

Engineering Data

Split Type Air Conditioners

- Heat Pump -

FFA-A Series



INVERTER

Split Type Air Conditioners

FFA-A Series

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1. Lineup

Indoor Unit		Outdoor Unit	Power Supply
Ceiling mounted cassette type	FFA09AVJU9	RXV09AVJU9	1 phase, 208 - 230 V, 60 Hz
	FFA12AVJU9	RXV12AVJU9	
	FFA15AVJU9	RXV15AVJU9	
	FFA18AVJU9	RXV18AVJU9	

Note: Power Supply Intake ; Outdoor Unit

Cautions



1. Air conditioners should not be installed in areas where corrosive gasses, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided and choose an outdoor unit with anti-corrosion treatment.

2. Functions

Category	Functions	FFA Series
		With BYFQ60C3W2W
Basic Function	Inverter (with inverter power control)	●
	Operation limit	Refer to page 22
	PAM control	●
	Standby electricity saving	—
Compressor	Swing compressor	●
	Reluctance DC motor	●
Comfortable Airflow	Power-airflow dual flaps (horizontal blades)	—
	Wide-angle louvers (vertical blades)	—
	Auto-swing (up and down)	—
	Auto-swing (right and left)	—
	3-D airflow	—
	COMFORT AIRFLOW operation	—
	Auto-swing	●
	Individual flap control	●
Comfort Control	Auto fan speed	●
	Switchable fan speed	3 steps
	Indoor unit quiet operation	—
	2 selectable temperature sensors	—
	Presence and floor sensor (option)	Option
	Hot-start function	●
	QUIET OUTDOOR UNIT operation	—
	INTELLIGENT EYE operation (auto energy saving)	—
	Quick warming function	●
	Automatic defrosting	●
Operation	Automatic cooling/heating change-over	●
	Program dry operation	●
	Fan only	●
	Setback function	●
Lifestyle Convenience	POWERFUL operation (inverter)	—
	ECONO operation	—
	Indoor unit ON/OFF switch	—
	Emergency operation switch	—
	Multi-colored indicator lamp	—
	Multi-colored lamp brightness setting	—
	Signal receiving sign	—
	R/C with back light	●
Health and Cleanliness	Titanium apatite deodorizing filter	—
	Mold proof air filter	—
	Longlife filter	Option
	Filter cleaning indicator	●
	Wipe-clean flat panel	—
	Removable drain pan	—
	Silver ion anti-bacterial drain pan	—
Timer	WEEKLY TIMER operation	—
	Schedule timer	●
	Setpoint auto reset	—
	Setpoint range set	—
	24-hour ON/OFF TIMER	●
	72-hour ON/OFF TIMER	—
	Off timer (turns unit off after set time)	●
	NIGHT SET mode	—
Worry Free (Reliability & Durability)	Auto-restart (after power failure)	●
	Self-diagnosis (Remote controller, LED)	●
	Anti-corrosion treatment of outdoor heat exchanger	●
Flexibility	Multi-split/split type compatible indoor unit	●
	Chargeless	32.8 ft. (10m)
	Either side drain (left or right)	—
	Drain pump	●
	Low temperature cooling operation (14°F) (–10°C)	●
	Low temperature cooling operation (–4°F) (–20°C)	●
	Requires wind baffle and field settings	●
	°F/°C changeover R/C temperature display (factory setting: °F)	●
Remote Control	Remote control adaptor (normal open pulse contact)	—
	Remote control adaptor (normal open contact)	—
	DIII-NET compatible (adaptor)	Option
	Wireless LAN connection	Option

● : Available
— : Not available

★ : Receiving sound only

3. Specifications

Model	Indoor Unit		FFA09AVJU9		FFA12AVJU9	
	Outdoor Unit		RXV09AVJU9		RXV12AVJU9	
			Cooling	Heating	Cooling	Heating
Power Supply			1φ, 208 - 230 V, 60 Hz		1φ, 208 - 230 V, 60 Hz	
Capacity Rated (Min. ~ Max.)		Btu/h	9,100 (4,600 ~ 11,000)	10,000 (4,600 ~ 14,000)	10,800 (4,600 ~ 13,300)	13,500 (4,600 ~ 16,800)
Running Current (Rated)		A	3.94 - 3.56	3.74 - 3.38	5.01 - 4.53	5.45 - 4.93
Power Consumption (Rated)		W	758 - 758	698 - 698	939 - 939	1,081 - 1,081
Power Factor (Rated)		%	92.5 - 92.5	89.7 - 89.9	90.1 - 90.1	95.4 - 95.4
SEER2 / HSPF2			19.8 / —	— / 9.4	19.5 / —	— / 9.0
EER2 (Rated)		Btu/W·h	12.0	—	11.5	—
COP2@5°F (Rated)		W/W	—	1.8	—	1.8
Piping Connections	Liquid	in. (mm)	φ 1/4 (6.4)		φ 1/4 (6.4)	
	Gas	in. (mm)	φ 3/8 (9.5)		φ 3/8 (9.5)	
	Drain	in. (mm)	VP20 (O.D. φ 1-1/32 (26))		VP20 (O.D. φ 1-1/32 (26))	
Heat Insulation			Both Liquid and Gas Pipes		Both Liquid and Gas Pipes	
Max. Interunit Piping Length		ft (m)	65-5/8 (20)		65-5/8 (20)	
Max. Interunit Height Difference		ft (m)	49-1/4 (15)		49-1/4 (15)	
Chargeless		ft (m)	49-1/4 (15)		49-1/4 (15)	
Amount of Additional Charge of Refrigerant		Oz/ft (g/m)	0.22 (20)		0.22 (20)	
Indoor Unit			FFA09AVJU9		FFA12AVJU9	
Front Panel Color			— (—)		— (—)	
Airflow Rate	H / M / L / SL	cfm	378 / 339 / 268 / —	399 / 357 / 282 / —	406 / 353 / 268 / —	427 / 371 / 282 / —
		m³/min	10.7 / 9.6 / 7.6 / —	11.3 / 10.1 / 8.0 / —	11.5 / 10.0 / 7.6 / —	12.1 / 10.5 / 8.0 / —
Fan	Type		Turbo Fan		Turbo Fan	
	Drive Input	A	0.29		0.31	
	Speed		3 steps		3 steps	
Air Direction Control			—		—	
Air Filter			—		—	
Running Current (Rated)		A	0.32 - 0.29	0.32 - 0.29	0.34 - 0.30	0.34 - 0.30
Power Consumption (Rated)		W	32 - 32	32 - 32	34 - 34	34 - 34
Power Factor (Rated)		%	48.1 - 47.6	48.1 - 47.6	48.1 - 48.9	48.1 - 48.9
Temperature Control			Microcomputer Control		Microcomputer Control	
Dimensions (H × W × D)		in. (mm)	10-1/4 × 22-5/8 × 22-5/8 (260 × 575 × 575)		10-1/4 × 22-5/8 × 22-5/8 (260 × 575 × 575)	
Packaged Dimensions (H × W × D)		in. (mm)	11 × 27 × 23-1/2 (280 × 686 × 597)		11 × 27 × 23-1/2 (280 × 686 × 597)	
Weight (Mass)		lbs (kg)	36 (16)		36 (16)	
Gross Weight (Gross Mass)		lbs (kg)	40 (18)		40 (18)	
Sound Pressure Level	H / M / L / SL	dB(A)	38 / 35 / 29 / —	38 / 35 / 29 / —	39 / 36 / 30 / —	39 / 36 / 30 / —
Remote controller (Option)		Wired	BRC1N RV71		BRC1N RV71	
		Wireless	—		—	
Decoration Panel (Option)	Model		BYFQ60C3W2W		BYFQ60C3W2W	
	Color		White		White	
	Dimensions (H × W × D)	in. (mm)	1-13/16 × 24-7/16 × 24-7/16 (46 × 620 × 620)		1-13/16 × 24-7/16 × 24-7/16 (46 × 620 × 620)	
	Weight (Mass)	lbs (kg)	6.2 (2.8)		6.2 (2.8)	
Outdoor Unit			RXV09AVJU9		RXV12AVJU9	
Casing Color			Ivory White		Ivory White	
Heat Exchanger	Fin / Spec. Tube		Waffle Fin / φ 7 Hi-XSL Tube		Waffle Fin / φ 7 Hi-XSL Tube	
Compressor	Type		Hermetically Sealed Swing Type		Hermetically Sealed Swing Type	
	Model		1Y091BKCX1A		1Y091BKCX1A	
Refrigerant Oil	Type		FW68DA		FW68DA	
	Charge	oz (L)	12.68 (0.375)		12.68 (0.375)	
Refrigerant	Type		R-32		R-32	
	Charge	lbs (kg)	1.65 (0.75)		1.65 (0.75)	
Airflow Rate		m³/min (cfm)	30.8 (1,088)	28.5 (1,006)	30.8 (1,088)	33.1 (1,169)
Fan	Type		Propeller		Propeller	
	Drive Input	A	9.0		11.1	
Running Current (Rated)		A	3.62 - 3.27	3.42 - 3.09	4.67 - 4.23	5.11 - 4.63
Power Consumption (Rated)		W	726 - 726	666 - 666	905 - 905	1,047 - 1,047
Power Factor (Rated)		%	96.4 - 96.5	93.6 - 93.7	93.1 - 93.0	98.5 - 98.3
Dimensions (H × W × D)		in. (mm)	21-15/16 × 26-9/16 × 11-3/16 (557 × 675 × 284)		21-15/16 × 26-9/16 × 11-3/16 (557 × 675 × 284)	
Packaged Dimensions (H × W × D)		in. (mm)	24-7/16 × 31-1/4 × 14-1/8 (620 × 794 × 359)		24-7/16 × 31-1/4 × 14-1/8 (620 × 794 × 359)	
Weight (Mass)		lbs (kg)	63 (29)		63 (29)	
Gross Weight (Gross Mass)		lbs (kg)	68 (31)		68 (31)	
Sound Pressure Level		dB(A)	49	51	50	53
Conditions Based on	Indoor		80.0°FDB (26.7°CDB) / 67.0°FWB (19.4°CWB)		80.0°FDB (26.7°CDB) / 67.0°FWB (19.4°CWB)	
	Outdoor		95.0°FDB (35.0°CDB) / 75.0°FWB (24.0°CWB)		95.0°FDB (35.0°CDB) / 75.0°FWB (24.0°CWB)	
	Piping Length		25 ft (7.5 m)		25 ft (7.5 m)	
Drawing No.			3D162090		3D162090	
Notes			SL: The quiet fan level of the airflow setting. When indoor unit is connected with multi-system outdoor unit. Please refer to the specifications of the multi-system outdoor unit to be connected.			

Conversion Formulae	
kcal/h = kW × 860	
Btu/h = kW × 3412	
cfm = m ³ /min × 35.3	

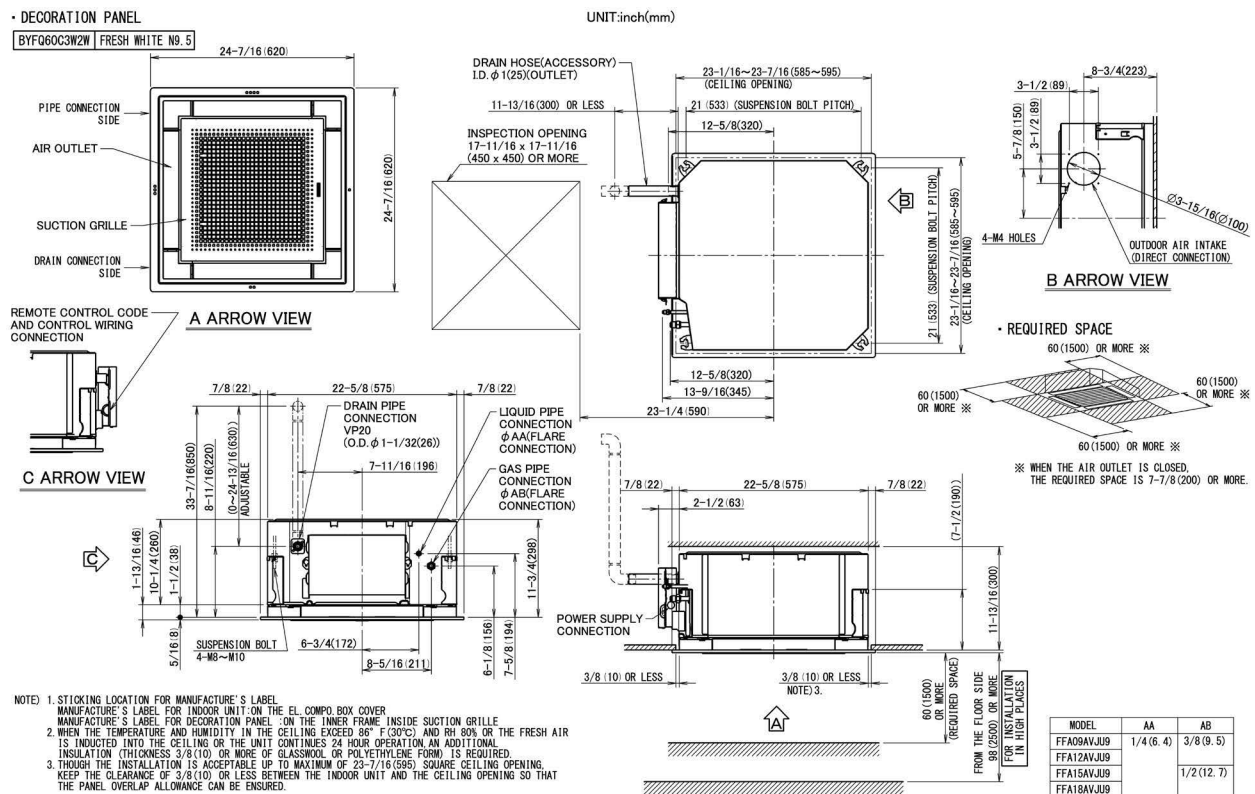
Model	Indoor Unit		FFA15AVJU9		FFA18AVJU9	
	Outdoor Unit		RXV15AVJU9		RXV18AVJU9	
			Cooling	Heating	Cooling	Heating
Power Supply			1φ, 208 - 230 V, 60 Hz		1φ, 208 - 230 V, 60 Hz	
Capacity Rated (Min. ~ Max.)		Btu/h	14,400 (5,100 ~ 16,200)	16,200 (5,400 ~ 16,300)	17,400 (5,100 ~ 18,800)	21,600 (5,400 ~ 21,800)
Running Current (Rated)		A	6.47 - 5.85	6.94 - 6.28	7.74 - 7.00	10.70 - 9.68
Power Consumption (Rated)		W	1,252 - 1,252	1,349 - 1,349	1,513 - 1,513	2,110 - 2,110
Power Factor (Rated)		%	93.0 - 93.0	93.5 - 93.4	94.0 - 94.0	94.8 - 94.8
SEER2 / HSPF2			19.6 / —	— / 8.8	18.2 / —	— / 8.5
EER2 (Rated)		Btu/W·h	11.5	—	11.5	—
COP2@5°F (Rated)		W/W	—	1.8	—	1.8
Piping Connections	Liquid	in. (mm)	φ 1/4 (6.4)		φ 1/4 (6.4)	
	Gas	in. (mm)	φ 1/2 (12.7)		φ 1/2 (12.7)	
	Drain	in. (mm)	VP20 (O.D. φ 1-1/32 (26))		VP20 (O.D. φ 1-1/32 (26))	
Heat Insulation			Both Liquid and Gas Pipes		Both Liquid and Gas Pipes	
Max. Interunit Piping Length		ft (m)	98-1/2 (30)		98-1/2 (30)	
Max. Interunit Height Difference		ft (m)	65-5/8 (20)		65-5/8 (20)	
Chargeless		ft (m)	49-1/4 (15)		49-1/4 (15)	
Amount of Additional Charge of Refrigerant		Oz/ft (g/m)	0.22 (20)		0.22 (20)	
Indoor Unit			FFA15AVJU9		FFA18AVJU9	
Front Panel Color			— (—)		— (—)	
Airflow Rate	H / M / L / SL	cfm	420 / 367 / 293 / —	441 / 385 / 307 / —	508 / 431 / 314 / —	537 / 455 / 332 / —
		m³/min	11.9 / 10.4 / 8.3 / —	12.5 / 10.9 / 8.7 / —	14.4 / 12.2 / 8.9 / —	15.2 / 12.9 / 9.4 / —
Fan	Type		Turbo Fan		Turbo Fan	
	Drive Input	A	0.32		0.41	
	Speed		3 steps		3 steps	
Air Direction Control			—		—	
Air Filter			—		—	
Running Current (Rated)		A	0.36 - 0.33	0.36 - 0.33	0.46 - 0.41	0.46 - 0.41
Power Consumption (Rated)		W	35 - 35	35 - 35	45 - 45	45 - 45
Power Factor (Rated)		%	46.4 - 46.8	46.4 - 46.8	47.2 - 47.2	47.2 - 47.2
Temperature Control			Microcomputer Control		Microcomputer Control	
Dimensions (H × W × D)		in. (mm)	10-1/4 × 22-5/8 × 22-5/8 (260 × 575 × 575)		10-1/4 × 22-5/8 × 22-5/8 (260 × 575 × 575)	
Packaged Dimensions (H × W × D)		in. (mm)	11 × 27 × 23-1/2 (280 × 686 × 597)		11 × 27 × 23-1/2 (280 × 686 × 597)	
Weight (Mass)		lbs (kg)	36 (16)		36 (16)	
Gross Weight (Gross Mass)		lbs (kg)	40 (18)		40 (18)	
Sound Pressure Level	H / M / L / SL	dB(A)	40 / 37 / 31 / —	40 / 37 / 31 / —	44 / 40 / 32 / —	44 / 40 / 32 / —
Remote controller (Option)		Wired	BRC1NVR71		BRC1NVR71	
		Wireless	—		—	
Decoration Panel (Option)	Model		BYFQ60C3W2W		BYFQ60C3W2W	
	Color		White		White	
	Dimensions (H × W × D)	in. (mm)	1-13/16 × 24-7/16 × 24-7/16 (46 × 620 × 620)		1-13/16 × 24-7/16 × 24-7/16 (46 × 620 × 620)	
	Weight (Mass)	lbs (kg)	6.2 (2.8)		6.2 (2.8)	
Outdoor Unit			RXV15AVJU9		RXV18AVJU9	
Casing Color			Ivory White		Ivory White	
Heat Exchanger		Fin / Spec. Tube	Waffle Fin / φ 7 Hi-XSL Tube		Waffle Fin / φ 7 Hi-XSL Tube	
Compressor	Type		Hermetically Sealed Swing Type		Hermetically Sealed Swing Type	
	Model		2Y147BKBX1A		2Y147BKBX1A	
Refrigerant Oil	Type		FW68DA		FW68DA	
	Charge	oz (L)	21.98 (0.650)		21.98 (0.650)	
Refrigerant	Type		R-32		R-32	
	Charge	lbs (kg)	2.45 (1.11)		2.45 (1.11)	
Airflow Rate		m³/min (cfm)	59.4 (2,097)	65.9 (2,327)	65.9 (2,327)	65.9 (2,327)
Fan	Type		Propeller		Propeller	
	Drive Input	A	12.3		14.4	
Running Current (Rated)		A	6.11 - 5.52	6.58 - 5.95	7.28 - 6.59	10.24 - 9.27
Power Consumption (Rated)		W	1,217 - 1,217	1,314 - 1,314	1,468 - 1,468	2,065 - 2,065
Power Factor (Rated)		%	95.7 - 95.8	96.0 - 96.0	97.0 - 96.9	97.0 - 96.9
Dimensions (H × W × D)		in. (mm)	29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320)		29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320)	
Packaged Dimensions (H × W × D)		in. (mm)	32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406)		32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406)	
Weight (Mass)		lbs (kg)	113 (52)		113 (52)	
Gross Weight (Gross Mass)		lbs (kg)	121 (55)		121 (55)	
Sound Pressure Level		dB(A)	52	57	55	57
Conditions Based on	Indoor		80.0°FDB (26.7°CDB) / 67.0°FWB (19.4°CWB)	70.0°FDB (21.1°CDB) / 60.0°FWB (15.6°CWB)	80.0°FDB (26.7°CDB) / 67.0°FWB (19.4°CWB)	70.0°FDB (21.1°CDB) / 60.0°FWB (15.6°CWB)
	Outdoor		95.0°FDB (35.0°CDB) / 75.0°FWB (24.0°CWB)	47.0°FDB (8.3°CDB) / 43.0°FWB (6.1°CWB)	95.0°FDB (35.0°CDB) / 75.0°FWB (24.0°CWB)	47.0°FDB (8.3°CDB) / 43.0°FWB (6.1°CWB)
	Piping Length		25 ft (7.5 m)		25 ft (7.5 m)	
Drawing No.			3D162091		3D162091	
Notes			SL: The quiet fan level of the airflow setting. When indoor unit is connected with multi-system outdoor unit. Please refer to the specifications of the multi-system outdoor unit to be connected.			

Conversion Formulae	
kcal/h = kW × 860	
Btu/h = kW × 3412	
cfm = m ³ /min × 35.3	

4. Dimensions

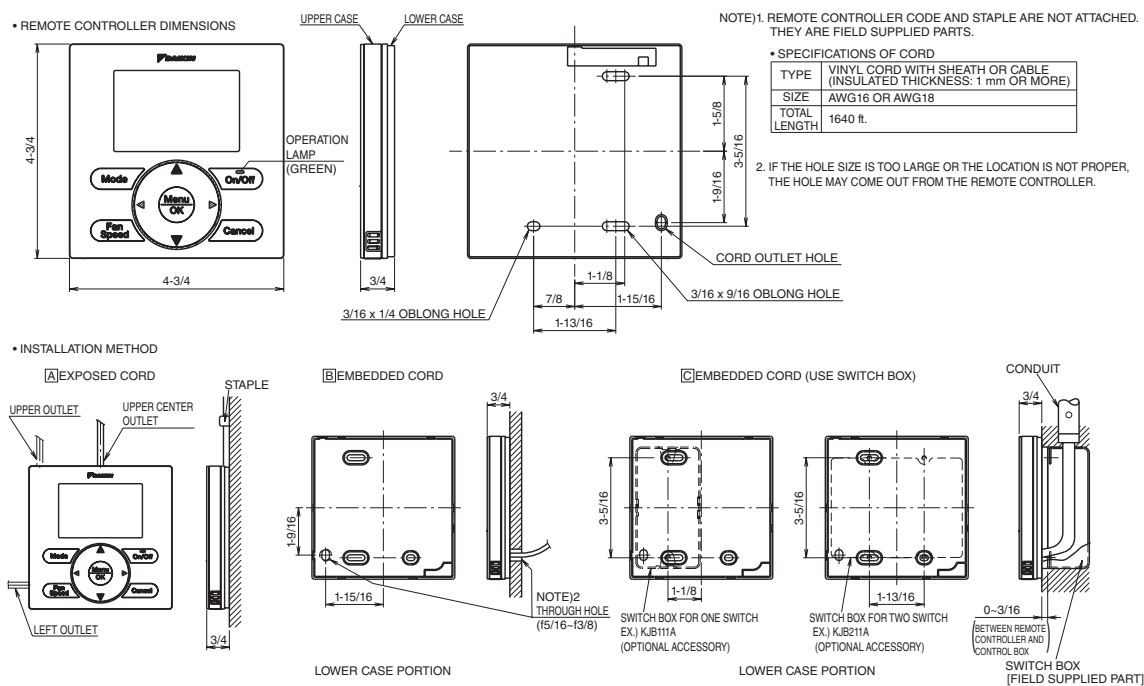
4.1 Indoor Unit

FFA09/12/15/18AVJU9 with BYFQ60C3W2W (Decoration Panel)



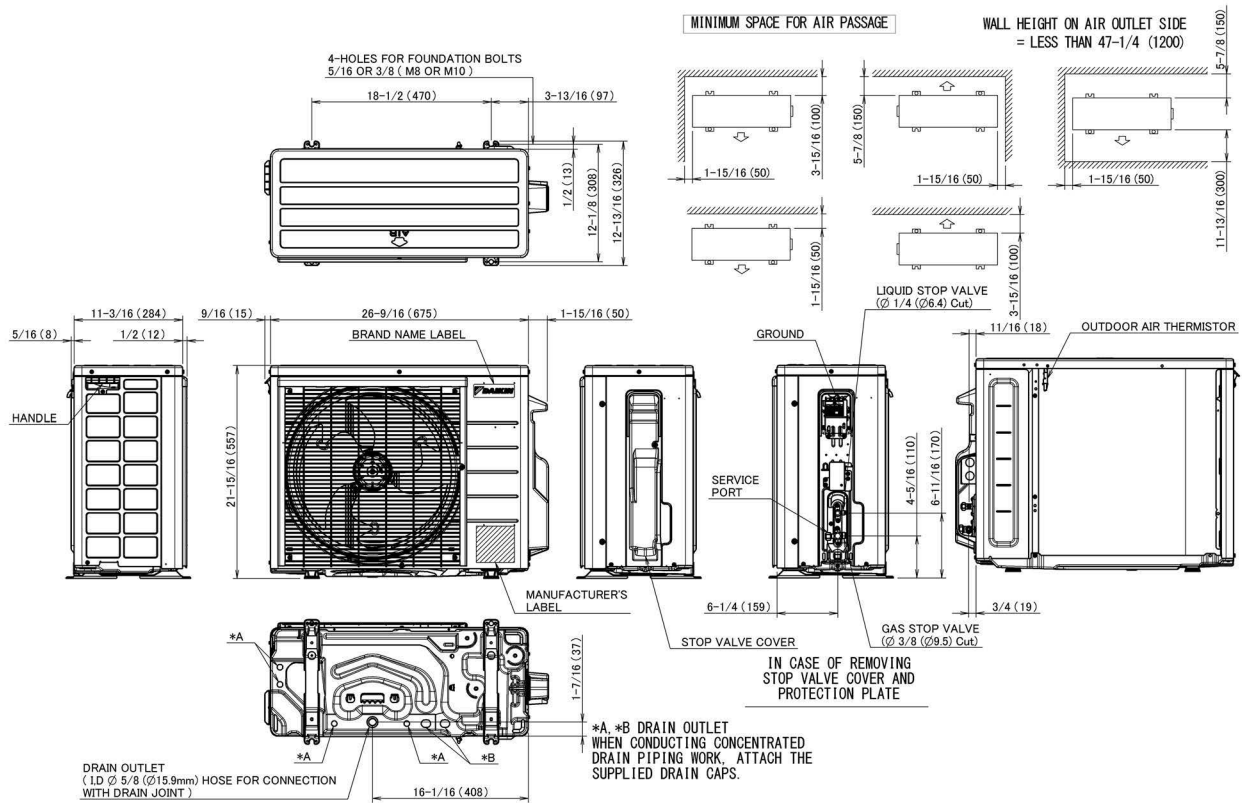
3D161611

BRC1NRV71 — Wired Remote Controller (Option) —



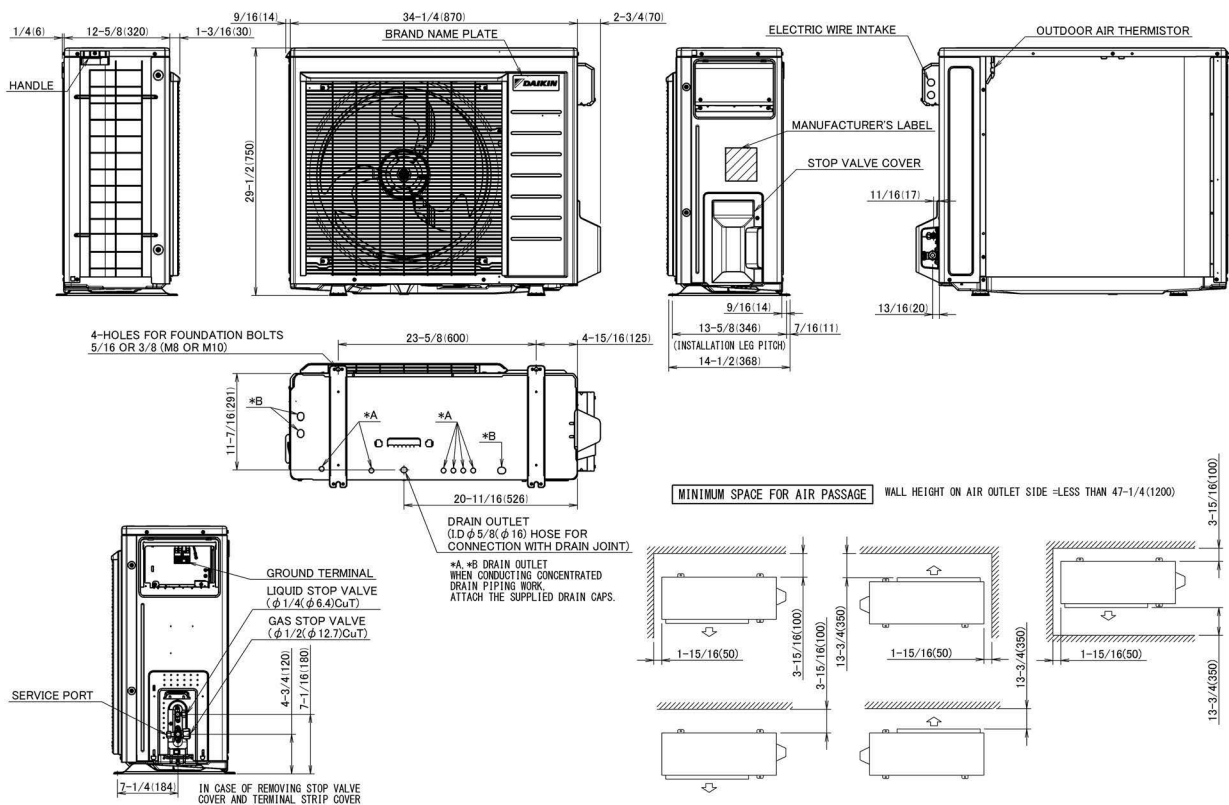
3D091305A

4.2 Outdoor Unit RXV09/12AVJU9



3D152019

RXV15/18AVJU9

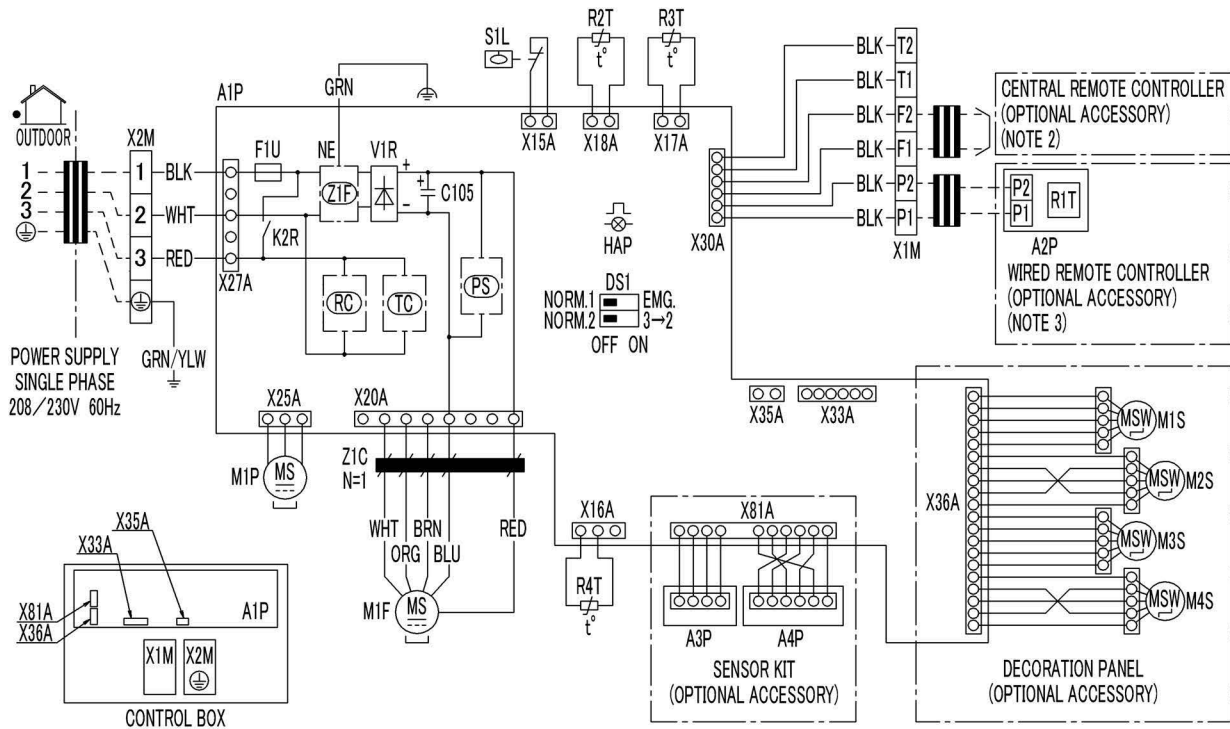


3D150942

5. Wiring Diagrams

5.1 Indoor Unit

FFA09/12/15/18AVJU9

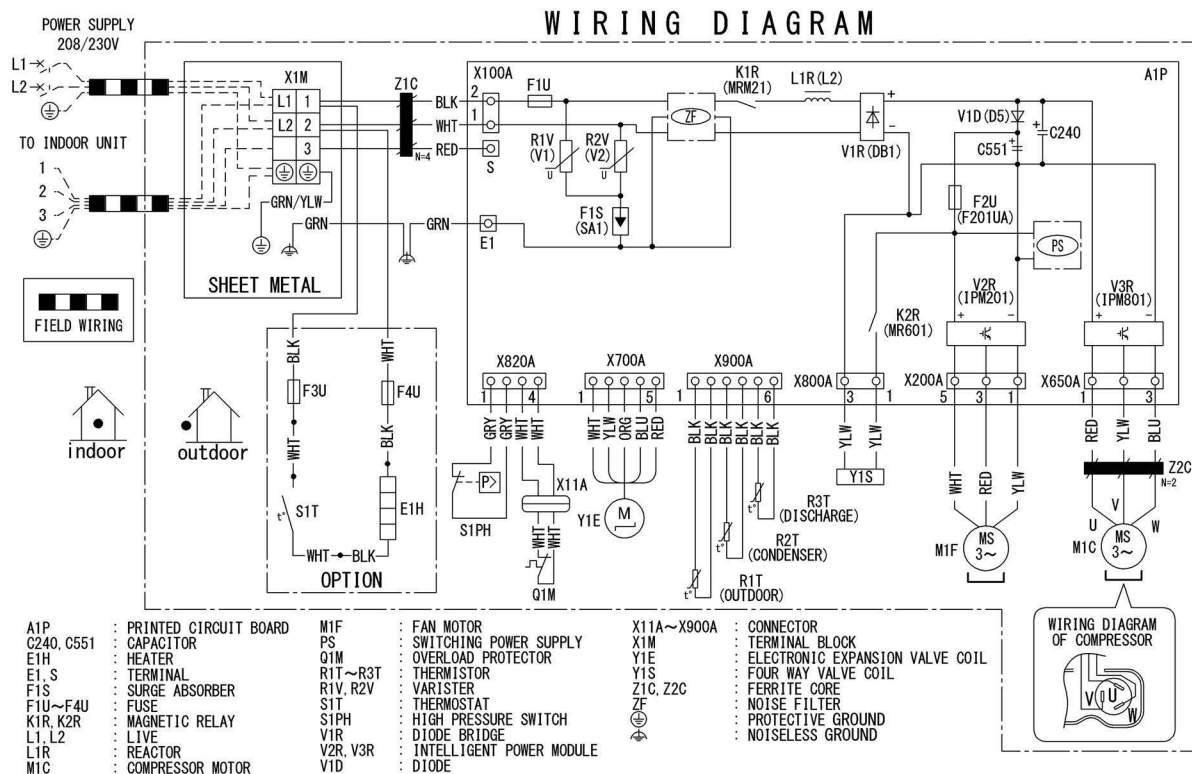


NOTES:

1. : TERMINAL BLOCK : CONNECTOR : FIELD WIRING : PROTECTIVE EARTH(SCREW) : NOISELESS EARTH
2. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTALLATION MANUAL.
3. IN CASE OF MAIN/SUB CHANGEOVER, SEE THE INSTALLATION MANUAL ATTACHED TO REMOTE CONTROLLER.
4. SYMBOLS SHOW AS FOLLOWS: BLK:BLACK RED:RED BLU:BLUE WHT:WHITE YLW:YELLOW GRN:GREEN ORG:ORANGE BRN:BROWN

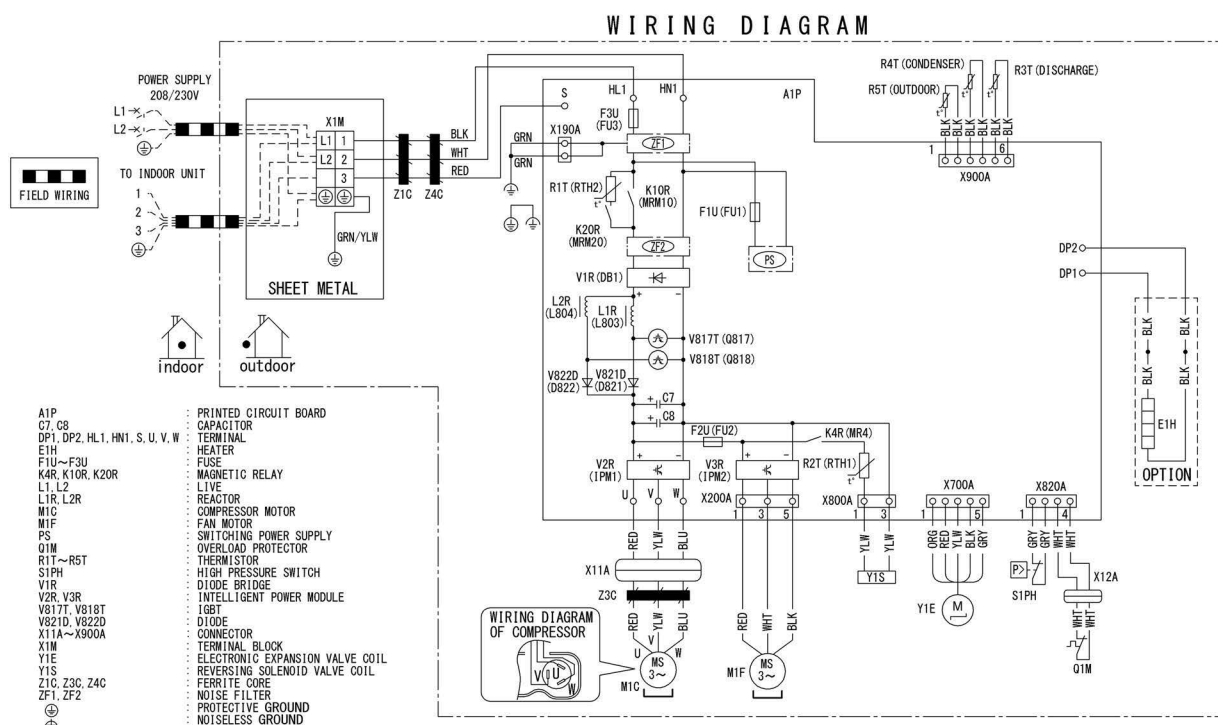
INDOOR UNIT		WIRED REMOTE CONTROLLER	
A1P	PRINTED CIRCUIT BOARD	A2P	PRINTED CIRCUIT BOARD
C105	CAPACITOR(M1F)	R1T	THERMISTOR(AIR)
DS1	DIP SWITCH ON PCB	SENSOR KIT	
F1U	FUSE(T.3.15A,250V)	A3P	PRINTED CIRCUIT BOARD
HAP	FLASHING LAMP (SERVICE MONITOR GREEN)	A4P	PRINTED CIRCUIT BOARD
K2R	MAGNETIC RELAY	CONNECTOR FOR OPTIONAL PARTS	
M1F	FAN MOTOR	X33A	CONNECTOR (WIRING ADAPTOR PRINTED CIRCUIT BOARD)
M1P	DRAIN PUMP MOTOR	X35A	CONNECTOR (GROUP CONTROL ADAPTOR)
M1S·M2S	SWING MOTOR	X36A	CONNECTOR (DECORATION PANEL)
M3S·M4S	SWING MOTOR	X81A	CONNECTOR (SENSOR KIT)
R2T·R3T	THERMISTOR(COIL)		
R4T	THERMISTOR(AIR)		
S1L	FLOAT SWITCH		
V1R	DIODE BRIDGE		
X1M	TERMINAL BLOCK		
X2M	TERMINAL BLOCK		
Z1F	NOISE FILTER		
Z1C	FERRITE CORE		
PS	SWITCHING POWER SUPPLY		
RC	RECEIVER		
TC	TRANSMITTER		

5.2 Outdoor Unit RXV09/12AVJU9



C: 3D149646A

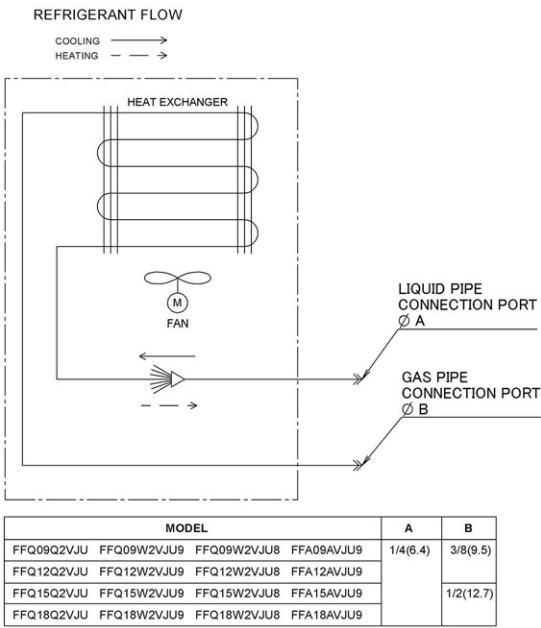
RXV15/18AVJU9



C: 3D149181

6. Piping Diagrams

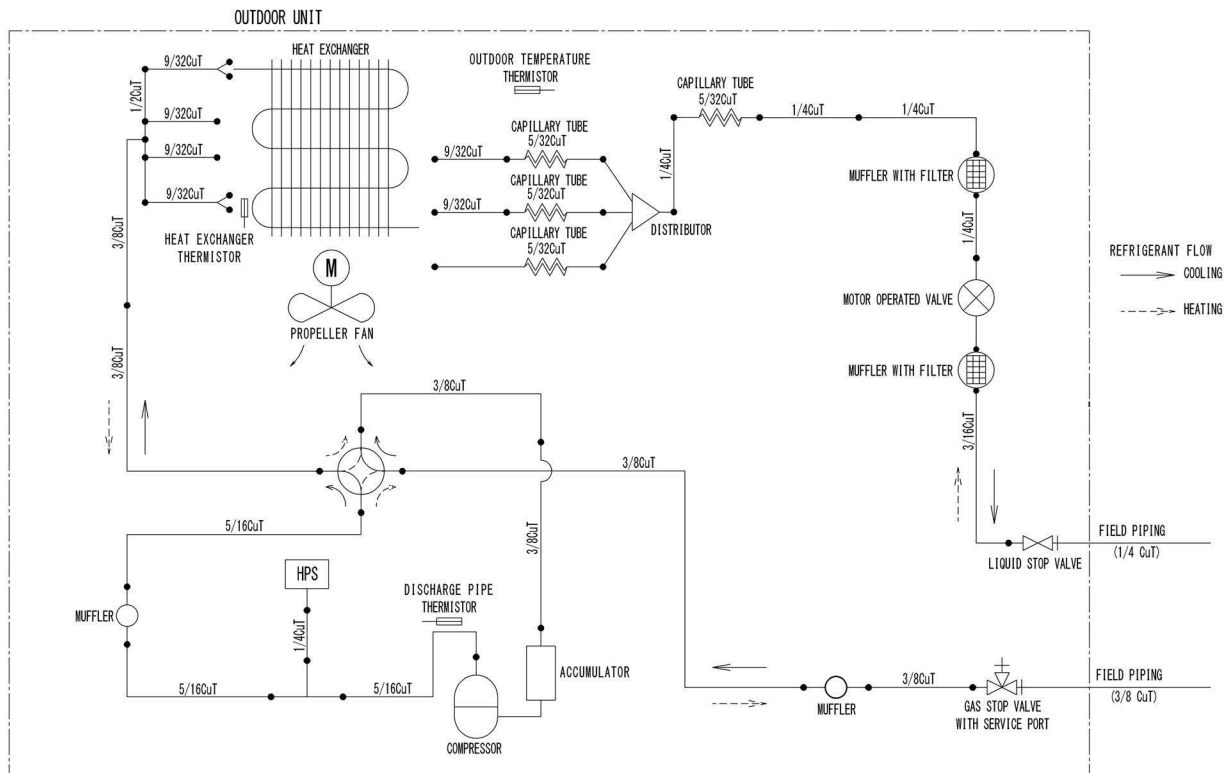
6.1 Indoor Unit
FFA09/12/15/18AVJU9



4D106033C

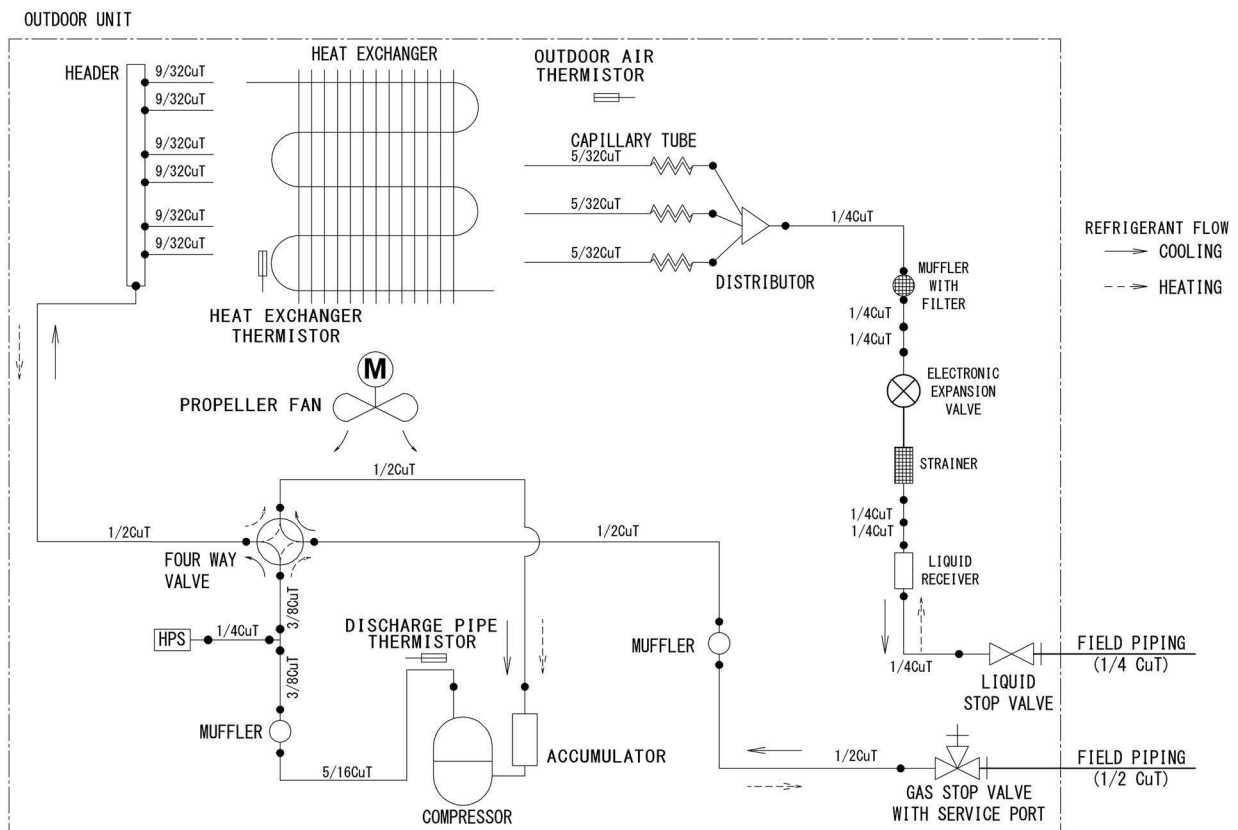
6.2 Outdoor Unit

RXV09/12AVJU9



3D150194

RXV15/18AVJU9



3D150094

7. Capacity Tables

FFA09AVJU9 + RXV09AVJU9

Cooling (60 Hz, 208 V)

AFR	10.7
BF	0.18

Temp: Celsius / TC, SHC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	10			20			30			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	3.59	2.65	0.57	3.29	2.50	0.71	2.99	2.35	0.84	2.84	2.28	0.91	2.69	2.21	0.98	2.51	2.13	1.06
16.0	22.0	3.74	2.60	0.57	3.44	2.46	0.71	3.14	2.32	0.85	2.99	2.25	0.92	2.84	2.19	0.98	2.65	2.11	1.07
18.0	25.0	3.89	2.72	0.58	3.59	2.59	0.72	3.29	2.46	0.85	3.14	2.39	0.92	2.98	2.33	0.99	2.80	2.26	1.07
19.4	26.7	3.99	2.72	0.58	3.69	2.60	0.72	3.39	2.48	0.85	3.24	2.42	0.92	3.09	2.36	0.99	2.91	2.29	1.07
22.0	30.0	4.19	2.75	0.72	3.89	2.64	0.72	3.58	2.53	0.86	3.43	2.48	0.93	3.28	2.43	1.00	3.10	2.36	1.08
24.0	32.0	4.34	2.68	0.73	4.04	2.58	0.73	3.73	2.48	0.86	3.58	2.43	0.93	3.43	2.38	1.00	3.25	2.32	1.08

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	50			68			86			95			104			115		
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	12.25	9.05	0.57	11.22	8.54	0.71	10.19	8.03	0.84	9.68	7.79	0.91	9.16	7.54	0.98	8.55	7.25	1.06
60.8	71.6	12.76	8.87	0.57	11.73	8.39	0.71	10.70	7.92	0.85	10.19	7.69	0.92	9.67	7.46	0.98	9.06	7.19	1.07
64.4	77.0	13.27	9.27	0.58	12.24	8.82	0.72	11.21	8.38	0.85	10.70	8.17	0.92	10.18	7.96	0.99	9.57	7.70	1.07
67.0	80.0	13.63	9.29	0.58	12.60	8.87	0.72	11.57	8.45	0.85	11.00	8.25	0.92	10.54	8.05	0.99	9.92	7.81	1.07
71.6	86.0	14.29	9.40	0.72	13.26	9.01	0.72	12.23	8.64	0.86	11.72	8.46	0.93	11.20	8.28	1.00	10.58	8.06	1.08
75.2	89.6	14.80	9.14	0.73	13.77	8.79	0.73	12.74	8.45	0.86	12.23	8.28	0.93	11.71	8.12	1.00	11.09	7.92	1.08

Heating (60 Hz, 208 V)

AFR	11.6
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Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		-15 / (-15)		-10 / (-9)		-5 / (-4)		0 / (1.5)		6 / (8.3)		10 / (15)		18 / (24)	
°C		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		2.22	1.10	2.71	1.12	3.20	1.14	3.69	1.16	4.28	1.19	4.68	1.23	5.46	1.31
21.1		2.05	1.14	2.54	1.16	3.03	1.18	3.52	1.20	4.11	1.22	4.50	1.26	5.29	1.34
22.0		2.03	1.15	2.52	1.16	3.01	1.18	3.50	1.20	4.08	1.22	4.48	1.26	5.26	1.35
24.0		1.97	1.16	2.46	1.18	2.95	1.19	3.44	1.21	4.03	1.24	4.42	1.28	5.20	1.36
25.0		1.95	1.16	2.43	1.18	2.92	1.20	3.41	1.22	4.00	1.24	4.39	1.28	5.17	1.36
27.0		1.89	1.18	2.38	1.19	2.87	1.21	3.36	1.23	3.94	1.25	4.33	1.29	5.12	1.37

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		5 / (5)		14 / (15.8)		23 / (24.8)		32 / (34.7)		43 / (47)		50 / (59)		64 / (75.2)	
°F		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0		7.56	1.10	9.24	1.12	10.91	1.14	12.58	1.16	14.59	1.19	15.93	1.23	18.60	1.31
70.0		7.00	1.14	8.67	1.16	10.33	1.18	12.00	1.20	14.00	1.22	15.33	1.26	18.00	1.34
71.6		6.92	1.15	8.58	1.16	10.25	1.18	11.91	1.20	13.91	1.22	15.25	1.26	17.91	1.35
75.2		6.73	1.16	8.39	1.18	10.06	1.19	11.72	1.21	13.72	1.24	15.05	1.28	17.72	1.36
77.0		6.64	1.16	8.30	1.18	9.96	1.20	11.63	1.22	13.62	1.24	14.95	1.28	17.62	1.36
80.6		6.46	1.18	8.11	1.19	9.77	1.21	11.43	1.23	13.43	1.25	14.76	1.29	17.42	1.37

Cooling (60 Hz, 230 V)

AFR	10.7
BF	0.18

Temp: Celsius / TC, SHC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	10			20			30			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	3.59	2.65	0.57	3.29	2.50	0.71	2.99	2.35	0.84	2.84	2.28	0.91	2.69	2.21	0.98	2.51	2.13	1.06
16.0	22.0	3.74	2.60	0.57	3.44	2.46	0.71	3.14	2.32	0.85	2.99	2.25	0.92	2.84	2.19	0.98	2.65	2.11	1.07
18.0	25.0	3.89	2.72	0.58	3.59	2.59	0.72	3.29	2.46	0.85	3.14	2.39	0.92	2.98	2.33	0.99	2.80	2.26	1.07
19.4	26.7	3.99	2.72	0.58	3.69	2.60	0.72	3.39	2.48	0.85	3.24	2.42	0.92	3.09	2.36	0.99	2.91	2.29	1.07
22.0	30.0	4.19	2.75	0.72	3.89	2.64	0.72	3.58	2.53	0.86	3.43	2.48	0.93	3.28	2.43	1.00	3.10	2.36	1.08
24.0	32.0	4.34	2.68	0.73	4.04	2.58	0.73	3.73	2.48	0.86	3.58	2.43	0.93	3.43	2.38	1.00	3.25	2.32	1.08

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	50			68			86			95			104			115		
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	12.25	9.05	0.57	11.22	8.54	0.71	10.19	8.03	0.84	9.68	7.79	0.91	9.16	7.54	0.98	8.55	7.25	1.06
60.8	71.6	12.76	8.87	0.57	11.73	8.39	0.71	10.70	7.92	0.85	10.19	7.69	0.92	9.67	7.46	0.98	9.06	7.19	1.07
64.4	77.0	13.27	9.27	0.58	12.24	8.82	0.72	11.21	8.38	0.85	10.70	8.17	0.92	10.18	7.96	0.99	9.57	7.70	1.07
67.0	80.0	13.63	9.29	0.58	12.60	8.87	0.72	11.57	8.45	0.85	11.00	8.25	0.92	10.54	8.05	0.99	9.92	7.81	1.07
71.6	86.0	14.29	9.40	0.72	13.26	9.01	0.72	12.23	8.64	0.86	11.72	8.46	0.93	11.20	8.28	1.00	10.58	8.06	1.08
75.2	89.6	14.80	9.14	0.73	13.77	8.79	0.73	12.74	8.45	0.86	12.23	8.28	0.93	11.71	8.12	1.00	11.09	7.92	1.08

Heating (60 Hz, 230 V)

AFR	11.6
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Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		-15 / (-15)		-10 / (-9)		-5 / (-4)		0 / (1.5)		6 / (8.3)		10 / (15)		18 / (24)	
°C		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		2.22	1.10	2.71	1.12	3.20	1.14	3.69	1.16	4.28	1.19	4.68	1.23	5.46	1.31
21.1		2.05	1.14	2.54	1.16	3.03	1.18	3.52	1.20	4.11	1.22	4.50	1.26	5.29	1.34
22.0		2.03	1.15	2.52	1.16	3.01	1.18	3.50	1.20	4.08	1.22	4.48	1.26	5.26	1.35
24.0		1.97	1.16	2.46	1.18	2.95	1.19	3.44	1.21	4.03	1.24	4.42	1.28	5.20	1.36
25.0		1.95	1.16	2.43	1.18	2.92	1.20	3.41	1.22	4.00	1.24	4.39	1.28	5.17	1.36
27.0		1.89	1.18	2.38	1.19	2.87	1.21	3.36	1.23	3.94	1.25	4.33	1.29	5.12	1.37

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		5 / (5)		14 / (15.8)		23 / (24.8)		32 / (34.7)		43 / (47)		50 / (59)		64 / (75.2)	
°F		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0		7.56	1.10	9.24	1.12	10.91	1.14	12.58	1.16	14.59	1.19	15.93	1.23	18.60	1.31
70.0		7.00	1.14	8.67	1.16	10.33	1.18	12.00	1.20	14.00	1.22	15.33	1.26	18.00	1.34
71.6		6.92	1.15	8.58	1.16	10.25	1.18	11.91	1.20	13.91	1.22	15.25	1.26	17.91	1.35
75.2		6.73	1.16	8.39	1.18	10.06	1.19	11.72	1.21	13.72	1.24	15.05	1.28	17.72	1.36
77.0		6.64	1.16	8.30	1.18	9.96	1.20	11.63	1.22	13.62	1.24	14.95	1.28	17.62	1.36
80.6		6.46	1.18	8.11	1.19	9.77	1.21	11.43	1.23	13.43	1.25	14.76	1.29	17.42	1.37

Symbols:

AFR	: Airflow rate	(m ³ /min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
PI	: Power input	(kW)

Notes:

- shows MAX capacities and power input (Cooling/Heating).
- TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
- Capacities are based on the following conditions.
Corresponding refrigerant piping length : 25 ft (7.5 m)
Level difference : 0 ft (0 m)

FFA12AVJU9 + RXV12AVJU9

Cooling (60 Hz, 208 V)

AFR	11.1
BF	0.09

Temp: Celsius / TC, SHC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	10			20			30			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	4.32	3.15	0.79	3.96	2.97	0.98	3.60	2.79	1.16	3.41	2.70	1.26	3.23	2.61	1.35	3.02	2.51	1.08
16.0	22.0	4.50	3.09	0.79	4.14	2.92	0.98	3.78	2.75	1.17	3.59	2.67	1.26	3.41	2.59	1.36	3.20	2.49	1.08
18.0	25.0	4.68	3.22	0.80	4.32	3.06	0.99	3.96	2.90	1.17	3.77	2.83	1.27	3.59	2.75	1.36	3.37	2.66	1.08
19.4	26.7	4.81	3.23	0.80	4.44	3.07	0.99	4.08	2.93	1.18	3.90	2.85	1.27	3.72	2.78	1.37	3.50	2.70	1.08
22.0	30.0	5.04	3.26	1.00	4.68	3.12	1.00	4.32	2.99	1.19	4.13	2.92	1.28	3.95	2.86	1.37	3.73	2.78	1.08
24.0	32.0	5.22	3.16	1.00	4.86	3.04	1.00	4.49	2.92	1.19	4.31	2.86	1.29	4.13	2.80	1.38	3.91	2.73	1.08

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	50			68			86			95			104			115		
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	14.75	10.76	0.79	13.51	10.13	0.98	12.27	9.52	1.16	11.65	9.22	1.26	11.03	8.92	1.35	10.29	8.57	1.08
60.8	71.6	15.36	10.54	0.79	14.12	9.95	0.98	12.88	9.38	1.17	12.26	9.10	1.26	11.64	8.82	1.36	10.90	8.49	1.08
64.4	77.0	15.98	10.99	0.80	14.74	10.45	0.99	13.50	9.91	1.17	12.88	9.65	1.27	12.26	9.39	1.36	11.51	9.08	1.08
67.0	80.0	16.40	11.01	0.80	15.17	10.49	0.99	13.93	9.98	1.18	13.30	9.73	1.27	12.69	9.49	1.37	11.94	9.20	1.08
71.6	86.0	17.20	11.11	1.00	15.96	10.65	1.00	14.72	10.19	1.19	14.10	9.97	1.28	13.48	9.75	1.37	12.74	9.49	1.08
75.2	89.6	17.81	10.80	1.00	16.58	10.37	1.00	15.34	9.96	1.19	14.72	9.75	1.29	14.10	9.55	1.38	13.35	9.31	1.08

Heating (60 Hz, 208 V)

AFR	12.3
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Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		-15 / (-15)		-10 / (-9)		-5 / (-4)		0 / (1.5)		6 / (8.3)		10 / (15)		18 / (24)	
°C		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		3.01	1.50	3.51	1.52	4.01	1.54	4.52	1.56	5.13	1.59	5.53	1.64	6.34	1.75
21.1		2.78	1.55	3.29	1.57	3.80	1.59	4.31	1.61	4.92	1.63	5.33	1.69	6.14	1.79
22.0		2.75	1.55	3.26	1.57	3.77	1.59	4.28	1.61	4.89	1.64	5.30	1.69	6.11	1.80
24.0		2.68	1.57	3.19	1.59	3.70	1.61	4.21	1.63	4.82	1.65	5.23	1.71	6.04	1.82
25.0		2.64	1.58	3.15	1.60	3.67	1.62	4.18	1.64	4.79	1.66	5.20	1.71	6.01	1.82
27.0		2.57	1.60	3.08	1.62	3.60	1.63	4.11	1.65	4.72	1.68	5.13	1.73	5.94	1.84

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		5 / (5)		14 / (15.8)		23 / (24.8)		32 / (34.7)		43 / (47)		50 / (59)		64 / (75.2)	
°F		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0		10.26	1.50	11.98	1.52	13.70	1.54	15.43	1.56	17.51	1.59	18.89	1.64	21.67	1.75
70.0		9.50	1.55	11.24	1.57	12.98	1.59	14.71	1.61	16.80	1.63	18.19	1.69	20.97	1.79
71.6		9.39	1.55	11.13	1.57	12.87	1.59	14.61	1.61	16.70	1.64	18.09	1.69	20.87	1.80
75.2		9.14	1.57	10.89	1.59	12.63	1.61	14.37	1.63	16.46	1.65	17.86	1.71	20.64	1.82
77.0		9.01	1.58	10.76	1.60	12.51	1.62	14.26	1.64	16.35	1.66	17.74	1.71	20.53	1.82
80.6		8.76	1.60	10.52	1.62	12.27	1.63	14.02	1.65	16.12	1.68	17.51	1.73	20.30	1.84

Cooling (60 Hz, 230 V)

AFR	11.1
BF	0.09

Temp: Celsius / TC, SHC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	10			20			30			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	4.32	3.15	0.79	3.96	2.97	0.98	3.60	2.79	1.16	3.41	2.70	1.26	3.23	2.61	1.35	3.02	2.51	1.08
16.0	22.0	4.50	3.09	0.79	4.14	2.92	0.98	3.78	2.75	1.17	3.59	2.67	1.26	3.41	2.59	1.36	3.20	2.49	1.08
18.0	25.0	4.68	3.22	0.80	4.32	3.06	0.99	3.96	2.90	1.17	3.77	2.83	1.27	3.59	2.75	1.36	3.37	2.66	1.08
19.4	26.7	4.81	3.23	0.80	4.44	3.07	0.99	4.08	2.93	1.18	3.90	2.85	1.27	3.72	2.78	1.37	3.50	2.70	1.08
22.0	30.0	5.04	3.26	1.00	4.68	3.12	1.00	4.32	2.99	1.19	4.13	2.92	1.28	3.95	2.86	1.37	3.73	2.78	1.08
24.0	32.0	5.22	3.16	1.00	4.86	3.04	1.00	4.49	2.92	1.19	4.31	2.86	1.29	4.13	2.80	1.38	3.91	2.73	1.08

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	50			68			86			95			104			115		
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	14.75	10.76	0.79	13.51	10.13	0.98	12.27	9.52	1.16	11.65	9.22	1.26	11.03	8.92	1.35	10.29	8.57	1.08
60.8	71.6	15.36	10.54	0.79	14.12	9.95	0.98	12.88	9.38	1.17	12.26	9.10	1.26	11.64	8.82	1.36	10.90	8.49	1.08
64.4	77.0	15.98	10.99	0.80	14.74	10.45	0.99	13.50	9.91	1.17	12.88	9.65	1.27	12.26	9.39	1.36	11.51	9.08	1.08
67.0	80.0	16.40	11.01	0.80	15.17	10.49	0.99	13.93	9.98	1.18	13.30	9.73	1.27	12.69	9.49	1.37	11.94	9.20	1.08
71.6	86.0	17.20	11.11	1.00	15.96	10.65	1.00	14.72	10.19	1.19	14.10	9.97	1.28	13.48	9.75	1.37	12.74	9.49	1.08
75.2	89.6	17.81	10.80	1.00	16.58	10.37	1.00	15.34	9.96	1.19	14.72	9.75	1.29	14.10	9.55	1.38	13.35	9.31	1.08

Heating (60 Hz, 230 V)

AFR	12.3
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Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		-15 / (-15)		-10 / (-9)		-5 / (-4)		0 / (1.5)		6 / (8.3)		10 / (15)		18 / (24)	
°C		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		3.01	1.50	3.51	1.52	4.01	1.54	4.52	1.56	5.13	1.59	5.53	1.64	6.34	1.75
21.1		2.78	1.55	3.29	1.57	3.80	1.59	4.31	1.61	4.92	1.63	5.33	1.69	6.14	1.79
22.0		2.75	1.55	3.26	1.57	3.77	1.59	4.28	1.61	4.89	1.64	5.30	1.69	6.11	1.80
24.0		2.68	1.57	3.19	1.59	3.70	1.61	4.21	1.63	4.82	1.65	5.23	1.71	6.04	1.82
25.0		2.64	1.58	3.15	1.60	3.67	1.62	4.18	1.64	4.79	1.66	5.20	1.71	6.01	1.82
27.0		2.57	1.60	3.08	1.62	3.60	1.63	4.11	1.65	4.72	1.68	5.13	1.73	5.94	1.84

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		5 / (5)		14 / (15.8)		23 / (24.8)		32 / (34.7)		43 / (47)		50 / (59)		64 / (75.2)	
°F		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0		10.26	1.50	11.98	1.52	13.70	1.54	15.43	1.56	17.51	1.59	18.89	1.64	21.67	1.75
70.0		9.50	1.55	11.24	1.57	12.98	1.59	14.71	1.61	16.80	1.63	18.19	1.69	20.97	1.79
71.6		9.39	1.55	11.13	1.57	12.87	1.59	14.61	1.61	16.70	1.64	18.09	1.69	20.87	1.80
75.2		9.14	1.57	10.89	1.59	12.63	1.61	14.37	1.63	16.46	1.65	17.86	1.71	20.64	1.82
77.0		9.01	1.58	10.76	1.60	12.51	1.62	14.26	1.64	16.35	1.66	17.74	1.71	20.53	1.82
80.6		8.76	1.60	10.52	1.62	12.27	1.63	14.02	1.65	16.12	1.68	17.51	1.73	20.30	1.84

Symbols:

AFR : Airflow rate (m³/min.)
 BF : Bypass factor
 EWB : Entering wet bulb temp. (°C) / (°F)
 EDB : Entering dry bulb temp. (°C) / (°F)
 TC : Total capacity (kW) / (kBtu/h)
 SHC : Sensible heat capacity (kW) / (kBtu/h)
 PI : Power input (kW)

Notes:

- shows MAX capacities and power input (Cooling/Heating).
- TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
- Capacities are based on the following conditions.
 Corresponding refrigerant piping length : 25 ft (7.5 m)
 Level difference : 0 ft (0 m)

FFA15AVJU9 + RXV15AVJU9

Cooling (60 Hz, 208 V)

AFR	11.7
BF	0.22

Temp: Celsius / TC, SHC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	10			20			30			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	4.46	3.14	0.72	4.46	3.14	1.00	4.46	3.14	1.28	4.15	2.98	1.44	3.93	2.86	1.54	3.66	2.73	1.67
16.0	22.0	5.47	3.51	0.91	5.03	3.27	1.12	4.69	3.10	1.29	4.37	2.94	1.44	4.15	2.83	1.55	3.88	2.71	1.68
18.0	25.0	5.69	3.61	0.91	5.25	3.39	1.13	4.90	3.22	1.29	4.59	3.08	1.45	4.37	2.98	1.56	4.10	2.86	1.69
19.4	26.7	5.84	3.59	0.92	5.40	3.39	1.13	5.06	3.23	1.30	4.74	3.09	1.45	4.52	2.99	1.56	4.25	2.88	1.69
22.0	30.0	6.13	3.58	0.92	5.69	3.40	1.14	5.34	3.26	1.31	5.02	3.13	1.46	4.80	3.04	1.57	4.54	2.94	1.70
24.0	32.0	6.35	3.46	0.93	5.90	3.29	1.15	5.56	3.17	1.31	5.24	3.05	1.47	5.02	2.97	1.58	4.76	2.88	1.70

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	50			68			86			95			104			115		
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	15.23	10.73	0.72	15.23	10.73	1.00	15.23	10.73	1.28	14.16	10.16	1.44	13.41	9.77	1.54	12.50	9.31	1.67
60.8	71.6	18.67	11.97	0.91	17.17	11.17	1.12	15.99	10.57	1.29	14.91	10.03	1.44	14.15	9.67	1.55	13.25	9.23	1.68
64.4	77.0	19.42	12.30	0.91	17.91	11.56	1.13	16.74	11.00	1.29	15.65	10.50	1.45	14.90	10.15	1.56	13.99	9.75	1.69
67.0	80.0	19.94	12.26	0.92	18.43	11.56	1.13	17.26	11.02	1.30	16.20	10.54	1.45	15.42	10.22	1.56	14.52	9.83	1.69
71.6	86.0	20.91	12.22	0.92	19.40	11.59	1.14	18.23	11.11	1.31	17.14	10.67	1.46	16.39	10.38	1.57	15.48	10.03	1.70
75.2	89.6	21.65	11.82	0.93	20.15	11.24	1.15	18.97	10.80	1.31	17.89	10.40	1.47	17.13	10.13	1.58	16.23	9.82	1.70

Heating (60 Hz, 208 V)

AFR	13.0
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Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		-15 / (-15)		-10 / (-9)		-5 / (-4)		0 / (1.5)		6 / (8.3)		10 / (15)		18 / (24)	
°C		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		3.61	1.71	3.96	1.74	4.25	1.76	4.57	1.79	4.97	1.82	5.24	1.89	5.77	2.01
21.1		3.34	1.77	3.72	1.80	4.02	1.82	4.36	1.85	4.77	1.88	5.04	1.94	5.59	2.06
22.0		3.30	1.78	3.69	1.80	3.99	1.83	4.33	1.85	4.74	1.88	5.01	1.95	5.56	2.07
24.0		3.21	1.80	3.61	1.82	3.91	1.85	4.26	1.87	4.67	1.90	4.95	1.96	5.50	2.09
25.0		3.17	1.81	3.57	1.83	3.88	1.85	4.23	1.88	4.64	1.91	4.92	1.97	5.47	2.09
27.0		3.08	1.82	3.49	1.85	3.80	1.87	4.16	1.90	4.58	1.93	4.85	1.99	5.41	2.11

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		5 / (5)		14 / (15.8)		23 / (24.8)		32 / (34.7)		43 / (47)		50 / (59)		64 / (75.2)	
°F		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0		12.31	1.71	13.53	1.74	14.50	1.76	15.63	1.79	16.99	1.82	17.90	1.89	19.73	2.01
70.0		11.40	1.77	12.71	1.80	13.73	1.82	14.90	1.85	16.30	1.88	17.23	1.94	19.10	2.06
71.6		11.27	1.78	12.59	1.80	13.62	1.83	14.79	1.85	16.20	1.88	17.14	1.95	19.01	2.07
75.2		10.97	1.80	12.32	1.82	13.37	1.85	14.55	1.87	15.97	1.90	16.92	1.96	18.80	2.09
77.0		10.82	1.81	12.18	1.83	13.24	1.85	14.44	1.88	15.86	1.91	16.81	1.97	18.70	2.09
80.6		10.52	1.82	11.91	1.85	12.99	1.87	14.20	1.90	15.64	1.93	16.59	1.99	18.49	2.11

Cooling (60 Hz, 230 V)

AFR	11.7
BF	0.22

Temp: Celsius / TC, SHC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	10			20			30			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	4.46	3.14	0.72	4.46	3.14	1.00	4.46	3.14	1.28	4.15	2.98	1.44	3.93	2.86	1.54	3.66	2.73	1.67
16.0	22.0	5.47	3.51	0.91	5.03	3.27	1.12	4.69	3.10	1.29	4.37	2.94	1.44	4.15	2.83	1.55	3.88	2.71	1.68
18.0	25.0	5.69	3.61	0.91	5.25	3.39	1.13	4.90	3.22	1.29	4.59	3.08	1.45	4.37	2.98	1.56	4.10	2.86	1.69
19.4	26.7	5.84	3.59	0.92	5.40	3.39	1.13	5.06	3.23	1.30	4.74	3.09	1.45	4.52	2.99	1.56	4.25	2.88	1.69
22.0	30.0	6.13	3.58	0.92	5.69	3.40	1.14	5.34	3.26	1.31	5.02	3.13	1.46	4.80	3.04	1.57	4.54	2.94	1.70
24.0	32.0	6.35	3.46	0.93	5.90	3.29	1.15	5.56	3.17	1.31	5.24	3.05	1.47	5.02	2.97	1.58	4.76	2.88	1.70

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	50			68			86			95			104			115		
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	15.23	10.73	0.72	15.23	10.73	1.00	15.23	10.73	1.28	14.16	10.16	1.44	13.41	9.77	1.54	12.50	9.31	1.67
60.8	71.6	18.67	11.97	0.91	17.17	11.17	1.12	15.99	10.57	1.29	14.91	10.03	1.44	14.15	9.67	1.55	13.25	9.23	1.68
64.4	77.0	19.42	12.30	0.91	17.91	11.56	1.13	16.74	11.00	1.29	15.65	10.50	1.45	14.90	10.15	1.56	13.99	9.75	1.69
67.0	80.0	19.94	12.26	0.92	18.43	11.56	1.13	17.26	11.02	1.30	16.20	10.54	1.45	15.42	10.22	1.56	14.52	9.83	1.69
71.6	86.0	20.91	12.22	0.92	19.40	11.59	1.14	18.23	11.11	1.31	17.14	10.67	1.46	16.39	10.38	1.57	15.48	10.03	1.70
75.2	89.6	21.65	11.82	0.93	20.15	11.24	1.15	18.97	10.80	1.31	17.89	10.40	1.47	17.13	10.13	1.58	16.23	9.82	1.70

Heating (60 Hz, 230 V)

AFR	13.0
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Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		-15 / (-15)		-10 / (-9)		-5 / (-4)		0 / (1.5)		6 / (8.3)		10 / (15)		18 / (24)	
°C		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		3.61	1.71	3.96	1.74	4.25	1.76	4.57	1.79	4.97	1.82	5.24	1.89	5.77	2.01
21.1		3.34	1.77	3.72	1.80	4.02	1.82	4.36	1.85	4.77	1.88	5.04	1.94	5.59	2.06
22.0		3.30	1.78	3.69	1.80	3.99	1.83	4.33	1.85	4.74	1.88	5.01	1.95	5.56	2.07
24.0		3.21	1.80	3.61	1.82	3.91	1.85	4.26	1.87	4.67	1.90	4.95	1.96	5.50	2.09
25.0		3.17	1.81	3.57	1.83	3.88	1.85	4.23	1.88	4.64	1.91	4.92	1.97	5.47	2.09
27.0		3.08	1.82	3.49	1.85	3.80	1.87	4.16	1.90	4.58	1.93	4.85	1.99	5.41	2.11

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		5 / (5)		14 / (15.8)		23 / (24.8)		32 / (34.7)		43 / (47)		50 / (59)		64 / (75.2)	
°F		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0		12.31	1.71	13.53	1.74	14.50	1.76	15.63	1.79	16.99	1.82	17.90	1.89	19.73	2.01
70.0		11.40	1.77	12.71	1.80	13.73	1.82	14.90	1.85	16.30	1.88	17.23	1.94	19.10	2.06
71.6		11.27	1.78	12.59	1.80	13.62	1.83	14.79	1.85	16.20	1.88	17.14	1.95	19.01	2.07
75.2		10.97	1.80	12.32	1.82	13.37	1.85	14.55	1.87	15.97	1.90	16.92	1.96	18.80	2.09
77.0		10.82	1.81	12.18	1.83	13.24	1.85	14.44	1.88	15.86	1.91	16.81	1.97	18.70	2.09
80.6		10.52	1.82	11.91	1.85	12.99	1.87	14.20	1.90	15.64	1.93	16.59	1.99	18.49	2.11

Symbols:

AFR	: Airflow rate	(m ³ /min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
PI	: Power input	(kW)

Notes:

- shows MAX capacities and power input (Cooling/Heating).
- TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
- Capacities are based on the following conditions.
Corresponding refrigerant piping length : 25 ft (7.5 m)
Level difference : 0 ft (0 m)

FFA18AVJU9 + RXV18AVJU9

Cooling (60 Hz, 208 V)

AFR	14.2
BF	0.24

Temp: Celsius / TC, SHC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	10			20			30			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	5.25	3.69	0.83	5.25	3.69	1.16	5.06	3.60	1.53	4.81	3.46	1.65	4.55	3.33	1.77	4.24	3.18	1.72
16.0	22.0	6.34	4.07	1.04	5.83	3.80	1.29	5.32	3.55	1.53	5.06	3.42	1.66	4.80	3.30	1.78	4.50	3.15	1.72
18.0	25.0	6.59	4.19	1.05	6.08	3.94	1.29	5.57	3.70	1.54	5.31	3.58	1.67	5.06	3.46	1.79	4.75	3.33	1.72
19.4	26.7	6.77	4.18	1.05	6.26	3.94	1.30	5.75	3.71	1.55	5.49	3.60	1.67	5.23	3.49	1.79	4.93	3.36	1.72
22.0	30.0	7.10	4.16	1.06	6.59	3.95	1.31	6.07	3.74	1.56	5.82	3.64	1.68	5.56	3.54	1.80	5.26	3.43	1.72
24.0	32.0	7.35	4.03	1.07	6.84	3.83	1.32	6.33	3.64	1.56	6.07	3.55	1.69	5.82	3.46	1.81	5.51	3.35	1.72

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	50			68			86			95			104			115		
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	17.90	12.61	0.83	17.90	12.61	1.16	17.27	12.27	1.53	16.40	11.82	1.65	15.53	11.37	1.77	14.48	10.84	1.72
60.8	71.6	21.63	13.89	1.04	19.88	12.98	1.29	18.14	12.10	1.53	17.26	11.67	1.66	16.39	11.25	1.78	15.35	10.75	1.72
64.4	77.0	22.49	14.30	1.05	20.74	13.44	1.29	19.00	12.62	1.54	18.13	12.22	1.67	17.26	11.82	1.79	16.21	11.35	1.72
67.0	80.0	23.09	14.25	1.05	21.35	13.44	1.30	19.60	12.65	1.55	18.80	12.27	1.67	17.86	11.89	1.79	16.81	11.45	1.72
71.6	86.0	24.21	14.21	1.06	22.47	13.48	1.31	20.73	12.77	1.56	19.85	12.43	1.68	18.98	12.09	1.80	17.93	11.69	1.72
75.2	89.6	25.08	13.75	1.07	23.33	13.08	1.32	21.59	12.43	1.56	20.72	12.12	1.69	19.84	11.81	1.81	18.80	11.44	1.72

Heating (60 Hz, 208 V)

AFR	15.9
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Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		-15 / (-15)		-10 / (-9)		-5 / (-4)		0 / (1.5)		6 / (8.3)		10 / (15)		18 / (24)	
°C		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		4.81	2.05	5.23	2.06	5.66	2.07	6.10	2.08	6.63	2.10	6.98	2.17	7.70	2.31
21.1		4.45	2.12	4.91	2.13	5.36	2.14	5.82	2.15	6.36	2.15	6.72	2.23	7.45	2.37
22.0		4.40	2.13	4.86	2.14	5.32	2.15	5.77	2.15	6.32	2.16	6.68	2.23	7.41	2.38
24.0		4.29	2.15	4.75	2.16	5.22	2.17	5.68	2.17	6.23	2.18	6.60	2.25	7.33	2.40
25.0		4.23	2.17	4.70	2.17	5.17	2.18	5.63	2.18	6.19	2.19	6.56	2.26	7.29	2.41
27.0		4.11	2.19	4.60	2.19	5.07	2.20	5.54	2.21	6.10	2.21	6.47	2.28	7.21	2.42

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		5 / (5)		14 / (15.8)		23 / (24.8)		32 / (34.7)		43 / (47)		50 / (59)		64 / (75.2)	
°F		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0		16.42	2.05	17.88	2.06	19.37	2.07	20.88	2.08	22.72	2.10	23.95	2.17	26.42	2.31
70.0		15.20	2.12	16.77	2.13	18.34	2.14	19.91	2.15	21.80	2.15	23.06	2.23	25.57	2.37
71.6		15.02	2.13	16.61	2.14	18.19	2.15	19.77	2.15	21.66	2.16	22.93	2.23	25.45	2.38
75.2		14.62	2.15	16.25	2.16	17.85	2.17	19.45	2.17	21.36	2.18	22.63	2.25	25.17	2.40
77.0		14.42	2.17	16.06	2.17	17.69	2.18	19.29	2.18	21.21	2.19	22.49	2.26	25.03	2.41
80.6		14.02	2.19	15.70	2.19	17.35	2.20	18.98	2.21	20.91	2.21	22.20	2.28	24.75	2.42

Cooling (60 Hz, 230 V)

AFR	14.2
BF	0.24

Temp: Celsius / TC, SHC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	10			20			30			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	5.25	3.69	0.83	5.25	3.69	1.16	5.06	3.60	1.53	4.81	3.46	1.65	4.55	3.33	1.77	4.24	3.18	1.72
16.0	22.0	6.34	4.07	1.04	5.83	3.80	1.29	5.32	3.55	1.53	5.06	3.42	1.66	4.80	3.30	1.78	4.50	3.15	1.72
18.0	25.0	6.59	4.19	1.05	6.08	3.94	1.29	5.57	3.70	1.54	5.31	3.58	1.67	5.06	3.46	1.79	4.75	3.33	1.72
19.4	26.7	6.77	4.18	1.05	6.26	3.94	1.30	5.75	3.71	1.55	5.49	3.60	1.67	5.23	3.49	1.79	4.93	3.36	1.72
22.0	30.0	7.10	4.16	1.06	6.59	3.95	1.31	6.07	3.74	1.56	5.82	3.64	1.68	5.56	3.54	1.80	5.26	3.43	1.72
24.0	32.0	7.35	4.03	1.07	6.84	3.83	1.32	6.33	3.64	1.56	6.07	3.55	1.69	5.82	3.46	1.81	5.51	3.35	1.72

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EDB																	
EWB	EDB	50			68			86			95			104			115		
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	17.90	12.61	0.83	17.90	12.61	1.16	17.27	12.27	1.53	16.40	11.82	1.65	15.53	11.37	1.77	14.48	10.84	1.72
60.8	71.6	21.63	13.89	1.04	19.88	12.98	1.29	18.14	12.10	1.53	17.26	11.67	1.66	16.39	11.25	1.78	15.35	10.75	1.72
64.4	77.0	22.49	14.30	1.05	20.74	13.44	1.29	19.00	12.62	1.54	18.13	12.22	1.67	17.26	11.82	1.79	16.21	11.35	1.72
67.0	80.0	23.09	14.25	1.05	21.35	13.44	1.30	19.60	12.65	1.55	18.80	12.27	1.67	17.86	11.89	1.79	16.81	11.45	1.72
71.6	86.0	24.21	14.21	1.06	22.47	13.48	1.31	20.73	12.77	1.56	19.85	12.43	1.68	18.98	12.09	1.80	17.93	11.69	1.72
75.2	89.6	25.08	13.75	1.07	23.33	13.08	1.32	21.59	12.43	1.56	20.72	12.12	1.69	19.84	11.81	1.81	18.80	11.44	1.72

Heating (60 Hz, 230 V)

AFR	15.9
-----	------

Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		-15 / (-15)		-10 / (-9)		-5 / (-4)		0 / (1.5)		6 / (8.3)		10 / (15)		18 / (24)	
°C		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		4.81	2.05	5.23	2.06	5.66	2.07	6.10	2.08	6.63	2.10	6.98	2.17	7.70	2.31
21.1		4.45	2.12	4.91	2.13	5.36	2.14	5.82	2.15	6.36	2.15	6.72	2.23	7.45	2.37
22.0		4.40	2.13	4.86	2.14	5.32	2.15	5.77	2.15	6.32	2.16	6.68	2.23	7.41	2.38
24.0		4.29	2.15	4.75	2.16	5.22	2.17	5.68	2.17	6.23	2.18	6.60	2.25	7.33	2.40
25.0		4.23	2.17	4.70	2.17	5.17	2.18	5.63	2.18	6.19	2.19	6.56	2.26	7.29	2.41
27.0		4.11	2.19	4.60	2.19	5.07	2.20	5.54	2.21	6.10	2.21	6.47	2.28	7.21	2.42

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE : EWB / (EDB)													
EDB		5 / (5)		14 / (15.8)		23 / (24.8)		32 / (34.7)		43 / (47)		50 / (59)		64 / (75.2)	
°F		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0		16.42	2.05	17.88	2.06	19.37	2.07	20.88	2.08	22.72	2.10	23.95	2.17	26.42	2.31
70.0		15.20	2.12	16.77	2.13	18.34	2.14	19.91	2.15	21.80	2.15	23.06	2.23	25.57	2.37
71.6		15.02	2.13	16.61	2.14	18.19	2.15	19.77	2.15	21.66	2.16	22.93	2.23	25.45	2.38
75.2		14.62	2.15	16.25	2.16	17.85	2.17	19.45	2.17	21.36	2.18	22.63	2.25	25.17	2.40
77.0		14.42	2.17	16.06	2.17	17.69	2.18	19.29	2.18	21.21	2.19	22.49	2.26	25.03	2.41
80.6		14.02	2.19	15.70	2.19	17.35	2.20	18.98	2.21	20.91	2.21	22.20	2.28	24.75	2.42

Symbols:

AFR	: Airflow rate	(m ³ /min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
PI	: Power input	(kW)

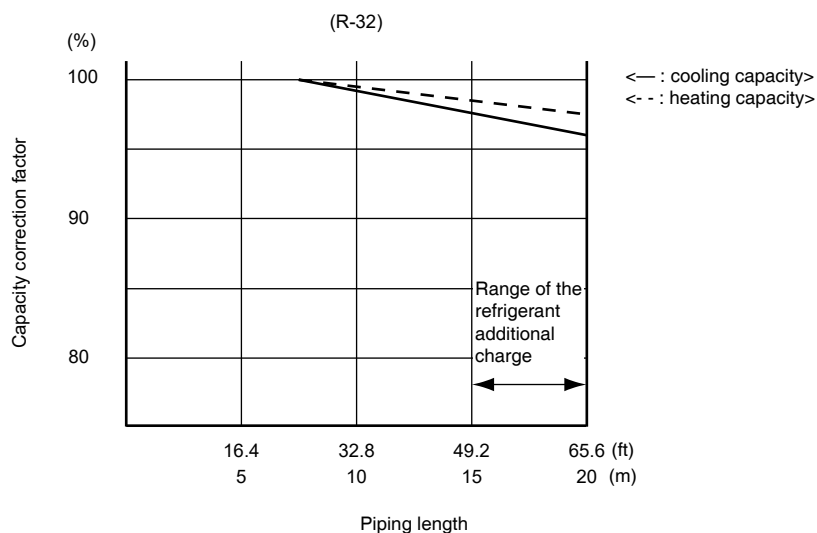
Notes:

- shows MAX capacities and power input (Cooling/Heating).
- TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
- Capacities are based on the following conditions.
Corresponding refrigerant piping length : 25 ft (7.5 m)
Level difference : 0 ft (0 m)

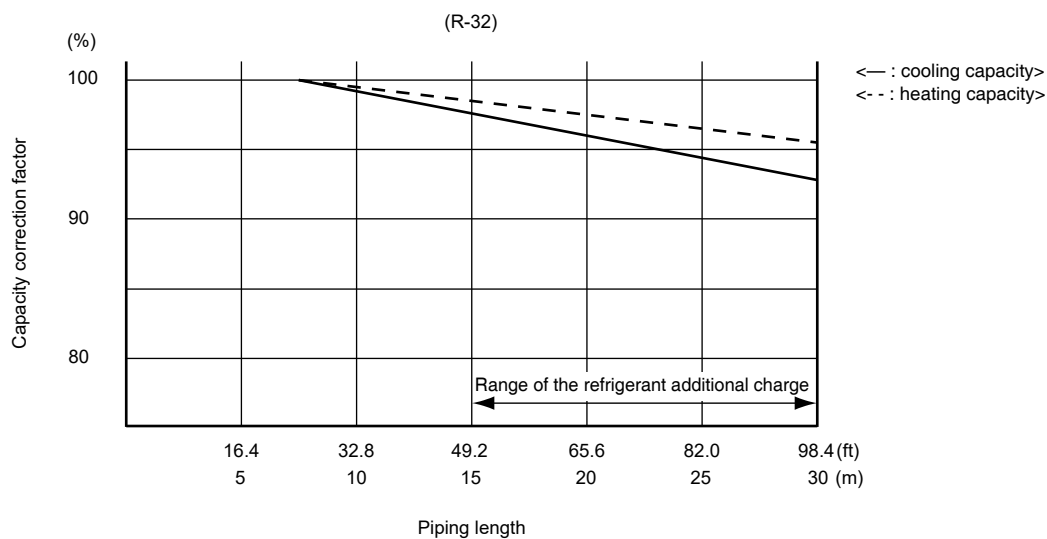
7.1 Capacity Correction Factor by the Length of Refrigerant Piping (Reference)

The cooling capacity and the heating capacity of the unit have to be corrected in accordance with the length of refrigerant piping — the distance between the indoor unit and the outdoor unit.

