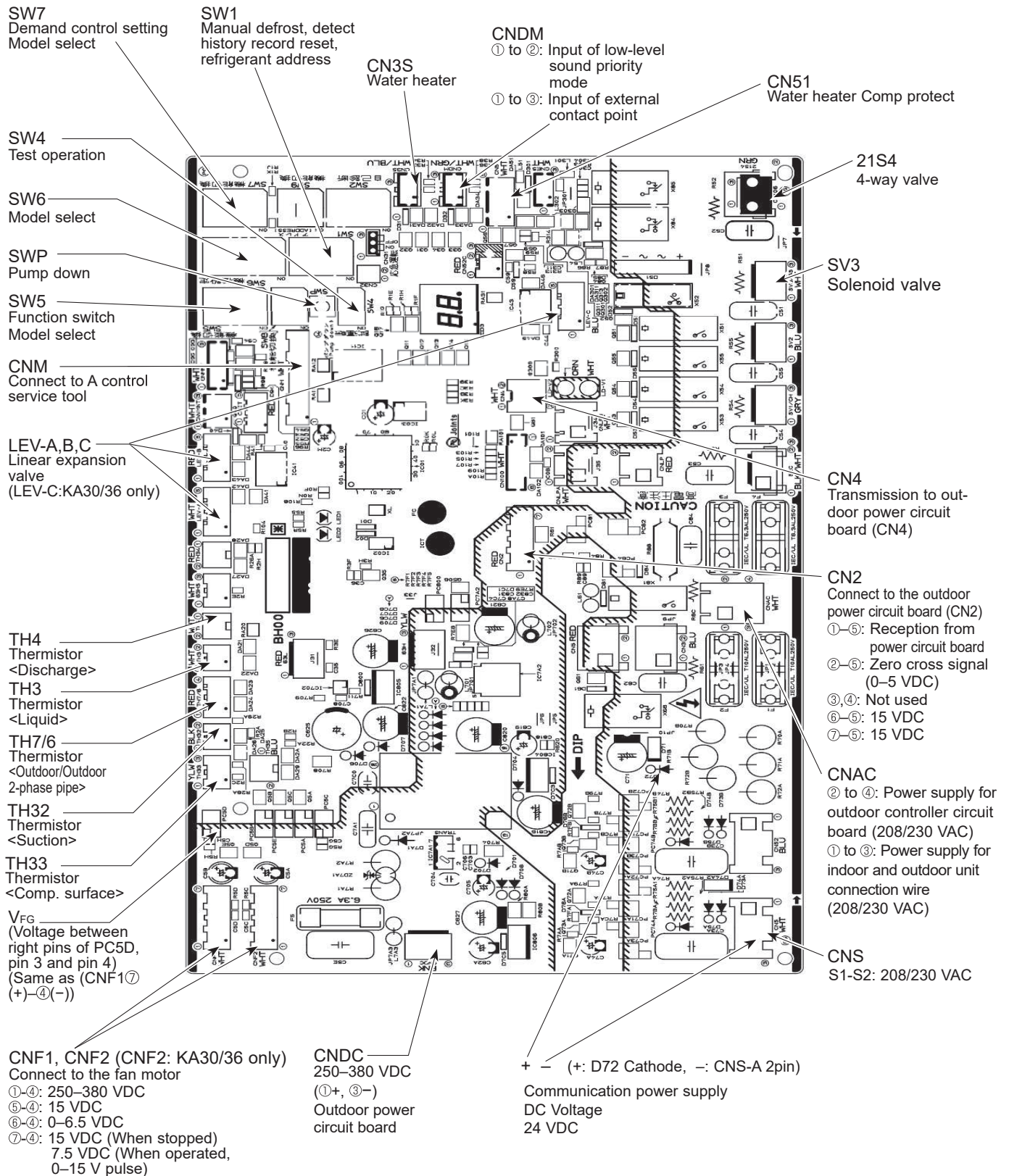


10-8. TEST POINT DIAGRAM

Outdoor controller circuit board

<CAUTION> TEST POINT① is high voltage.



Outdoor power circuit board

SUZ-KA24NAHZ

Brief Check of POWER MODULE

If they are short-circuited, it means that they are broken.
Measure the resistance in the following points (connectors, etc.).

1. Check POWER MODULE

① Check of DIODE circuit

R - P1 S - P1 R - N1 S - N1

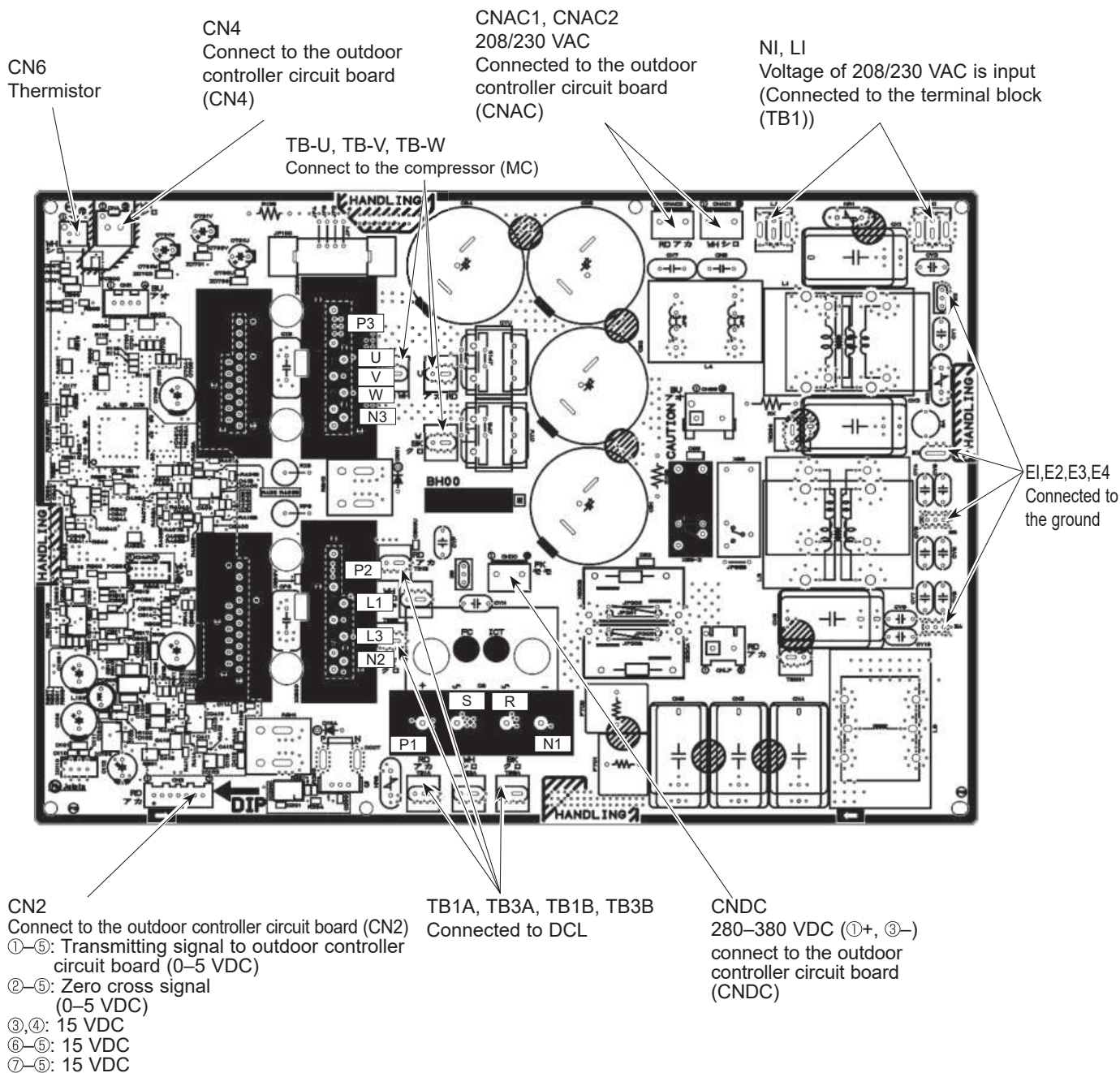
② Check of PFC circuit

P2 - L1 P2 - L3 N2 - L1 N2 - L3

③ Check of INVERTER circuit

P3 - U, P3 - V, P3 - W, N3 - U, N3 - V, N3 - W

Note: The marks R, S, L1, L3, P1, P2, P3, N1, N2, N3, U, V and W show in the diagram are not actually printed on the board.



Outdoor power circuit board

SUZ-KA30NAHZ
SUZ-KA36NAHZ

Brief Check of POWER MODULE

If they are short-circuited, it means that they are broken.
Measure the resistance in the following points (connectors, etc.).

1. Check POWER MODULE

① Check of DIODE circuit

R - P1 S - P1 R - N1 S - N1

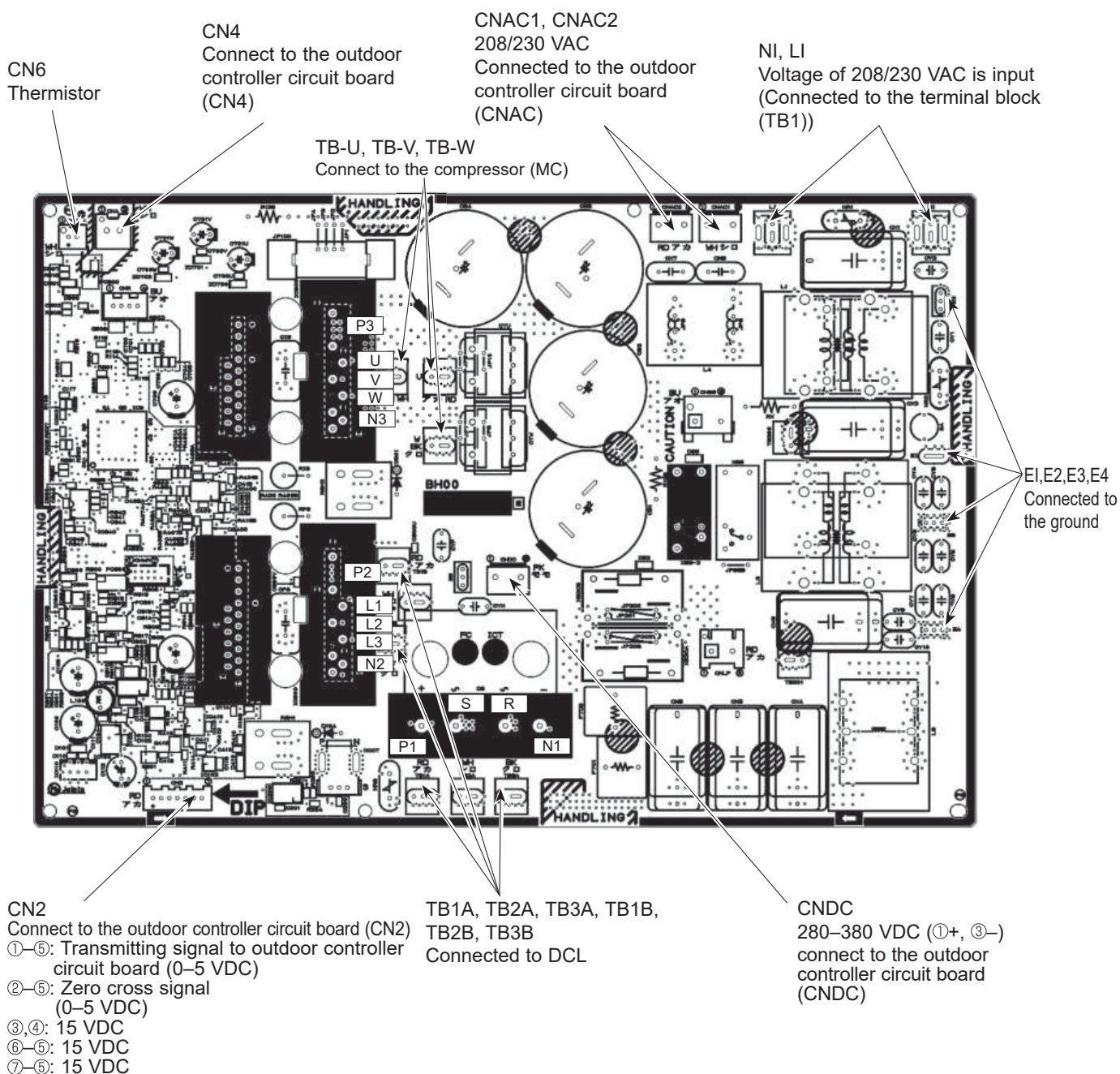
② Check of PFC circuit

P2 - L1 P2 - L2 P2 - L3 N2 - L1 N2 - L2 N2 - L3

③ Check of INVERTER circuit

P3 - U, P3 - V, P3 - W, N3 - U, N3 - V, N3 - W

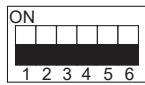
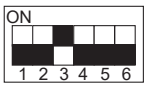
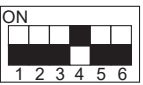
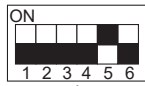
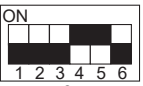
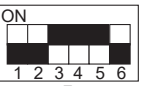
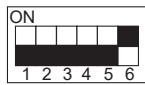
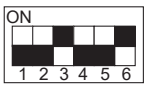
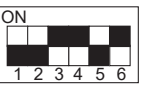
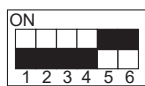
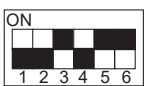
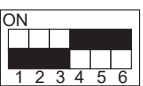
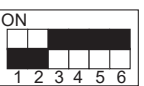
Note: The marks R, S, L1, L2, L3, P1, P2, P3, N1, N2, N3, U, V and W show in the diagram are not actually printed on the board.



10-9. FUNCTION OF SWITCHES, CONNECTORS AND JUMPERS

(1) Function of switches

The black square (■) indicates a switch position.

Type of switch	Switch	No.	Function	Action by the switch operation		Effective timing		
				ON	OFF			
DIP switch	SW1	1	Manual defrost*	Start	Normal	When compressor is working in heating operation.*		
		2	Abnormal history clear	Clear	Normal	off or operating		
		3	Refrigerant address setting	 0	 1	 2	 3	When power supply ON
		4		 4	 5	 6	 7	
		5		 8	 9	 10	 11	
		6		 12	 13	 14	 15	
	SW4	1	Test run	Operating	OFF	Under suspension		
		2	Test run mode setting	Heating	Cooling			
	SW8	1	Use of existing pipe	Used	Not used	Always		
		2	No function	—	—	—		
		3	Separate indoor/outdoor unit power supplies	Used	Not used	When power supply ON		
	Push switch	SWP		Pump down	Start	Normal	Under suspension	

*Manual defrost should be done as follows;

- ① Change the DIP SW1-1 on the outdoor controller board from OFF to ON.
- ② Manual defrost will start by the above operation 1 if all these conditions written below are satisfied.
 - Heat mode setting
 - 10 minutes have passed since compressor started operating or previous manual defrost finished.
 - Pipe temperature is less than or equal to 46°F [8°C].

Manual defrost will finish if certain conditions have been satisfied.

Manual defrost can be done if above conditions have been satisfied when DIP SW1-1 is changed from OFF to ON.

After DIP SW1-1 is changed from OFF to ON, there is no problem if DIP SW1-1 is left ON or changed to OFF again.

This depends on the service conditions.

Continue to the next page.

Type of Switch	Switch	No.	Function	Action by the switch operation		Effective timing																																																							
				ON	OFF																																																								
DIP switch	SW5	1	No function	—	—	—																																																							
		2	Power failure automatic recovery*2	Auto recovery	No auto recovery	When power supply ON																																																							
		3,4,5,6	No function	—	—	—																																																							
	SW7*4	1	Model select*3	Demand function	Low noise mode	Always																																																							
		2	No function	—	—	—																																																							
		3	Max. Hertz setting (cooling)	Max. Hertz (cooling) × 0.8	Normal	Always																																																							
		4	Max. Hertz setting (heating)	Max. Hertz (heating) × 0.8	Normal	Always																																																							
		5	No function	—	—	—																																																							
		6	Defrost setting	For high humidity	Normal	Always																																																							
		SW9	1	No function	—	—	—																																																						
	2		No function	—	—	—																																																							
	3,4		No function	—	—	—																																																							
	SW6	1	Model select	<table><tr><th>MODEL</th><th colspan="8">SW6</th></tr><tr><td rowspan="2">24N</td><td>ON</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr><tr><td>OFF</td><td>☒</td><td>☒</td><td>☒</td><td>☐</td><td>☒</td><td>☒</td></tr><tr><td rowspan="2">30N</td><td>ON</td><td>☐</td><td>☒</td><td>☐</td><td>☐</td><td>☒</td><td>☐</td></tr><tr><td>OFF</td><td>☒</td><td>☐</td><td>☒</td><td>☒</td><td>☐</td><td>☒</td></tr><tr><td rowspan="2">36N</td><td>ON</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr><tr><td>OFF</td><td>☒</td><td>☒</td><td>☒</td><td>☐</td><td>☐</td><td>☒</td></tr></table>				MODEL	SW6								24N	ON	☐	☐	☐	☐	☐	☐	OFF	☒	☒	☒	☐	☒	☒	30N	ON	☐	☒	☐	☐	☒	☐	OFF	☒	☐	☒	☒	☐	☒	36N	ON	☐	☐	☐	☐	☐	☐	OFF	☒	☒	☒	☐	☐	☒
		MODEL						SW6																																																					
		24N						ON	☐	☐	☐	☐	☐	☐																																															
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SW5	6																																																												

*2 “Power failure automatic recovery” can be set by either remote controller or this DIP SW. If one of them is set to ON, “Auto recovery” activates. Please set “Auto recovery” basically by remote controller because all units do not have DIP SW. Please refer to the indoor unit installation manual.