7.1.1 09/12 Class



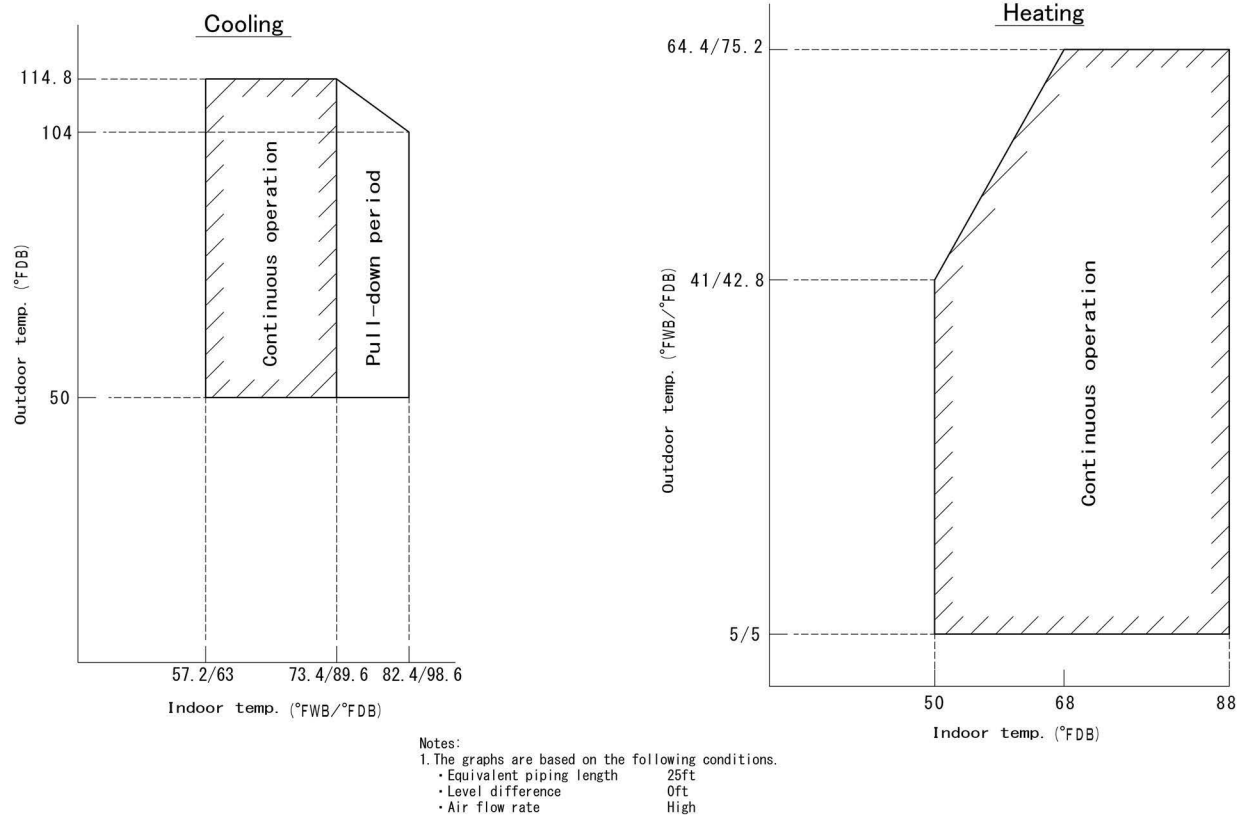
7.1.2 15/18 Class



Note: The graphs show the factor when additional refrigerant of the proper quantity is charged.

8. Operation Limit

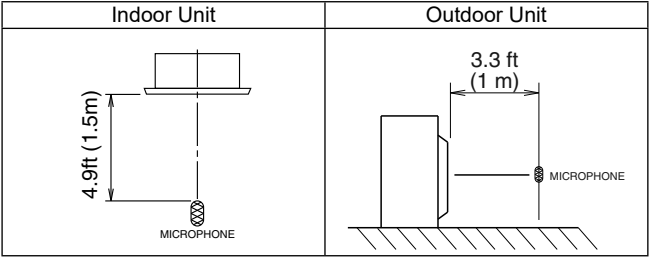
RXV09/12/15/18AVJU9



3D161995

9. Sound Level

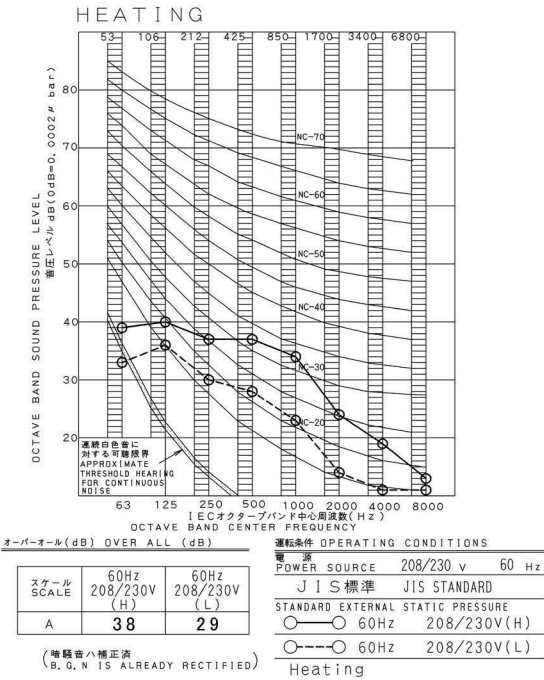
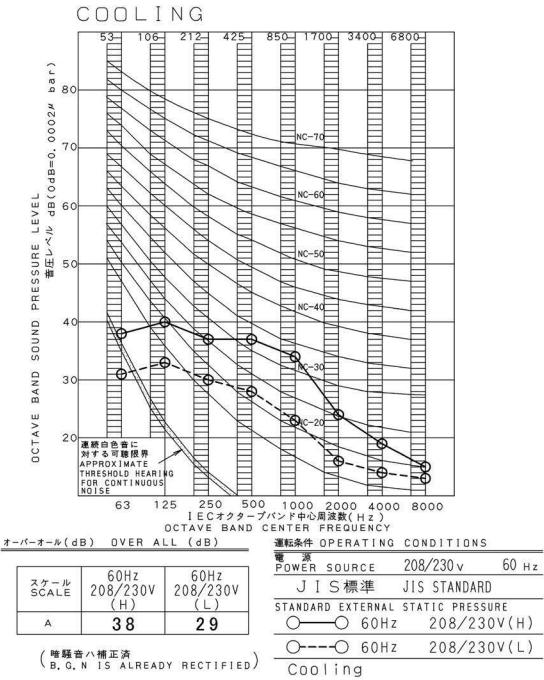
9.1 Measuring Location



- Notes:**
- 1. Operation sound is measured in an anechoic chamber.
 - 2. The data are based on the conditions shown in the table below.

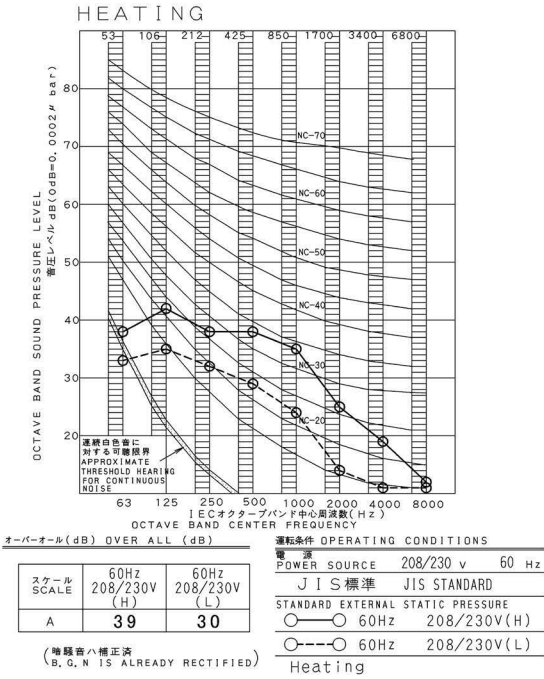
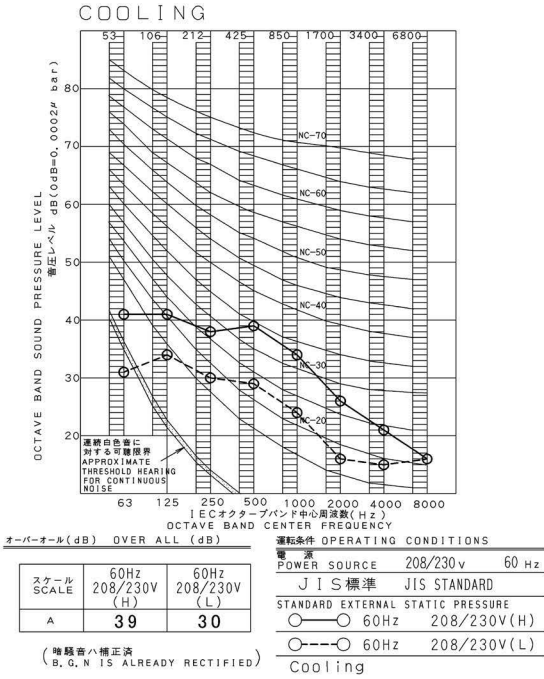
Cooling	Heating	Piping Length
Indoor ; 80.0°FDB (26.7°CDB) / 67.0°FWB (19.4°CWB) Outdoor ; 95.0°FDB (35.0°CDB) / 75.0°FWB (23.9°CWB)	Indoor ; 70.0°FDB (21.1°CDB) / 60.0°FWB (15.6°CWB) Outdoor ; 47.0°FDB (8.33°CDB) / 43.0°FWB (6.11°CWB)	25 ft (7.5 m)

9.2 Indoor Unit
FFA09AVJU9



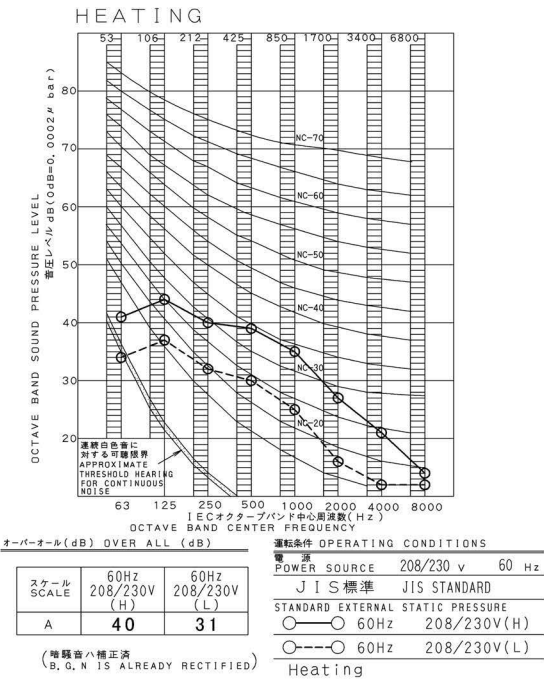
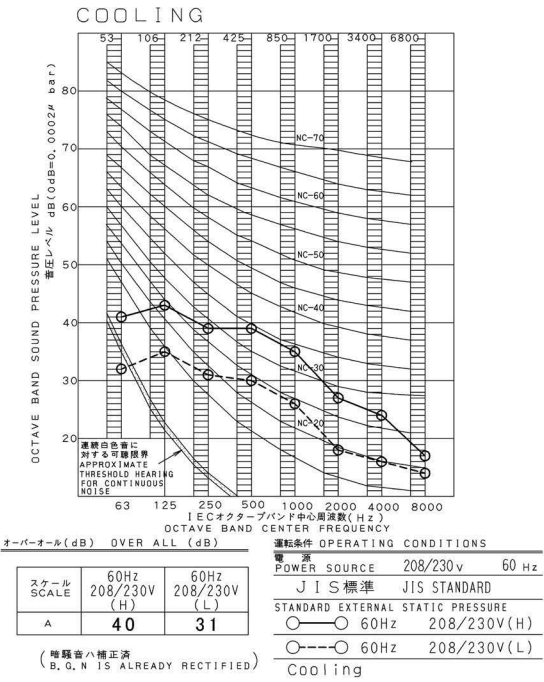
3D161946

FFA12AVJU9



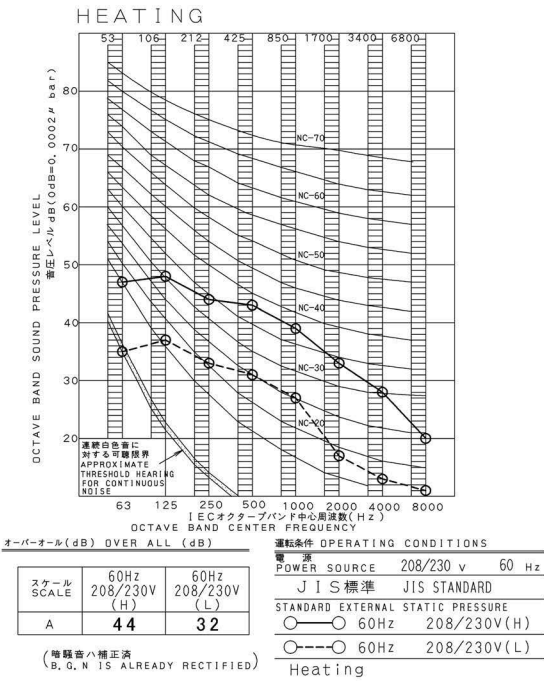
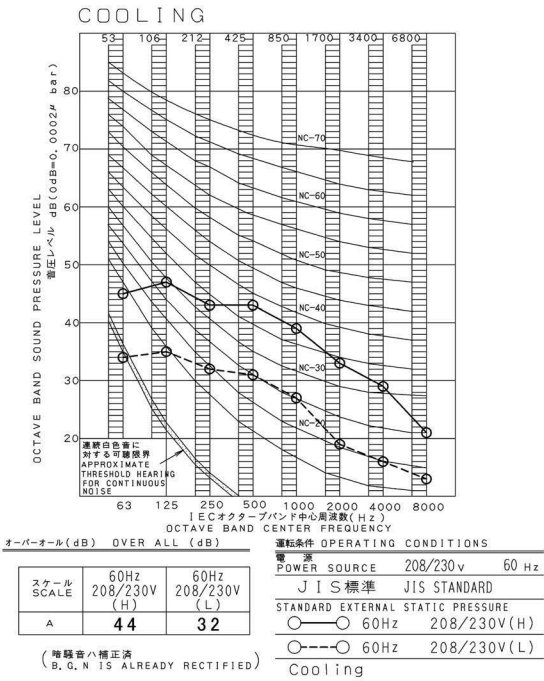
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FFA15AVJU9



3D161948

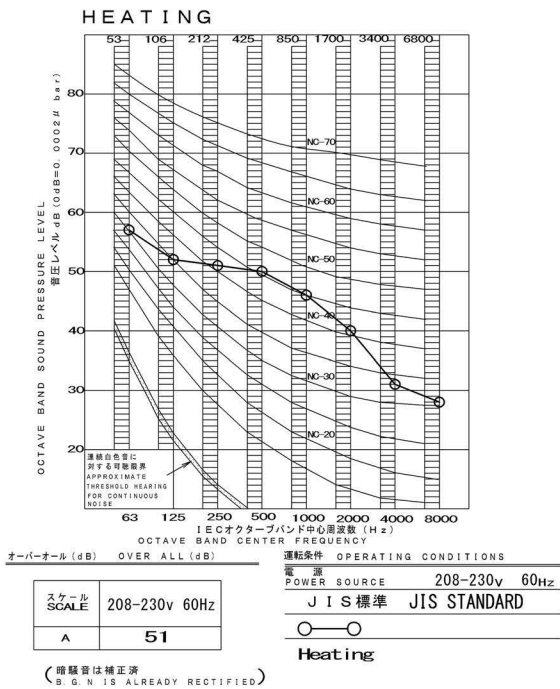
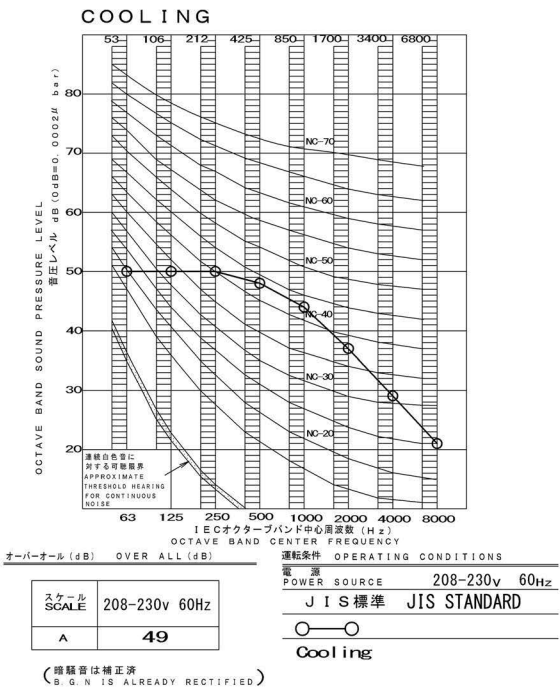
FFA18AVJU9



3D161949

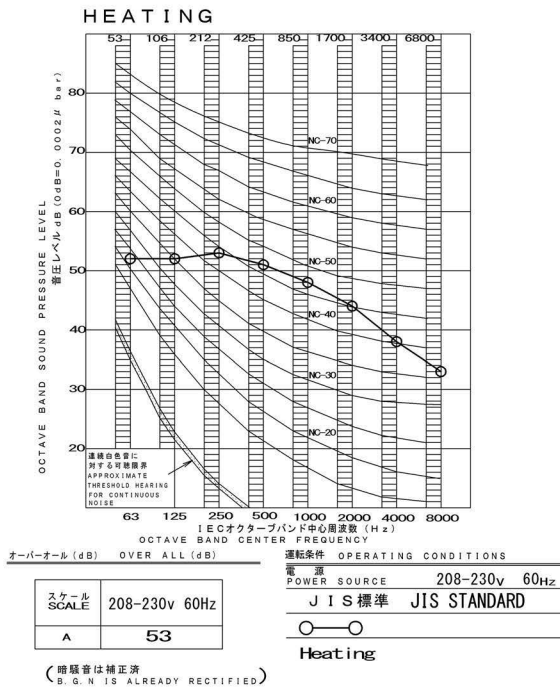
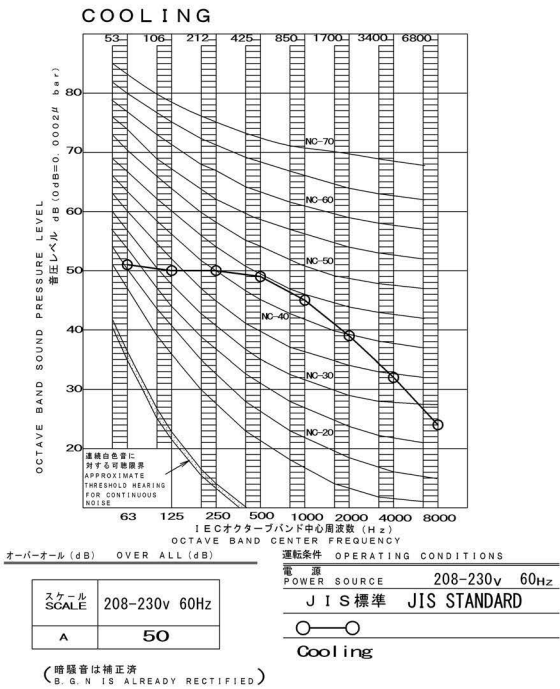
9.3 Outdoor Unit

RXV09AVJU9



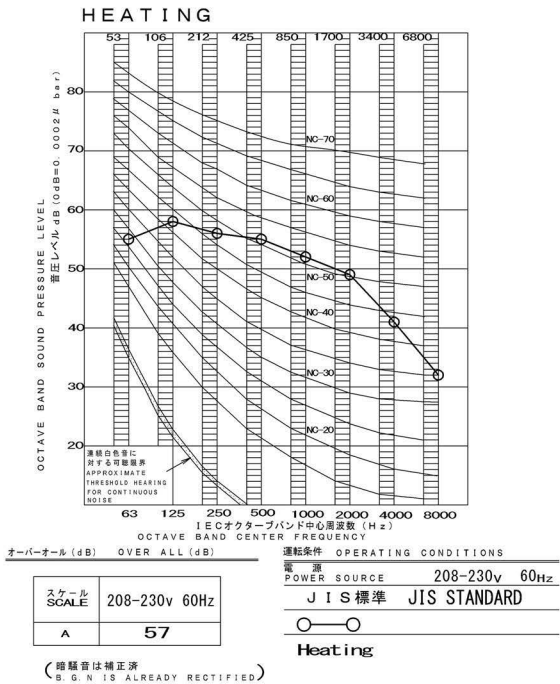
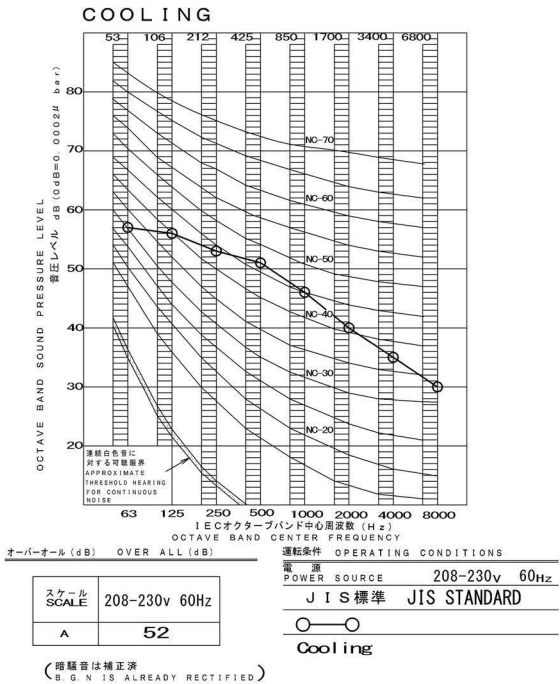
3D152631

RXV12AVJU9



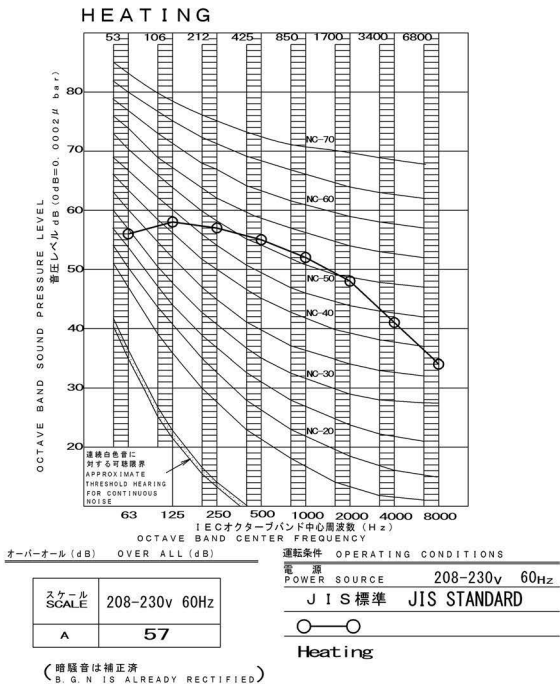
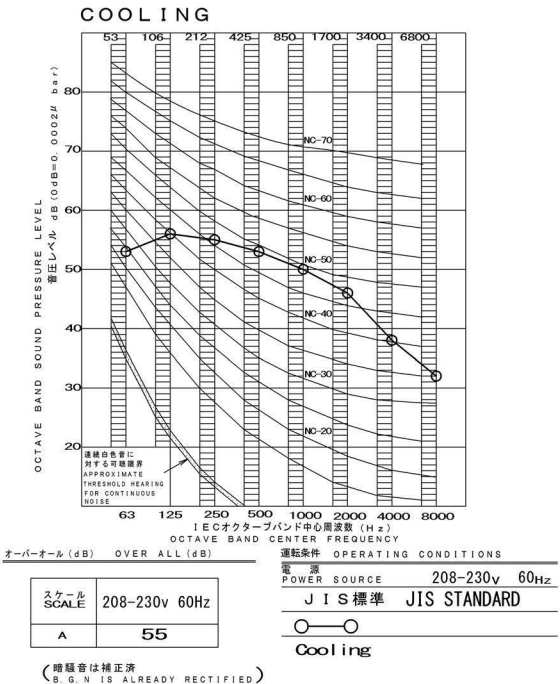
3D161962

RXV15AVJU9



3D152192

RXV18AVJU9



3D161966

10. Electric Characteristics

Indoor Unit	Outdoor Unit	Power Supply				Fan/Compressor	Indoor Fan
		Hz - Volts	Voltage Range	MCA	MOP	Inverter Drive Input	Inverter Drive Input
FFA09AVJU9	RXV09AVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	11.6	15	9.0	0.29
FFA12AVJU9	RXV12AVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	14.6	15	11.1	0.31
FFA15AVJU9	RXV15AVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	16.0	20	12.3	0.32
FFA18AVJU9	RXV18AVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	17.9	20	14.4	0.41

Symbols:

MCA : Min. circuit ampacity

MOP : Max. overcurrent protective device

Notes:

1. Inverter drive input is the current value specified in annex 101. DVA.
2. Maximum allowable voltage variation between phases is 2%.
3. Select wire size based on the larger value of MCA.

3D161959

11. Installation Manual

11.1 FFA

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The pictures in this document are for illustrative purposes only.

Safety Considerations

Refer also to the General Safety Considerations in the separate booklet.

	Read the precautions in this manual carefully before operating the unit.
	This appliance is filled with R32.

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference. Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion. Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

-  **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
-  **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
-  **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
-  **NOTE** Indicates situations that may result in equipment or property-damage accidents only.

DANGER

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

WARNING

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.

- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- The unit must have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electrical fault should occur.
The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit and control box wire to the building's electrical service panel.
Other methods of grounding are permitted if performed in accordance with the "National Electrical Code" (NEC)/ "American National Standards Institute" (ANSI)/ "National Fire Protection Association" (NFPA) 70 and local/state codes.
In CANADA, electrical grounding is to be in accordance with the Canadian Electrical Code CSA C22.1.
Failure to observe this warning can result in electrical shock that can cause personal injury or death.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).

- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.
- When mechanical connectors are reused indoors, sealing parts shall be renewed.
- When flared joints are reused indoors, the flared part shall be refabricated.

CAUTION

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,...) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.
 - (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
 - (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection against harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant piping* and follow the procedures.
- The indoor unit is for R32. See the catalog for outdoor models that can be connected. Normal operation is not possible when connected to non-compatible outdoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.

Safety Considerations

- Do not install the air conditioner or heat pump in the following locations:
 - Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
 - Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in refrigerant leakage.
 - Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
 - Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

NOTE

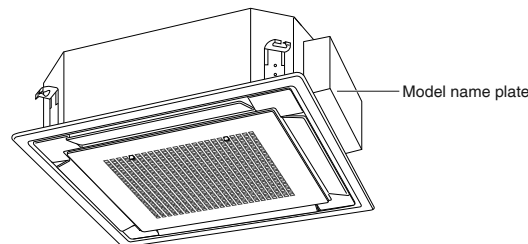
- The indoor unit should be positioned where the unit and interunit wires (outdoor to indoor) are at least 3.3 ft (1 m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3 ft (1 m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604 psi (4.17 MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

FTN007(R32)-U

This is an appliance that is not accessible to the general public.

Before Installation

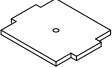
- Leave the unit inside its packaging until you reach the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, this to avoid damage or scratches to the unit. When unpacking the unit or when moving the unit after unpacking, be sure to lift the unit by holding on to the hanger bracket without exerting any pressure on other parts, especially on refrigerant piping, drain piping and other resin parts.
- Refer to the installation manual of the outdoor unit for items not described in this manual.
- Caution concerning refrigerant series R32:
The connectable outdoor units must be designed exclusively for R32.
- Check the General Safety Considerations and enter the values in the blanks on the model name plate.



Precautions

- Do not install or operate the unit in places mentioned below.
 - Places with mineral oil, or filled with oil vapor or spray like in kitchens. (Plastic parts may deteriorate.)
 - Where corrosive gas like sulphurous gas exists. (Copper tubing and brazed spots may corrode.)
 - Where volatile flammable gas like thinner or gasoline is used.
 - Where machines generating electromagnetic waves exist. (Control system may malfunction.)
 - Where the air contains high levels of salt such as near the ocean and where voltage fluctuates a lot (e.g. in factories). Also inside vehicles or vessels.
- When selecting the installation site, use the supplied (E) template for installation.
- Do not install accessories on the casing directly. Drilling holes in the casing may damage electrical wires and consequently cause fire.
- Take off static electricity from the body when carrying out wiring and the electrical wiring box cover is removed. The electric parts may be damaged.

Accessories

Ⓐ Drain hose  1	Ⓑ Clamp metal  1	Ⓒ Washer (for hanger bracket)  8	Ⓓ Clamp  7
Ⓔ Template (cut out from upper part of packing)  1	Ⓕ Screws (M5) (for template)  4	Ⓖ Fitting insulation (for gas pipe)  1	Ⓗ Fitting insulation (for liquid pipe)  1
Ⓙ Sealing pad (large)  1	Ⓚ Sealing pad (medium A)  1	Ⓛ Sealing pad (medium B)  1	Ⓜ Sealing pad (small)  1
Ⓝ Operation manual Ⓟ Installation manual Ⓠ Warranty Ⓡ General Safety Considerations 1 each			

Optional Accessories

- The optional decoration panel and remote controller are required for this indoor unit.

Table 1

Optional decoration panel
BYFQ60C3W2W (Color: White)

Table 2

Remote controller
BRC1NRV71 (Wired type)

- If you wish to use a remote controller that is not listed in Table 2, select a suitable remote controller after consulting catalogs and technical materials.

Choosing an Installation Site

R32 refrigerant is a mildly flammable refrigerant. Do not install indoor or outdoor units in areas where, in the event of a refrigerant leakage, refrigerant concentrations could exceed flammable concentrations.

Hold the unit by the 4 hanger brackets when opening the box and moving it, and do not exert pressure on to any other part, piping (refrigerant, drain, etc.), or plastic parts.

If the temperature or humidity inside the ceiling might rise above 86 °F (30 °C) or RH 80%, respectively, add extra insulation to the unit.

Use polyethylene foam as insulation and make sure it is at least 3/8 inch (10 mm) thick and fits inside the ceiling opening.

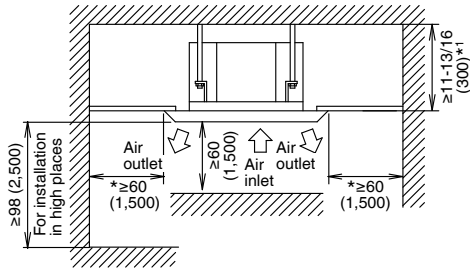
Select the airflow directions best suited to the room and point of installation.

For air discharge in 3 directions, it is necessary to make field settings by means of the remote controller and to close the air outlet (s).

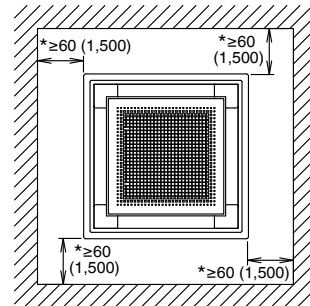
Refer to the installation manual of the blocking pad kit (sold separately) and to “Field Settings” on page 17.

- Before choosing the installation site, obtain user approval.
The indoor unit should be positioned in a place where:
 - 1) both the air inlet and air outlet are unobstructed,
 - 2) the unit is not exposed to direct sunlight,
 - 3) the unit is away from the source of heat or steam,
 - 4) there is no source of machine oil vapor (this may shorten the indoor unit service life),
 - 5) cool/warm air is circulated throughout the room,
 - 6) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
 - 7) no laundry equipment is nearby,
 - 8) drainage can be performed without any problem,
 - 9) the weight of the indoor unit can be adequately supported,
 - 10) the wall and the ceiling's lower surface are not significantly tilted,
 - 11) room can be left for installation and service work,
 - 12) there is no risk of flammable gas leaking,
 - 13) the required length of indoor-outdoor piping would not exceed the specified maximum length (see the installation manual that came with the outdoor unit for details).

Installation Space Requirements



*1 These dimensions do not include the dimensions of any added extra insulation, so please secure additional space when adding extra insulation.



unit: inch (mm)

- Leave 8 inch (200 mm) or more space where marked with the *, on sides where the air outlet is closed.

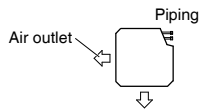
<Failure example>

If there is an obstacle in the airflow path or proper installation space is not provided, the indoor unit will cause air volume reduction and take in air blown out of the indoor unit, thus resulting in performance degradation or turning the thermostat OFF frequently.

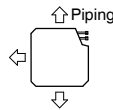
Airflow direction

- The air direction shown is an example.
- Select the appropriate number of directions according to the shape of the room and the location of the unit. (Field settings have to be made using the remote controller and the outlet vents have to be shut off if 2 or 3 directions are selected. See the blocking pad kit (sold separately) installation manual for details.)

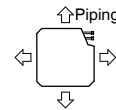
Airflow direction (Example)



Air outlet in 2 directions



Air outlet in 3 directions



Air outlet in 4 directions

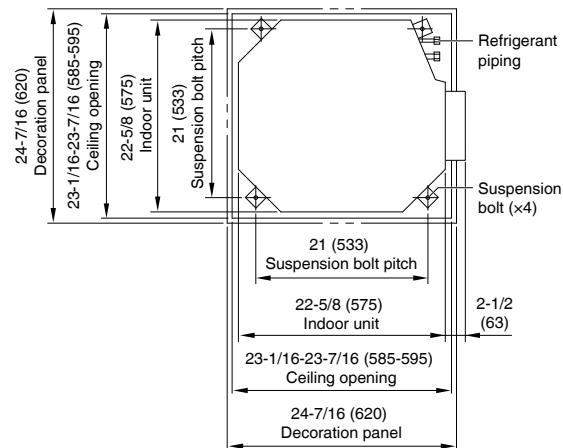
Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.

(Installation pitch is marked on the (E) template. Refer to it to check for points requiring reinforcing.)

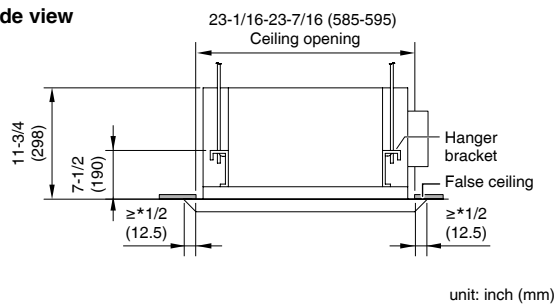
Indoor Unit Installation

1. Relation of ceiling opening to unit and suspension bolt position

Top view

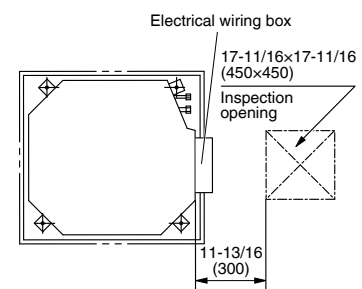


Side view



NOTE

- * If the panel does not extend over the ceiling by this amount, supplement with extra ceiling material or restore the ceiling.
- Install the inspection opening on the electrical wiring box side where maintenance and inspection of the electrical wiring box and drain pump are easy.



2. Make the ceiling opening needed for installation where applicable (For existing ceilings)

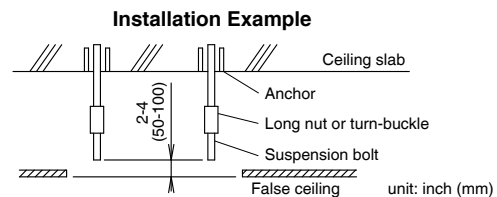
- Refer to the (E) template for ceiling opening dimensions.
- Create the ceiling opening required for installation. From the side of the opening to the casing outlet, implement the refrigerant and drain piping and wiring for remote controller and wiring between units. Refer to each “5. Drain piping work” or “6. Wiring” section.
- After making an opening in the ceiling, it may be necessary to reinforce ceiling beams to keep the ceiling level and to prevent it from vibrating. Consult the builder for details.

3. Installing the suspension bolts

(Use either a M8-M10 size bolt or the equivalent)

Use a hole-in anchor for existing ceilings, and a sunken insert, sunken anchor or other field supplied parts for new ceilings to reinforce the ceiling to bear the weight of the unit. Adjust clearance (2-4 inch (50-100 mm)) from the ceiling before proceeding further.

- All the above parts are field supplied.



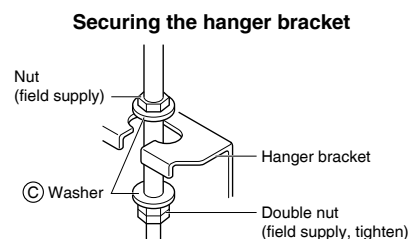
4. Installing the indoor unit

When installing optional accessories (except for the decoration panel), read also the installation manual of the optional accessories. Depending on the field conditions, it may be easier to install optional accessories before the indoor unit is installed. However, for existing ceilings, always install fresh air intake kit before installing the unit. As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by Daikin.

For new ceilings

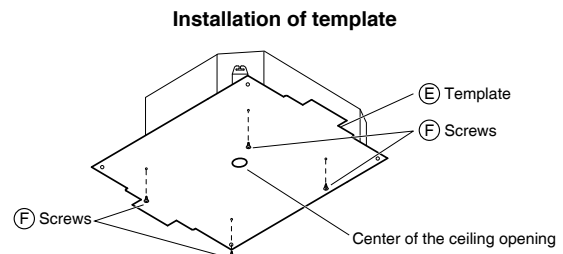
1) Install the indoor unit temporarily.

- Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and (C) washer from the upper and lower sides of the hanger bracket.



2) Refer to the (E) template for ceiling opening dimension. Consult the builder or carpenter for details.

- The center of the ceiling opening is indicated on the (E) template. This indication also indicates the center of the unit.
- The (E) template can be rotated by 90° to be able to indicate the correct dimensions on all 4 sides.
- After cutting the template from the packaging, attach the (E) template to the unit with (F) screws (x4) as shown in figure.
- Ceiling height is shown on the side of the (E) template. Adjust the height of the unit according to this indication.



Ceiling work

3) Adjust the unit to the right position for installation.

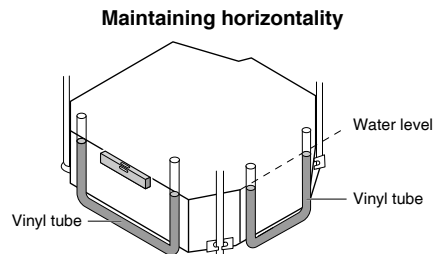
(Refer to “1. Relation of ceiling opening to unit and suspension bolt position”.)

Indoor Unit Installation

⚠ CAUTION

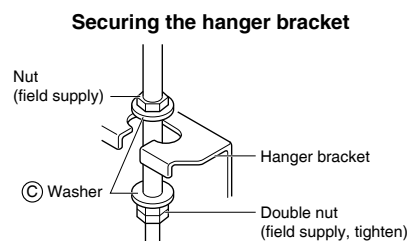
If the unit is tilted against condensate flow, the float switch may malfunction and cause water to drip.

- 4) Check the unit is horizontally level.
 - The indoor unit is equipped with a built-in drain pump and float switch. Verify that it is level by using a water level or a water-filled vinyl tube.
- 5) Remove the (E) template.



For existing ceilings

- 1) Install the indoor unit temporarily.
 - Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and (C) washer from the upper and lower sides of hanger bracket.



- 2) Adjust the height and position of the unit.
(Refer to “1. Relation of ceiling opening to unit and suspension bolt position”.)
- 3) Perform steps 4) in **For new ceilings**.

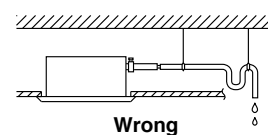
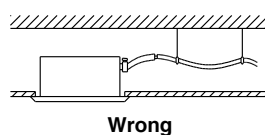
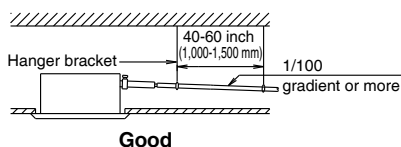
5. Drain piping work

⚠ CAUTION

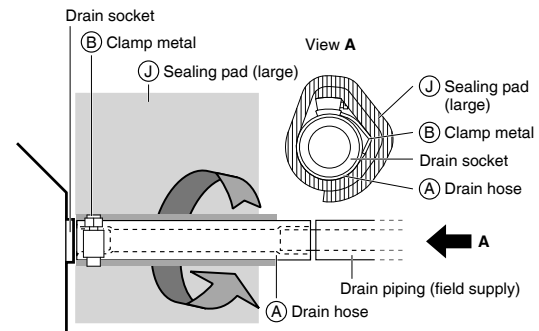
- Water pooling in the drainage piping can cause the drain to clog.
- **Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.**
- **Keep in mind that the drain pipe becomes blocked if water collects on it.**

1. Install of drain piping

- Install the drain piping as shown in the figure and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.
- Keep piping as short as possible and slope it downwards at a gradient of at least 1/100 so that air may not remain trapped inside the pipe.
- Keep pipe size equal to or greater than that of the connecting pipe (vinyl pipe of nominal diameter 13/16 inch (20 mm) and outer diameter 1 inch (26 mm)).
- Push the supplied drain hose as far as possible over the drain socket.
- If the drain hose cannot be sufficiently set on a slope, refer to “Precautions for drain raising piping”.
- To keep the drain hose from sagging, space hanger bracket every 40-60 inch (1,000-1,500 mm).

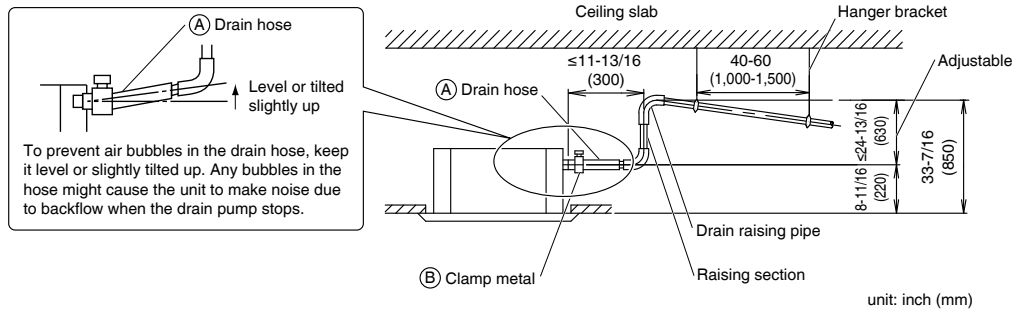


- Tighten the (B) clamp metal as indicated in the illustration.
- After the testing of drain piping is finished, attach the (J) sealing pad (large) supplied with the unit over the uncovered part of the drain socket (= between drain hose and unit body).
- Wrap the supplied large sealing pad over the (B) clamp metal and (A) drain hose to insulate and fix it with clamps (field supply).
- Insulate the complete drain piping inside the building (field supply).
- If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).

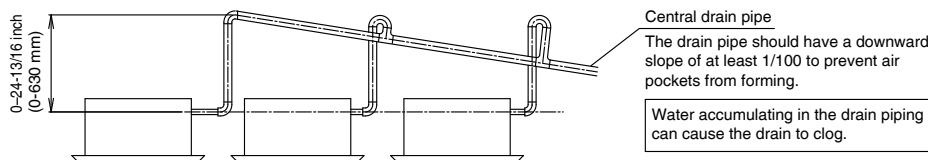


Precautions for drain raising piping

- Install the drain raising pipes at a height of less than 24-13/16 inch (630 mm)*.
- * If the downward slope cannot achieve a 1/100 gradient, install the drain raising pipes.
- Install the drain raising pipes at a right angle to the indoor unit and no more than 11-13/16 inch (300 mm) from the unit.



- To ensure no excessive pressure is applied to the included (A) drain hose, do not bend or twist the hose when installing as it could cause leakage.
- If converging multiple drain pipes, install according to the procedure shown below.



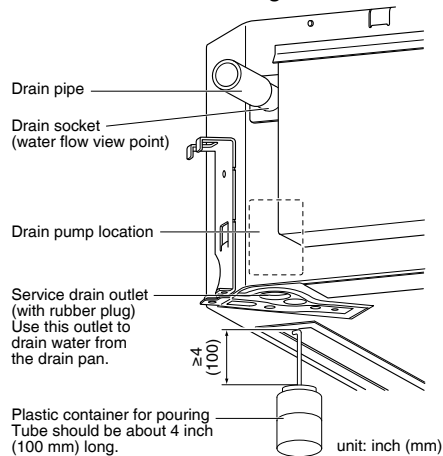
Select converging drain pipes with gauges is suitable for the operating capacity of the unit.

Indoor Unit Installation

2. After piping work is finished, check if drainage flows smoothly

- Add approximately 1/4 gal of water slowly from the air outlet and check drainage flow.

Method of adding water



When electric wiring work is finished

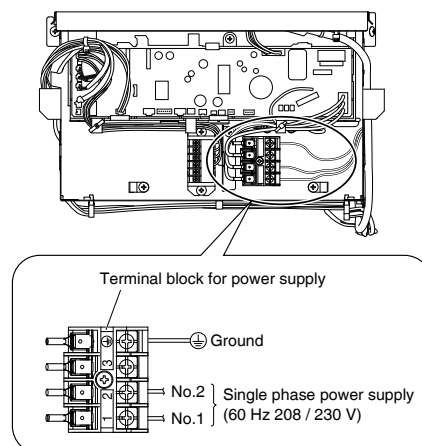
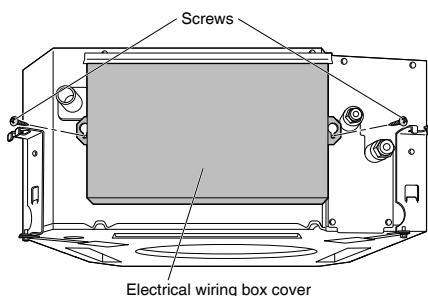
- Check drainage flow during COOL operation, explained in “Test operation and testing” on page 18.

When electric wiring work is not finished

⚠ CAUTION

Electrical wiring work should be done by a certified electrician.

- If someone who does not have the proper qualifications performs the work, perform the following actions after the test operation is complete.
- 1) Remove the electrical wiring box cover (2 screws). Connect the single phase power supply (SINGLE PHASE 60 Hz 208/230 V) to connections No.1 and No.2 on the terminal block for power supply.
Do not connect to No.3 of the terminal block for power supply or the drain pump will not operate.
When carrying out wiring work around the electrical wiring box, make sure none of the connectors come undone.
Be sure to attach the electrical wiring box cover before turning on the power.
 - 2) After confirming drainage, turn off the power supply and remove the power supply wiring.
 - 3) Attach the electrical wiring box cover as before.



6. Wiring

Refer also to the installation manual for the outdoor unit.

 WARNING

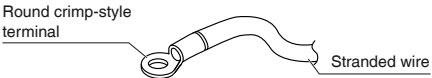
- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

 CAUTION

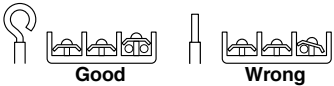
Precautions to be taken for wiring

- Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.

- For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimp-style terminals on the wires up to the covered part and secure in place.



- If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.



- When clamping wiring, use the included clamping material to prevent outside pressure being exerted on the wiring connections and clamp firmly. When doing the wiring, make sure the wiring is neat and does not cause the electrical wiring box cover to stick up, then close the cover firmly.
- Outside the unit, separate the low voltage wiring (remote controller wiring) and high voltage wiring (wiring between units, ground, and other power wiring) at least 2 in. so that they do not pass through the same place together. Proximity may cause electrical interference, malfunctions, and breakage.

Tightening torque for the terminal blocks

- Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.
- Refer to the table below for the tightening torque of the terminal screws.

unit: lbf • ft (N • m)

	Tightening torque
Terminal block for remote controller (6P)	0.58 - 0.72 (0.79 - 0.98)
Terminal block for power supply (4P)	0.87 - 1.06 (1.18 - 1.44)

Indoor Unit Installation

- For electric wiring work, refer also to “**Wiring diagram label**” attached to the electrical wiring box cover.
- For remote controller wiring details, refer to the installation manual attached to the remote controller.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.
- **Specifications for field wire**

The remote controller wiring should be procured locally.

Table 3

	Wire	Size	Length
Wiring between units	Recommend stranded and shielded. Local code supersedes recommendation.	AWG 14	—
Remote controller wiring	Sheathed (2 wire)	AWG 18 - 16	Max. 1,640 ft (500 m)*
Wiring to ground terminal	Recommend stranded and shielded. Local code supersedes recommendation.	—	—

* This will be the total extended length in the system when doing group control.

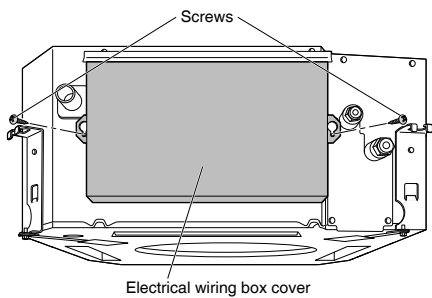
⚠ CAUTION

- Arrange the wires and fix a cover firmly so that the cover does not float during wiring work.
- Do not clamp remote controller wiring together with wiring between units. Doing so may cause malfunction.
- Remote controller wiring and wiring between units should be located at least 2 inch (50 mm) from other electric wires. Not following this guideline may result in malfunction due to electrical noise.

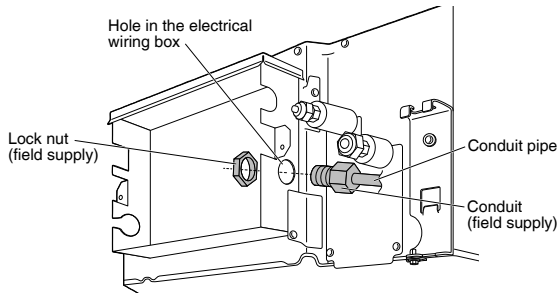
Connection of wiring between units, ground wire and remote controller wiring

Wiring between units and ground wire

- 1) Remove the electrical wiring box cover (2 screws).

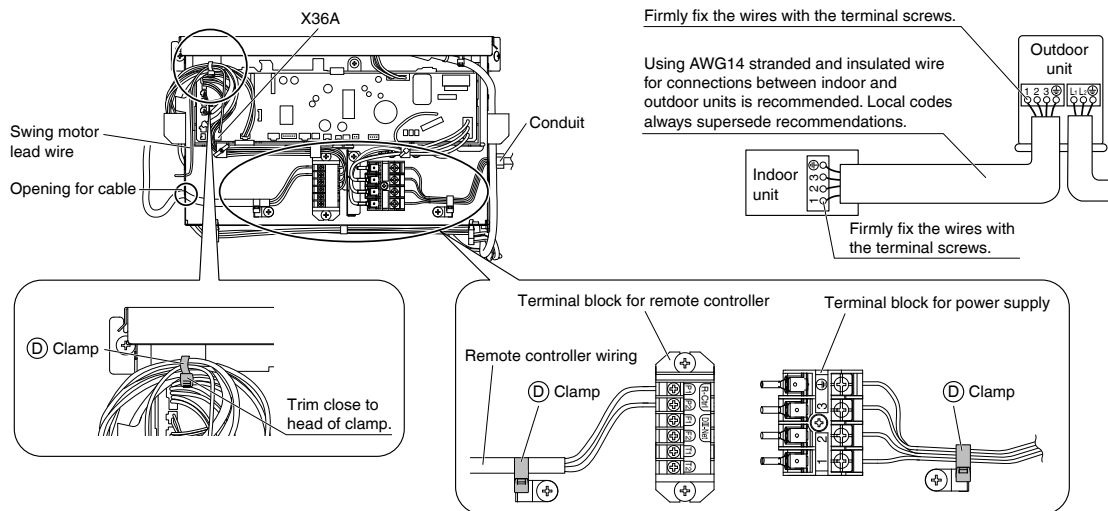


- 2) Insert the wires including the ground wire into the conduit, and secure the conduit to the hole in the electrical wiring box using a lock nut, as shown in the illustration.



- 3) Connect the ground wire to the corresponding terminals.
- 4) Match wire colors with terminal numbers on the terminal block for power supply of indoor and outdoor unit and firmly secure the wires in the corresponding terminals with screws.
- 5) In doing this, pull the wires inside through the hole and fix the wires securely with the included (D) clamp.
- 6) Give enough slack to the wires between the (D) clamp and terminal block for power supply.
- 7) Pull the wires inside through the hole and connect them to the terminal block for remote controller (P1, P2) (no polarity). Securely fix the remote controller wiring with the included (D) clamp.
- 8) Give enough slack to the wires between the (D) clamp and the terminal block for remote controller.
- 9) Securely connect the swing motor lead wire from the decoration panel to the connector (X36A) on the PCB inside the electrical wiring box of the indoor unit.

The swing flap will not function without connection to the connector.
- 10) Fasten the swing motor lead wire to the other wires using the (D) clamp. After fastening, trim away any excess strap from the (D) clamp close to the head of the clamp.
- 11) Attach the electrical wiring box cover as before.
- 12) After all wiring connections are done, fill in any gaps in the casing wiring holes with putty or (M) sealing pad (small) thus to prevent small animals or dirt from entering the unit from outside and causing short circuits in the electrical wiring box.



Refrigerant Piping Work

Refer also to the installation manual for the outdoor unit.

⚠ WARNING

- Do not apply mineral oil on flared part.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with the unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

Execute thermal insulation work completely on both sides of the gas and the liquid piping. Otherwise, a water leakage can result sometimes.

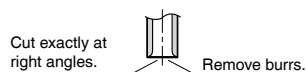
Be sure to use insulation designed for use with HVAC systems.

Also, in cases where the temperature and humidity of the refrigerant piping sections might exceed 86 °F (30 °C) or RH80%, reinforce the refrigerant insulation. (13/16 inch (20 mm) or thicker) Condensation may form on the surface of the insulating material.

Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.

1. Flaring the pipe end

- 1) Cut the pipe end with a pipe cutter.
- 2) Remove burrs with the cut surface facing downward so that the filings do not enter the pipe.



- 3) Put the flare nut on the pipe.
- 4) Flare the pipe.
- 5) Check that the flaring has been done correctly.

Flaring

Set exactly at the position shown below.

	Flare tool for R410A or R32	Conventional flare tool	
	Clutch-type	Clutch-type (Rigid-type)	Wing-nut type (Imperial-type)
A	0-0.020 inch (0-0.5 mm)	0.039-0.059 inch (1.0-1.5 mm)	0.059-0.079 inch (1.5-2.0 mm)

Check

The flare's inner surface must be flaw-free.

When flaring, do not over-tighten and crack.

The pipe end must be evenly flared in a perfect circle.

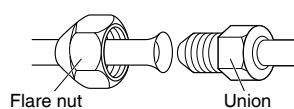
Make sure that the flare nut is fitted.

2. Refrigerant piping

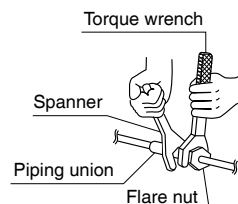
⚠ CAUTION

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.

- For refrigerant pipe connections, align the center of the flare and the union, tighten the flare nut 3 to 4 turns by hand, and then use a torque wrench and a spanner to firmly tighten to the specified torque.



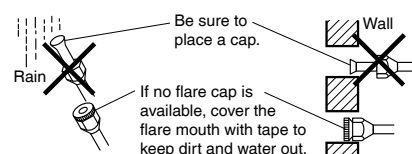
Do not apply refrigeration oil, gas leak prevention agent, etc., to the outer surface of the flare or threads (flare nut, union).
(May result in cracking of the flare nut or damage to the threads)



	Piping size	Flare nut tightening torque
Gas side	O.D. 3/8 inch (9.5 mm)	24-1/8-29-1/2 lbf • ft (32.7-39.9 N • m)
	O.D. 1/2 inch (12.7 mm)	36-1/2-44-1/2 lbf • ft (49.5-60.3 N • m)
Liquid side	O.D. 1/4 inch (6.4 mm)	10-1/2-12-3/4 lbf • ft (14.2-17.2 N • m)

Cautions on piping handling

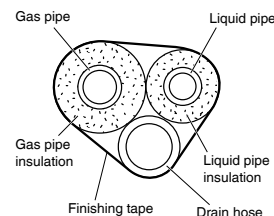
- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.



Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
Heat transfer rate: 0.041 to 0.052 W/mK (0.024 to 0.030 Btu/ft²°F (0.035 to 0.045 kcal/mh°C))
Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper pipe only.

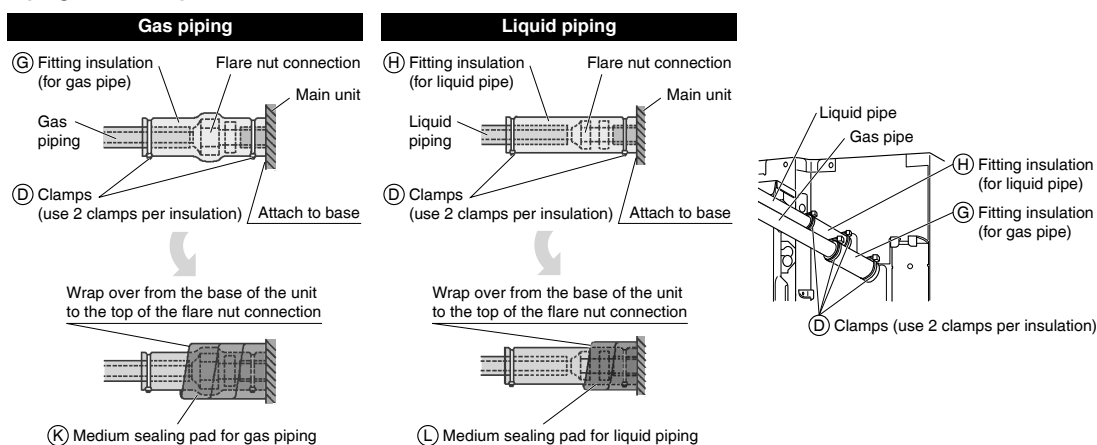


- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
Gas side	O.D. 3/8 inch (9.5 mm)	1-3/16 inch (30 mm) or more	0.031 inch (0.8 mm) (C1220T-O)	I.D. 15/32-19/32 inch (12-15 mm)	13/32 inch (10 mm) Min.
	O.D. 1/2 inch (12.7 mm)	1-9/16 inch (40 mm) or more		I.D. 9/16-5/8 inch (14-16 mm)	
Liquid side	O.D. 1/4 inch (6.4 mm)	1-3/16 inch (30 mm) or more		I.D. 5/16-13/32 inch (8-10 mm)	

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.
- Make absolutely sure to execute thermal insulation works on the pipe-connecting section, after checking for gas leakage, by thoroughly studying the following figures and using the included thermal insulating materials (G) fitting insulation and (H) fitting insulation. Fasten both ends with the (D) clamps.

Piping insulation procedure



CAUTION

Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.

Installation of the Decoration Panel

Read "Test Operation and Testing" on page 18 before making a test operation without attaching the decoration panel.
Refer to the installation manual attached to the decoration panel.
After installing the decoration panel, ensure that there is no space between the unit body and decoration panel.

Field Settings

⚠ CAUTION

When performing field setting or test operation without attaching the decoration panel, do not touch the drain pump. This may cause electric shock.

- Make sure the electrical wiring box cover is closed on the indoor and outdoor units.
- Field settings must be made from the remote controller and in accordance with installation conditions.
- Setting can be made by changing the "Mode No.," "FIRST CODE NO." and "SECOND CODE NO."
- The "Field Settings" included with the remote control lists the order of the settings and method of operation.

Field Settings			
Unit No	Mode		
0	20		
0-01	1-01	2-02	3-01
4	5	6	7
8	9	10	11
12	13	14	15
Setting			

1. Setting air outlet direction

- For changing air outlet direction (2 or 3 directions), refer to the installation manual attached to the blocking pad kit (sold separately) or the service manual.
(SECOND CODE NO. is factory set to "01" for air outlet in 4 directions.)

2. Setting for options

- For settings for options, see the installation manual provided with the option.

3. Setting air filter sign

- Remote controllers are equipped with liquid crystal display air filter signs to display the time to clean air filters.
- Change the SECOND CODE NO. depending on the amount of dirt or dust in the room.

AIR FILTER CLEANING TIME INDICATOR lamp display interval

Setting content	Contamination	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Approx. 2,500 hrs	Contamination-light	10 (20)	0	01
Approx. 1,250 hrs	Contamination-heavy			02

AIR FILTER CLEANING TIME INDICATOR lamp display

Setting content	Mode No.	FIRST CODE NO.	SECOND CODE NO.
Display ON	10 (20)	3	01
Display OFF*			02

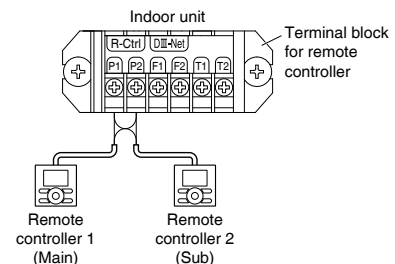
* Use "Display OFF" setting when cleaning indication is not necessary such as the case of periodical cleaning being carried out.

4. 2 remote controllers (controlling 1 indoor unit by 2 remote controllers)

- When using 2 remote controllers, one must be set to "MAIN" and the other to "SUB".

Wiring Method

- 1) Remove the electrical wiring box cover.
(Refer to Wiring between units and ground wire in "6. Wiring" on page 13.)
- 2) Add remote controller 2 to the terminal block for remote controller (P1, P2) in the electrical wiring box. (There is no polarity.)
(Refer to Table 3 in "6. Wiring" on page 13.)



Test Operation and Testing

CAUTION

When performing field settings or test operation without attaching the decoration panel, do not touch the drain pump. This may cause electric shock.

- After finishing the construction of refrigerant piping, drain piping, and electric wiring, conduct test operation accordingly to protect the unit.

Precautions

Refer to “3. How to diagnose for malfunction” if the unit does not operate properly.

1. Test operation and testing

- Test operation should be carried out in either COOL or HEAT operation.

1-1. Measure the supply voltage and make sure that it is within the specified range.

1-2. In COOL operation, select the lowest programmable temperature;

in HEAT operation, select the highest programmable temperature.

1-3. Carry out the test operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the louvers, are working properly.

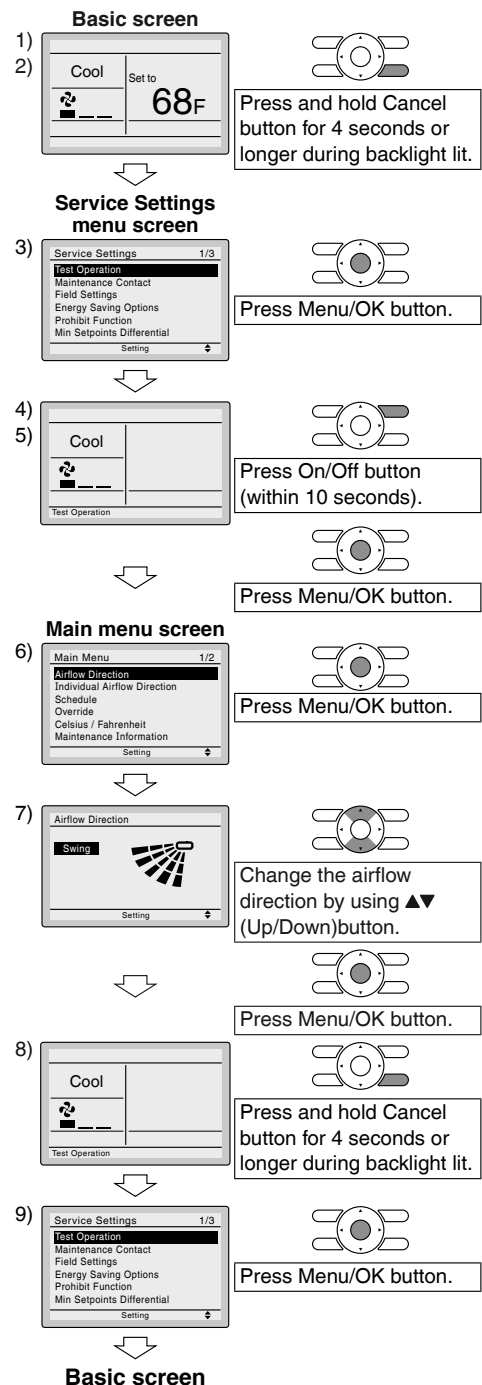
- To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.

1-4. After test operation is complete, set the temperature to a normal level (78 °F to 82 °F (26 °C to 28 °C) in COOL operation, 68 °F to 75 °F (20 °C to 24 °C) in HEAT operation).

- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to test operation mode using the procedure on page 19.

Test Operation and Testing

- 1) Set to COOL or HEAT operation using the remote controller.
- 2) Press and hold Cancel button for 4 seconds or longer. Service settings menu is displayed.
- 3) Select **Test Operation** in the service settings menu, and press Menu/OK button. Basic screen returns and "Test Operation" is displayed at the bottom.
- 4) Press On/Off button within 10 seconds, and the test operation starts.
Monitor the operation of the indoor unit for a minimum of 10 minutes. During test operation, the indoor unit will continue to cool/heat regardless of the temperature setpoint and room temperature.
 - In the case of above-mentioned procedures 3) and 4) in reverse order, test operation can start as well.
- 5) Press Menu/OK button in the basic screen. Main menu is displayed.
- 6) Select **Airflow Direction** in the main menu and check that airflow direction is actuated according to the setting. For operation of airflow direction setting, see the operation manual.
- 7) After the operation of airflow direction is confirmed, press Menu/OK button. Basic screen returns.
- 8) Press and hold Cancel button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
- 9) Select **Test Operation** in the service settings menu, and press Menu/OK button. Basic screen returns and normal operation is conducted.
 - Test operation will stop automatically after 15-30 minutes. To stop the operation, press On/Off button.
- 10) If the decoration panel has not been installed, turn off the power after the test operation.



2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed securely.	Fall, vibration, noise	
Is the outdoor unit fully installed?	No operation or burn damage	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
Does the power supply voltage correspond to that shown on the name plate?	No operation or burn damage	
Only specified wires are used for all wiring, and all wires are connected correctly.	No operation or burn damage	
System is properly grounded.	Electrical leakage	
Is wiring size according to specifications?	No operation or burn damage	
Is something blocking the air outlet or inlet of either the indoor or outdoor units?	Incomplete cooling/heating function	
Are refrigerant piping length and additional refrigerant charge noted down?	The refrigerant charge in the system is not clear	
Pipes and wires are connected to the corresponding connection ports / terminal blocks for the connected unit.	No cooling/heating	
Stop valves are opened.	Incomplete cooling/heating function	
Check that the connector of the lead wires of the decoration panel is connected securely.	Louvers do not move	
Indoor unit properly receives remote control commands.	No operation	

Items to be checked at time of delivery

Also review the “Precautions” on page 3

Test items	Check
Are the electrical wiring box cover, air filter, suction grille attached?	
Did you explain about operations while showing the operation manual to your customer?	
Did you hand the operation manual over to your customer?	

Points for explanation about operations

The items with ⚠ WARNING and ⚠ CAUTION marks in the operation manual are the items pertaining to possibilities for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your customers to read the operation manual.

Note to the installer

Be sure to instruct customers how to properly operate the unit (especially cleaning the filter, operating different functions, and adjusting the temperature) by having them carry out operations while looking at the manual.

Test Operation and Testing

3. How to diagnose for malfunction

- If the air conditioner does not operate normally after installing the air conditioner, a malfunction shown in the table below may happen.

Wired remote controller display	Description
No display	• Power outage, power voltage error or open-phase • Incorrect wiring (between indoor and outdoor units) • Indoor PCB assembly failure • Remote controller wiring not connected • Remote controller failure • Open fuse or tripped circuit breaker (outdoor unit)
"Checking the connection. Please stand by." *	• Indoor PCB assembly failure • Wrong wiring (between indoor and outdoor units)

* "Checking the connection. Please stand by" will be displayed for up to 90 seconds following the application of power to the indoor unit. This is normal and does not indicate a malfunction.

■ Diagnose with the display on the liquid crystal display remote controller.

When the operation stops due to a malfunction, operation lamp blinks, and the malfunction code is indicated on the liquid crystal display. In such a case, diagnose the fault contents by referring to **Error History** in the service settings menu. In the case of group control, the unit No. is displayed so that the indoor unit with the trouble can be identified.

4. Pump down operation

Be sure to pump down when relocating or disposing of the unit.
For instructions on how to pump down, refer to the service manual.

11.2 RXV09/12

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Outdoor Unit Installation	7	Trial Operation and Testing	13
1. Installing the outdoor unit	7	1. Trial operation and testing	13
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The pictures in this document are for illustrative purposes only.

Safety Considerations

Refer also to the General Safety Considerations in the separate booklet.

	Read the precautions in this manual carefully before operating the unit.
	This appliance is filled with R32.

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference. Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion. Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

-  **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
-  **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
-  **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
-  **NOTE** Indicates situations that may result in equipment or property damage accidents only.

DANGER

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

⚠ WARNING

- During installation, attach the refrigerant piping securely before operating the compressor. If the refrigerant pipes are not attached and the stop valve is open when the compressor is operated, air will be sucked in, causing abnormal pressure in the refrigeration cycle, which may result in equipment damage and even injury.
- During pump down, stop the compressor before removing the refrigerant piping. If the compressor is still operating and the stop valve is open during pump down, air will be sucked in when the refrigerant piping is removed, causing abnormal pressure in the refrigeration cycle, which may result in equipment damage and even injury.
- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- The unit must have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electrical fault should occur.
The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit and control box wire to the building's electrical service panel.
Other methods of grounding are permitted if performed in accordance with the "National Electrical Code" (NEC)/ "American National Standards Institute" (ANSI)/ "National Fire Protection Association" (NFPA) 70 and local/state codes.
In CANADA, electrical grounding is to be in accordance with the Canadian Electrical Code CSA C22.1.
Failure to observe this warning can result in electrical shock that can cause personal injury or death.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the protection plate can be securely fastened. Improper positioning of the protection plate may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit protection plate. If the protection plate is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.

⚠ CAUTION

- While following the instructions in this installation manual, install drain piping to ensure proper drainage and insulate the piping to prevent condensation. Improper drain piping may result in indoor water leakage and property damage.
- The refrigerant circuit temperature will be high, therefore the inter-unit wires must be kept away from copper pipes that are not thermally insulated.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,...) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.

Safety Considerations

- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.
 - (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
 - (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection against harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant piping* and follow the procedures.
- The outdoor unit is for R32. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to non-compatible indoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
 - (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
 - (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in refrigerant leakage.
 - (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
 - (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.

- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

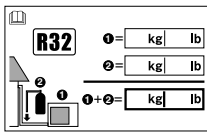


NOTE

- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32 or R410A, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

RN009(R32)-U

Accessories

Ⓐ Installation manual	1	Ⓑ Drain socket*  This is at the bottom of the packaging.	1
Ⓒ Drain cap (1)* 	4	Ⓓ Drain cap (2)* 	2
Ⓔ Warranty	1	Ⓕ Refrigerant charge label  Affix near the manufacturer's label.	1
Ⓖ General Safety Considerations	1		

* Only for heat pump models

Precautions for Selecting a Location

- 1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
- 2) Choose a location where the air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
- 3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
- 4) There must be sufficient space to carry the unit into and out of the site.
- 5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
- 6) In coastal areas or other places with a salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
- 7) Since water will flow from the drain of the outdoor unit, do not place anything under the unit which must be kept away from moisture.
- 8) A location where flammable gas does not leak. Position at least 6-5/8ft (2m) from propane gas cylinders.

NOTE

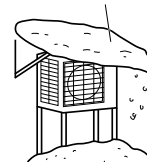
Cannot be installed suspended from a ceiling or stacked.

⚠ CAUTION

When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.
- If there is a likelihood of snow accumulating on the outdoor unit, attach a snow protection hood (sold separately).
- In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater (sold separately) to prevent ice build-up from the bottom frame.

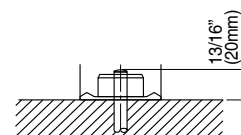
- Construct a large canopy.
- Construct a pedestal.



Install the unit high enough off the ground to prevent burying in snow.

Precautions on Installation

- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers.)
- It is best to screw in the foundation bolts until their ends are 13/16 inch (20mm) from the foundation surface.



Outdoor Unit Installation Diagram

Max. allowable piping length	65-5/8ft (20m)
Min. allowable piping length	10ft (3m)
Max. allowable piping height	49-1/4ft (15m)
Additional refrigerant required for refrigerant pipe exceeding 49-1/4ft (15m) in length.	0.22oz/ft (20g/m)
Gas pipe	O.D. 3/8 inch (9.5mm)
Liquid pipe	O.D. 1/4 inch (6.4mm)

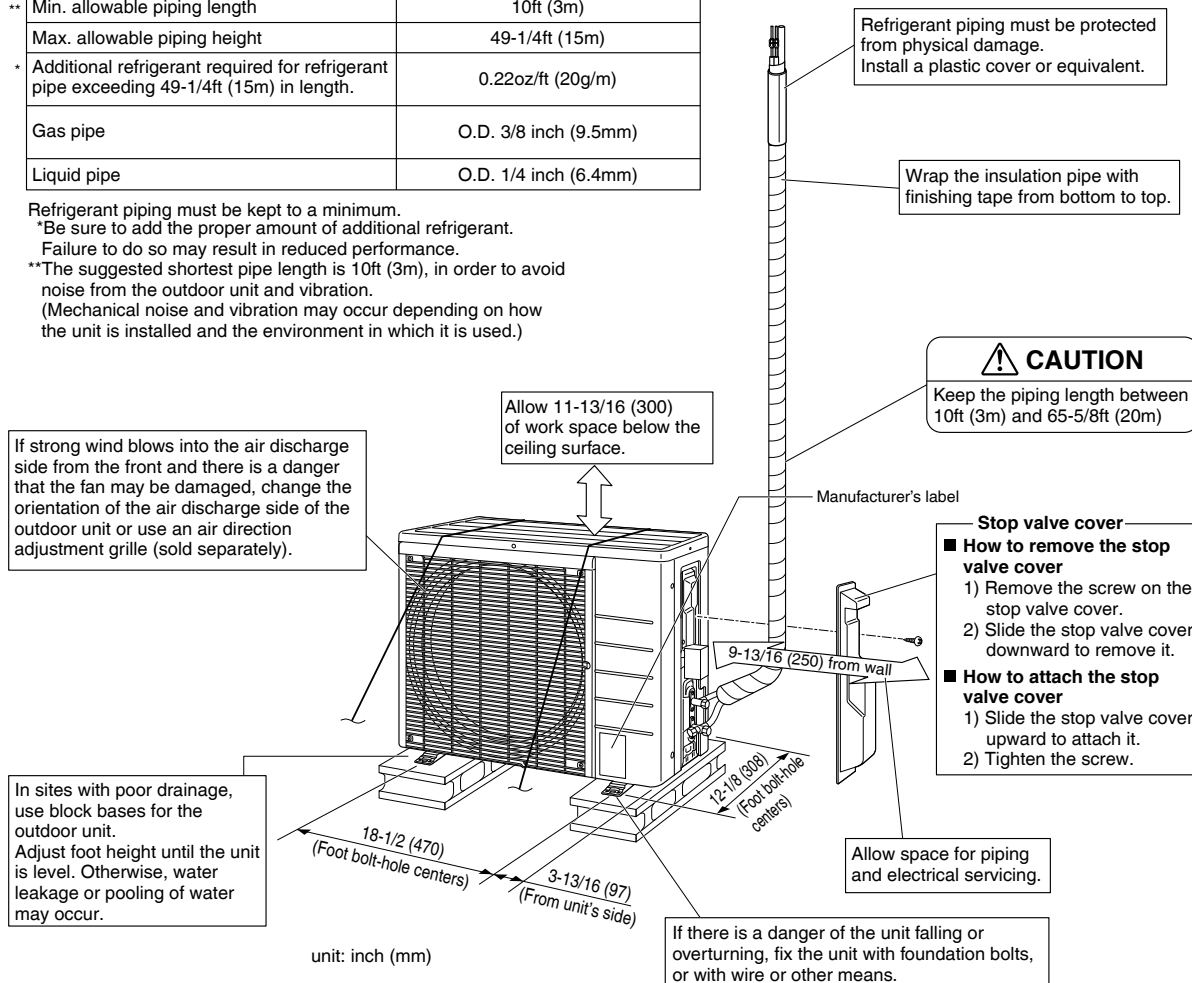
Refrigerant piping must be kept to a minimum.

*Be sure to add the proper amount of additional refrigerant.

Failure to do so may result in reduced performance.

**The suggested shortest pipe length is 10ft (3m), in order to avoid noise from the outdoor unit and vibration.

(Mechanical noise and vibration may occur depending on how the unit is installed and the environment in which it is used.)



Refrigerant charge label

Please fill in with indelible ink,

1 the factory refrigerant charge of the product,

2 the additional refrigerant amount charged in the field and

1 + 2 the total refrigerant charge

on the refrigerant charge label.

Affix the refrigerant charge label near the manufacturer's label after filling it out.

1 factory refrigerant charge of the product: see unit manufacturer's label

2 additional refrigerant amount charged in the field

3 total refrigerant charge

4 outdoor unit

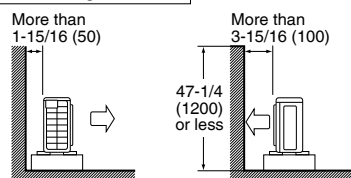
5 refrigerant cylinder and manifold for charging

• The minimum required floor area of the room where the indoor unit is installed varies depending on the installation height and refrigerant amount. For details, refer to the General Safety Considerations supplied with the indoor unit.

Installation Space Requirements

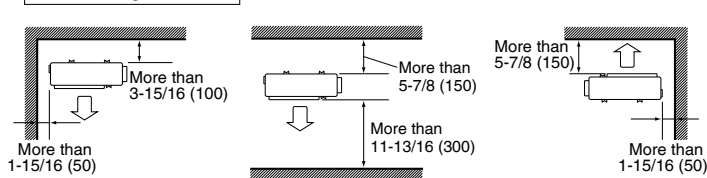
- Position the unit on a horizontal surface. Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.
- Secure as much installation space around the unit as the location allows, as more space will result in more efficient operation.

Wall facing one side



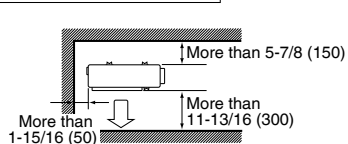
Side view

Walls facing two sides



Top view

Walls facing three sides



Top view

unit: inch (mm)

When installed as in the figure on the left, it is recommended to either change the orientation of the outdoor unit outlet side or use the air direction adjustment grille (sold separately).

Outdoor Unit Installation

1. Installing the outdoor unit

- When installing the outdoor unit, refer to “Precautions for Selecting a Location” on page 4 and “Outdoor Unit Installation Diagram” on page 5.
- If drain work is necessary, follow the procedures below.

2. Drain work (Only for heat pump models)

⚠ CAUTION

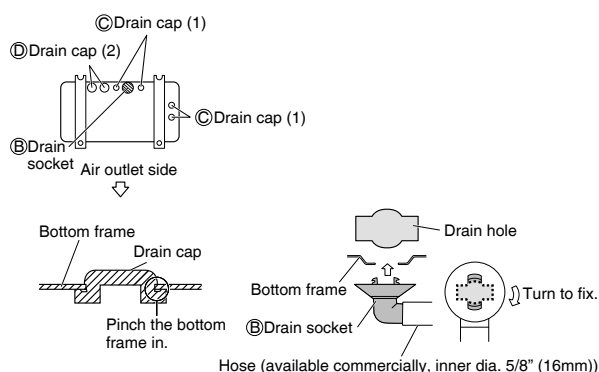
In cold areas, do not use a drain socket, drain caps (1, 2) and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)

- If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 1-1/4 inch (30mm) in height under the outdoor unit's feet.

1) Attach ③ drain cap (1) and ④ drain cap (2).

2) Attach ⑤ drain socket to the shape of drain hole and fix it by turning.

- When attaching ⑤ drain socket to the bottom frame, make sure to connect the drain hose to the drain socket first.



3. Flaring the pipe end

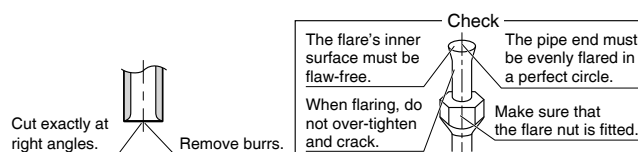
⚠ WARNING

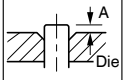
- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

⚠ CAUTION

Do not reuse joints which have been used once already.

- Cut the pipe end with a pipe cutter.
- Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
- Put the flare nut on the pipe.
- Flare the pipe.
- Check that the flaring has been done correctly.

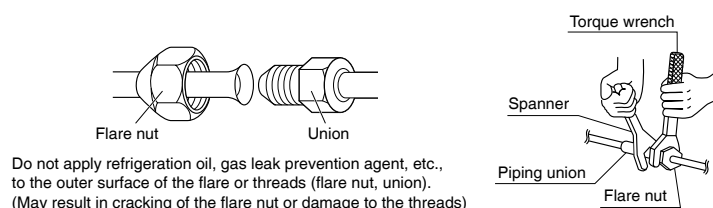


Flaring			
Set exactly at the position shown below.			
	Flare tool for R32 or R410A	Conventional flare tool	
	Clutch-type	Clutch-type (Rigid-type)	Wing-nut type (Imperial-type)
A	0-0.020 inch (0-0.5mm)	0.039-0.059 inch (1.0-1.5mm)	0.059-0.079 inch (1.5-2.0mm)

4. Refrigerant piping

⚠ CAUTION

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
 - Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
 - Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.
-
- For refrigerant pipe connections, align the center of the flare and the union, tighten the flare nut 3 to 4 turns by hand, and then use a torque wrench and a spanner to firmly tighten to the specified torque.



Tightening torque

Piping connection

Flare nut	
Gas side	Liquid side
3/8 inch (9.5mm)	1/4 inch (6.4mm)
24-1/8 – 29-3/8lbf • ft (32.7-39.9N • m)	10-1/2 – 12-5/8lbf • ft (14.2-17.2N • m)

Valve cap

Width across flats	
11/16 inch (17mm)	3/4 inch (19mm)
10-1/2 – 12-5/8lbf • ft (14.2-17.2N • m)	12-5/8 – 15-3/8lbf • ft (17.1-20.9N • m)

Service port cap

7-7/8 – 10-7/8lbf • ft (10.7-14.7N • m)
--

Cautions on pipe handling

- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.

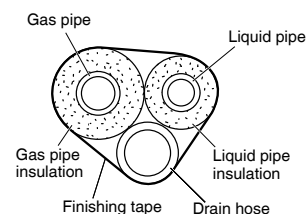
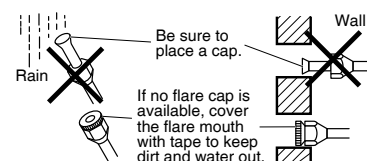
Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F) (0.035 to 0.045kcal/mh°C)
Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
Gas side	O.D. 3/8 inch (9.5mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 15/32-19/32 inch (12-15mm)	13/32 inch (10mm) Min.
Liquid side	O.D. 1/4 inch (6.4mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 5/16-13/32 inch (8-10mm)	

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.
- Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.



Outdoor Unit Installation

5. Pressure test and evacuating system

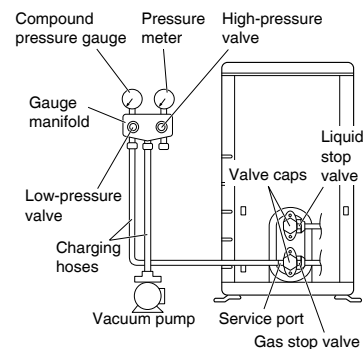
⚠ WARNING

- Make sure that air or any matter other than refrigerant (R32) does not get into the refrigeration cycle.
- If refrigerant gas leaks should occur, ventilate the room as soon and as much as possible.
- R32, as well as other refrigerants, should always be recovered and never be released directly into the environment.
- **Use tools for R32 or R410A (such as the gauge manifold, charging hose, or vacuum pump adapter).**

⚠ CAUTION

Do not open/close the stop valves when the outdoor temperature is -5°F (-21°C) or less, as this may result in refrigerant leakage.

- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rod.
- All refrigerant pipe joints should be tightened with a torque wrench to the specified tightening torque.



- 1) Pressurize the liquid pipe and gas pipe from the service port of gas stop valve to 604psi (4.17MPa) (do not pressurize more than 604psi (4.17MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
- 2) Connect the gauge manifold's charging hose to the gas stop valve's service port.
- 3) Fully open the low-pressure valve (Lo) on the gauge manifold and fully close the high-pressure valve (Hi). (High-pressure valve will require no further operation.)
- 4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
- 5) Close the low-pressure valve (Lo) on the gauge manifold and stop vacuum pumping. (Maintain this condition for a few minutes to make sure that the compound pressure gauge pointer does not swing back.)*¹
- 6) Remove the valve caps from the liquid stop valve and gas stop valve.
- 7) To open the liquid stop valve, turn the rod of the valve 90° counter-clockwise using a hexagonal wrench. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off *².
- 8) Disconnect the charging hoses from the service port for the gas stop valve, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rods further than they can go.)
- 9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques. Refer to "4. Refrigerant piping" on page 8 for details.

*¹ If the compound pressure gauge pointer swings back, the refrigerant pipes may contain water or there may be a loose pipe joint.

Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).

*² **Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks.**

A halide torch (or any other detector using a naked flame) shall not be used.

Do not use substances containing chlorine and electronic leak detection for gas leak detection.

Wiring

⚠ WARNING

• RISK OF ELECTRIC SHOCK CAUSE INJURY OR DEATH.

- System contains oversize protective earthing (grounding) terminal which shall be properly connected.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.
- Do not turn on the circuit breaker until all work is completed.

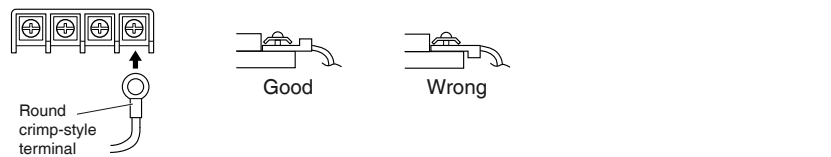
⚠ CAUTION

Precautions to be taken for wiring

- Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.

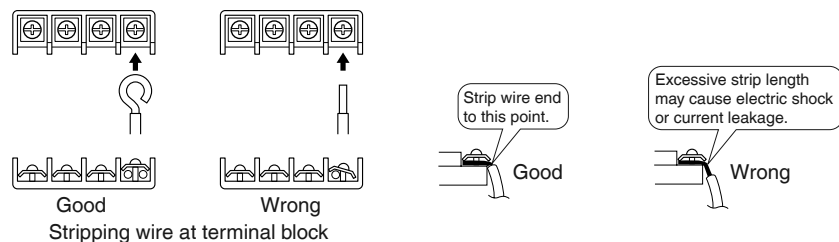
- For stranded wires, make sure to use the round crimp-style terminal. Place the round crimp-style terminals on the wires up to the covered part and secure in place.

1) Use the following method when installing a round crimp-style terminal.



2) Use the following method when installing a solid core wire.

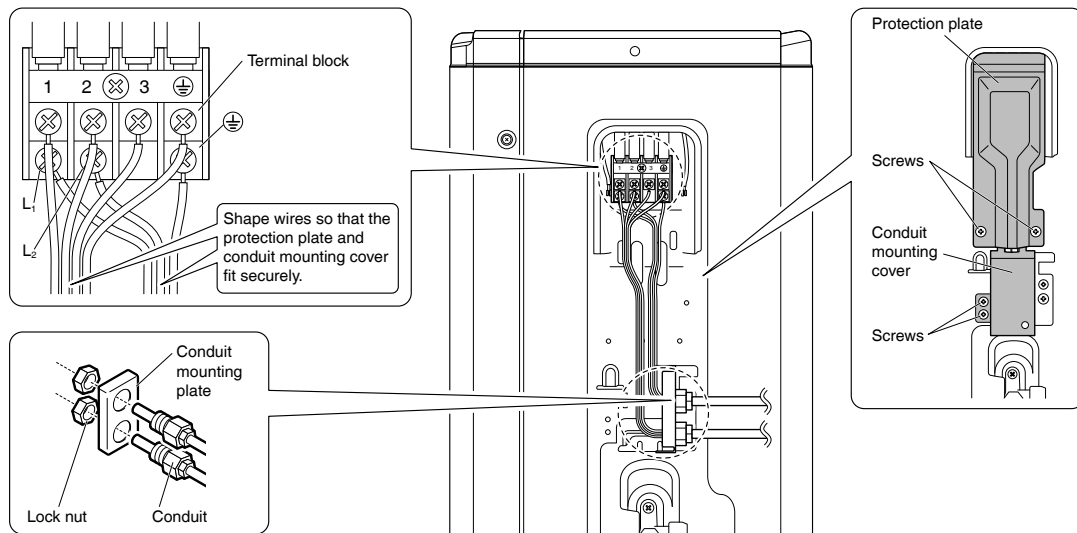
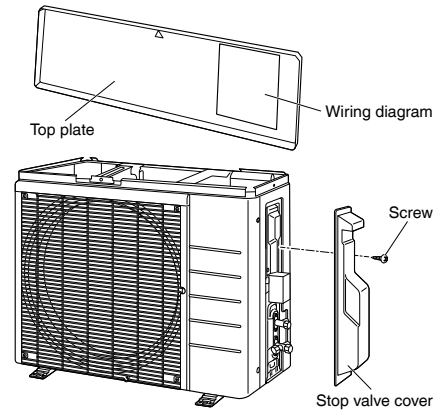
Make sure to curl the end of the lead. Improper work may cause heat and fire.



Wiring

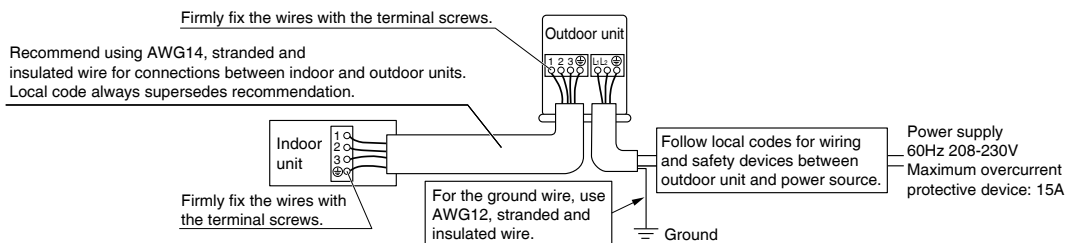
[Method of mounting conduit]

- When wiring, remove the top plate and look at the wiring diagram on the back of the top plate.
 - A protection plate is fixed for protection from the high-voltage section.
- 1) Dismount the stop valve cover by removing the screw.
 - 2) Dismount the protection plate by removing the 2 screws.
 - 3) Dismount the conduit mounting cover by removing the 2 screws.
 - 4) Pass wires through the conduit and secure them with a lock nut.



[Wiring procedure]

- 1) Strip the insulation from the wire (13/16 inch (20mm)).
- 2) Connect the inter-unit wires between the indoor and outdoor units so that the terminal numbers match. Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws.
- 3) Pull the wire lightly to make sure that it does not disconnect.
- 4) After completing the work, reattach the conduit mounting cover, the protection plate, and the stop valve cover to its original position.



Ground

This air conditioner must be grounded. For grounding, follow all local, and state electrical codes.

NOTE

Take care to ensure that all wiring between indoor unit and outdoor unit has a consistent connection. Any splices can cause communication errors.

Facility Setting (cooling at low outdoor temperature)

⚠ WARNING

Make sure to turn the power OFF before performing work.

⚠ CAUTION

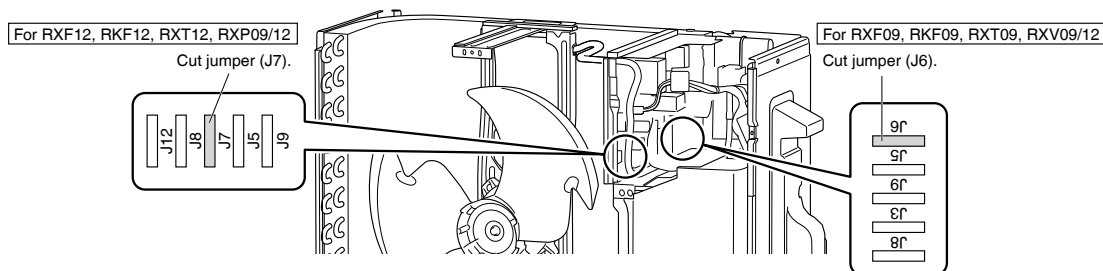
- If the outdoor unit is installed where the heat exchanger of the unit is exposed to direct wind, provide a windbreak wall.
- Intermittent noises may be produced by the indoor unit due to the outdoor fan turning on and off when using facility settings.
- Do not place humidifiers or other items which might raise the humidity in rooms where facility settings are being used. A humidifier might cause dew condensation from the indoor unit outlet vent.
- Activating the facility setting sets the indoor fan tap to the highest position. Notify the user about this.

This function is designed for facilities such as equipment or computer rooms. It is never to be used in a residence or office where people occupy the space.

- Cutting Jumper (J6) for RXF09, RKF09, RXT09, RXV09/12, Jumper (J7) for RXF12, RKF12, RXT12, RXP09/12 on the circuit board will expand the operation range down to 14°F (–10°C).

Installing an air direction adjustment grille (sold separately) will further extend the operation range to –4°F (–20°C). In these cases, the unit will stop operating if the outdoor temperature falls below –4°F (–20°C), restarting once the temperature rises above this level.

- 1) Remove the top plate of the outdoor unit. (4 screws)
- 2) Remove the front plate. (5 screws)
- 3) Cut Jumper (J6) for RXF09, RKF09, RXT09, RXV09/12, Jumper (J7) for RXF12, RKF12, RXT12, RXP09/12 of the PCB inside.



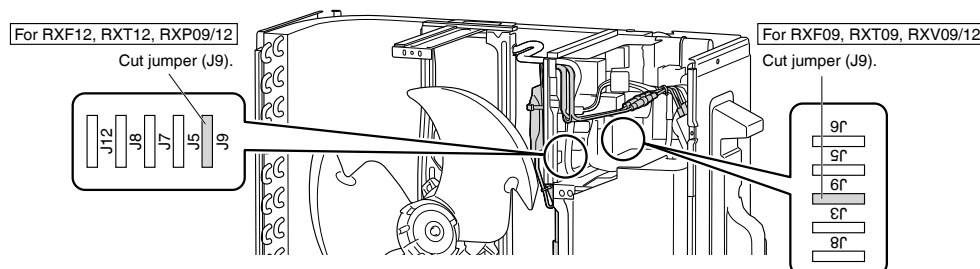
When attaching the drain pan heater (Only for heat pump models)

⚠ WARNING

Make sure to turn the power OFF before performing work.

In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

- 1) Attach the drain pan heater in accordance with the installation manual included with the drain pan heater.
- 2) Cut jumper (J9) of the PCB inside.



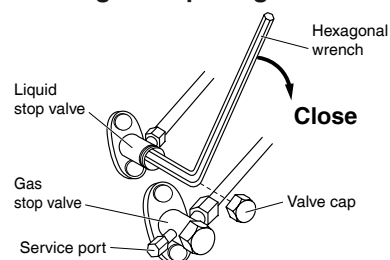
Pump Down Operation

⚠ CAUTION

Do not open/close the stop valves when the outdoor temperature is -5°F (-21°C) or less, as this may result in refrigerant leakage.

In order to protect the environment, be sure to pump down when relocating or disposing of the unit.

- 1) Remove the valve caps from the liquid stop valve and gas stop valve.
- 2) Begin forced cooling operation.
- 3) After 5 to 10 minutes, close the liquid stop valve with a hexagonal wrench.
- 4) After 2 to 3 minutes, close the gas stop valve and stop forced cooling operation.
- 5) Attach the valve caps once procedures are complete.



Forced cooling operation

Refer to the installation manual for the indoor unit.

Trial Operation and Testing

- When trial operation is conducted directly after the circuit breaker is turned on, in some cases no air will be output for about 15 minutes in order to protect the air conditioner.

1. Trial operation and testing

Refer to the installation manual for the indoor unit.

2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed securely.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
Only specified wires are used for all wiring, and all wires are connected correctly.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	

11.3 RXV15/18

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The pictures in this document are for illustrative purposes only.

Safety Considerations

Refer also to the General Safety Considerations in the separate booklet.

	Read the precautions in this manual carefully before operating the unit.
	This appliance is filled with R32.

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference. Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion. Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

-  **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
-  **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
-  **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
-  **NOTE** Indicates situations that may result in equipment or property damage accidents only.

DANGER

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

⚠ WARNING

- During installation, attach the refrigerant piping securely before operating the compressor. If the refrigerant pipes are not attached and the stop valve is open when the compressor is operated, air will be sucked in, causing abnormal pressure in the refrigeration cycle, which may result in equipment damage and even injury.
- During pump down, stop the compressor before removing the refrigerant piping. If the compressor is still operating and the stop valve is open during pump down, air will be sucked in when the refrigerant piping is removed, causing abnormal pressure in the refrigeration cycle, which may result in equipment damage and even injury.
- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- The unit must have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electrical fault should occur.
The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit and control box wire to the building's electrical service panel.
Other methods of grounding are permitted if performed in accordance with the "National Electrical Code" (NEC)/ "American National Standards Institute" (ANSI)/ "National Fire Protection Association" (NFPA) 70 and local/state codes.
In CANADA, electrical grounding is to be in accordance with the Canadian Electrical Code CSA C22.1.
Failure to observe this warning can result in electrical shock that can cause personal injury or death.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the service lid can be securely fastened. Improper positioning of the service lid may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit service lid. If the service lid is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.

⚠ CAUTION

- While following the instructions in this installation manual, install drain piping to ensure proper drainage and insulate the piping to prevent condensation. Improper drain piping may result in indoor water leakage and property damage.
- The refrigerant circuit temperature will be high, therefore the inter-unit wires must be kept away from copper pipes that are not thermally insulated.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,...) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.

Safety Considerations

- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.
 - (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
 - (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection against harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant piping* and follow the procedures.
- The outdoor unit is for R32. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to non-compatible indoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
 - (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
 - (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in refrigerant leakage.
 - (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
 - (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.

- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

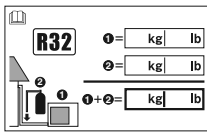


NOTE

- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32 or R410A, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

RN009(R32)-U

Accessories

Ⓐ Installation manual	1	Ⓑ Drain socket*  This is at the bottom of the packaging.	1
Ⓒ Drain cap (1)* 	6	Ⓓ Drain cap (2)* 	3
Ⓔ Warranty	1	Ⓕ Refrigerant charge label  Affix near the manufacturer's label.	1
Ⓖ General Safety Considerations	1		

* Only for heat pump models

Precautions for Selecting a Location

- 1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
- 2) Choose a location where the air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
- 3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
- 4) There must be sufficient space to carry the unit into and out of the site.
- 5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
- 6) In coastal areas or other places with a salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
- 7) Since water will flow from the drain of the outdoor unit, do not place anything under the unit which must be kept away from moisture.
- 8) A location where flammable gas does not leak. Position at least 6-5/8ft (2m) from propane gas cylinders.

NOTE

Cannot be installed suspended from a ceiling or stacked.

⚠ CAUTION

When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.
- If there is a likelihood of snow accumulating on the outdoor unit, attach a snow protection hood (sold separately).
- In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater (sold separately) to prevent ice build-up from the bottom frame.

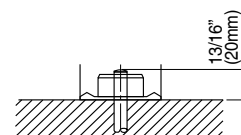
- Construct a large canopy.
- Construct a pedestal.



Install the unit high enough off the ground to prevent burying in snow.

Precautions on Installation

- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers.)
- It is best to screw in the foundation bolts until their ends are 13/16 inch (20mm) from the foundation surface.



Outdoor Unit Installation Diagram

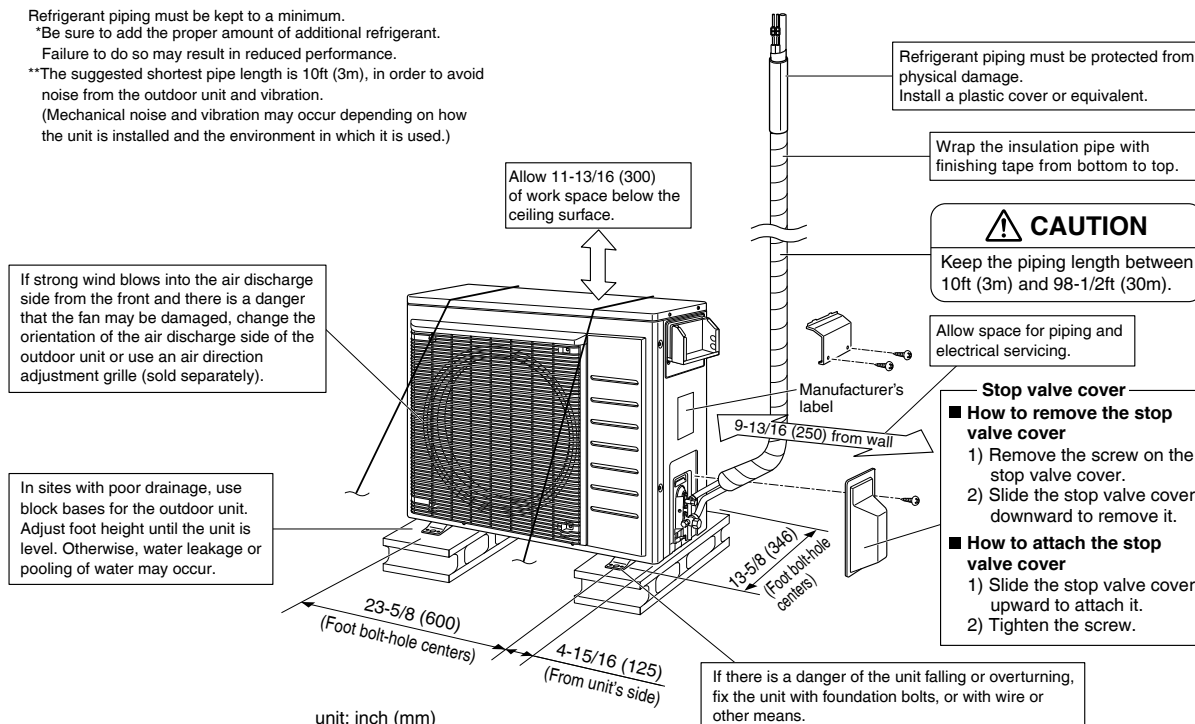
	RXF18, RKF18, RXT15, RXT18, RXP15, RXP18, RXV15, RXV18	RXF24, RKF24, RXT24, RXP24, RXV30, RXV36, RKV30, RKV36
Max. allowable piping length	98-1/2ft (30m)	
Min. allowable piping length	10ft (3m)	
Max. allowable piping height	65-5/8ft (20m)	
Additional refrigerant required for refrigerant pipe exceeding 49-1/4ft (15m) in length.	0.22oz/ft (20g/m)	
Gas pipe	O.D. 1/2 inch (12.7mm)	O.D. 5/8 inch (15.9mm)
Liquid pipe	O.D. 1/4 inch (6.4mm)	

Refrigerant piping must be kept to a minimum.

*Be sure to add the proper amount of additional refrigerant.

Failure to do so may result in reduced performance.

**The suggested shortest pipe length is 10ft (3m), in order to avoid noise from the outdoor unit and vibration.
(Mechanical noise and vibration may occur depending on how the unit is installed and the environment in which it is used.)



Refrigerant charge label

Please fill in with indelible ink,

1 the factory refrigerant charge of the product,

2 the additional refrigerant amount charged in the field and

1 + 2 the total refrigerant charge on ② refrigerant charge label.

Affix ② refrigerant charge label near the manufacturer's label after filling it out.

	1	kg	lb
	2	kg	lb
	1+2	kg	lb

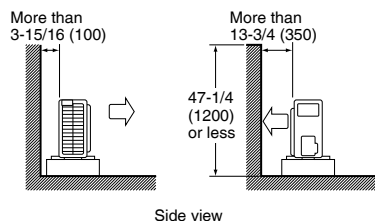
- 1 factory refrigerant charge of the product: see unit manufacturer's label
- 2 additional refrigerant amount charged in the field
- 3 total refrigerant charge
- 4 outdoor unit
- 5 refrigerant cylinder and manifold for charging

- The minimum required floor area of the room where the indoor unit is installed varies depending on the installation height and refrigerant amount. For details, refer to the General Safety Considerations supplied with the indoor unit.

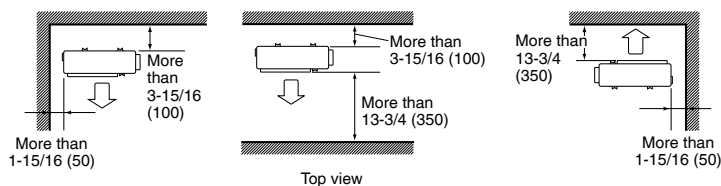
Installation Space Requirements

- Position the unit on a horizontal surface. Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.
- Secure as much installation space around the unit as the location allows, as more space will result in more efficient operation.

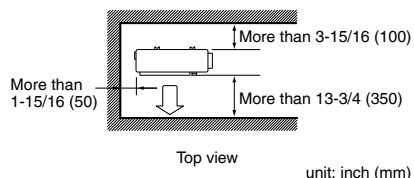
Wall facing one side



Walls facing two sides



Walls facing three sides



unit: inch (mm)

When installed as in the figure on the left, it is recommended to either change the orientation of the outdoor unit outlet side or use the air direction adjustment grille (sold separately).

Outdoor Unit Installation

1. Installing the outdoor unit

- When installing the outdoor unit, refer to “Precautions for Selecting a Location” on page 4 and “Outdoor Unit Installation Diagram” on page 5.
- If drain work is necessary, follow the procedures below.

2. Drain work (Only for heat pump models)

⚠ CAUTION

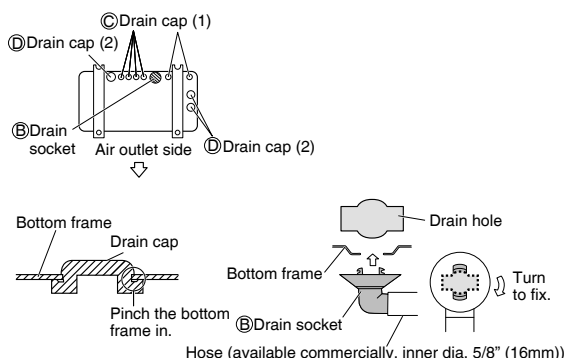
- In cold areas, do not use a drain socket, drain caps (1, 2) and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)

- If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 1-1/4 inch (30mm) in height under the outdoor unit's feet.

1) Attach ③ drain cap (1) and ④ drain cap (2).

2) Attach ⑤ drain socket to the shape of drain hole and fix it by turning.

- When attaching ⑤ drain socket to the bottom frame, make sure to connect the drain hose to the drain socket first.



3. Flaring the pipe end

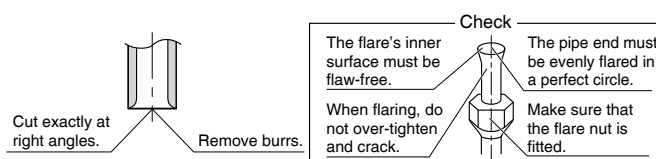
⚠ WARNING

- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

⚠ CAUTION

- Do not reuse joints which have been used once already.

- Cut the pipe end with a pipe cutter.
- Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
- Put the flare nut on the pipe.
- Flare the pipe.
- Check that the flaring has been done correctly.



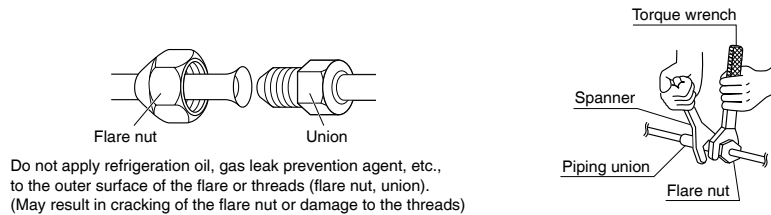
Set exactly at the position shown below.		
Flare tool for R32 or R410A	Conventional flare tool	
	Clutch-type (Rigid-type)	Wing-nut type (Imperial-type)
Die	0.039-0.059 inch (1.0-1.5mm)	0.059-0.079 inch (1.5-2.0mm)

4. Refrigerant piping

⚠ CAUTION

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.

- For refrigerant pipe connections, align the center of the flare and the union, tighten the flare nut 3 to 4 turns by hand, and then use a torque wrench and a spanner to firmly tighten to the specified torque.



Tightening torque

Piping connection

Flare nut		
Gas side		Liquid side
1/2 inch (12.7mm)	5/8 inch (15.9mm)	1/4 inch (6.4mm)
36-1/2–44-1/2lbf • ft (49.5-60.3N • m)	45-5/8–55-5/8lbf • ft (61.8-75.4N • m)	10-1/2–12-5/8lbf • ft (14.2-17.2N • m)

Service port cap

7-7/8–10-7/8lbf • ft
(10.7-14.7N • m)

Valve cap

Width across flats		
11/16 inch (17mm)	7/8 inch (22mm)	1 inch (26mm)
10-1/2–12-5/8lbf • ft (14.2-17.2N • m)	16-1/4–19-7/8lbf • ft (22.1-26.9N • m)	23-1/4–28-3/8lbf • ft (31.5-38.5N • m)

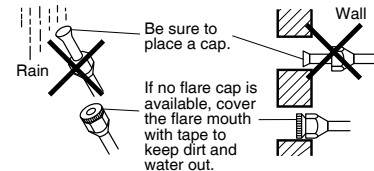
Cautions on pipe handling

- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.

Selection of copper and heat insulation materials

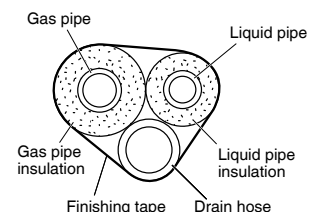
When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F) (0.035 to 0.045kcal/mh°C)
Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.



	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
Gas side	O.D. 1/2 inch (12.7mm)	1-9/16 inch (40mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 9/16-5/8 inch (14-16mm)	13/32 inch (10mm) Min.
	O.D. 5/8 inch (15.9mm)	1-15/16 inch (50mm) or more	0.039 inch (1.0mm) (C1220T-O)	I.D. 5/8-13/16 inch (16-20mm)	
Liquid side	O.D. 1/4 inch (6.4mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 5/16-13/32 inch (8-10mm)	

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.
- Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.



Outdoor Unit Installation

5. Pressure test and evacuating system

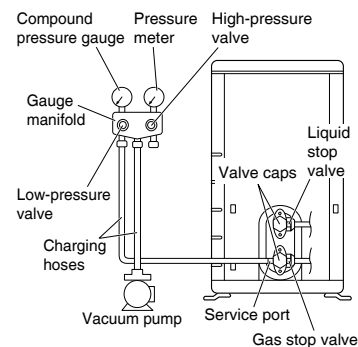
⚠ WARNING

- Make sure that air or any matter other than refrigerant (R32) does not get into the refrigeration cycle.
- If refrigerant gas leaks should occur, ventilate the room as soon and as much as possible.
- R32, as well as other refrigerants, should always be recovered and never be released directly into the environment.
- **Use tools for R32 or R410A (such as the gauge manifold, charging hose, or vacuum pump adapter).**

⚠ CAUTION

Do not open/close the stop valves when the outdoor temperature is -5°F (-21°C) or less, as this may result in refrigerant leakage.

- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rod.
- All refrigerant pipe joints should be tightened with a torque wrench to the specified tightening torque.



- 1) Pressurize the liquid pipe and gas pipe from the service port of gas stop valve to 604psi (4.17MPa) (do not pressurize more than 604psi (4.17MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
- 2) Connect the gauge manifold's charging hose to the gas stop valve's service port.
- 3) Fully open the low-pressure valve (Lo) on the gauge manifold and fully close the high-pressure valve (Hi). (High-pressure valve will require no further operation.)
- 4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
- 5) Close the low-pressure valve (Lo) on the gauge manifold and stop vacuum pumping. (Maintain this condition for a few minutes to make sure that the compound pressure gauge pointer does not swing back.)*¹
- 6) Remove the valve caps from the liquid stop valve and gas stop valve.
- 7) To open the liquid stop valve, turn the rod of the valve 90° counter-clockwise using a hexagonal wrench. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off.*²
- 8) Disconnect the charging hoses from the service port for the gas stop valve, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rods further than they can go.)
- 9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques. Refer to "4. Refrigerant piping" on page 8 for details.

*¹ If the compound pressure gauge pointer swings back, the refrigerant pipes may contain water or there may be a loose pipe joint.

Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).

*² **Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks.**

A halide torch (or any other detector using a naked flame) shall not be used.

Do not use substances containing chlorine and electronic leak detection for gas leak detection.

Wiring

⚠ WARNING

• RISK OF ELECTRIC SHOCK CAUSE INJURY OR DEATH.

- System contains oversize protective earthing (grounding) terminal which shall be properly connected.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.
- Do not turn on the circuit breaker until all work is completed.

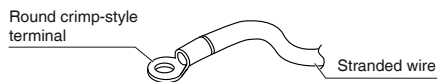
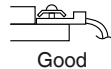
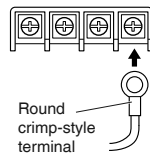
⚠ CAUTION

Precautions to be taken for wiring

- Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.

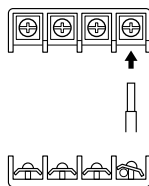
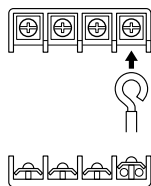
- For stranded wires, make sure to use the round crimp-style terminal. Place the round crimp-style terminals on the wires up to the covered part and secure in place.

1) Use the following method when installing a round crimp-style terminal.

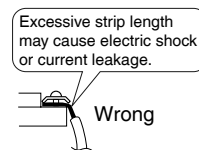
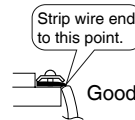


2) Use the following method when installing a solid core wire.

Make sure to curl the end of the lead. Improper work may cause heat and fire.



Good
Wrong
Stripping wire at terminal block

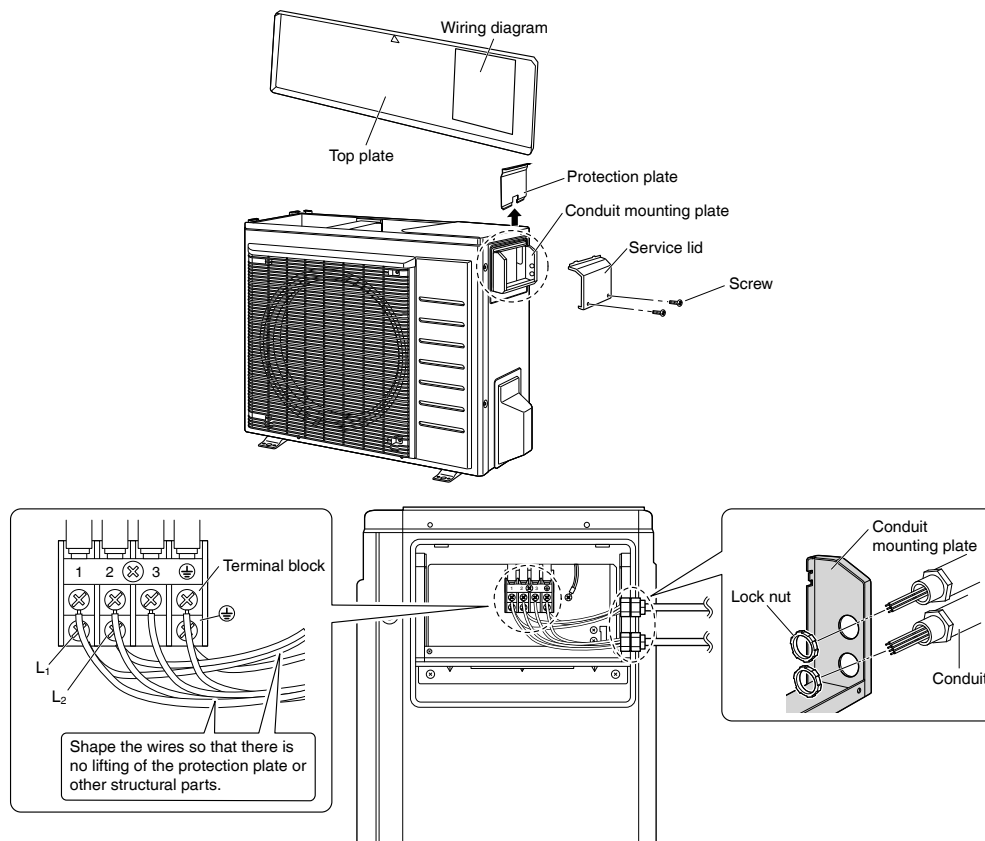


Wiring

[Method of mounting conduit]

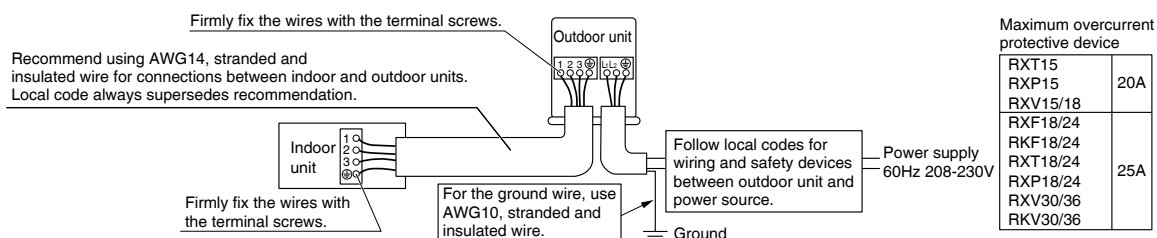
When wiring, remove the top plate and look at the wiring diagram on the back of the top plate.

- 1) Dismount the service lid by removing the 2 screws.
- 2) Slide the protection plate up and remove it.
- 3) Pass wires through the conduit and secure them with a lock nut.



[Wiring procedure]

- 1) Strip the insulation from the wire (13/16 inch (20mm)).
- 2) Connect the inter-unit wires between the indoor and outdoor units so that the terminal numbers match. Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws.
- 3) Pull the wire lightly to make sure that it does not disconnect.
- 4) Pass the wiring through the cutout on the bottom of the protection plate and attach the protection plate.
- 5) After completing the work, reattach the service lid to its original position.



Ground

This air conditioner must be grounded. For grounding, follow all local, and state electrical codes.

NOTE

Take care to ensure that all wiring between indoor unit and outdoor unit has a consistent connection. Any splices can cause communication errors.

Facility Setting (cooling at low outdoor temperature)

⚠ WARNING

- Make sure to turn the power OFF before performing work.

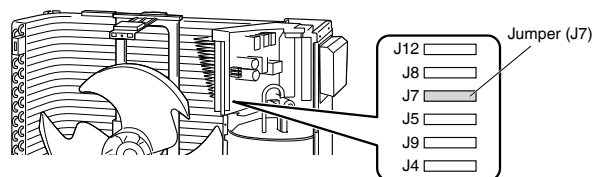
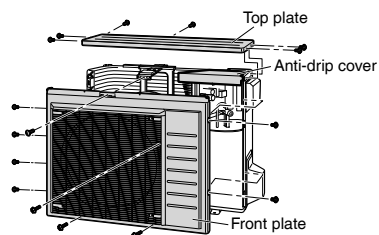
⚠ CAUTION

- If the outdoor unit is installed where the heat exchanger of the unit is exposed to direct wind, provide a windbreak wall.
- Intermittent noises may be produced by the indoor unit due to the outdoor fan turning on and off when using facility settings.
- Do not place humidifiers or other items which might raise the humidity in rooms where facility settings are being used. A humidifier might cause dew condensation from the indoor unit outlet vent.
- Activating the facility setting sets the indoor fan tap to the highest position. Notify the user about this.

This function is designed for facilities such as equipment or computer rooms. It is never to be used in a residence or office where people occupy the space.

- Cutting jumper (J7) on the PCB will extend the operation range to 14°F (–10°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to –4°F (–20°C). In these cases, the unit will stop operating if the outdoor temperature falls below –4°F (–20°C), restarting once the temperature rises above this level.

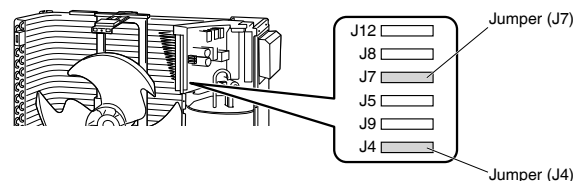
- 1) Remove the top plate of the outdoor unit. (6 screws)
- 2) Remove the front plate. (10 screws)
- 3) Remove the anti-drip cover.
- 4) Cut jumper (J7) of the PCB inside.



Only for RKV30/36 models

- Cutting jumper (J4) on the PCB, in addition to jumper (J7), will extend the operating range to –22°F (–30°C). The unit will stop operating if the outdoor temperature falls below –22°F (–30°C), and restart once the temperature rises above this level.

- 1) Cut jumper (J4) on the PCB in addition to jumper (J7).



NOTE

When the outdoor temperature is below –4°F (–20°C) and J4 is cut (as in this step), it may take up to 3 hours for operation to begin as the system must be warmed up to protect the compressor.

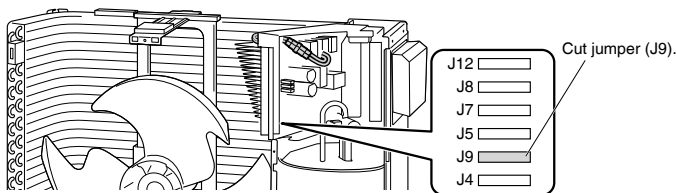
When attaching the drain pan heater (Only for heat pump models)

⚠ WARNING

- Make sure to turn the power OFF before performing work.

In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

- 1) Attach the drain pan heater in accordance with the installation manual included with the drain pan heater.
- 2) Cut jumper (J9) of the PCB inside.



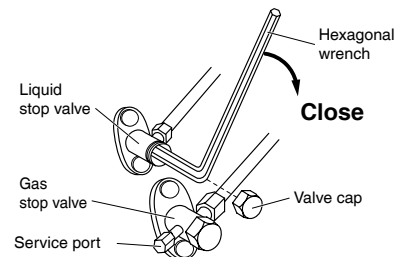
Pump Down Operation

⚠ CAUTION

Do not open/close the stop valves when the outdoor temperature is -5°F (-21°C) or less, as this may result in refrigerant leakage.

In order to protect the environment, be sure to pump down when relocating or disposing of the unit.

- 1) Remove the valve caps from the liquid stop valve and gas stop valve.
- 2) Begin forced cooling operation.
- 3) After 5 to 10 minutes, close the liquid stop valve with a hexagonal wrench.
- 4) After 2 to 3 minutes, close the gas stop valve and stop forced cooling operation.
- 5) Attach the valve caps once procedures are complete.



Forced cooling operation

Refer to the installation manual for the indoor unit.

Trial Operation and Testing

- When trial operation is conducted directly after the circuit breaker is turned on, in some cases no air will be output for about 15 minutes in order to protect the air conditioner.

1. Trial operation and testing

Refer to the installation manual for the indoor unit.

2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed securely.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
Only specified wires are used for all wiring, and all wires are connected correctly.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	

12. Operation Manual

12.1 FFA

Read Before Operation

Contents

■ Read Before Operation

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■ Multi Connection

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■ Care

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■ When the Need Arises

Troubleshooting	11
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The pictures in this document are for illustrative purposes only.

Safety Considerations

Refer also to the General Safety Considerations in the separate booklet.

	Read the precautions in this manual carefully before operating the unit.
	This appliance is filled with R32.

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump. Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit. Inform users that they should store this operation manual with the installation manual for future reference.

Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

-  **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
-  **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
-  **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
-  **NOTE** Indicates situations that may result in equipment or property-damage accidents only.

-  **DANGER** —
- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
 - Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
 - Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
 - For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
 - If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.

Read Before Operation

- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

⚠ WARNING

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Never touch the internal parts of the controller. To check and adjust internal parts, contact your dealer.
- Be sure to establish a ground. Do not ground the unit to a utility pipe, arrester, or telephone ground. Incomplete grounding may cause electrical shock, or fire. A high surge current from lightning or other sources may cause damage to the air conditioner.
- Be sure to install a ground fault circuit interrupter. Failure to install a ground fault circuit interrupter may result in electric shock or fire.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.

- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.

⚠ CAUTION

- Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating. Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- For care and cleaning, call service person.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot which may be splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide. Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.

Read Before Operation

Safety Considerations

— NOTE —

- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in a water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
 - a. Places with a mist of mineral oil, such as cutting oil.
 - b. Locations such as coastal areas where there is a lot of salt in the air.
 - c. Locations such as hot springs where there is a lot of sulfur in the air.
 - d. Locations such as factories where the power voltage varies a lot.
 - e. In cars, boats, and other vehicles.
 - f. Locations such as kitchens where oil may splatter or where there is steam in the air.
 - g. Locations where equipment produces electromagnetic waves.
 - h. Places with an acid or alkaline mist.
 - i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
 - a. Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
 - b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.

- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.
- Do not spray the air conditioner unit with any deodorizers, etc. It may cause the unit to malfunction.

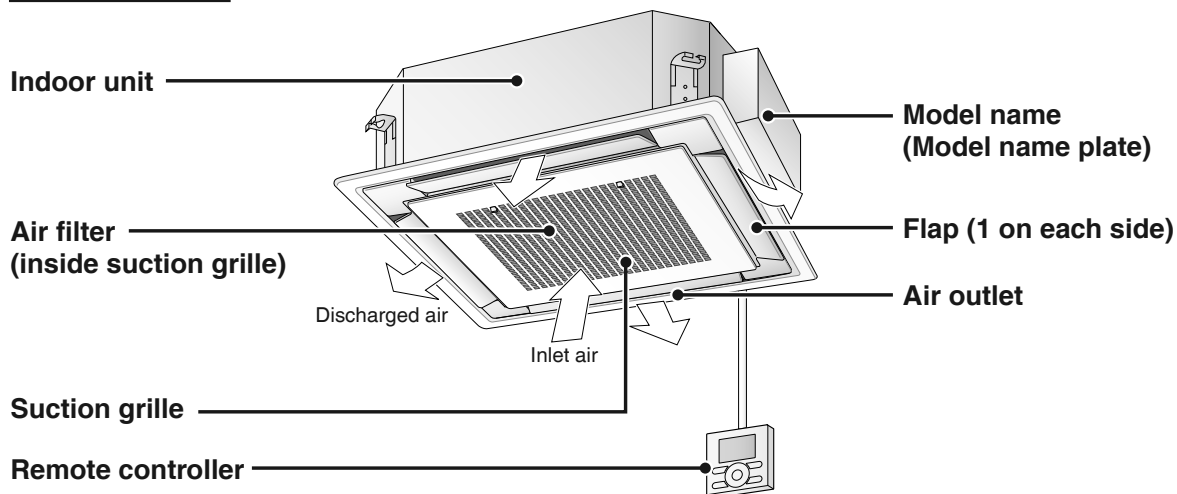
FCP003M(R32)-U

This is an appliance that is not accessible to the general public.

Read Before Operation

Names of Parts

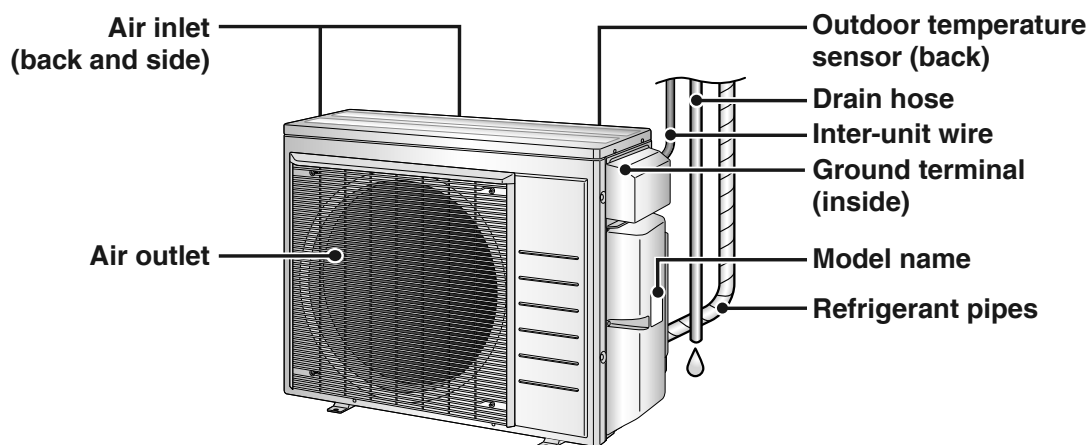
Indoor Unit



- The appearance of the remote controller may differ between different models.
- For details on remote controller operation, refer to the operation manual included with the remote controller.

Outdoor Unit

- The appearance of the outdoor unit may differ between different models.



Multi Connection

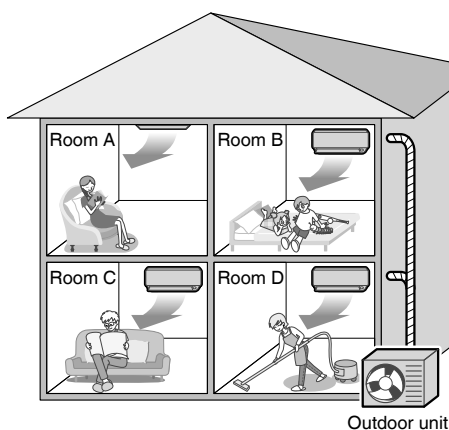
Note for Multi System

A multi system has one outdoor unit connected to multiple indoor units.

Selecting the operation mode

When the priority room setting is active but the set unit is not operating or when the priority room setting is inactive

When more than one indoor unit is operating, priority is given to the first unit that was turned on. In this case, set the units that are turned on later to the same operation mode as the first unit. Otherwise, they will enter the standby state, and when using the remote controller the centralized control icon "CENTRAL CONTROL" will light up; this does not indicate malfunction.



NOTE

Notes on operation mode for a multi system

- COOL, DRY and FAN operation may be used at the same time.
 - AUTO operation automatically selects COOL operation or HEAT operation based on the indoor temperature.
- Therefore, AUTO operation is available when selecting the same operation mode as that of the first unit to be turned on.

CAUTION

- Normally, the operation mode of the first unit that was turned on is given priority, but the following situations are exceptions to this rule. If the operation mode of the first room is FAN operation, using HEAT operation in any room after this will give priority to HEAT operation. In this situation, the indoor unit operating in FAN mode will switch to standby, and when using the remote controller the centralized control icon "CENTRAL CONTROL" will light up.

When the priority room setting is active

Refer to "Priority room setting" on the next page.

Multi Connection

COOL/HEAT mode lock

The COOL/HEAT mode lock requires initial programming during installation. Please consult your authorized dealer for assistance. The COOL/HEAT mode lock sets the unit forcibly to either COOL or HEAT operation. This function is convenient when you wish to set all indoor units connected to the multi system to the same operation mode.

NOTE

- The COOL/HEAT mode lock cannot be activated together with the priority room setting.

Priority room setting

The priority room setting requires initial programming during installation. Please consult your authorized dealer for assistance. The room designated as the priority room takes priority in the following situations.

Operation mode priority

- As the operation mode of the priority room takes precedence, you can select a different operation mode from other rooms.

[Example]

- Room A is the priority room in this example.

When COOL operation is selected in room A while operating the following modes in room B, C and D:

Operation mode in room B, C and D	Status of room B, C and D when the unit in room A is in COOL operation
COOL or DRY or FAN	The current operation mode is maintained.
HEAT	The unit enters the standby mode. Operation resumes when the room A unit stops operating.
AUTO	If the unit is set to COOL operation, it continues. If the unit is set to HEAT operation, it enters the standby mode. Operation resumes when the room A unit stops operating.

Care

Care and Cleaning

Only a qualified service person is allowed to perform maintenance.

WARNING

- Only a qualified service person is allowed to perform maintenance.
- Before cleaning, be sure to stop unit operation and turn off the circuit breaker.
Otherwise, an electric shock and injury may result.
- Contact a qualified person regarding the attachment of accessories and be sure to use only accessories specified by the manufacturer.
If an accessory is attached incorrectly, water leakage, an electric shock, or fire may result.

CAUTION

- When cleaning, use a sturdy and stable stand and watch your step.
- Make sure to firmly support the suction grille with your hand while performing maintenance tasks to prevent it from falling out.

■ Quick reference

Cleaning parts

Outside panel and flaps

- Wipe the parts with a soft cloth.
- When it is difficult to remove stains, use water or a neutral detergent.
- If the flaps are stained severely, contact your dealer and have the flaps replaced.

If dirty

Air filter

- Vacuum dust or wash the filter.

When "Time to clean filter" displays on the remote controller

► Page 8

Remote controller

- Wipe them with a soft cloth.

If dirty

Suction grille

- Wipe it with a soft damp cloth.

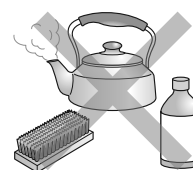
If dirty

► Page 9, 10

Notes on cleaning

For cleaning, do not use any of the following:

- Water hotter than 104°F (40.0°C)
- Volatile liquid such as benzine, gasoline and thinner
- Polishing compounds or liquid insecticide
- Rough materials such as a scrubbing brush
- Sprays such as deodorizers



Care

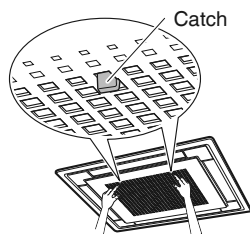
■ Cleaning the air filter

Clean the air filter when "Time to clean filter" displays on the remote controller.

- If the unit is installed in a room where the impurity content of the air is high, clean the filter more frequently.
- If the filter has become difficult to clean, replace the air filter. (Additional air filter sold separately.)

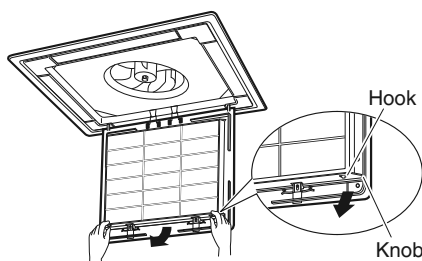
1. Open the suction grille.

- Push the 2 catches away from you and slowly open the suction grille. (To close, perform the steps in reverse.)

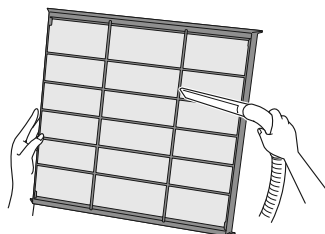


2. Remove the air filter.

- Pull the knobs of the air filter downward to disconnect the hooks, and remove the air filter.

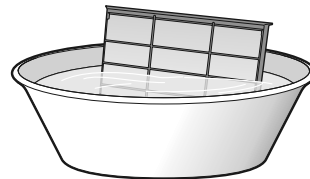


3. Clean the air filter with a vacuum cleaner or wash it with water.



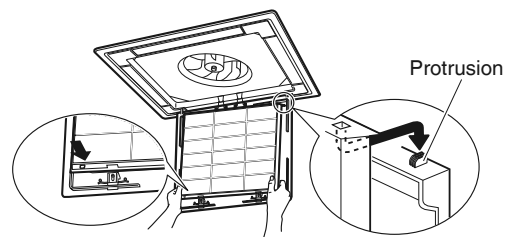
If the dust does not come off easily

- Wash the air filter using a soft brush and a neutral detergent, then let it dry in the shade.



4. Reattach the air filter.

- 4-1 Hook one side of the air filter on to the protrusions on the suction grille.
- 4-2 Push the other side of the air filter into place.



5. Close the suction grille.

- Refer to STEP 1.

6. After turning on the power, reset the filter sign in accordance with the instructions in the operation manual for the remote controller.

"Time to clean filter" disappears from the display on the remote controller.

Care

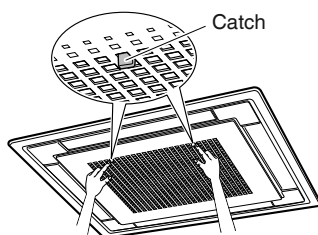
Care and Cleaning

Only a qualified service person is allowed to perform maintenance.

■ Cleaning the suction grille

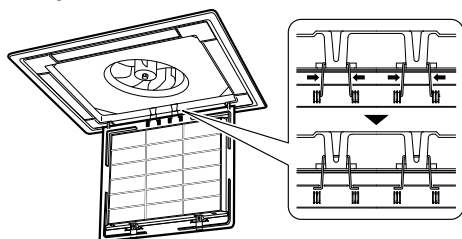
1. Open the suction grille.

- Push the 2 catches away from you and slowly open the suction grille. (To close, perform the steps in reverse.)



2. Remove the suction grille.

- Open the suction grille so that it hangs by the hinges at 90 degrees to the ceiling.
- Pinch the wire catches inward as shown in the figure.



3. Remove the air filter.

► Page 8

4. Clean the suction grille.

Wash with a soft bristle brush and a neutral detergent or water, and dry thoroughly.



• When very dirty

Directly apply the type of detergent used for cleaning ventilation fans or ovens, wait for about 10 minutes, and then rinse with water.

5. Reattach the air filter.

► Page 8

6. Reattach the suction grille.

- Refer to STEP 2.

7. Close the suction grille.

- Refer to STEP 1.

Care

■ Prior to a long period of non-use**1. Operate the FAN mode for several hours to dry out the inside.**

- To start the operation, refer to the operation manual for the remote controller.

2. After operation stops, turn off the circuit breaker for the room air conditioner.**3. Clean the air filter and reattach it.****■ We recommend periodical maintenance**

- In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a qualified contractor.
- For qualified contractor maintenance, please contact the dealer where you bought the air conditioner.

When the Need Arises

Troubleshooting

Before making an inquiry or a request for repair, please check the following.
If the problem persists, consult your dealer.



Not a problem

This case is not a problem.



Check

Please check again before requesting repairs.

Case	Description / what to check
Operation does not start soon. - When ON/OFF button was pressed soon after operation was stopped. - When the mode was reselected.	☒ This is to protect the air conditioner. You should wait for about 3 minutes.
Air does not come out.	☒ ■ In HEAT operation - The air conditioner is warming up. Wait for about 1 to 4 minutes. - During defrosting operation, hot air does not flow out of the indoor unit. ■ When the air conditioner operates immediately after the circuit breaker is turned on - The air conditioner is preparing to operate. Wait for about 3 to 20 minutes.
The HEAT operation stops suddenly and a flowing sound is heard.	☒ The system is taking away the frost on the outdoor unit. You should wait for about 4 to 12 minutes.
The outdoor unit emits water or steam.	☒ ■ In HEAT mode - The frost on the outdoor unit melts into water or steam when the air conditioner is in defrost operation. ■ In COOL or DRY mode - Moisture in the air condenses into water on the cool surface of outdoor unit piping and drips.
Mist comes out of the indoor unit.	☒ This happens when the air in the room is cooled into mist by the cold airflow during cooling operation.
The indoor unit gives out odor.	☒ This happens when smells of the room, furniture, or cigarettes are absorbed into the unit and discharged with the airflow. (If this happens, we recommend you to have the indoor unit washed by a technician. Consult your dealer where you bought the air conditioner.)
The outdoor fan rotates while the air conditioner is not in operation.	☒ ■ After operation is stopped: - The outdoor fan continues rotating for another 1 minute for system protection. ■ While the air conditioner is not in operation: - When the outdoor temperature is very high, the outdoor fan starts rotating for system protection.
The operation stopped suddenly. (OPERATION lamp* is on.)	☒ - For system protection, the air conditioner may stop operating on a sudden large voltage fluctuation. It automatically resumes operation in about 3 minutes. - In the case of multi systems, are all indoor units that are connected to the same outdoor unit in the same operation mode? If not, set all indoor units to the same operation mode.
The air conditioner does not operate. (OPERATION lamp* is off.)	☐ - Hasn't the circuit breaker turned OFF or a fuse blown? - Isn't it a power failure? - Is the timer setting correct?
Cooling (Heating) effect is poor.	☐ - Are the air filters clean? - Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units? - Is the temperature setting appropriate? - Are the windows and doors closed? - Are the airflow rate and the air direction set appropriately?
Operation stops suddenly. (OPERATION lamp* is blinking.)	☐ - Are the air filters clean? - Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units? Clean the air filters or take all obstacles away and turn the circuit breaker OFF. Then turn it ON again and try operating the air conditioner with the remote controller. If the lamp still blinks, call your dealer where you bought the air conditioner.

* The OPERATION lamp is on the receiver of the separately sold remote controller.

When the Need Arises

Case	Description / what to check
An abnormal functioning happens during operation.	 • The air conditioner may malfunction with lightning or radio waves. Turn the breaker OFF, turn it ON again and try operating the air conditioner with the remote controller.

Notes on the operating conditions

- If operation continues under any conditions other than those listed in the table,
 - A safety device may activate to stop the operation.
(With a multi connection in COOL operation, the safety device may work to stop the operation of the outdoor unit only.)
 - Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.
- *1 Cutting the jumper on the outdoor unit PCB will extend the cooling operation range to 14°F (–10.0°C).
Installing an air direction adjustment grille (sold separately) will further extend the operation range to –4°F (–20.0°C).
Please consult your dealer.
- *2 Installing a drain pan heater (sold separately) will further extend the heating operation range to –13°F (–25.0°C).
Please consult your dealer.

Mode	Operating conditions
COOL / DRY	Outdoor temperature [RXV models] : 50*1 - 115°F (10*1 - 46°C) [MXM, MXT, MXTH models] : 14 - 115°F (–10 - 46°C) *1 –4°F (–20°C) if an air direction adjustment grille (sold separately) is installed.
	Indoor temperature : 63 - 90°F (17 - 32°C)
	Indoor humidity : 80% max.
HEAT	Outdoor temperature [MXM models] : 5 - 75°F (–15 - 24°C) [MXT models] : 5*2 - 75°F (–15*2 - 24°C) [MXTH models] : –13 - 75°F (–25 - 24°C) [RXV models] : 5 - 75°F (–15 - 24°C) *2 –13°F (–25°C) if a drain pan heater (sold separately) is installed.
	Indoor temperature : 50 - 88°F (10 - 31°C)

■ Call your dealer immediately**⚠ WARNING**

When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.

- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

Do not attempt to repair or modify the air conditioner by yourself.

- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

If one of the following symptoms takes place, call your dealer immediately.

- The power cord is abnormally hot or damaged.
- An abnormal sound is heard during operation.
- The circuit breaker cuts off the operation frequently.
- A switch or a button often fails to work properly.
- There is a burning smell.
- Water leaks from the indoor unit.

Turn off the circuit breaker and call your dealer.

**■ After a power failure**

- The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

■ Lightning

- If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

■ Disposal requirements

- Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.

13. Options

13.1 Option List

13.1.1 Indoor Unit

FFA Series

Option Name	Model Name
Wired remote controller	BRC1NRV71
Decoration panel	BYFQ60C3W2W
Central remote controller	DCS302C71
Schedule timer controller	DST301BA61
Remote sensor	KRCS01-6B
Wire renovated adaptor	KRP1C77
Group control adaptor	KRP4A74
Sensor kit	BRYQ60AAW (for BYFQ60C3W2W)
Sealing member of air discharge outlet	BDBHQ44C60
Fresh air intake kit (direct installation type)	KDDQ44XA60
Longlife filter	KAF441C60

13.1.2 Outdoor Unit

Option Name	Model	
	09/12 class	15/18 class
Air direction adjustment grille	KPW937F4	KPW063B4
Back protection wire net	KKG067A41	KKG063A44
Drain plug ★	KKP937A4	KKP937A4
Drain pan heater	KEH068A41	KEH064A41
Snow hood (intake side plate)	KPS067A41	KPS063A41
Snow hood (intake rear plate)	KPS067A42	KPS063A44
Snow hood (outlet)	KPS067A44	KPS063A47

★ Standard accessory

13.2 <BRC1NRV71> Wired Remote Controller (Installation)

1. Safety Considerations

The original instructions are written in English. All other languages are translations of the original instructions.

All phases of the field-installation, including, but not limited to, electrical, piping, safety, etc. must be in accordance with manufacturer's instructions and must comply with national, state, provincial and local codes.

Read these **SAFETY CONSIDERATIONS** carefully before installing the remote controller.

After completing the installation, ensure that the remote controller operates properly during the startup operation.

Train the customer to operate and maintain the remote controller. Inform customers that they should store this Installation Manual with the Operation Manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in electrical shock, fire, or explosion.

Meanings of **WARNING**, **CAUTION**, and **NOTE** Symbols.

 WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
 NOTE	Indicates situations that may result in equipment or property-damage accidents only.

 WARNING	
Only qualified personnel must carry out the installation work.	
Consult your Daikin dealer regarding relocation and reinstallation of the remote controller. Improper installation work may result in electric shocks or fire.	
Electrical work must be performed in accordance with relevant local and national regulations and with instructions in this installation manual. Improper installation may cause electrical shocks or fire.	
Use only specified accessories and parts for installation work. Failure to use specified parts may result in electric shocks, fire, or the unit falling.	
Do not disassemble, reconstruct, or repair. Electric shock or fire may occur.	
Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.	
Before touching electrical parts, confirm the power-off to the unit.	

 CAUTION

Keep water out of the remote controller.

To avoid electric shock due to entry of water or insects, fill the wiring through-hole with putty.

Do not wash the remote controller with water as it may result in electrical shocks or fire.

Do not touch the remote controller buttons with wet fingers.

Touching the buttons with wet fingers can cause an electric shock.

Do not install the remote controller in the following locations:

- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
Plastic parts may deteriorate.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced.
- (c) Near machinery emitting electromagnetic waves.
Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions can cause a fire.
- (e) High temperature area or direct flame.
Overheating and/or fire can occur.
- (f) Moist area, where there is exposure to water. If water enters the inside of the remote controller, it may cause electric shock and electrical components may fail.

 NOTE

Install the control wires for the unit and the remote controller at least 3.5 feet (1 meter) away from televisions or radios to prevent image interference or noise. Depending on the radio waves, a distance of 3.5 feet (1 meter) may not be sufficient to eliminate the noise.

When remote controller's temperature sensor is used, select the installation location as per the following:

- A place where average temperature in the room can be detected.
- A place where it is not exposed to direct sunlight.
- A place where it is far away from any heat source.
- A place where it is not affected directly by outside air.

2. Accessories

The following accessories are included.

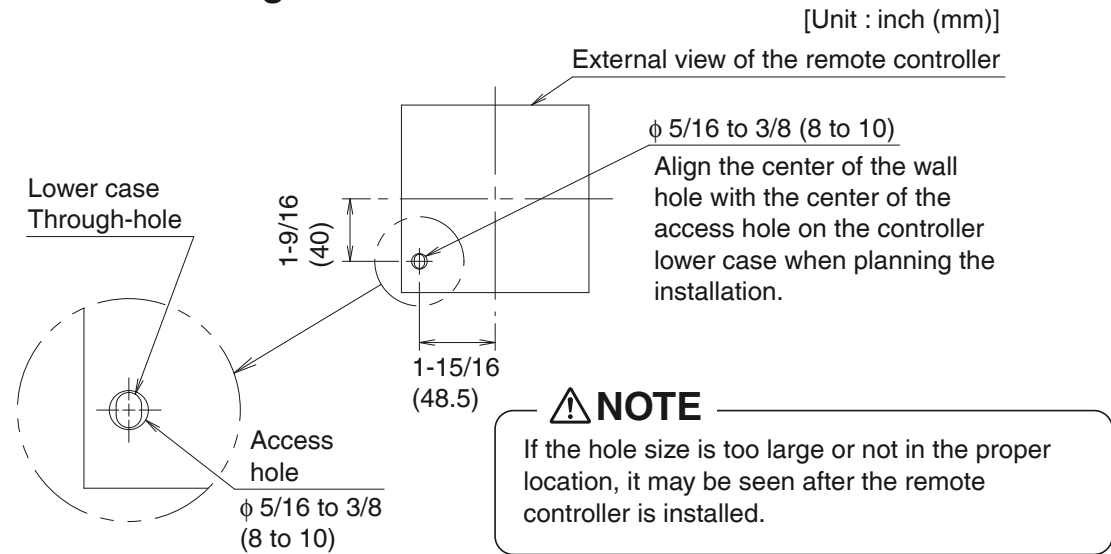
Drywall screw	Drywall anchor	Wire tie	Operation manual	Installation manual	Wiring retainer
					
(2 pcs.)	(2 pcs.)	(1 pc.)	(1 pc.)	(1 pc.)	(1 pc.)

3. Remote Controller Installation Procedure

3-1 Determine where to install the remote controller.

Make sure to follow the **Safety Considerations** when determining the location.

3-2 If the control wire for the remote controller is to be routed from the rear, consider the location of the access hole in the lower case for making a hole in the wall.

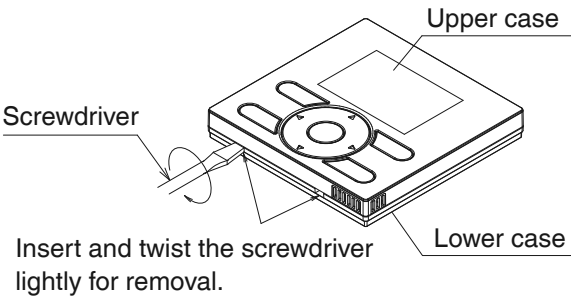


3-3 Remove upper case.

Insert a screwdriver in the recess of lower case to remove the upper case (2 points).

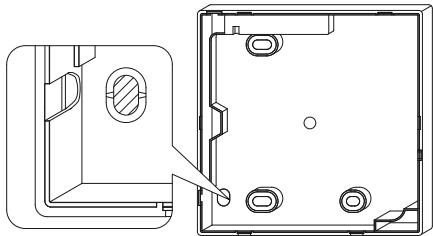
Remote controller printed-circuit board is installed on the upper case. Be careful not to damage the printed-circuit board with the screwdriver.

Be careful not to let dust or moisture touch the printed-circuit board.



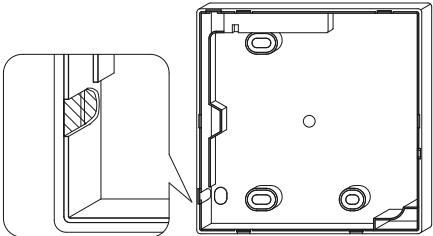
3-4 Determine the location where the wiring will enter the remote controller (back, left side, top left, top center).

3-4-1 Back outlet



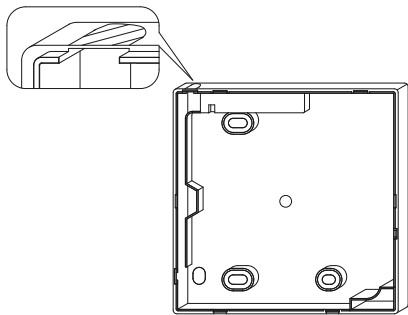
Cut off resin area (notched area).