*3 SW7-1,2 are used for demand control. SW7-1,2 are effective only at the demand control.
(Refer to next page: Special function (b))

*4 Please do not use SW7-3-6 usually. Trouble might be caused by the usage condition.

(2) Function of connector

Types	Connector	Function	Action by open/ short operation		Effective timing
			Short	Open	
Connector	CN31	Emergency operation	Start	Normal	When power supply ON

Special function

(a) Low-level sound priority mode (Local wiring)

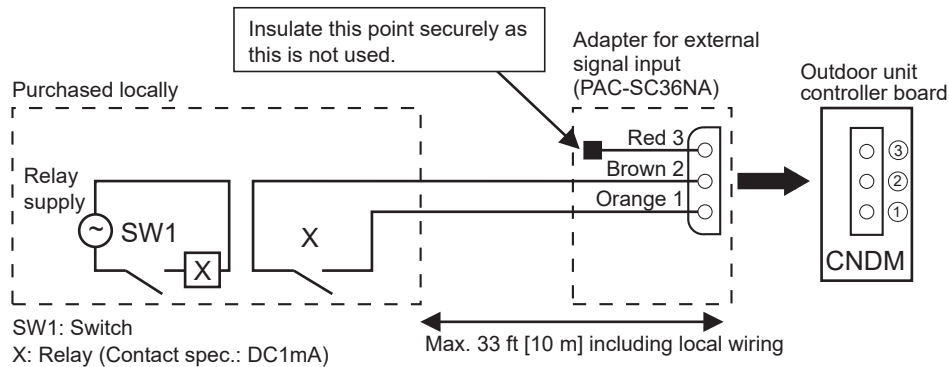
Unit enters into Low-level sound priority mode by external signal input setting.

Inputting external signals to the outdoor unit decreases the outdoor unit operation sound 3 to 4 dB lower than that of usual. Adding a commercial timer or on-off switch contactor setting to the CNDM connector which is optional contactor for demand input located on the outdoor controller board enables to control compressor operation frequency.

Note: The performance depends on the load of conditioned outdoor temperature.

How to wire

<Low-level sound priority mode circuit>



1) Make the circuit as shown above with adapter for external signal input (PAC-SC36NA).

2) Turn SW1 to on for Low-level sound priority mode.

Turn SW1 to off to release Low-level sound priority mode and normal operation.

(b) On demand control (Local wiring)

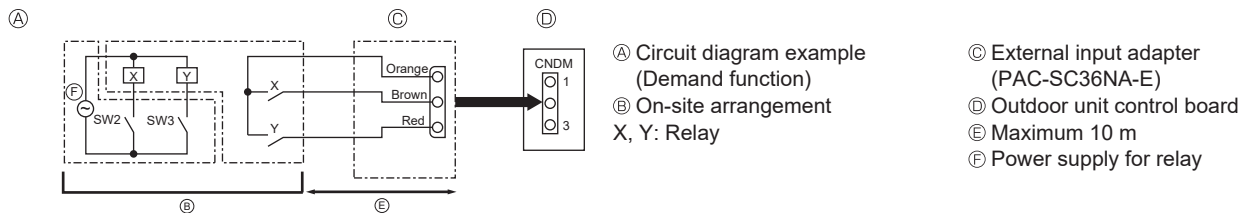
By performing the following modification, energy consumption can be reduced to 0–100% of the normal consumption.

The demand function will be activated when a commercially available timer or the contact input of an ON/OFF switch is added to the CNDM connector (option) on the control board of the outdoor unit.

① Complete the circuit as shown when using the external input adapter (PAC-SC36NA-E). (Option)

② By setting SW7-1 on the control board of the outdoor unit, the energy consumption (compared to the normal consumption) can be limited as shown below.

	SW7-1	SW2	SW3	Energy consumption
Demand function	ON	OFF	OFF	100%
		ON	OFF	75%
		ON	ON	50%
		OFF	ON	0% (Stop)



<Display function of inspection for outdoor unit>

The blinking patterns of both LED1(green) and LED2(red) indicate the types of abnormality when it occurs.

Types of abnormality can be indicated in details by connecting an optional part "A-Control Service Tool (PAC-SK52ST)" to connector CNM on outdoor controller board.

[Display]

(1)Normal condition

Unit condition	Outdoor controller board		A-Control Service Tool	
	LED1 (Green)	LED2 (Red)	Check code	Indication of the display
When the power is turned on	Lit	Lit	— ⇔ —	Alternately blinking display
When unit stops	Lit	Not lit	00, etc.	Operation mode
When compressor is warming up	Lit	Not lit	08, etc.	
When unit operates	Lit	Lit	C5, H7, etc.	

(2)Abnormal condition

Indication		Error			
Outdoor controller board		Contents	Check code*	Inspection method	Detailed reference page
LED1 (Green)	LED2 (Red)				
1 blinking	2 blinking	Connector(63H) is open.	F5	① Check if connector (63H) on the outdoor controller board is not disconnected. ② Check continuity of pressure switch (63H) by multimeter.	P.27
2 blinking	1 blinking	Miswiring of indoor/outdoor unit connecting wire, excessive number of indoor units (4 units or more)	—	① Check if indoor/outdoor connecting wire is connected correctly. ② Check if 4 or more indoor units are connected to outdoor unit.	P.27 (EA)
		Miswiring of indoor/outdoor unit connecting wire (converse wiring or disconnection)	—	③ Check if noise entered into indoor/outdoor connecting wire or power supply.	P.27 (Eb)
		Startup time over	—	④ Re-check error by turning off power, and on again.	P.27 (EC)
	2 blinking	Indoor/outdoor unit communication error (signal receiving error) is detected by indoor unit.	E6	① Check if indoor/outdoor connecting wire is connected correctly. ② Check if noise entered into indoor/outdoor connecting wire or power supply.	**
		Indoor/outdoor unit communication error (transmitting error) is detected by indoor unit.	E7	③ Check if noise entered into indoor/outdoor controller board.	**
		Indoor/outdoor unit communication error (signal receiving error) is detected by outdoor unit.	—	④ Re-check error by turning off power, and on again.	P.33 (E8)
		Indoor/outdoor unit communication error (transmitting error) is detected by outdoor unit.	—		P.33 (E9)
	3 blinking	Remote controller signal receiving error is detected by remote controller.	E0	① Check if connecting wire of indoor unit or remote controller is connected correctly.	P.32
		Remote controller transmitting error is detected by remote controller.	E3	② Check if noise entered into transmission wire of remote controller.	P.33
		Remote controller signal receiving error is detected by indoor unit.	E4	③ Re-check error by turning off power, and on again.	P.32
		Remote controller transmitting error is detected by indoor unit.	E5		P.33
	4 blinking	Check code is not defined.	EF	① Check if noise entered into transmission wire of remote controller. ② Check if noise entered into indoor/outdoor connecting wire. ③ Re-check error by turning off power, and on again.	P.34
		Float switch connector open (FS)	P4	① Check if connector (CN4F) on indoor controller board is not disconnected. ② Measure resistance value among terminals on drain pump using a multimeter. ③ Check if drain pump works. ④ Check drain function.	**
	5 blinking	Serial communication error <Communication between outdoor controller board and outdoor power board> <Communication between outdoor controller board and M-NET P.C. board>	Ed	① Check if connector (CN4) on outdoor controller board and outdoor power board is not disconnected. ② Check if there is poor connection of connector on outdoor controller board(CNMNT and CNVMNT). ③ Check M-NET communication signal.	P.34
		Communication error of M-NET system	A0-A8		P.36-P.39

*Check code displayed on remote controller

**Refer to service manual for indoor unit.

Continue to the next page.



Indication		Error			
Outdoor controller board		Contents	Check code*	Inspection method	Detailed reference page
LED1 (Green)	LED2 (Red)				
3 blinking	1 blinking	Abnormality of Discharge temperature (TH4) and Comp. surface temperature (TH33)	U2	① Check if stop valves are open. ② Check if connectors (TH4, TH33, LEV-A, and LEV-B) on outdoor controller board are not disconnected.	P.28
		Abnormality of superheat due to low discharge temperature	U7	③ Check if unit is filled with specified amount of refrigerant. ④ Measure resistance values among terminals on indoor valve and outdoor linear expansion valve using a multimeter.	P.30
	2 blinking	Abnormal high pressure (High pressure switch 63H worked.)	U1	① Check if indoor/outdoor units have a short cycle on their air ducts. ② Check if connector (63H) (63L) on outdoor controller board is not disconnected.	P.28
		Abnormal low pressure (Low pressure switch 63L worked.)	UL	③ Check if heat exchanger and filter is not dirty. ④ Measure resistance values among terminals on linear expansion valve using a multimeter.	P.32
	3 blinking	Abnormality of outdoor fan motor rotational speed	U8	① Check the outdoor fan motor. ② Check if connector (TH3) (T _{63HS}) on outdoor controller board is disconnected.	P.30
		Protection from overheat operation(TH3)(T _{63HS})	Ud		P.31
	4 blinking	Compressor overcurrent breaking (Startup locked)	UF	① Check if stop valves are open. ② Check looseness, disconnection, and converse connection of compressor wiring.	P.31
		Compressor overcurrent breaking (P.B.)	UP		P.32
		Abnormality of current sensor (P.B.)	UH	③ Measure resistance values among terminals on compressor using a multimeter.	P.31
		Abnormality of power module	U6	④ Check if outdoor unit has a short cycle on its air duct.	P.29
	5 blinking	Open/short of discharge thermistors (TH4) (TH33)	U3	① Check if connectors (TH3, TH32, TH33, TH4, and TH7/6) on outdoor controller board and connector (CN6) on outdoor power board are not disconnected.	P.29
		Open/short of outdoor thermistors (TH3, TH32, TH6, TH7 and TH8)	U4	② Measure resistance value of outdoor thermistors.	P.29
	6 blinking	Abnormality of heatsink temperature	U5	① Check if indoor/outdoor units have a short cycle on their air ducts. ② Measure resistance value of outdoor thermistor (TH8).	P.29
	7 blinking	Abnormality of voltage	U9	① Check looseness, disconnection, and converse connection of compressor wiring. ② Measure resistance value among terminals on compressor using a multimeter. ③ Check if power supply voltage decreases.	P.30
4 blinking	1 blinking	Abnormality of room temperature thermistor (TH1)	P1	① Check if connectors (CN20, CN21, CN29 and CN44) on indoor controller board are not disconnected.	**
		Abnormality of pipe temperature thermistor /Liquid (TH2)	P2	② Measure resistance value of indoor thermistors.	**
		Abnormality of pipe temperature thermistor/Condenser-Evaporator	P9		**
	2 blinking	Abnormality of drain sensor (DS)	P4	① Check if connector (CN31) on indoor controller board is not disconnected.	**
		Indoor drain overflow protection	P5	② Measure resistance value of indoor thermistors. ③ Measure resistance value among terminals on drain-up machine using a multimeter. ④ Check if drain-up machine works. ⑤ Check drain function.	**
	3 blinking	Freezing (cooling)/overheating (heating) protection	P6	① Check if indoor unit has a short cycle on its air duct. ② Check if heat exchanger and filter is not dirty. ③ Measure resistance value on indoor and outdoor fan motors. ④ Check if the inside of refrigerant piping is not clogged.	**
	4 blinking	Abnormality of pipe temperature	P8	① Check if indoor thermistors(TH2 and TH5) are not disconnected from holder. ② Check if stop valve is open. ③ Check converse connection of extension pipe. (on plural units connection) ④ Check if indoor/outdoor connecting wire is connected correctly.(on plural units connection)	**

*Check code displayed on remote controller

**Refer to service manual for indoor unit.

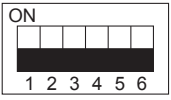
<Outdoor unit operation monitor function>

[When optional part "A-Control Service Tool(PAC-SK52ST)" is connected to outdoor controller board(CNM)]

Digital indicator LED1 displays 2 digit number or code to inform operation condition and the meaning of check code by controlling DIP SW2 on "A-Control Service Tool".

Operation indicator SW2: Indicator change of self-diagnosis

SW2 setting	Display detail	Explanation for display	Unit
-------------	----------------	-------------------------	------

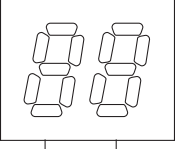


<Digital indicator LED1 working details>
(Be sure that 1 to 6 in the SW2 are set to OFF.)

(1) Display when the power supply turns ON
When the power supply turns ON, blinking displays by turns.
Wait for 4 minutes at the longest.

(2) When the display lights (Normal operation)
①Operation mode display

LED1



(Lighting)

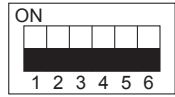
The tens digit: Operation mode

Display	Operation Model
O	OFF / FAN
C	COOLING / DRY
H	HEATING
d	DEFROSTING

The ones digit: Relay output

Display	Warming-up Compressor	Compressor	4-way valve	Solenoid valve
0	—	—	—	—
1	—	—	—	ON
2	—	—	ON	—
3	—	—	ON	ON
4	—	ON	—	—
5	—	ON	—	ON
6	—	ON	ON	—
7	—	ON	ON	ON
8	ON	—	—	—
A	ON	—	ON	—

SW2



(Initial setting)

(2)Display during error postponement
Postponement code is displayed when compressor stops due to the work of protection device.
Postponement code is displayed while error is being postponed.

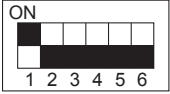
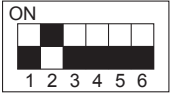
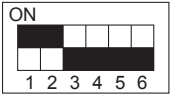
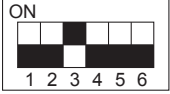
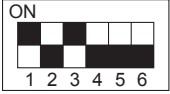
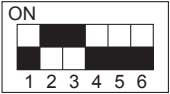
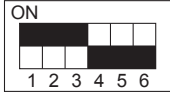
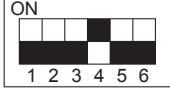
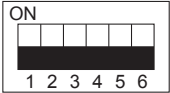
(3) When the display blinks
Inspection code is displayed when compressor stops due to the work of protection devices.

Display	Inspection unit
0	Outdoor unit
1	Indoor unit 1
2	Indoor unit 2

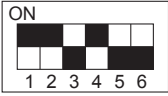
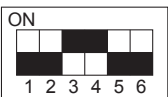
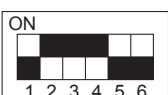
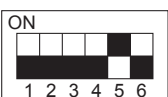
Display	Contents to be inspected (During operation)
U1	Abnormal high pressure (63H worked)
U2	Abnormal high discharge temperature, shortage of refrigerant
U3	Open/short circuit of discharge thermistor (TH4) (TH33)
U4	Open/short of outdoor unit thermistors (TH3, TH32, TH6, TH7 and TH8)
U5	Abnormal temperature of heatsink
U6	Abnormality of power module
U7	Abnormality of superheat due to low discharge temperature
U8	Abnormality in outdoor fan motor
Ud	Overheat protection
UE	Abnormal pressure of 63HS
UF	Compressor overcurrent interruption (When Comp. locked)
UH	Current sensor error
UL	Abnormal low pressure(63L worked)
UP	Compressor overcurrent interruption
P1~P8	Abnormality of indoor units
PL	Abnormal refrigerant circuit
A0~A7	Communication error of M-NET system

Display	Contents to be inspected (When power is turned on)
F3	63L connector(red) is open.
F5	63H connector(yellow) is open.
E8	Indoor/outdoor communication error (Signal receiving error) (Outdoor unit)
E9	Indoor/outdoor communication error (Transmitting error) (Outdoor unit)
EA	Miswiring of indoor/outdoor unit connecting wire, excessive number of indoor units (4 units or more)
Eb	Miswiring of indoor/outdoor unit connecting wire(converse wiring or disconnection)
EC	Startup time over
E0~E7	Communication error except for outdoor unit

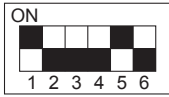
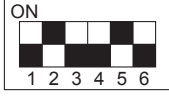
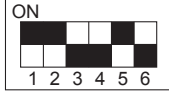
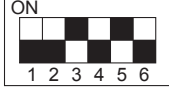
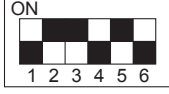
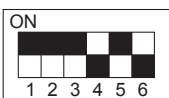
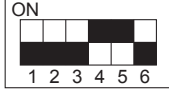
The black square (■) indicates a switch position.

SW2 setting	Display detail	Explanation for display	Unit
	Pipe temperature / Liquid (TH3) -40 to 194	-40 to 194 [-40 to 90°C] (When the coil thermistor detects 0°F [0°C] or below, “-” and temperature are displayed by turns.) Example: When -10°F; 0.5 s 0.5 s 2 s -□ → 10 → □□	°F [°C]
	Discharge temperature (TH4) 37 to 433	37 to 433 [3 to 217°C] (When the discharge thermistor detects 100°F or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 105°F; 0.5 s 0.5 s 2 s □1 → 05 → □□	°F [°C]
	Output step of outdoor FAN 0 to 10	0 to 10	Step
	The number of ON / OFF times of compressor 0 to 9999	0 to 9999 (When the number of times is 100 or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 42500 times (425 × 100 times); 0.5 s 0.5 s 2 s □4 → 25 → □□	100 times
	Compressor integrating operation times 0 to 9999	0 to 9999 (When it is 100 hours or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 2450 hours (245 × 10 hours); 0.5 s 0.5 s 2 s □4 → 25 → □□	10 hours
	Compressor operating current 0 to 50	0 to 50 Note: Omit the figures after the decimal fractions.	A
	Compressor operating frequency 0 to 9999	0 to 9999 (When it is 100 Hz or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 125 Hz; 0.5 s 0.5 s 2 s 12 → 50 → □□	Hz
	LEV-A opening pulse 0 to 480	0 to 480 (When it is 100 pulse or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 150 pulse; 0.5 s 0.5 s 2 s □1 → 50 → □□	Pulse
	Error postponement code history (1) of outdoor unit	Postponement code display Blinking: During postponement Lighting: Cancellation of postponement “00” is displayed in the case of no postponement.	Code display
	Operation mode on error occurring	Operation mode of when operation stops due to error is displayed by setting SW2 like below. (SW2) 	Code display

The black square (■) indicates a switch position.

SW2 setting	Display detail	Explanation for display	Unit
	Pipe temperature / Liquid (TH3) on error occurring -40 to 194	-40 to 194 [-40 to 90°C] (When the coil thermistor detects 0°F [0°C] or below, “-” and temperature are displayed by turns.) Example: When -15°F; 0.5 s 0.5 s 2 s -□ → 15 → □□	°F [°C]
	Compressor temperature (TH4) or discharge temperature (TH4) on error occurring 37 to 433	37 to 433 [3 to 217°C] (When the temperature is 100°F or more, the hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 130°F; 0.5 s 0.5 s 2 s □1 → 30 → □□	°F [°C]
	Compressor operating current on error occurring 0 to 50	0 to 50	A
	Error history (1) (latest) Alternate display of abnormal unit number and code	When no error history, “0” and “-” are displayed by turns.	Code display
	Error history (2) Alternate display of error unit number and code	When no error history, “0” and “-” are displayed by turns.	Code display
	Thermostat ON time 0 to 999	0 to 999 (When it is 100 minutes or more, the hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 245 minutes; 0.5 s 0.5 s 2 s □2 → 45 → □□	Minute
	Test run elapsed time 0 to 120	0 to 120 (When it is 100 minutes or more, the hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 105 minutes; 0.5 s 0.5 s 2 s □1 → 05 → □□	Minute

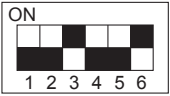
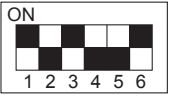
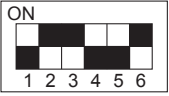
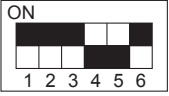
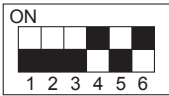
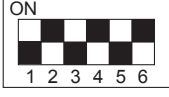
The black square (■) indicates a switch position.

SW2 setting	Display detail	Explanation for display	Unit										
	The number of connected indoor units	0 to 3 (The number of connected indoor units are displayed.)	Unit										
	Capacity setting display	Displayed as an outdoor capacity code <table><tr><th>Capacity</th><th>Code</th></tr><tr><td>KA24</td><td>11</td></tr><tr><td>KA30</td><td>14</td></tr><tr><td>KA36</td><td>20</td></tr></table>	Capacity	Code	KA24	11	KA30	14	KA36	20	Code display		
Capacity	Code												
KA24	11												
KA30	14												
KA36	20												
	Outdoor unit setting information	- The tens digit (Total display for applied setting)<table><tr><th>Setting details</th><th>Display details</th></tr><tr><td>H·P / Cooling only</td><td>0: H·P 1: Cooling only</td></tr><tr><td>Single phase / 3 phase</td><td>0: Single phase 2: 3 phase</td></tr></table> - The ones digit<table><tr><th>Setting details</th><th>Display details</th></tr><tr><td>Defrosting switch</td><td>0: Normal 1: For high humidity</td></tr></table> Example: When heat pump, 3 phase and defrosting (normal) are set up, “20” is displayed.	Setting details	Display details	H·P / Cooling only	0: H·P 1: Cooling only	Single phase / 3 phase	0: Single phase 2: 3 phase	Setting details	Display details	Defrosting switch	0: Normal 1: For high humidity	Code display
Setting details	Display details												
H·P / Cooling only	0: H·P 1: Cooling only												
Single phase / 3 phase	0: Single phase 2: 3 phase												
Setting details	Display details												
Defrosting switch	0: Normal 1: For high humidity												
	Indoor pipe temperature/ Liquid (TH2(1)) Indoor 1 -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [0°C] or less, “-” and temperature are displayed by turns.)	°F [°C]										
	Indoor pipe temperature/ Cond. / Eva. (TH5(1)) Indoor 1 -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [0°C] or less, “-” and temperature are displayed by turns.)	°F [°C]										
	Indoor pipe temperature/ Liquid (TH2(2)) Indoor 2 -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [0°C] or less, “-” and temperature are displayed by turns.)	°F [°C]										
	Indoor pipe temperature/ Cond./ Eva. (TH5(2)) Indoor 2 -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [0°C] or less, “-” and temperature are displayed by turns.)	°F [°C]										
	Indoor room temperature (TH1) 46 to 102	46 to 102 [8 to 39°C]	°F [°C]										

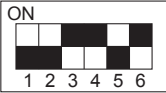
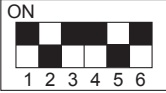
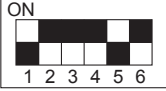
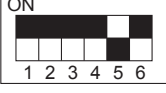
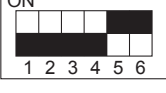
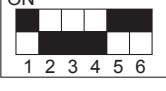
The black square (■) indicates a switch position.

SW2 setting	Display detail	Explanation for display	Unit														
ON 123456	Indoor setting temperature 62 to 86	62 to 86 [17 to 30°C]	°F [°C]														
ON 123456	Outdoor pipe temperature/2-phase (TH6) -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [0°C] or less, “-” and temperature are displayed by turns.)	°F [°C]														
ON 123456	Outdoor outside temperature (TH7) -38 to 190	-38 to 190 (-39 to 88°C) (When the temperature is 0°F [0°C] or less, “-” and temperature are displayed by turns.)	°F [°C]														
ON 123456	Outdoor heatsink temperature (TH8) -40 to 327	-40 to 327 [-40 to 164°C] (When the temperature is 0°F [0°C] or less, “-” and temperature are displayed by turns.) (When the thermistor detects 100°F or more, hundreds digit, tens digit and ones digit are displayed by turns.)	°F [°C]														
ON 123456	Discharge superheat. SHd 0 to 458 [Cooling = [Higher temperature of TH4 or TH32] -TH6 Heating = [Higher temperature of TH4 or TH32] -TH5]	0 to 458 [0 to 255°C] (When the temperature is 100°F or more, hundreds digit, tens digit and ones digit are displayed by turns.)	°F [°C]														
ON 123456	Number of defrost cycles 0 to FFFE	0 to FFFE (in hexadecimal notation) (When more than FF in hex (255 in decimal), the number is displayed in order of 16 ³ 's and 16 ² 's, and 16 ¹ 's and 16 ⁰ 's places. Example: When 5000 cycles; 0.5 s 0.5 s 2 s □9 → C4 → □□	2 cycles														
ON 123456	Input current of outdoor unit	0 to 500 (When it is 100 or more, hundreds digit, tens digit and ones digit are displayed by turns.)	0.1 A														
ON 123456	LEV-B opening pulse 0 to 480	0 to 480 (When it is 100 pulse or more, hundreds digit, tens digit and ones digit are displayed by turns.)	Pulse														
ON 123456	U9 error detail history (latest)	<table><tr><th>Description</th><th>Display</th></tr><tr><td>Normal</td><td>00</td></tr><tr><td>Overvoltage error</td><td>01</td></tr><tr><td>Undervoltage error</td><td>02</td></tr><tr><td>Input current sensor error</td><td>04</td></tr><tr><td>Abnormal power synchronous signal</td><td>08</td></tr><tr><td>PFC error (Overvoltage/Undervoltage/Overcurrent)</td><td>10</td></tr></table> • Display examples for multiple errors: Overvoltage (01) + Undervoltage (02) = 03 Undervoltage (02) + Power-sync signal error (08) = 0A L1 phase open error (04) + PFC error (10) = 14	Description	Display	Normal	00	Overvoltage error	01	Undervoltage error	02	Input current sensor error	04	Abnormal power synchronous signal	08	PFC error (Overvoltage/Undervoltage/Overcurrent)	10	Code display
Description	Display																
Normal	00																
Overvoltage error	01																
Undervoltage error	02																
Input current sensor error	04																
Abnormal power synchronous signal	08																
PFC error (Overvoltage/Undervoltage/Overcurrent)	10																

The black square (■) indicates a switch position.

SW2 setting	Display detail	Explanation for display	Unit
	DC bus voltage 180 to 760	180 to 760 (When it is 100 V or more, hundreds digit, tens digit and ones digit are displayed by turns.)	V
	Capacity save 0 to 100 When air conditioner is connected to M-NET and capacity save mode is demanded, a value from "0" to "100" is displayed. [When there is no setting of capacity save, "100" is displayed.]	0 to 100 (When the capacity is 100%, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 100%; 0.5 s 0.5 s 2 s □1 → 00 → □□	%
	Error postponement code history (2) of outdoor unit	Postponement code display Blinking: During postponement Lighting: Cancellation of postponement "00" is displayed in the case of no postponement.	Code display
	Error postponement code history (3) of outdoor unit	Postponement code display Blinking: During postponement Lighting: Cancellation of postponement "00" is displayed in the case of no postponement.	Code display
	Error history (3) (Oldest) Alternate display of abnormal unit number and code.	When no error history, "0" and "—" are displayed by turns.	Code display
	Error thermistor display [When there is no error thermistor, "—" is displayed.]	3: Liquid pipe temperature (TH3) 4: Discharge pipe temperature (TH4) 6: 2-phase pipe temperature (TH6) 7: Ambient temperature (TH7) 8: Heat sink temperature (TH8) 32: Suction pipe temperature (TH32) 34: Comp. surface temperature (TH33)	Code display
	Operation frequency on error occurring 0 to 255	0 to 255 (When it is 100 Hz or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 125 Hz; 0.5 s 0.5 s 2 s □1 → 25 → □□	Hz
	Fan step on error occurring 0 to 10	0 to 10	Step

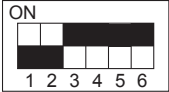
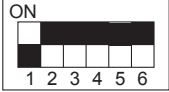
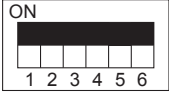
The black square (■) indicates a switch position.

SW2 setting	Display detail	Explanation for display	Unit
	LEV-C opening pulse on error occurring 0 to 480	0 to 480 (When it is 100 pulse or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 130 pulse; 0.5 s 0.5 s 2 s □ 1 → 30 → □ □	Pulse
	Indoor room temperature (TH1) on error occurring 46 to 102	46 to 102 [8 to 39°C]	°F [°C]
	Indoor pipe temperature / Liquid (TH2) on error occurring -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 32°F [0°C] or less, “-” and temperature are displayed by turns.) Example: When -15°F; 0.5 s 0.5 s 2 s -□ → 15 → □ □	°F [°C]
	Indoor pipe temperature/Cond./Eva. (TH5) on error occurring -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 32°F [0°C] or less, “-” and temperature are displayed by turns.) Example: When -15°F; 0.5 s 0.5 s 2 s -□ → 15 → □ □	°F [°C]
	Outdoor pipe temperature / 2-phase (TH6) on error occurring -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 32°F [0°C] or less, “-” and temperature are displayed by turns.) Example: When -15°F; 0.5 s 0.5 s 2 s -□ → 15 → □ □	°F [°C]
	Outdoor ambient temperature (TH7) on error occurring -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 32°F [0°C] or less, “-” and temperature are displayed by turns.) Example: When - 15°F; 0.5 s 0.5 s 2 s -□ → 15 → □ □	°F [°C]
	Outdoor heatsink temperature (TH8) on error occurring -40 to 392	-40 to 392 [-40 to 200°C] (When the temperature is 32°F [0°C] or less, “-” and temperature are displayed by turns.) (When the temperature is 100°F or more, hundreds digit, tens digit and ones digit are displayed by turns.)	°F [°C]

The black square (■) indicates a switch position.

SW2 setting	Display detail	Explanation for display	Unit																
ON 123456	Discharge superheat on error occurring SHd 0 to 327 Cooling = [Higher temperature of TH4 or TH32] -TH6 Heating = [Higher temperature of TH4 or TH32] -TH5	0 to 327 [0 to 182°C] (When the temperature is 100°F or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 150°F ; 0.5 s 0.5 s 2 s □1 →50 →□□	°F [°C]																
ON 123456	Sub cool on error occurring. SC 0 to 234 Cooling = TH6 - TH3 Heating = TH5 - TH2	0 to 234 [0 to 130°C] (When the temperature is 100°F or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 115°F; 0.5 s 0.5 s 2 s □1 →15 →□□	°F [°C]																
ON 123456	Thermo-on time until error stops 0 to 999	0 to 999 (When it is 100 minutes or more, hundreds digit, tens digit and ones digit are displayed by turns.) Example: When 415 minutes; 0.5 s 0.5 s 2 s □4 →15 →□□	Minute																
ON 123456	Indoor pipe temperature / Liquid (TH2 (3)) Indoor 3 -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [°C] or less, “-” and temperature are displayed by turns.)	°F [°C]																
ON 123456	Indoor pipe temperature / Cond./ Eva. (TH5 (3)) Indoor 3 -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [°C] or less, “-” and temperature are displayed by turns.) When there is no indoor unit, “00” is displayed.	°F [°C]																
ON 123456	Controlling status of compressor operating frequency	The following code will be a help to know the operating status of unit. •The tens digit <table><tr><th>Display</th><th>Compressor operating frequency control</th></tr><tr><td>1</td><td>Primary current control</td></tr><tr><td>2</td><td>Secondary current control</td></tr></table> •The ones digit (In this digit, the total number of activated control is displayed.) <table><tr><th>Display</th><th>Compressor operating frequency control</th></tr><tr><td>1</td><td>Preventive control for excessive temperature rise of discharge temperature</td></tr><tr><td>2</td><td>Preventive control for excessive temperature rise of condensing temperature</td></tr><tr><td>4</td><td>Frost preventing control</td></tr><tr><td>8</td><td>Preventive control for excessive temperature rise of radiator panel</td></tr></table> (Example) The following controls are activated. • Primary current control • Preventive control for excessive temperature rise of condensing temperature • Preventive control for excessive temperature rise of heatsink LED 18	Display	Compressor operating frequency control	1	Primary current control	2	Secondary current control	Display	Compressor operating frequency control	1	Preventive control for excessive temperature rise of discharge temperature	2	Preventive control for excessive temperature rise of condensing temperature	4	Frost preventing control	8	Preventive control for excessive temperature rise of radiator panel	Code display
Display	Compressor operating frequency control																		
1	Primary current control																		
2	Secondary current control																		
Display	Compressor operating frequency control																		
1	Preventive control for excessive temperature rise of discharge temperature																		
2	Preventive control for excessive temperature rise of condensing temperature																		
4	Frost preventing control																		
8	Preventive control for excessive temperature rise of radiator panel																		

The black square (■) indicates a switch position.