3-4-2 Left outlet



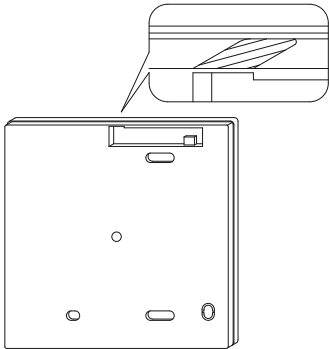
Cut the plastic at the notched area and remove any remaining burrs.

3-4-3 Top left outlet



Cut the plastic at the notched area and remove any remaining burrs.

3-4-4 Top center outlet



Cut the plastic at the notched area and remove any remaining burrs.

3-5 Install wiring.

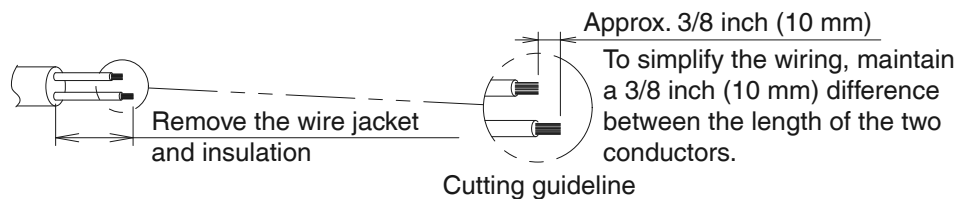
NOTE

- 1. Switch box and control wiring are filed supplied.
- 2. Do not touch the remote controller printed-circuit board.

Wiring Specifications

Wiring Type	Non-shielded, 2-conductor, stranded copper wire
Wiring Size	AWG-18
Wiring Length	Maximum 1640 feet (500 m)

Prepare the wiring for connection to the remote controller following these instructions:

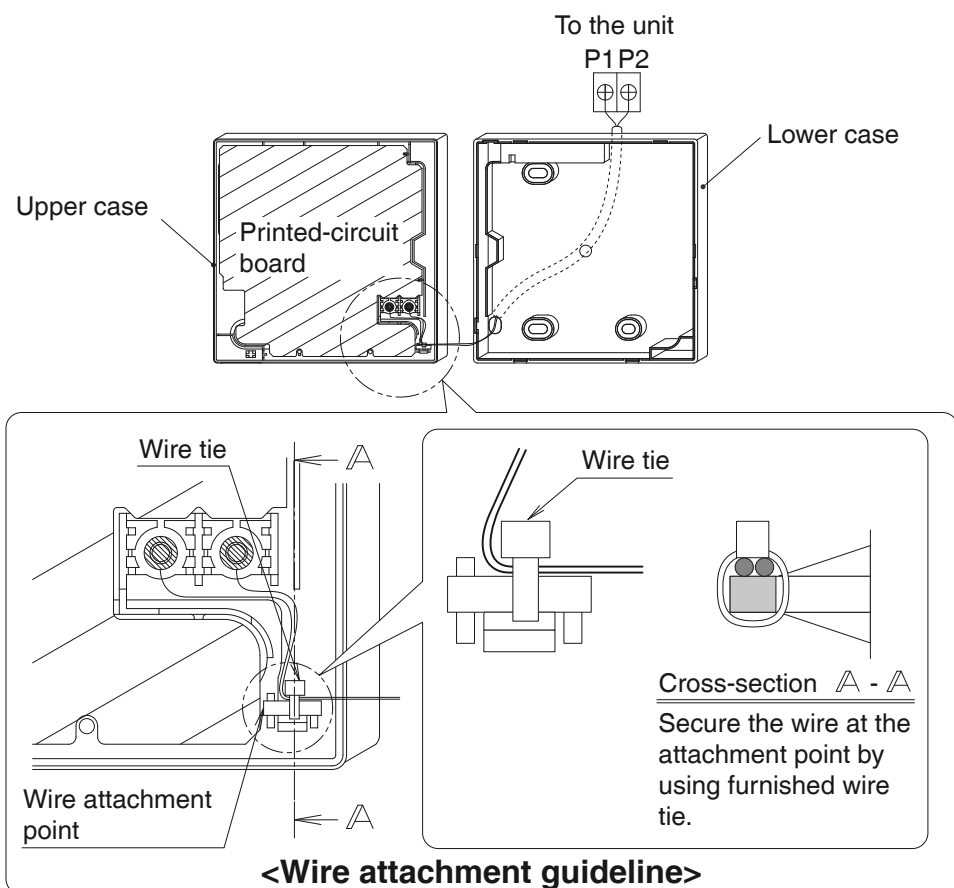


Length of jacket to be removed:

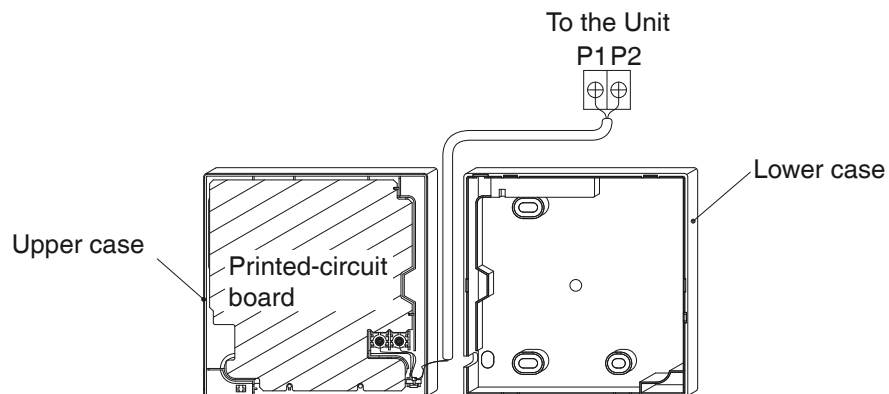
- Approx. 6 inch (150 mm) for top left outlet
- Approx. 8 inch (200 mm) for top center outlet

Connect the terminals (P/P1, N/P2) of the remote controller to the terminals (P1, P2) of the unit. (P1 and P2 are not polarity sensitive.)

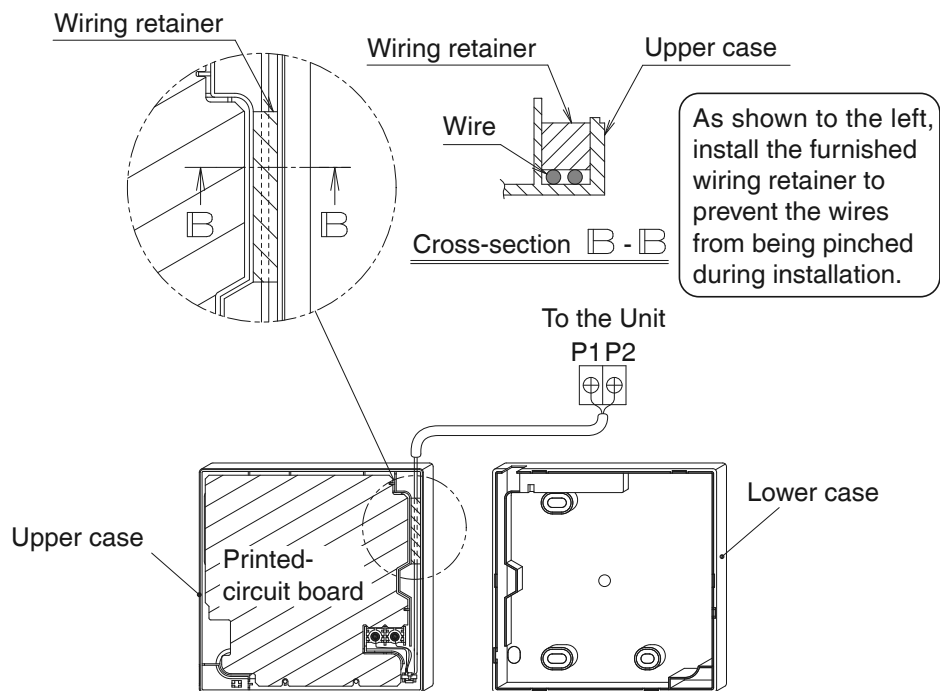
3-5-1 Back outlet



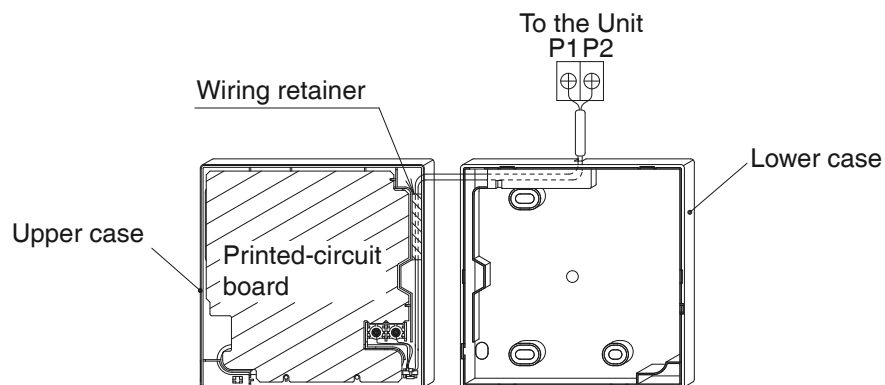
3-5-2 Left outlet



3-5-3 Top left outlet



3-5-4 Top center outlet



⚠ NOTE

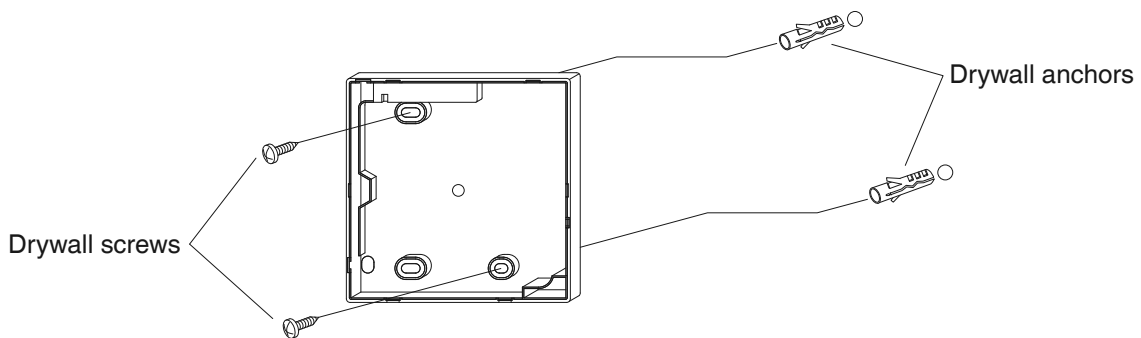
- To prevent electrical noise and possible communication errors, avoid installing the remote controller wiring parallel to or in the vicinity of line voltage circuits.

3-6 Installation procedure for the lower case.

When wiring the remote controller through the top center or rear access points, attachment of the wire to the lower case is required before it is wall mounted. Closely follow the wiring procedures.

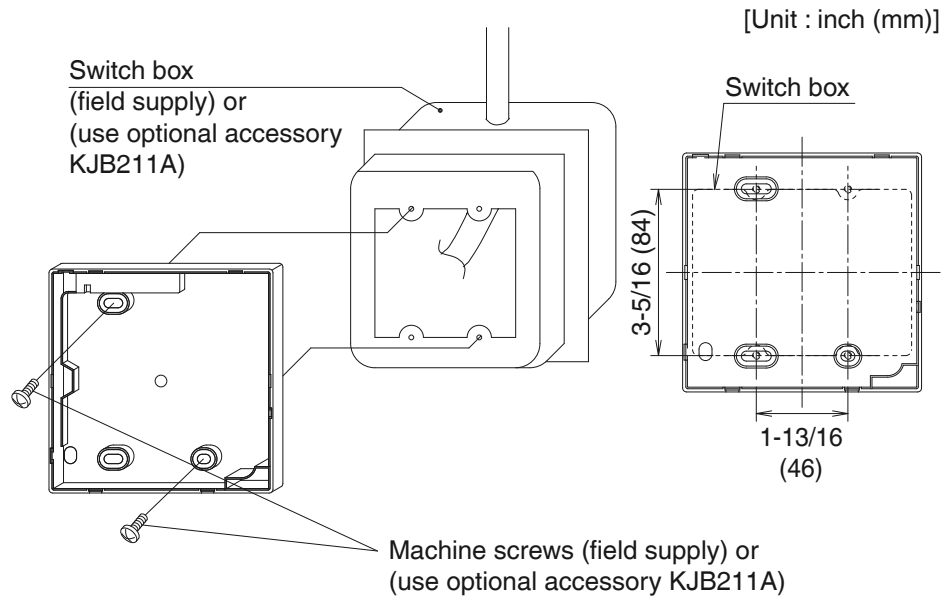
3-6-1 Wall installation

Secure by using furnished drywall anchors and screws (2 pcs.).



3-6-2 Switch box installation

Secure by using field supplied machine screws (2 pcs.).

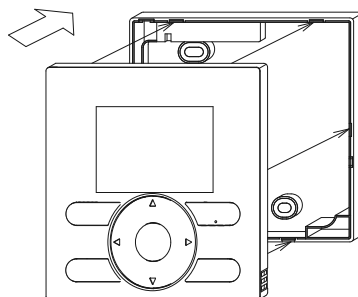


⚠ NOTE

- Install the control on a flat surface only.
- To prevent deformation of the lower case, avoid over-tightening the installation screws.

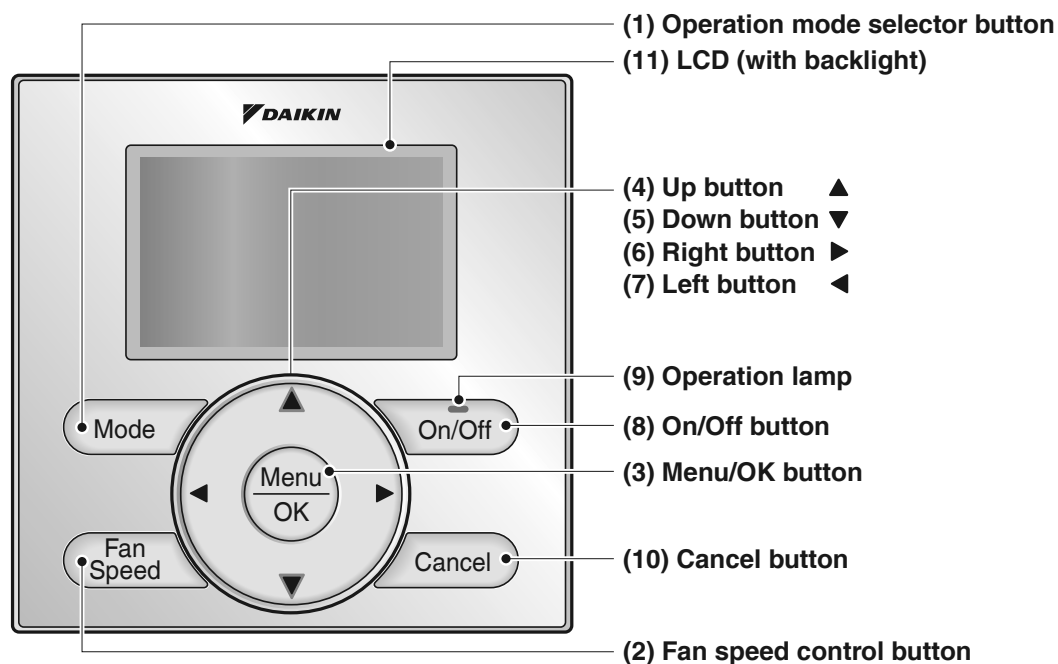
3-7 Install the upper case.

- Align the upper case with tabs of the lower case (6 points), insert and install the upper case.
- Install the wiring with care to prevent pinching.
- Peel off the protective membrane which overlays the upper case.



4. Functions and Menu Items of Remote Controller Buttons

4-1 Functions and menu items



(1) Operation mode selector button

Used to change the mode.

(2) Fan speed control button

Used to change the fan control.

(3) Menu/OK button

- Used to access the main menu.
(For details of the main menu, see the operation manual.)
- Used to enter the item selected.

Main Menu

CO2 Monitoring
 *Humidity
 *Airflow Direction
 *Individual Airflow Direction
 *Ventilation
 Schedule
 Override
 *Optimum Start/Stop
 Celsius / Fahrenheit
 Filter Auto Clean
 Maintenance Information
 Configuration
 Current Settings
 Clock & Calendar
 Daylight Saving Time
 Language

*Depending on connected model

(4) Up button ▲

- Used to raise the setpoint temperature.
- The previous menu items will be highlighted.
(The highlighted items will be scrolled continuously when the button is pressed continuously.)
- Used to change the selected item.

(5) Down button ▼

- Used to lower the setpoint temperature.
- Items below the currently selected item will be highlighted.
(The highlighted items will be scrolled continuously when the button is pressed continuously.)
- Used to change the selected item.

(6) Right button ►

- Used to highlight items to the right of the currently selected item.
- Display contents are changed to next screen per page.

(7) Left button ◀

- Used to highlight items to the left of the currently selected item.
- Display contents are changed to previous screen per page.

(8) On/Off button

Press once to operate, and press once again to stop.

(9) Operation lamp

Green lamp lights up during operation. The lamp will flash if a malfunction occurs.

(10) Cancel button

- Used to return to the previous screen.
- Press and hold this button for 4 seconds or longer to display service settings menu.

(11) LCD (with backlight)

The backlight will illuminate for approximately 30 seconds by pressing any operation button.

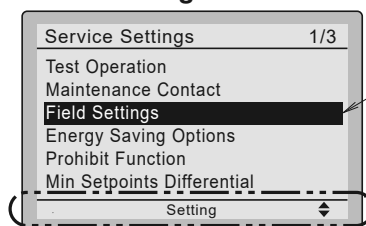
Service Settings menu

Test Operation
Maintenance Contact
*Blower Speed
Field Settings
*Energy Saving Options
Prohibit Function
Min Setpoints Differential
*Outdoor unit AirNet Address
*Unit Operation Hours
Error History
*Indoor Unit Status
*Outdoor Unit Status
*Unit Status
Forced Fan ON
Switch Main Sub Controller
Filter Indicator
*Brush/Filter Ind.
*Disable Filter Auto Clean

*Depending on connected model

⚠ NOTE

- Operate the button while the backlight is illuminated.
- When one indoor unit or rooftop unit is controlled by two remote controllers (main / sub) only the first controller to be accessed by the user will illuminate it's backlight.

4-2 Button menu display descriptions**<Service settings menu screen>**

Highlighted display (selected items)

In the highlighted display (selected items) setting screen, button operation descriptions are displayed.

5. Power-on

- Check for completion of indoor/outdoor unit wiring (SkyAir and VRV only).
- Ensure that covers have been replaced on electrical component boxes for all units prior to restoring power.

NOTE

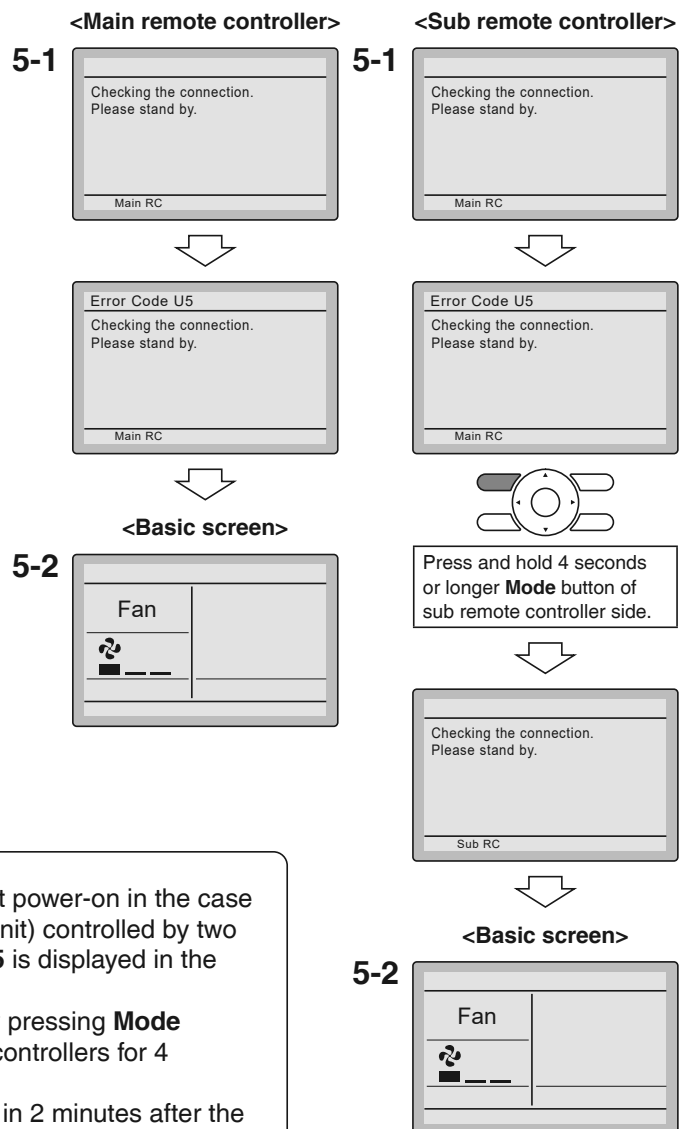
If construction activities are planned within the space following the test operation procedure, recommend to the customer that the unit is not operated to prevent contamination from paints, drywall dust and other airborne materials.

- 5-1** The following message is displayed after power-on.
Checking the connection.
Please stand by.

When the above message is displayed, the backlight will not be ON.

In the case that 1 indoor unit or 1 rooftop unit is controlled by 2 remote controllers:

Make sure to set the sub remote controller when the above message is displayed. Hold **Mode** button for 4 seconds or longer to set.
 When the display is changed from "Main RC" to "Sub RC" the setting is completed.



- 5-2** Basic screen is displayed.

NOTE

If sub remote controller is not set at power-on in the case of one indoor unit (or one rooftop unit) controlled by two remote controllers, **Error Code: U5** is displayed in the connection checking screen.
 Select the sub remote controller by pressing **Mode** button of either one of the remote controllers for 4 seconds or longer.
 If the basic screen is not displayed in 2 minutes after the "Sub RC" is displayed, shut off the power supply and check the wiring.

NOTE

When selecting a different language, refer to **Chapter 12. Language.**
 (See page 28.)

6. Field Settings

- There are 2 setting ways for field settings when the unit is group controlled. One is individual setting, and another is group setting.
- Group Control is only for VRV and SkyAir.

6-1 Press and hold **Cancel** button for 4 seconds or longer.
Service settings menu is displayed.

6-2 Select **Field Settings** in the Service settings menu, and press **Menu/OK** button.
Field settings screen is displayed.

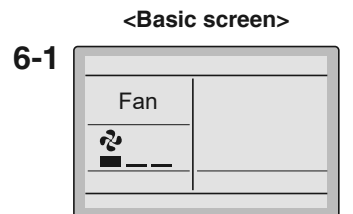
6-3 Highlight the mode, and select desired "Mode No." by using ▲▼ (Up/Down) button.
* Depending on the mode number, sub mode number is displayed.
See the unit's manual for details.

6-4 In the case of setting per unit during group control (When Mode No. such as **20**, **21**, **22**, **23**, **25** are selected), highlight the unit No. and select "Unit No." to be set by using ▲▼ (Up/Down) button.
(In the case of group setting, this operation is not needed.)

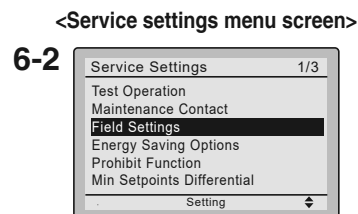
[In the case of individual setting per unit, current settings are displayed. And, SECOND CODE NO. " - " means no function.]

6-5 Highlight SECOND CODE NO. of the FIRST CODE NO. to be changed, and select desired "SECOND CODE NO." by using ▲▼ (Up/Down) button. Multiple identical mode number settings are available.

[In the case of setting for all units in the remote control group, available SECOND CODE NO. is displayed as " * " which means it can be changed. When SECOND CODE NO. is displayed as " - ", there is no function.]



Press and hold **Cancel** button for 4 seconds or longer during backlight lit.

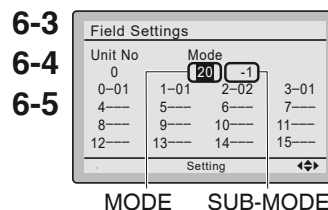


Press **Menu/OK** button.

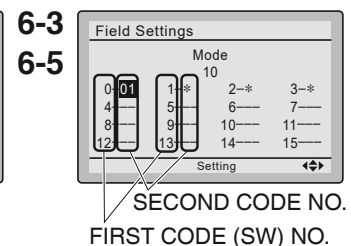


<Service settings screen>

In the case of individual setting per unit



In the case of group total setting



Press **Menu/OK** button.

6-6 Press **Menu/OK** button. Setting confirmation screen is displayed.

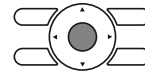
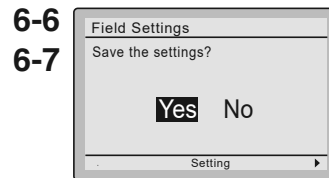
6-7 Select **Yes** and press **Menu/OK** button. Setting details are determined and field settings screen returns.

6-8 In the case of multiple setting changes, repeat “**6-3**” to “**6-7**”.

6-9 After all setting changes are completed, press **Cancel** button twice.

6-10 Backlight goes out, and **[Checking the connection. Please stand by.]** is displayed for initialization. After the initialization, the basic screen returns.

↓
<Setting confirmation screen>



Press **Menu/OK** button.



Setting confirmation

NOTE

- Installation of optional accessories in the unit require changes to field settings. See the manual of the optional accessory.
- For field setting details related to the unit, see installation manual shipped with the unit.

Mode No. (Note 1)		First Code No.	Description	Second Code No. (Note 2) (Items in bold are factory default settings)												
				01	02	03	04	05	06	07	08	09	10	11	12	13
1b	7	Standby display for Defrost/ Hot start/Oil return	Displayed	Not Displayed	—	—	—	—	—	—	—	—	—	—	—	
	11	Clock display on detailed screen	Displayed	Not Displayed	—	—	—	—	—	—	—	—	—	—	—	
	12	Setting temperature display when stopped	Displayed	Not Displayed	—	—	—	—	—	—	—	—	—	—	—	
	13	Operation mode display when stopped	Displayed	Not Displayed	—	—	—	—	—	—	—	—	—	—	—	
	15	Air volume/FAN operation icon display	Displayed	Not Displayed	—	—	—	—	—	—	—	—	—	—	—	
1c	1	Thermistor sensor for auto changeover and setback control by the remote controller	Utilize the return air thermistor	Utilize the remote controller thermistor	—	—	—	—	—	—	—	—	—	—	—	
	3	Access permission level setting	Level 2	Level 3	—	—	—	—	—	—	—	—	—	—	—	
	10	Remote controller thermostat offset (Main RC, Auto mode) (Note 3)	-5.4F (-3.0C)	-4.5F (-2.5C)	-3.6F (-2.0C)	-2.7F (-1.5C)	-1.8F (-1.0C)	-0.9F (-0.5C)	±0.0F (±0.0C)	0.9F (0.5C)	1.8F (1.0C)	2.7F (1.5C)	3.6F (2.0C)	4.5F (2.5C)	5.4F (3.0C)	
	11	Remote controller thermostat offset (Sub RC, Auto mode) (Note 3)	-5.4F (-3.0C)	-4.5F (-2.5C)	-3.6F (-2.0C)	-2.7F (-1.5C)	-1.8F (-1.0C)	-0.9F (-0.5C)	±0.0F (±0.0C)	0.9F (0.5C)	1.8F (1.0C)	2.7F (1.5C)	3.6F (2.0C)	4.5F (2.5C)	5.4F (3.0C)	
	12	Remote controller thermostat offset (Main RC, Cool mode) (Note 3)	-5.4F (-3.0C)	-4.5F (-2.5C)	-3.6F (-2.0C)	-2.7F (-1.5C)	-1.8F (-1.0C)	-0.9F (-0.5C)	±0.0F (±0.0C)	0.9F (0.5C)	1.8F (1.0C)	2.7F (1.5C)	3.6F (2.0C)	4.5F (2.5C)	5.4F (3.0C)	
	13	Remote controller thermostat offset (Main RC, Heat mode) (Note 3)	-5.4F (-3.0C)	-4.5F (-2.5C)	-3.6F (-2.0C)	-2.7F (-1.5C)	-1.8F (-1.0C)	-0.9F (-0.5C)	±0.0F (±0.0C)	0.9F (0.5C)	1.8F (1.0C)	2.7F (1.5C)	3.6F (2.0C)	4.5F (2.5C)	5.4F (3.0C)	
	14	Remote controller thermostat offset (Sub RC, Cool mode) (Note 3)	-5.4F (-3.0C)	-4.5F (-2.5C)	-3.6F (-2.0C)	-2.7F (-1.5C)	-1.8F (-1.0C)	-0.9F (-0.5C)	±0.0F (±0.0C)	0.9F (0.5C)	1.8F (1.0C)	2.7F (1.5C)	3.6F (2.0C)	4.5F (2.5C)	5.4F (3.0C)	
	15	Remote controller thermostat offset (Sub RC, Heat mode) (Note 3)	-5.4F (-3.0C)	-4.5F (-2.5C)	-3.6F (-2.0C)	-2.7F (-1.5C)	-1.8F (-1.0C)	-0.9F (-0.5C)	±0.0F (±0.0C)	0.9F (0.5C)	1.8F (1.0C)	2.7F (1.5C)	3.6F (2.0C)	4.5F (2.5C)	5.4F (3.0C)	
	2	Setback availability	N/A	Heat only	Cool only	Cool/ Heat	—	—	—	—	—	—	—	—	—	
	1e	11	Cooling/Heating switching guard timer setting	15min	30min	60min	90min	—	—	—	—	—	—	—	—	—
12		Cooling/Heating auto switching temperature	0.9F (0.5C)	1.8F (1.0C)	2.7F (1.5C)	3.6F (2.0C)	—	—	—	—	—	—	—	—	—	
13		Cooling/Heating immediate switching temperature	0.9F (0.5C)	1.8F (1.0C)	2.7F (1.5C)	3.6F (2.0C)	—	—	—	—	—	—	—	—	—	

English

15

- Notes)
1. Field settings are normally applied to the entire remote control group, however if individual indoor units in the remote control group require specific settings or for confirmation that settings have been established, utilize the mode number in parenthesis.
 2. Any features not supported by the connected unit will not be displayed.
 3. If different offset values are set for cooling and heating modes, the following issues may occur in auto operation mode:
 - The indoor unit may switch more frequently between cooling/heating modes
 - The indoor unit may switch less frequently between cooling/heating modes
 - Setback on/off may happen more frequently
 - Setback on/off may happen less frequentlyTo avoid these issues, set the offset values for auto mode.

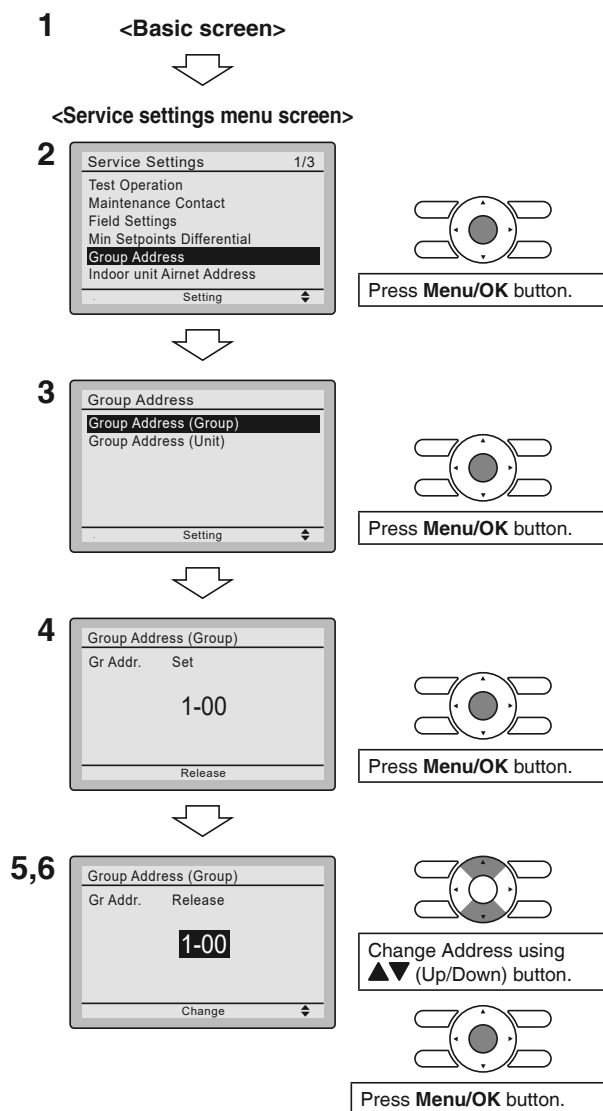
7. Setting Addresses

- This section describes how to set Group Address, Indoor unit Airnet Address, Outdoor unit Airnet Address, Indoor unit Label and Outdoor unit Label.

7-1 Group Address (Group) for VRV

This menu is displayed when multizone controller or BACnet MS/TP adaptor is connected.

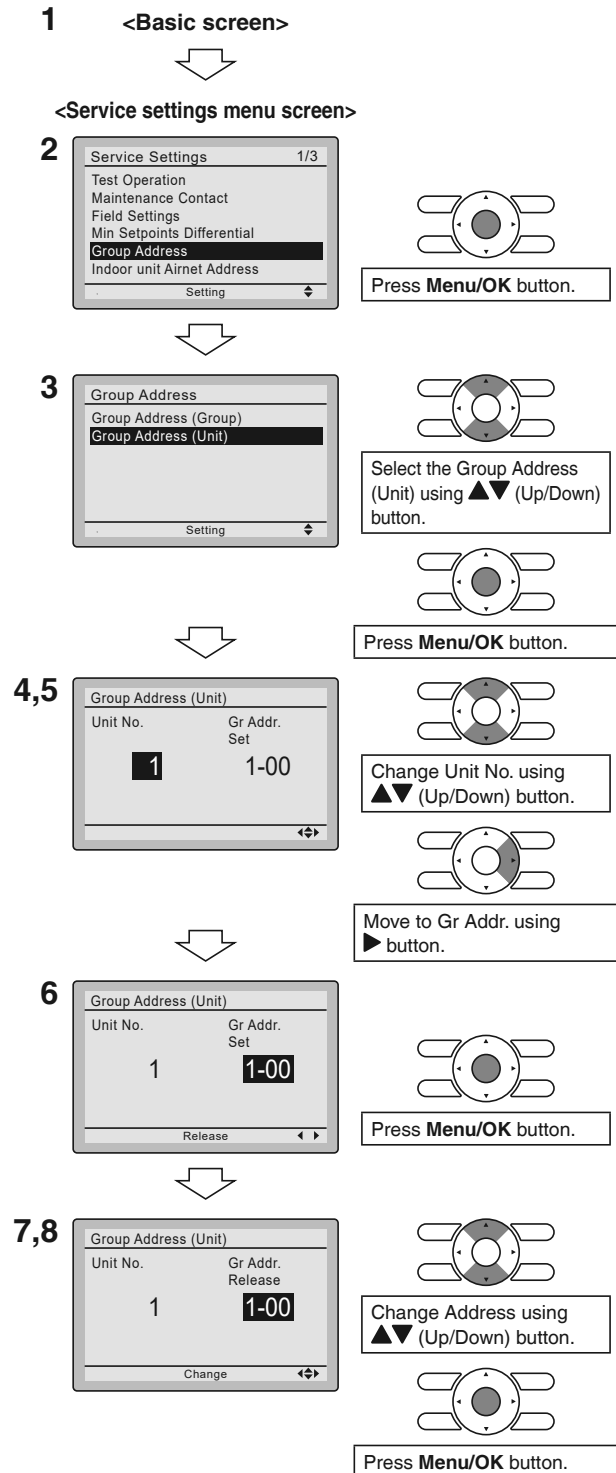
1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select **Group Address** in the Service settings menu, and press **Menu/OK** button. Group Address screen is displayed.
3. Select **Group Address (Group)** and press **Menu/OK** button.
4. If an address is already "Set", press **Menu/OK** button to release the current address setting. The mode indication changes from "Set" to "Release", and you are now ready to change the address.
5. Select the address you want to set by using **▲▼** buttons.
6. Press **Menu/OK** button. The indication changes from "Release" to "Set", then the group address is set.



7-2 Group Address (Unit) (VRV only)

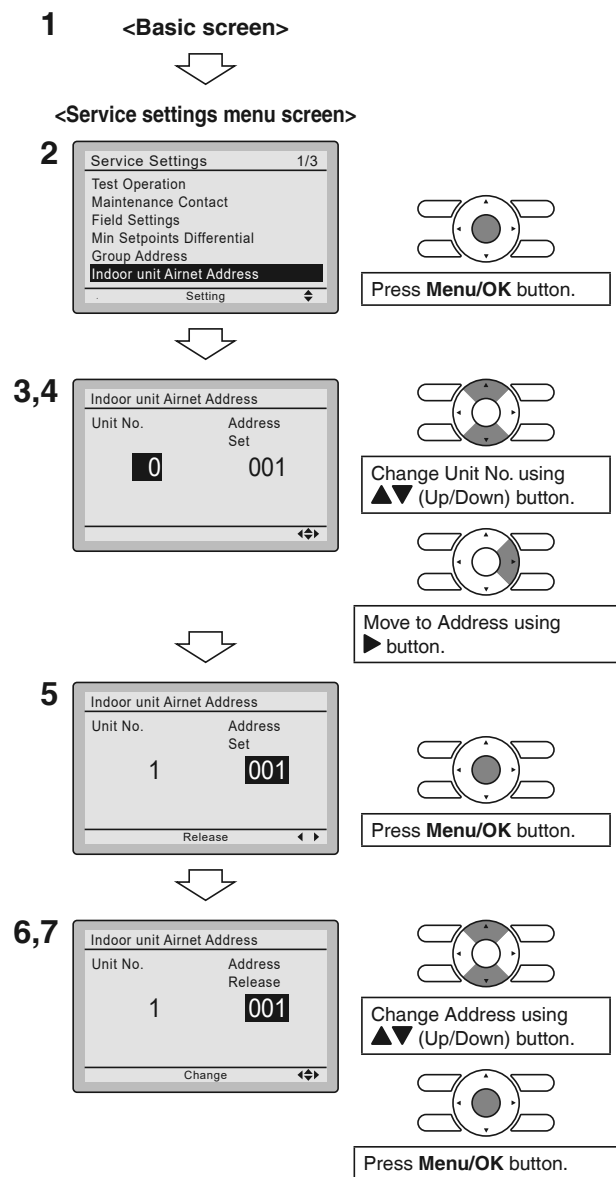
This menu is displayed when multizone controller or BACnet MS/TP adaptor is connected.

1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select **Group Address** in the Service settings menu, and press **Menu/OK** button. Group Address screen is displayed.
3. Select **Group Address (Unit)** and press **Menu/OK** button.
4. Select the Unit No. you want to set by using **▲▼** buttons.
5. Press **▶** button to move to Gr. Addr.
6. If an address is already "Set", press **Menu/OK** button to release the current address setting. The mode indication changes from "Set" to "Release", and you are now ready to change the address.
7. Select the address you want to set by using **▲▼** buttons.
8. Press **Menu/OK** button. The indication changes from "Release" to "Set", then the group address is set.



7-3 Indoor unit Airnet Address (VRV only)

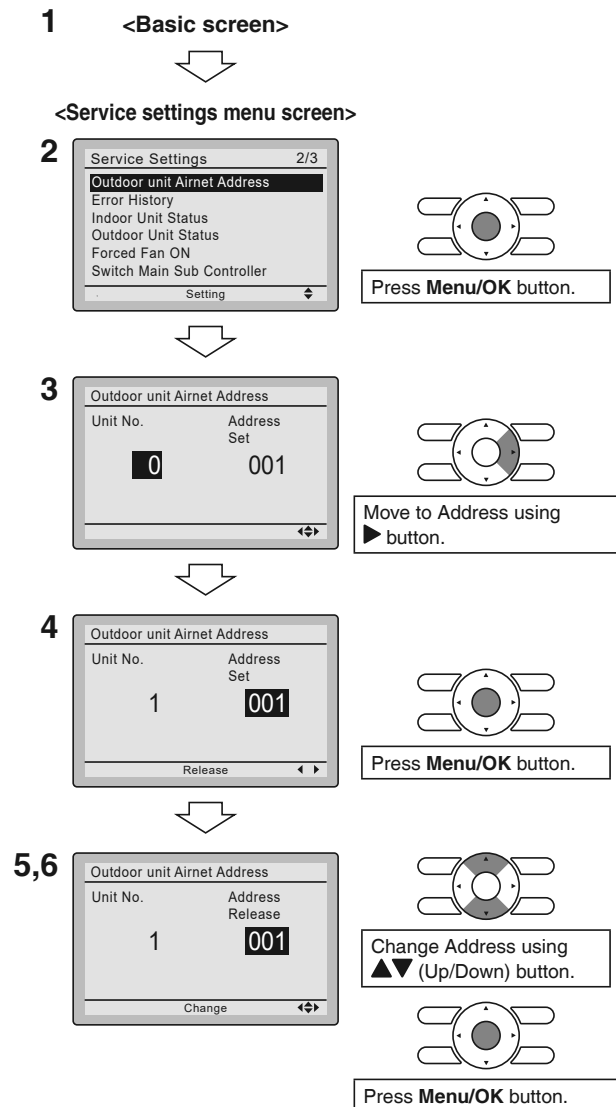
1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select **Indoor unit Airnet Address** in the Service settings menu, and press **Menu/OK** button. Indoor unit Airnet Address screen is displayed.
3. Select the Unit No. you want to set by using **▲▼** buttons.
4. Press **▶** button to move to Address.
5. If an address is already "Set", press **Menu/OK** button to release the current address setting. The mode indication changes from "Set" to "Release", and you are now ready to change the address.
6. Select the address you want to set by using **▲▼** buttons.
7. Press **Menu/OK** button. The indication changes from "Release" to "Set", then the Indoor unit Airnet Address is set.



7-4 Outdoor unit Airnet Address (VRV only)

This address menu is displayed when the Outdoor unit is recognized from the indoor unit.

1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select **Outdoor unit Airnet Address** in the Service settings menu, and press **Menu/OK** button. Outdoor unit Airnet Address screen is displayed.
3. Press **▶** button to move to Address.
4. If an address is already "Set", press **Menu/OK** button to release the current address setting. The mode indication changes from "Set" to "Release", and you are now ready to change the address.
5. Select the address you want to set by using **▲▼** buttons.
6. Press **Menu/OK** button. The indication changes from "Release" to "Set", then the Outdoor unit Airnet Address is set.



7-5 Group Address/Airnet Address (Rooftop unit only)

1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

2. Select **Group Address/Airnet Address** in the Service settings menu, and press **Menu/OK** button. Group Address/Airnet Address screen is displayed.

3. If there are only rooftop units connected in D3 system, select **Yes**. If no, Select **No**.

If the rooftop unit has just been turned on and is preparing for communication, Step 3 will not appear. And goes to Step 4 directly.

4. Individual addresses can be set via No.4 screen on this page. Details of the setting procedures refer to 7-1 to 7-4. (See page 17-20.)

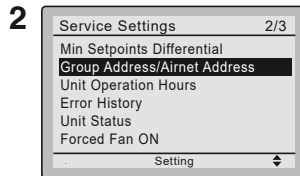
5. Press **▶** button to move to Group Address.

6. If an address is already "Set", press **Menu/OK** button to release the current address setting. The mode indication changes from "Set" to "Release", and you are now ready to change the address.

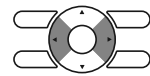
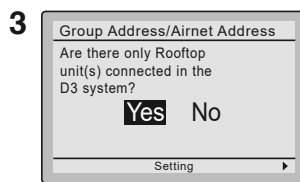
1 <Basic screen>



<Service settings menu screen>



Press **Menu/OK** button.

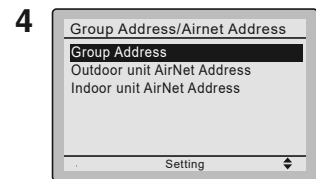


Change Yes or No using **◀▶** (Left/Right) button.

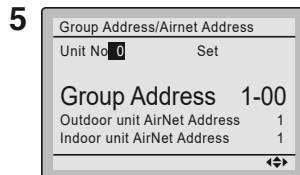


Press **Menu/OK** button.

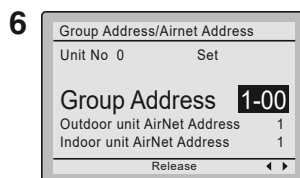
No



Yes



Move to Group Address using **▶** button.



Press **Menu/OK** button.



7. Select the address you want to set by using ▲▼ buttons.

8. Press **Menu/OK** button.
The indication changes from “Release” to “Set”, then addresses are set.

7,8

Group Address/AirNet Address	
Unit No 0	Release
Group Address	1-00
Outdoor unit AirNet Address	1
Indoor unit AirNet Address	1
Change ◀▶	



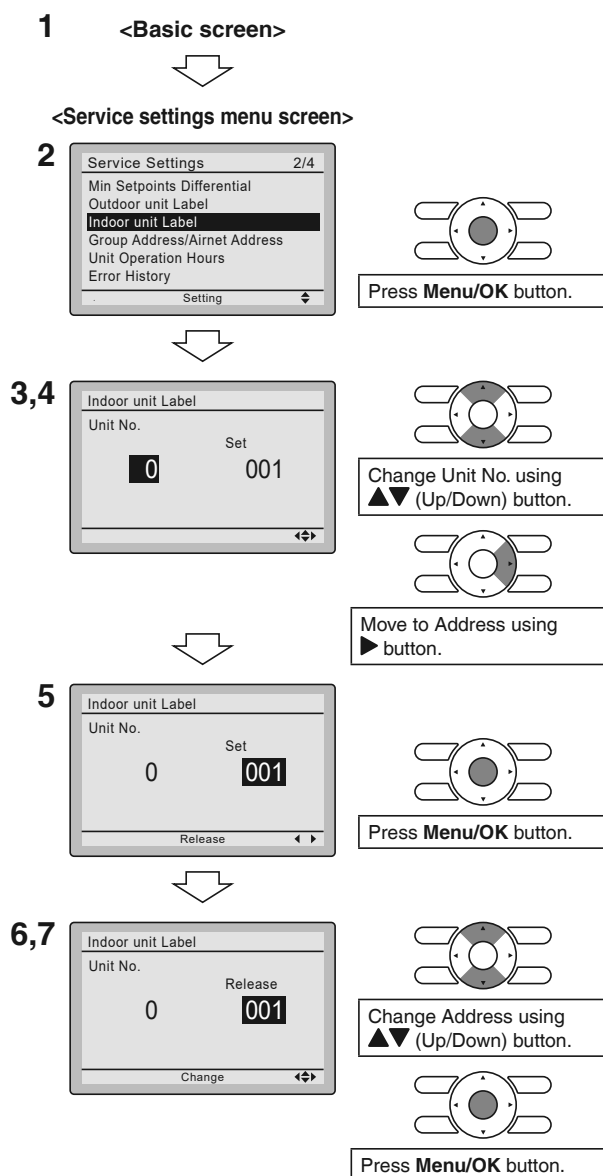
Change Address using
▲▼ (Up/Down) button.



Press **Menu/OK** button.

7-6 Indoor unit Label (VRV only)

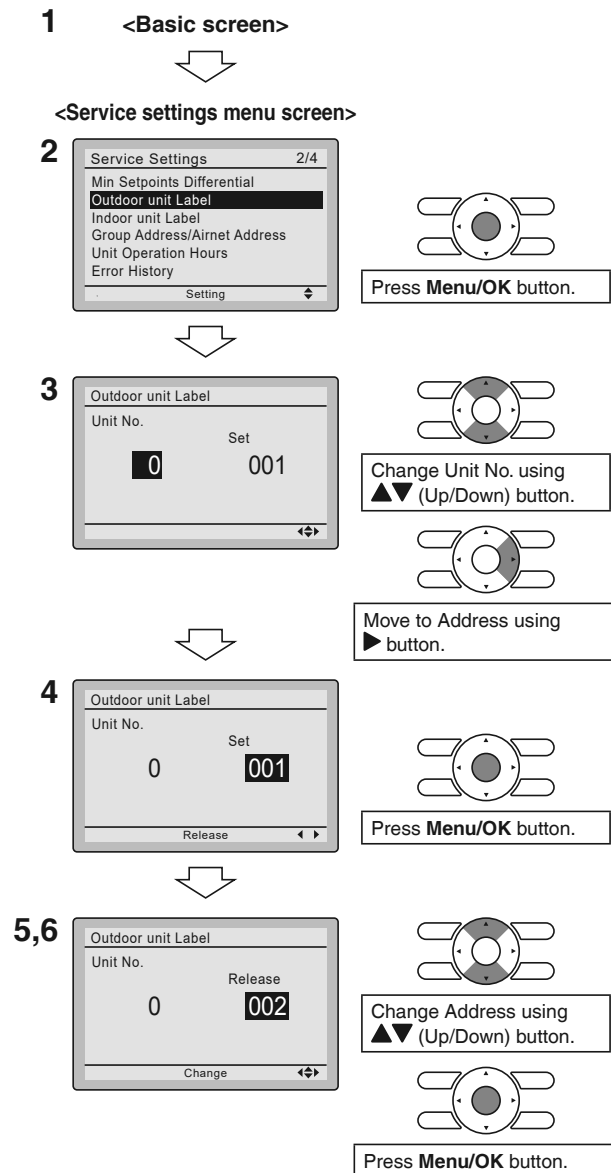
1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select **Indoor unit Label** in the Service settings menu, and press **Menu/OK** button. Indoor unit Label screen is displayed.
3. Select the Unit No. you want to set by using **▲▼** buttons.
4. Press **▶** button to move to Address.
5. If an address is already "Set", press **Menu/OK** button to release the current address setting. The mode indication changes from "Set" to "Release", and you are now ready to change the address.
6. Select the address you want to set by using **▲▼** buttons.
7. Press **Menu/OK** button. The indication changes from "Release" to "Set", then the Indoor unit Label is set.



7-7 Outdoor unit Label (VRV only)

This address menu is displayed when the Outdoor unit is recognized from the indoor unit.

1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select **Outdoor unit Label** in the Service settings menu, and press **Menu/OK** button. Outdoor unit Label screen is displayed.
3. Press **►** button to move to Address.
4. If an address is already "Set", press **Menu/OK** button to release the current address setting. The mode indication changes from "Set" to "Release", and you are now ready to change the address.
5. Select the address you want to set by using **▲▼** buttons.
6. Press **Menu/OK** button. The indication changes from "Release" to "Set", then the Outdoor unit Label is set.



8. Procedure for Checking Error History

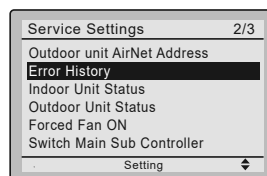
- 8-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
- 8-2** Select **Error History** in the service settings menu, and press **Menu/OK** button. The error history menu screen is displayed.
- 8-3** Select **RC Error History** in the error history menu, and press **Menu/OK** button. Error codes and unit No. can be confirmed in the RC error history screen.
- 8-4** In the error history, the 10 most recent items are displayed in order of occurrence.
- 8-5** Press **Cancel** button in the RC error history screen 3 times. The basic screen returns.

8-1 <Basic screen>



<Service settings menu screen>

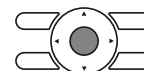
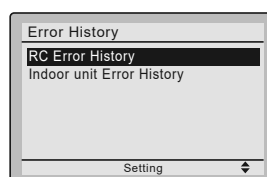
8-2



Press **Menu/OK** button.



8-3



Press **Menu/OK** button.

8-4

8-5

Unit	Error	Date	Time
01	--	--/--/--	--:--
02	--	--/--/--	--:--
03	--	--/--/--	--:--
04	--	--/--/--	--:--

Unit No.

Latest record

9. Adding Maintenance Contact Information

- Registration of the maintenance contact.

9-1 Press and hold **Cancel** button for 4 seconds or longer in the basic screen.
Service settings menu is displayed.

9-2 Select **Maintenance Contact** in the service settings menu, and press **Menu/OK** button. Maintenance contact menu screen is displayed.

9-3 Select **Maintenance Contact**, and press **Menu/OK** button.

9-4 Enter the telephone number.
Scroll through the numbers by using **▲▼** (Up/Down) buttons. Start from the left side. Blank digits should remain as " _".

9-5 Press **Menu/OK** button.
Setting confirmation screen is displayed.

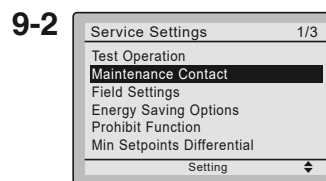
9-6 Select **Yes** and press **Menu/OK** button.
Setting details are saved and service settings menu screen returns.

9-7 Press **Cancel** button once.
The basic screen returns.

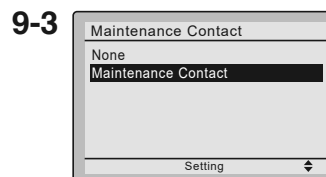
9-1 <Basic screen>



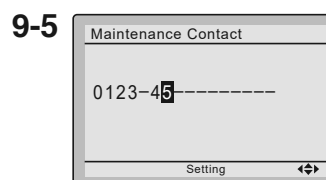
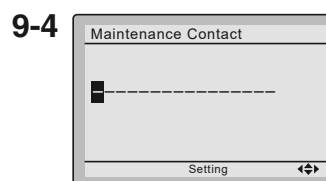
<Service settings menu screen>



Press **Menu/OK** button.



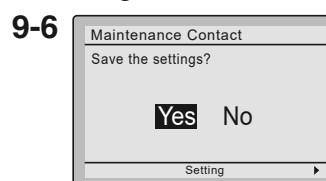
Press **Menu/OK** button.



Press **Menu/OK** button.



<Setting confirmation screen>



Press **Menu/OK** button.

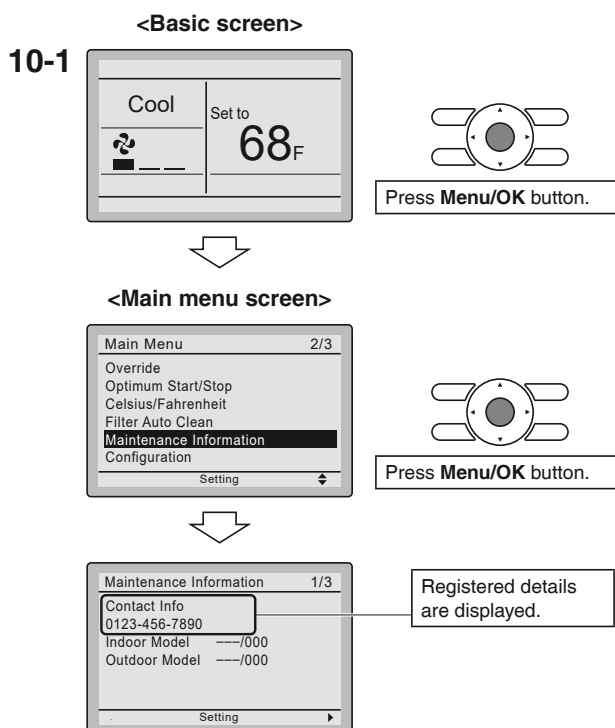


<Service settings menu screen>

10. Confirming Registered Details

- 10-1** Press **Menu/OK** button in the basic screen.
Main menu is displayed.
Select **Maintenance Information** in the main menu, and press **Menu/OK** button.

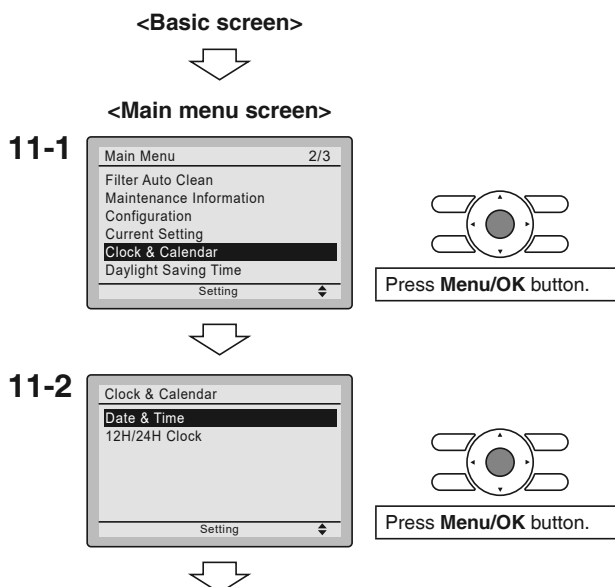
- 10-2** Press **Cancel** button twice.
The basic screen returns.



11. Clock & Calendar

- 11-1** Press **Menu/OK** button in the basic screen.
Main menu is displayed.
Select **Clock & Calendar** in the main menu, press **Menu/OK** button.

- 11-2** Press **▲▼** buttons to select **Date & Time** on the clock & calendar screen.
* The date & time screen will appear when **Menu/OK** button is pressed.



11-3 Select **year, month, day** and **time** by using ◀▶ (Left/Right) button and set by using ▲▼ (Up/Down) button in the date & time screen. Press and hold the button for continuous change of the numeric value.

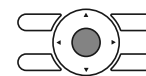
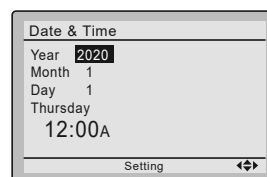
* Day of the week is set automatically.

11-4 Press **Menu/OK** button.
Setting confirmation screen is displayed.

11-5 Select **Yes** and press **Menu/OK** button.
Setting details are saved and basic screen returns.

* If power outage exceeds 48 hours, reset is needed.

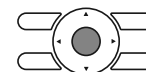
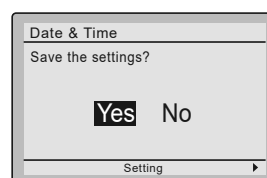
11-3
11-4



Press **Menu/OK** button.



11-5



Press **Menu/OK** button.



<Basic screen>

12. Language

12-1 Press **Menu/OK** button in the basic screen.
Main menu is displayed.
Select **Language** in the main menu, press **Menu/OK** button.

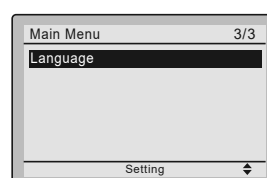
12-2 Press ▲▼ (Up/Down) buttons to select **Language** on the language screen.
English/Français/Español
Press **Menu/OK** button.

<Basic screen>



<Main menu screen>

12-1



Press **Menu/OK** button.



12-2



13. Unit Status (Rooftop unit only)

13-1 Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

13-2 Select **Unit Status** in the service settings menu, and press **Menu/OK** button. Unit Status menu screen is displayed.

13-3 Unit Status have 4 pages. Display contents are changed to use ◀▶ buttons per pages.

Unit Status menu

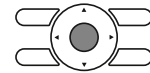
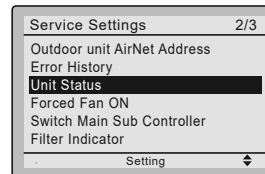
- Page 1
 - Room Temp
 - Remote Ctrl Temp
 - Return Air Temp
 - Return Air Humidity
 - Return Air Enthalpy
- Page 2
 - Supply Air Temp
 - Supply Air Temp Mode
 - O/D Temp
 - O/D Humidity
 - O/D Enthalpy
- Page 3
 - Economizer
 - Demand Ctrl Vent
 - Free Cooling
 - Mix-air low lim cycl
 - Compressor
- Page 4
 - Heating
 - Liquid Temp
 - Gas Temp
 - Evaporated Temp
 - Condensed Temp

13-1 <Basic screen>



<Service settings menu screen>

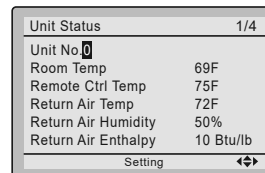
13-2



Press **Menu/OK** button.



13-3



14. Blower Speed (Rooftop unit only)

- The appropriate setting is shown on the manual of the unit.

14-1 Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

14-2 Select **Blower Speed** in the service settings menu, and press **Menu/OK** button. Blower Speed menu screen is displayed.

14-3 Select Unit Number or % of blower speed using ◀▶ buttons. Use ▲▼ buttons to change number, and press **Menu/OK** button. Setting confirmation screen is displayed.

14-4 Select **Yes** and press **Menu/OK** button. Setting details are saved and service settings menu screen returns.

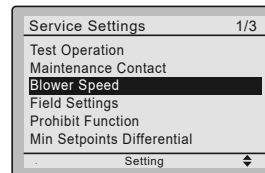
14-5 Press **Cancel** button once. The basic screen returns.

14-1 <Basic screen>



<Service settings menu screen>

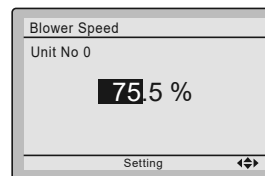
14-2



Press **Menu/OK** button.



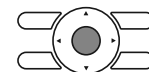
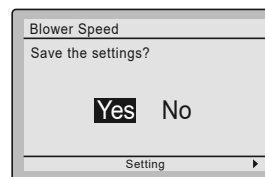
14-3



Press **Menu/OK** button.



14-4



Press **Menu/OK** button.



<Service settings menu screen>

15. Unit Operation Hours (Rooftop unit only)

- Runtime is displayed and some of them are resettable.

15-1 Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

15-2 Select **Unit Operation Hours** in the service settings menu, and press **Menu/OK** button. Unit Operation Hours menu screen is displayed.

15-3 If Display Hours is selected, runtimes are displayed.

15-4 If Reset is selected, it will display the title of runtimes that is resettable.

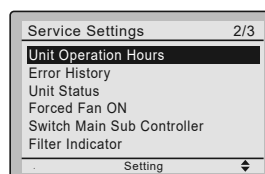
Total System Hrs
Total Fan Hrs (Resettable)
Comp Heat Mode (Resettable)
Aux Heat Hrs (Resettable)
Cool Mode Hrs (Resettable)
Econ Mode Hrs (Resettable)
Vent Mode Hrs (Resettable)

15-1 <Basic screen>



<Service settings menu screen>

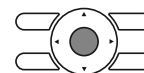
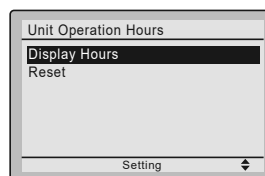
15-2



Press **Menu/OK** button.



15-3



Press **Menu/OK** button.

15-4

16. Prohibit Function

16-1 Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

16-2 Select **Prohibit Function** in the service settings menu, and press **Menu/OK** button. Prohibit Function menu screen is displayed.

16-3 Prohibit Buttons is for prohibiting each button input like Fan Speed button. Prohibit Mode is for prohibiting mode like “Cool” or “Heat”.

16-4 To enable the Prohibit Buttons function in the basic screen, proceed as follows.

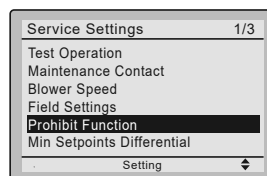
1. Keep **►** button pressed.
2. Press **Cancel**, **Mode**, **Fan speed** buttons simultaneously while keeping **►** button pressed.

16-1 <Basic screen>



<Service settings menu screen>

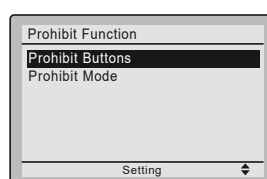
16-2



Press **Menu/OK** button.

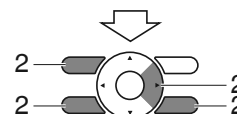


16-3



Press **Menu/OK** button.

16-4



17. Certification

COMPLIANCE WITH FCC RULES AND REGULATIONS

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase or decrease the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced remote control/ TV technician for help.

FCC Authorization Label

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

13.3 <BRC1NRV71> Wired Remote Controller (Operation)

Safety Considerations

The original instructions are written in English. All other languages are translation of the original instructions.

Read these **SAFETY CONSIDERATIONS** carefully before operating the remote controller.

Train the customer to operate and maintain the remote controller.

Inform customers that they should store this Operations Manual with the Installation Manual for future reference.

Meanings of **WARNING** and **CAUTION** Symbols:

 WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
 NOTE	Indicates situations that may result in equipment or property-damage accidents only.

- The following pictograms are used in this manual.

	Never do.		Always follow the instructions given.
	Keep water and moisture away.		Keep wet hands away.

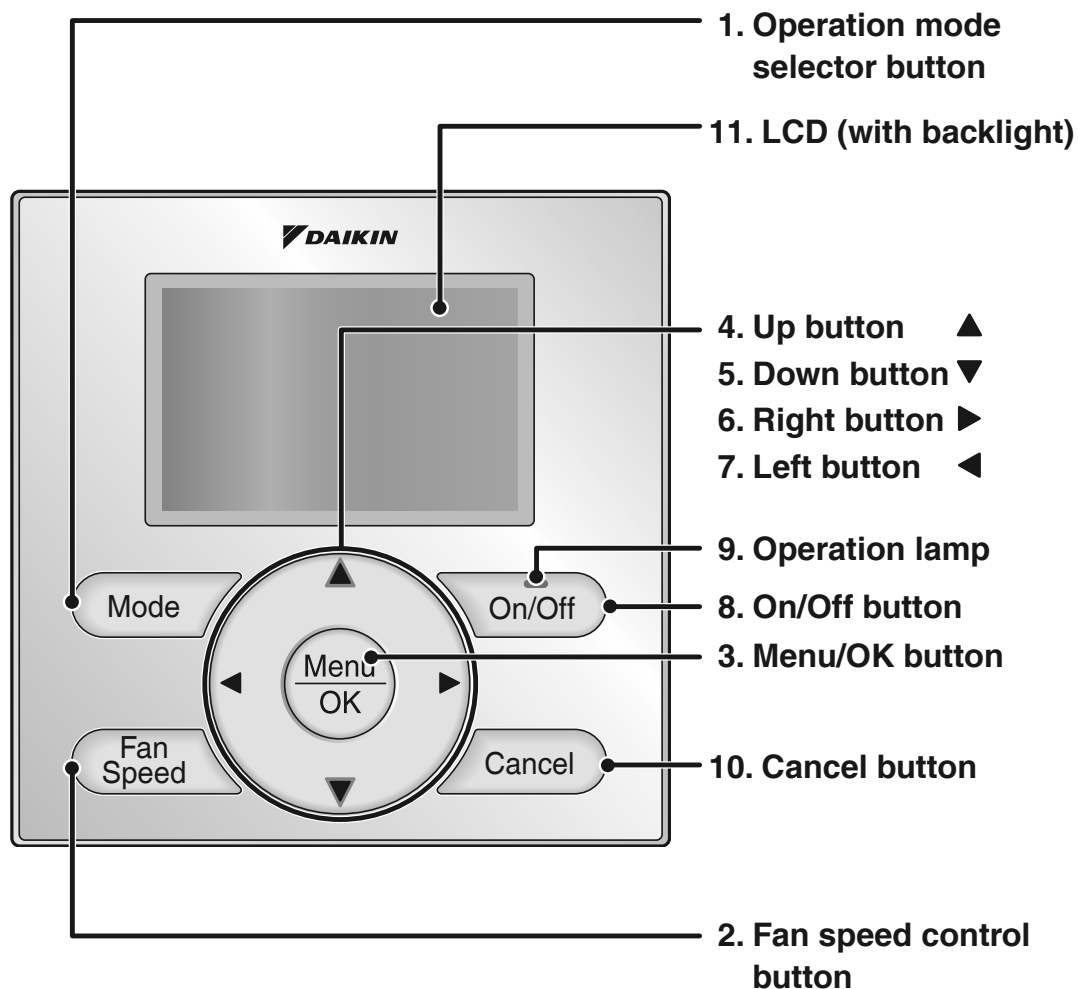
 WARNING	
	• Do not modify or repair the remote controller. Consult your Daikin dealer for any modification or for repairs.
	• Do not relocate or reinstall the remote controller by yourself. Improper installation may result in electric shocks or fire. Consult your Daikin dealer to relocate or for any reinstallation.
	• Do not use flammable materials (e.g., hairspray or insecticide) near the remote controller. Do not clean the product with organic solvents such as paint thinner. The use of organic solvents may cause cracking, damaging the product, causing electric shocks, or fire.
	• Consult the dealer if the remote controller was submerged under water due to a natural disaster, such as a flood or hurricane. Do not operate the remote controller at this time or a malfunction, electric shock, or fire can occur.

——Items to be Strictly Observed——

 CAUTION	
	• Do not allow children to play with the remote controller to avoid causing damage to the product.
	• Never disassemble the remote controller. Touching the interior parts may result in electric shocks or fire. Consult your Daikin dealer for internal inspections and adjustments.
	• Do not touch the remote controller buttons with wet fingers. Touching the buttons with wet fingers can cause an electric shock.
	• Do not wash the remote controller. Doing so may cause electric leakage and result in electric shocks or fire.
	• Never let the remote controller to get wet. Water can cause damage to the remote controller, and may cause an electric shock or fire.

 NOTE	
	• Never press the button of the remote controller with a hard and pointed object. The remote controller may be damaged.
	• Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
	• Do not wipe the remote controller with benzine, thinner, chemical dustcloth, etc. The remote controller may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the remote controller clean. And wipe it with another dry cloth.

Button Locations and Descriptions



Functions other than basic operation items (i.e., On/Off, Operation Mode, Fan Speed, and Setpoint) are set from the menu screen.

NOTE

- Do not install the remote controller in places exposed to direct sunlight, the LCD will be damaged.
- Do not pull or twist the remote controller cord, the remote controller may be damaged.
- Do not use objects with sharp ends to press the buttons on the remote controller, damage may result.

1. Operation mode selector button

- Press this button to select the operation mode of your preference. **(See page 10.)**
* Available modes vary with the model of unit.

2. Fan speed control button

- Press this button to select the fan speed of your preference. **(See page 11.)**
* Available fan speeds vary with the model of unit.

3. Menu/OK button

- Used to enter the main menu.
(See page 20 for the menu items.)
- Used to enter the selected item.

4. Up button ▲

- Used to raise the setpoint.
- The item above the current selection will be highlighted.
(The highlighted items will be scrolled continuously when the button is continuously pressed.)
- Used to change the selected item.

5. Down button ▼

- Used to lower the setpoint.
- The item below the current selection will be highlighted.
(The highlighted items will be scrolled continuously when the button is continuously pressed.)
- Used to change the selected item.

6. Right button ►

- Used to highlight the next items on the right-hand side.
- Each screen is scrolled in the right-hand direction.

7. Left button ◀

- Used to highlight the next items on the left-hand side.
- Each screen is scrolled in the left-hand direction.

8. On/Off button

- Press this button and system will start.
- Press this button again to stop the system.

9. Operation lamp

- This lamp illuminates solid green during normal operation.
- This lamp flashes if an error occurs.

10. Cancel button

- Used to return to the previous screen.

11. LCD (with backlight)

- The backlight will be illuminated for approximately 30 seconds by pressing any button.
- If two remote controllers are used to control a single unit, only the controller accessed first will have backlight functionality.

Names and Functions

Liquid Crystal Display

- Three types of display mode (Standard, Detailed and Simple) are available.
- Standard display is set by default.
- Detailed and Simple displays can be selected in the main menu. (See page 44.)

Standard display

10. Changeover controlled by the master indoor unit

9. Under centralized control

1. Operation mode

2. Fan Speed

6. Ventilation

11. Setback

8. (⊕) Scheduled or Override

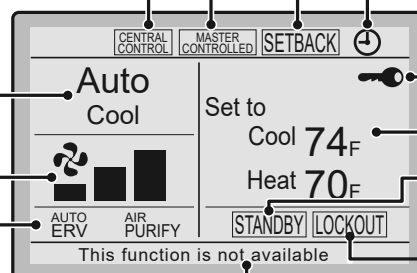
7. (🔑) Key Lock

3. Setpoint

4. Stand by for Defrost/ Hot start/Oil return

17. Lockout

5. Message



<Standard display example>

Detailed display

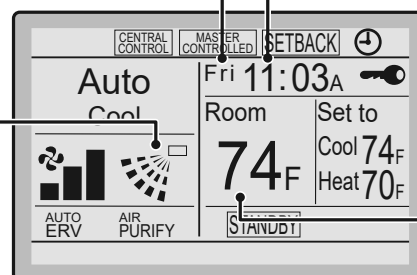
- The airflow direction, clock, and selectable item appear on Detailed display screen in addition to the items appearing on Standard display.

12. Airflow Direction

(Displayed only when the indoor unit is turned on.)

13. Current Day/Time (12/24 hour time display)

14. Selectable Display Item



<Detailed display example 1>

No Fan speed display (with no fan speed control function)

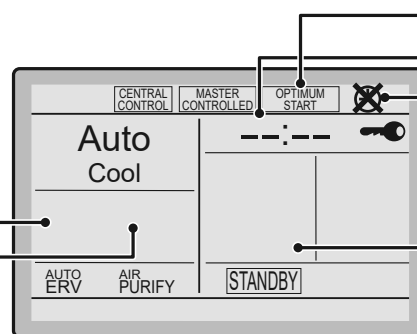
No Airflow Direction display (with no airflow direction settings)

16. Optimum Start/Stop

No Clock display (when the clock has not been set yet)

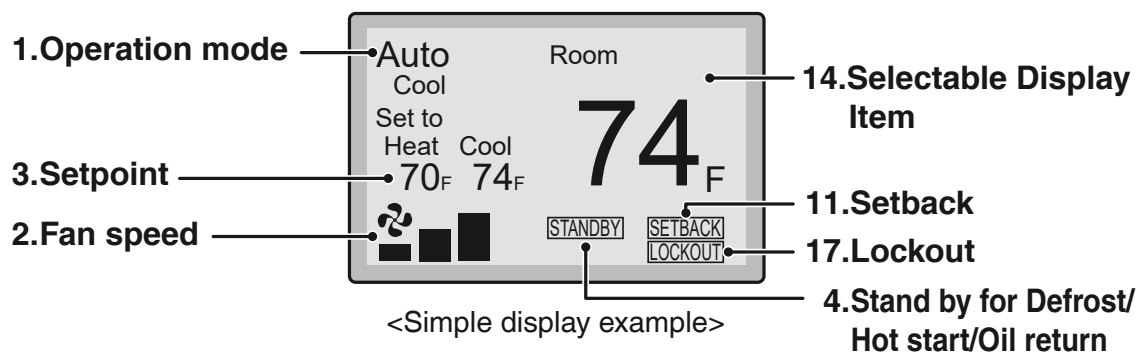
15. (🔒) Unable to schedule

No Selectable Display Item (with no selectable display item selected)



<Detailed display example 2>

Simple display



Note for all display modes

- Depending on the field settings, while the unit is stopped, OFF may be displayed instead of the operation mode and/or the setpoint may not be displayed.

Names and Functions

1. Operation mode

- Used to display the current operation mode: Cool, Heat, Vent, Fan, Dry or Auto.
- In Auto mode, the actual operation mode (Cool or Heat) will be also displayed.
- Operation mode cannot be changed when OFF is displayed.
Operation mode can be changed after starting operation.

2. Fan Speed

- Used to display the fan speed that is set for the unit.
- The fan speed will not be displayed if the connected model does not have fan speed control functionality.

3. Setpoint

- Used to display the setpoint for the unit.
- Use the Celsius/Fahrenheit item in the main menu to select the temperature unit (Celsius or Fahrenheit).

4. Stand by for Defrost/Hot start/Oil return “” (See page 12.)

If ventilation icon is displayed in this field:

- Indicates that an energy recovery ventilator (ERV) is connected.
For details, refer to the Operation Manual of the ERV.

5. Message

The following messages may be displayed.

“This function is not available”

- Displayed for a few seconds when an Operation button is pressed and the unit does not provide the corresponding function.
- In a remote control group, the message will not appear if at least one of the units provides the corresponding function.

“Error: Push Menu button”

“Warning: Push Menu button”

- Displayed if an error or warning is detected (see page 54).

“Time to clean filter”

“Time to clean element”

“Time to clean filter & element”

- Displayed as a reminder when it is time to clean the filter and/or element (see page 52).

6. Ventilation

- Displayed when an energy recovery ventilator is connected.
- **Ventilation Mode icon.** “ AUTO ERV BYPASS ”
These icons indicate the current ventilation mode (ERV only) (AUTO, ERV, BYPASS).
- **Air Purify ICON** “ AIR PURIFY ”
This icon indicates that the air purifying unit (Optional) is in operation.

7. Key Lock (See page 19.)

- Displayed when the key lock is set.

8. Scheduled or Override (See page 33, 38.)

- Displayed if the Schedule or Override is enabled.
- For Schedule, see page 33, for override, see page 38.
- When the Override is active, the icon will flash. “”

9. Under Centralized control “”

- Displayed if the system is under the management of a multi-zone controller (Optional) and the operation of the system through the remote controller is limited.

10. Changeover controlled by the master indoor unit “” (VRV only)

- Displayed when another indoor unit on the system has the authority to change the operation mode between cool and heat.

11. Setback “ ” (See page 14.)

- The setback icon flashes when the unit is turned on by the setback control.

12. Airflow Direction “ ”

- Displayed when the airflow direction and swing are set (see page 26).
- If the connected model does not include oscillating louvers this item will not be displayed.

13. Current Day/Time (12/24 hour time display)

- Displayed if the clock is set (see page 46).
- If the clock is not set, “ -- : -- ” will be displayed.
- 12 hour time format is displayed by default.
- Select 12/24 hour time display option in the main menu under “Clock & Calendar”.

14. Selectable Display Item

- Room temperature is selected by default.
- For other choices see page 45.

15. Unable to schedule

- Displayed when the clock needs to be set.
- The schedule function will not work unless the clock is set.

16. Optimum Start/Stop

“  ” “  ” (See page 40.)

- Displayed when the Optimum start or Optimum stop is enabled.
- “  ” or “  ” is flashing when the Optimum start or Optimum stop is active.

17. Lockout “ ”

(Rooftop unit only)

- “  ” is flashing when the lockout is active.

Basic Operation

Cool/Heat/Auto/Fan Operation (SkyAir, VRV and Rooftop)

How to follow the operation manual

Operation procedure

Operation button display

Operation screen display

Operation

Explains the sequence of operation for the remote controller. Operate the buttons according to the procedure.

Displays the location of buttons to be operated.

Describes screens that will be displayed on the remote controller in operation.

1

Main Menu 1/3

CO2 Monitoring

Humidity

Airflow Direction

Individual Airflow Direction

Ventilation

Schedule

Setting

Schedule

Clock has not been set.

Would you like to set it now?

Yes No

Setting

Date & Time

Year 2020

Month 1

Day 1

Thursday

12:00A

Setting

• Display the main menu screen.
(See page 23.)

• Press ▼▲ buttons to select **Schedule**
Press **Menu/OK** button to display the schedule screen.

• Before setting the schedule, the clock must be set.

• If the clock has not been set, a screen like the one on the left will appear.
Press ◀▶ buttons to select **Yes** and press **Menu/OK** button.

• The date & time screen will appear.

• Set the current year, month, day, and time. (See clock settings on page 46.)

◀▶

◀▶

◀▶

◀▶

Preparation

- For mechanical protection purposes, apply power to the outdoor units (rooftop units) at least six hours before starting the operation of the system.

Operation

1

Cool

Set to

74°F

Cool

Set to

74°F

• Press **Mode** button several times until the desired mode Cool, Heat, Fan, or Auto mode is selected.

* Unavailable operation modes are not displayed.

Note

• Both heat and cool mode may not be selected if the unit is master controlled. See page 16 if MASTER CONTROLLED icon flashes.

◀▶

◀▶

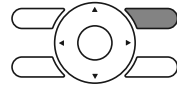
◀▶

◀▶

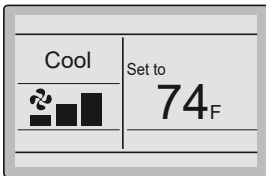
2



- Press **On/Off** button.
The Operation lamp will illuminate solid green and the system will start operating.



3

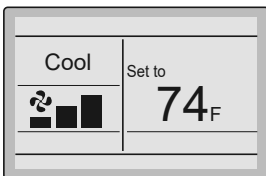


- The setpoint will increase by 1°F (or 1°C) when ▲ button is pressed and decrease by 1°F (or 1°C) when ▼ button is pressed.



* Setpoint is not available in fan or dry mode.

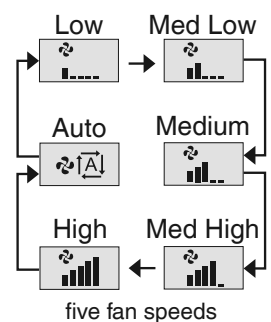
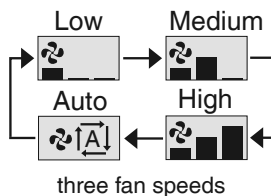
4



- To change the fan speed, press **Fan Speed** button and select the fan speed from;



- Low/High/Auto for two-speed
- Low/Medium/High/Auto for three-speed
- Low/Med Low/Medium/Med High/High/Auto for five-speed depending on the model.