SW2 setting	Display detail	Explanation for display	Unit
	Outdoor suction pipe temperature (TH32) -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [0°C] or less, “-” and temperature are displayed by turns.) Example: When -15°C; 0.5 s -□ 0.5 s → 15 2 s → □□	°F [°C]
	Indoor pipe temperature / Liquid (TH2 (4)) Indoor 4 -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [°C] or less, “-” and temperature are displayed by turns.)	°F [°C]
	Indoor pipe temperature / Cond./ Eva. (TH5 (4)) Indoor 4 -38 to 190	-38 to 190 [-39 to 88°C] (When the temperature is 0°F [°C] or less, “-” and temperature are displayed by turns.) When there is no indoor unit, “00” is displayed.	°F [°C]

11-1. SMOOTH MAINTENANCE

<PAR-4xMAA ("x" represents 0 or later)>

Refer to "15-9. SMOOTH MAINTENANCE" for operation procedure.

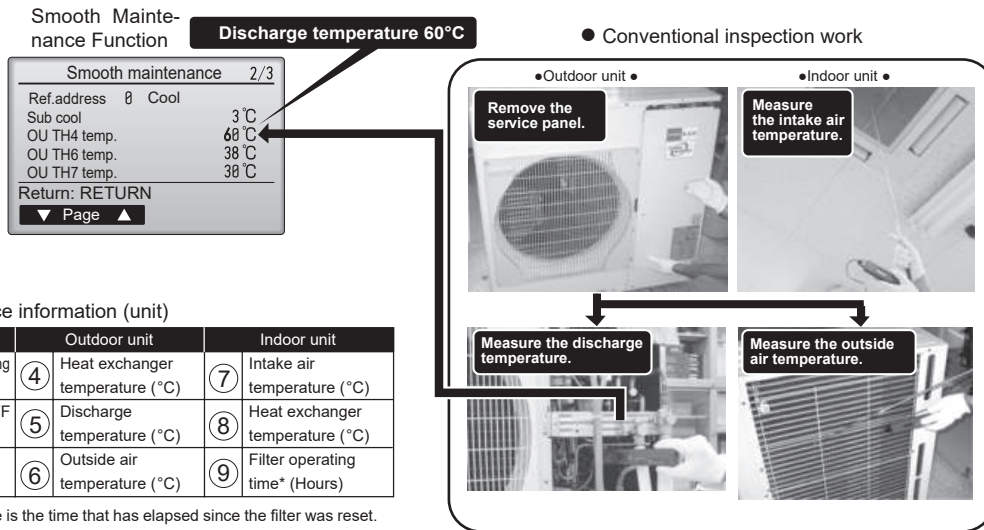
Maintenance data, such as the indoor/outdoor unit's heat exchanger temperature and compressor operation current can be displayed with "Smooth maintenance".

This cannot be executed during test operation.

Depending on the combination with the outdoor unit, this may not be supported by some models.

- Reduces maintenance work drastically.
- Enables you to check operation data of the indoor and outdoor units by remote controller.

Furthermore, use of maintenance stable-operation control that fixes the operating frequency, allows smooth inspection, even for inverter models.



Easy maintenance information (unit)

Compressor		Outdoor unit		Indoor unit	
①	Accumulated operating time (×10 hours)	④	Heat exchanger temperature (°C)	⑦	Intake air temperature (°C)
②	Number of ON/OFF times (×10 times)	⑤	Discharge temperature (°C)	⑧	Heat exchanger temperature (°C)
③	Operating current (A)	⑥	Outside air temperature (°C)	⑨	Filter operating time* (Hours)

* The filter operating time is the time that has elapsed since the filter was reset.

11-2. Guide for operation condition

Checkpoints

Enter the temperature differences between ⑤, ④, ⑦ and ⑧ into the graph given below.

Operation state is determined according to the plotted areas on the graph.

For data measurements, set the fan speed to "Hi" before activating maintenance mode.

Inspection item		Result	
Power supply	Loose connection	Breaker	Good
		Outdoor Unit	Good
		Indoor Unit	Good
	(Insulation resistance)		MΩ
Compressor	(Voltage)		V
	① Accumulated operating time		Time
	② Number of ON/OFF times		Times
	③ Current		A
Outdoor Unit	Temperature	④ Refrigerant/heat exchanger temperature	COOL °C HEAT °C
		⑤ Refrigerant/discharge temperature	COOL °C HEAT °C
		⑥ Air/outside air temperature	COOL °C HEAT °C
		(Air/discharge temperature)	COOL °C HEAT °C
	Cleanliness	Appearance	Good
		Heat exchanger	Good
		Sound/vibration	None
	Indoor Unit	⑦ Air/intake air temperature	COOL °C HEAT °C
		(Air/discharge temperature)	COOL °C HEAT °C
		⑧ Refrigerant/heat exchanger temperature	COOL °C HEAT °C
		⑨ Filter operating time*	Time
		Decorative panel	Good
		Filter	Good
	Cleanliness	Fan	Good
		Heat exchanger	Good
		Sound/vibration	None
			Present

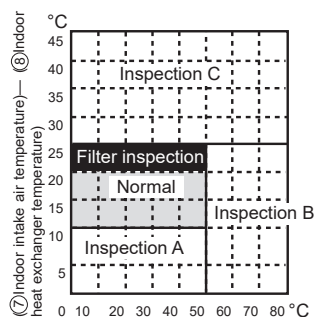
* The filter operating time is the time that has elapsed since the filter was reset.

Classification	Item	Result	
Cool	Inspection	Is "D000" displayed stably on the remote controller?	Stable Unstable
	Temperature difference	((⑤ Discharge temperature) – (④ Outdoor heat exchanger temperature))	°C
		((⑦ Indoor intake air temperature) – (⑧ Indoor heat exchanger temperature))	°C
	Inspection	Is "D000" displayed stably on the remote controller?	Stable Unstable
Heat	Temperature difference	((⑤ Discharge temperature) – (⑧ Indoor heat exchanger temperature))	°C
		((⑧ Indoor heat exchanger temperature) – (⑦ Indoor intake air temperature))	°C

Notes:

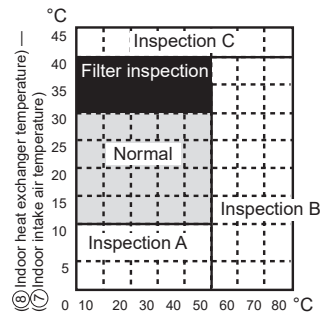
- Fixed Hz operation may not be possible under the following temperature ranges.
 - In cool mode, outdoor intake air temperature is 40 °C or higher or indoor intake air temperature is 23 °C or lower.
 - In heat mode, outdoor intake air temperature is 20 °C or higher or indoor intake air temperature is 25 °C or lower.
- If the air conditioner is operated at a temperature range other than the ones above but operation is not stabilized after 30 minutes or more have elapsed, carry out inspection.
- In heat mode, the operation state may vary due to frost forming on the outdoor heat exchanger.

Cool mode



(⑤ Discharge temperature) – (④ Outdoor heat exchanger temperature)

Heat mode



(⑤ Discharge temperature) – (④ Outdoor heat exchanger temperature)

Result

Area	Check item	Judgement	
		Cool	Heat
Normal	Normal operation state		
Filter inspection	Filter may be clogged. *1		
Inspection A	Performance has dropped. Detailed inspection is necessary.		
Inspection B	Refrigerant amount is dropping.		
Inspection C	Filter or indoor heat exchanger may be clogged.		

Note:

The above judgement is just guide based on Japanese standard conditions. It may be changed depending on the indoor and outdoor temperature.

*1 It may be judged as "Filter inspection" due to the outdoor and indoor temperature, even though it is not clogged.

12-1. UNIT FUNCTION SETTING BY THE REMOTE CONTROLLER

Each function can be set as necessary using the remote controller. The setting of function for each unit can only be done by the remote controller. Select function available from the table 1.

(1) Functions available when setting the unit number to 00 (Select 00 referring to ④ setting the indoor unit number.)

<Table 1> Function selections

Function	Settings	Mode No. Wired remote controller (RF thermostat)	Setting No.	● : Initial setting (when sent from the factory)	Remarks
Power failure automatic recovery	Not available	01 (101)	1		The setting is applied to all the units in the same refrigerant system.
Indoor temperature detection	Available		2	●	
	Average data from each indoor unit	02 (-)	1	●	
	Data from the indoor unit with remote controllers		2		
	Data from main remote controller		3		
LOSSNAY connectivity	Not supported	03 (103)	1	●	
	Supported (indoor unit does not intake outdoor air through LOSSNAY)		2		
	Supported (indoor unit intakes outdoor air through LOSSNAY)		3		
Power supply voltage	230V	04 (104)	1	●	
	208V		2		
Frost prevention temperature	36°F [2°C] (Normal)	15 (115)	1	●	
	37°F [3°C]		2		
Humidifier control	When the compressor operates, the humidifier also operates.	16 (116)	1	●	
	When the fan operates, the humidifier also operates.		2		
Change of defrosting control	Standard	17 (117)	1	●	
	For high humidity		2		

<Table 2> Meaning of "Function setting"
Mode 02: indoor temperature detecting

No.	Indoor temperature(ta)=		Diagram 1: ta=(A+B)/2	Diagram 2: ta=(A+B)/2	Diagram 3: ta=A	Diagram 4: ta=A
No.1	Average data of the sensor on all the indoor units	Initial setting	ta=(A+B)/2	ta=(A+B)/2	ta=A	ta=A
No.2	Data of the sensor on the indoor unit that connected with remote controller	Initial setting	ta=A	ta=B	ta=A	ta=A
No.3	Data of the sensor on main remote controller	Initial setting	ta=C	ta=C	ta=C	ta=C

- (2) Functions available when setting the unit number to 01-03 or AL (07 in the case of the IR wireless remote controller)
- When setting functions for an indoor unit in an independent system, set the unit number to 01 referring to ④ setting the indoor unit number.
 - When setting functions for a simultaneous twin indoor unit system, set the unit number to 01 to 03 for each indoor unit in the case of selecting different functions for each unit referring to ④ setting the indoor unit number.
 - When setting the same functions for an entire simultaneous Twin-indoor unit system, set refrigerant address to AL (07 in the case of the IR wireless remote controller) referring to ④ setting the indoor unit number.

<Table 3> Available functions and settings

Function	Settings	Mode No. Wired remote controller (RF thermostat)	Setting No.	● : Initial setting (Factory setting)		Check
				Ceiling suspended	Multi position	
				PEAD-A·AA	SVZ-KP·NA	
Filter sign	100h	07 (107)	1			
	2500h		2			
	No filter sign indicator		3	●	●	
External static pressure	5/15/35/50Pa (0.02/0.06/0.14/0.20in.WG)	08 (108)		Refer to the table below	Refer to the table below	
		10 (110)		Refer to the table below	Refer to the table below	
Heater control *2	No heater present	11 (111)	1	●	●	
	Heater present		2			
	SEZ, SLZ :Set temp -4.5°F ON PEAD, SVZ :Heater not operation in Defrost/Error	23 (123)	1	●	●	
	SEZ, SLZ :Set temp -1.8°F ON PEAD, SVZ :Heater not operation in Defrost/Error*4		2			
Set temperature in heating mode *3	Available	24 (124)	1	●	●	
	Not available		2			
Fan speed during the heating thermo OFF	Extra low	25 (125)	1	●	●	
	Stop		2			
	Set fan speed		3			
Fan speed during the cooling thermo OFF	Set fan speed	27 (127)	1	●	●	
	Stop		2			
Detection of abnormality of the pipe temperature (P8)	Available	28 (128)	1			
	Not available		2	●	●	

*2 For the detail of Heater control, refer to the service manual.

*3 4 degC (7.2 degF) up

*4 Depend on the error, heater may not operate please refer to SVZ service manual.

External static pressure setting for SVZ (Vertical, Horizontal left, Horizontal right position*).

External static pressure	Setting No.		● : Initial setting (Factory setting)	Check
	Mode No. 08	Mode No. 10		
75Pa (0.3in.WG)	1	1		
125Pa (0.5in.WG)	2	1	●	
200Pa (0.8in.WG)	3	1		

* Regarding to down flow setting, please refer to down flow kit installation manual.

External static pressure setting for PEAD.

External static pressure	Setting No.		● : Initial setting (Factory setting)	Check
	Mode No. 08	Mode No. 10		
35Pa (0.14in.WG)	2	1		
50Pa (0.20in.WG)	3	1	●	
70Pa (0.28in.WG)	1	2		
100Pa (0.40in.WG)	2	2		
150Pa (0.60in.WG)	3	2		

12-2. SELECTING FUNCTIONS USING THE REMOTE CONTROLLER

Refer to "15-3. SERVICE MENU" and "15-5. FUNCTION SETTING" when selecting functions.

13-1. HOW TO "MONITOR THE OPERATION DATA"

Refer to "15-10. REQUEST CODE" when monitoring the operation data.

13-2. REQUEST CODE LIST

Certain indoor/outdoor combinations do not have the request code function; therefore, no request codes are displayed.

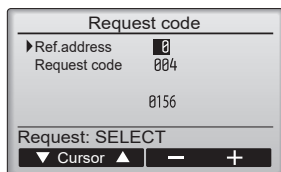
Request code	Request content	Description (Display range)	Unit	Remarks
0	Operation state	Refer to 13-2-1. Detail Contents in Request Code.	—	
1	Compressor-Operating current (rms)	0 – 50	A	
2	Compressor-Accumulated operating time	0 – 9999	10 hours	
3	Compressor-Number of operation times	0 – 9999	100 times	
4	Discharge temperature (TH4)	37 – 327	°F	
5	Outdoor unit - Liquid pipe 1 temperature (TH3)	-40 – 194	°F	
6	Outdoor unit - Liquid pipe 2 temperature	-40 – 194	°F	
7	Outdoor unit-2-phase pipe temperature (TH6)	-38 – 190	°F	
8	Outdoor suction pipe temperature (TH32)	-38 – 190	°F	
9	Outdoor unit-Ambient air temperature (TH7)	-38 – 190	°F	
10	Outdoor unit-Heatsink temperature (TH8)	-40 – 327	°F	
11				
12	Discharge superheat (SHd)	0 – 327	°F	
13	Sub-cool (SC)	0 – 234	°F	
14				
15				
16	Compressor-Operating frequency	0 – 255	Hz	
17	Compressor-Target operating frequency	0 – 255	Hz	
18	Outdoor unit-Fan output step	0 – 10	Step	
19	Outdoor unit-Fan 1 speed (Only for air conditioners with DC fan motor)	0 – 9999	rpm	
20	Outdoor unit-Fan 2 speed (Only for air conditioners with DC fan motor)	0 – 9999	rpm	"0" is displayed if the air conditioner is a single-fan type.
21				
22	LEV (A) opening	0 – 500	Pulses	
23	LEV (B) opening	0 – 500	Pulses	
24	LEV (C) opening	0 – 500	Pulses	
25	Primary current	0 – 50	A	
26	DC bus voltage	180 – 370	V	
27				
28				
29	Number of connected indoor units	0 – 4	Units	
30	Indoor unit-Setting temperature	62 – 86	°F	
31	Indoor unit-Intake air temperature <Measured by thermostat>	46 – 102	°F	
32	Indoor unit-Intake air temperature (Unit No. 1) <Heat mode-4 degree correction>	46 – 102	°F	"0" is displayed if the target unit is not present.
33	Indoor unit-Intake air temperature (Unit No. 2) <Heat mode-4 degree correction>	46 – 102	°F	↑
34	Indoor unit-Intake air temperature (Unit No. 3) <Heat mode-4 degree correction>	46 – 102	°F	↑
35	Indoor unit-Intake air temperature (Unit No. 4) <Heat mode-4 degree correction>	46 – 102	°F	↑
36				
37	Indoor unit - Liquid pipe temperature (Unit No. 1)	-38 – 190	°F	"0" is displayed if the target unit is not present.
38	Indoor unit - Liquid pipe temperature (Unit No. 2)	-38 – 190	°F	↑
39	Indoor unit - Liquid pipe temperature (Unit No. 3)	-38 – 190	°F	↑
40	Indoor unit - Liquid pipe temperature (Unit No. 4)	-38 – 190	°F	↑
41				
42	Indoor unit-Cond./Eva. pipe temperature (Unit No. 1)	-38 – 190	°F	"0" is displayed if the target unit is not present.
43	Indoor unit-Cond./Eva. pipe temperature (Unit No. 2)	-38 – 190	°F	↑
44	Indoor unit-Cond./Eva. pipe temperature (Unit No. 3)	-38 – 190	°F	↑
45	Indoor unit-Cond./Eva. pipe temperature (Unit No. 4)	-38 – 190	°F	↑

Request code	Request content	Description (Display range)	Unit	Remarks
46				
47				
48	Thermostat ON operating time	0 – 999	Minutes	
49	Test run elapsed time	0 – 120	Minutes	◀ Not possible to activate maintenance mode during the test run.
50	Indoor unit-Control state	Refer to 13-2-1.Detail Contents in Request Code.	–	
51	Outdoor unit-Control state	Refer to 13-2-1.Detail Contents in Request Code.	–	
52	Compressor-Frequency control state	Refer to 13-2-1.Detail Contents in Request Code.	–	
53	Outdoor unit-Fan control state	Refer to 13-2-1.Detail Contents in Request Code.	–	
54	Actuator output state	Refer to 13-2-1.Detail Contents in Request Code.	–	
55	Error content (U9)	Refer to 13-2-1.Detail Contents in Request Code.	–	
56				
57				
58				
59				
60	Signal transmission demand capacity	0 – 255	%	
61	Contact demand capacity	Refer to 13-2-1.Detail Contents in Request Code.	–	
62	External input state (silent mode, etc.)	Refer to 13-2-1.Detail Contents in Request Code.	–	
63				
64				
65				
66				
67				
68				
69				
70	Outdoor unit-Capacity setting display	Refer to 13-2-1.Detail Contents in Request Code.	–	
71	Outdoor unit-Setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
72				
73	Outdoor unit-SW1 setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
74	Outdoor unit-SW2 setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
75				
76	Outdoor unit-SW4 setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
77	Outdoor unit-SW5 setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
78	Outdoor unit-SW6 setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
79	Outdoor unit-SW7 setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
80	Outdoor unit-SW8 setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
81	Outdoor unit-SW9 setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
82	Outdoor unit-SW10 setting information	Refer to 13-2-1.Detail Contents in Request Code.	–	
83				
84	M-NET adapter connection (presence/absence)	"0000": Not connected "0001": Connected	–	
85				
86				
87				
88				
89	Display of execution of replace/wash operation	"0000": Not washed "0001": Washed	–	
90	Outdoor unit-Microprocessor version information	Examples) Ver 5.01 → "0501"	Ver	
91	Outdoor unit-Microprocessor version information (sub No.)	Auxiliary information (displayed after version information) Examples) Ver 5.01 A000 → "A000"	–	
92				
93				
94				
95				
96				
97				
98				
99				

Request code	Request content	Description (Display range)	Unit	Remarks
100	Outdoor unit - Error postponement history 1 (latest)	Displays postponement code. (" - " is displayed if no postponement code is present)	Code	
101	Outdoor unit - Error postponement history 2 (previous)	Displays postponement code. (" - " is displayed if no postponement code is present)	Code	
102	Outdoor unit - Error postponement history 3 (last but one)	Displays postponement code. (" - " is displayed if no postponement code is present)	Code	
103	Error history 1 (latest)	Displays error history. (" - " is displayed if no history is present.)	Code	
104	Error history 2 (second to last)	Displays error history. (" - " is displayed if no history is present.)	Code	
105	Error history 3 (third to last)	Displays error history. (" - " is displayed if no history is present.)	Code	
106	Abnormal thermistor display (TH3/TH6/TH7/TH8)	3: TH3 6: TH6 7: TH7 8: TH8 0: No thermistor error	Sensor number	
107	Operation mode at time of error	Displayed in the same way as request code "0".	—	
108	Compressor-Operating current at time of error	0 – 50	A	
109	Compressor-Accumulated operating time at time of error	0 – 9999	10 hours	
110	Compressor-Number of operation times at time of error	0 – 9999	100 times	
111	Discharge temperature at time of error	37 – 327	°F	
112	Outdoor unit - Liquid pipe 1 temperature (TH3) at time of error	–40 – 194	°F	
113	Outdoor unit - Liquid pipe 2 temperature at time of error	–40 – 194	°F	
114	Outdoor unit-2-phase pipe temperature (TH6) at time of error	–38 – 190	°F	
115				
116	Outdoor unit-Outside air temperature (TH7) at time of error	–38 – 190	°F	
117	Outdoor unit-Heat sink temperature (TH8) at time of error	–40 – 327	°F	
118	Discharge super heat (SHd) at time of error	0 – 327	°F	
119	Sub-cool (SC) at time of error	0 – 234	°F	
120	Compressor-Operating frequency at time of error	0 – 255	Hz	
121	Outdoor unit at time of error · Fan output step	0 – 10	Step	
122	Outdoor unit at time of error · Fan 1 speed (Only for air conditioners with DC fan)	0 – 9999	rpm	
123	Outdoor unit at time of error · Fan 2 speed (Only for air conditioners with DC fan)	0 – 9999	rpm	"0" is displayed if the air conditioner is a single-fan type.
124				
125	LEV (A) opening at time of error	0 – 500	Pulses	
126	LEV (B) opening at time of error	0 – 500	Pulses	
127				
128				
129				
130	Thermostat ON time until operation stops due to error	0 – 999	Minutes	
131				
132	Indoor - Liquid pipe temperature at time of error	–38 – 190	°F	Average value of all indoor units is displayed if the air conditioner consists of 2 or more indoor units (twin).
133	Indoor-Cond./Eva. pipe temperature at time of error	–38 – 190	°F	Average value of all indoor units is displayed if the air conditioner consists of 2 or more indoor units (twin).
134	Indoor at time of error · Intake air temperature <Thermostat judge temperature>	–38 – 190	°F	
135				
136				
137				
138				
139				
140				
to				
146				
147				
148				
149				

Request code	Request content	Description (Display range)	Unit	Remarks
150	Indoor-Actual intake air temperature	-38 – 190	'F	
151	Indoor - Liquid pipe temperature	-38 – 190	'F	
152	Indoor-Cond./Eva. pipe temperature	-38 – 190	'F	
153				
154	Indoor-Fan operating time (After filter is reset)	0 – 9999	1 hour	
155	Indoor-Total operating time (Fan motor ON time)	0 – 9999	10 hours	
156				
157	Indoor fan output value (Sj value)	0 – 255 Fan control data	–	For indoor fan phase control
158	Indoor fan output value (Pulsation ON/OFF)	"00 *** ****" indicates fan control data.	–	For indoor fan pulsation control
159	Indoor fan output value (duty value)	"00 *** ****" indicates fan control data.	–	For indoor DC brushless motor control
160				
161				
162	Indoor unit-Model setting information	Refer to 13-2-1. Detail Contents in Request Code.	–	
163	Indoor unit-Capacity setting information	Refer to 13-2-1. Detail Contents in Request Code.	–	
164	Indoor unit-SW3 information	Undefined	–	
165	Wireless pair No. (indoor control board side) setting	Refer to 13-2-1. Detail Contents in Request Code.	–	
166	Indoor unit-SW5 information	Undefined	–	
167				
~				
189				
190	Indoor unit-Microprocessor version information	Examples) Ver 5.01 → "0501"	Ver	
191	Indoor unit-Microprocessor version information (sub No.)	Auxiliary information (displayed after version information) Examples) Ver 5.01 A000 → "A000"	–	
192				
~				
764				
765	Stable operation (Heat mode)	This request code is not provided to collect data. It is used to fix the operation state.		
766	Stable operation (Cool mode)	This request code is not provided to collect data. It is used to fix the operation state.		
767	Stable operation cancellation	This request code is not provided to collect data. It is used to cancel the operation state that has been fixed by request codes "765" and "766".		

13-2-1. Detail Contents in Request Code



[Example) Request code "004"
Discharge temperature 156°F
Refrigerant address "00"]

[Operation state] (Request code: "0")

Data display

Relay output state

Operation mode

Operation mode

Display	Operation mode
0	STOP • FAN
C	COOL • DRY
H	HEAT
d	DEFROST

Relay output state

Display	Power currently supplied to compressor	Compressor	Four-way valve	Solenoid valve
0	—	—	—	—
1				ON
2			ON	
3			ON	ON
4		ON		
5		ON		ON
6		ON	ON	
7		ON	ON	ON
8	ON			
A	ON		ON	

[Indoor unit – Control state] (Request code: "50 ")

Data display

Unit No. 4 state

Unit No. 3 state

Unit No. 2 state

Unit No. 1 state

Display	State
0	Normal
1	Preparing for heat operation.
2	—
3	—
4	Heater is ON.
5	Anti-freeze protection is ON.
6	Overheat protection is ON.
7	Requesting compressor to turn OFF.
F	There are no corresponding units.

[Outdoor unit – Control state] (Request code: "51")

Data display	State
0 0 0 0	Normal
0 0 0 1	Preparing for heat operation.
0 0 0 2	Defrost

[Compressor – Frequency control state] (Request code: "52")

Data display

Frequency control state ②

Frequency control state ①

Frequency control state ①

Display	Current limit control
0	No current limit
1	Primary current limit control is ON.
2	Secondary current limit control is ON.

Frequency control state ②

Display	Discharge temperature overheat prevention	Condensation temperature overheat prevention	Anti-freeze protection control	Heatsink temperature overheat prevention
0				
1	Controlled			
2		Controlled		
3	Controlled	Controlled		
4			Controlled	
5	Controlled		Controlled	
6		Controlled	Controlled	
7	Controlled	Controlled	Controlled	
8				Controlled
9	Controlled			Controlled
A		Controlled		Controlled
b	Controlled	Controlled		Controlled
C			Controlled	Controlled
d	Controlled		Controlled	Controlled
E		Controlled	Controlled	Controlled
F	Controlled	Controlled	Controlled	Controlled

[Fan control state] (Request code: "53")

Data display

0	0	*	*
---	---	---	---

Fan step correction value by heatsink temperature overhear prevention control

Fan step correction value by cool condensation temperature overhear prevention control

Display	Correction value
- (minus)	- 1
0	0
1	+1
2	+2

[Actuator output state] (Request code: "54")

Data display

0	0	*	*
---	---	---	---

Actuator output state ①

Actuator output state ②

Actuator output state ①

Display	SV1	Four-way valve	Compressor	Compressor is warming up
0				
1	ON			
2		ON		
3	ON	ON		
4			ON	
5	ON		ON	
6		ON	ON	
7	ON	ON	ON	
8				ON
9	ON			ON
A		ON		ON
b	ON	ON		ON
C			ON	ON
d	ON		ON	ON
E		ON	ON	ON
F	ON	ON	ON	ON

Actuator output state ②

Display	52C	SV2	SS
0			
1	ON		
2		ON	
3	ON	ON	
4			ON
5	ON		ON
6		ON	ON
7	ON	ON	ON

[Error content (U9)] (Request code: "55")

Data display

0	0	*	*
---	---	---	---

Error content ①

Error content ②

Error content ①

● : Detected

Display	Overvoltage error	Undervoltage error	L1-phase open error	Power synchronizing signal error
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
b	●	●		●
C			●	●
d	●		●	●
E		●	●	●
F	●	●	●	●

Error content ②

● : Detected

Display	Converter Fo error	PAM error
0		
1	●	
2		●
3	●	●

[Contact demand capacity] (Request code: "61")

Data display

0	0	0	*
---	---	---	---

 Setting content

Setting content

Display	Setting value	Setting	
		SW7-1	SW7-2
0	0%		
1	50%	ON	
2	75%		ON
3	100%	ON	ON

[External input state] (Request code: "62")

Data display

0	0	0	*
---	---	---	---

 Input state

Input state

● : Input position

Display	Contact demand input	Silent mode input	Spare 1 input	Spare 2 input
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
b	●	●		●
C			●	●
d	●		●	●
E		●	●	●
F	●	●	●	●

[Outdoor unit – Capacity setting display] (Request code: "70")

Data display	Capacity
9	12
10	18
11	24
14	30
20	36
25	42

[Outdoor unit – Setting information] (Request code: "71")

Data display

0	0	*	*
---	---	---	---

 Setting information ①
Setting information ②

Setting information ①

Display	Defrost mode
0	Standard
1	For high humidity

Setting information ②

Display	Single-/three-phase	Heat pump/cooling only
0	Single-phase	Heat pump
1		Cooling only
2	Three-phase	Heat pump
3		Cooling only

[Outdoor unit switch setting display (SW1 to SW10, except SW3)] Request codes: "73 to 82"

0: Switch OFF 1: Switch ON

SW1, SW2, SW6, SW7						Data display
1	2	3	4	5	6	
0	0	0	0	0	0	00 00
1	0	0	0	0	0	00 01
0	1	0	0	0	0	00 02
1	1	0	0	0	0	00 03
0	0	1	0	0	0	00 04
1	0	1	0	0	0	00 05
0	1	1	0	0	0	00 06
1	1	1	0	0	0	00 07
0	0	0	1	0	0	00 08
1	0	0	1	0	0	00 09
0	1	0	1	0	0	00 0A
1	1	0	1	0	0	00 0b
0	0	1	1	0	0	00 0C
1	0	1	1	0	0	00 0d
0	1	1	1	0	0	00 0E
1	1	1	1	0	0	00 0F
0	0	0	0	1	0	00 10
1	0	0	0	1	0	00 11
0	1	0	0	1	0	00 12
1	1	0	0	1	0	00 13
0	0	1	0	1	0	00 14
1	0	1	0	1	0	00 15
0	1	1	0	1	0	00 16
1	1	1	0	1	0	00 17
0	0	0	1	1	0	00 18
1	0	0	1	1	0	00 19
0	1	0	1	1	0	00 1A
1	1	0	1	1	0	00 1B
0	0	1	1	1	0	00 1C
1	0	1	1	1	0	00 1D
0	1	1	1	1	0	00 1E
1	1	1	1	1	0	00 1F
0	0	0	0	0	1	00 20
1	0	0	0	0	1	00 21
0	1	0	0	0	1	00 22
1	1	0	0	0	1	00 23
0	0	1	0	0	1	00 24
1	0	1	0	0	1	00 25
0	1	1	0	0	1	00 26
1	1	1	0	0	1	00 27
0	0	0	1	0	1	00 28
1	0	0	1	0	1	00 29
0	1	0	1	0	1	00 2A
1	1	0	1	0	1	00 2B
0	0	1	1	0	1	00 2C
1	0	1	1	0	1	00 2D
0	1	1	1	0	1	00 2E
1	1	1	1	0	1	00 2F
0	0	0	0	1	1	00 30
1	0	0	0	1	1	00 31
0	1	0	0	1	1	00 32
1	1	0	0	1	1	00 33
0	0	1	0	1	1	00 34
1	0	1	0	1	1	00 35
0	1	1	0	1	1	00 36
1	1	1	0	1	1	00 37
0	0	0	1	1	1	00 38
1	0	0	1	1	1	00 39
0	1	0	1	1	1	00 3A
1	1	0	1	1	1	00 3B
0	0	1	1	1	1	00 3C
1	0	1	1	1	1	00 3D
0	1	1	1	1	1	00 3E
1	1	1	1	1	1	00 3F

0: Switch OFF 1: Switch ON

SW5				Data display
1	2	3	4	
0	0	0	0	00 00
1	0	0	0	00 01
0	1	0	0	00 02
1	1	0	0	00 03
0	0	1	0	00 04
1	0	1	0	00 05
0	1	1	0	00 06
1	1	1	0	00 07
0	0	0	1	00 08
1	0	0	1	00 09
0	1	0	1	00 0A
1	1	0	1	00 0b
0	0	1	1	00 0C
1	0	1	1	00 0d
0	1	1	1	00 0E
1	1	1	1	00 0F

0: Switch OFF 1: Switch ON

SW8			Data display
1	2	3	
0	0	0	00 00
1	0	0	00 01
0	1	0	00 02
1	1	0	00 03
0	0	1	00 04
1	0	1	00 05
0	1	1	00 06
1	1	1	00 07

0: Switch OFF 1: Switch ON

SW4, SW9, SW10		Data display
1	2	
0	0	00 00
1	0	00 01
0	1	00 02
1	1	00 03

[Indoor unit – Model setting information] (Request code: "162")

Data display

0	0	*	*
---	---	---	---

See the table on the right.

Display	Model setting state	Display	Model setting state
00		20	
01		21	
02		22	
03		23	
04	SVZ-KP·NA	24	
05		25	
06		26	
07		27	
08		28	
09		29	
0A		2A	
0b		2b	
0C		2C	
0d		2d	
0E		2E	
0F		2F	
10		30	PEA-A·AA
11		31	
12		32	
13		33	
14		34	
15		35	
16		36	
17		37	
18		38	
19		39	
1A		3A	
1b		3b	
1C		3C	
1d		3d	
1E		3E	
1F		3F	

[Indoor unit – Capacity setting information] (Request code: "163")

Data display

0	0	*	*
---	---	---	---

See the table on the right.