- * Auto cannot be selected if the unit does not have Auto Fan speed function.
- * The system may change the fan speed automatically for equipment protection purposes.
- * The system may turn off the fan when the room temperature is satisfied.
- * It is normal for a delay to occur when changing the fan speed.
- * If the Auto is selected for the fan speed, the fan speed varies automatically based on the difference between setpoint and room temperature.

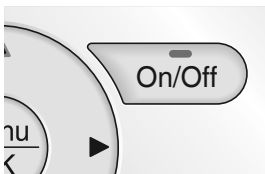
Basic Operation

5

- Adjust Airflow Direction from the main menu (see page 26).

* If the connected unit does not have oscillating louvers, this function will not be available.

6



- When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.



* When the system is stopped while in the heating mode, the fan will continue to operate for a few minutes to remove residual heat from the unit.

Note

- To prevent condensation water damage or system failure, do not shut off the power supply to the unit immediately after operation. Wait at least five minutes for the condensate pump to finish draining residual water from the unit.

Characteristics of Defrost, Hot start, Oil return Mode

The system automatically controls the following operating modes to prevent the reduction of heating capacity and space comfort.

Defrost operation

- The system will automatically go into defrost operation to prevent frost accumulation at the outdoor unit (rooftop unit) and subsequent loss of heating capacity.
- The fan will stop, and “**STANDBY**” will be displayed on the remote controller.
- The system will finish the Defrost operation and return to normal usually within six to eight minutes. It won't last for more than ten minutes.

Hot start

- When the system starts heating operation, the fan will operate with a delay in order to prevent a cold draft.
(In that case, “**STANDBY**” will be displayed on the remote controller.)

Oil return

(Rooftop unit only)

- At the cooling mode, the space may be cooled more than necessary in order to prevent a shortage of oil in the compressor.
(In that case, “**STANDBY**” will be displayed on the remote controller.)

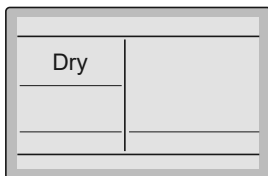
Dry Mode

Preparation

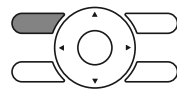
- For equipment protection purposes, apply power to the outdoor units (rooftop units) at least six hours before starting the operation of the system.
- The dry mode may not be selected if the remote controller is master controlled and the system is not already in the cooling mode of operation. (see page 18 for details)

Operation

1

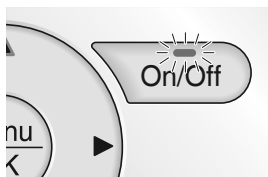


- Press **Mode** button several times until the Dry mode is selected.



* The dry mode may not be available depending on the model of unit.

2



- Press **On/Off** button.
The Operation lamp will illuminate solid green and the system will start operating.



* In Dry mode, the system maintains automatic temperature and fan speed control. Therefore, temperature setpoint or fan speed settings are not available while the unit is in the Dry mode.

3

- Adjust Airflow Direction from the main menu (see page 26).

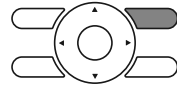
* If the connected unit does not have oscillating louvers, this function will not be available.

Basic Operation

4



- When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.

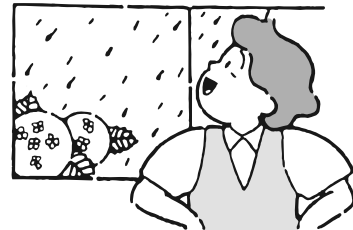


Note

- To prevent condensation water damage or system failure, do not shut off the power supply to the unit immediately after operation. Wait at least five minutes for the condensate pump to finish draining residual water from the unit.

Characteristic of Dry mode

The Dry mode dehumidifies the space at reduced cooling capacity to prevent the room temperature from dropping to an uncomfortable level.



Setback

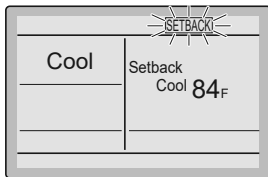
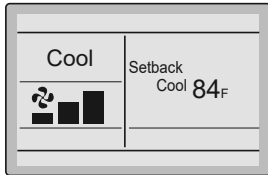
The Setback function can be used to maintain the space temperature in an assigned range for an unoccupied period.

Note

- When enabled, the Setback mode becomes active when the unit is turned off by either the user, a schedule event or an Override.
- This function is not available by default. It can be enabled by the system installer.

Operation

1



- The setback icon flashes when the unit is turned on by the setback control.

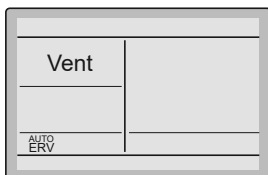
Ventilation Mode When the Indoor Unit (VRV/SkyAir) is Interlocked with Energy Recovery Ventilator

Preparation

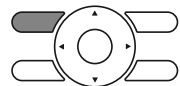
- For equipment protection purposes, apply power to the outdoor units at least six hours before starting the operation of the system.

Operation

1



- When operating the energy recovery ventilator (ERV) between seasons without the indoor unit, set the control to ventilation mode.



2

- Changes to the ventilation mode are made from the main menu.

* Ventilation Mode: Auto, ERV, and Bypass

3

- Changes to the ventilation rate are made from the main menu.

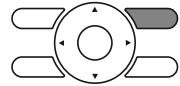
* Ventilation Rate: Low or High

Basic Operation

4



- Press **On/Off** button.
The Operation lamp will illuminate solid green and the system will start operating.



5



- When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.



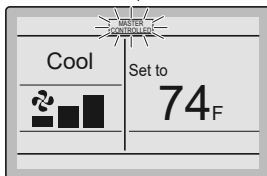
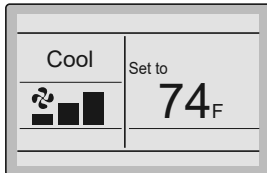
Setting the Cool / Heat Changeover Master

(VRV only)

Setting Changes

See page 18 for an explanation of the cool/heat changeover master indoor unit.

1



- Press **Mode** button on the remote controller of the changeover master indoor unit for at least four seconds while the backlight is illuminated.



- The “**MASTER CONTROLLED**” icon on each remote controller for the indoor units connected to the same outdoor unit or Branch Selector unit will start flashing.

* Vent mode setting changes are possible regardless of the cool/heat changeover master indoor unit.

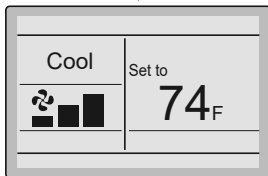
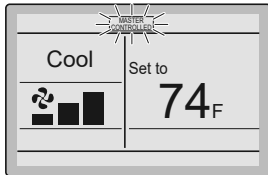
* If the outdoor unit is configured as cool/heat changeover master, all remote controllers serving the associated indoor units will display its “**MASTER CONTROLLED**” icon.

- Set the cool/heat changeover master indoor unit as outlined below.

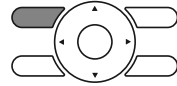
Selection Settings

The icon "MASTER CONTROLLED" will flash on all remote controllers when the power is turned ON for the first time.

2



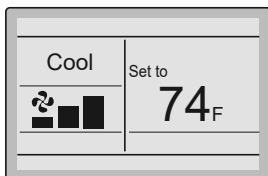
- Press **Mode** button on the remote controller of the indoor unit which is to serve as the cool/heat changeover master.



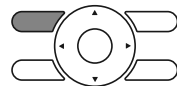
The remote controller for the changeover master indoor unit is established and the **MASTER CONTROLLED** icon is no longer displayed.

Other remote controllers in the system (indoor units served by the same outdoor unit or indoor units served by the same branch selector unit) will now display the **MASTER CONTROLLED** icon.

3



- Press **Mode** button on the remote controller of the indoor unit designated as the cool/heat changeover master (the remote controller not displaying the **MASTER CONTROLLED** icon) repeatedly until the desired mode is selected. The display will change to **Fan, Dry, Auto, Cool, Heat** each time the button is pressed.
- Simultaneously, the other indoor units on the system will follow suit and change modes to reflect the new mode selected at the changeover master remote controller.



Basic Operation

Cool / Heat Mode Selection Availability (VRV only)

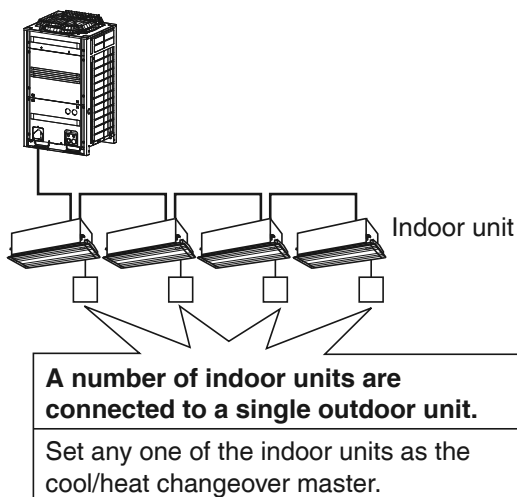
- “Cool”, “Heat”, and “Auto” are all only available for selection on the cool/heat changeover master indoor unit. The following table indicates the available operating modes of the other indoor units on the system based upon the selected mode of the master indoor unit.

When the master indoor unit is set to	The other indoor units in the system can be set to			
	Cool	Dry	Heat	Fan
Cool mode	✓	✓		✓
Dry mode	✓	✓		✓
Heat mode			✓	✓
Fan mode				✓
Auto mode (Cooling operation)	✓	✓		✓
Auto mode (Heating operation)			✓	✓

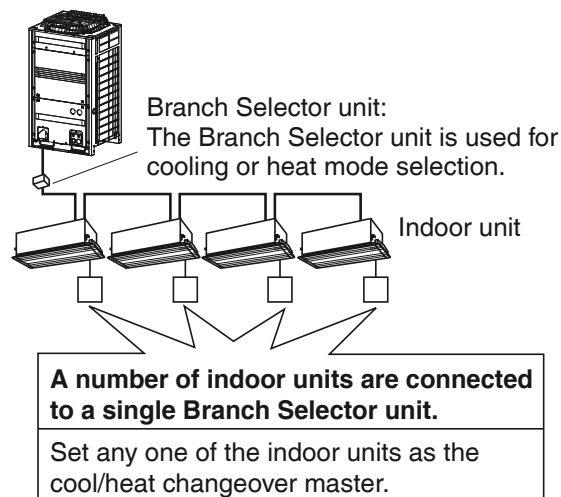
Precautions for Selecting the Cool / Heat Changeover Master Indoor Unit (VRV only)

- The cool/heat changeover master must be set for a single indoor unit in the following applications

(2-Pipe Heat Pump System)



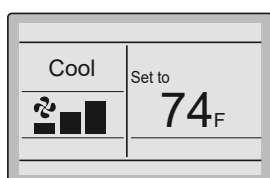
(3-Pipe Heat Recovery System)



Key Lock

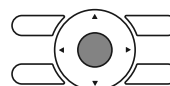
Operation Confirm and cancel Key Lock settings in the basic display screen.

1

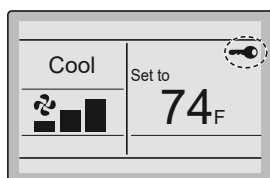


Basic screen

- Press **Menu/OK** button for at least four seconds while the backlight is illuminated.



2



- “” is displayed.
All buttons are disabled when the keys are locked.
- To cancel the key lock mode, continue pressing **Menu/OK** button for at least four seconds while the backlight is illuminated.

Quick Reference

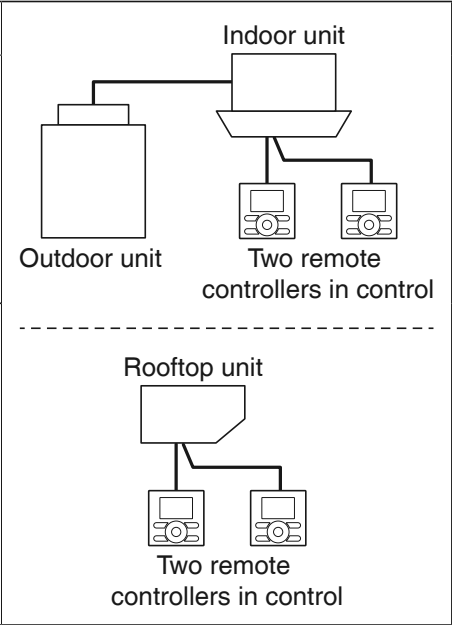
■ The main menu has the following items.

Menu item		Description	Reference page
CO2 Monitoring		Display CO2 history plot and current CO2. (If the unit has a CO2 sensor.)	24
Humidity		Display the current room humidity and set the humidity setpoint.	25
Airflow Direction		Used to configure airflow direction settings. - The airflow direction louver is automatically operated up and down (left and right). - The fixed airflow directions are configurable for five positions. * Only for indoor unit that supports Airflow Direction setting.	26
Individual Airflow Direction (Depends on the model of unit)	Louver Setting	Set the airflow direction individually for each of the 4 louvers. • Maximum 16 units (unit 0 till 15).	28
	Louver Setting List	Setting table for louver.	29
	Reset All Louvers Position	Reset all louvers to factory default setting.	30
Ventilation (Ventilation operation settings for energy recovery ventilator)	Ventilation Rate	Used to set "Low" or "High"	31
	Ventilation Mode	Used to set Auto, ERV, or Bypass.	32
Schedule	Daily Patterns	• Day settings are selected from four patterns, i.e., "7Days", "Weekday/Sat/Sun", "Weekday/Weekend", and "Everyday".	34
	Settings	• Set the startup time and operation stop time. ON: Startup time, cooling and heating temperature setpoints can be configured. OFF: Operation stop time, cooling and heating setback temperature setpoints can be configured. (--: Indicates that the setback function is disabled for this time period.) __: Indicates that the temperature setpoint and setback temperature setpoint for this time period is not specified. The last active setpoint will be utilized. • Up to five actions can be set for each day.	35

Menu item		Description	Reference page
Override		Used to set the run time for the indoor unit and rooftop unit using this controller. Possible to set in 10 minute increments from 10 minutes to 10 hours.	38
Optimum Start/Stop		Optimum start and stop can be enabled or disabled by each. - Optimum start is used to ensure comfortable space temp prior to occupancy. - Optimum stop is used to ensure energy savings prior to unoccupancy without compromising on comfort.	40
Celsius / Fahrenheit		Used to select whether temperature values will be displayed in Celsius or Fahrenheit.	—
Filter Auto Clean		Set the time when the filter needs to be automatically cleaned. For the detailed operation refer to the Operation Manual of the self cleaning decoration panel.	—
Maintenance Information		Used to display the maintenance information.	41
Configuration	Draft Prevention (Only available with Occ. sensor installed model of the unit)	The draft prevention function can be enabled or disabled . When enabled, the Occ. sensor will adjust the louver's position to prevent air blowing directly on occupant.	42
	Contrast Adjustment	Used to make LCD contrast adjustment.	43
	Display	Used to set the display mode. - Display mode Standard, Detailed, or Simple display - Detailed and Simple displays provide the selectable display item among Room Temp, System, None or Outside Air Temp.	44
Current Settings		Used to display a list of current settings for available items.	46
Clock & Calendar	Date & Time	Used to configure date and time settings and corrections. - The default time display is 12H. - The clock will maintain accuracy to within ± 30 seconds per month. - If there is a power failure for a period not exceeding 48 hours, the clock will continue working with the built-in backup power supply.	46
	12H/24H Clock	The time can be displayed in either a 12 hour or a 24 hour time format.	49
Daylight Saving Time		Used to adjust the clock in observance of daylight saving time.	49
Language		The display language can be selected between English , Francais , or Espanol .	52

Quick Reference

Note: Available setting items vary with the model of unit.

Sub Remote Controller Menu Items	
If two remote controllers are connected to a single indoor unit or rooftop unit, the following menu items are not set in the sub remote controller. In this case, the following items should be configured in the main remote controller. • Individual Airflow Direction • Schedule • Override • Humidity • Setback • Draft Prevention • CO2 Monitoring • Optimum Start/Stop	

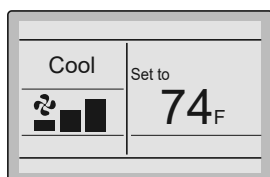
Menu Options

Navigating the Main Menu Screen

■ Display Method for Main Menu

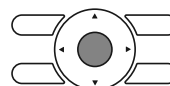
Operation

1

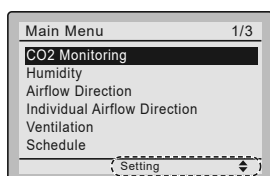


Basic screen

- Press **Menu/OK** button.



2



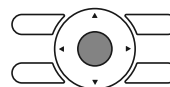
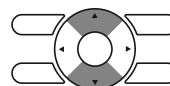
Main menu screen

- The main menu screen is displayed.

← Instructions for navigating the main menu will appear.

3

- Selecting items from the main menu.
 1. Press ▼▲ buttons to select the desired item to be set.
 2. Press **Menu/OK** button to display the details for the selected item.



4

- To go back to the basic screen from the main menu, press **Cancel** button.



Note

- If a button is not pressed for 5 minutes during configuration, the controller will automatically revert to the basic screen.

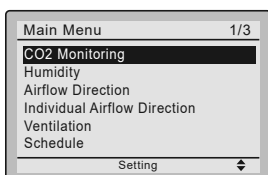
Menu Options

CO2 Monitoring

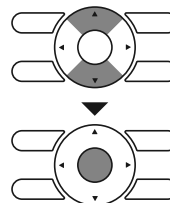
If the unit has CO2 sensor, CO2 history plot and current CO2 are displayed.

Operation

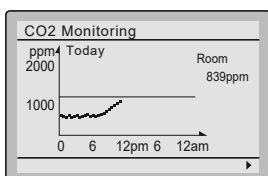
1



- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select **CO2 Monitoring** and press **Menu/OK** button.

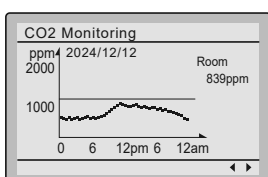


2

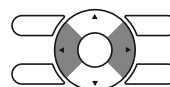


- Today's CO2 history plot and current CO2 are displayed.

3



- The date of the history plot can be changed using the ◀▶ buttons up to a week in the past.



Note

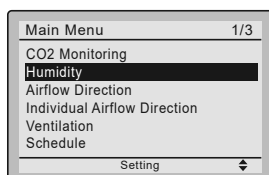
- If the unit is powered off, history data only remains the latest 2 days.
- If the clock has not been set, the history plot is not displayed.

Humidity

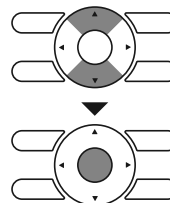
Display the current room humidity and set the humidity.

Operation

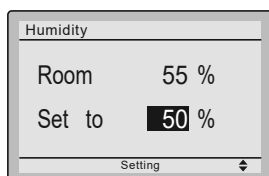
1



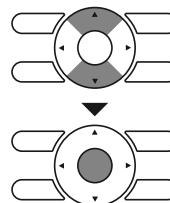
- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select **Humidity** and press **Menu/OK** button.



2



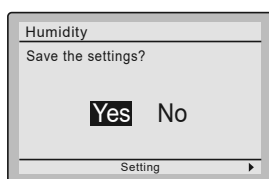
- Room Humidity is displayed.
- To set the humidity, use ▼▲ buttons for adjustment and press **Menu/OK** button. Then, the confirmation screen is displayed.



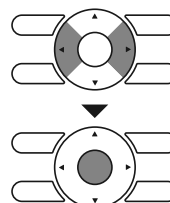
Note

- The menu appears when the connected unit has a humidity sensor.
- The humidity setting appears when the connected unit supports the humidity setting.

3



- Press ◀▶ button to select **Yes** on the confirmation screen. Pressing **Menu/OK** button confirms the humidity and takes you back to the basic screen.



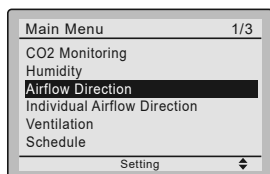
Menu Options

Airflow Direction

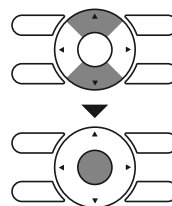
■ Configuring Airflow direction

Operation

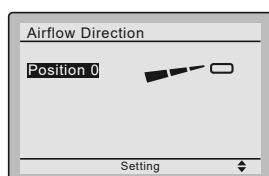
1



- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select **Airflow Direction** and press **Menu/OK** button.

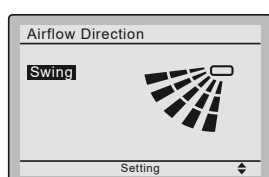
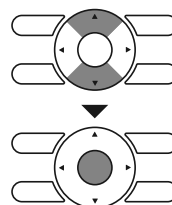


2

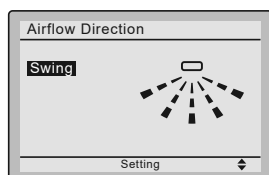


- (1) Adjusting method when there is single airflow direction.

- Select the desired airflow direction from **Position 0** , **Position 1** , **Position 2** , **Position 3** , **Position 4** , **Swing** or **Auto** using ▼▲ buttons.
- Press **Menu/OK** button to confirm the settings and to return to the basic screen.



Airflow direction setting (up/down)



Airflow direction setting (left/right)

Note

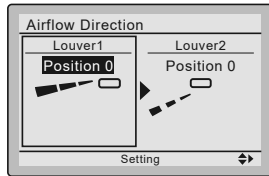
- The airflow directions appear on the screen as follows:



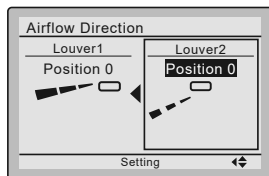
Notice

These operation and screen are example of single airflow direction type indoor unit.
It is different from Single flow cassette model.

3



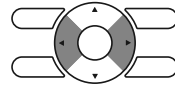
When front/back
direction is selected



When left/right
direction is selected

(2) Adjusting method for selecting dual
airflow directions.

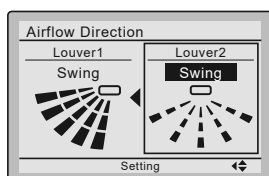
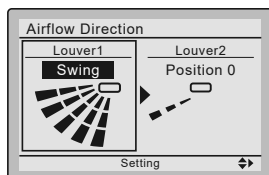
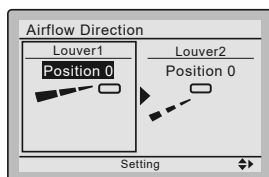
- Press ◀▶ buttons, to select front/back or left/right direction setting.



Notice

These operation and screen are example of dual airflow directions type directions indoor unit (Single flow cassette model).

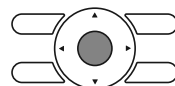
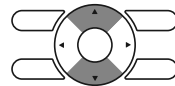
4



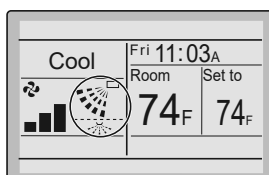
- Select the desired airflow direction from **Position 0** , **Position 1** , **Position 2** , **Position 3** , **Position 4** , **Swing** or **Auto** using ▼▲ buttons.

- Selecting **Swing** will cause the airflow direction louver to swing position 0 to 4.
- Setting **Auto** is not available when left/right direction is selected.

- Press **Menu/OK** button to confirm the settings and return to the basic screen.



5



Basic screen
(Detailed display)

- If dual airflow directions are set, then the dual airflow direction icons are displayed in the basic screen.

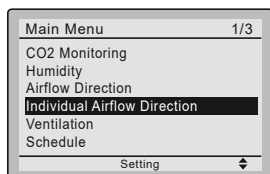
Menu Options

Individual Airflow Direction

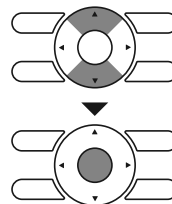
■ Louver Setting

Operation

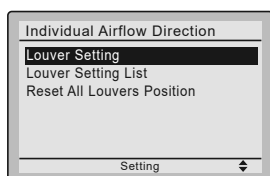
1



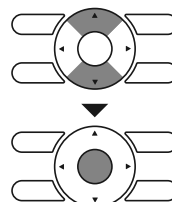
- Display the main menu screen.
(See page 23.)
- Select **Individual Airflow Direction** and press **Menu/OK** button.



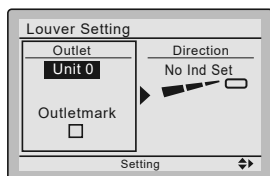
2



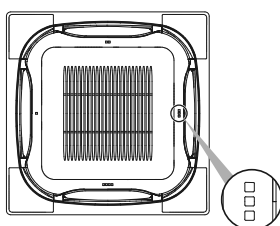
- Select **Louver Setting** and press **Menu/OK** button.



3



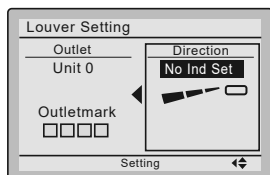
- Use ▼▲ buttons to select the unit and outlet mark.
- Maximum 16 units for each group (unit 0 till 15) can be selected.



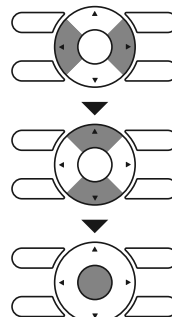
Note

In case of four outlets (cassette type), you can control each one of the four louvers individually (the following marks are beside each air outlet: □, □□, □□□, □□□□).

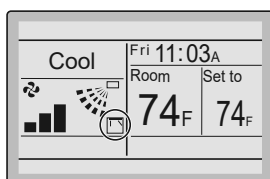
4



- Press ◀▶ button to select the airflow direction.
- Use ▼▲ buttons to change the airflow direction to the following:
No Ind Set , **Position 0** , **Position 1** ,
Position 2 , **Position 3** , **Position 4** ,
Swing or **Blocked** .
No Ind Set : No Individual Louver Setting.
Blocked : Individual airflow is blocked.
- Press **Menu/OK** button to confirm the settings and to return to the basic screen.



5



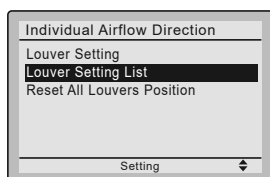
Basic screen
(Detailed display)

- If individual airflow direction is set, then the individual airflow direction icon is displayed in the basic screen.

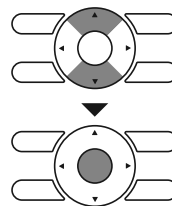
■ Louver Setting List

Operation

1



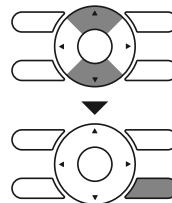
- Display the individual airflow direction screen. (See page 28.)
- Press ▼▲ buttons to select **Louver Setting List** and press **Menu/OK** button.



2

Louver Setting List		
Unit 0		
Outletmark	Direction	Indiv.
□	Position 0	OFF
□□	Position 0	OFF
□□□	Position 0	OFF
□□□□	Position 0	OFF

- A table shows the current settings. Press ▼▲ buttons to go to the next unit.
- Press **Cancel** button to return to the previous menu.

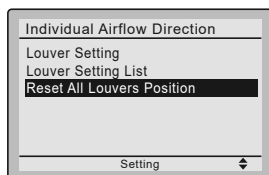


Menu Options

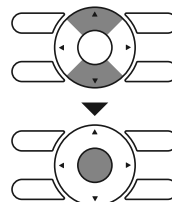
■ Reset All Louvers Position

Operation

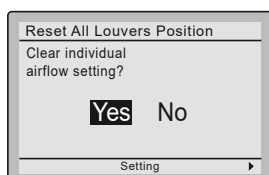
1



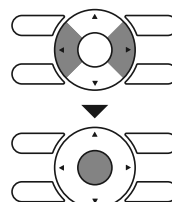
- Display the individual airflow direction screen.
(See page 28.)
- Press ▼▲ buttons to select **Reset All Louvers Position** and press **Menu/OK** button.



2



- Press ◀▶ buttons to select **Yes**.
- Press **Menu/OK** button to confirm the reset and to return to the basic screen.

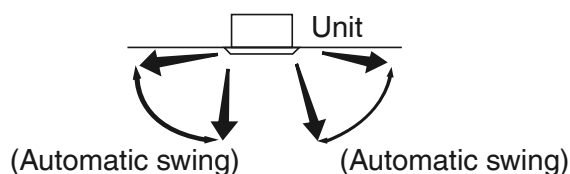


Operational Details and Functions

There are two types of airflow direction settings.

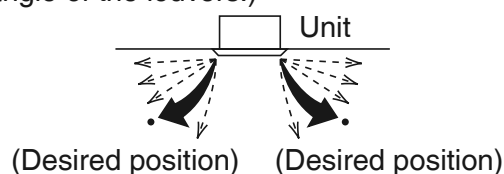
Airflow direction swing

The louvers automatically oscillate up and down.



Airflow direction

You can select from one of five fixed directions. (This has no relation to the angle of the louvers.)



Movement of airflow direction louver

Under the operating conditions shown next, airflow direction is controlled automatically. Actual operation may be different than what is displayed on the remote controller.

Operating condition

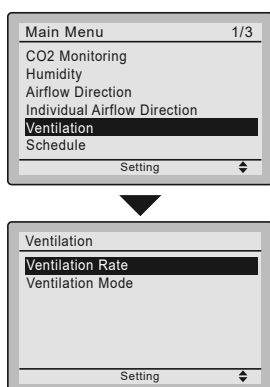
- Room temperature is higher than the remote controller's setpoint (in heating operation).
- When defrosting (in heating operation).
(The airflow discharges horizontally to avoid creating a draft for the room occupants.)
- Under continuous operation with the airflow discharging horizontally.

Ventilation

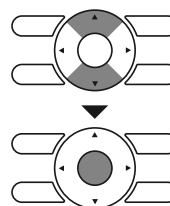
■ Ventilation screen display properties

Operation

1



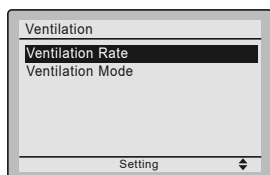
- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select **Ventilation** on the main menu screen.
(For models with no ventilation function, **Ventilation** will not be displayed on the main menu screen.)
Press **Menu/OK** button to display the ventilation screen.



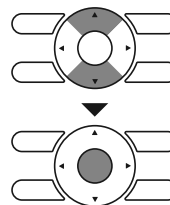
■ Changing the ventilation rate

Operation

1



- Navigate to the ventilation screen
(see above).
- Press ▼▲ buttons to select **Ventilation Rate** on the ventilation screen.
Press **Menu/OK** button to display the ventilation rate screen.



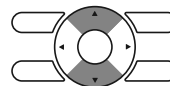
Menu Options

2



- Press ▼▲ buttons to toggle between the **Low** and **High** settings.

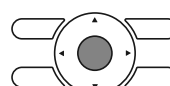
* Only modes that can be set are displayed.



3

- Selecting and confirming the desired ventilation rate will take you back to the basic screen.

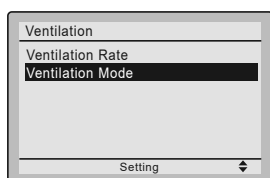
(Pressing **Cancel** button takes you back to the previous screen without changing the ventilation rate.)



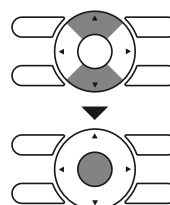
■ Changing the ventilation mode

Operation

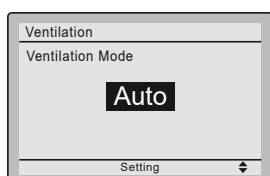
1



- Display the ventilation screen. (See page 31.)
- Press ▼▲ buttons to select **Ventilation Mode** on the ventilation screen. Press **Menu/OK** button to display the ventilation mode screen.



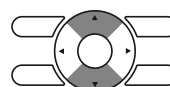
2



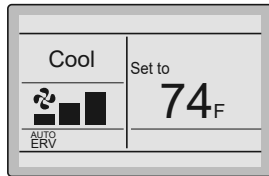
- Pressing ▼▲ buttons cycles through the settings in the order shown below.



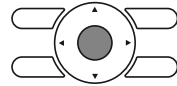
* Only modes that can be set are displayed.



3



- Selecting and confirming the desired ventilation mode will take you back to the basic screen.
(Pressing **Cancel** button takes you back to the previous screen without changing the ventilation mode.)



Ventilation Mode

Auto mode

Using information from the indoor unit (cool, heat, fan, and setpoint) and the energy recovery ventilator unit (indoor and outdoor temperatures), the ventilation mode is automatically changed between ERV and Bypass.

ERV mode

Outside air is passed through the ERV core and is supplied to the conditioned space.

Bypass mode

Outside air is supplied to the conditioned space without passing through the ERV core.

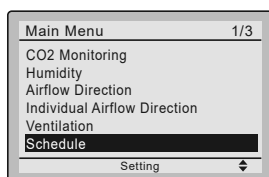
Schedule

■ Setting the schedule

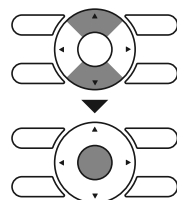
The schedule will disappear when a multizone controller is connected, but can be re-enabled by the system installer.

Operation The schedule will disappear when a BACnet is connected, but can be re-enabled from BACnet. (Rooftop unit only)

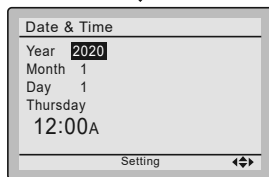
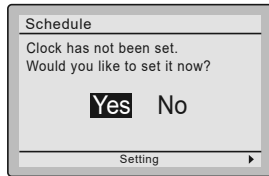
1



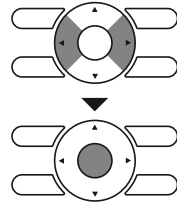
- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select **Schedule**.
Press **Menu/OK** button to display the schedule screen.



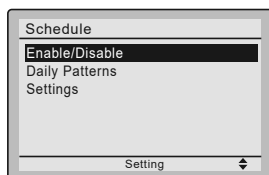
Menu Options



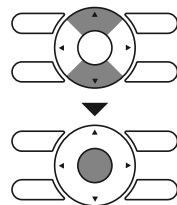
- Before setting the schedule, the clock must be set.
- If the clock has not been set, a screen like the one on the left will appear. Press ◀▶ buttons to select **Yes** and press **Menu/OK** button.
- The date & time screen will appear.
- Set the current year, month, day, and time. (See clock settings on page 46.)



2



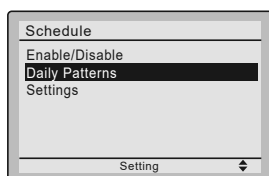
- Press ▼▲ buttons to select the desired function on the schedule screen and press **Menu/OK** button.



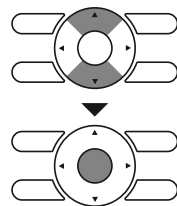
■ Daily Patterns

Operation

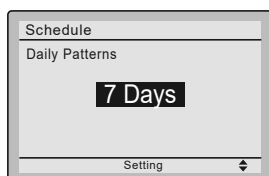
1



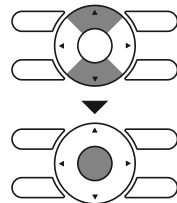
- The schedule screen will appear.
- Press ▼▲ buttons to select **Daily Patterns** on the schedule screen. The daily patterns screen will appear when **Menu/OK** button is pressed.



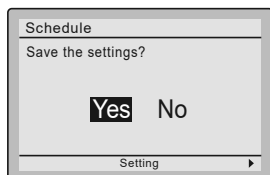
2



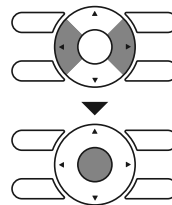
- Press ▼▲ buttons to select **7 Days**, **Weekday/Sat/Sun**, **Weekday/Weekend** or **Everyday** on the daily patterns screen. The confirmation screen will appear when **Menu/OK** button is pressed.



3



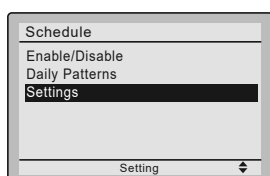
- Press ◀▶ buttons to select **Yes** on the confirmation screen.
- Pressing **Menu/OK** button enters the daily patterns in the schedule and takes you back to the main menu screen.



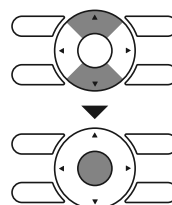
■ Settings

Operation

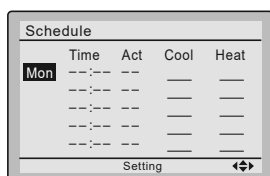
1



- The schedule screen will appear.
 - Press ▼▲ buttons to select **Settings** on the schedule screen.
- The settings screen will appear when **Menu/OK** button is pressed.



2

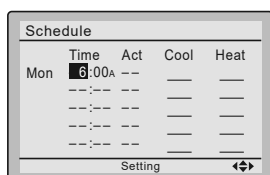


- Press ▼▲ buttons to select the day to be set.

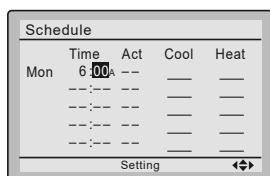
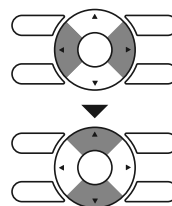
* It cannot be selected in the case of **EVDY**.



3



- Input the time for the selected day.
 - Press ◀▶ buttons to move the highlighted item and press ▼▲ buttons to input the desired operation start time.
- Each press of ▼▲ buttons moves the numbers by 1 hour or 1 minute.



Menu Options

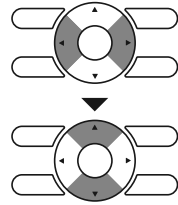
4

Schedule				
	Time	Act	Cool	Heat
Mon	6:00A			
	--:--			
	--:--			
	--:--			
	--:--			
Setting				



Schedule				
	Time	Act	Cool	Heat
Mon	6:00A	ON	90F	60F
	--:--			
	--:--			
	--:--			
	--:--			
Setting				

- Press ◀▶ buttons to move the highlighted item and press ▼▲ buttons to configure ON/OFF/-- settings. --, ON, or OFF changes in sequence when ▼▲ buttons are pressed.



ON: The temperature setpoints can be configured.
 OFF: The setback temperature setpoints can be configured.
 --: The temperature setpoints and setback temperature setpoints become disabled.

Schedule				
	Time	Act	Cool	Heat
Mon	6:00A	ON	75F	70F
	8:00A	OFF		
	--:--			
	--:--			
	--:--			
Setting				

- The cooling and heating temperature setpoints for both ON and OFF (Setback) are configured.

—: Indicates that the temperature setpoint and setback temperature setpoint for this time period is not specified. The last active setpoint will be utilized.
 --: Indicates that the setback function is disabled for this time period.

5

Schedule				
	Time	Act	Cool	Heat
Mon	6:00A	ON	75F	70F
	8:00A	OFF	85F	50F
	5:30P	ON	75F	70F
	10:00P	--		
	--:--			
	--:--			
Setting				



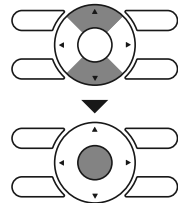
Schedule				
	Time	Act	Cool	Heat
Mon	6:00A	ON	75F	70F
	8:00A	OFF	85F	50F
	5:30P	ON	75F	70F
	10:00P	OFF	82F	62F
	--:--			
	--:--			
Setting				



Schedule				
	Time	Act	Cool	Heat
Tue	6:00A	ON	75F	70F
	8:00A	OFF	85F	50F
	5:30P	ON	75F	70F
	10:00P	OFF	82F	62F
	--:--			
	--:--			
Setting				

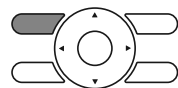
A maximum of five actions per day can be set.

- Press **Menu/OK** button when settings for each day are completed. The confirmation screen will appear.

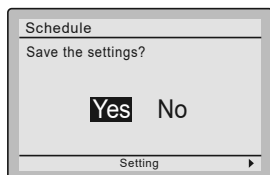


To copy the settings for the previous day, press **Mode** button so that the existing settings will be copied.

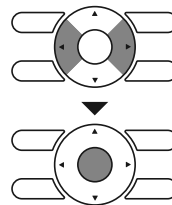
Example: The contents for Monday are copied by pressing **Mode** button after selecting Tuesday.



6



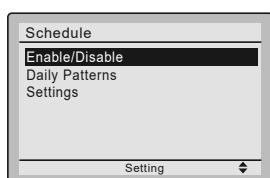
- Press ◀▶ buttons to select **Yes** on the confirmation screen. Pressing **Menu/OK** button confirms the settings for each day and takes you back to the basic screen.



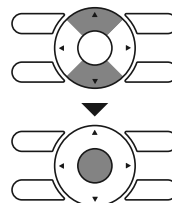
Enabling or disabling the schedule

Operation

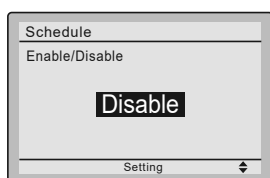
1



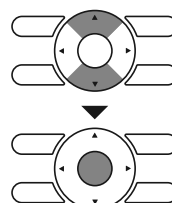
- Display the schedule screen. (See page 33.)
- Press ▼▲ buttons to select **Enable / Disable** on the schedule screen. Press **Menu/OK** button to display the enable/disable screen.



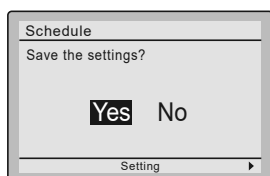
2



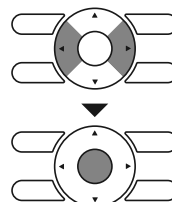
- Press ▼▲ buttons to select **Enable** or **Disable** on the enable/disable screen. Press **Menu/OK** button after selecting the item. The confirmation screen is displayed.



3



- Press ◀▶ buttons to select **Yes** on the confirmation screen. Pressing **Menu/OK** button confirms the enable/disable setting for the schedule and takes you back to the basic screen.



Menu Options

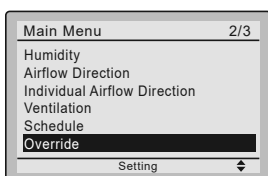
Override

When the unit is turned on by the On/Off button during except for the occupied period, it will automatically turn off after a time set by the timer to prevent forgetting to turn it off.

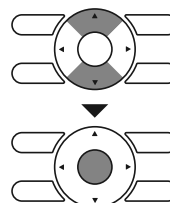
■ Configuring and Confirming the Override settings

Operation

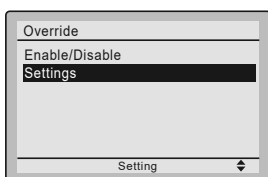
1



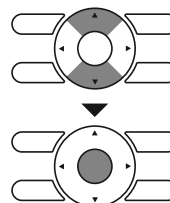
- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select the **Override** on the main menu screen. Press **Menu/OK** button to display the override screen.



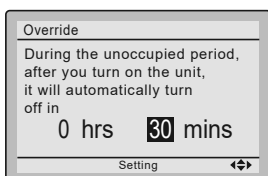
2



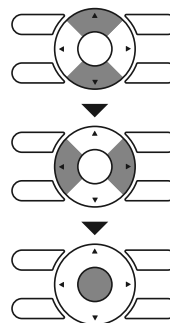
- Press ▼▲ buttons to select **Settings** on the override screen. Press **Menu/OK** button to display the configuration screen.



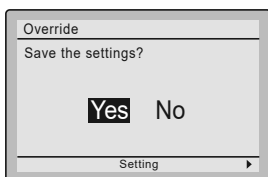
3



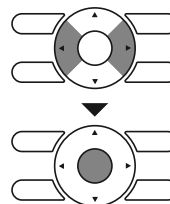
- Use ▼▲ buttons to set the time from operation start until the unit automatically stops.
- Use ◀▶ buttons to select the items of hours and minutes.
- Selections can be made in increments of 10 minutes from 10 minutes to 10 hours.
- Select the desired time and press **Menu/OK** button. The confirmation screen will appear.



4



- Press ◀▶ button to select **Yes** on the confirmation screen. Pressing **Menu/OK** button confirms the override and takes you back to the basic screen.

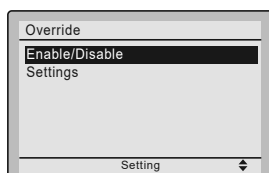




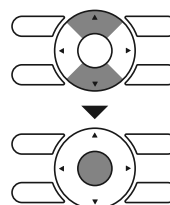
Enabling or disabling the override

Operation

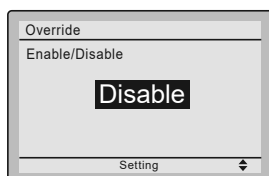
1



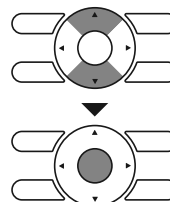
- Navigate to the override screen.
(See page 38.)
- Press ▼▲ buttons to select **Enable/Disable** on the override screen. Press **Menu/OK** button to display the enable/disable screen.



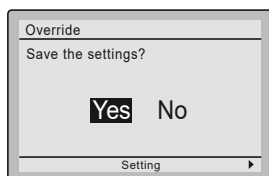
2



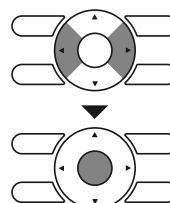
- Press ▼▲ buttons to select **Enable** or **Disable** on the enable/disable screen. Press **Menu/OK** button after selecting the item. Then the confirmation screen is displayed.



3



- Press ◀▶ button to select **Yes** on the confirmation screen. Pressing **Menu/OK** button confirms the enable/disable for the override and takes you back to the basic screen.



Menu Options

Optimum Start/Stop

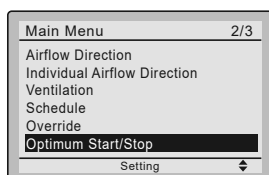
Optimum Start: Unit operation automatically starts before the occupied period to bring the space to desired occupied temperature levels at the beginning of scheduled occupancy.

Optimum Stop: Unit operation automatically slows down before the unoccupied period to bring the space to unoccupied temperature levels at the end of scheduled occupancy.

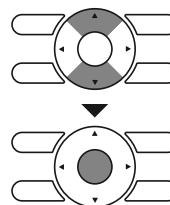
■ Configuring and Confirming the Optimum Start/Stop settings

Operation

1



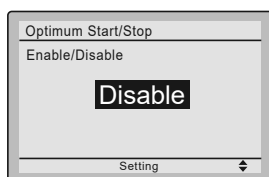
- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select the **Optimum Start/Stop** on the main menu screen.
Press **Menu/OK** button to display the optimum start/stop screen.



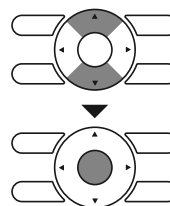
Note

The Optimum Start/Stop menu appears when the connected unit supports the Optimum Start/Stop.

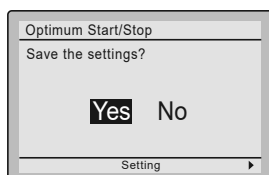
2



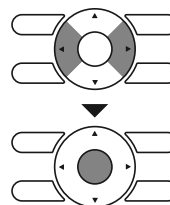
- Press ▼▲ buttons to select from **Disable**, **Start and Stop**, **Start only**, or **Stop only**.
Press **Menu/OK** button to display the confirmation screen.



3



- Press ◀▶ button to select **Yes** on the confirmation screen.
Pressing **Menu/OK** button confirms the settings and takes you back to the basic screen.

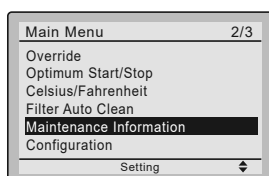


Maintenance Information

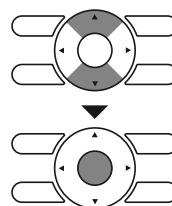
■ Displaying the service contact and model information

Operation

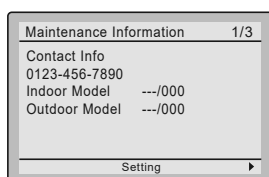
1



- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select **Maintenance Information** on the main menu screen and press **Menu/OK** button.



2



- The phone number for the contact is displayed at the top of the screen.
(If it has not yet been entered, it will not be displayed.)
- The model information of the indoor and outdoor units (or rooftop units) for your product will be displayed at the middle of the screen.
(For some models the product code may be displayed.)
- The serial number and detailed model name of the units are displayed on 2nd page and 3rd page.
 - * If the rooftop unit is connected, only one model name is displayed as a model name, and it does not display on 3rd page.
 - * The model name will not be displayed if the unit PCB has been replaced.

* The error code history may also be displayed. If the Operation lamp is not flashing, the unit is working properly. The error code history is no longer displayed if you press **On/Off** button for more than 4 seconds.



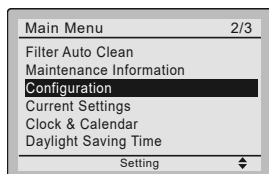
Menu Options

Configuration

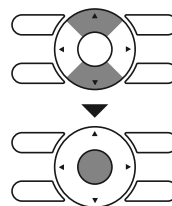
■ Draft Prevention

Operation

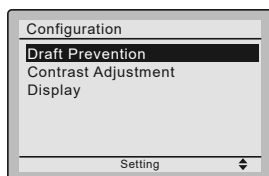
1



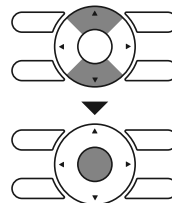
- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select **Configuration** and press **Menu/OK** button.



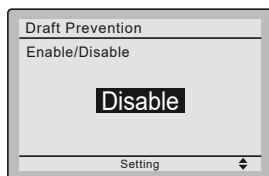
2



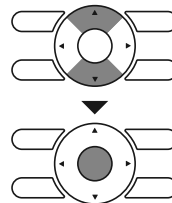
- Press ▼▲ buttons to select **Draft Prevention** and press **Menu/OK** button.



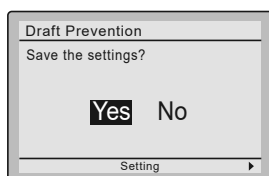
3



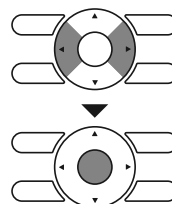
- Press ▼▲ buttons to select **Enable** or **Disable**.
- The confirmation screen will appear when **Menu/OK** button is pressed.



4



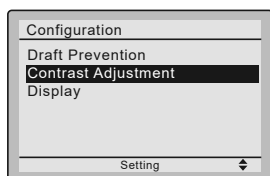
- Press ◀▶ buttons to select **Yes**.
- Press **Menu/OK** button to confirm the settings and to return to the basic screen.



■ Contrast Adjustment

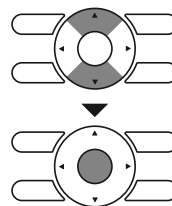
Operation

1

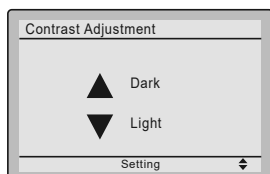


- Navigate to the configuration screen.
(See page 42.)

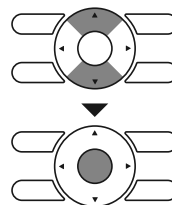
- Press ▼▲ buttons to select **Contrast Adjustment** on the configuration screen.
Press **Menu/OK** button to display the contrast adjustment screen.



2



- On the contrast adjustment screen press ▼▲ buttons until you reach the desired contrast.
After setting, press **Menu/OK** button and return to the basic screen.

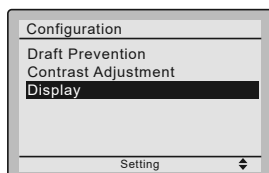


Menu Options

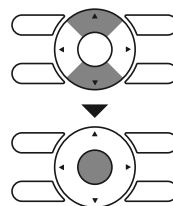
■ Display Display Mode

Operation

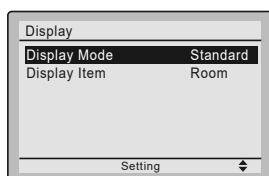
1



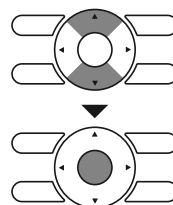
- Navigate to the configuration screen.
(See page 42.)
- Press ▼▲ buttons to select **Display** on the configuration screen. Press **Menu/OK** button to display the display screen.



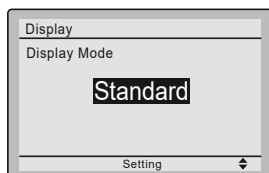
2



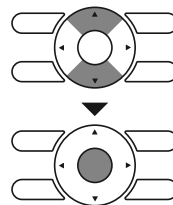
- Press ▼▲ buttons to select **Display Mode** on the display screen. Press **Menu/OK** button to display the display mode screen.



3



- Press ▼▲ buttons to select **Standard**, **Detailed** or **Simple** on the display screen.
- Press **Menu/OK** button to confirm the settings and return to the basic screen.

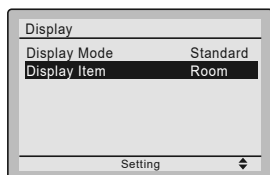


* Refer to **Display Item** to change the selectable display item for Detailed and Simple display modes. (See page 45.)

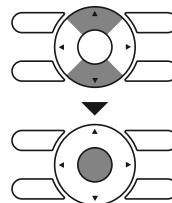
Display Item

Operation

1



- Navigate to the display screen.
(See page 44.)
- Press ▼▲ buttons to select **Display Item** on the display screen. Press **Menu/OK** button to display the display item screen.



2



- Pressing ▼▲ buttons displays the following.



* Some models may not display these items even if they are selected.

- Be sure to read the following notes regarding display of room temperature and outside air temperature.

Room Temp

..... The temperature at the remote controller.
The temperature that is detected may be affected by the location of the remote controller.

Outside Air Temp

..... The temperature that is detected may be affected by factors such as the location of the unit (for example, if it is in direct sunlight) and unit operation during defrosting.

- After setting, press **Menu/OK** button to confirm settings and return to the basic screen.



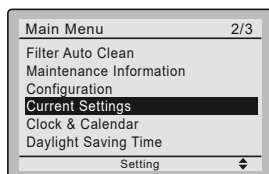
Menu Options

Current Settings

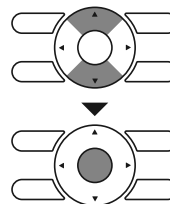
■ Confirming the current settings

Operation

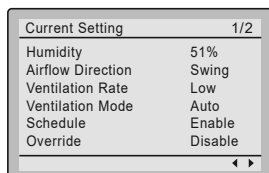
1



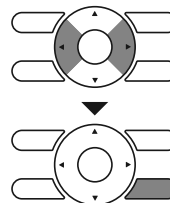
- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select **Current Settings** on the main menu screen and press **Menu/OK** button.



2



- A list showing the current setting status will appear.
Press ◀▶ buttons to go to the next item.
- Pressing **Cancel** button takes you back to the main menu screen.



Display items

Humidity	Display Mode
Airflow Direction	Display Item
Ventilation Rate	Filter Auto Clean
Ventilation Mode	Optimum Start
Schedule	Optimum Stop
Override	

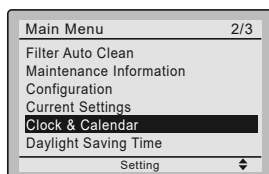
* Display items may differ depending on the model.
Only the items that can be set are displayed.

Clock & Calendar

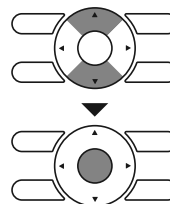
■ Date & Time

Operation

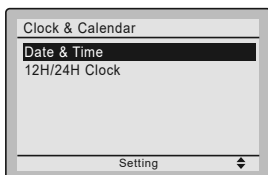
1



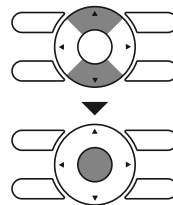
- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select **Clock & Calendar** on the main menu screen.
Press **Menu/OK** button to display the clock & calendar screen.



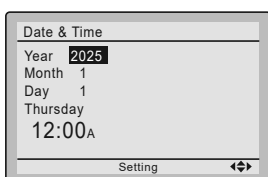
2



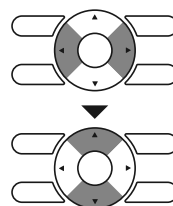
- Press ▼▲ buttons to select **Date & Time** on the clock & calendar screen. Press **Menu/OK** button to display the date & time screen.



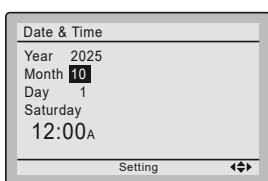
3



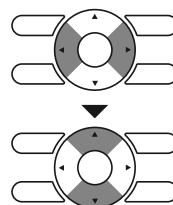
- Select **Year** with ◀▶ buttons. Change the year with ▼▲ buttons. Holding down the button causes the number to change continuously.



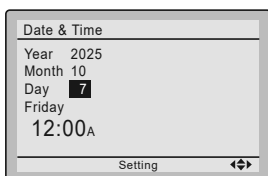
4



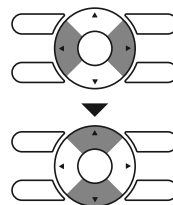
- Select **Month** with ◀▶ buttons. Change the month with ▼▲ buttons. Holding down the button causes the number to change continuously.



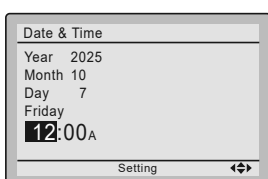
5



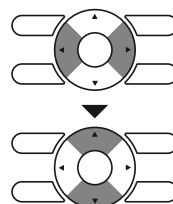
- Select **Day** with ◀▶ buttons. Change the day with ▼▲ buttons. Holding down the button causes the number to change continuously. Days of the week change automatically.



6

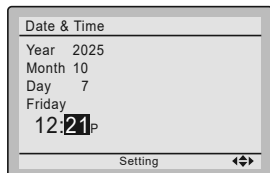


- Select **Hour** with ◀▶ buttons. Change the hour with ▼▲ buttons. Holding down the button causes the number to change continuously.



Menu Options

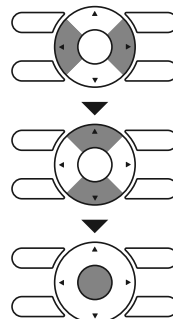
7



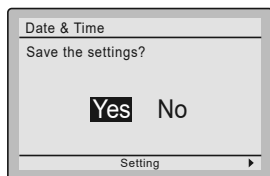
- Select **Minute** with ◀▶ buttons. Change the minute with ▼▲ buttons. Holding down the button causes the number to change continuously.
- Press **Menu/OK** button. The confirmation screen will appear.

Note:

The date can be set between January 1, 2020 and December 31, 2099.

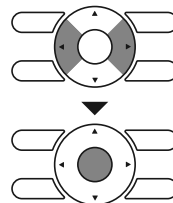


8



- Press ◀▶ button to select **Yes** on the confirmation screen. Press **Menu/OK** button to confirm the clock and return to the basic screen.

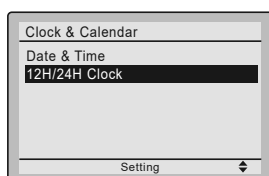
* When setting the schedule, the display returns to the settings screen.



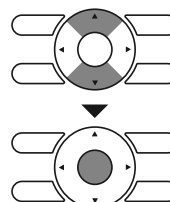
■ 12H/24H CLOCK

Operation

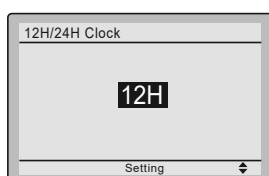
1



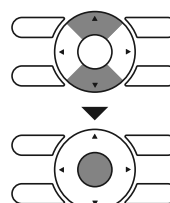
- Display the clock & calendar screen. (See page 46.)
- Press ▼▲ buttons to select **12H/24H Clock** on the clock & calendar screen. The 12H/24H clock screen will appear when **Menu/OK** button is pressed.



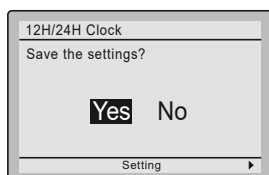
2



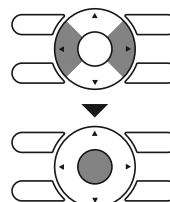
- By default, the time display is set to the 12H format.
- Press ▼▲ buttons to select **12H** **24H** on the 12H/24H clock screen.
- The confirmation screen will appear when **Menu/OK** button is pressed.



3



- Press ◀▶ buttons to select **Yes** on the confirmation screen. Pressing **Menu/OK** button confirms the 12H or 24H and takes you back to the basic screen.

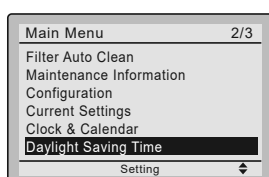


Daylight Saving Time

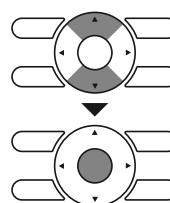
■ How to display Daylight Saving Time

Operation

1



- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select **Daylight Saving Time** on the main menu screen. Press **Menu/OK** button to display the daylight saving time screen.

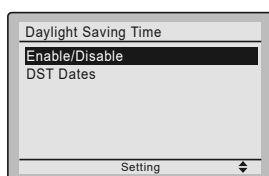


Menu Options

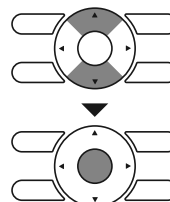
Enabling or disabling Daylight Saving Time

Operation

1



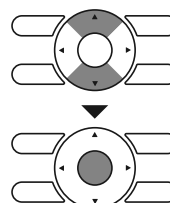
- Display the daylight saving time screen.
(See page 49.)
- Press ▼▲ buttons to select **Enable/Disable** on the daylight saving time screen. Press **Menu/OK** button to display the enable/disable screen.



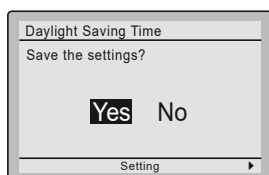
2



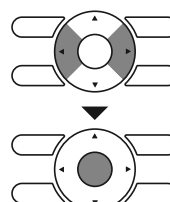
- Press ▼▲ buttons to select **Enable** or **Disable** on the enable/disable screen.
- Press **Menu/OK** button to display the setting confirmation screen.



3



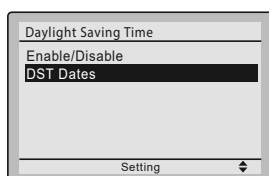
- Press ◀▶ buttons to select **Yes** on the setting confirmation screen. Pressing **Menu/OK** button confirms the daylight saving time enable/disable setting and takes you back to the basic screen.



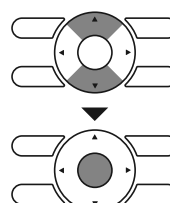
Setting the date

Operation

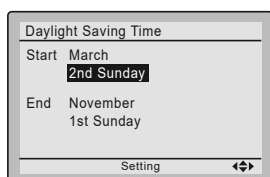
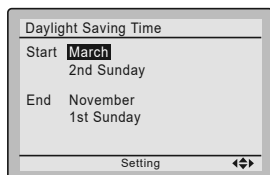
1



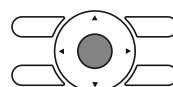
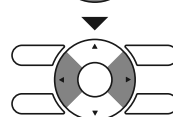
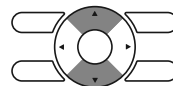
- Display the daylight saving time screen.
(See page 49.)
- Press ▼▲ buttons to select **DST Dates** on the daylight saving time screen. Press **Menu/OK** button to display the duration setting screen.



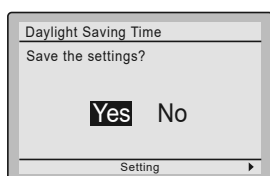
2



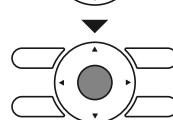
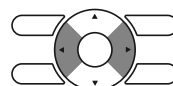
- Press ▼▲ buttons to select the start month and the end month.
- Press ◀▶ buttons to select a week. Press ▼▲ buttons to select the start week and the end week.
- After setting the Start and End dates, press **Menu/OK** button to display the setting confirmation screen.



3



- Press ◀▶ buttons to select **Yes** on the setting confirmation screen. Pressing **Menu/OK** button confirms the Daylight Saving Time settings and takes you back to the basic screen.



When Daylight Saving Time is enabled

When the time in the remote controller reaches 2:00 a.m. on the specified start date, the clock is automatically set forward by one hour. When the time in the remote controller reaches 2:00 a.m. on the end date, the clock is automatically set back by one hour.

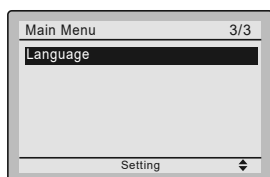
Menu Options

Language

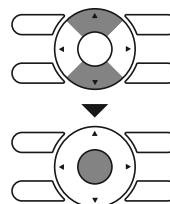
■ Selectable Languages

Operation

1



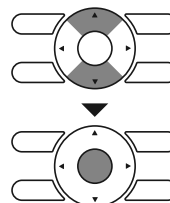
- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select **Language** on the main menu screen and press **Menu/OK** button.



2



- Press ▼▲ buttons to select the preferred language on the language screen. **English/Français/Español** are available.
- Press **Menu/OK** button to confirm the settings and return to the basic screen.

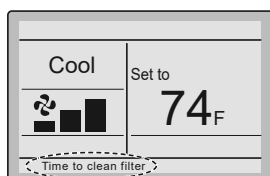


Maintenance

Reset Filter Indicator

Operation

1



- When it is time to clean or replace the filter, one of the following messages will be displayed on the bottom of the basic screen.

Time to clean filter

Time to clean filter & element

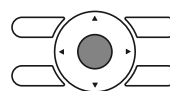
Time to clean element

* This is not displayed when Simple display is set.

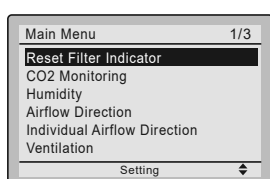
- Wash, clean, or replace the filter or element.
For details, refer to the operation manual supplied with the unit.

2

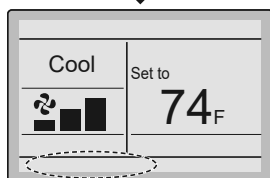
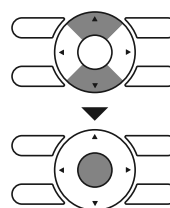
- Reset the filter indicator when the filter or element is cleaned or replaced.
- Press **Menu/OK** button.
The main menu screen will be displayed.



3



- Press ▼▲ buttons to select **Reset Filter Indicator** on the main menu screen and press **Menu/OK** button.



- The displayed message “Time to clean filter” is no longer displayed on the basic screen when the filter sign is reset.

Maintaining the Unit and LCD Display

- Wipe the LCD and surface of the remote controller with a dry cloth when they become dirty.
- If the dirt on the surface cannot be removed, soak the cloth in neutral detergent diluted with water, squeeze the cloth tightly, and clean the surface. Wipe the surface with a dry cloth.

Note

- Do not use any paint thinner, organic solvent, or strong acid.

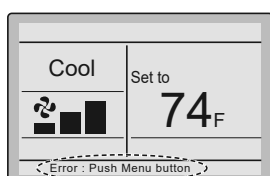
Reference Information

Error Code Display

■ Contact your Daikin dealer in the following cases

Operation

1



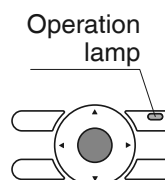
- If an error occurs, either one of the following items will flash in the basic screen.

Error: Push Menu button

- * The Operation lamp will flash.
- * For Simple display, the message is not displayed, and only the Operation lamp flashes.

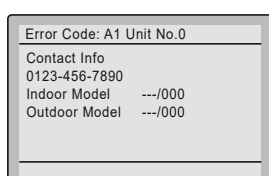
Warning: Push Menu button

- * The Operation lamp will not flash.
- * For Simple display, the message is not displayed, and the Operation lamp does not flash, either.



- Press **Menu/OK** button.
 - * If the refrigerant leaks, it will automatically transition to the below screen from the basic screen. However, if the basic screen is not displayed, the transition will not occur automatically.

2



- The error code will flash on the screen for the corresponding unit number.
- The service contact and model name or code are displayed.
- If the refrigerant leaks, it shows "Refrigerant leak detected." with an error code.
- Notify your Daikin dealer with the Error code and model name or code.

After-sale Service



Warning

- **Do not relocate or reinstall the remote controller by yourself.**
Improper installation may result in electric shocks or fire.
Consult your Daikin dealer.



■ Advise your Daikin Dealer of the following items

- Model name
- Date of installation
- Failure conditions: As precise as possible.
- Your address, name, and telephone number

■ Repairs after Warranty Period

Consult your Daikin dealer.

■ Inquiry about After-sale Service

Contact your Daikin dealer.

13.4 <DCS302C71> Central Remote Controller (Installation)

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained. Also, inform customers that they should store this installation manual along with the operation manual for future reference. This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

- ⚠ **WARNING** Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 ⚠ **CAUTION** Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
 ⚠ **NOTE** Indication situation that may result in equipment or property-damage-only accidents.

⚠ WARNING

Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.
 Improper installation may result in water leakage, electric shocks or fire.

Perform installation work in accordance with this installation manual.
 Improper installation may result in water leakage, electric shocks or fire.

Be sure to use only the specified accessories and parts for installation work.
 Failure to use the specified parts may result in water leakage, electric shocks, fire or the unit falling.

Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.
 Improper installation work may result in the equipment falling and causing accidents.

Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.
 An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

Make sure that all wiring is secured, the specified wires are used, and no external forces act on the terminal connections or wires.
 Improper connections or installation may result in fire.

When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.
 Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

Before touching electrical parts, turn off the unit.

Ground the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.
 Incomplete grounding may result in electric shocks.

When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air.

Do not reconstruct or change the settings of the protection devices.
 If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

Do not touch the switch with wet fingers.
 Touching a switch with wet fingers can cause electric shock.

Install an leak circuit breaker, as required.
 If an leak circuit breaker is not installed, electric shock may result.

Do not install the air conditioner or the remote controller in the following locations:

- (a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen
 Plastic parts may deteriorate and fall off or result in water leakage.
- (b) where corrosive gas, such as sulfurous acid gas, is produced
 Corroding copper pipes or soldered parts may result in refrigerant leakage.
- (c) near machinery emitting electromagnetic waves
 Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
- (d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
 Operating the unit in such conditions may result in fire.

⚠ CAUTION

Be very careful about product transportation.

Safely dispose of the packing materials.
 Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

Do not turn off the power immediately after stopping operation.
 Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

⚠ NOTE

Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.
 (Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

Remote controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps.(inverter or rapid start types)
 Install the indoor unit as far away from fluorescent lamps as possible.

This unit is a class A product.
 In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

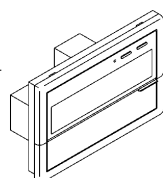
Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.

1 COMPONENTS

Check the following components are included in this optional accessory before installation.

Installation screw (M4 × 16)	4
Operation manual	1
Installation manual	1
Installation table	1

Body



When using this optional accessory an electric parts box of KJB311A is required.
For installation, a steel electric parts box to be embedded is mandatory.

2 SYSTEM CONFIGURATION

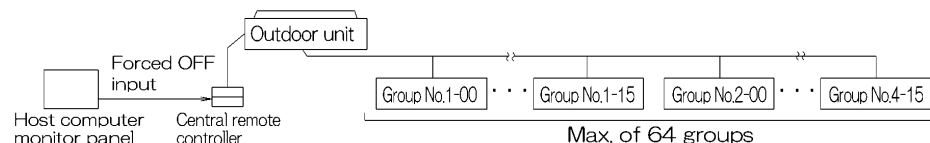
With the central remote controller, unified operation/stop is possible with up to a maximum 64 groups of indoor units.

When using 2 central remote controllers, unified operation is possible with up to a maximum 128 groups.

With this optional accessory, setting of control modes including operation, stop, operation controlled by timer, and ON/OFF control possible/impossible by remote controller can be set individually by zones while it enables to control and display the operation state such as set temperature.

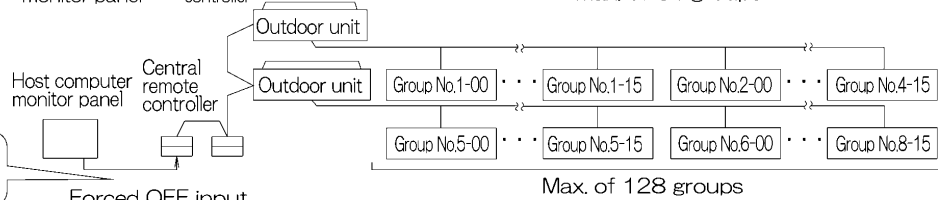
It can be connected with the external key system, host computer monitor panel, etc., through forced OFF input (no-voltage normally open contactor).
A zone is a one or more groups together. In general, the same settings are used throughout a zone.

- When using 1 central remote controller



- When using 2 central remote controller

Forced ON/OFF command should be connected to one of the two units.



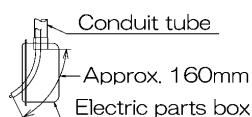
The central remote controller and the separately sold remote control adapter circuit board or group remote control adapter cannot be used together. See the D-BACS design guide for details.

3 INSTALLATION

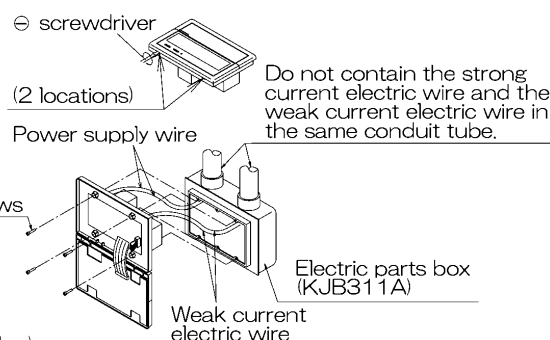
- (1) Open the upper part of remote controller.
Insert a ⊖ screwdriver (2 locations) into the recess between the upper part and the lower part of remote controller and twist the screwdriver lightly.

PC board is attached with both the upper and lower part of remote controller. Do not damage the board with the screwdriver.

- (2) Open the upper part of remote controller and install the Electric parts box with the attached installation screws (M4 × 16).



NOTE) Suitable length of the electric wire is about 160mm, (from electric parts box)
If it is difficult to contain a long wiring, strip the sheathed part of the wiring.



4 INITIAL SETTING

Setting (1) through (3) are initialized when power is turned ON, therefore complete settings BEFORE activating the power. (The positions of connectors and switches used for settings in this section are shown in Fig. 1.)

- (1) Connector for setting master controller (X1A) (Provided with connector at factory set)
- When using only 1 central remote controller, do not disconnect the connector for setting master controller. (Use the unit with the connector in the state in which it was delivered.)
 - When using multiple central remote controllers, or using the central remote controller in conjunction with the optional controllers for centralized control, makes settings as indicated in the below table.

Pattern of connection of optional controllers for centralized control			Connector for setting master controller (X1A) Setting, Removed		
Central remote controller	Unified ON/OFF controller	Schedule timer	Central remote controller	Unified ON/OFF controller	Schedule timer
1 to 4	1 to 16	1	Set one to "Used" and all the rest to "Not used"	Set all to "Not used"	"Not used"
		1			"Not used"

(Remove all the connectors for the central remote controller, the on/off controller, and the schedule timer when using the unit together with the Ve-UP controller, the master station II, the DMS interface, the payment management unit, or the parallel interface station.)

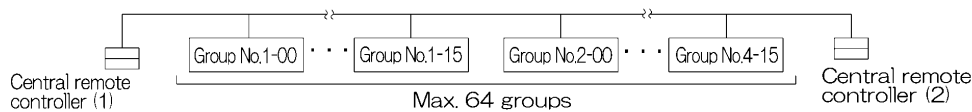
- (2) Address setting

Two central remote controllers can be used as shown in **2 SYSTEM CONFIGURATION**, to control anywhere up to a max. 128 groups of indoor units. In this case, group address must be set. This is done with the switch for setting each address (SS3).

SS3 setting	Indoor unit address	SS3 setting	Indoor unit address
SETTING EACH ADDRESS 5-00 ~ 8-15	To control indoor units from group Nos. 1-00 through 4-15	SETTING EACH ADDRESS 5-00 ~ 8-15	To control indoor units from group Nos. 5-00 through 8-15

- (3) MAIN/SUB changeover switch setting

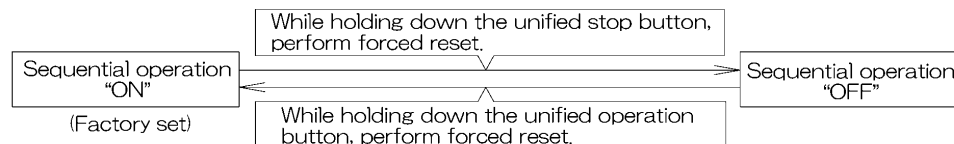
With two central remote controllers, centralized control (indoor units) is possible from different locations. In this kind of set-up, it is necessary to set the MAIN/SUB changeover switch.



One of the two central remote controllers (1) . (2) is set to "MAIN" while the other is set to "SUB".

- (4) Setting of the sequential operation function

The central remote controller is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation. (Sequential operation is factory set to "ON.") To switch sequential operation ON or OFF, set as follows.



NOTE: The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

- (5) Forced reset switch

When changing the setting of the connector for setting master controller, etc., you can reset simply by setting it to the reset side once and returning to the normal side, without turning the power OFF. (For normal operation, set the switch to the normal side.)

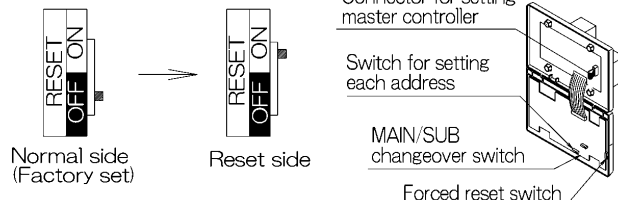
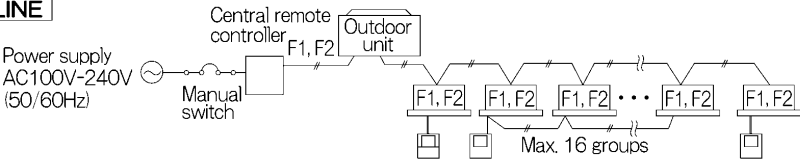


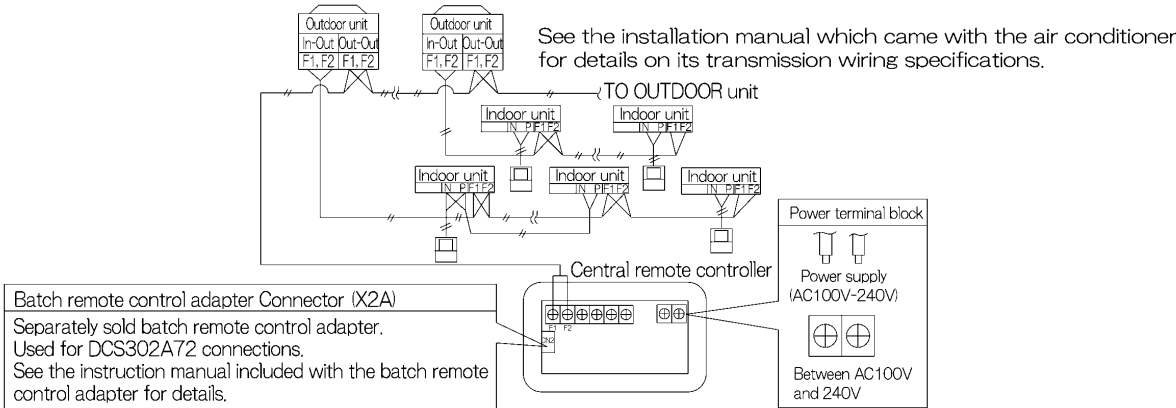
Fig. 1

5 ELECTRIC WIRING

WIRING OUTLINE



WIRING TO THE INDOOR UNIT AND OUTDOOR UNIT



Wiring specifications

Power supply wiring	2mm ²
Transmission wiring for control	0.75 – 1.25 mm ² sheathed vinyl cord or cable (balanced type) – maximum length 1000 m (total overall wiring length 2000 m)
Manual switch	10A or 15A

Wire the indoor units to the outdoor units and between all power, indoor units, and remote controllers. See the instruction manual included with the indoor and outdoor units for details.

CONTROL TERMINAL STRIP

*1 For connecting Indoor unit (F1, F2)

*2 Forced OFF input (T1, T2)
None of the indoor units connected to the forced OFF input contact (non-voltage contact with minimal current) will operate when it is shut off.
Use only contactors which guarantee the minimum applicable load DC 16V, 10mA.

T1 → | DC16V
T2 → |

NOTE) Use instantaneous contactor of over 200m sec. energizing time, when necessary.

*3 For schedule timer (D1, D2)
Power can be supplied to the schedule timer (DST301B61) separately sold. For details, refer to the installation manual of the schedule timer.
Wire *2 and *3 only when necessary.

*1 *2 *3
F1 F2 T1 T2 D1 D2

(NOTE)
Do not connect the power supply wiring (100 to 240V) to the control terminal strip. If connected by mistake, it may damage or burn electrical parts of optional controllers for centralized control and indoor unit. It may result in serious danger. Be sure to check wirings before turning the power ON.

6 SETTING GROUP NO. FOR CENTRALIZED CONTROL

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

(1) Turn ON the power of the indoor unit and central remote controller.

(Unless the power is ON, no setting can be made.)

Check that the installation and electrical wiring are correct before turning the power supply ON.

(When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of "gg".)

(2) While in the normal mode, hold down the "TEST" button for a minimum of 4 seconds.

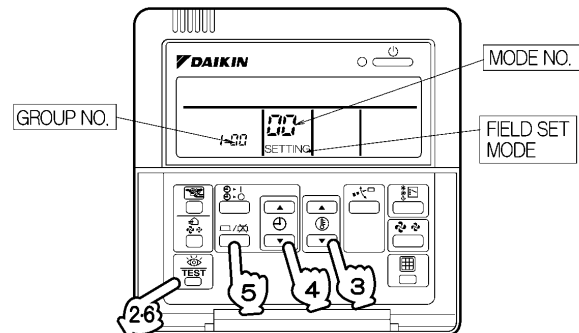
The remote controller will enter the FIELD SET MODE.

(3) Select the MODE No. "00" with the "MODE" button.

(4) Use the "GROUP" button to select the group No. for each group.
(Group numbers increase in the order of 1-00, 1-01, ..., 1-15, 2-00, ..., 8-15.)

(5) Press "ENTER" to set the selected group No.

(6) Press "RESET" to return to the NORMAL MODE.



NOTES) • For simplified remote controller, see the installation table.
• See the instruction manuals which came with the Ventiair and adapters (i.e., multi-purpose adapters) for details on their Group No. settings.

NOTICE Enter the group No. and installation place of the indoor unit into the installation table in the operation manual. Be sure to keep the operation manual for maintenance.

7 TEST OPERATION (Perform a test operation in the individual screen before registering zones.)

Before starting test operation, check that the power is supplied to the indoor and outdoor units, and central remote controller.

(1) Select the display "INDIVIDUALLY"

Press "INDIVIDUALLY" button to display "INDIVIDUALLY"

(2) Select the group to be tested.

Select the group No. with "←" "→" "↑" "↓" button.

(3) Press "TEST" button to select the test operation mode.

"TEST" is displayed.

"HOST A" is displayed on the remote controller.

(4) Press "ENTER" button within 10 seconds after entering into the test operation mode.

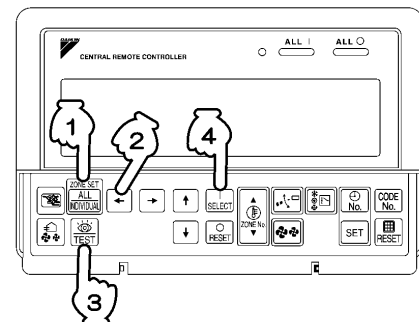
Operation the unit for 30 minutes.

When pressing the "TEST" button, the unit stops operating.

If the operation lamp flashes, it indicates a malfunction.

Call the group of flashing display, confirm malfunction code, and check the source of malfunction.

(The operation manual lists all error codes, so refer to it.)



NOTES) • For test operation, refer to the installation manual of the outdoor unit.
• After turning the power supply ON, if the unit does not accept operation for two minutes or more with the display of "gg", check the following points.
• Check that setting of the connector for setting master controller is correct.
• Check that the group No. for centralized control has been set.

13.5 <DCS302C71> Central Remote Controller (Operation)

BEFORE USE

■ GENERAL DESCRIPTION OF SYSTEM

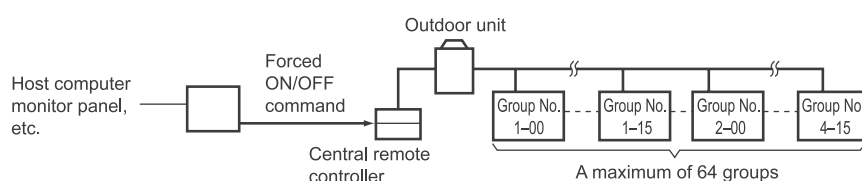
This central remote controller can monitor and control up to 64 indoor unit groups.

Using two central remote controllers allows monitoring and controlling of up to 128 indoor unit groups.

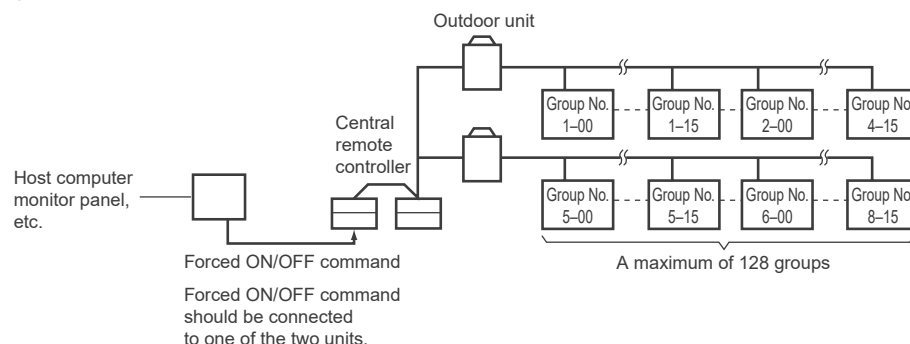
Main Functions

1. Batch starting and stopping of indoor units connected to the central remote controller.
2. Handling of operation settings such as start/stop, timer operation, remote controller prohibition/permission, etc., and operation status settings such as temperature.
3. Operation status monitoring of operation mode, set temperature, etc.
4. Can be connected to an external central monitor panel and key system using the forced stop input (non-voltage a connector).

- When using 1 central remote controller



- When using 2 central remote controllers

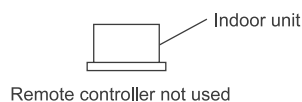


(The central remote controller and the separately sold remote control adapter circuit board or group remote control adapter cannot be used together.)

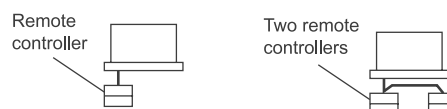
* GROUP OF INDOOR UNIT refers to the below.

1. A single indoor unit without remote controller

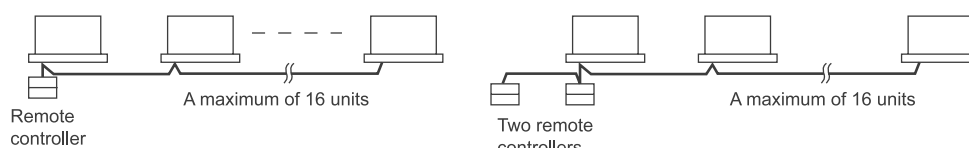
1. A single indoor unit without remote controller



2. A single indoor unit controlled by one or two remote controllers

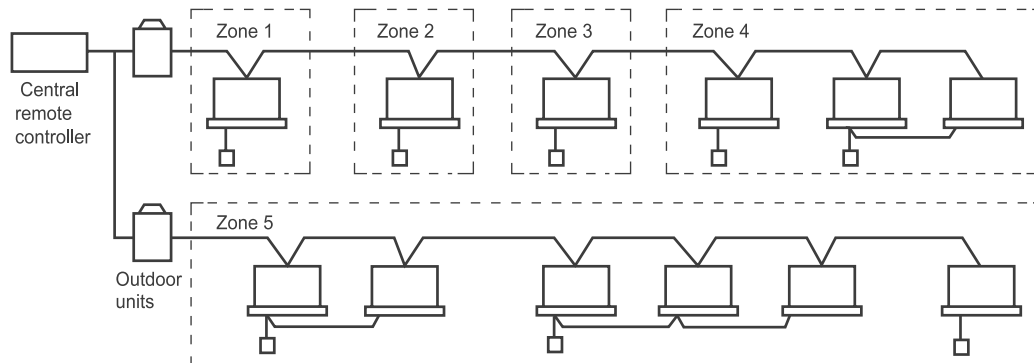


3. Maximum of 16 indoor units, group-controlled by one or two remote controllers



* Zone control from the central remote controller

Zone control is available from the central remote controller. With it, it is possible to make unified settings for multiple groups, so setting operations are greatly simplified.



- Any setting you make within a given zone will apply to all groups in the said zone.
- A maximum of 64 zones can be set from a single central remote controller. (Each zone contains a maximum of 64 groups.)
- Zones can be set randomly from the central remote controller.

SAFETY CONSIDERATIONS

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly.

After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.

Also, inform customers that they should store this installation manual along with the operation manual for future reference. This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of danger, warning, caution and note symbols.

! DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

! WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

! CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

! NOTE..... Indicates situation that may result in equipment or property-damage-only accidents.

Keep these warning sheets handy so that you can refer to them if needed.

Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

! DANGER

- **Any abnormalities in the operation of the air conditioner such as smoke or fire could result in severe injury or death.** Turn off the power and contact your dealer immediately for instructions.
- **Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.**
- **Safely dispose of the packing materials.** Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death due to suffocation.

! WARNING

- **Ask your dealer for installation of the air conditioner.** Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.
- **Ask your dealer for improvement, repair, and maintenance.** Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.
- **Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.**
- **Ask your dealer to move and reinstall the air conditioner or the remote controller.** Incomplete installation may result in a water leakage, electric shock, and fire.
- **Never let the indoor unit or the remote controller get wet.** It may cause an electric shock or a fire.

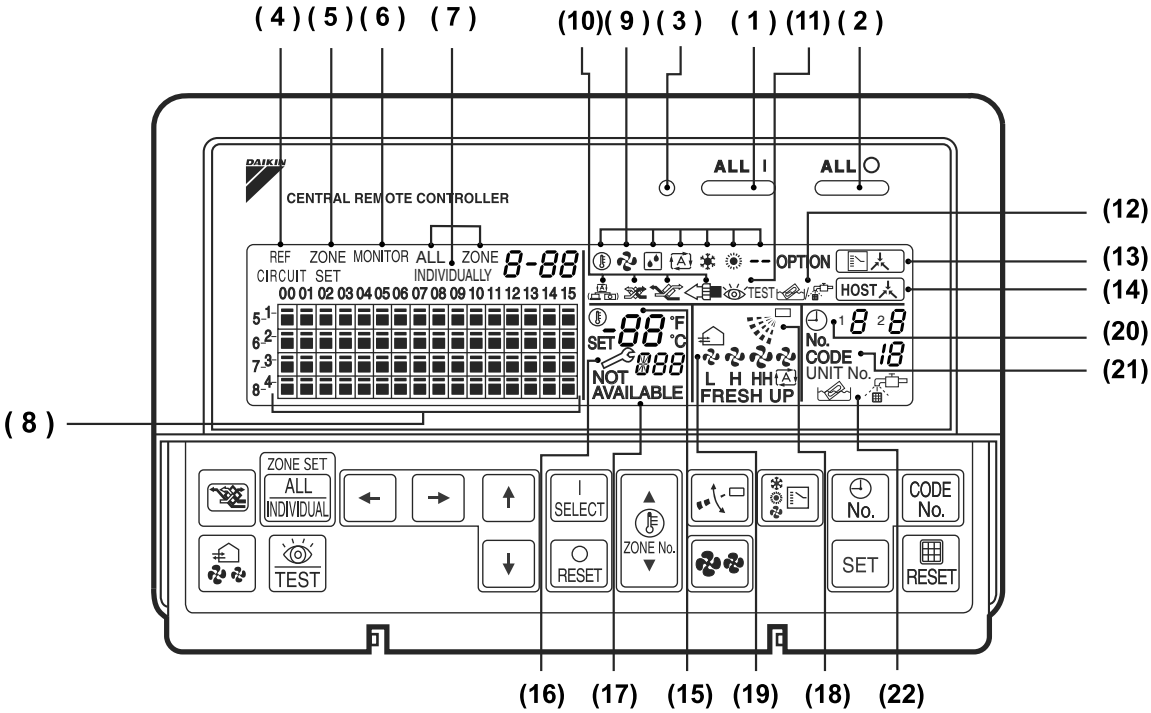


Fig. 1

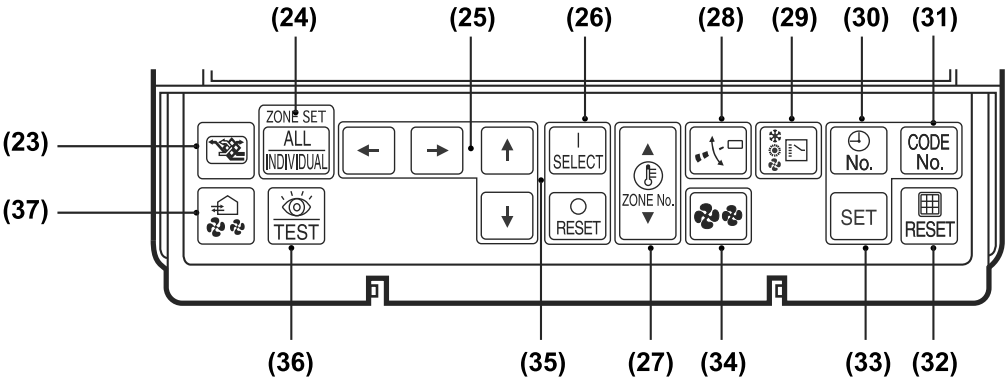


Fig. 2

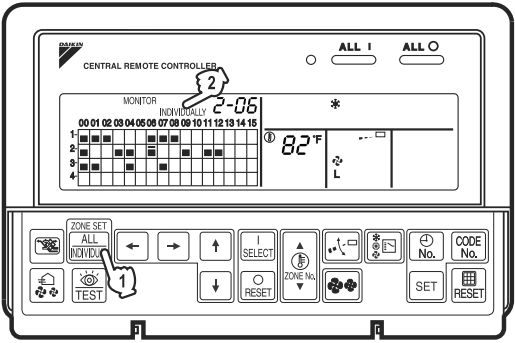


Fig. 3

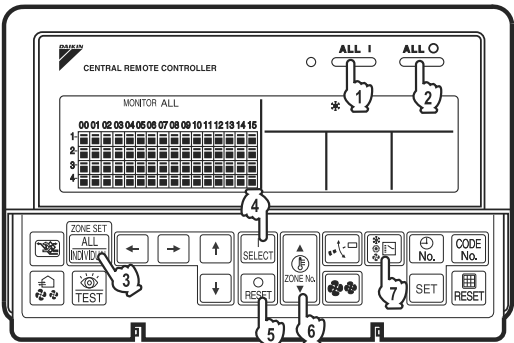


Fig. 4

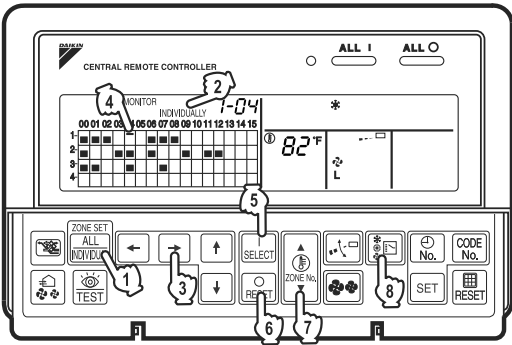


Fig. 5

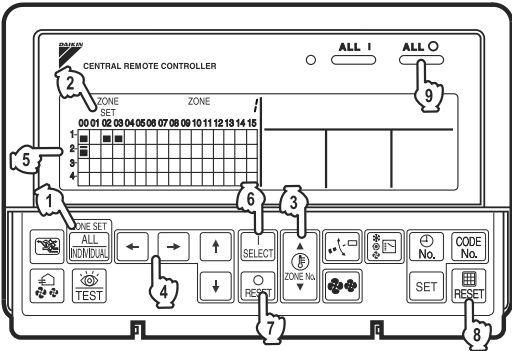


Fig. 6

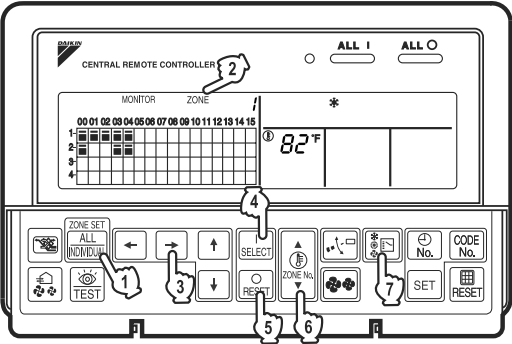


Fig. 7

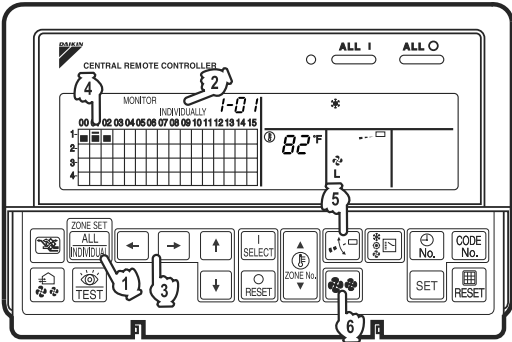


Fig. 8

- **Never use flammable spray such as hair spray, lacquer or paint near the unit.**
It may cause a fire.
- **Do not allow children to play on or around the unit as they could be injured.**
- **Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.**
Use of wire or copper wire may cause the unit to break down or cause a fire.
- **Never inspect or service the unit by yourself.**
Ask a qualified service person to perform this work.
- **Cut off all electric waves before maintenance.**
- **Do not wash the air conditioner or the remote controller with excessive water.**
Electric shock or fire may result.
- **Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.
- **Never touch the internal parts of the controller.**
Do not remove the front panel because some parts inside are dangerous to touch. In addition, some parts may be damaged by touching. For checking and adjusting internal parts, contact your dealer.
- **Check the unit stand for damage on a continuous basis, especially if it had been in use for a long time.**
If left in a damaged condition the unit may fall and cause injury.
- **Placing a flower vase or other containers with water or other liquids on the unit could result in a shock hazard or fire if a spill occurs.**

CAUTION

- **Avoid placing the controller in a spot splashed with water.**
Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

- **Do not operate the air conditioner when using a room fumigation - type insecticide.**
Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.
- **Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.
- **The appliance is not intended for use by young children or infirm persons without supervision.**
- **The remote controller should be installed in such a way that children cannot play with it.**

NOTE

- **Never press the button of the remote controller with a hard, pointed object.**
The remote controller may be damaged.
- **Never pull or twist the electric wire of the remote controller.**
It may cause the unit to malfunction.
- **Do not place the controller exposed to direct sunlight.**
The LCD display may get discolored, failing to display the data.
- **Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.**
The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.
- **Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

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FEATURES AND FUNCTIONS

■ Operation menu

This central remote controller can operate and stop machines by either group or zone.
Batch operation and batch stop functions are also available. When used in combination with the schedule timer (optional accessory), timer operation and stop functions are available.



See page
8—12.

■ Various operation modes.

You can operate the system from both this unit and the remote controller, so to enable various operation control patterns. Twenty different operation modes are available including five operation patterns:

1. Start/stop: remote controller prohibition, remote controller stop-only permission, central priority, after-press priority, remote controller permission timer
2. Operation modes: remote controller prohibition, remote controller permission
3. Set temperature: remote controller prohibition, remote controller permission



See page
13—15.

■ Zone control for simpler setting procedures

You can control a maximum of 64 groups of indoor units by using this central remote controller. You don't have to repeat the same setting operations by group because you can make each of the following settings by zone.

A functions is available for setting all groups in one batch.

- Operation mode
- Control mode
- Setting temperature
- Programming time No. (Used in conjunction with the schedule timer)



See page
8—16.

■ Monitoring all indoor unit information

The following information can be displayed by group.

- Operation information such as operation mode, set temperature, etc., for indoor units
- Maintenance information such as cleaning signs for filters or elements
- Error codes and other malfunction diagnosis information



See page
16—21.

■ Function of refrigerant system display

This display helps you understand, at a glance, the indoor units sharing the same outdoor unit and the particular indoor unit among them that is set as the master remote controller.



See page 20.

- Room air conditioners and multi-purpose air conditioners may also be connected by using separately-sold adapter boards.
This may limit functionality, so consult the manuals that come with each adapter board.

NAMES AND FUNCTIONS OF THE OPERATING SECTION (Fig. 1, 2)

1	UNIFIED OPERATION BUTTON Press to operate all indoor units.	13	"" DISPLAY (COOLING/HEATING SELECTION PRIVILEGE NOT SHOWN) For zones or individual units (groups) for which this is displayed, cooling and heating cannot be selected.
2	UNIFIED STOP BUTTON Press to stop all indoor units.	14	"" DISPLAY (UNDER HOST COMPUTER INTEGRATED CONTROL) While this display is lit up, no settings can be made. It lights up when the upper central machines are present on the same air conditioning network.
3	OPERATION LAMP (RED) Lit white any of the indoor units under control is in operation.	15	" SET 88°F" DISPLAY (PRESET TEMPERATURE) Displays the preset temperature.
4	" REF CIRCUIT" DISPLAY (REFRIGERANT SYSTEM DISPLAY) This indication in the square is lit while the refrigerant system is being displayed.	16	" U4" DISPLAY (MALFUNCTION CODE) This displays (flashes) the content of errors when an error failure has occurred. In maintenance mode, it displays the latest error content.
5	" ZONE SET" DISPLAY (ZONE SETTING) The lamp is lit while setting zones.	17	"NOT AVAILABLE" DISPLAY (NO FUNCTION DISPLAY) If a function is not available in the indoor unit even if the button is pressed, "NOT AVAILABLE" is may be displayed for a few seconds.
6	" MONITOR" DISPLAY (OPERATION MONITOR) The lamp is lit while operation is being monitored.	18	"" DISPLAY (FAN DIRECTION SWING DISPLAY) This displays whether the fan direction is fixed or set to swing.
7	"ALL" "ZONE" "INDIVIDUALLY" DISPLAY The status displays indicates either batch functions or which zone or individual unit (or group) are being used.	19	" L H HH  FRESH UP" DISPLAY (VENTILATION STRENGTH/SET FAN STRENGTH DISPLAY) This displays the set fan strength.
8	OPERATION MONITOR Each square displays the state corresponding to each group.	20	" No." DISPLAY (TIME NO.) Displays the operation timer No. when used in conjunction with the schedule timer.
9	"       " DISPLAY (OPERATION MODE) Displays operating state.		
10	"    " DISPLAY (VENTILATION CLEANING DISPLAY) This is displayed when a Ventiair total enthalpy heat exchanger unit or other such unit is connected.		
11	" TEST" DISPLAY (INSPECTION/TEST) Pressing the maintenance/test run button (for service) displays this. This button should not normally be used.		
12	" / " DISPLAY (TIME TO CLEAN) It lights up when any individual unit (group) has reached the time for the filter or element to be cleaned.		

	“CODE UNIT No. 18” DISPLAY (OPERATION CODE AND UNIT NUMBER DISPLAY)
21	The method of operation (remote controller prohibited, central operation priority after-press operation priority, etc.) is displayed by the corresponding code. This displays the numbers of any indoor units which have stopped due to an error.
22	“” DISPLAY (TIME TO CLEAN AIR CLEANER ELEMENT/ TIME TO CLEAN AIR FILTER) Displayed to notify the user it is time to clean the air filter or air cleaner element of the group displayed.
23	VENTILATION MODE BUTTON This is pressed to switch the ventilation mode of the total enthalpy heat exchanger.
24	ALL/INDIVIDUAL BUTTON Pressing this button scrolls through the “all screen”, “zone screen”, and “individual screen”.
25	ARROW KEY BUTTON This button is pressed when calling an individual indoor unit or a zone.
26	ON/OFF BUTTON Starts and stops ALL, ZONE, and INDIVIDUAL units.
27	TEMPERATURE ADJUSTMENT BUTTON (ZONE NUMBER BUTTON) This button is pressed when setting the temperature. Select the zone number if any zones have been registered.
28	FAN DIRECTION ADJUSTMENT BUTTON This button is pressed when setting the fan direction to “fixed” or “swing”.
29	OPERATION MODE SELECTOR BUTTON This sets the operation mode. The dry setting cannot be done.
30	TIME NO. BUTTON Selects time No. (Use in conjunction with the schedule timer only).
31	CONTROL MODE BUTTON Selects control mode.
32	FILTER SIGN RESET BUTTON This button is pressed to erase the “clean filter” display after cleaning or replacement.

33	SET BUTTON Sets control mode and time No.
34	FAN STRENGTH ADJUSTMENT BUTTON Pressing this button scrolls through “weak”, “strong”, and “fast”.
35	ZONE SETTING BUTTON Zone registration mode can be turned on and off by pressing the start and stop buttons simultaneously for at least four seconds.
36	INSPECTION/TEST RUN BUTTON (FOR SERVICE) Pressing this button scrolls through “inspection”, “test run”, and “system display”. This button is not normally used.
37	VENTILATION STRENGTH ADJUSTMENT BUTTON This button is pressed to switch the ventilation strength (“fresh up”) of the total enthalpy heat exchanger.

(Notes)

- Please note that all the displays in the figure appear for explanation purposes or when the cover is open.
- If the unit is used in conjunction with other optional central controllers, the OPERATION LAMP of the unit that is not under operation control may light up and go out a few minutes behind schedule. This shows that the signal is being exchanged, and does not indicate any failure.

OPERATION**■ Individual screen, all screen, zone screen (Fig. 3)**

This controller can perform operations in the individual screen, all screen, or zone screen.

- Individual screen The individual screen is used when performing group operations.
- All screen The all screen is used when performing operations for all units at once.
- Zone screen The zone screen is used when performing zone operations.

1. Select the screen by pressing the “ALL/INDIVIDUAL” button.

 Every time the “ALL/INDIVIDUAL” button is pressed, the selection scrolls through INDIVIDUAL → ALL → ZONE.

If nothing is done in the all or zone screens for one minute, it automatically goes to the individual screen.

- If the zone number in the zone screen is displayed as “--,” this indicates that no units are registered in a zone.
Please perform zone registration before proceeding in the zone screen. (See page 9)

■ Batch operation and stop method (Fig. 4)

This is for operating or stopping all connected units at once.

A. What to do when operating or stopping all connected units at once.

1. Press either “ALL I” or

 “ALL O”.

- Operation can be performed from the individual screen, the all screen, or the zone screen.
- The “TEMPERATURE ADJUSTMENT” and “OPERATION MODE SELECTOR” buttons cannot be used.
To set the temperature and operation mode, use B. batch operation.

B. Batch Operation

1. Press the “ALL/INDIVIDUAL button” to enter the all screen.

The “” display lights up on all registered units.

2. Press the “SELECT” button.

The “” display lights up on all connected units.

Press the “RESET” button.

The “” display goes off on all connected units.
Operation and stop in the batch screen are done the same as with the batch operation and batch stop buttons.

3. Press the “TEMPERATURE ADJUSTMENT” button.

The temperature rises 1° every time the () button is pressed.
The temperature drops 1° every time the () button is pressed.

Set to “--” when you do not wish to use batch setting for the temperature setting.
Setting to 1° above or below the temperature setting range displays “--”.

4. Call up the desired mode by pressing the “OPERATION MODE SELECTOR” button.

Set to “--” when you do not wish to use batch setting for the operation setting.

■ Group operation and stop method (Fig. 5)

This is for operating or stopping connected units in groups.

[Group operation]

1. Press the “ALL/INDIVIDUAL button”

to enter the  individual screen.

The unit will enter the individual screen automatically if nothing is done for one minute.

2. Using the arrow keys, move the

“” to select the units to operate or stop.

Keeping the button pressed down will move it rapidly.

The “” in this screen has selected unit 1-04.

3. Press the “SELECT” button.

The “” display lights up in the group.

Press the “RESET” button.

The “” display goes off in the group.

4. Press the “TEMPERATURE ADJUSTMENT” button.

The temperature rises 1° every time the () button is pressed.

The temperature drops 1° every time the () button is pressed.

Temperature adjustment cannot be done if the selected group's air conditioners are in fan mode.

5. Call up the desired mode by pressing the “OPERATION MODE SELECTOR” button.

■ Registering zones (Fig. 6)

It is possible to set multiple groups as one zone and control each zone separately.

No zones are registered when the unit is shipped from the factory.

Zone registration can be done in the individual screen, all screen, or zone screen.

[Registration]

1. Pressing the “ALL/INDIVIDUAL” button for four seconds. Displays ZONE SET.

Zone Number 1 will be displayed, and if there are any groups already registered in the displayed zone, a “” will light up on the operation monitor.

2. Select the Zone Number to be registered using the “ZONE NUMBER” button. Keeping the button pressed down will move it rapidly.
3. “” to the group you wish to register using the arrow keys. Keeping the button pressed down will move it rapidly.
4. Press the “SELECT” button to register that group to the zone.
The “” display lights up on all the selected units.
 Pressing the “RESET” button removes the group from that zone, and “” goes off.
Repeat steps 3 and 4 until all the units you wish to register to the zone have been added.

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
1-	■		■	■												
2-	■															
3-																
4-																

In this example, a screen is shown with units 1-00, 1-02, 1-03, and 2-00 registered to Zone Number 1.

5. Repeat steps 2 to 4 to register to the next zone.
 6. Once zone registration is complete, press the “ALL/INDIVIDUAL” button to turn off “ZONE SET” display and return to the individual screen.
The display returns to the normal screen if nothing is done for one minute when in zone registration mode.
- (NOTE)
- It is impossible to register one group to several different zones.
If this is done, the last zone registered to will be valid.

[Batch deletion of zone registration]

1. Pressing the “ALL ○” for at least four seconds while pressing the “FILTER SIGN RESET” button when “ZONE SET” is displayed will delete all zone registrations.
The zone registrations for all units will be lost.

■ Zone operation and stop method (Fig. 7)

This is for operating or stopping connected units in zones.

[Zone operation]

1. Press the “ALL/INDIVIDUAL button” to enter the zone screen.
2. Using the arrow keys, select the zone number to operate or stop.

Pressing and reduces the zone number while and raise the number.
Keeping the button pressed down will move it rapidly.

- If the zone number is displayed as “--,” this indicates that no units are registered in a zone. Please perform zone registration before using a zone. (See page 9)

3. Press the “SELECT” button.

The “” display lights up in the group.

Press the “RESET” button.

The “” display goes off in the group.

4. Press the “TEMPERATURE ADJUSTMENT” button.

The temperature rises 1° every time the (▲) button is pressed.

The temperature drops 1° every time the (▼) button is pressed.

Set to “--” when you do not wish to use zone setting for the temperature setting.

Setting to 1° above or below the temperature setting range displays “--”.

5. Call up the desired mode by pressing the “OPERATION MODE SELECTOR” button.

Set to “--” when you do not wish to use zone setting for the operation mode.

■ Changing the fan direction and fan strength (Fig. 8)

This changes the fan direction and strength settings in the air conditioner.

Changing the fan direction and strength is done in the individual screen.

[Registration]

1. Press the “ALL/INDIVIDUAL button” to enter the individual screen.

The unit will enter the individual screen automatically if nothing is done for one minute.

2. Using the arrow keys, move the “ ” to select the units to fan direction adjustment or fan strength adjustment.

Keeping the button pressed down will move it rapidly.

3. Press the “FAN DIRECTION ADJUSTMENT” button.

This sets “fixed” or “swing” for the fan direction.

- Press the “FAN STRENGTH ADJUSTMENT” button.

Pressing this button scrolls through “”, “”, and “”.

Depending on the indoor unit, only “” and “” may be available.

The functions included in the indoor units may vary. Pressing a button for a function which is not available will cause “NOT AVAILABLE” to be displayed.

■ Changing the ventilation mode and ventilation strength (Fig. 9)

This changes the ventilation mode and strength settings in the total enthalpy heat exchanger.

Changing the ventilation mode and strength is done in the individual screen.

[Registration]

1. Press the “ALL/INDIVIDUAL button” to enter the individual screen.

The unit will enter the individual screen automatically if nothing is done for one minute.

2. Using the arrow keys, move the “ ” to select the units to ventilation mode or ventilation strength adjustment.

Keeping the button pressed down will move it rapidly.

3. Press the “VENTILATION MODE” button.

It will scroll through “” → “” → “” → “”.

- Press the “VENTILATION STRENGTH ADJUSTMENT” button.

It will scroll through “” → “” → “ FRESH UP” → “ FRESH UP” → “”.

The fresh up function may not be available depending on the connected unit model.

The functions included in the indoor units may vary. Pressing a button for a function which is not available will cause “NOT AVAILABLE” to be displayed.

• Ventilation Mode and Amount

If these are changed using the remote controller depending on the unit model, they cannot be displayed on the central remote controller.

To monitor the ventilation mode and amount, check the values on the remote controller.

■ Timer Number Setting (Fig. 10)

(Only when used with the schedule timer)

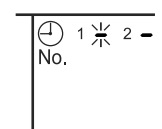
Using this together with the schedule timer makes it possible to set on and off times four times a day.

[Registration]

1. Pressing the “TIMER NO.” button causes the number set for timer number 1 to blink.

If no timer setting has been made “-” will be displayed.

Select the desired timer number by pressing the “TIMER NO.” button.

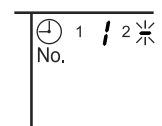


2. Once the desired timer number is displayed, press the “SET” button.

Press the “SET” button within 10 seconds after the timer number is displayed.

The display will return to how it was after 10 seconds.

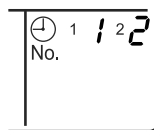
The display for timer number 1 will stop blinking and then timer number 2 will start blinking.



3. Select the desired timer number by pressing the "TIMER NO." button.

Once the desired timer number is displayed,  press the "SET" button.

The display for timer number 2 will stop blinking.



The "⌚ No." display will disappear after 3 seconds.

Select " - " in the timer number when you do not wish to set a timer number.
It is possible to set only one timer number.
(The times for turning the unit(s) on and off twice a day can be set with a single timer number.)

• Timer Number Setting

Group control: select the unit in the individual screen and set the timer number.

Batch control: set the timer numbers for all connected units.

Zone control: set the timer numbers for all zone-registered units.
Call up the zones which you wish to set in the zone screen and set the timer numbers.

- **Since the timer number will be set to after-press priority, the timer number in the last screen set will be valid for the connected units.**

Example 1

Setting timer number 1 for unit 1-00 to "1" and timer number 2 to "2" in the individual screen and then setting timer number 1 to "3" and timer number 2 to "4" in the batch screen causes the timer numbers for all units to be set, so timer number 1 for unit 1-00 will be "3" and timer number 2 will be "4".

Example 2

To prevent leaving units on, timer number 1 is set to "5" in the batch screen.

Setting timer number 1 in zone number 1 to " - " in the zone screen after that will change the timer number for zone number 1, so the setting to prevent leaving the units on will be lost for zone number 1 only.

If a timer number is set incorrectly by accident, redo the setting in the desired screen.

- **What happens when the timer number on time and off time are set to the same time**

When the on time and off time are set to the same time for the same timer number, operation does not change.

When the on time and off time are set to the same time for different timer numbers, the off time is given priority.

When using timer operation, make sure the times do not overlap when setting the program of the schedule timer.

■ Setting the Operation Code (Fig. 11)

[Registration]

1.  Pressing the "CONTROL MODE" button causes the currently set operation code to blink.

Call up the desired code number by pressing the

 "CONTROL MODE" button.

Scroll through the code numbers.

2.  Once the code number is displayed, press the "SET" button.

The display will stop blinking.

The operation code display will disappear after 3 seconds.

[The Operation Code Setting]

Group control: select the unit in the individual screen and set the operation code.

Batch control: set the operation code for all connected units.

Zone control: set the operation code for all zone-registered units.

Call up the zones which you wish to set in the zone screen and set the operation code.

Since the operation code will be set for after-press priority, setting the operation code in the zone and individual screens after setting the operation code in the batch screen, will cause the operation codes set afterwards to be valid.

OPERATION MODE

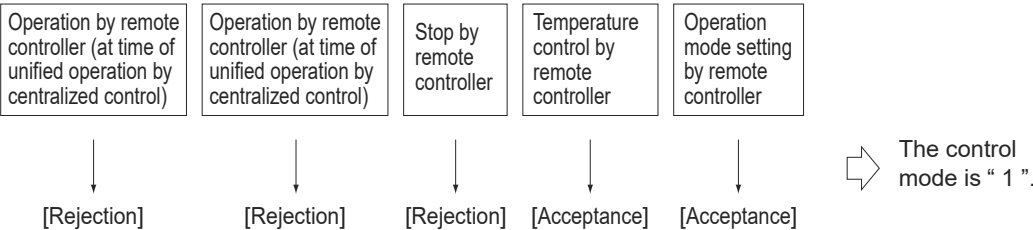
The following five operation control modes can be selected along with the temperature setting and operation mode by remote controller, for a total of twenty different modes. These twenty modes are set and displayed with control modes of 0 to 19. (For further details, see **EXAMPLE OF OPERATION SCHEDULE** on the next page.)

- ON/OFF control impossible by remote controller..... Use this mode when operating and stopping from the central remote controller only. (ON/OFF control by the remote controller is disabled.)
- Only OFF control possible by remote controller Use this mode when executing the operation only by the central remote controller, and executing only the stop by remote controller.
- Centralized Use this mode when executing the operation only by the central remote controller, and executing start/stop freely by remote controller during the preset hours.
- Individual Use this mode when executing start/stop both by central remote controller and remote controller.
- Timer operation possible by remote controller..... Use this mode when executing start/stop by remote controller during the preset hours, and not starting operation by the central remote controller at the programmed time of system start.

[HOW TO SELECT THE CONTROL MODE]

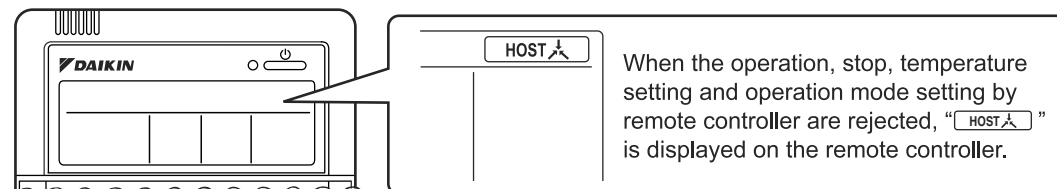
- Select whether to accept or to reject the operation from the remote controller regarding the operation, stop, temperature setting and operation mode setting, respectively, and determine the particular control mode from the rightmost column of the table below.

Example



Operation mode	Control by remote controller					Control mode
	Operation		Stop	Tempera- ture control	Operation mode setting	
	Unified operation, individ- ual operation by central remote controller, or opera- tion controlled by timer	Unified stop, individual stop by central remote controller, or timer stop				
ON/OFF control impossible by remote controller	<u>Rejection</u> (Example)	<u>Rejection</u> (Example)	<u>Rejection</u> (Example)	Rejection	Acceptance	0
					Rejection	10
				<u>Acceptance</u> (Example)	<u>Acceptance</u> (Example)	<u>1</u> (Example)
					Rejection	11
Only OFF control possible by remote controller		<u>Rejection</u> (Example)	Acceptance	Rejection	Acceptance	2
					Rejection	12
				Acceptance	Acceptance	3
					Rejection	13
Centralized	Acceptance			Rejection	Acceptance	4
					Rejection	14
				Acceptance	Acceptance	5
					Rejection	15
Individual		Acceptance		Rejection	Acceptance	6
					Rejection	16
				Acceptance	Acceptance	7
					Rejection	17
Timer operation possible by remote controller	Acceptance (During timer at ON position only)	Rejection (During timer at OFF position)		Rejection	Acceptance	8
					Rejection	18
				Acceptance	Acceptance	9
					Rejection	19

Note) Do not select the timer operation possible without the remote controller. In this case, timer operation is disabled.

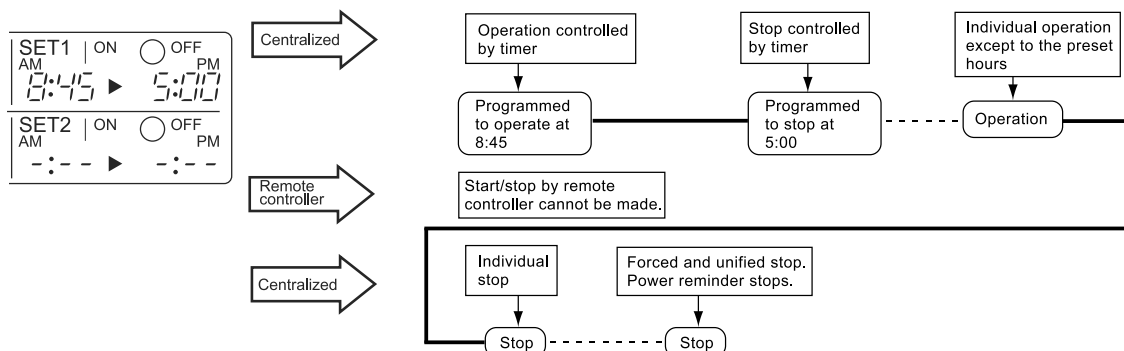


EXAMPLE OF OPERATION SCHEDULE

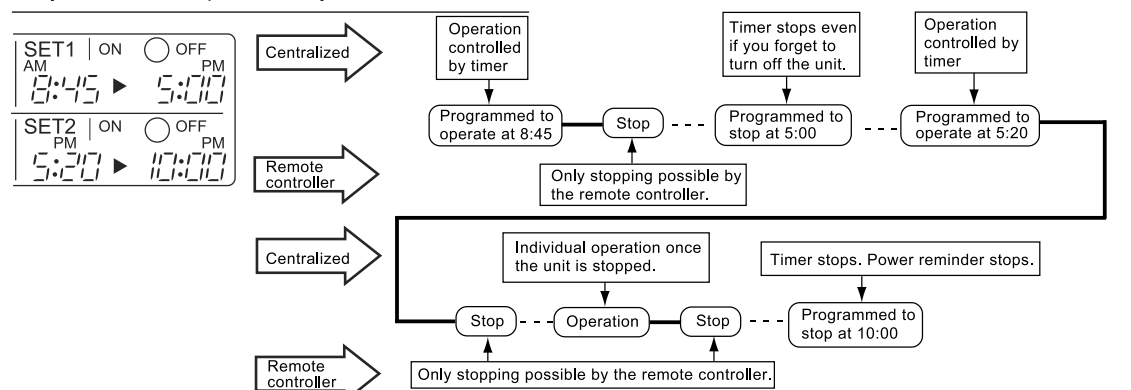
Operation schedule is possible only in conjunction with the schedule timer (optional accessory).

Liquid crystal display of schedule timer

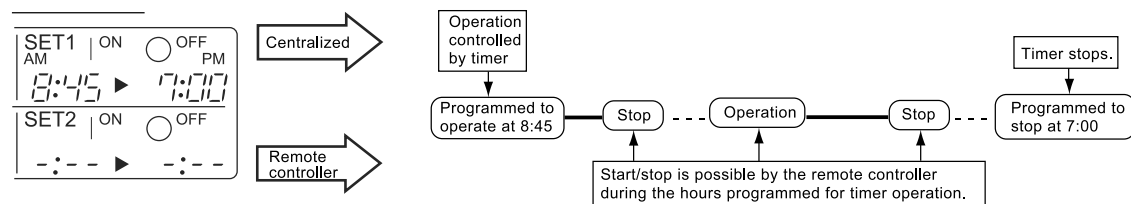
ON/OFF control impossible by remote controller



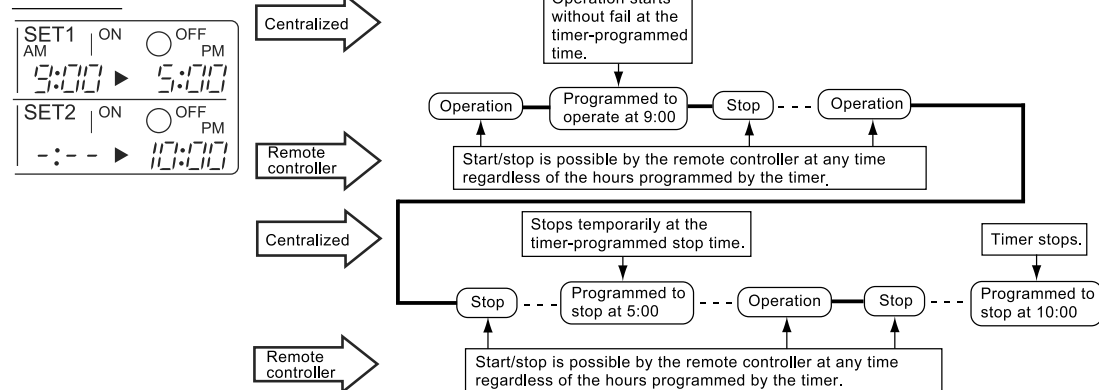
Only OFF control possible by remote controller



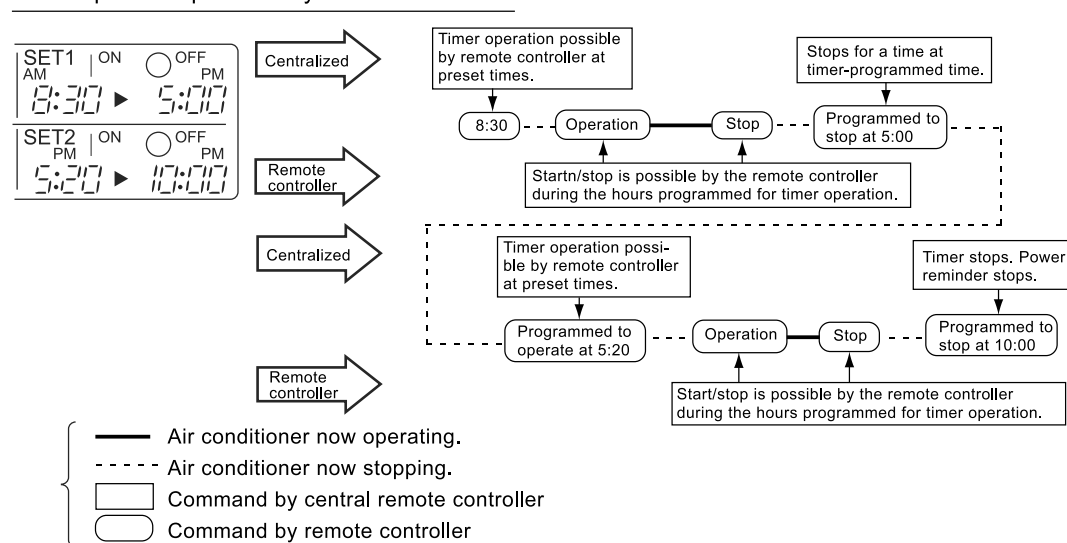
Centralized



Individual



Timer operation possible by remote controller



■ Setting operation mode (Fig. 12)

[Registration]

1. Press the **OPERATION MODE SELECTOR BUTTON**. Each time you press this button, the display rotates as shown on the below list.

• List of operations which can be set

In the below list, “○” refers to the acceptable setting, while “×” refers to the not acceptable setting.

Display	A: Zones and groups with no “ ” display.	
	Setting	Contents of setting
	×	
	○	Can be set in individual zones or groups
	○ * 1	Can be set in individual zones or groups
	○	Can be set in individual zones or groups
	○	Can be set in individual zones or groups
	○ * 1	Can be set in individual zones or groups * 3
	○ * 1	Can be set in individual zones or groups
	○	Select this display if you don't wish to set by zone.

Display	B: Zones and groups with a “ ” display.	
	Setting	Contents of setting
	○	To be set by zone * 2
	○	Can be set in individual zones or groups
	×	
	×	The displays are shown by group * 4
	×	The displays are shown by group * 4
	○ * 1	Can be set in individual zones or groups * 3
	○ * 1	Can be set in individual zones or groups
	○	Select this display if you don't wish to set by zone.

*1: Setting may not be acceptable depending on the type of indoor unit with which this unit is connected.

*2: In zone control, the units run in temperature adjustment mode (heating or cooling) for the outdoor system for the groups registered to those zones. Heating or cooling selection is not available.

*3: or or

Changing the ventilation mode cannot be done in the zone screen. Changing the ventilation mode should be done in the individual screen.

*4: In group control, the units run in temperature adjustment mode (heating or cooling) for the group outdoor system. Heating or cooling selection is not available.

• The Zone consists of the following two cases.

A. Zone without display “ ”

The group with master remote controller setting exists in this zone.

Setting the master remote controller enables cool/heat selection.

Operations other than cool/heat operations can also be set for some operations. For further details, see the list on the left.

B. Zone with display “ ”

No group with master remote controller setting exists in this zone.

The cool/heat selection is not available because the master remote controller has not been set.

Some operations other than cool/heat operations can be set. For further details, see the list in the left.

See page 20 if the display “ ” is flashing.

- Fan operation can be performed for each zone using the central remote controller even if there is no cooling/heating selection right during cooling or heating. Also, if a Ventiair is connected in the zone, ventilation and ventilation cleaning operation is possible. See the included operating manuals for details.
- When the indoor unit is in heat operation, change the setting to FAN operation through the central remote controller; then, you can switch the fan speed to the extremely low fan speed. Warm air may blow if any other indoor unit belonging to the same system is in heat operation.
- The indoor fan stops during defrost/hot start.
- DRY cannot be set from the central remote controller.

■ Group monitoring (Fig. 13)

Utilize the group monitor function in each of the following cases:

1. Check the malfunction code. (See the next page.)
2. Check the group that requires cleaning of the air filter and air cleaner element. (See page 21.)
3. Change the setting of the master remote controller. (See page 20.)
4. Check the group(s) sharing the same outdoor unit. Or, check the particular group(s) with the master remote controller setting. (See page 20.)
5. Check the conditions of other individual groups.

When in zone screen

The zone screen will revert to the individual screen automatically if nothing is done in it for one minute.

[Registration]

1. Press the “ALL/INDIVIDUAL” button to switch to the “INDIVIDUAL” screen.

2. Using the arrow key, move the “” to select the unit to be monitored.

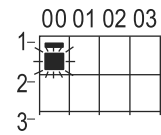
Keeping the button pressed down will move it rapidly.

The “” lights up and the status of that unit is displayed in the LCD. The cursor in the screen Fig. 13 has selected unit 2-06.

■ Error diagnosing function (Fig. 14)

This central remote controller is provided with a diagnosing function, for when an indoor unit stops due to malfunction. In case of actuation of a safety device, disconnection in transmission wiring for control or failure of some parts, the operation lamp, inspection display and unit No. start to flash; then, the malfunction

code is displayed. Check the contents of the display, and contact your DAIKIN dealer because the above signs can give you the idea on the trouble area.

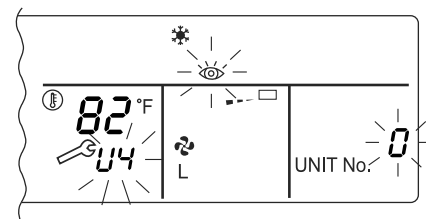


The display “” flashes under the group No. where the indoor unit that has stopped due to malfunction.

[Registration]

1. Press the ARROW KEY BUTTON to call up the group that has stopped due to malfunction.

The unit No. the malfunction code is flashing because of an error failure.



Operation lamp	Maintenance display	Unit No.	Malfunction code	Error content
	●		64	Indoor air thermistor error
	●		65	Outdoor air thermistor error
	●		68	HVU error (Ventiair dust-collecting unit)
	●		6A	Dumper system error
			6A	Dumper system error + Thermistor error
	●		6F	Simple remote controller error
	●		6H	Door switch (Ventiair dust-collecting unit), relay harness fault (Ventiair dust-collecting/humidifier unit)
			94	Ventiair internal transmission error (between total enthalpy – fan unit)
			A0	Indoor unit · external safety device error
			A1	Indoor unit · BEV unit (Sky-Air connection unit) PC board assembly fault
	●		A1	Indoor unit · PC board assembly fault
			A3	Indoor unit · Drain level error (33H)
			A6	Indoor unit · Fan motor (51F) lock, overload
	●		A7	Indoor unit · Fan direction adjustment motor (MA) error
			A9	Indoor unit · BEV unit, electric expansion valve motor (20E) error
	●		AF	Indoor unit · Malfunctioning drain
	●		AH	Indoor unit · Dust-collector error
			AJ	Indoor unit · Insufficient capacity setting, address setting fault

☼	☼	☼	C4	Indoor unit · Liquid piping thermistor (Th2) Error (faulty connection, cut wire, short circuit, fault)
☼	☼	☼	C5	Indoor unit · BEV unit, gas piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
☼	☼	☼	C9	Indoor unit · Intake air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
☼	☼	☼	CA	Indoor unit · Outlet air thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault)
☼	●	☼	CJ	Indoor unit · remote controller sensor error
☼	☼	☼	E0	Outdoor unit · Safety device operation
☼	☼	☼	E1	Outdoor unit · PC board assembly fault
☼	●	☼	E1	Outdoor unit · PC board assembly fault
☼	☼	☼	E3	Outdoor unit · High-pressure switch fault
☼	☼	☼	E4	Outdoor unit · Low-pressure switch fault
☼	☼	☼	E9	Outdoor unit · Electric expansion valve motor (20E) error
☼	●	☼	EC	Heat source unit · Intake water temperature inter-lock operation (fan operation)
☼	☼	☼	EF	Outdoor unit · Ice thermal storage unit error
☼	☼	☼	F3	Outdoor unit · Discharge piping temperature error
☼	●	☼	H3	Outdoor unit · High-pressure switch operation
☼	☼	☼	H4	Outdoor unit · Low-pressure switch operation
☼	☼	☼	H9	Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
☼	●	☼	H9	Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
☼	●	☼	HC	Outdoor unit · Water temperature sensor system error
☼	●	☼	HF	Ice thermal storage unit error, ice thermal storage controller error, error in outdoor unit during ice thermal storage operation
☼	☼	☼	HJ	Outdoor unit · water system fault
☼	☼	☼	J1	Outdoor unit · pressure sensor error
☼	☼	☼	J3	Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
☼	●	☼	J3	Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
☼	☼	☼	J5	Outdoor unit · Intake piping thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault)
☼	☼	☼	J6	Outdoor unit · Heat exchange thermistor (Th2) error
☼	●	☼	J6	Outdoor unit · Heat exchange thermistor (Th2) error Error (faulty connection, cut wire, short circuit, fault)
☼	☼	☼	J7	Outdoor unit · Header thermistor (Th6) error
☼	☼	☼	JA	Outdoor unit · Discharge piping pressure sensor error
☼	☼	☼	JC	Outdoor unit · Intake piping pressure sensor error
☼	☼	☼	JF	Outdoor unit · Oil temperature sensor (Th5) system error
☼	●	☼	JH	Outdoor unit · Oil temperature sensor (Th5) system error
☼	☼	☼	L0	Outdoor unit · Inverter system fault
☼	☼	☼	L4	Outdoor unit · Inverter cooler fault
☼	☼	☼	L5	Outdoor unit · Ground circuit for compressor motor, short circuit, or power unit short circuit

☼	☼	☼	L6	Outdoor unit · Ground circuit for compressor motor, short circuit
☼	☼	☼	L8	Outdoor unit · Compressor overload, compressor motor wire disconnection
☼	☼	☼	L9	Outdoor unit · Compressor lock
☼	☼	☼	LA	Outdoor unit · Power unit error
☼	☼	☼	LC	Outdoor unit · Transmission error between inverter and outdoor control unit
☼ or ●	☼	☼	M1	Central controller: PC board fault
☼ or ●	☼	☼	M8	Transmission error between central controllers
☼ or ●	☼	☼	MA	Central controller: Incorrect combination
☼ or ●	☼	☼	MC	Central controller: Address setting fault
☼	●	☼	P0	Insufficient gas (thermal storage)
☼	☼	☼	P1	Outdoor unit · Power voltage imbalance, phase loss
☼	☼	☼	P4	Outdoor unit · Power unit temperature sensor error
☼	●	☼	U0	Pressure drop due to insufficient refrigerant, electric expansion valve fault, etc.
☼	☼	☼	U1	Reversed or lost phase
☼	☼	☼	U2	Power voltage error, momentary electrical stoppage
☼	☼	☼	U4	Transmission error between indoor unit/BEV unit and outdoor/BS unit, Transmission error between outdoor unit and BS unit
☼	☼	☼	U5	Transmission error between remote controller and indoor control unit
●	☼	●	U5	Remote controller board fault or remote controller setting fault
☼	☼	☼	U6	Transmission error between indoor units
☼	☼	☼	U7	Transmission error between outdoor units Transmission error between outdoor unit and ice thermal storage unit
☼	●	☼	U7	Transmission error between outdoor units (cooling/heating batch, low-noise operation)
☼	☼	●	U8	Transmission error between master remote controller and slave remote controller (slave remote controller error) Incorrect combination of indoor unit and remote controller within a single system (model)
☼	☼	☼	U9	Transmission error between indoor unit/BEV unit and outdoor unit within a single system Transmission error between BS unit and indoor unit/BEV unit and outdoor unit within a single system
☼	☼	☼	UA	Incorrect combination of indoor, BS, and outdoor units within a single system (model, number of units, etc.) Incorrect combination of indoor unit and remote controller (remote controller in question) BS unit connection position fault
☼	●	☼	UC	Central control group numbers overlap
☼	☼	☼	UE	Transmission error between indoor unit and central controller
☼	☼	☼	UF	Unset system, incorrect settings between BEV unit and indoor unit
☼	☼	☼	UH	System fault

■ error codes (in outline font) do not display “maintenance” and the system will run, but please check the content of the display and contact your dealer.

■ Setting master remote controller (Fig. 15)

You must set the master remote controller of the operation mode for one of the indoor units, if two or more such indoor units with the remote controller are connected with the outdoor unit where the operation modes such as cool/heat operation and FAN operation can be set by remote controller and central remote controller.

1. Preparations

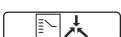
When you want to fix settings

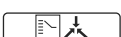
- Check the particular group with the master remote controller setting for the refrigerant system you wish to reset. (See the below.)

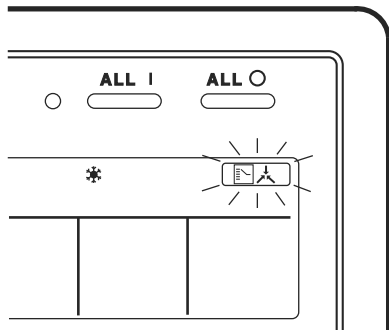
- Call up the group without the display

“” (See page 16.)

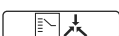
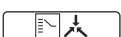
➡ Hold the OPERATION MODE SELECTOR BUTTON down for about four seconds while the above group is being called up.

The display “” flashes on the liquid crystal display of the remote controller for all the groups sharing the same outdoor unit or BS unit.

When you turn on the power switch for the first time, the display “” flashes.



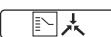
2. Setting selection right

Pull up the desired group to set the master remote controller, and ➡ press the OPERATION MODE SELECTOR BUTTON. The master remote controller is set for this group, and the display “” goes out. The display “” appears for the other groups. Setting is finished now.

When switching operation

- In case of operation switch

Call up the zone including the group with the setting of master remote controller.

(Zone without the display “”)

➡ Press the OPERATION MODE SELECTOR BUTTON several times, and switch to the desired operation mode.

Each time you press it, the display is switched to “” “” “” and “--” in sequence.

NOTE

- However, the displays “” “” and “VENTILATION MODE” may appear in some zones, depending on the type on indoor unit with which they are connected.

(VENTILATION MODE)



[System Display]

1. Test run mode is necessary to display the system display.
2. In order to turn on test run mode, select the appropriate air conditioner on the individual screen with the cursor and then set its operation mode to either cooling or heating. (It makes no difference if the air conditioner is running or not running while this operator is being performed.)
3. Press the “inspection/test run” button twice to put it into test run mode.
4. Pressing the “inspection/test run” button for four or more seconds in test run mode will display ➡ the “REF CIRCUIT.”

REF

CIRCUIT

1

1-03

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

1

2

3

4

1	■			■	■	■											
2			■	■													
3																	
4																	

Call the unit whose system you wish to look up using the arrow keys.

The “” on all groups in the same system as the displayed group will light up.

Of those, the “” display in all groups which have cooling/heating selection privilege will blink.

	00	01	02	03	04	05	06	07	0
1-									
2-									
3-									

In this example, individual units 1-00, 1-03, 1-05, 1-06, 1-07, 2-02, and 2-03 are in the same system, and 1-05 has the cooling/heating selection privilege.

To look up other systems, call up all the units you wish to look up using the arrow keys.

Pressing the inspection/test run button one more time gets rid of the system display and ends it.

The unit will enter the individual screen automatically if nothing is done for one minute in the system display screen.

This function may not be available for all connected outdoor units, in which case “REF CIRCUIT” will blink. It will also not be correctly displayed if DIII-NET extension ADP is used.

■ Display of time to clean (Fig. 16)

This central remote controller displays the time to clean the air filter or air cleaner element for each group or any given group by utilizing two types of signs. The display “” tells the time to clean the air filter or the air cleaner element of some group.

If a cleaning sign is displayed

A filter or element in some group is ready to be cleaned.

1.  Press the **ARROW KEY BUTTON**, and search the groups displaying “” or “” (The group may be plural.)

Clean or change the air filter or air cleaner element.

For further details, see the operation manual attached to each indoor unit. (Clean or change the air filter or air cleaner element of all the groups displaying “” or “”.)

2.  Press the **FILTER SIGN RESET BUTTON**, and the display “” disappears. (Including all the groups where the air filter has been cleaned.)

NOTE

Be sure to check the display “” “” has disappeared at this point. The appearance of the above display is a sign that the air filter or air cleaner element of some group still needs cleaning.

INSTALLATION TABLE

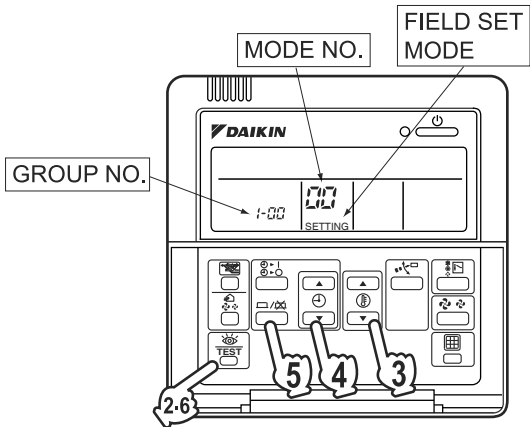
When installing the equipment, mark the zone No. of each group and installation location in the below table.

Setting group No.

(Setting is not possible unless power is activated to both the central remote controller and indoor unit.)

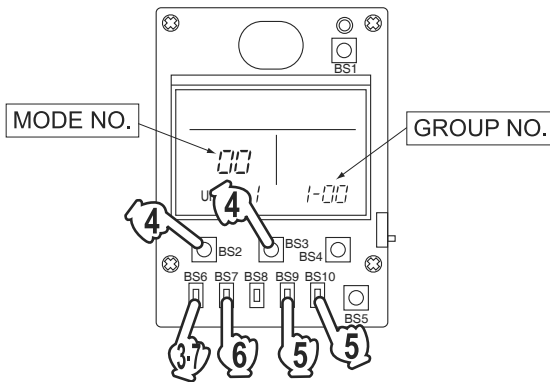
Operated by remote controller

- 1. Activate power to both the central remote controller and indoor unit.
- 2. While in the normal mode, hold down the “ ” button for a minimum of 4 seconds. The unified ON/OFF controller will enter the FIELD SET MODE.
- 3. Select the MODE No. “ ” with the “ ” button.
- 4. Use the “ ” button to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
- 5. Press “ ” to set the selected group No.
- 6. Press “ ” to return to the NORMAL MODE.



Operated by simplified remote controller

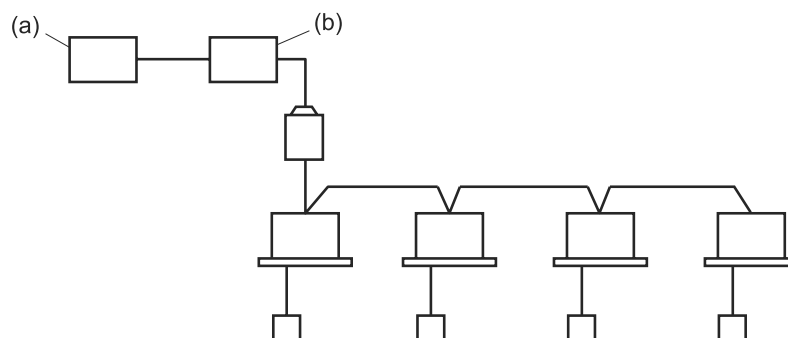
- 1. Activate power to both the central remote controller and indoor unit.
- 2. Remove the upper part of the remote controller.
- 3. Press the [BS6] BUTTON (field set) on the PC board. The controller will enter the FIELD SET MODE.
- 4. Select the MODE No. “ ” with the [BS2] BUTTON and [BS3] BUTTON (temperature setting).
- 5. Use the [BS9] BUTTON (set A) and [BS10] BUTTON (set B) to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
- 6. Press [BS7] BUTTON (set/cancel) to set the selected group No.
- 7. Press [BS6] BUTTON (field set) to return to the NORMAL MODE.



Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																
Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																

Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																
Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																

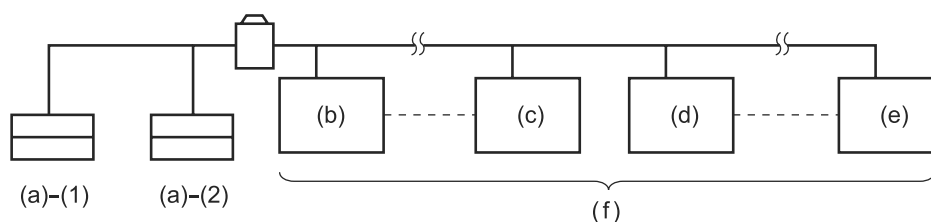
OPTIONAL ACCESSORIES



You can perform the normal operation, take off the malfunction contact point and unified start/stop by contact point, all by connecting this unit with the unification adaptor for computerized control. For further details, ask your DAIKIN dealer.

(a) Unification adaptor for computerized control (b) Central remote controller

DOUBLE CENTRAL REMOTE CONTROLLERS



With two central remote controllers, centralized control (indoor units) is possible from different locations.

(a) Central remote controller (b) Group No. 1 - 00 (c) Group No. 1 - 15 (d) Group No. 2 - 00
(e) Group No. 4 - 15 (f) A maximum of 64 groups

Note)

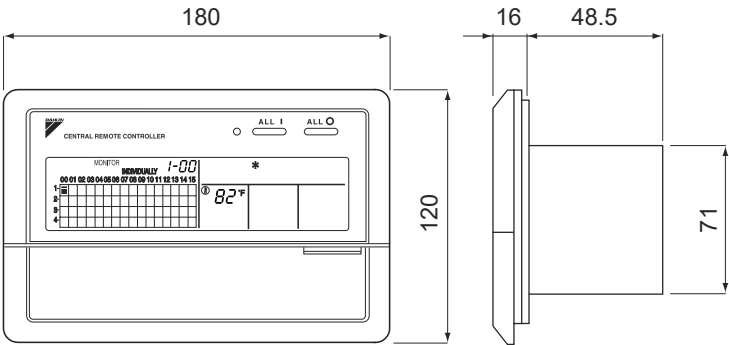
- For control alignment and settings for double central remote controllers, contact your dealer.

SPECIFICATIONS

■ Specifications

Power supply	1 ~ 50/60Hz, 100V – 240V
Power consumption	Max. 8W
Forced ON/OFF input	Continuous “a” contact Contact current: approximately 10mA
Size	180 (W) × 120 (H) × 64.5 (D)
Weight	420g

■ Outline drawings



When using this unit an electric parts box of KJB311A is required.
For installation, a steel electric parts box to be embedded is mandatory.

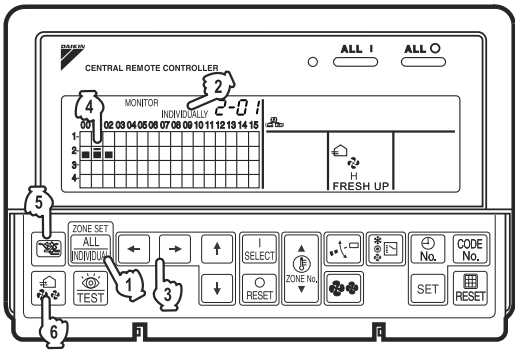


Fig. 9

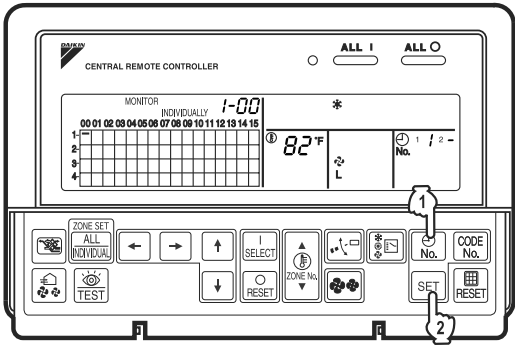


Fig. 10

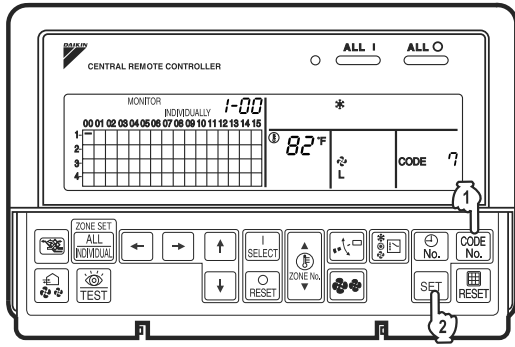


Fig. 11

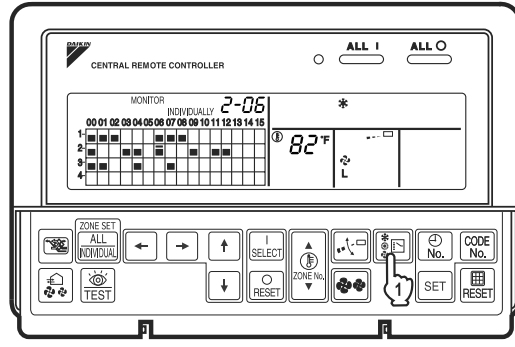
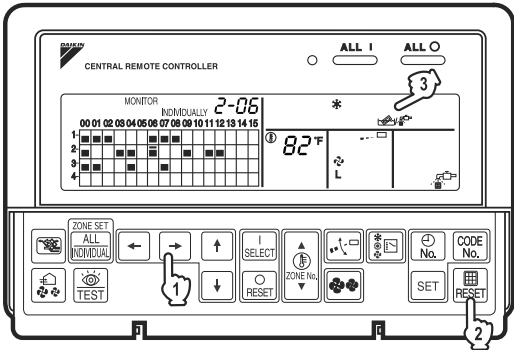
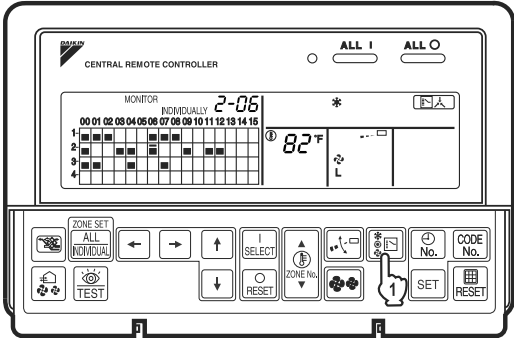
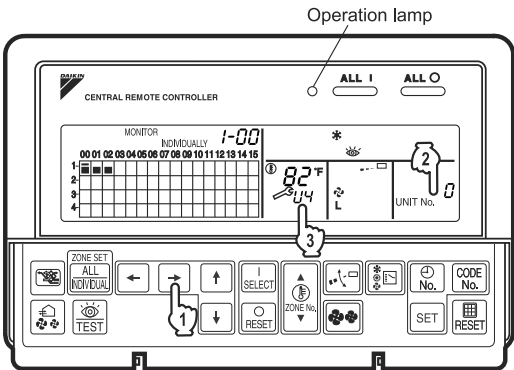
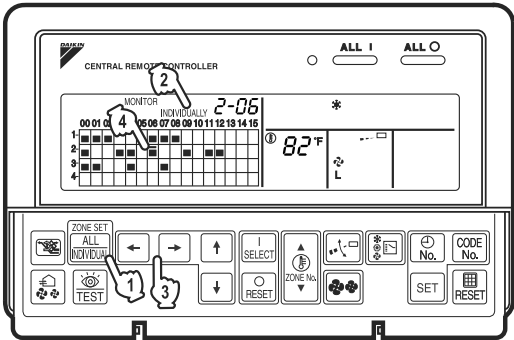


Fig. 12



13.6 <DST301BA61> Schedule Timer Controller (Installation)

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained. Also, inform customers that they should store this installation manual along with the operation manual for future reference. This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

-  **WARNING**Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
-  **CAUTION**Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
-  **NOTE**Indication situation that may result in equipment or property-damage-only accidents.

WARNING

Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.
Improper installation may result in water leakage, electric shocks or fire.

Perform installation work in accordance with this installation manual.
Improper installation may result in water leakage, electric shocks or fire.

Be sure to use only the specified accessories and parts for installation work.
Failure to use the specified parts may result in water leakage, electric shocks, fire or the unit falling.

Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.
Improper installation work may result in the equipment falling and causing accidents.

Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.
Improper connections or installation may result in fire.

When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.
Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

Before touching electrical parts, turn off the unit.

Ground the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.
Incomplete grounding may result in electric shocks.

When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air.

Do not reconstruct or change the settings of the protection devices.
If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

Do not touch the switch with wet fingers.
Touching a switch with wet fingers can cause electric shock.

Install an earth leak circuit breaker, as required.
If an earth leak circuit breaker is not installed, electric shock may result.

Do not install the air conditioner or the remote controller in the following locations:

- (a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen
Plastic parts may deteriorate and fall off or result in water leakage.
- (b) where corrosive gas, such as sulfurous acid gas, is produced
Corroding copper pipes or soldered parts may result in refrigerant leakage.
- (c) near machinery emitting electromagnetic waves
Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
- (d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.

CISPR 22 Class A Warning.

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

 CAUTION

Be very careful about product transportation.

Safely dispose of the packing materials.

Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.

Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

Do not turn off the power immediately after stopping operation.

Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

 NOTE

Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.

(Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

Remote controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps. (inverter or rapid start types)

Install the indoor unit as far away from fluorescent lamps as possible.

This unit is a class A product.

In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.

1 ACCESSORIES

Check the following accessories are included in the kit before installation.

Body	1	Installation screws (M4 × 16)	2
Operation manual	1	Attached electric wire (for individual use)	1
Installation manual*	4	Crimp style terminal (for individual use)	2

For Installation, a electrical box to be embedded is necessary (part to be procured in the field/with covers).

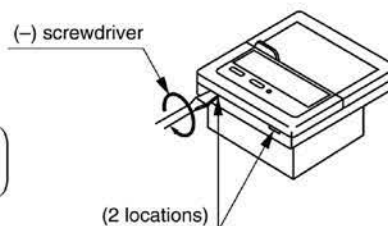
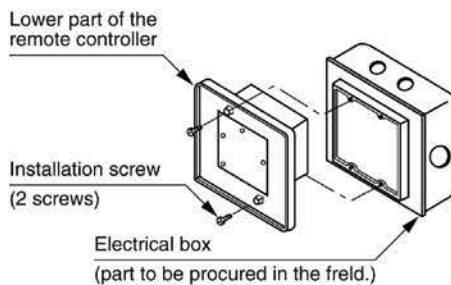
* DST301BA61 includes only one installation manual.

2 INSTALLATION AND INITIAL SETTING

1. Remove the upper part of the remote controller.

- Insert a (–) screwdriver (2 locations) into the recess between the upper part and the lower part of the remote controller and twist the screwdriver lightly.

(The PC board is attached with the upper part of the remote controller. Do not damage electric parts with a screwdriver, etc.)



- Attach the lower part to the electrical box (part to be procured in the field) with the provided installation screws.

(Select a flat face as a installation place. Do not tighten the installation screws excessively not to damage the lower part of the remote controller.)

For part to be procured in the field electrical box, use KJB212AA (optional accessory).

2. Initial setting

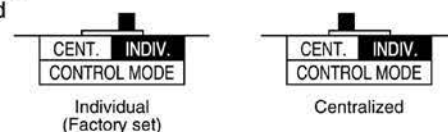
- Setting connector for individual use (X1A) (Factory set : OFF) (Set for individual use only)

- For individual use of schedule timer
Insert the connector attached with the body case on the PC board.
- For combined use with other optional controllers for centralized control
Do not change the factory setting.

- Control mode selector (SS2) (Set for individual use only)

By changing the switch, setting mode of individual and centralized operation is available.

Note) When used with other optional controllers, control mode of central remote controller and unified ON/OFF controller have the priority.

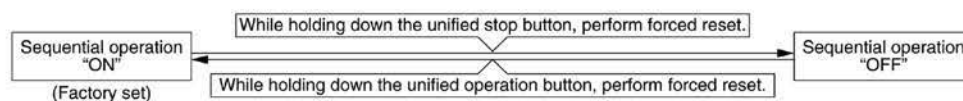


- Setting of the sequential operation function

The schedule timer is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation.

(Sequential operation is factory set to "ON.")

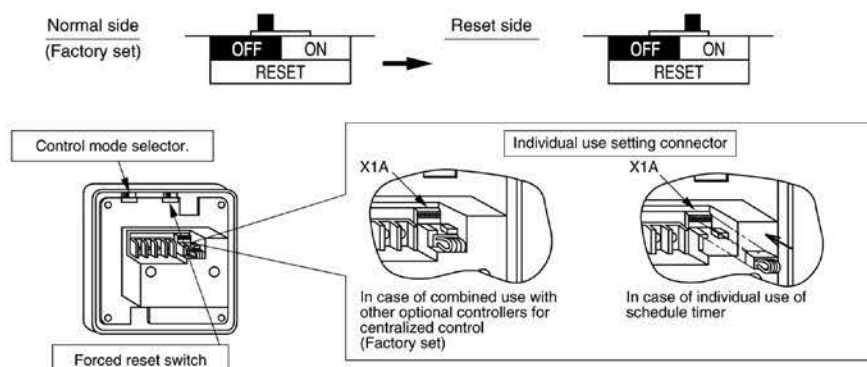
To switch sequential operation ON or OFF, set as follows.



Note) The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

④ Forced reset switch (SS1)

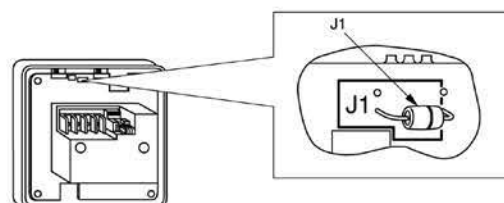
When changing the setting of the connector for individual use, etc., the switch can be reset simply by setting it to the reset side once and returning to the normal side. This procedure enables to reset without turning off the power. (Set the normal side at normal operation.)



⑤ Setting for special function

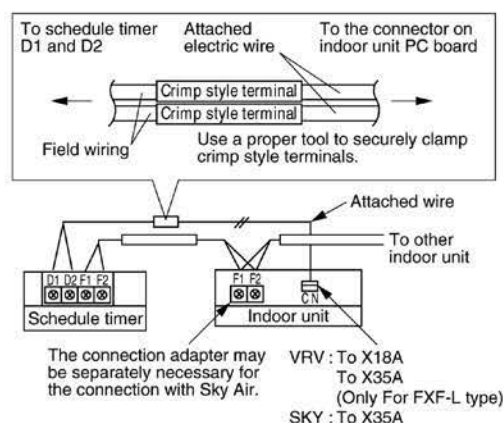
When you want to have a programmed operation of a part of indoor units by using only schedule timer, cut off JP1 and supply the power again.