Display	Capacity setting state	Display	Capacity setting state
00		10	42
01		11	
02		12	
03		13	
04		14	
05		15	
06	12	16	
07		17	
08		18	
09	18	19	
0A		1A	
0b	24	1b	
0C		1C	
0d	30	1d	
0E		1E	
0F	36	1F	

[Wireless pair No. (indoor control board side) setting] (Request code: "165")

Data display

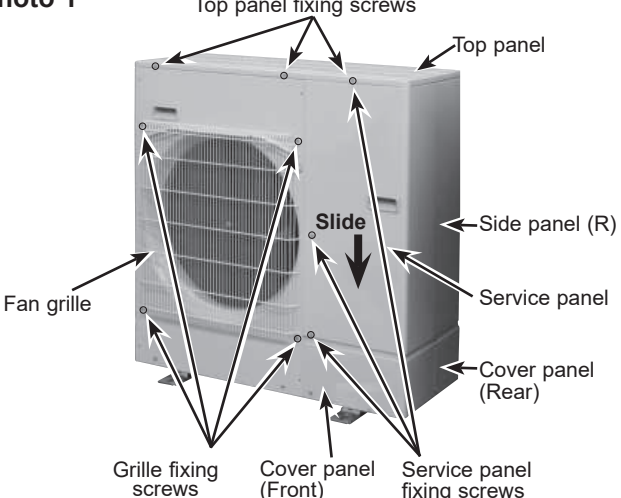
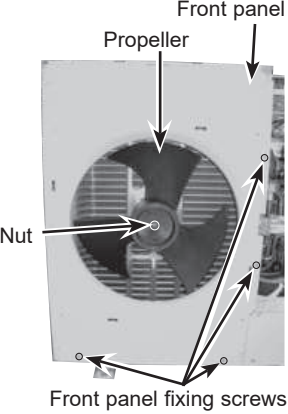
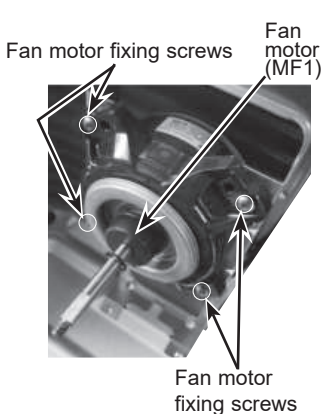
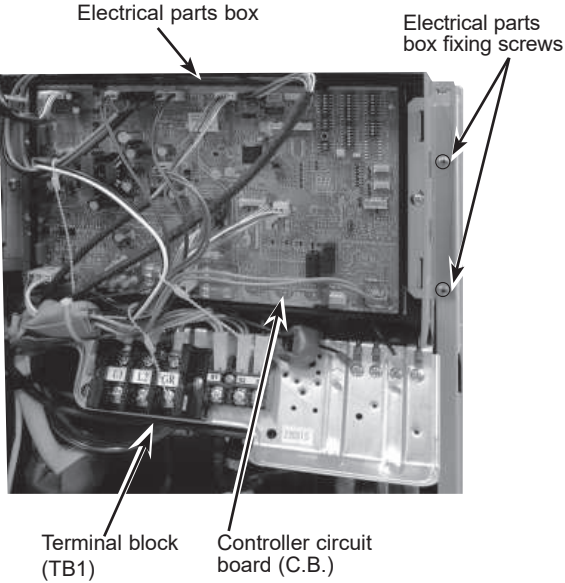
0	0	*	*
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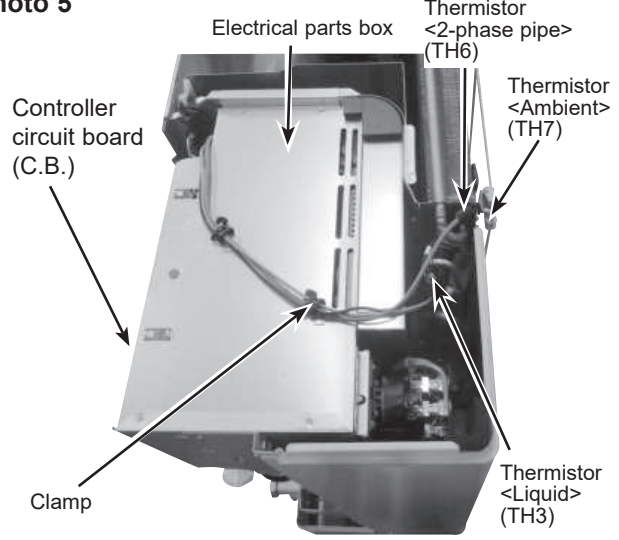
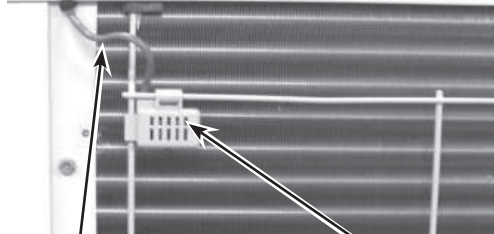
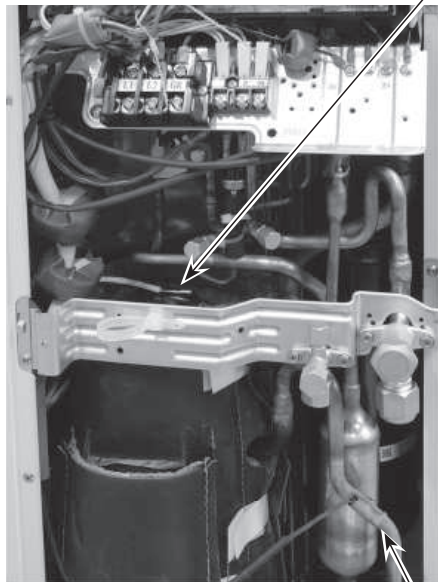
See the table on the right.

Display	Pair No. setting state
00	No. 0
01	No. 1 J41 disconnected
02	No. 2 J42 disconnected
03	No. 3 J41, J42 disconnected

SUZ-KA24NAHZ

—————> : Indicates the visible parts in the photos/figures.

OPERATING PROCEDURE	PHOTOS/FIGURES
1. Removing the service panel and top panel (1) Remove 3 service panel fixing screws (5 × 12) and slide the hook on the right downward to remove the service panel. (2) Remove screws (3 for front, 3 for rear/5 × 12) of the top panel and remove it.	Photo 1 
2. Removing the fan motor (MF1) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove 4 fan grille fixing screws (5 × 12) to detach the fan grille. (See Photo 1) (4) Remove a nut (for right handed screw of M6) to detach the propeller. (See Photo 2) (5) Disconnect the connector CNF1 on controller circuit board in electrical parts box. (6) Remove 4 fan motor fixing screws (5 × 20) to detach the fan motor. (See Photo 3)	Photo 2  Photo 3 
3. Removing the electrical parts box (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Disconnect the indoor/outdoor connecting wire from terminal block. (4) Disconnect the connector CNF1, SV2, LEV-A and LEV-B on the controller circuit board. <Symbols on the board> • CNF1: Fan motor • LEV-A, LEV-B: LEV • SV2: Base Heater (5) Disconnect the pipe-side connections of the following parts. • Thermistor <Liquid> (TH3) • Thermistor <Discharge> (TH4) • Thermistor <2-phase pipe, Ambient> (TH7/6) • High pressure switch (63H) • 4-way valve coil (21S4) • Thermistor <Comp. surface> (TH33) (6) Remove the terminal cover and disconnect the compressor lead wire. (7) Remove an electrical parts box fixing screw (4 × 10) and detach the electrical parts box by pulling it upward. The electrical parts box is fixed with 2 hooks on the left and 1 hook on the right.	Photo 4 

OPERATING PROCEDURE	PHOTOS/FIGURES
4. Removing the thermistor <Liquid> (TH3) and thermistor <2-phase pipe> (TH6) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Disconnect the connector TH7/6 (red) and TH3 (white) on the controller circuit board in the electrical parts box. (4) Loosen the 2 clamps for the lead wires on the top of the electrical parts box. (5) Pull out the thermistor <2-phase pipe> (TH6) and the thermistor <Liquid> (TH3) from each sensor holders. Note: When replacing thermistor <2-phase pipe> (TH6), replace it together with thermistor <Ambient> (TH7), since they are combined together. Refer to procedure No.5 below to remove thermistor <Ambient>.	Photo 5  Electrical parts box Thermistor <2-phase pipe> (TH6) Thermistor <Ambient> (TH7) Controller circuit board (C.B.) Clamp Thermistor <Liquid> (TH3)
5. Removing the thermistor <Ambient> (TH7) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Disconnect the connector TH7/6 (red) on the controller circuit board in the electrical parts box. (4) Loosen the clamp for the lead wire in the rear of the electrical parts box. (See Photo 5) (5) Pull out the thermistor <Ambient> (TH7) from the sensor holder. Note: When replacing thermistor <Ambient> (TH7), replace it together with thermistor <2-phase pipe> (TH6), since they are combined together. Refer to procedure No.4 above to remove thermistor <2-phase pipe>.	Photo 6  Lead wire of thermistor <Ambient> (TH7) Sensor holder
6. Removing the thermistor <Discharge> (TH4) and thermistor <Comp. surface> (TH33) (1) Remove the service panel. (See Photo 1) (2) Disconnect the connectors, TH4 (white) and TH33 (yellow), on the controller circuit board in the electrical parts box. (3) Loosen the clamp for the lead wire in the rear of the electrical parts box. (See Photo 5) (4) Pull out the thermistor <Discharge> (TH4) from the sensor holder. [Removing the thermistor<Comp. surface> (TH33)] (5) Remove the compressor cover (upper) and pull out the thermistor <Comp. surface> (TH33) from the holder of the compressor shell.	Photo 7  Thermistor <Comp.Surface> (TH33) Thermistor <Discharge> (TH4)

OPERATING PROCEDURE

7. Removing the 4-way valve coil (21S4), LEV coil (LEV(A), LEV(B))

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the electrical parts box. (See Photo 4)
- [Removing the 4-way valve coil]**
- (4) Remove 4-way valve coil fixing screw (M4 × 6).
- (5) Remove the 4-way valve coil by sliding the coil toward you.
- (6) Disconnect the connector 21S4 (green) on the controller board in the electrical parts box.

[Removing the LEV coil]

- (4) Remove the LEV coil by sliding the coil upward.
- (5) Disconnect the connectors, LEV A (white) and LEV B (red), on the controller circuit board in the electrical parts box.

8. Removing the 4-way valve

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the electrical parts box. (See Photo 4)
- (4) Remove 3 valve bed fixing screws (4 × 10) and 4 ball valve and stop valve fixing screws (5 × 16) and then remove the valve bed.
- (5) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and then remove the right side panel.
- (6) Remove the 4-way valve coil. (See Photo 8)
- (7) Recover refrigerant.
- (8) Remove the welded part of 4-way valve.

Note 1: Recover refrigerant without spreading it in the air.

Note 2: The welded part can be removed easily by removing the right side panel.

Note 3: When installing the 4-way valve, cover it with a wet cloth to prevent it from heating (120°C or more), then braze the pipes so that the inside of pipes are not oxidized.

9. Removing the LEV

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the electrical parts box. (See Photo 4)
- (4) Remove 3 valve bed fixing screws (4 × 10) and 4 ball valve and stop valve fixing screws (5 × 16) and then remove the valve bed.
- (5) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and then remove the right side panel.
- (6) Remove the LEV.
- (7) Recover refrigerant.
- (8) Remove the welded part of linear expansion valve.

Note 1: Recover refrigerant without spreading it in the air.

Note 2: The welded part can be removed easily by removing the right side panel.

Note 3: When installing the LEV, cover it with a wet cloth to prevent it from heating (120°C or more), then braze the pipes so that the inside of pipes are not oxidized.

PHOTOS/FIGURES

Photo 8

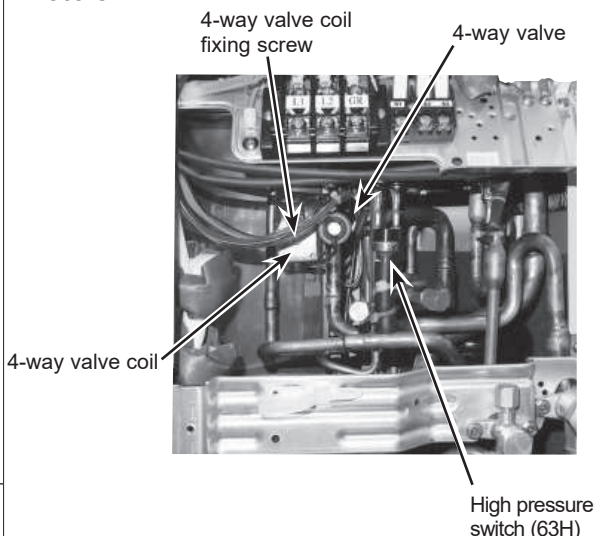
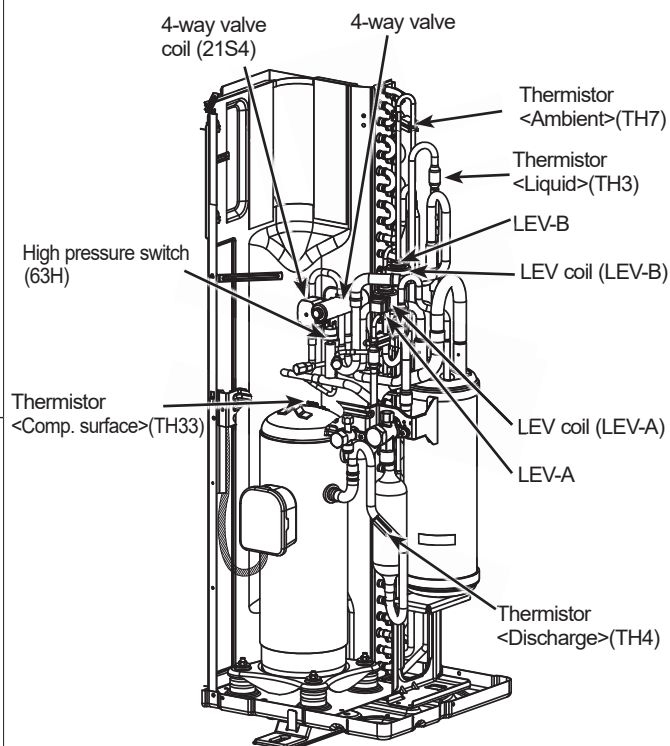
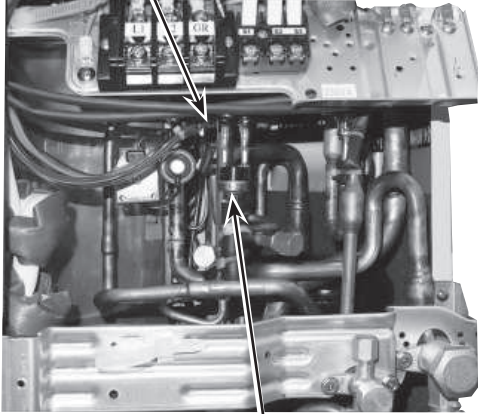
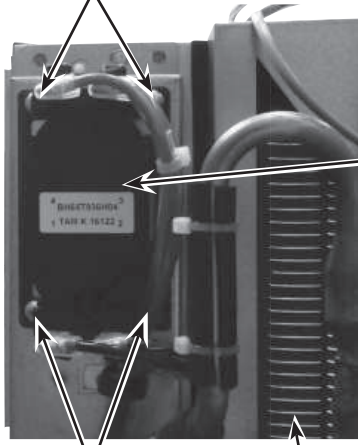
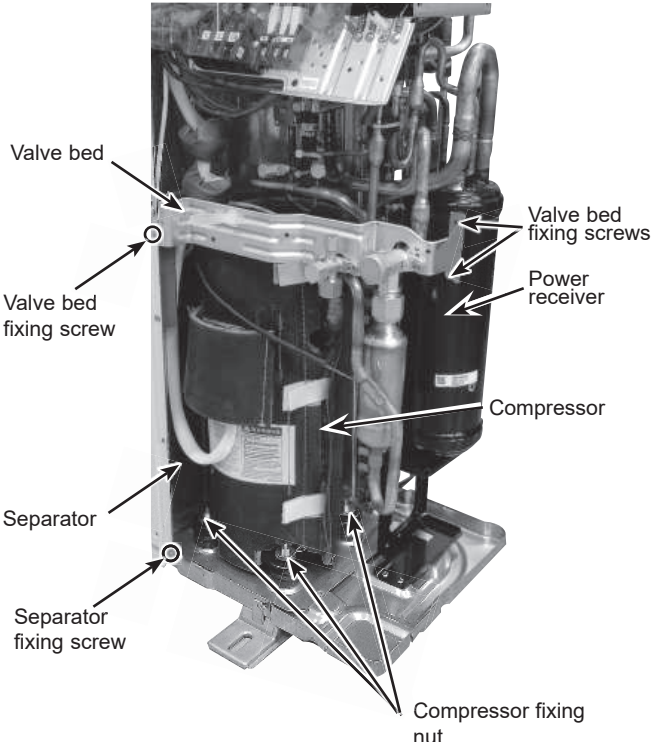
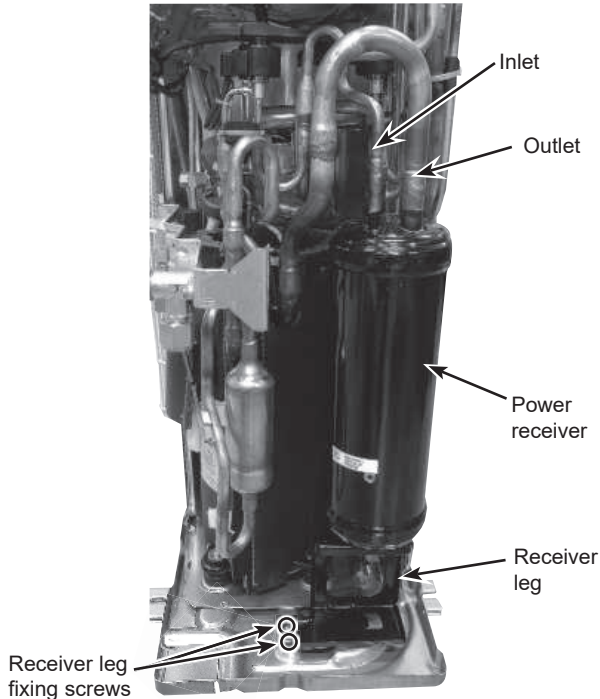