You can have a programmed operation of the indoor units set the address for central control by local remote controller.



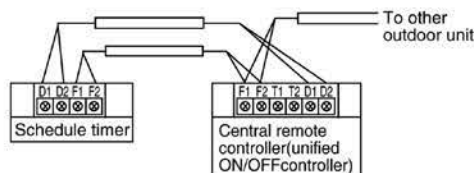
3. Transmission wiring

- In case of individual use of schedule timer**
Connect terminals of the schedule timer (F1, F2) with terminals of the indoor unit (F1, F2). Connect terminals of the schedule timer (D1, D2) and the connector on the indoor unit PC board, using the attached electric wire and crimp style terminals. Prevent the connection part of crimp style terminal from getting out of the electric parts box of indoor unit.
- In case of combined use with other optional controllers for centralized control**
Connect terminals of the schedule timer (F1, F2, D1, D2) and the terminals of the central remote controller (or unified ON/OFF controller).



Wiring specifications

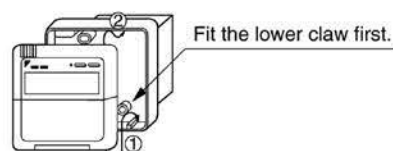
	F1, F2	D1, D2
Wiring	Sheathed wire (2-wire)	Sheathed wire (2-wire)
Gauge	0.75 ~ 1.25mm ²	0.75 ~ 1.25mm ²
Length	Max. 1000m	Max. 150m



NOTES:

- Electrical box and transmission wiring are not attached.
- Do not touch the PC board with your hand.
- Keep transmission wiring at least 50 mm away from power supply wiring to avoid malfunctions.

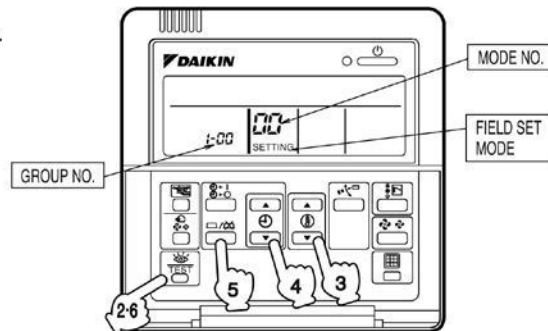
4. Install the upper part of the remote controller as before.



3 SETTING GROUP NO. FOR CENTRALIZED CONTROL

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

- (1) Turn ON the power of the indoor unit and SCHEDULE TIMER.
(Unless the power is ON, no setting can be made.)
Check that the installation and electrical wiring are correct before turning the power supply ON.
(When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of "88".)
- (2) While in the normal mode, hold down the " " button for a minimum of 4 seconds.
The remote controller will enter the FIELD SET MODE.
- (3) Select the MODE No. " " with the " " button.
- (4) Use the " " button to select the group No. for each group.
(Group numbers increase in the order of 1-00, 1-01, ... 1-15, 2-00, ... 8-15.)
- (5) Press " " to set the selected group No.
- (6) Press " " to return to the NORMAL MODE.



- NOTES)
- In case of individual use of schedule timer
Group number setting is not necessary. It is automatically set when turning power supply ON.
 - See the instruction manuals which came with the VentiAir and adapters (i.e., multi-purpose adapters) for details on their Group No. settings.

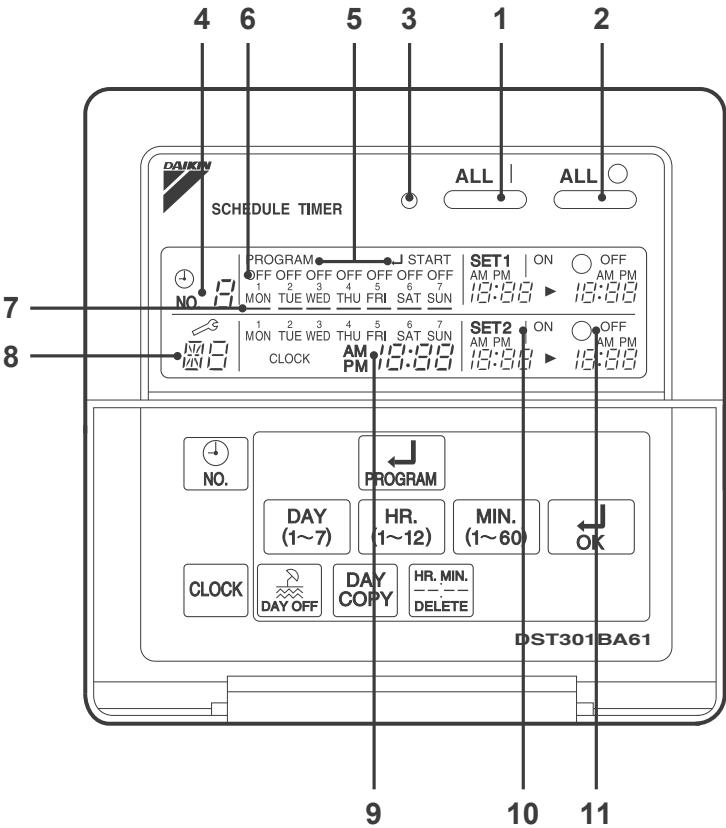
NOTICE Be sure to keep the operation manual for maintenance.

4 TEST OPERATION

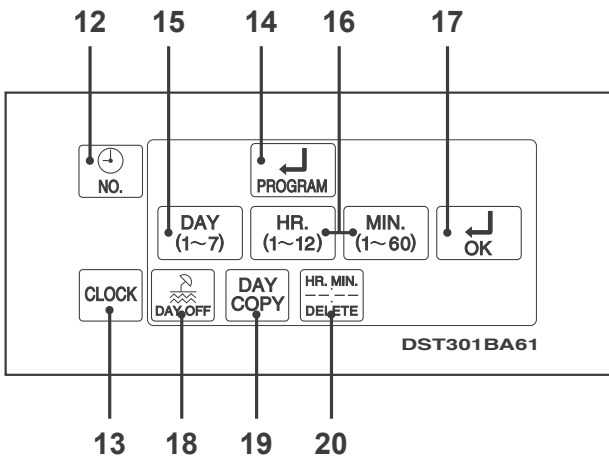
Refer to the installation manual attached to the outdoor unit.

In case the schedule timer is used individually and the wiring is changed after the system has been operated, reset the power after energizing for more than five minutes.
It may not be possible to control the unit from the schedule timer.

13.7 <DST301BA61> Schedule Timer Controller (Operation)

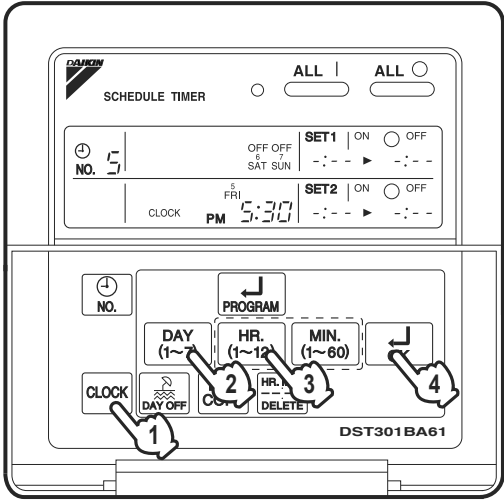


1

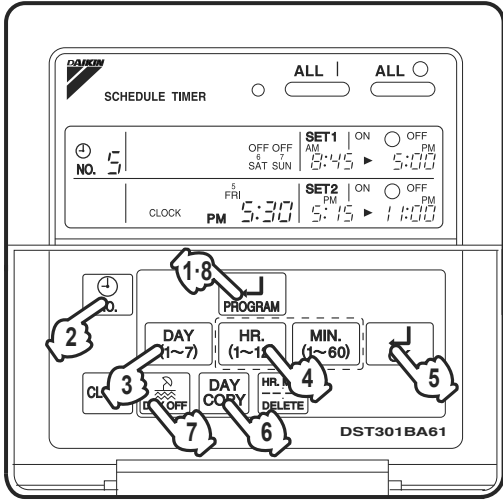


2

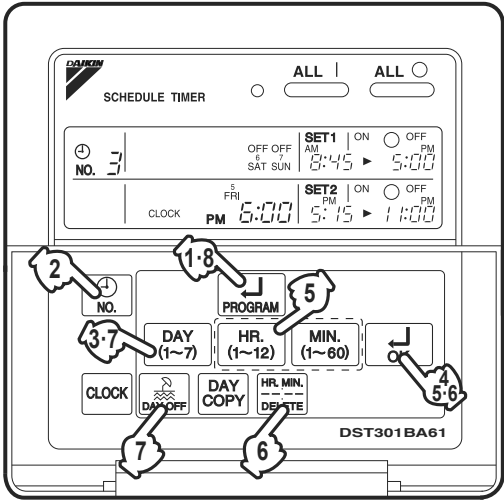
[1]



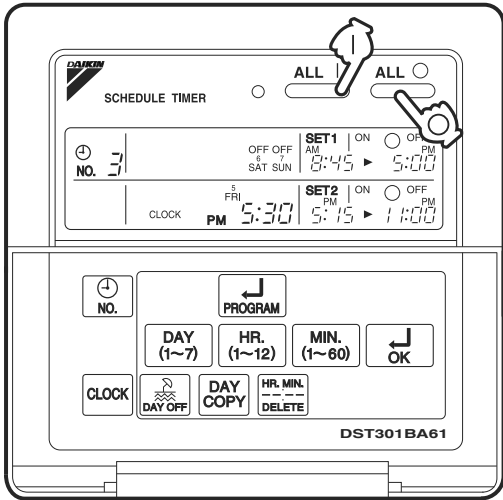
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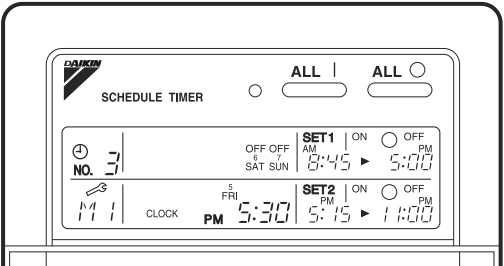
4



5



6



7

[2]

SAFETY CONSIDERATIONS

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.

Please instruct the customer on how to operate the unit and keep it maintained.

Also, inform customers that they should store this installation manual along with the operation manual for future reference.

This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

 **NOTE** Indicates situation that may result in equipment or property-damage-only accidents.

Keep these warning sheets handy so that you can refer to them if needed.

Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

WARNING

In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.

Ask your dealer for installation of the air conditioner.

Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.

Ask your dealer for improvement, repair, and maintenance.

Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.

Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.

Ask your dealer to move and reinstall the air conditioner or the remote controller.

Incomplete installation may result in a water leakage, electric shock, and fire.

Never let the indoor unit or the remote controller get wet.

It may cause an electric shock or a fire.

Never use flammable spray such as hair spray, lacquer or paint near the unit.

It may cause a fire.

Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.

Use of wire or copper wire may cause the unit to break down or cause a fire.

Never inspect or service the unit by yourself.

Ask a qualified service person to perform this work.

Cut off all electric waves before maintenance.

Do not wash the air conditioner or the remote controller with excessive water.

Electric shock or fire may result.

Do not install the air conditioner or the remote controller at any place where flammable gas may leak out.

If the gas leaks out and stays around the air conditioner, a fire may break out.

Do not touch the switch with wet fingers.

Touching a switch with wet fingers can cause electric shock.

CISPR 22 Class A Warning:

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

— CAUTION —

After a long use, check the unit stand and fitting for damage.

If they are left in a damaged condition, the unit may fall and result in injury.

Do not allow a child to mount on the unit or avoid placing any object on it.

Falling or tumbling may result in injury.

Do not let children play on and around the unit.

If they touch the unit carelessly, it may result in injury.

Do not place a flower vase and anything containing water.

Water may enter the unit, causing an electric shock or fire.

Never touch the internal parts of the controller.

Do not remove the front panel. Some parts inside are dangerous to touch, and a machine trouble may happen.

For checking and adjusting the internal parts, contact your dealer.

Avoid placing the controller in a spot splashed with water.

Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

Do not operate the air conditioner when using a room fumigation - type insecticide.

Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.

Safely dispose of the packing materials.

Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.

Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

Do not turn off the power immediately after stopping operation.

Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

The appliance is not intended for use by young children or infirm persons without supervision.

The remote controller should be installed in such away that children cannot play with it.

— NOTE —

Never press the button of the remote controller with a hard, pointed object.

The remote controller may be damaged.

Never pull or twist the electric wire of the remote controller.

It may cause the unit to malfunction.

Do not place the controller exposed to direct sunlight.

The LCD display may get discolored, failing to display the data.

Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.

The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.

Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.

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FEATURES AND FUNCTIONS

■ **Operation controlled by programmed time**
Operating time and stopping time can be set to the minute by each day of the week. The operating and stopping patterns can also be set in schedule according to the time slot given twice a day in tune with the uses.



See page
5—9.

■ **Unified Operation/Stop**
By using this schedule timer, the unified operation/stop of the indoor unit can be executed manually regardless of the No. of programmed time in operation.



See page
9.

• **When used in conjunction with central remote controller (Optional Accessory)**
The operation controlled by programmed time can be set for up to eight different patterns (timer No. 1 – 8). Each schedule pattern can be also selected.

NAMES AND FUNCTIONS OF OPERATING SECTION (Fig. 1, 2)

1	UNIFIED OPERATION BUT- TON “ ALL ”
	Press this button to perform the unified operation regardless of the No. of programmed time.
2	UNIFIED STOP BUTTON “ ALL ○ ”
	Press this button to perform the unified stop regardless of the No. of programmed time.
3	OPERATION LAMP (RED) The light turns on during the operation of the indoor unit.
4	DISPLAY “ ⌚ NO. ” (TIME NO.) Displays the time No. only when used in conjunction with the central remote controller.
5	DISPLAY “PROGRAM ↵ START.” (PROGRAMMING START) The light turns on when the timer is programmed.
6	DISPLAY “ OFF ” (HOLIDAY SETTING) Lights above the day of the week set as holiday. The operation controlled by timer is not available on that day.
7	DISPLAY “ — ” (SETTING OF DAYS OF A WEEK) Flashes below the day of the week programmed.
8	DISPLAY “ ⚠ ” (MALFUNCTION CODE) Displays the contents of malfunction during the stop due to malfunction.
9	DISPLAY “ M O N T U E S D A Y F R I S A T S U N ” (PRESENT TIME) CLOCK AM PM 12:00
	Displays the present day of the week and time.
10	DISPLAY “ AM PM ON ” (PROGRAMMED TIME OF SYSTEM START) 12:00
	Displays the time programmed to start.
11	DISPLAY “ OFF AM PM ” (PROGRAMMED TIME OF SYSTEM OFF) 12:00
	Displays the time programmed to stop.
12	TIME NO. BUTTON “ ⌚ NO. ”
	See page 5–9.
13	CLOCK ADJUSTING BUTTON “ CLOCK ”
	Press this button to set the present time.
14	PROGRAMMING START BUTTON “ ↵ PROGRAM ”
	Press this button to set or check the No. of programmed time. Press it again after you are through with the program.
15	BUTTON FOR SELECTING DAYS OF A WEEK “ DAY (1~7) ”
	Press this button to select the day of the week.
16	HOUR/MINUTE BUTTON “ HR. (1~12) MIN. (1~60) ”
	Press this button to adjust the present time and the programmed time.

17	TIMER ON BUTTON “  ”
	Press this button to set the present time and the programmed time.
18	HOLIDAY SETTING BUTTON “  ”
	Press this button to set holidays.
19	BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY “  ”
	Use this button to set the No. of programmed time same as that of the previous day.
20	PROGRAM CANCELING BUTTON “  ”
	Use this button to set the programmed time to cancel. The display shows “-;--”.
(Note) 1. Please note that all the displays in the figure appear for explanation purpose or when the cover is open.	

OPERATION

■ Setting present time (Fig. 3)

(Example) In case of setting Friday, 5:30 p.m.

1.  Press the **CLOCK ADJUSTING BUTTON**. The present time display flashes.

(NOTE)

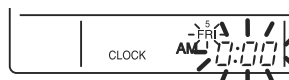
- The present time needs adjusting in case of turning power supply on for the first time or the occurrence of power failure over the period of 48 hours or more.



2.  Press the **BUTTON FOR SELECTING DAYS OF A WEEK**. Each time the button is pressed, the day display shifts to the right.

(NOTE)

- The display “ MON ” follows the display “ SUN. ”

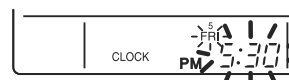


Set the day to Friday.

3.  Set the time with the **HOURLY/MINUTE BUTTON**. Each time the **HOURLY/MINUTE BUTTON** is pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.

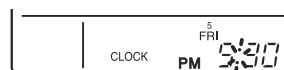
(NOTES)

- After becoming “ AM 11:00 ”, when the button is pressed, the display becomes “ PM 0:00 ”.
- After becoming “ 59 ” (minute), when the button is pressed, the display becomes “ 00 ” (minute).



Set the time to 5:30 p.m.

4.  Press the **TIMER ON BUTTON** the moment the time signal of TV, radio, telephone, etc. is heard. The mark “ : ” flashes, and the clock starts.



Press the **TIMER ON BUTTON** in tune with the time signal at 5:30 p.m.

(NOTES)

- The clock used is of 12-hour type.
- When you turn power supply on, the system may display “ 88 ” for about one minute and not start to operate after all the liquid crystal displays appear at a time.
- If the **CLOCK ADJUSTING BUTTON** is pressed by mistake, press it again to return to the original state. As the clock does not stop, the time indicated by the clock is kept correct. In case of power failure within 48 hours, the clock keeps operating by utilizing the built-in battery.

■ Setting no. of programmed time (Fig. 4)

(Example) Time No. 5 (to be programmed only when used in conjunction with the central remote controller)

Monday to Friday:

Operating from 8:45 a.m. till 5:00 p.m.

Operating from 5:15 p.m. till 11:00 p.m.

Saturday and Sunday:

Setting the whole day stop operation (application for holidays) controlled by programmed time.

1. Press the PROGRAMMING START BUTTON. Programming is available. The display "PROGRAM" and "START" appears, and the display of days of a week flashes.

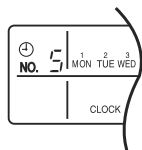


2. Press the TIME No. BUTTON, and select the desired number.

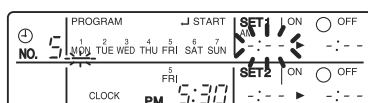
(NOTE)

- Unless used in conjunction with the central remote controller, The TIME No. is not displayed and can not be selected.

Select the TIME No. 5.



3. Press the BUTTON FOR SELECTING DAYS OF A WEEK, and set the proper day of the week. Each time you press it, the flashing display of days of a week shifts to the right.



Set to Monday.

(1) Setting programmed time

4. Set the programmed time of system start 1 by using the HOUR/MINUTE BUTTON. Each time the HOUR/MINUTE BUTTON is pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.



Set the "PROGRAMMED TIME OF SYSTEM START 1" at 8:45 a.m.

5. Press the TIMER ON BUTTON, and set the programmed time of system start 1. Each time you press it, the next area to be set flashes.

(NOTE)

- Set the other programmed time in the same procedure.



(2) Set the next day of the week.

Set the day of the week to Tuesday, and copy the program of the previous day (Monday). In the same procedure, set the day of the week to Wednesday through Friday in sequence.

6.  **Press the BUTTON FOR SELECTING DAYS OF A WEEK and set the following day. Press the BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY. The same program as that of the immediately preceding day of the week is set.**

(NOTE)

- Repeat each procedure 3 – 5 in the above when not copying the contents of the previous day.

(3) Holiday setting

7.  **Press the BUTTON FOR SELECTING DAYS OF A WEEK and set one or more days of the week as holiday. Press the HOLIDAY SETTING BUTTON, and the display “OFF” is displayed at the top of the day of the week. If you press it again, the display returns to the original state.**



Set Saturday and Sunday as holidays.

8.  **Press the PROGRAMMING START BUTTON, and finish the program setting.**

(NOTES)

- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents up to the point where the TIMER ON BUTTON (or HOLIDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY) is pressed will only take effect.
- The display “PROGRAM ↵ START” and the display of days of a week “—” disappears.

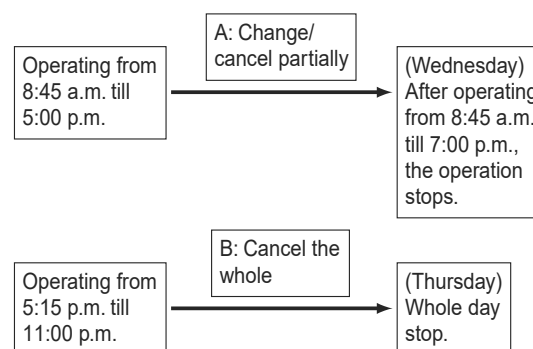
- The flashing display goes off, and the No. of programmed time of the present day is displayed. Then the operation controlled by timer starts.
- The operation controlled by timer is executed even while the program is being set.



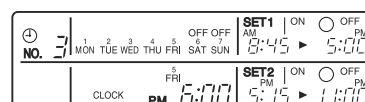
This is the end of the setting example.

■ Change and cancellation of no. of programmed time (Fig. 5)

(Example) Time No. 3 (to be set only when used in conjunction with the central remote controller)



-  **Press the PROGRAMMING START BUTTON. The program setting is ready. The display “PROGRAM ↵ START” appears, and the display of days of a week flashes.**
-  **Press the TIME No. BUTTON, and select the desired No.**



Select the time No. 3.

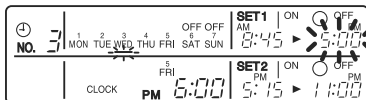
3.  Press the **BUTTON FOR SELECTING DAYS OF A WEEK**, and set the day of the week to be changed. The set No. of programmed time of the day of the week is displayed.



Set the day to Wednesday.

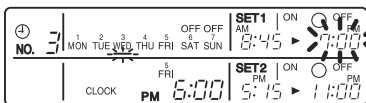
A. Change/cancel partially

4.  Press the **TIMER ON BUTTON** and change, and the display of programmed time flashes. Each time you press it, the next area to be set flashes.



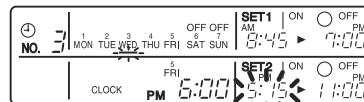
Shift to the display "PROGRAMMED TIME OF SYSTEM OFF 1".

5.  Press the **HOUR/MINUTE BUTTON** and change the programmed time. Press the **TIMER ON BUTTON**, and finalize the setting of change.



Change the "PROGRAMMED TIME OF SYSTEM OFF 1" to 7:00 p.m.

6.  Press the **PROGRAM CANCELING BUTTON**, and cancel the programmed time. If you press it again, display returns to the original state. Press the **TIMER ON BUTTON** to finalize the cancellation.



Shift to the "PROGRAMMED TIME OF SYSTEM START 2".



Set the "PROGRAMMED TIME OF SYSTEM START 2" to program cancellation.

In the same procedure, cancel the programmed time of system off 2.

B. Cancel the whole

7.  Press the **BUTTON FOR SELECTING DAYS OF A WEEK**, and shift to the day of the week to be canceled. Then, press the **HOLIDAY SETTING BUTTON**, the display "OFF" appears at the top of the particular day of the week. The programmed time is canceled. If you press the button again, the display returns to the original state.



Shift the day of the week to Thursday to set as a holiday.

8. **Press the PROGRAMMING START BUTTON. The program setting is now finished.**

(NOTES)

- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents to the point where the TIMER ON BUTTON (or HOLIDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY) is pressed will only take effect.
- To continue the change/cancellation, do not press the PROGRAMMING START BUTTON until all change/cancellation are completed.
- The operation controlled by timer is executed even while the program is being set.

■ Manual operation (Fig. 6)

This schedule timer enables the operation/stop by pressing the UNIFIED OPERATION/STOP BUTTON in addition to the operation controlled by timer (operation/stop according to the programmed time) at any time.

1.  **Press the UNIFIED OPERATION BUTTON, and the OPERATION LAMP turns on.**
2.  **Press the UNIFIED STOP BUTTON, and the OPERATION LAMP is turned off.**

(NOTES)

- The operation automatically stops according to the programmed time of system off even during the manual operation. In the meantime, the operation starts automatically according to the programmed time of system start even during the stop of operation.
- If the unit is used in conjunction with other optional controllers for centralized control, the OPERATION LAMP of the unit that is not under operation control may be turned on or off a few minutes behind schedule. This shows that the signal is being exchanged, and does not indicate any failure.

Operation lamp

- Turn on: The light turns on when any of the indoor units is in operation whether the operation is controlled by timer or by hand.
- Turn off: The light turns off when all the indoor units stop.

■ Operation control code

Two different types of operation control codes can be selected when this kit is used independently (when not used in conjunction with the central remote controller, unified ON/OFF controller, etc.).

Individual

In case where the operation/stop is controlled by both schedule timer and remote controller.

Centralized

The operation is controlled by the schedule timer alone, and the operation/stop is controlled freely with the remote controller during the programmed time.

(NOTES)

- For current settings, contact your DAIKIN dealer.
- To change settings, contact your DAIKIN dealer.
Do not change settings yourself.

■ Error diagnosing function (Fig. 7)

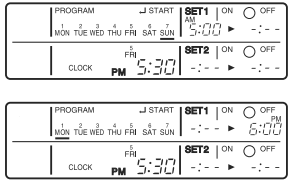
This schedule timer is provided with the malfunction diagnosing function. The malfunction code flashes if there occurs any malfunction in communication, etc. between and among the optional controllers for centralized control. In addition, the operation lamp also flashes if there occurs any malfunction in communication with the indoor unit. Check the contents of the display and contact your DAIKIN dealer because the signals give you the idea of the trouble area.

Operation lamp	Malfunction code	Contents of malfunction
Turn off	M1	Failure of PC board of schedule timer. Fixes The following causes are possible. Check each one. 1. PC board problems
Turn on or off	M8	Malfunction of transmission between each optional controllers for centralized control. Fixes Check all central devices which are connected (e.g., power supply, transmission wiring, etc.).
Turn on or off	MA	Improper combination of optional controllers for centralized control. Fixes The following causes are possible. Check each one. 1. Are all central devices combined correctly? 2. Is the master central connector attached to two or more central devices? 3. Are there 128 or more indoor units connected?

Turn on or off	MC	Address failure of schedule timer. Fixes The following causes are possible. Check each one. 1. Do the control range addresses in the central remote controller overlap? 2. Do the control range addresses in the on/off controller overlap? 3. Are there 2 or more schedule timers connected?
Flash	UE	Malfunction of transmission between indoor unit and optional controllers for centralized control. Fixes Inspect all indoor units which are displaying an error (e.g., power supply, transmission wiring, etc.).
Flash	—	Malfunction in indoor unit (Refer to the malfunction codes of the indoor remote controller, while also read the "CAUTION FOR SERVICING" attached to the indoor unit.)

QUESTION AND ANSWER

Question	Answer
It is possible to make settings twice a day, but is it possible to make only the "off" setting? (To avoid forgetting to turn the unit off.)	Yes. Press the PROGRAM CANCELING BUTTON in the " ^{AM PM} 12:00 ^{ON} " section in order to set it to "OFF".

Is it possible to set times which straddle days?	Yes, it is possible. Example: Start operation at 5:00 a.m. on Sunday Stop operation at 6:00 p.m. on Monday 	The TIME NO. is not displayed.	The following causes are possible. 1. The TIME NO. is not displayed when using the schedule timer alone. (It can be set if using the central remote controller at the same time.)
The unit does not turn on even though the set "on" time has come. (When using the schedule timer alone)	The following causes are possible. 1. Are the "on" time and the "off" time set to the same time?	The display remains  even though I push the HOUR/MINUTE BUTTON in the timer program settings.	The following causes are possible. 1. Is the day set to a holiday?
The unit does not turn on even though the set "on" time has come. (When using the unit with a central remote controller)	The following causes are possible. Check each one. 1. Was the timer number set with the central remote controller? Was an incorrect timer number set? 2. Is another timer no. set with the central remote controller set for "off" at the same time? 3. Is the operation code set to "remote control permission timer" using the central remote controller or the on/off controller?	I cannot set "central management priority" or "after-push priority" with the schedule timer.	The following causes are possible. 1. Is a central remote controller or on/off controller also installed? * The priority order of the operation codes depends on the central devices which are installed. The below operation codes are set. - Schedule timer Central remote controller is used as well Operation code of the central remote controller - Schedule timer On/off controller is used as well Operation code of the on/off controller - Schedule timer Central remote controller On/off controller is used as well Operation code of the central remote controller
The unit operates even though that day is set as a holiday. (When using the unit with a central remote controller)	The following causes are possible. 1. Is another timer number set with the central remote controller set for "on" at the same time? (If two timer numbers are set, make sure that the settings for holidays and working days do not overlap between the different timer numbers.)		

13.8 <KRP1C77> Wire Renovated Adaptor (Installation)

Wiring Adaptor PCB

Installation Manual

KRP1C76・77

Accessories

Check if the following accessories are included in the kit.

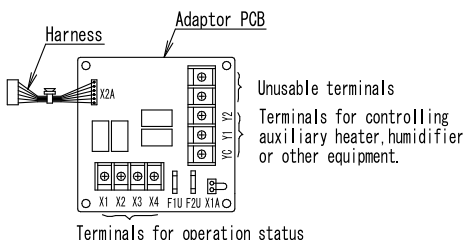
Name	Adaptor PCB	Harness	PCB support	Clamp	Installation manual
Shape					
Quantity	1	1	4	3	1

Note

- Kits vary according to applicable models.
- A special adaptor plate or installation box for adaptor PCB is required for the following models.

FXFQ~AA, FCQ~AA	••• KRP1H98A
FXFQ~AA, FCQ~AA (Self-cleaning filter panel)	••• KRP1J98A
FXZQ~TB, FFA~A	••• KRP1BB101
FXSQ~TB, FXMQ~TB, FBQ~TB, CDMA~A, FDMA~A	••• KRP4A98
- **<Caution>**
 - All wiring must be performed by an authorized electrician. Improper installation may result in water leakage, electric shock or fire.
 - For electric wiring work, refer to "Wiring diagram" attached to the control box cover of indoor unit and this manual. Improper installation may result in water leakage, electric shock or fire.
 - All wiring must be worked after shutting down power supply. Touching the live part may result in electric shock.
 - All field supplied parts and materials and electric works must conform to local codes.
 - A circuit breaker capable of shutting down power supply to the entire system must be installed.
 - When wiring, use the specified wires to make secure connections, and securely fasten the wires to the terminal connections so that no external force is applied to the wires. Incomplete connection or fixing may result in electric shock, heat generation or fire.
 - When wiring, position the wires so that the control box cover can be securely fastened. Improper positioning of the control box cover may result in electric shock or fire.

1 Names of parts

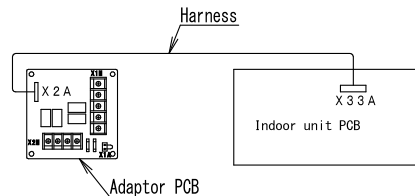


2 Electric wiring

- Refer to the wiring diagram attached to the indoor unit and the installation manual included in Installation box for adaptor PCB or Adaptor plate for detailed information such as wiring routing and treatment before attempting to wire.

(Make sure wires to units do not pass over this adaptor PCB when wiring.)

- Wire the adaptor PCB to the indoor unit as shown below.

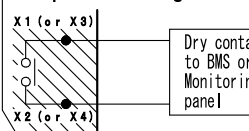


① Thermo-ON and Fan ON status

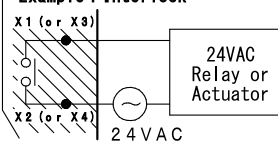
- Thermo-ON status
Contact terminals X1 and X2 close while the indoor unit is Thermo-ON (call for cooling or heating).

- Fan ON status
Contact terminals X3 and X4 close when indoor unit fan is ON.

Example : Obtaining status

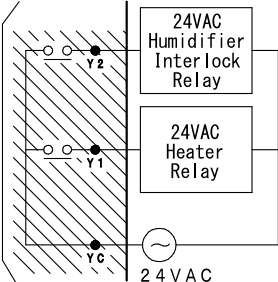


Example : Interlock



② Interlocking Humidifier and Heater

- Humidifier output (Y2-YC)
• Energized while heating Thermo-ON (call for heating).
- Heater output (Y1-YC)
• Auxiliary heater output with heat pump heating
• Primary heater output when heat pump lockout enabled.

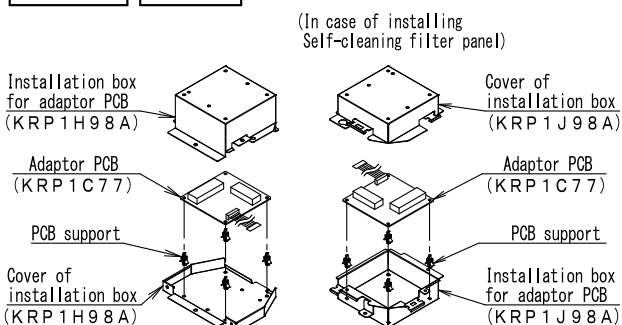


3 Installation

- Installation differs according to models as shown below.
- Install according to the installation manual included in Installation box for adaptor PCB or Adaptor plate.
- Do not bundle low and high voltage wires together.
- Bundle any excess wires with the attached clamps so as to keep loose wires off the indoor unit PCB.

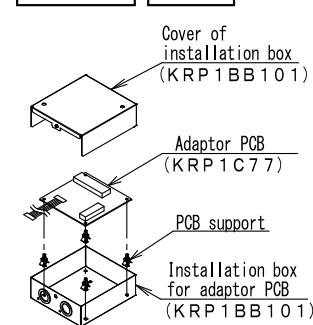
<Ceiling mounted cassette type>

FXFQ~AA FCQ~AA



<Ceiling mounted cassette type (2x2)>

FXZQ~TB FFA~A

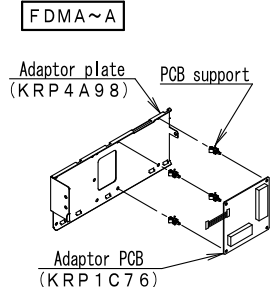


<Ceiling mounted duct type>

FXSQ~TB FXMQ~TB

FBQ~TB CDMA~A

FDMA~A



13.9 <KRP4A74> Group Control Adaptor (Installation)

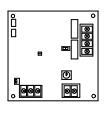
DAIKIN VRV HEAT PUMP

Wiring Adaptor for Electrical Appendices (Group Control Adaptor)

Installation Manual

KRP4A71 • 72 • 73 • 74

Accessories Check if the following accessories are included in the kit.

Adaptor	Relay harness
× 1	(1) × 1 each
	(2) 

PCB support	× 4
Clamp	× 3
Installation manual	× 1

Notes

- Kits vary according to applicable models.
- A special adaptor fixing plate and box are required for the following models.

FXAQ,..... KRP4A93
 FXFQ • FCQ,..... KRP1H98
 FXHQ • FHQ,..... KRP1C93
 FXDQ • FXZQ • FXTQ • FTQ • FFA..... KRP1B101
 FXMQ~P • FBQ,..... KRP4A96

1 System outline

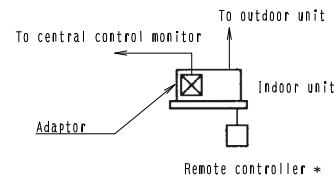
This kit enables remote control (ON/OFF control, temperature setting, operation display, error display) and can be used with the following systems though it cannot be used in conjunction with other optional controllers for centralized control.

1. Individual control (Each indoor unit is controlled individually.)

This system requires the following parts.

- Adaptor,..... KRP4A71 • 72 • 73 • 74 Any one kit
- Remote controller,.....* (For operation control)

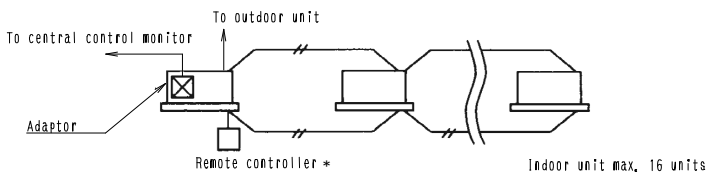
(Ex.) When individually controlling 8 FXSQ12MVJU units
 KRP4A71 × 8 kits
 BRC1E71 × 8 kits



2. Group control (Multiple indoor units are controlled as a group.)

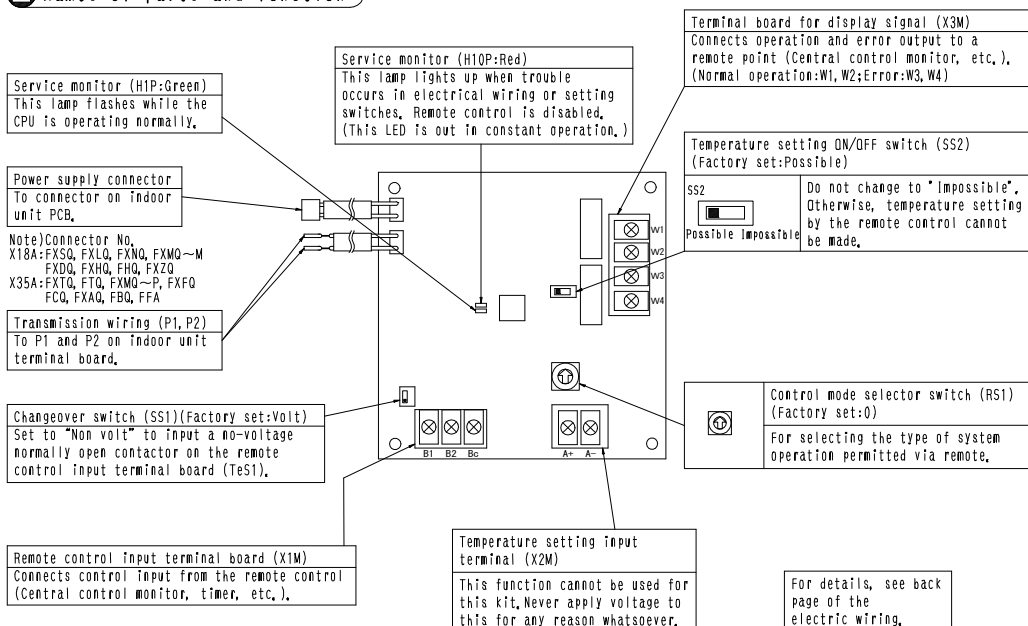
This system requires the following parts.

- Adaptor,..... KRP4A71 • 72 • 73 • 74 Any one kit
- Remote controller,.....* (For operation control)



*: Please prepare a remote controller compatible with the indoor unit to which the adaptor will be connected.

2 Names of parts and function



③ Installation

<Ceiling-mounted duct type>

FXDQ
FXZQ

Lid of installation box
KRP1B101 (Optional accessory)

<Air handling unit>

FXTQ
FTQ

Adaptor
(KRP4A74)

PCB support

<Ceiling-mounted cassette type>

FFA

Installation box for adaptor PCB
KRP1B101 (Optional accessory)

Note: Installation box for adaptor PCB is required to install the adaptor.

<Ceiling-mounted cassette type>

FXFQ (Fit the edge of the adaptor PCB into the grooves on the adaptor box,)
FCQ

Lid of installation box
KRP1H98

Adaptor
(KRP4A74)

PCB support

Installation box for adaptor PCB
KRP1H98

<Ceiling-suspended type>

FXHQ
FHQ

Lid of installation box
KRP1C93 (Optional accessory)

Adaptor
(KRP4A72)

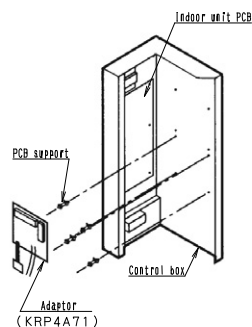
PCB support

Installation box for adaptor PCB
KRP1C93 (Optional accessory)

Note: Installation box for adaptor PCB is required to install the adaptor.

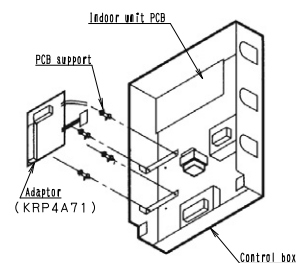
<Floor-standing type>

FXLQ
FXNQ



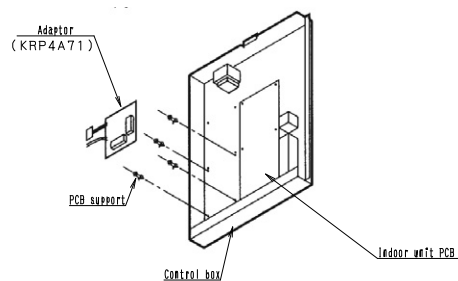
<Ceiling-mounted built-in type>

FXSQ



<Ceiling-mounted duct type>

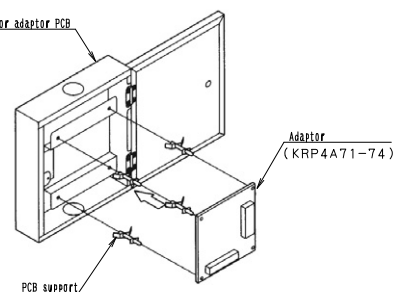
FXMQ~M



<Wall-mounted type>

FXAQ

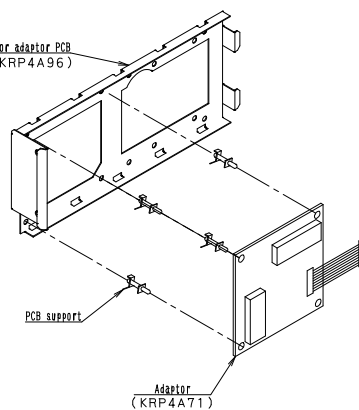
Installation box for adaptor PCB
(KRP4A93)



<Ceiling-mounted duct type>

FXMQ~P
FBQ

Mounting plate for adaptor PCB
(KRP4A96)



13.10 <KRCS01-6B> Remote Sensor (Installation)

DAIKIN Air Conditioners

Remote Sensor

Installation Manual

KRCS01-6B

Be sure to read this installation manual before conducting the installation of this product. Installation must be conducted according to this manual.

3P528641-1C

IMPORTANT

Caution Local setting for case of Skyair

- Case of installing to Skyair, make sure the set to local settings after mounted remote sensor.

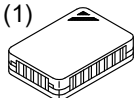
Depending on the model, it may not be necessary to change the settings.

Mode No.	FIRST CODE No.	Default		Changed
		SECOND CODE No.		SECOND CODE No.
15 (25)	10	02	▶	01
15 (25)	10	01	▶	no need
15 (25)	10	--	▶	no need

Setting detail be refer to ③ Local setting.

- Make sure the no errors be sure to operation test after local setting.
- Notes) If you install remote sensor on model that has comfortable eco-dry control function or dehumidification cooling function by humidity detection, these functions will not work.

Accessories description Check it the following accessories are attached to this product.

Name	Sensor box	Extension cable (2-core, 12m)	Clamp	Mounting screw (M4×16)	Other
Quantity	1 pc.	1 pc.	2 pcs.	2 pcs.	1 pc.
Shape	(1) 	(2) 	(3) 	(4) 	• Installation manual

1 Mounting the Sensor box

(1) Selection of mounting location.

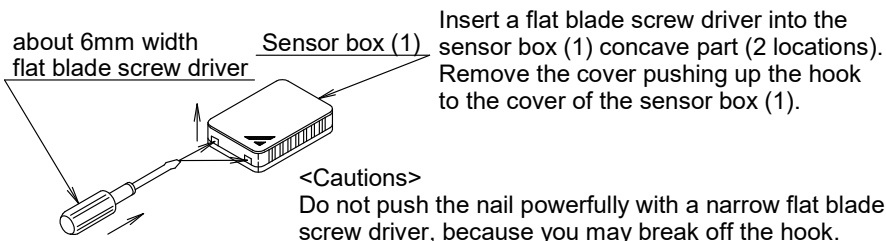
Sensor box (1) have thermistor for temperature detection built-in.

Select the mounting location taking the following cautions into account.

- Where the average temperature of an air conditioned room can be detected.
- Where it is not exposed to the direct sunlight.
- Where it is not influenced by other heat sources.
- Where it is not exposed to the direct discharge air from the air conditioner.
- Where it is not exposed to the outdoor air infiltrated into the room by opening the door.

(2) Mounting

- Remove the cover of the sensor box (1).



① When mounting on the wall

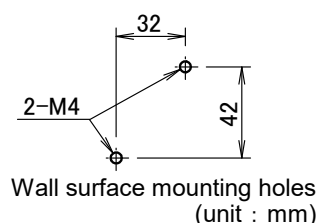
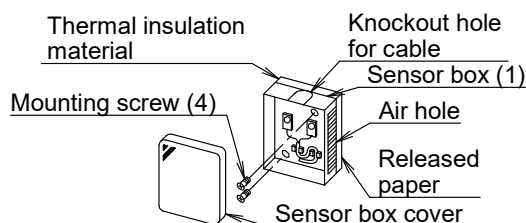
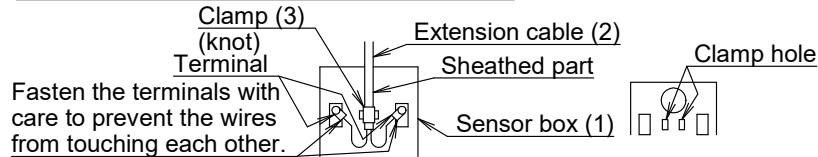


Figure 1

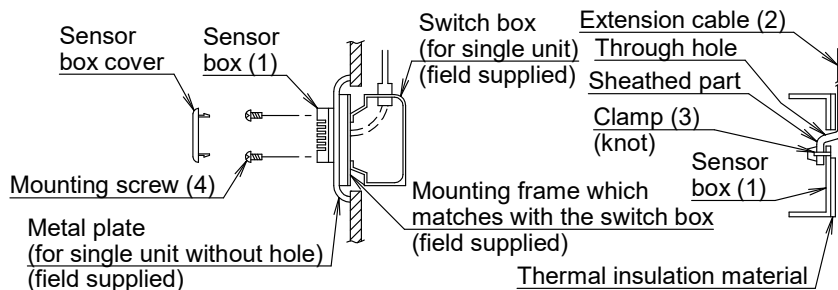
- Break open the knockout hole in the sensor box (1) with a nipper or a similar tool. Pass the extension cable (2) through the hole and fasten the wires to the terminals with screws.
- To avoid tensile force on the terminals, pass the attached clamp (3) through the holes shown in the below right figure and tighten the extension cable (2) with the attached clamp (3) at the sheathed part.
(The knot must come to the box inside.)

Please cut excess clamp for base after fixing.



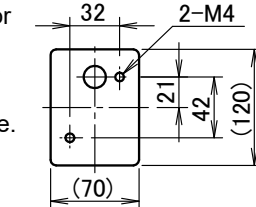
- Screw the sensor box (1) to the wall surface with mounting screw (4) (M4×16, 2 places).
Wall surface mounting holes dimension refer to (Figure 1).
If the sensor box cannot be screwed to wall surface, tear off the released paper and mount it on the wall surface.

2 For embedded wiring



- Pass the extension cable (2) through the sensor box (1) cable hole and carry out the wiring.
- Pass the attached clamp (3) through the clamp holes and tighten the extension cable (2) at the sheathed part as shown in the upper right figure.
Please cut excess clamp for base after fixing.

- Tap M4 screw holes in the metal plate (field supplied) as shown in the right drawing and mount the switch box on the metal plate. Refer to (Figure 2).

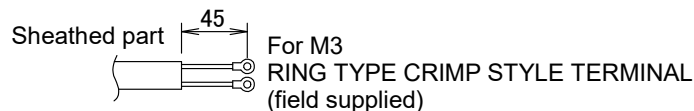


Holes to be tapped in the metal plate on site (unit: mm)

Figure 2

<Cautions>

- When wiring the extension cable (2), the air holes of sensor box (1) will not be blocked.
- When the extension cable is longer than necessary, cut it to the appropriate length, peel the insulation, attach the ring type crimp style terminal for M3 (field supplied) and carry out the wiring. The length of insulation to be peeled off is as shown below.
(Work carefully so that the connector side may not be cut.)



2 Wiring method

Connect the extension cable (2) connector side to the indoor unit PCB (printed circuit board) For connection to the indoor unit, follow the procedure shown below.

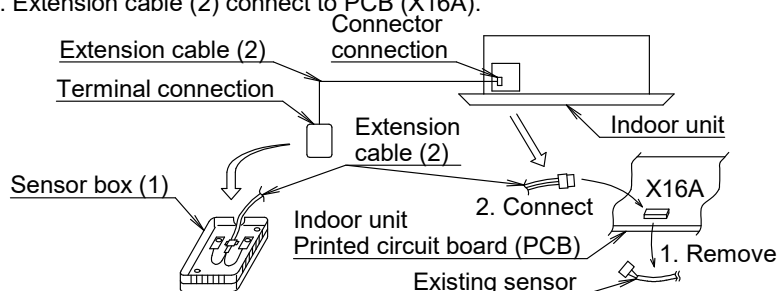
⚠ Caution

1. Make sure to turn off the power supply before starting the wiring work and do not turn on until all the work is completed.
Read also the installation manual and the wiring diagram of the indoor unit when carrying out the work.

2. When wiring the extension cable (2), do not pass where the extension cable (2) may be affected by the power line or noise.
3. Make sure to securely connect the connectors.
Defective connection may result in incorrect detection of room temperature or malfunction.
4. Do not splice wires.
5. Lay and clamp the extension cable (2) inside the indoor unit switch box just like the low voltage line (cord for remote controller).
And do not pass where the extension cable inside the indoor unit switch box may be affected by the power line (cord for the indoor unit and the other electric line).

<Procedure>

1. When wiring to the indoor unit PCB, remove the existing sensor from PCB (X16A).
2. Extension cable (2) connect to PCB (X16A).



3. Lay and clamp the extension cable (2) inside the indoor unit switch box just like the low voltage wire (remote controller wiring).
When doing this work, keep a certain distance between the high voltage wiring and the low voltage wiring to avoid error of sensor.
Provide protection of the existing cable for sensor without touching indoor unit PCB.
4. Fit the sensor box cover into the sensor box (1).

3 Local setting

- Case of installing to Skyair, make sure the set to local settings after mounted remote sensor.
Depending on the model, it may not be necessary to change the settings.
- Make sure the completing all work of indoor and outdoor unit.
- Make sure the closing switch box cover of indoor unit, casing for outdoor unit and cover for piping.

⚠ Set the local setting by remote controller after turn on.

- Local setting set by changing three of "Mode No.", "FIRST CODE No.", "SECOND CODE No.".
- Setting procedure and operating method refer to installing manual attach to remote controller.

Notes) "Mode No." setting be done to group together.

Case of each indoor units setting or setting confirmation,
set to number in () of "Mode No.".

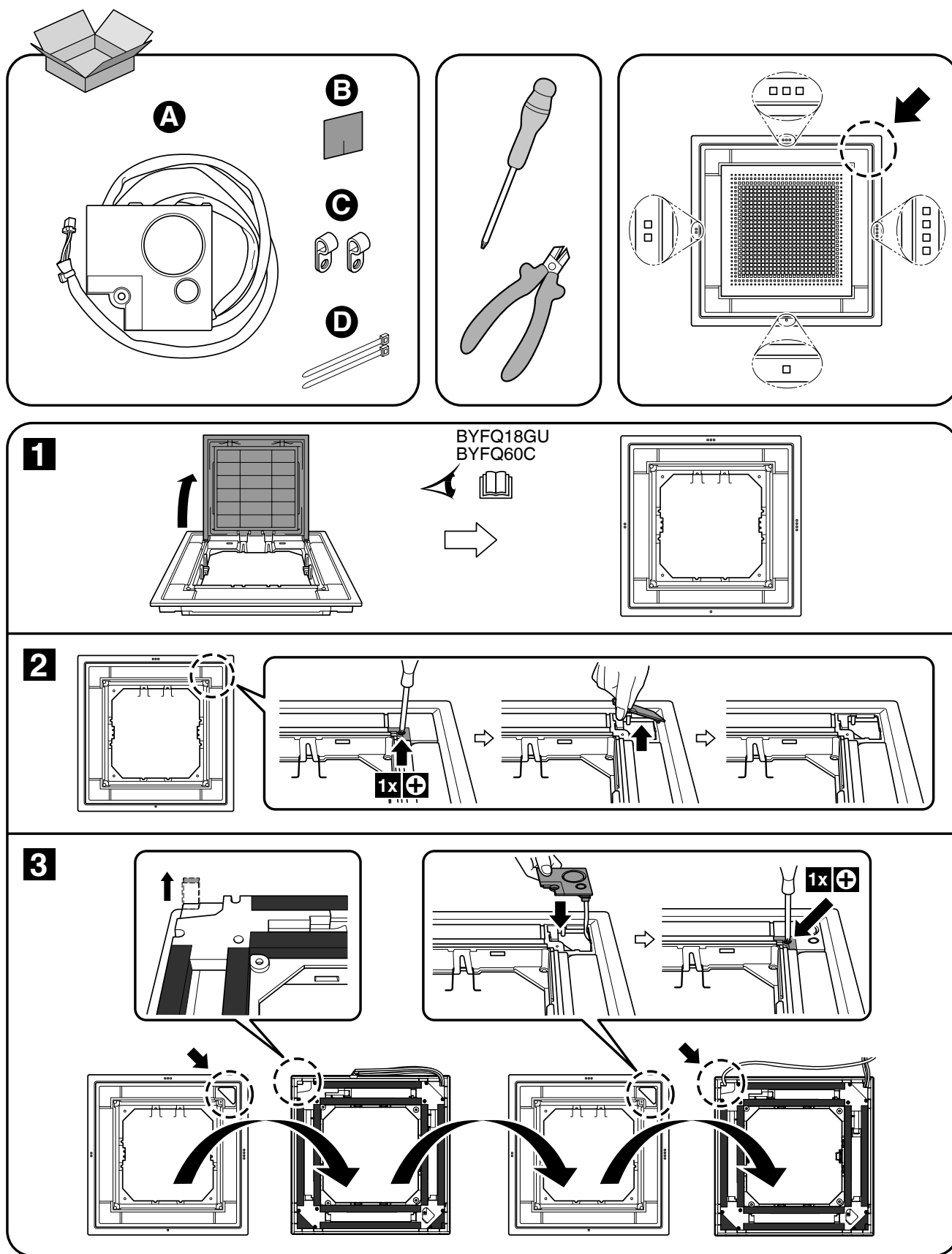
		Default		Changed
Mode No. (Notes)	FIRST CODE No.	SECOND CODE No.		SECOND CODE No.
15 (25)	10	02	▶	01
15 (25)	10	01	▶	no need
15 (25)	10	--	▶	no need

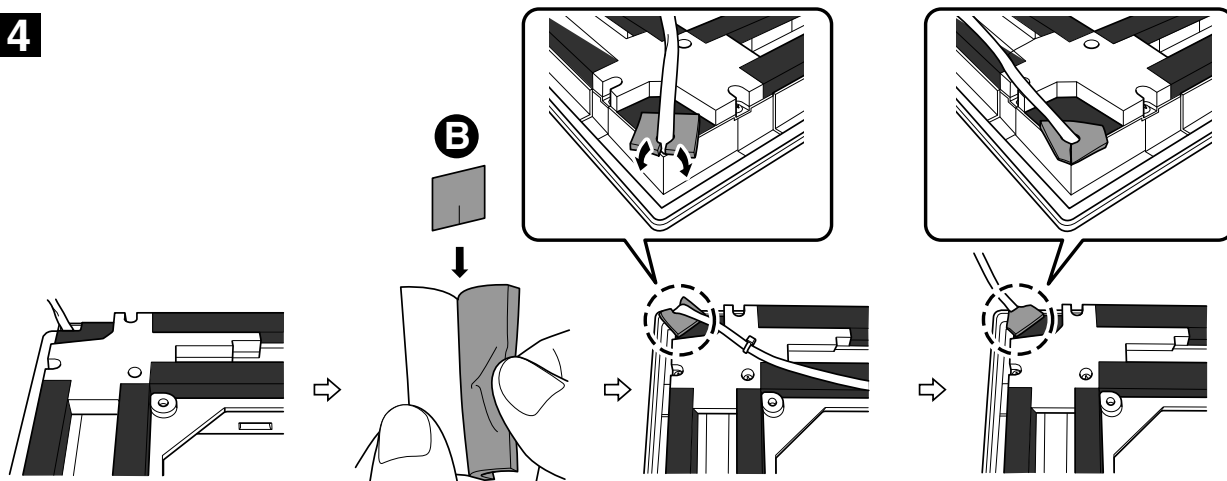
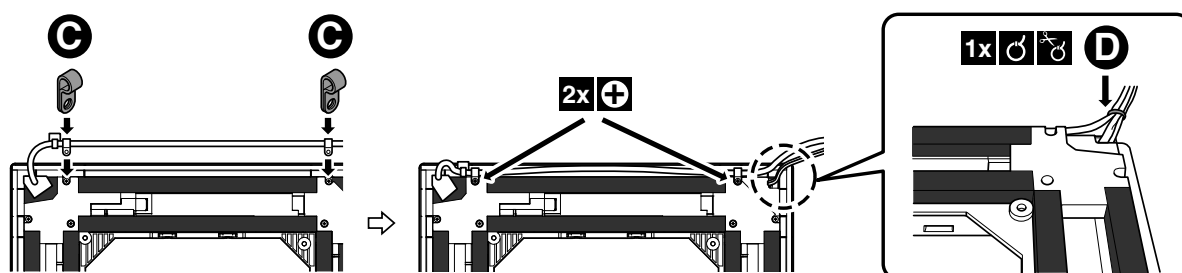
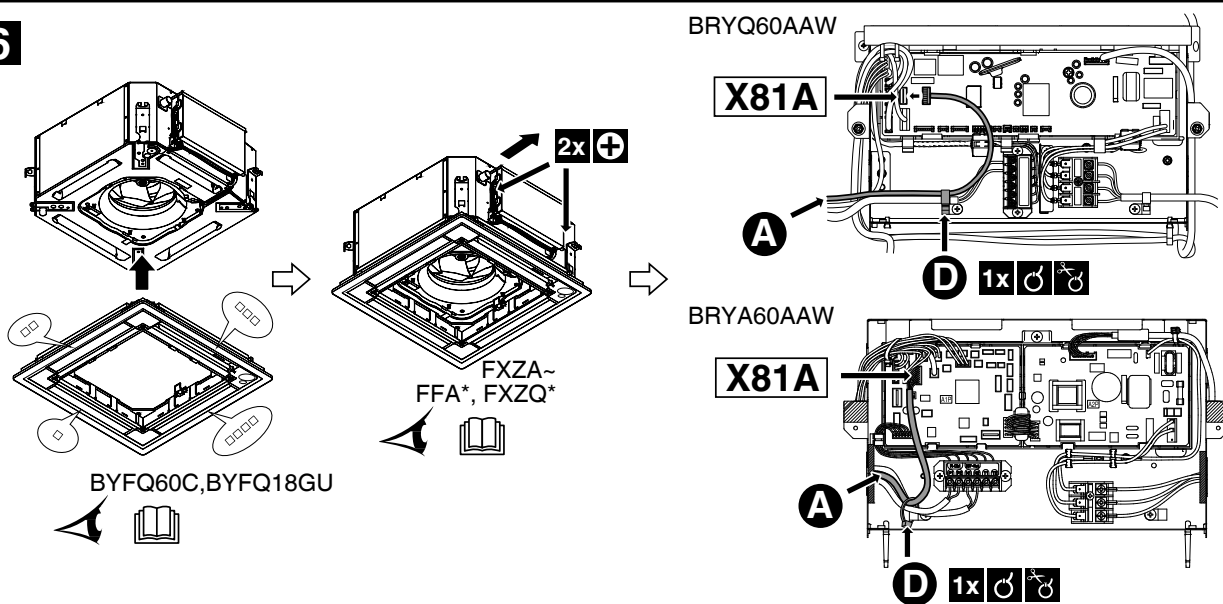
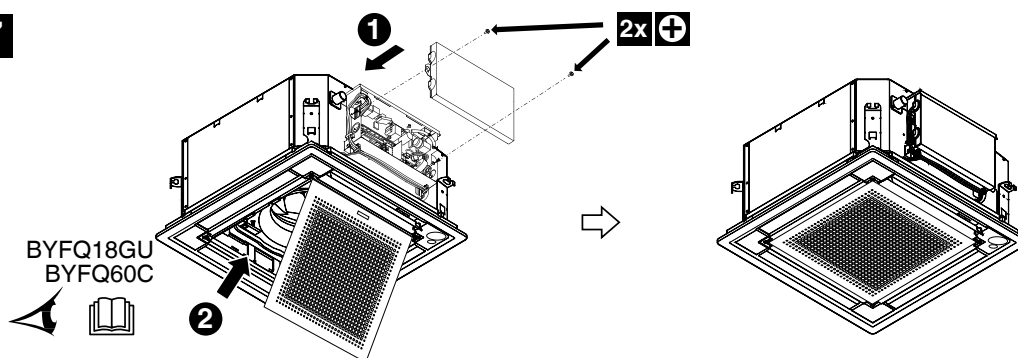
- After changed to settings, Turn off and turn on again.

4 Operation test after mounting the sensor

After the sensor is installed and the wiring is completed, conduct cooling and heating operation in order to make sure of detecting temperature accurately (not to be uncooled or unheated).

13.11 <BRYQ60AAW> Sensor Kit

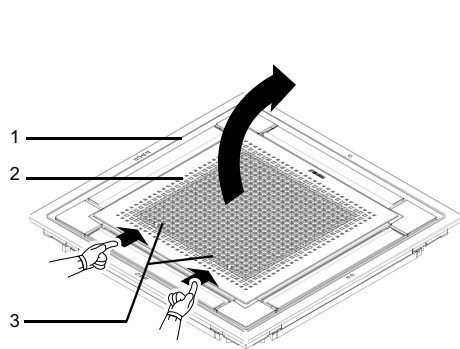


4**5****6****7****8**

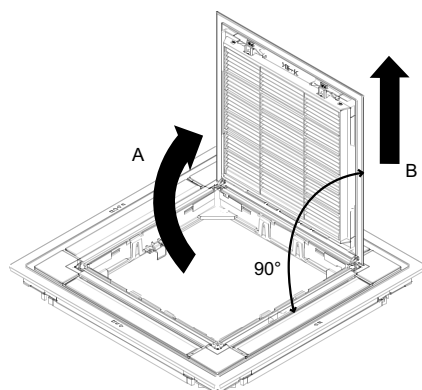
REMOTE CONTROLLER



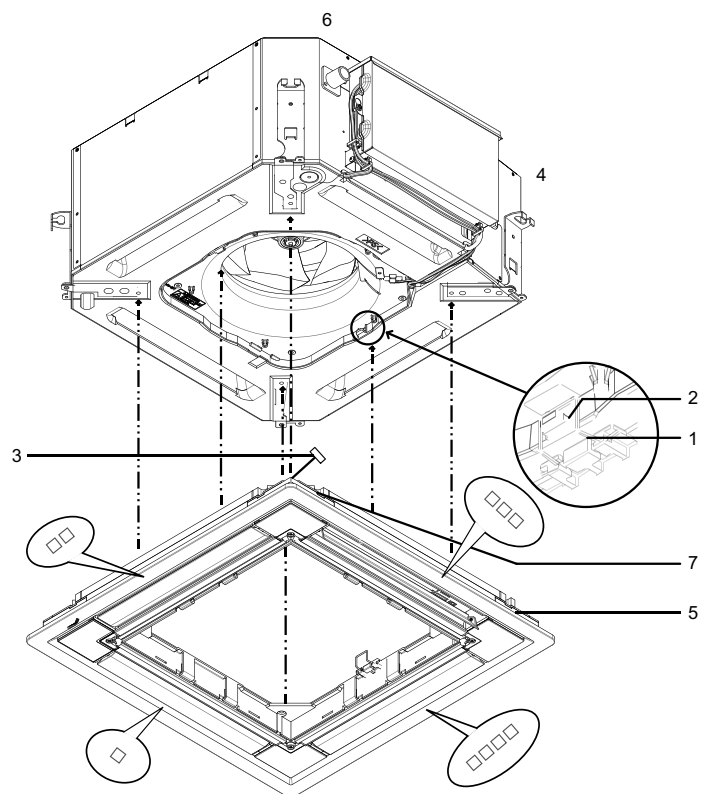
13.12 <BYFQ60C3W2W> Decoration Panel



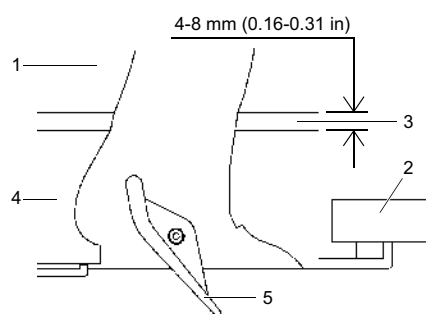
1



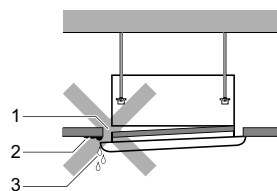
2



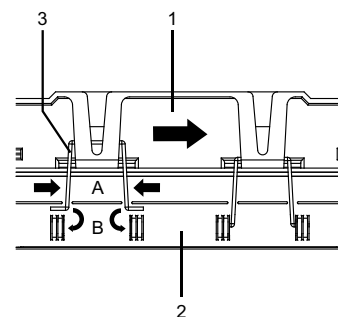
3



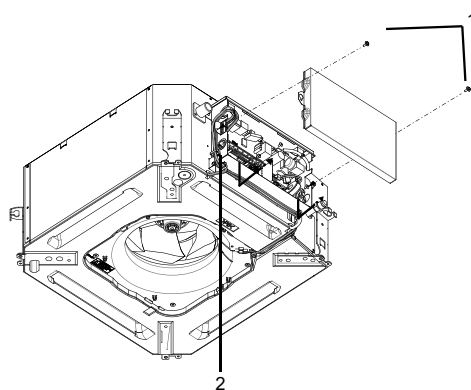
4



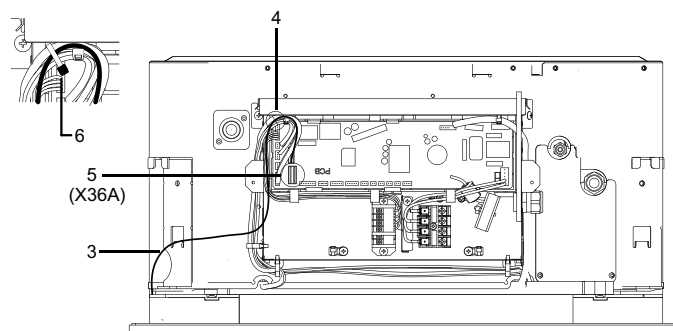
5



7



6





The English text is the original instruction. Other languages are translations of the original instructions.

Read this manual attentively before installation. Do not throw it away. Keep it in your files for future reference.

Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin that are specifically designed for the use with the equipment and have them installed by a professional.

If unsure of installation procedures or use, always contact your dealer for advice and information.

Before installation

- Leave the unit inside its packaging until you reach the installation site.



Rotary fan



Cut off the main power before opening the grille.

- Refer to the installation manual of the indoor unit for items not described in this manual.

NOTE



To the installer

Be sure to instruct the customer how to properly operate the system showing him or her the operation manual of the indoor unit.

Accessories

Installation manual	
Screws (4x)	
Grille hinge (2x)	

Preparation before installation

For this unit, you are able to select air flow directions. To discharge air in 2 or 3 directions, it is necessary to purchase the optional blocking pad kit for sealing air discharge outlets.

Handling of the decoration panel

To prevent any damage to the decoration panel, take care of the following:

- Never place the decoration panel facing down.
- Never let the decoration panel lean against a wall.
- Never place the decoration panel on a sharp or projecting object.
- Never touch or put pressure on the swing flap in order to prevent malfunction of the swing flap.

Preparing the decoration panel for installation

- 1 Remove the suction grille from the decoration panel.

- 1 Decoration panel
- 2 Suction grille
- 3 Lever

- Remove the transporting tape from the decoration panel suction grille and flaps.

- Push the suction grille lever (3) inward and open the suction grille (2). (See figure 1)

- Detach the suction grille from the decoration panel by lifting the suction grille up approximately 90 degrees (A) until the position is reached on which removal of the suction grille is possible (B). (See figure 2)

Installation of the decoration panel to the indoor unit

Refer to the installation manual of the indoor unit for details on installing the indoor unit.

- 1 Install the decoration panel (See figure 3)

- 1 Temporary latch
- 2 Hook
- 3 Swing flap motor lead wire
- 4 Piping area
- 5 Piping side mark
- 6 Drain area
- 7 Drain side mark

- 1 Hold the decoration panel against the indoor unit by matching the piping side and drain side marks on the decoration panel with the position of the piping area and drain area of the indoor unit.
- 2 Turn 2 panel temporary latches up into the hooks of the indoor unit so the decoration panel is temporarily fixed to the indoor unit. (See figure 3)
- 3 Make sure that the swing flap motor lead wire isn't caught between the decoration panel and the indoor unit.
- 4 Attach 4 supplied screws and check whether the decoration panel is properly aligned with the indoor unit and ceiling.
- 5 Tighten all 4 screws until the thickness between of the sealing material between the decoration panel and the indoor unit reduces to 4-8 mm. (See figure 4)

- 1 Indoor unit
- 2 Ceiling
- 3 Sealing material
- 4 Decoration panel
- 5 Air outlet

Precautions

- Improper tightening of the screws - (See figure 5) - may cause air to leak into the unit and between the ceiling and the decoration panel (1), resulting in formation of contamination (2) and dew (3).
- If there is a gap remaining between the ceiling and the decoration panel after tightening the screws, re-adjust the indoor unit body height. The indoor unit must be kept leveled and the drain piping kept unaffected.

2 Wiring of the decoration panel (See figure 6)

Make sure to turn off the power supply before wiring!

- | | |
|---|--|
| 1 | Screws (2) |
| 2 | Switch box |
| 3 | Swing flap motor lead wire |
| 4 | Swing flap motor lead wire fixed by tie wrap to the rest of the wires (See detail in figure 6) |
| 5 | Connector of the indoor unit PCB (X36A) |
| 6 | Tie wrap |

- 1 Remove the electric components box lid. Loosen 2 screws and slide the electric components box lid in the direction of the arrows.
- 2 Securely connect the connector of swing flap motor lead wire installed on the decoration panel. Attach the swing flap motor lead wire to the rest of the wires firmly by tie wrap (from indoor unit accessory set). (See figure 6)
- 3 Replace the electric components box lid reversing the procedure to remove it.



Make sure that the swing flap motor lead wire is not caught between the indoor unit and the decoration panel and inbetween the electric component box lid.

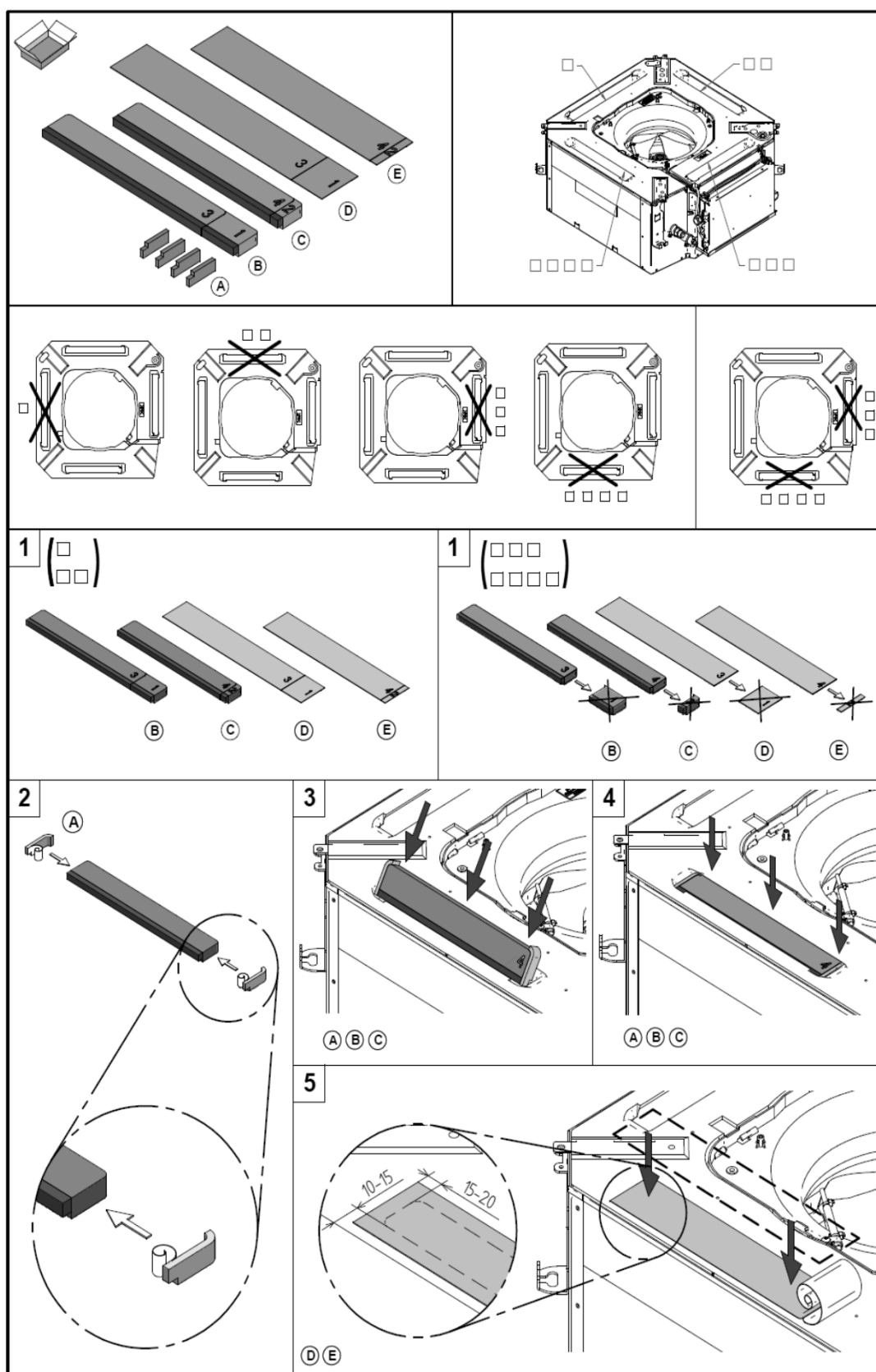
Installation of the suction grille to decoration panel

Install the suction grille (See figure 7)

- | | |
|---|---|
| 1 | Decoration panel |
| 2 | Suction grille |
| 3 | Suction grille hinge (attached to decoration panel) |

- 1 Remove the transportation tape which is securing 2 suction grille hinges in place.
 - 2 Attach the suction grille to hinges by pressing the hinge and inserting both ends of hinge to holes on the suction grille. (See figure 7)
 - 3 Make sure that the suction grille is attached to the decoration panel properly by 2 hinges.
 - 4 Close the suction grille by reversing the procedure shown in "Preparing the decoration panel for installation" on page 1.
- The suction grille may be installed in 4 directions by simply turning it 90 degrees.
 - Change the direction when adjusting the direction of the suction grille of multiple units or to comply with the demands of the customer.

13.13 <BDBHQ44C60> Sealing Member



- The 3 different kinds of setting such as "Mode number", "First code number" and "Second code number" must be made by the remote controller.
- The setting and operation procedure are written in the installation manual provided with the remote controller.
- Do not perform settings that are not listed in the table.

Setting according to number of air outlets used

Set the "Second code number". It is shown in the table below depending on the number of air outlet used.

Setting	Mode number (Note)	First code number	Second code number
4-way flow	13(23)	1	01
3-way flow			02
2-way flow			03

13.14 <KDDQ44XA60> Fresh Air Intake Kit

Remarks :

- 1. This kit can be installed to the Ceiling mounted cassette type (Multi-flow).
- 2. When installing this kit, duct (Nominal dia. : $\phi 100$) is required on site.

- In case that metal duct is penetrated through wooden walls, make sure the duct and the wall electrically insulated.
- Install the duct inclined downwardly to outdoor so that the rain may not get into the duct. (Inclination 1/100 to 1/50)
- To avoid birds, small animals or insects getting inside the duct, make sure to install net where it contacts the outside air.

Contents

Prior to installation, make sure you have the complete kit of parts.

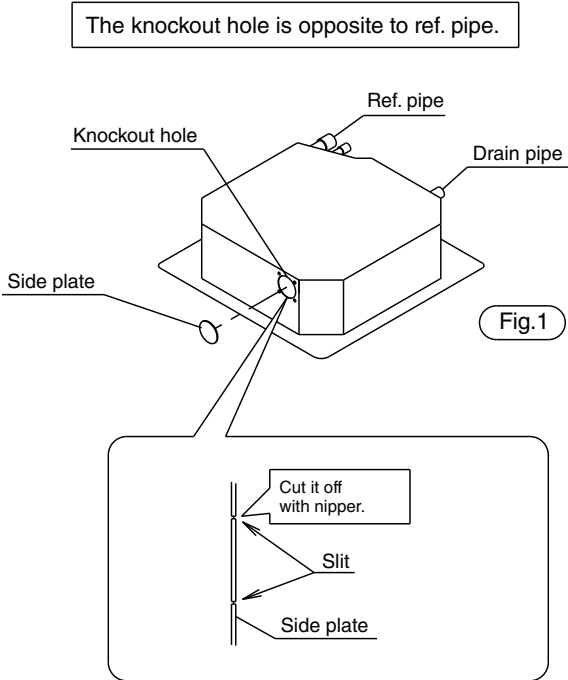
Name	① Duct flange	② Screws	③ Insulation for duct flange	④ Insulation for opening of unit	⑤ Installation manual
Q'ty	1 piece	4 pieces	1 piece	1 piece	1 piece
Shape		 M4×12			

Necessary tools

Philips head screw driver, nipper, cutter etc.

1 Installation procedures of duct flange

- 1. Cut off the knockout hole on the side plate. (Fig.1)



2. Adhere the insulation ④ for opening of unit to the opening. (Fig. 2)

Put the insulation ④ to be suitable for the hole of the insulation ④ and hole of the indoor unit.

However, put the insulation ④ so as not to conceal the screw hole of the indoor unit.

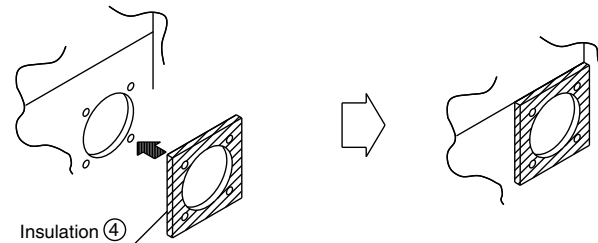


Fig. 2

3. Install the duct flange ① with screws ② (M4×12, 4 screws) to the opening and adhere the insulation ③ (Fig. 3)

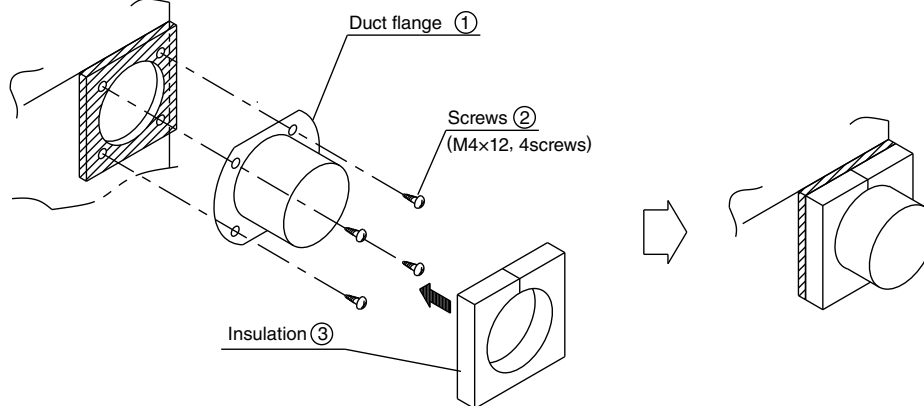
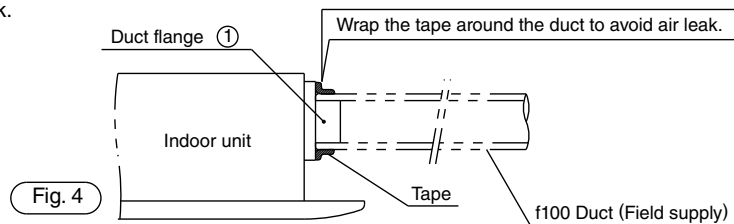


Fig. 3

2 Installation procedures of duct <Nominal diameter of duct : f100>

1. Connect the duct to the duct flange. (Flange fits inside the duct.) (Fig. 4)

2. After connection, wrap vinyl tape (field supply) around the duct connection to prevent air leak.



Precaution

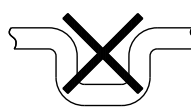
- All ducts must be completely insulated.
- Do not do the followings when installing duct.

A) To bend the duct excessively



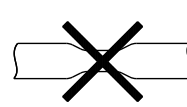
WRONG

B) To bend the duct too many times



WRONG

C) To reduce the duct diameter



WRONG

13.15 <KPW937F4> Air Direction Adjustment Grille

Component parts Be sure to check that the following parts are included before installation.

Name	①Air direction adjustment grille	②M 4 × 3 0 Screw	③Installation manual	④Seal	⑤Spacer
Shape					
Qty.	1 pc.	4 pcs.	3 sheets.	L=385: 1pc, L=355: 2pcs.	4 pcs.

Selection of installation site

- Use the air direction adjustment grille for installation at a location that fits the following conditions.
 1. When installing the outdoor unit near the neighbouring house.
 2. When changing the airflow direction to prevent exhaust blowing directly onto passersby or garden plants.

Cautions for usage

- Be sure to perform the following as installation precautions to ensure correct and safe use of the air direction adjustment grille.
 1. Be sure to stop the operation before installation.
 2. Avoid short-circuits during installation.
 3. When using the unit in areas with snow, install the grille to create a left-right or downward airflow. Do not install the grille to create an upward airflow to prevent snow accumulating in the air outlet of the outdoor unit as this may damage the unit.
 4. Be careful of foreign substances such as dead leaves, which may accumulate on the air outlet after installing the grille to create an upward airflow.
 5. Do not use screws other than those provided. Tighten the screws securely without any looseness.

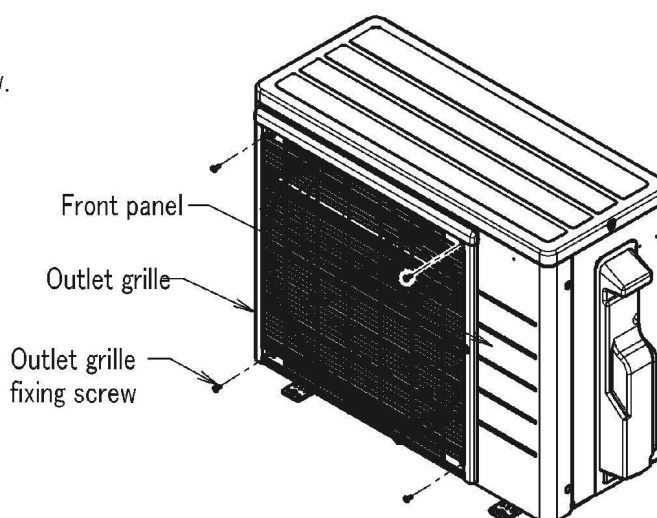
Installation of air direction adjustment grille

- Pitch of the installation screws for the air direction adjustment grille(①) is 434mm in the vertical and horizontal directions.
- Installation can be performed in 4 directions: top, bottom, left and right.
- Temporarily secure the air direction adjustment grille(①) using 4 screws(②), check the installation angle, and then tighten the screws.

Steel wire outlet grille

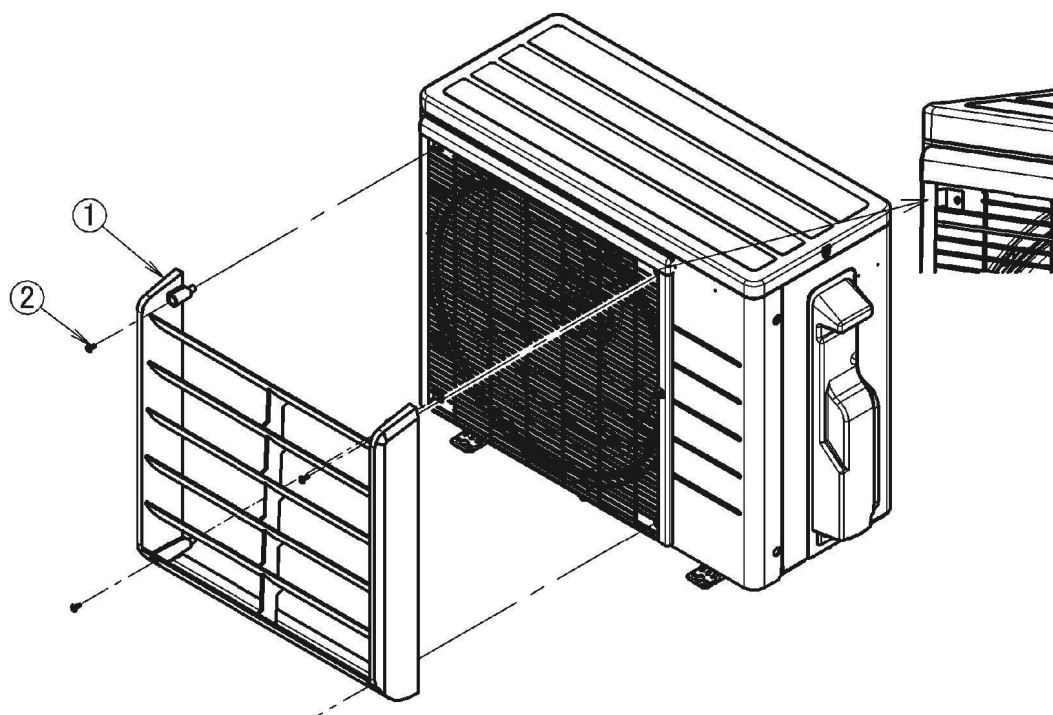
- Seals(④) and spacers(⑤) are not necessary.

- 1 Remove the 4 outlet grille fixing screws.

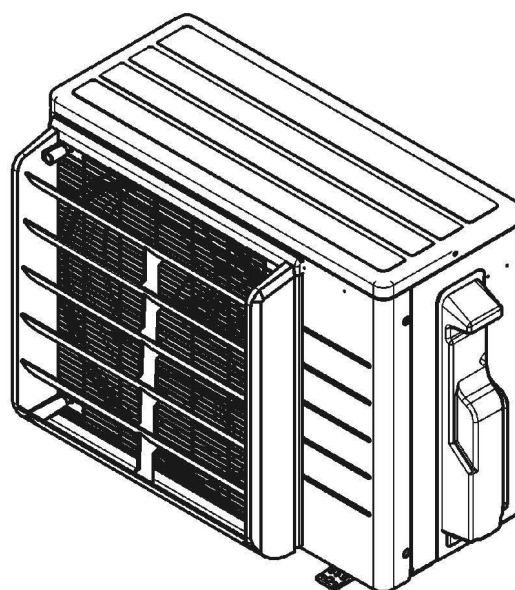


- 2 Install the air direction adjustment grille(①) attached on the front panel using 4 screws(②).

※ Attach the air direction adjustment grille on top of the outlet grille using the same screws.



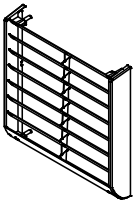
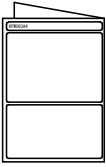
- 3 Appearance of the air direction adjustment panel following installation.
(When installed with the louvers facing up.)



13.16 <KPW063B4> Air Direction Adjustment Grille

Component parts Be sure to check that the following parts are included before installation.

Component parts

Name	① Air direction adjustment grille	② Screw	③ Spacer	④ Installation Manual
Illustration				
Quantity	1 pcs.	4 pcs.	4 pcs.	1 sheet (this sheet)

Selection of installation site

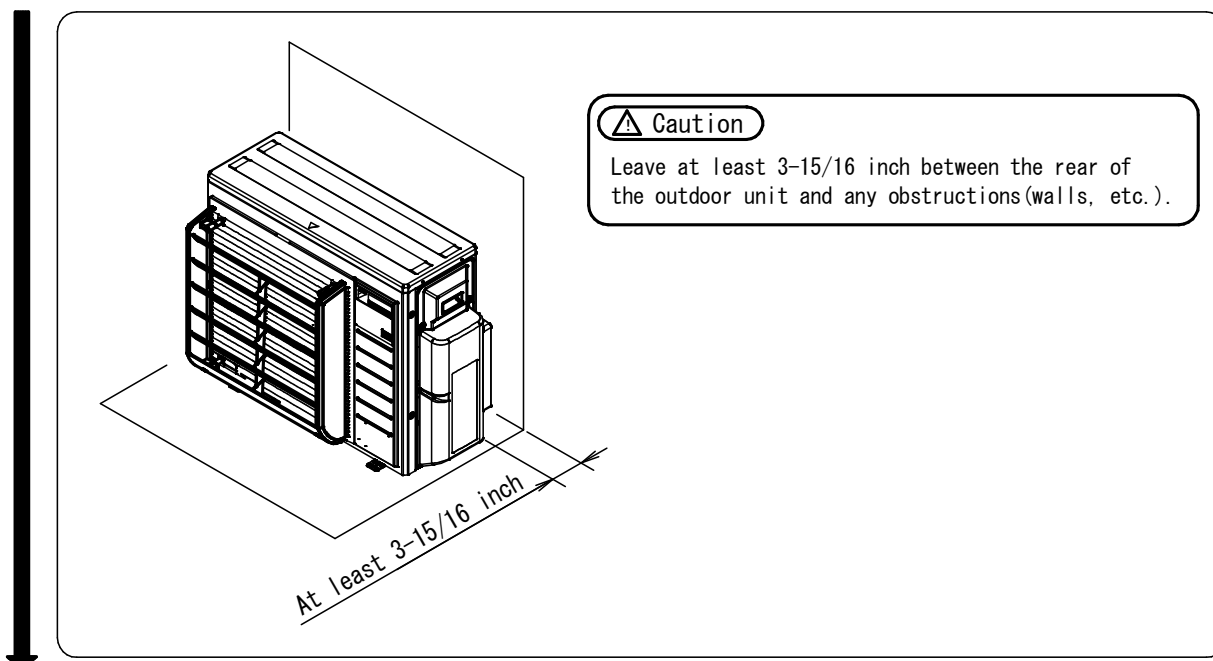
Install only on an outdoor unit in a location that satisfies the following conditions:

- When installing the outdoor unit near the neighbouring house.
- Where you wish to change the exhaust airflow direction because the outdoor unit has been installed facing a road, so that passing people are not exposed to its exhaust air
- When changing the airflow direction to prevent exhaust blowing directly onto passersby or garden plants.

Cautions for usage

- Be sure to perform the following as installation precautions to ensure correct and safe use of the air direction adjustment grille.
 1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance purposes.
 2. When installing the product in a location in which it may be exposed to strong winds, install a rollover prevention bracket (sold separately) at the same time.
 3. Tighten screws securely. Failure to do so may result in vibration.

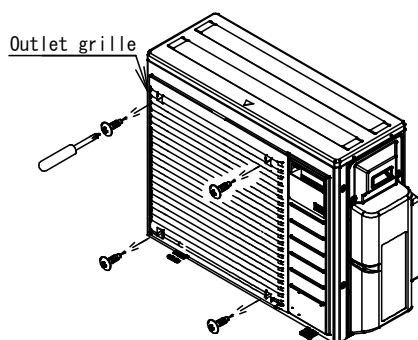
① Verifying the amount of space required for installation



2 Installation of air direction adjustment grille

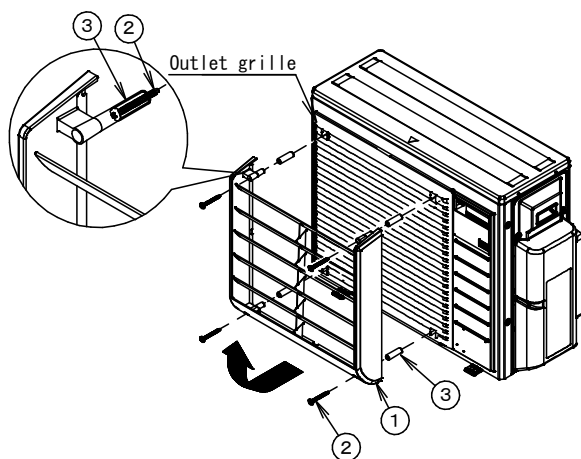
⚠ Caution

Install the air direction adjustment grille on top of the outlet grille.
Be sure to install the outlet grille as installing only the air direction adjustment grille would allow a person to reach his or her hand into the outdoor unit far enough to come into contact with the rotating fan.

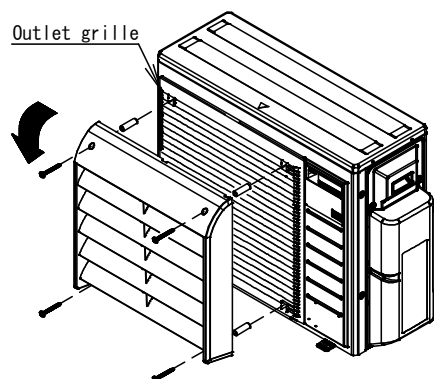


- (1) Remove the 4 outlet grille fixing screws.
- (2) Referring to the following illustration, attach the outlet grille and air direction adjustment grille, taking care to align them with the air outlet direction.
- Attach the air direction adjustment grille on top of the outlet grille using the same screws.

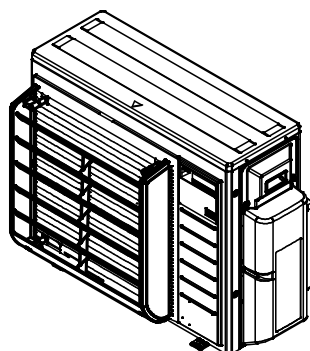
Upward facing



Downward facing



Appearance of the air direction adjustment grille after installation
(when installed with the louvers facing up)



13.17 <KKG067A41> Back Protection Wire Net

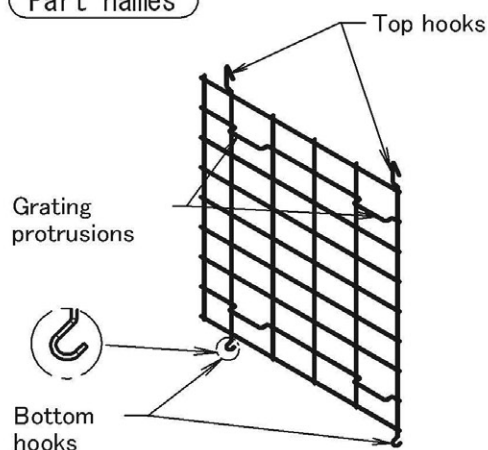
Component parts

Name	① Protection net	② Installation manual
Shape		
Q'ty	1pc	1sheet(this sheet)

Caution

Be sure to wear protection gloves when performing installation work as the fins on the heat exchanger may cause injury.

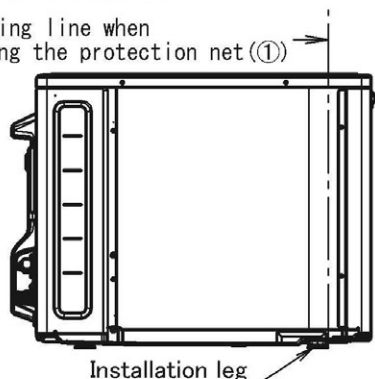
Part names



1 Verify the location at which the protection net(①) is to be installed.

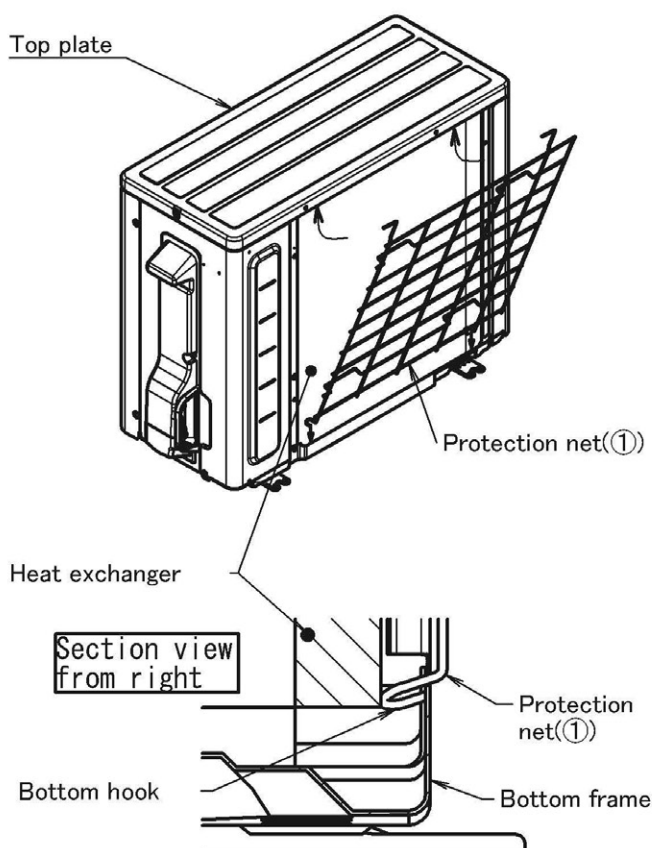
Attach the protection net(①) so that the vertical grating is aligned with the outside edge of the installation leg on the right side of the outdoor unit.

Positioning line when installing the protection net(①)

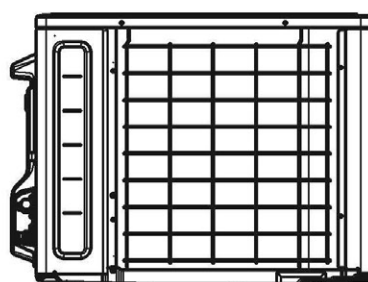


2 Attach the protection net(①)

Orient the protection net(①) so that the horizontal grating protrusions are facing the heat exchanger and insert the two bottom hooks between the heat exchanger and the bottom frame. Insert the two top hooks between the heat exchanger and the top panel while flexing the protection net(①).
 ※ Be careful not to install the protection net upside down.
 Be careful not to damage the heat exchanger's cooling tubes.

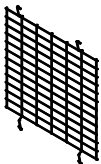
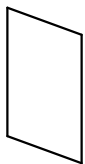


3 Appearance of the protection net(①) following installation



13.18 <KKG063A44> Back Protection Wire Net

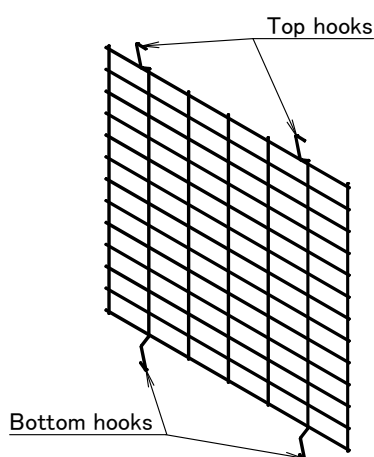
Component parts

Name	① Protection net	② Installation manual
Shape		
Q'ty	1pc.	1sheet (this sheet)

Caution

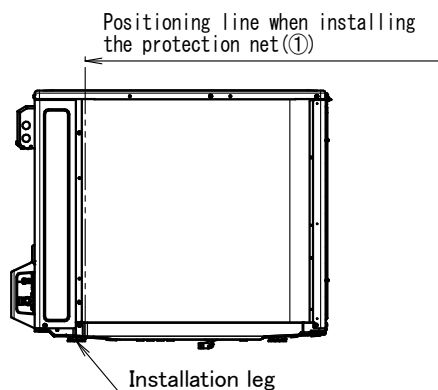
Be sure to wear protection gloves when performing installation work as the fins on the heat exchanger may cause injury.

Part names



- 1** Verify the location at which the protection net(①) is to be installed.

Attach the protection net(①) so that the vertical grating is aligned with the edge of the installation leg on the right side of the outdoor unit.

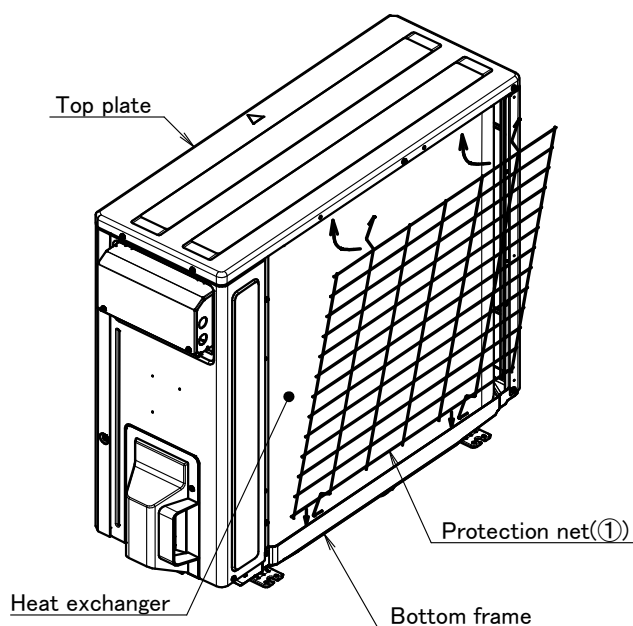


- 2** Attach the protection net(①)

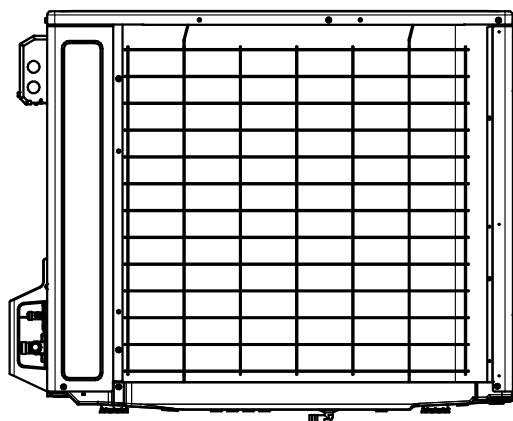
Orient the protection net(①) so that top and bottom hooks are facing the heat exchanger and insert the two bottom hooks between the heat exchanger and the bottom frame.

Insert the two top hooks between the heat exchanger and the top panel while flexing the protection net(①).

※ Be careful not to damage the heat exchanger's cooling tubes.



- 3** Appearance of the protection net(①) following installation



13.19 <KEH068A41> Drain Pan Heater

Safety Considerations

Give this installation manual to the user when installation is completed.

- Read these **Safety Considerations** carefully to ensure correct installation.
- After completing the installation, make sure that the unit operates properly during the startup operation.
- All phases of the field-installation, including, but not limited to, electrical, piping, and safety, must be done in accordance with manufacturer's instructions and must comply with national, state, provincial, and local codes.
- This product is a heater designed to melt snow that is blown into the product from the outside to prevent the drain pan of the outdoor unit from freezing.
- Install the product with a snow-break hood on a high stand if this product is used in heavy snow areas.
- Meaning of **DANGER**, **WARNING** and **CAUTION** symbols:

 **DANGER** : Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING** : Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION** : Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

-  **DANGER**
- Do not touch the heater unit without wearing gloves. The temperature of the heater unit will become high when the heater is turned on. Touching the heater unit with bare hands will result in burns or injury.

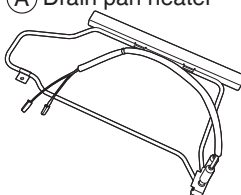
 WARNING

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in electric shock, fire, or equipment damage.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in electric shock, fire, the product falling, or equipment damage.
- Before touching electrical parts, turn off the unit.
- Use specified wires. Connect and fix the wires so that the wires will not put improper force on the terminal junctions. Wires connected or fixed improperly could result in terminal overheating, an electric shock, or fire.

 CAUTION

- Wear protective gloves at the time of installation. Touching the suction mouth or aluminum fin of the outdoor unit may result in injury.
- Do not install the product in places where there is danger of exposure to inflammable gas leakage. If the gas leaks and builds up around the unit, it may catch fire.
- Do not grab the top plate of the outdoor unit carelessly when removing the top plate. The sharp edge of the top plate may cause injury.

Accessories

	1		3		1		1
			1		1		

Tools Required for Installation

- Phillips screwdriver
- Nippers
- Electric drill
- $\phi 1/8$ inch ($\phi 3.2$ mm) drill

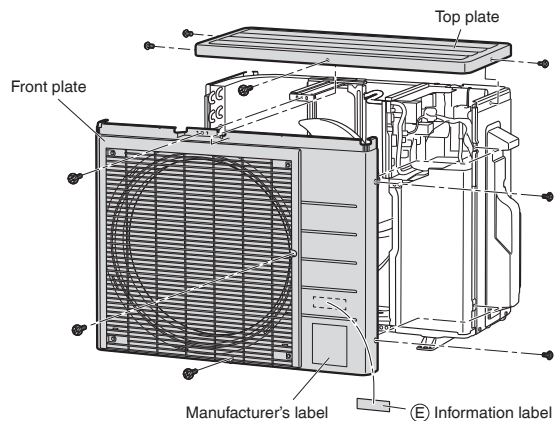
Installation Procedure (1)

WARNING

- Be sure to check that the power supply of the product is turned off.

1. Remove each component of the outdoor unit.

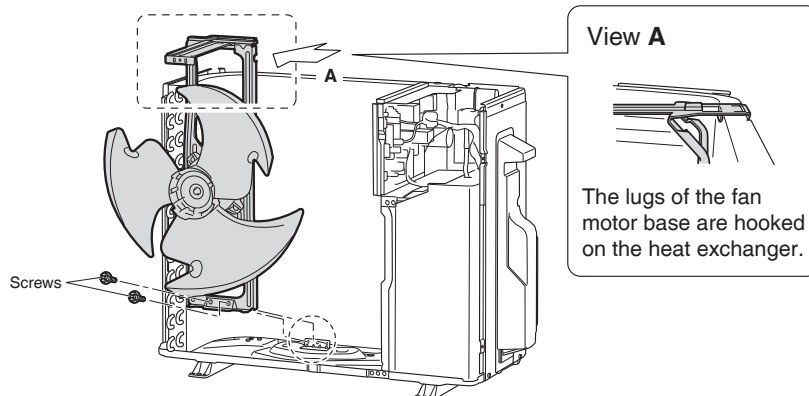
- 1) Remove the top plate.
- 2) Remove the front plate.
- 3) Affix the (E) information label near the manufacturer's label.



Appearance of the outdoor unit may differ from some models.

2. Remove the fan motor base.

- 1) Remove the fixing screws at the lower section of the fan motor base. (2 screws)
- 2) Remove the fan motor base together with the propeller fan and ensure that stress is not placed on the propeller fan when placing them aside.
 - Do not remove the fan motor harness.
 - Ensure that the fan motor harness does not come into contact with the edges of the heat exchanger or other components.

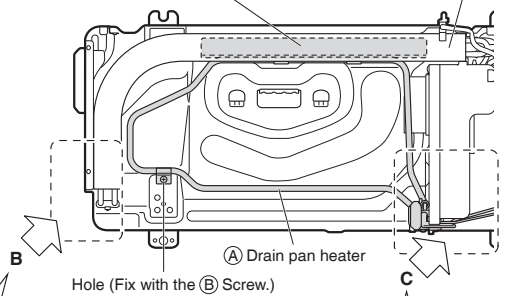


Installation Procedure (2)

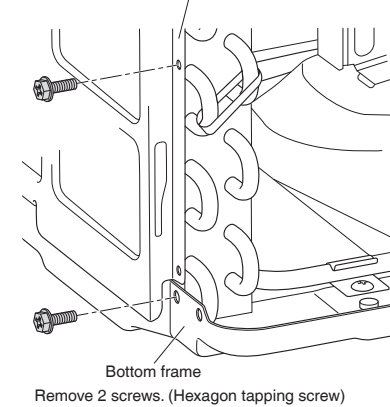
3. Install the (A) drain pan heater.

- 1) Remove 2 screws from the bottom frame and the left-side plate so that the plates of the (A) drain pan heater can be inserted under the heat exchanger with ease.
- 2) Lift up the heat exchanger, and insert the plates of the (A) drain pan heater under the heat exchanger.
 - The ground plate of the (A) drain pan heater should be installed so that it firmly adheres to the bottom frame.
 - Install the (A) drain pan heater in a position where it does not come into contact with the fan motor base.
- 3) Fix the (A) drain pan heater with the (B) screws.
- 4) Replace the screws that were removed from the bottom frame and the left-side plate.

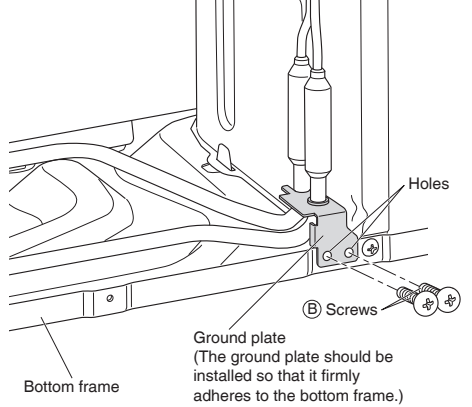
Plates (Insert the plates under the heat exchanger.) Heat exchanger



View B



View C

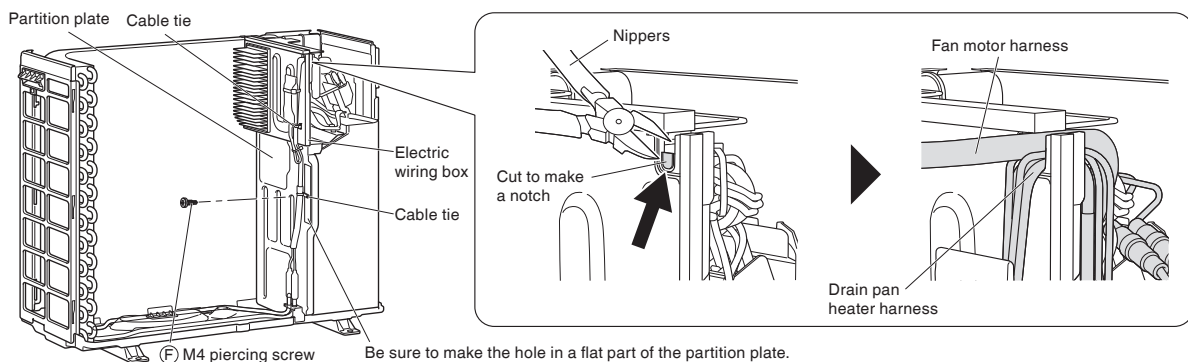


4. Route the harnesses.

⚠ CAUTION

- When drilling a hole, be careful not to damage the soundproofing material and other components on the back side.

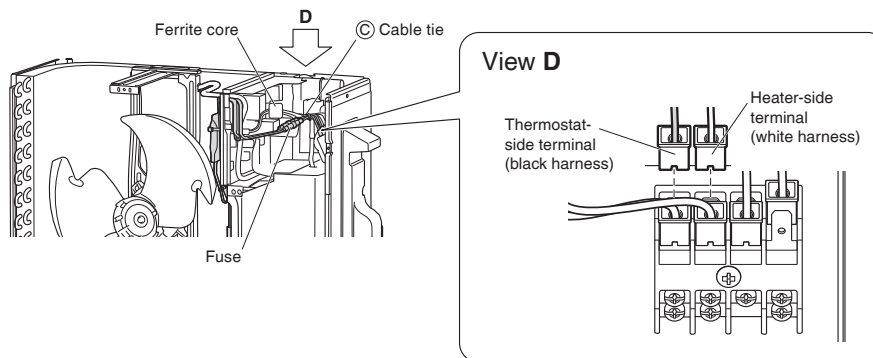
- 1) Trim the electrical wiring box with nippers at the locations shown in the figures.
 - Treat the notch to ensure that no sharp edges remain.
- 2) Insert the drain pan heater harness into the space that was trimmed.
- 3) Secure the drain pan heater harness cable tie in the hole in the electric wiring box.
- 4) If there is no hole, drill a $\phi 1/8$ inch ($\phi 3.2$ mm) hole in the partition plate to secure the (A) drain pan heater.
 - Set the actual components in place before drilling the hole to ensure positioning is correct.
 - The hole can be made with the included (F) M4 piercing screw as well.
- 5) Fix in place the cable tie attached to the (A) drain pan heater harness by screwing the (F) M4 piercing screw into the hole. (1 location)
- 6) Install the fan motor base.



Installation Procedure (3)

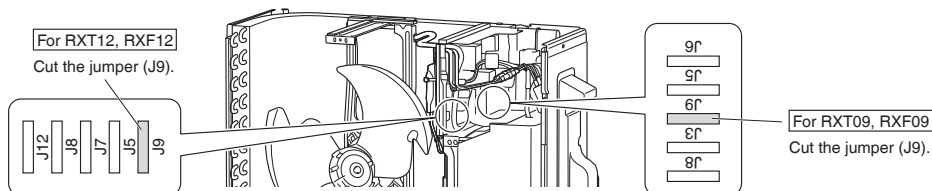
5. Connect the faston terminals of the drain pan heater to the terminal block of the outdoor unit.

- 1) Connect the thermostat-side terminal (black harness) to the leftmost terminal and the heater-side terminal (white harness) to the second leftmost terminal.
- 2) Secure the ① drain pan heater harness and power cords between the ferrite core and terminal using the ③ cable tie.
 - Make sure not to position the harness so that the fuse is at its lowest point. (To prevent water droplets on the harness flowing to the fuse which would cause it to malfunction.)
 - Cut the tip of the ③ cable tie.



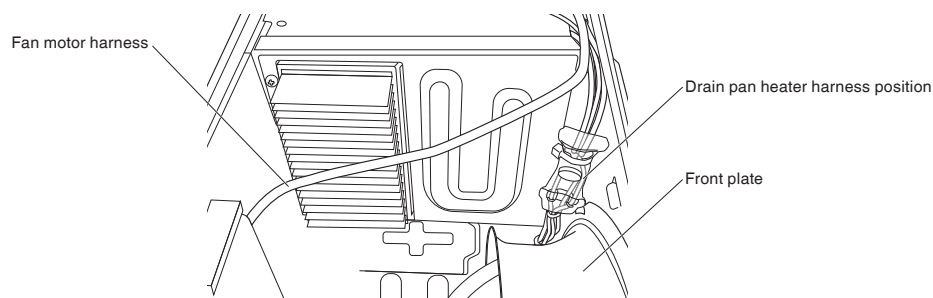
6. Cut the jumper.

- Using a tool such as nippers, cut the jumper (J9) of the PCB inside.



7. Install each component to the original position.

- When attaching the front plate, be careful not to pinch the drain pan heater harness.



13.20 <KEH064A41> Drain Pan Heater

Safety Considerations

Give this installation manual to the user when installation is completed.

- Read these **Safety Considerations** carefully to ensure correct installation.
- After completing the installation, make sure that the unit operates properly during the startup operation.
- All phases of the field-installation, including, but not limited to, electrical, piping, and safety, must be done in accordance with manufacturer's instructions and must comply with national, state, provincial, and local codes.
- This product is a heater designed to melt snow that is blown into the product from the outside to prevent the drain pan of the outdoor unit from freezing.
- Install the product with a snow-break hood on a high stand if this product is used in heavy snow areas.
- Meaning of **DANGER**, **WARNING** and **CAUTION** symbols:

 **DANGER** : Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING** : Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION : Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ DANGER _____

- Do not touch the heater unit without wearing gloves.
The temperature of the heater unit will become high when the heater is turned on.
Touching the heater unit with bare hands will result in burns or injury.

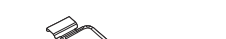
 WARNING

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual.
Improper installation may result in electric shock, fire, or equipment damage.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in electric shock, fire, the product falling, or equipment damage.
- Before touching electrical parts, turn off the unit.
- Use specified wires. Connect and fix the wires so that the wires will not put improper force on the terminal junctions. Wires connected or fixed improperly could result in terminal overheating, an electric shock, or fire.

 CAUTION

- Wear protective gloves at the time of installation.
Touching the suction mouth or aluminum fin of the outdoor unit may result in injury.
- Do not install the product in places where there is danger of exposure to inflammable gas leakage.
If the gas leaks and builds up around the unit, it may catch fire.
- Do not grab the top plate of the outdoor unit carelessly when removing the top plate.
The sharp edge of the top plate may cause injury.

Accessories

1	A Drain pan heater 	B Screw M4 × 5/16" (M4 × 8mm) 	3
		C Installation Manual 	1
		D Information label 	1

Tools Required for Installation

- Phillips screwdriver
- Nippers

Installation Procedure (1)

WARNING

- Be sure to check that the power supply of the product is turned off.

Some stages in the installation procedure differ by model of outdoor unit. Refer to the instructions for the relevant model.

Type A models : RX

Type B models : 2/3/4MX

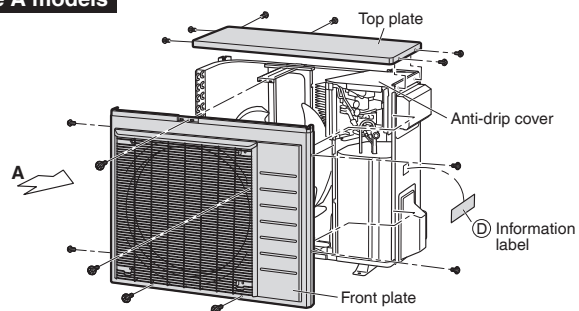
1. Remove each component of the outdoor unit.

- 1) Remove the top plate.
- 2) Remove the screws from the protective wire mesh if one is fitted. (2 screws)
- 3) Remove the front plate.
- 4) Remove the anti-drip cover.
- 5) Affix the ⓘ information label near the manufacturer's label.

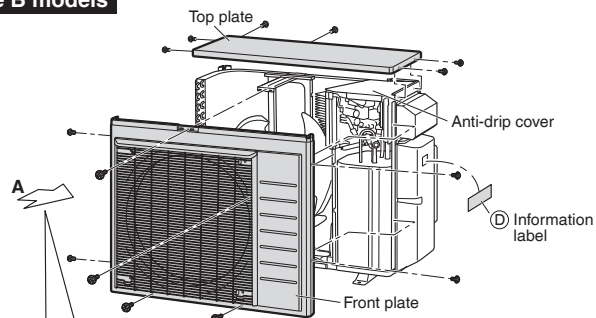
- Screw types for each component are indicated as below.

No icon: Hexagon tapping screw
 : Truss head tapping screw

For type A models



For type B models

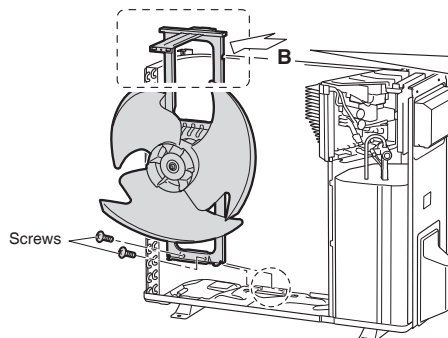


View A

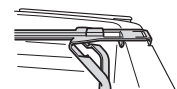
Protective wire mesh

2. Remove the fan motor base.

- 1) Remove the fixing screws at the lower section of the fan motor base. (2 screws)
- 2) Remove the fan motor base together with the propeller fan and ensure that stress is not placed on the propeller fan when placing them aside.
 - Do not remove the fan motor harness.
 - Ensure that the fan motor harness does not come into contact with the edges of the heat exchanger or other components.



View B



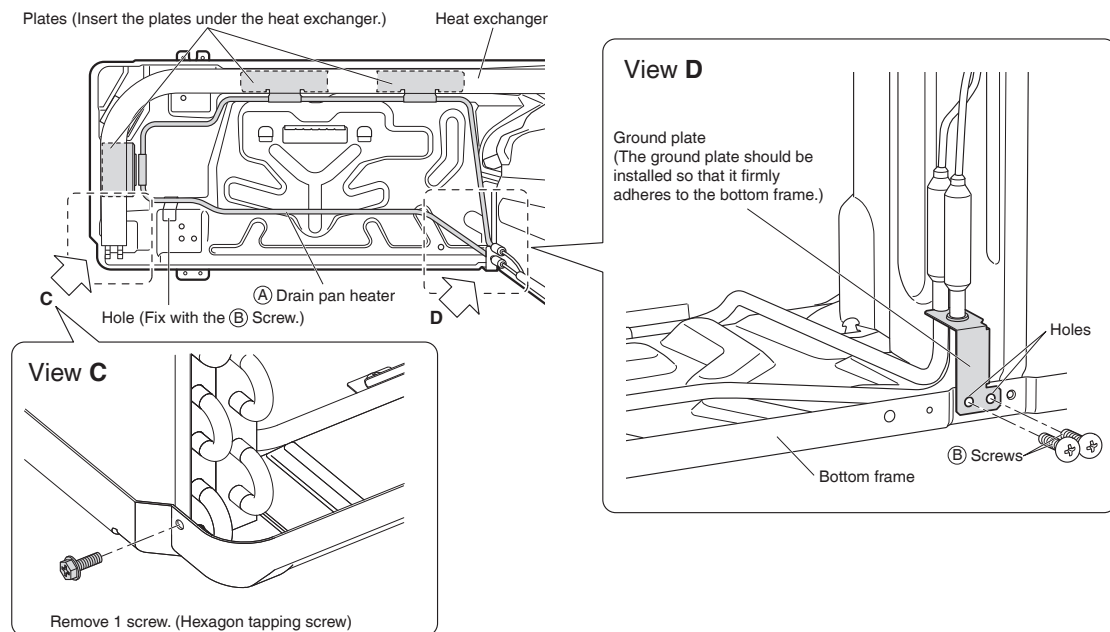
The lugs of the fan motor base are hooked on the heat exchanger.

Appearance of the outdoor unit may differ from some models.

Installation Procedure (2)

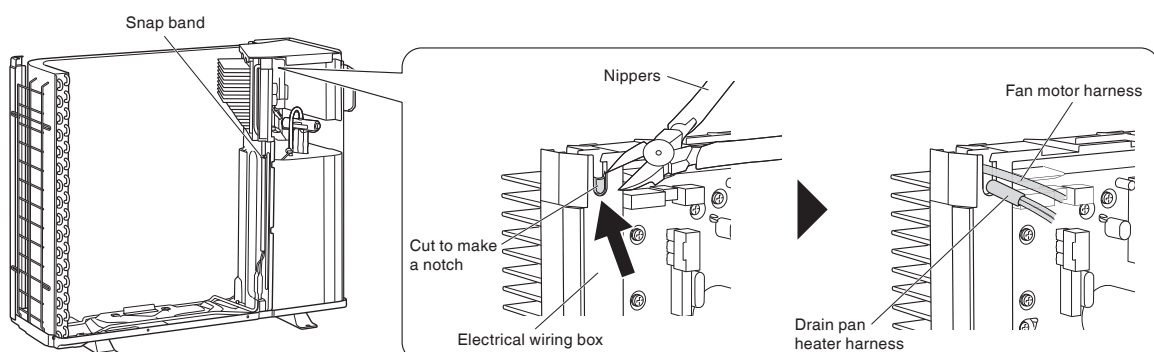
3. Install the (A) drain pan heater.

- 1) Remove 1 screw from the bottom frame so that the plates of the (A) drain pan heater can be inserted under the heat exchanger with ease.
- 2) Lift up the heat exchanger, and insert the plates of the (A) drain pan heater under the heat exchanger.
 - The ground plate of the (A) drain pan heater should be installed so that it firmly adheres to the bottom frame.
 - Install the (A) drain pan heater in a position where it does not come into contact with the fan motor base.
- 3) Fix the (A) drain pan heater with the (B) screws.
- 4) Reattach the screw that was removed from the bottom frame.



4. Route the harnesses.

- 1) Trim the electrical wiring box with nippers at the locations shown in the figures.
- 2) Insert the drain pan heater harness into the space that was trimmed.
- 3) Secure the drain pan heater harness snap band in the hole in the partition plate.
- 4) Install the fan motor base.
 - Be careful not to confuse screw types. Refer to “Installation Procedure (1)”.

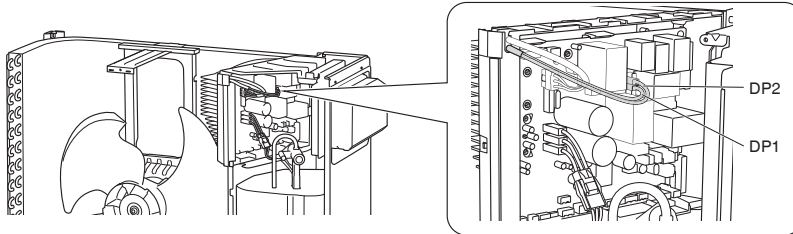


Installation Procedure (3)

For type A models

5) Connect the fasten terminals to DP1 and DP2 on the PC-board.

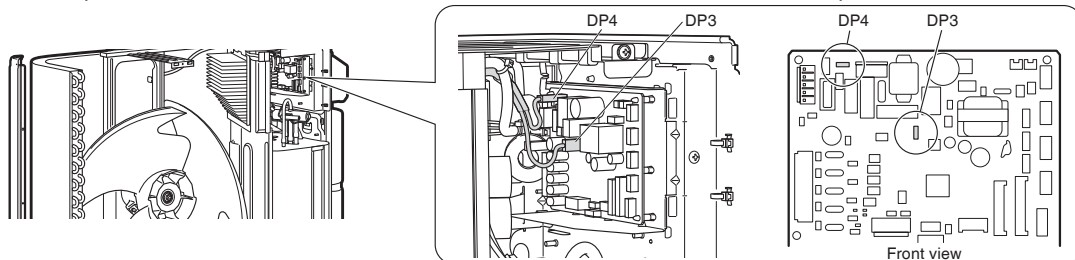
- Either drain pan heater fasten terminal can be connected to either DP1 or DP2 with no problem.



For type B models

5) Connect the fasten terminals to DP3 and DP4 on the PC-board.

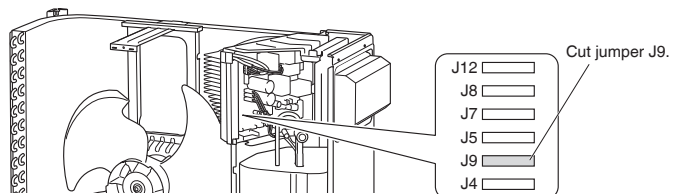
- Either drain pan heater fasten terminal can be connected to either DP3 or DP4 with no problem.



5. Cut the jumper.

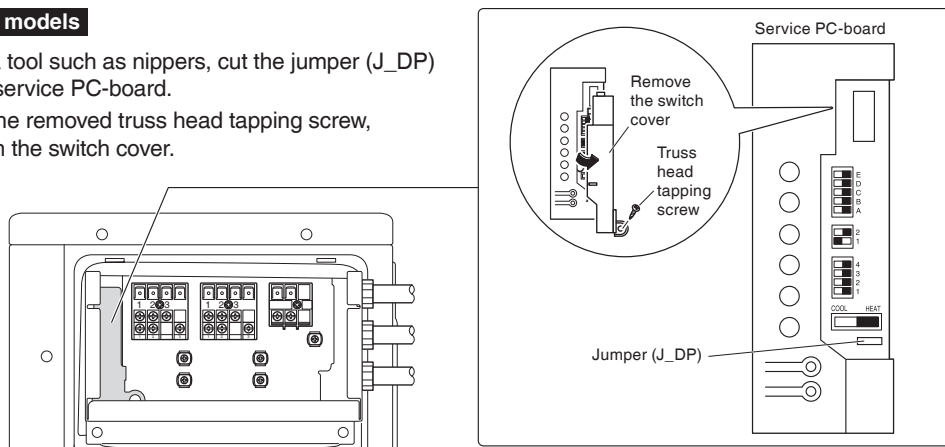
For type A models

- Using a tool such as nippers, cut the jumper (J9) of the PCB inside.



For type B models

- Using a tool such as nippers, cut the jumper (J_DP) on the service PC-board.
- Using the removed truss head tapping screw, reattach the switch cover.

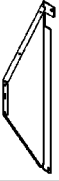
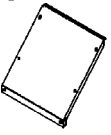
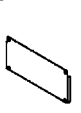


6. Install each component to the original position.

- Be careful not to confuse screw types. Refer to "Installation Procedure (1)".

13.21 <KPS067A41> Snow Hood (Side)

Parts Before assembling the product, verify that all of the following parts have been included:

Name	Side plate (left)	Side plate (right)	Top plate	Front plate	Screws	Piercing screw	Installation Manual
Illustration	① 	② 	③ 	④ 	⑤ 	⑥ 	⑦ 
Quantity	1	1	1	1	8	1	1 (this document)

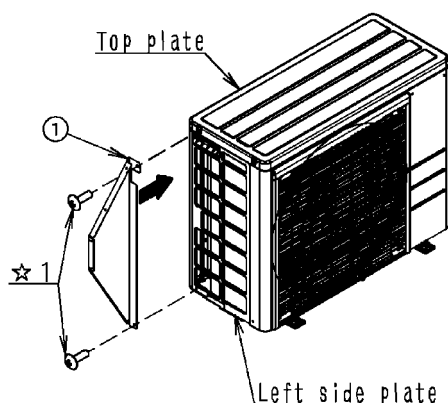
Caution Read these safety considerations for installation carefully before installing the product.

- Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
 2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
 3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
 4. Tighten screws securely. Failure to do so may result in vibration.

Caution
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

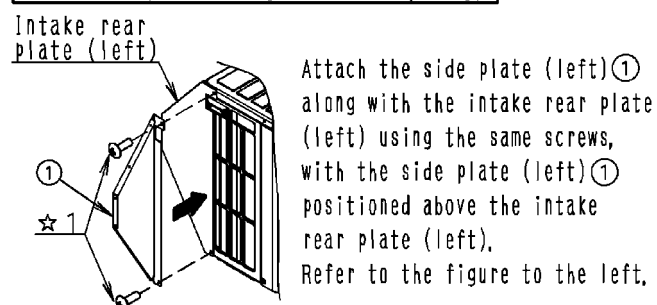
1 Installing the snow hood (intake side plate)

1 Attach the side plate (left) ①

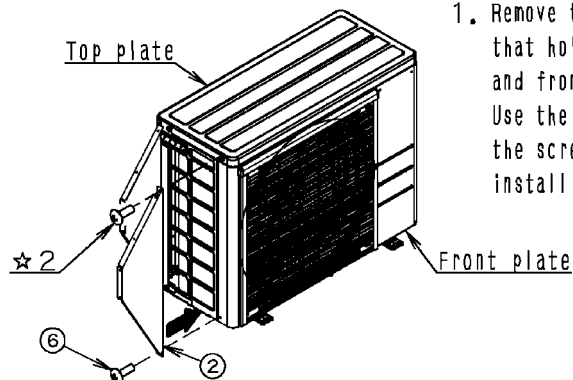


1. Remove the two screws (marked "☆1" in the figure) that hold the outdoor unit's top plate, bottom frame, and front plate in place and use them to attach the side plate (left) ①.

When using with KPS067A42 (snow hood [intake rear plate])

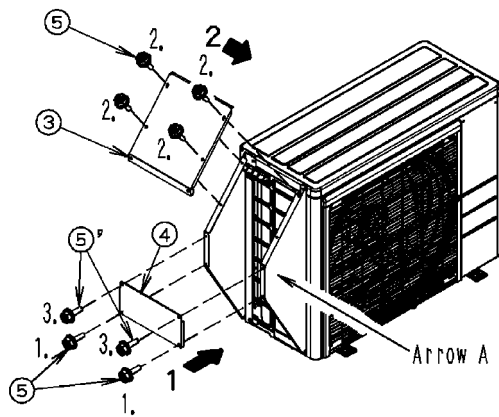


2 Attach the side plate (right) ②



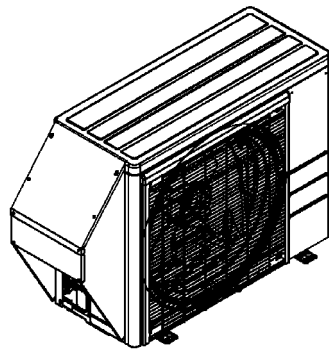
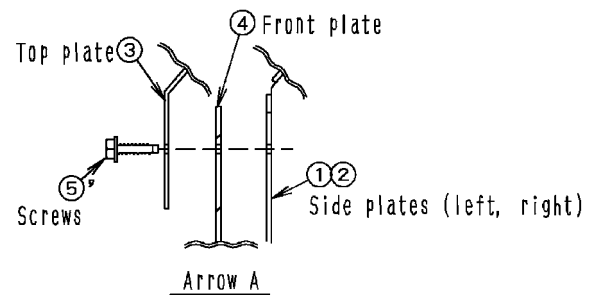
1. Remove the screw (marked "☆2" in the figure) that hold the outdoor unit's top plate, and front plate in place and Use the ⑥ piercing screws supplied with the screws and kit that were removed, install a side plate (right) ②.

3 Attach the top plate ③ and front plate ④.



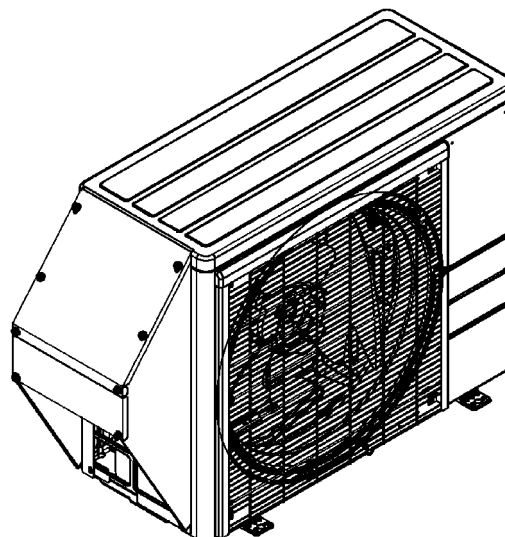
1. Aligning the creases on the left and right sides of the front plate ④ with the outer surfaces of the side plate (left) ① and the side plate (right) ②, temporarily secure the front plate ④ in place with the 2 screws ⑤.
2. Temporarily secure the top plate ③ from above the front plate ④ with the 4 screws ⑤.
3. Temporarily secure the top plate ③ and the front plate ④ with the 2 screws ⑤'. (See arrow A.)

*The side plate (left) (1), side plate (right) ②, top plate ③, and front plate ④ should be positioned as shown in the following figure:



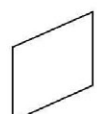
4. Securely tighten the 8 screws ⑤ with which the plates were temporarily secured in steps 1), 2), and 3).

2 Appearance of the snow hood (intake side plate) following installation



13.22 <KPS063A41> Snow Hood (Side)

Parts Before assembling the product, verify that all of the following parts have been included:

Name	Side plate (right)	Side plate (left)	Top plate	Front plate	Screws	Installation Manual
Illustration	① 	② 	③ 	④ 	⑤  (quantity to use 14)	⑥ 
Quantity	1	1	1	1	16	1 (this document)

Caution Read these safety considerations for installation carefully before installing the product.

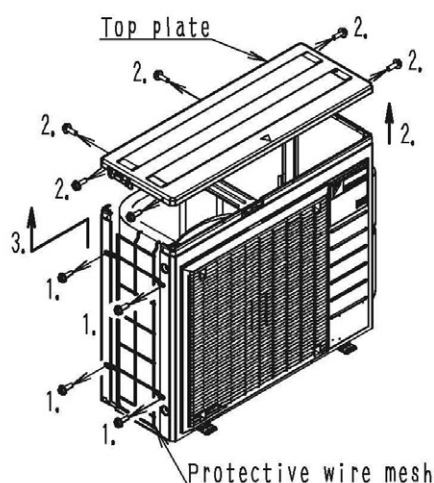
- Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
 2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
 3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
 4. Tighten screws securely. Failure to do so may result in vibration.

Caution

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

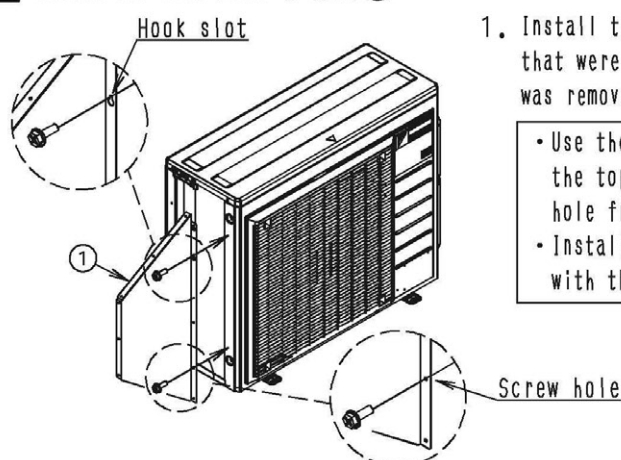
1 Installing the snow hood (intake side plate)

1 Remove the protective wire mesh



1. Remove the 2 screws that hold the protective wire mesh.
2. Remove the 6 screws that hold the top plate and remove the top plate.
3. Remove the protective wire mesh, being careful of the part that is attached to the heat exchanger.
4. Attach the top plate removed in step 2 using the 6 screws removed in step 2.

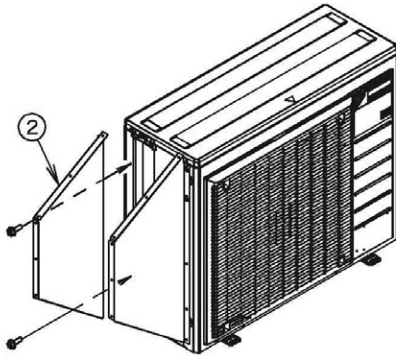
2 Attach the side plate (right) ①



1. Install the side plate (right) ① with the 2 screws that were used in the protective wire mesh that was removed in step 1.

- Use the second hook slot from the top and the 2 screw hole from the bottom.
- Installation is easiest if you start with the hook slot.

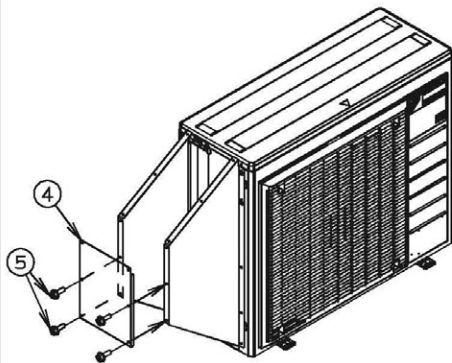
3 Attach the side plate (left) ②.



1. Install the side plate (left) ② with the 2 screws that were used in the protective wire mesh that was removed in step 1.

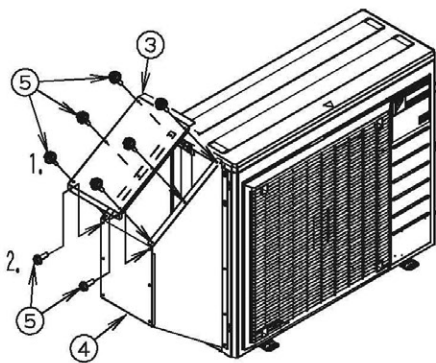
- Use the second hook slot from the top and the 2 screw hole from the bottom.
- Installation is easiest if you start with the hook slot.

4 Attach the front plate ④.



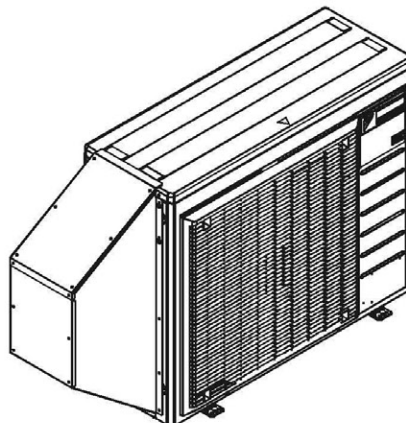
1. Temporarily secure the front plate ④ in place with the 4 screws ⑤.

5 Attach the top plate ③.



1. Attach the top plate ③ with the 6 screws ⑤.
2. Temporarily secure the top plate ③ and the front plate ④ to the side plate (right) ① and the side plate (left) ② with the 2 screws ⑤.
3. Tighten the 12 screws ⑤ that you used to temporarily secure parts in steps 4 and 5.

2 Appearance of the snow hood (intake side plate) after installation



13.23 <KPS067A42> Snow Hood (Rear)

Parts Before assembling the product, verify that all of the following parts have been included:

Name	Side plate	Side plate	Top plate	Front plate	Screws	Piercing screw	Installation Manual
Illustration	① (Left)	② (Right)	③	④	⑤	⑥	⑦
Quantity	1	1	1	1	8	2	1 (this document)

⚠ Caution Read these safety considerations for installation carefully before installing the product.

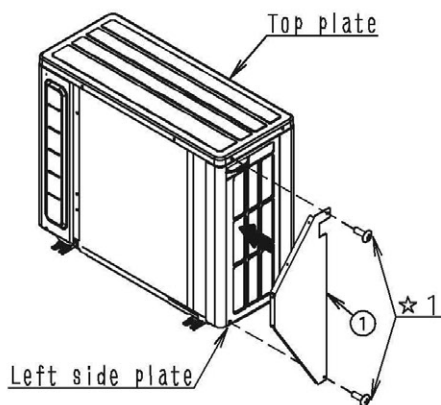
- Be sure to observe the following installation precautions to ensure that the product can be used safely:
 1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
 2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
 3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
 4. Tighten screws securely. Failure to do so may result in vibration.

⚠ Caution

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

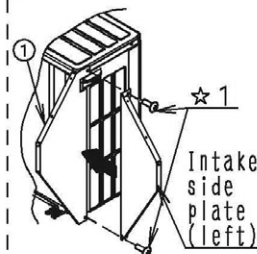
1 Installing the snow hood (intake rear plate)

1 Attach the side panel (left) ①.



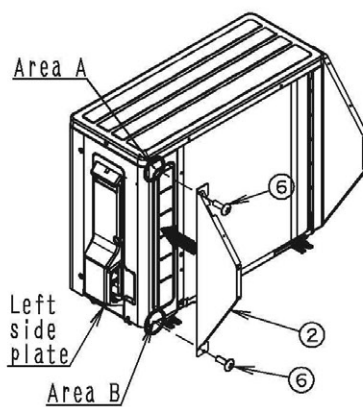
1. Remove the 2 screws (marked "★1" in the figure) that hold the outdoor unit's top plate, left side plate, and bottom frame and use them to attach the side plate (left) ①.

***When using with KPS067A41 (snow hood [intake side plate])**

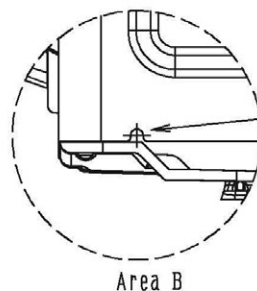


Attach the side plate (left) ① along with the intake side plate (left) using the same screws, with the side plate (left) ① positioned below the intake side plate (left). Refer to the figure to the left.

2 Attach the side plate (right) ②.

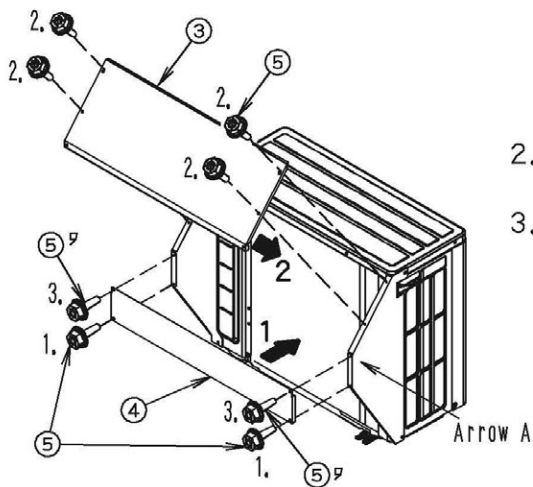


1. Attach by tightening the 1 piercing screw ⑥ into the dowel hole in the right side plate (area A) and the 1 piercing screw ⑥ into the screw hole in the bottom frame (area B).



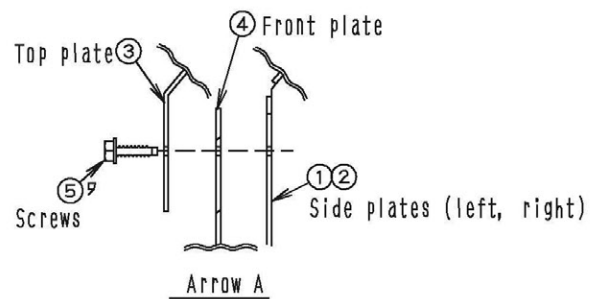
*If using an electric screwdriver, be careful not to overtighten the screws.
The fixed location

③ Attach the top plate ③ and the front plate ④.

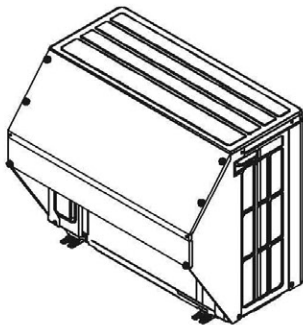


1. Aligning the creases on the left and right sides of the front plate ④ with the outer surfaces of the side plate (left) ① and side plate (right) ②, temporarily secure the front plate ④ in place with the 2 screws ⑤.
2. Temporarily secure the top plate ③ from above the front plate ④ with the 4 screws ⑤.
3. Temporarily secure the top plate ③ and the front plate ④ with the 2 screws ⑤'. (See arrow A,)

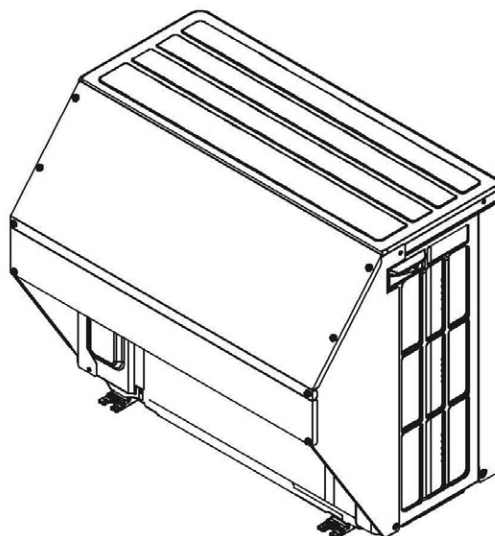
*The side plate (left) (1), side plate (right) ②, top plate ③, and front plate ④ should be positioned as shown in the following figure:



4. Securely tighten the 8 screws ⑤ with which the plates were temporarily secured in steps 1), 2), and 3).



② Appearance of the snow hood (intake rear plate) following installation



13.24 <KPS063A44> Snow Hood (Rear)

Parts Before assembling the product, verify that all of the following parts have been included:

Name	Side plate	Side plate	Top plate	Front plate	Screws	Piercing screw	Installation Manual
Illustration	① (Right)	② (Left)	③	④	⑤	⑥	⑦
Quantity	1	1	1	1	14	3	1 (this document)

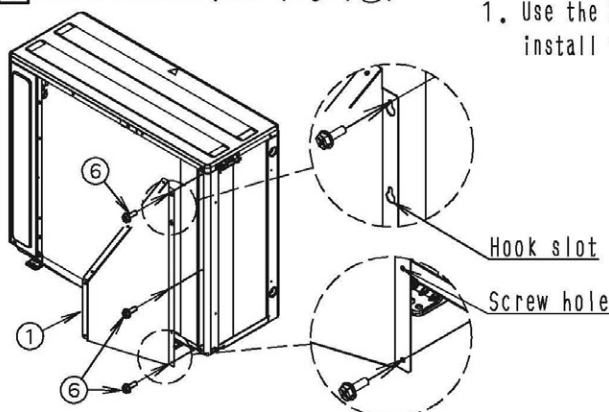
Caution Read these safety considerations for installation carefully before installing the product.

- Be sure to observe the following installation precautions to ensure that the product can be used safely:
 1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
 2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
 3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
 4. Tighten screws securely. Failure to do so may result in vibration.

Caution
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

① Installing the snow hood (intake rear plate)

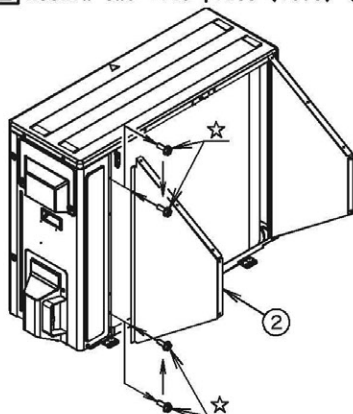
① Attach the side plate (right) ①.



1. Use the 3 piercing screws ⑥ included in the kit to install the side plate (right) ①.

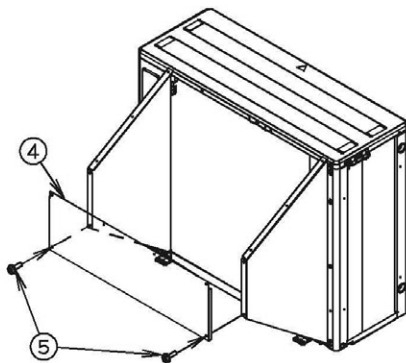
- For the hook slot, use the first hook slot from the top.
- For the screw hole, use the first screw hole from the bottom.
- Installation is easiest if you start with the hook slot.
- Align the screw installation position with the dowel hole.

② Attach the side plate (left) ②



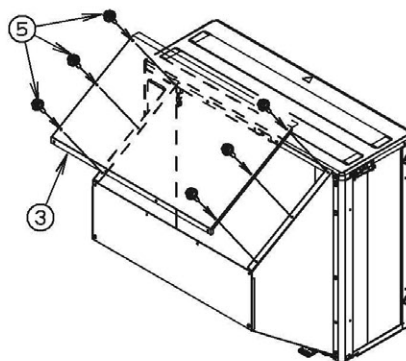
1. Remove the 2 screws (☆) that hold the heat exchanger.
2. Install the side plate (left) ② using the 2 screws removed in step 1.

3 Attach the front plate ④



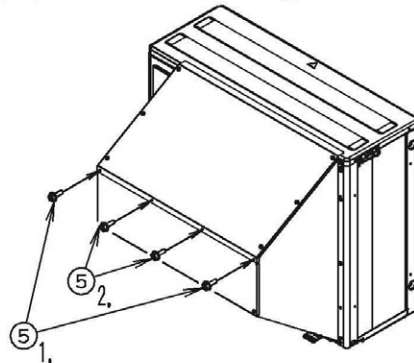
1. Temporarily secure the front plate ④ in place with the 2 screws ⑤ included in the kit.

4 Attach the top plate ③



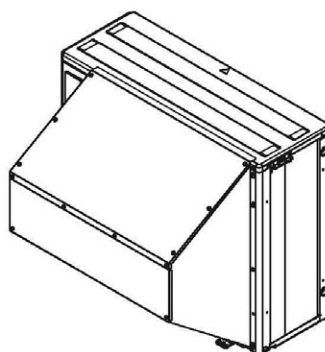
1. Temporarily secure the top plate ③ in place with the 6 screws ⑤ included in the kit.

5 Attach the top plate ③



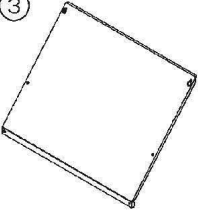
1. Temporarily secure the top plate ③ and front plate ④ to the side plate (right) ① and side plate (left) ② with the 2 screws ⑤ included in the kit.
2. Temporarily secure the top plate ③ to the front plate ④ with the 2 screws ⑤ included in the kit.
3. Tighten the 12 screws that you used to temporarily secure parts in steps 3), 4), and 5).

2 Appearance of the snow hood (intake rear plate) after installation



13.25 <KPS067A44> Snow Hood (Discharge)

Parts Before assembling the product, verify that all of the following parts have been included:

Name	Side plate	Side plate	Top plate	Screws	Installation Manual
Illustration	① (Right) 	② (Left) 	③ 	④ 	⑤ 
Quantity	1	1	1	6	1 (this document)

Caution Read these safety considerations for installation carefully before installing the product.

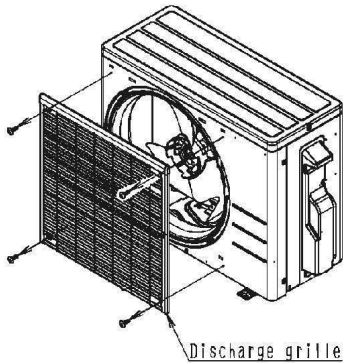
- Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
 2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
 3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
 4. Tighten screws securely. Failure to do so may result in vibration.

Caution
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

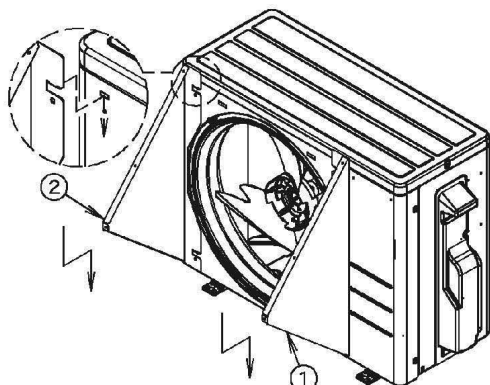
1 Installing the snow hood (outlet)

1 Remove the discharge grille,

1. Remove the 4 screws that hold the discharge grille, then remove the discharge grille.

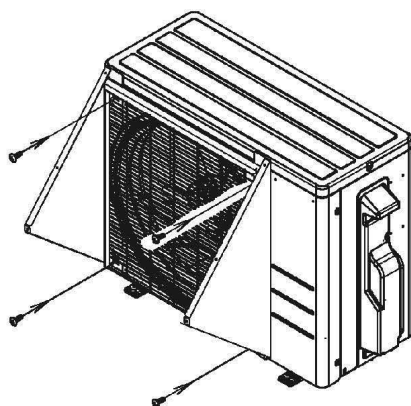


2 Attach the side plate (left) ② and side plate (right) ①.



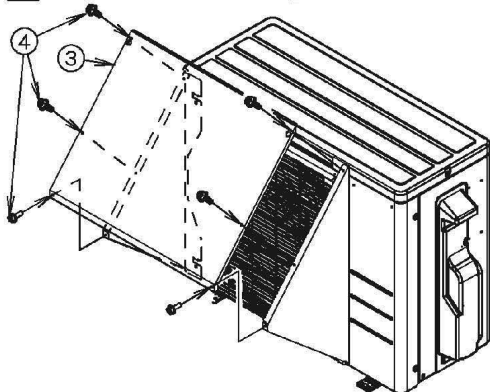
1. Insert the hooks in the side plate (right) ① and side plate (left) ② respectively into the holes provided in the front plate.

3 Attach the discharge grille.



1. When installing the discharge grille removed in [1], jointly tighten the side plate (right) ① and side plate (left) ② with the 2 screws that hold the discharge grille for each plate.

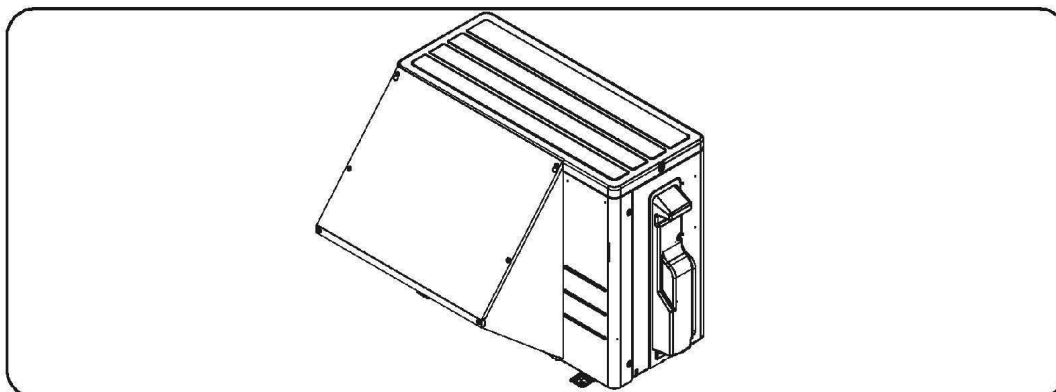
4 Attach the top plate ③



1. Install the top plate ③ using the 6 screws ④ included in the kit.

• Installation is easiest if you start with the hook slot.

2 Appearance of the snow hood (outlet) after installation



13.26 <KPS063A47> Snow Hood (Discharge)

Parts Before assembling the product, verify that all of the following parts have been included:

Name	Side plate	Side plate	Top plate	Installation plate	Screws	Piercing screw	Installation Manual
Illustration	① (Right)	② (Left)	③	④	⑤	⑥	⑦
Quantity	1	1	1	1	8	3	1 (this document)

Caution Read these safety considerations for installation carefully before installing the product.

● Be sure to observe the following installation precautions to ensure that the product can be used safely:

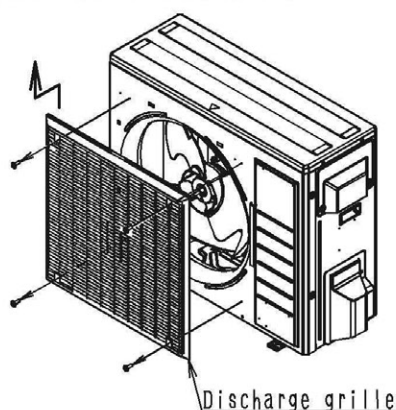
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

Caution

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

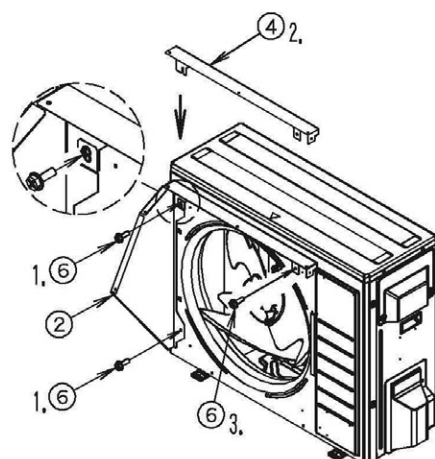
1 Installing the snow hood (outlet)

1 Remove the discharge grille.



1. Remove the 4 screws that hold the discharge grille.
(The discharge grille is held with the 4 screws and 2 hooks.)

2 Attach the side plate (left) ② and installation plate ④.

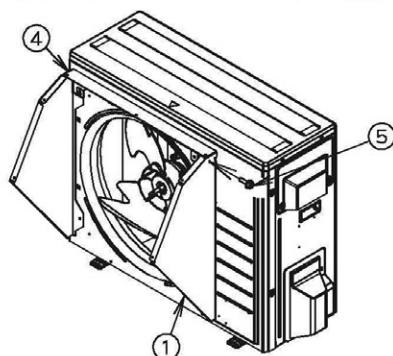


1. Temporarily secure the side plate (left) ② in place with the 2 piercing screw ⑥ included in the kit.

- Installation is easiest if you start with the hook slot.
- Align the screw installation position with the dowel hole.

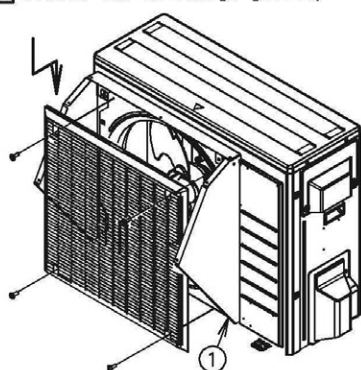
2. Jointly tighten the installation plate ④ with the 1 piercing screw ⑥ temporarily secured in step 1.
3. Install the right side of the installation plate ④ with the 1 piercing screw ⑥.

3 Attach the installation plate ④.



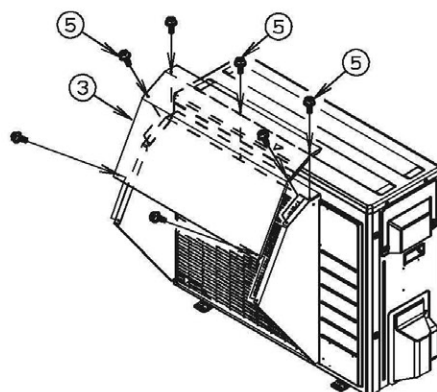
1. Install the side plate (right) ① and installation plate ④ with the 1 screws ⑤ included in the kit.

4 Attach the discharge grille.



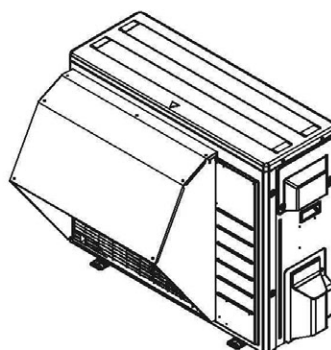
1. When installing the discharge grille removed in [1], jointly tighten the side plate (right) ① with the 2 screws securing the discharge grille. (Secure the discharge grille with the 4 screws and 2 hooks.)

5 Attach the top plate ③.



1. Install the top plate ③ with the 7 screws ⑤ included in the kit.

2 Appearance of the snow hood (outlet) after installation



Warning

- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.