Figure 1



OPERATING PROCEDURE	PHOTOS/FIGURES
10. Removing the high pressure switch (63H) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the electrical parts box. (See Photo 4) (4) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit and remove the right side panel. (5) Pull out the lead wire of high pressure switch. (6) Recover refrigerant. (7) Remove the welded part of high pressure switch. Note 1: Recover refrigerant without spreading it in the air. Note 2: The welded part can be removed easily by removing the right side panel. Note 3: When installing the high pressure switch, cover it with a wet cloth to prevent it from heating (100°C or more), then braze the pipes so that the inside of pipes are not oxidized.	Photo 9 Lead wire of high pressure switch  High pressure switch (63H)
11. Removing the reactor (DCL) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the electrical parts box. (See Photo 4) (4) Remove the reactor fixing screws (4 places, 4 × 10) Note: The reactor is attached to the rear of the electrical parts box.	Photo10 Reactor fixing screws  Reactor (DCL) Reactor fixing screws Electrical parts box

OPERATING PROCEDURE	PHOTOS/FIGURES
12. Removing the compressor (MC) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove 2 front cover panel fixing screws (5 × 12) and remove the front cover panel. (See Photo 1) (4) Remove 2 back cover panel fixing screws (5 × 12) and remove the back cover panel. (5) Remove the electrical parts box. (See Photo 4) (6) Remove 3 valve bed fixing screws (4 × 10) and 4 ball valve and stop valve fixing screws (5 × 16) and then remove the valve bed. (7) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit then remove the right side panel. (8) Remove 2 separator fixing screws (4 × 10) and remove the separator. (9) Recover refrigerant. (10) Remove the 3 points of the compressor fixing nut using a spanner or a adjustable wrench. (11) Remove the welded pipe of compressor inlet and outlet then remove the compressor. Note: Recover refrigerant without spreading it in the air.	Photo 11 
13. Removing the power receiver (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove 2 front cover panel fixing screws (5 × 12) and remove the front cover panel. (See Photo 1) (4) Remove 2 back cover panel fixing screws (5 × 12) and remove the back cover panel. (5) Remove the electrical parts box. (See Photo 4) (6) Remove 3 valve bed fixing screws (4 × 10) and 4 ball valve and stop valve fixing screws (5 × 16) then remove the valve bed. (7) Remove 3 right side panel fixing screws (5 × 12) in the rear of the unit then remove the right side panel. (8) Recover refrigerant. (9) Remove 4 welded pipes of power receiver inlet and outlet. (10) Remove 2 receiver leg fixing screws (4 × 10). Note: Recover refrigerant without spreading it in the air.	Photo 12 

OPERATING PROCEDURE

14. Removing the base heater

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the upper 2 screws (5×12) fixing the motor support, the lower 2 screws (5×12) fixing the base and the screw (4×10) fixing the separator to detach the front panel. (See Photo 1)
- (4) Remove a nut (for right handed screw of M6) to detach the propeller. (See Photo 2)
- (5) Remove all of the following connectors from controller circuit board;
<Diagram symbol in the connector housing>
 - Fan motor (CNF1)
 - Base heater (SV2)
 Pull out the disconnected wire from the electrical parts box. (See Photo 4)
- (6) Loosen the clamps on the side of the motor support and on the upper side of the separator.
- (7) Remove 2 motor support fixing screws (4×10), then remove the motor support with fan motor still attached. (See Photo 13)
- (8) Remove 4 base heater support fixing screws (4×10), then remove the base heater support.
- (9) Remove the base heater. (See Photo 14)

Notes:

1. Tighten the propeller fan with a torque of 5.7 ± 0.3 N·m [4.2 ± 0.2 ft = lbs]
2. Rotate the propeller fan and make sure that the base heater and the lead wires do not interfere with the movement of the propeller fan.

PHOTOS/FIGURES

Photo 13

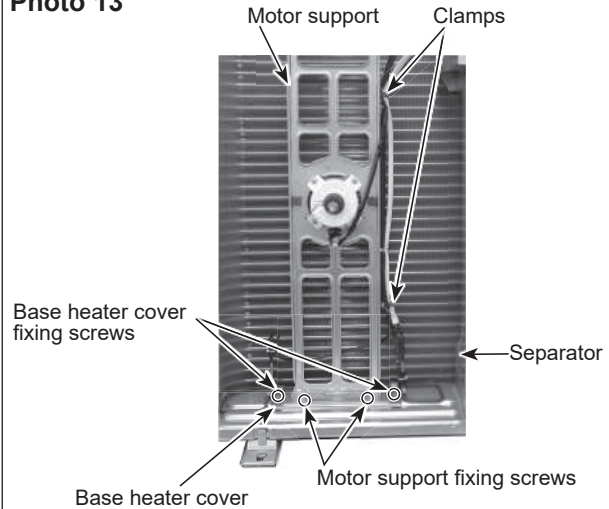
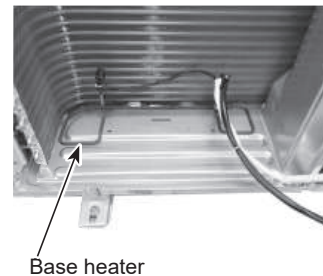


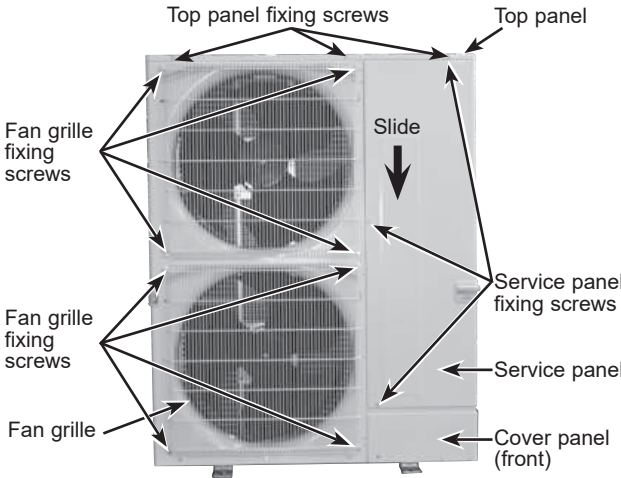
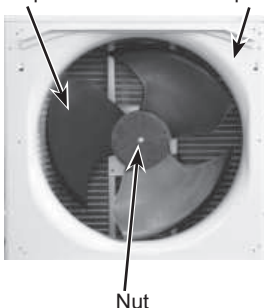
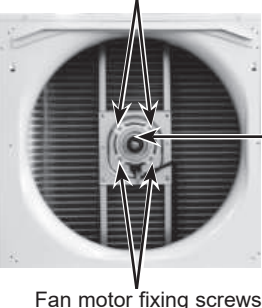
Photo 14



SUZ-KA30NAHZ SUZ-KA36NAHZ

—————> : Indicates the visible parts in the photos/figures.

-----> : Indicates the invisible parts in the photos/figures.

OPERATING PROCEDURE	PHOTOS/FIGURES
1. Removing the service panel and top panel (1) Remove 3 service panel fixing screws (5 × 12) and slide the hook on the right downward to remove the service panel. (2) Remove screws (3 for front, 3 for rear/5 × 12) of the top panel and remove it.	Photo 1 
2. Removing the fan motor (MF1, MF2) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove 4 fan grille fixing screws (5 × 12) to detach the fan grille. (See Photo 1) (4) Remove a nut (for right handed screw of M6) to detach the propeller. (See Photo 2) (5) Disconnect the connectors, CNF1, CNF2 on controller circuit board in electrical parts box. (6) Remove 4 fan motor fixing screws (5 × 20) to detach the fan motor. (See Photo 3)	Photo 2  Photo 3 

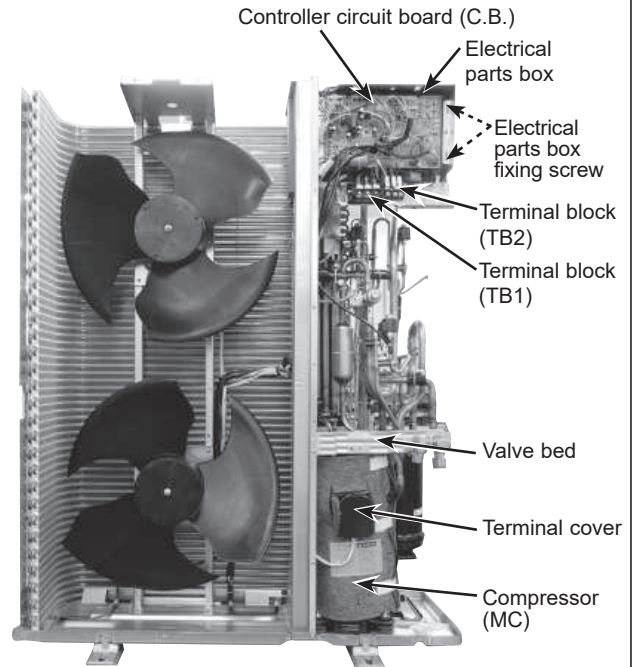
OPERATING PROCEDURE

3. Removing the electrical parts box

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Disconnect the indoor/outdoor connecting wire and the power supply wire from terminal block.
- (4) Disconnect the connector CNF1, CNF2, SV2, LEV-A, LEV-B and LEV-C on the controller circuit board.
 - <Symbols on the board>
 - CNF1, CNF2: Fan motor
 - LEV-A, LEV-B, LEV-C: LEV
 - SV2: Base Heater
- (5) Disconnect the pipe-side connections of the following parts.
 - Thermistor <Liquid>(TH3)
 - Thermistor <Discharge>(TH4)
 - Thermistor <2-phase pipe>(TH6)
 - Thermistor <Ambient>(TH7)
 - Thermistor <Suction> (TH32)
 - Thermistor <Comp. surface> (TH33)
 - High pressure switch (63H)
 - 4-way valve coil (21S4)
- (6) Remove the terminal cover and disconnect the compressor lead wire.
- (7) Loosen the clamp for lead wires on the separator.
- (8) Remove 2 electrical parts box fixing screws (4 × 10) and detach the electrical parts box by pulling it upward. The electrical parts box is fixed with 2 hooks on the left and 1 hook on the right.

PHOTOS/FIGURES

Photo 4



OPERATING PROCEDURE

4. Removing the thermistor <2-phase pipe> (TH6) and thermistor <Ambient>(TH7)

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Disconnect the connectors TH7/6 (red) on the controller circuit board in the electrical parts box.
Loosen fasteners for lead wires in the electrical parts box.
- (4) Loosen the clamp for lead wires in the rear of the electrical parts box.
- (5) Pull out the thermistor <2-phase pipe> (TH6) and thermistor <Ambient> (TH7) from the sensor holder.

Note: When replacing thermistor <2-phase pipe> (TH6) or thermistor <Ambient> (TH7), replace it together.

PHOTOS/FIGURES

Photo 5

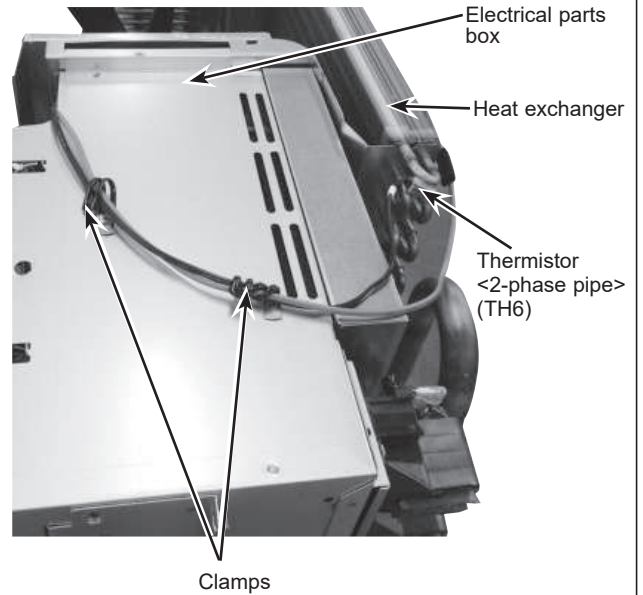
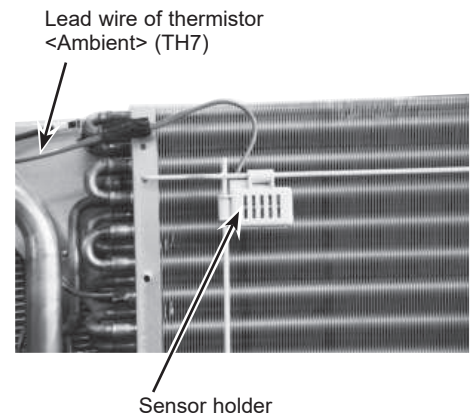
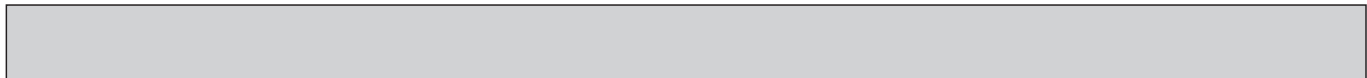
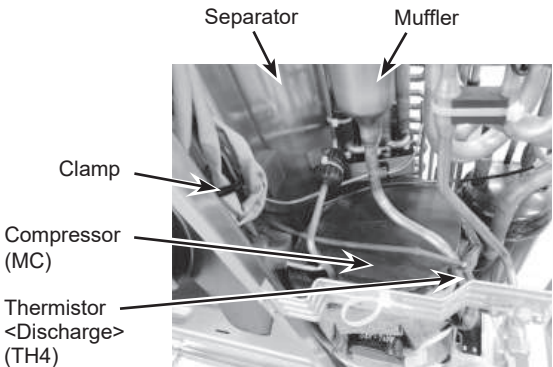
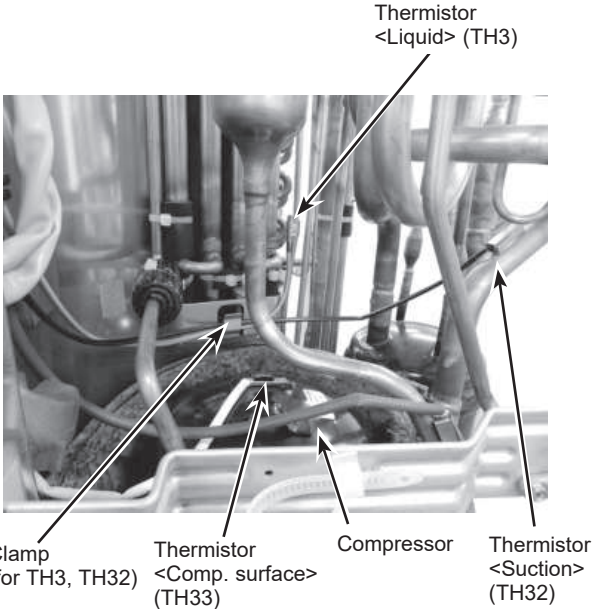
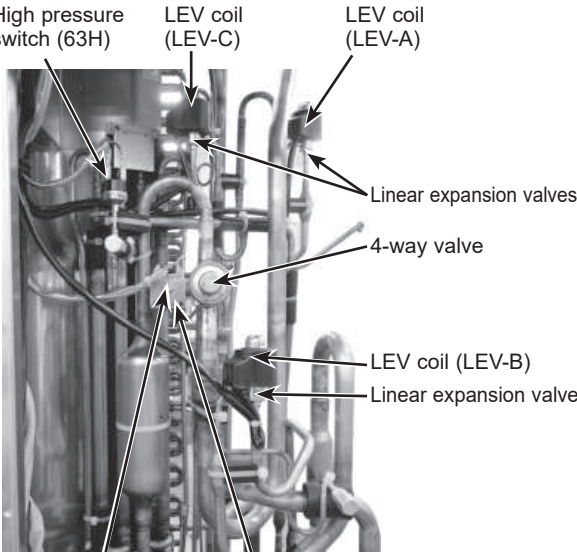


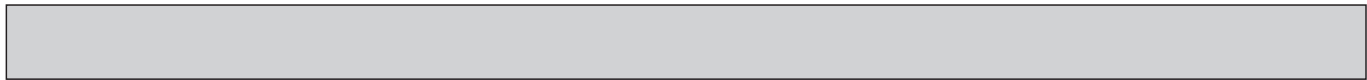
Photo 6

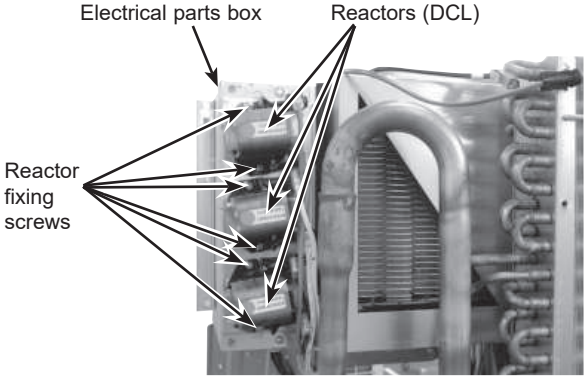
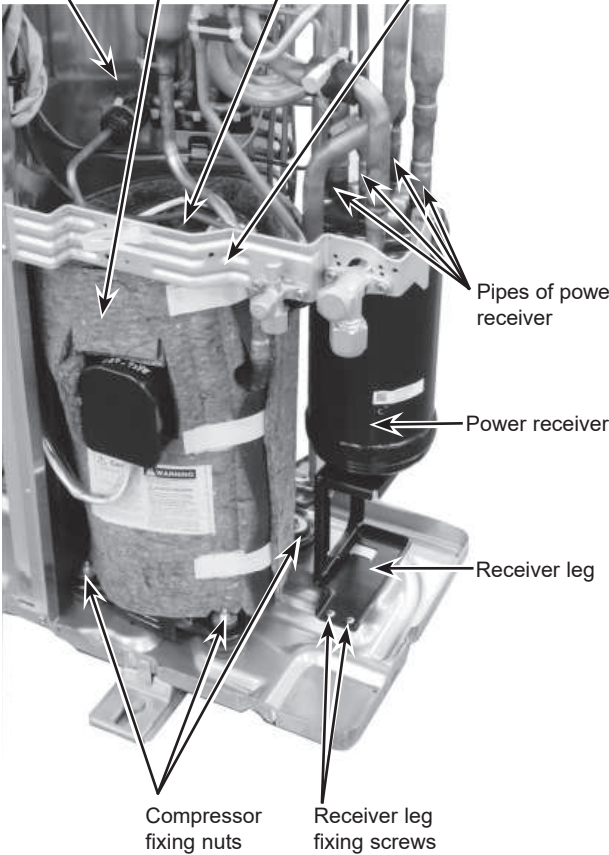




OPERATING PROCEDURE	PHOTOS/FIGURES
5. Removing the thermistor <Discharge> (TH4) (1) Remove the service panel. (See Photo 1) (2) Disconnect the connector TH4 (white) on the controller circuit board in the electrical parts box. Loosen fasteners for lead wires in the electrical parts box. (3) Loosen clamps for the lead wire on the separator (See Photo 7). (4) Pull out the thermistor <Discharge> (TH4) from the sensor holder.	Photo 7 
6. Removing the thermistor <Liquid> (TH3), thermistor <Suction> (TH32), thermistor <Comp. surface> (TH33) (1) Remove the service panel. (See Photo 1) (2) Disconnect the connectors, TH3 (white) and TH32 (black), TH33 (red) on the controller circuit board in the electrical parts box. Loosen fasteners for lead wires in the electrical parts box. (3) Loosen clamps for the lead wires on the separator (See Photo 7). Loosen clamp and cable strap for lead wires on the bottom of the electrical parts box. (Note that this procedure is only for removing TH32.) (4) Loosen clamp for the lead wire for TH3 and TH32. (5) Pull out the thermistor <Liquid> (TH3), thermistor <Suction> (TH32), thermistor <Comp. surface> (TH33).	Photo 8 

OPERATING PROCEDURE	PHOTOS/FIGURES
7. Removing the 4-way valve coil (21S4), and linear expansion valve coil (LEV-A, LEV-B, LEV-C) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the electrical parts box. (See Photo 4) [Removing the 4-way valve coil] (4) Remove 4-way valve coil fixing screw (M5 × 7). (5) Remove the 4-way valve coil by sliding the coil toward you. Loosen the clamp for lead wires on the separator. Loosen fasteners and the cable strap for lead wires in the electrical parts box. (6) Disconnect the connector 21S4 (green) on the controller circuit board in the electrical parts box. [Removing the linear expansion valve coil] (4) Loosen a fastener for lead wires. (5) Remove the linear expansion valve coil by sliding the coil upward. Loosen the clamp for lead wires on the separator. Loosen a fastener for lead wires in the electrical parts box. (6) Disconnect the connectors, LEV-A (white), LEV-B (red) and LEV-C (blue) on the controller circuit board in the electrical parts box.	Photo 9 
8. Removing the 4-way valve (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the electrical parts box. (See Photo 4) (4) Remove 2 cover panel front fixing screws (5 × 12) and remove the cover panel front. (See Photo 1) (5) Remove 2 cover panel rear fixing screws (5 × 12) and remove the cover panel rear. (6) Remove 3 valve bed fixing screws (4 × 10) and 4 ball valve and stop valve fixing screws (5 × 16) then remove the valve bed. (7) Remove 3 side panel (R) fixing screws (5 × 12) in the rear of the unit then remove the side panel (R). (8) Remove the 4-way valve coil. (9) Recover refrigerant. (10) Remove the welded part of 4-way valve. Note :When installing the 4-way valve, cover it with a wet cloth to prevent it from heating (250°F [120°C] or more), then braze the pipes so that the inside of pipes are not oxidized.	
9. Removing linear expansion valve (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the electrical parts box. (See Photo 4) (4) Remove the cover panel front. (Refer to procedure 8) (5) Remove the cover panel rear. (Refer to procedure 8) (6) Remove the valve bed. (Refer to procedure 8) (7) Remove the side panel (R). (Refer to procedure 8) (8) Remove the linear expansion valve coil. (9) Recover refrigerant. (10) Remove the welded part of linear expansion valve. Note : When installing the linear expansion valve, cover it with a wet cloth to prevent it from heating (250°F [120°C] or more), then braze the pipes so that the inside of pipes are not oxidized.	10. Removing the high pressure switch (63H) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the electrical parts box. (See Photo 4) (4) Remove the cover panel front. (5) Remove the cover panel rear. (6) Remove the valve bed. (Refer to procedure 8) (7) Remove the side panel (R). (Refer to procedure 8) (8) Pull out the lead wire of high pressure switch (63H). (9) Recover refrigerant. (10) Remove the welded part of high pressure switch (63H). Note : When installing the high pressure switch, cover it with a wet cloth to prevent it from heating (210°F [100°C] or more), then braze the pipes so that the inside of pipes are not oxidized.



OPERATING PROCEDURE	PHOTOS/FIGURES
11. Removing the reactor (DCL) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the electrical parts box. (See Photo 4) (4) Remove 6 reactor fixing screws (4 × 10) and remove the reactors. Note 1: The reactor and capacitor is attached to the rear of the electrical parts box. Note 2: The 3 pieces of reactors to be replaced must have the same color of sticker. (Green, Orange, or Blue)	Photo 10  Electrical parts box Reactors (DCL) Reactor fixing screws
12. Removing the compressor (MC) (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the electrical parts box. (See Photo 4) (4) Remove the cover panel front. (Refer to procedure 8) (5) Remove the cover panel rear. (Refer to procedure 8) (6) Remove the valve bed. (Refer to procedure 8) (7) Remove the side panel (R). (Refer to procedure 8) (8) Remove 3 separator fixing screws (4 × 10) and remove the separator. (9) Remove the comp felt for compressor. (10) Recover refrigerant. (11) Remove the welded pipe of compressor inlet and outlet then remove the compressor. (12) Remove the 3 points of the compressor fixing nut using a spanner or a adjustable wrench. Note: Recover refrigerant without spreading it in the air.	Photo 11  Separator Comp felt Compressor (MC) Valve bed Pipes of power receiver Power receiver Receiver leg Compressor fixing nuts Receiver leg fixing screws
13. Removing the power receiver (1) Remove the service panel. (See Photo 1) (2) Remove the top panel. (See Photo 1) (3) Remove the electrical parts box. (See Photo 4) (4) Remove the cover panel front. (Refer to procedure 8) (5) Remove the cover panel rear. (Refer to procedure 8) (6) Remove the valve bed. (Refer to procedure 8) (7) Remove the side panel (R). (Refer to procedure 8) (8) Recover refrigerant. (9) Remove 4 welded pipes of power receiver inlet and outlet. (10) Remove 2 receiver leg fixing screws (4 × 10). Note: Recover refrigerant without spreading it in the air.	

OPERATING PROCEDURE

14. Removing the base heater

- (1) Remove the service panel. (See Photo 1)
- (2) Remove the top panel. (See Photo 1)
- (3) Remove the upper 2 screws (5 × 12) fixing the motor support, the lower 3 screws (5 × 12) fixing the base and the 2 screws (4 × 10) fixing the separator to detach the front panel. (See Photo 1)
- (4) Remove a nut (for right handed screw of M6) to detach the propeller. (See Photo 2)
- (5) Remove all of the following connectors from controller circuit board;
<Diagram symbol in the connector housing>
 - Fan motor (CNF1, CNF2)
 - Base heater (SV2)
 Pull out the disconnected wire from the electrical parts box. (See Photo 4)
- (6) Loosen the wire clamps on the side of the motor support and separator.
- (7) Remove 2 motor support fixing screws (5 x 12), then remove the motor support with fan motor still attached. (See Photo 12)
- (8) Remove 4 base heater cover fixing screws (4 x 10), then remove the base heater cover.
- (9) Remove the base heater. (See Photo 13)

Notes:

1. Tighten the propeller fan with a torque of 5.7 ± 0.3 N·m [4.2 ± 0.2 ft = lbs]
2. Rotate the propeller fan and make sure that the base heater and the lead wires do not interfere with the movement of the propeller fan.

PHOTOS/FIGURES

Photo 12

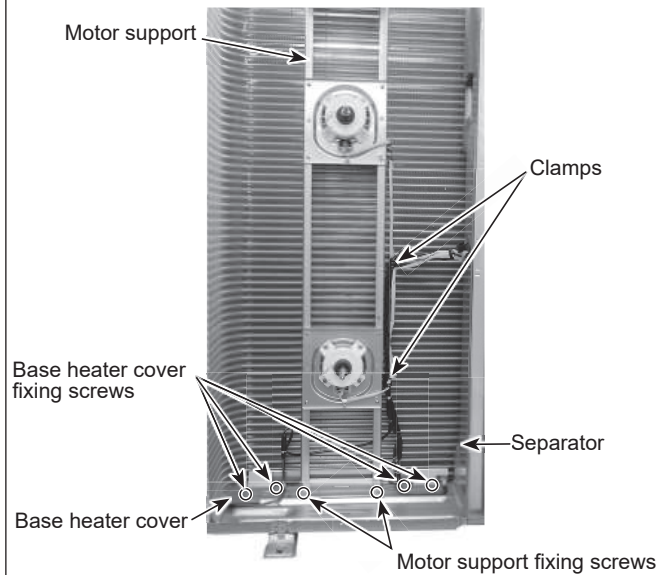
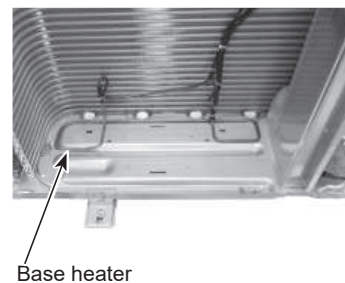


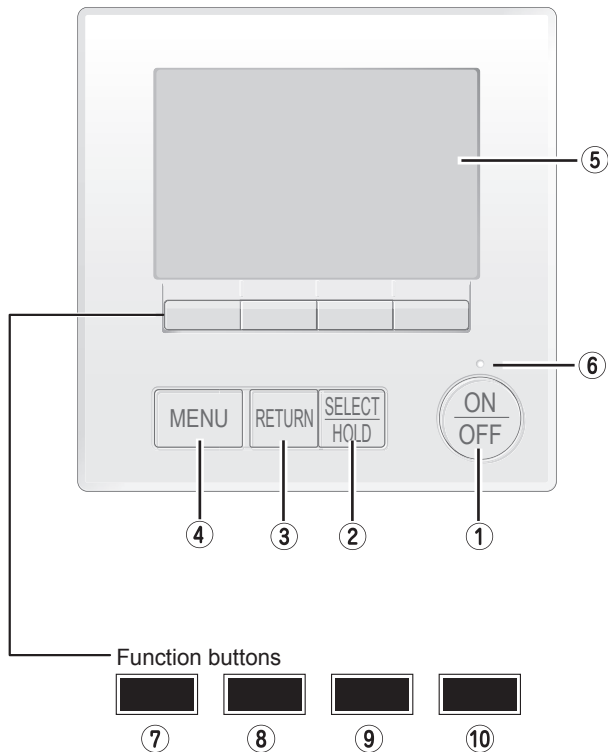
Photo 13



15-1. REMOTE CONTROLLER FUNCTIONS

<PAR-40MAA>

Controller interface

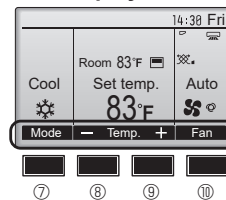


The functions of the function buttons change depending on the screen.

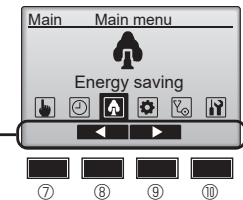
Refer to the button function guide that appears at the bottom of the LCD for the functions they serve on a given screen.

When the system is centrally controlled, the button function guide that corresponds to the locked button will not appear.

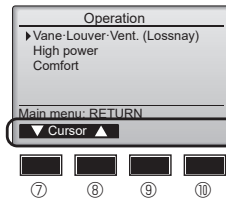
Main display



Main menu



Menu screen



Function guide

① [ON/OFF] button

Press to turn ON/OFF the indoor unit.

② [SELECT/HOLD] button

Press to save the setting.

When the Main menu is displayed, pressing this button will enable/disable the HOLD function.

③ [RETURN] button

Press to return to the previous screen.

④ [MENU] button

Press to bring up the Main menu.

⑤ Backlit LCD

Operation settings will appear.

When the backlight is off, pressing any button turns the backlight on and it will stay lit for a certain period of time depending on the screen.

When the backlight is off, pressing any button turns the backlight on and does not perform its function. (except for the [ON/OFF] button)

⑥ ON/OFF lamp

This lamp lights up in green while the unit is in operation. It blinks while the remote controller is starting up or when there is an error.

⑦ Function button [F1]

Main display: Press to change the operation mode.

Menu screen: The button function varies with the screen.

⑧ Function button [F2]

Main display: Press to decrease temperature.

Main menu: Press to move the cursor left.

Menu screen: The button function varies with the screen.

⑨ Function button [F3]

Main display: Press to increase temperature.

Main menu: Press to move the cursor right.

Menu screen: The button function varies with the screen.

⑩ Function button [F4]

Main display: Press to change the fan speed.

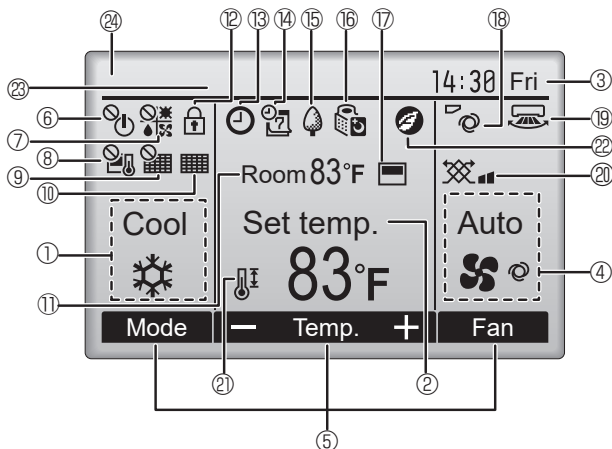
Menu screen: The button function varies with the screen.

Display

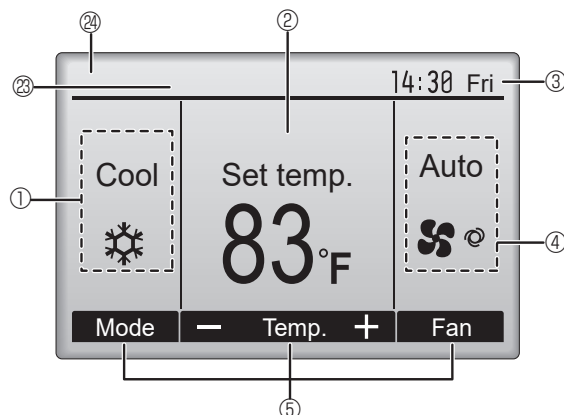
The main display can be displayed in two different modes: "Full" and "Basic". The initial setting is "Full". To switch to the "Basic" mode, change the setting on the Main display setting. (Refer to operation manual included with remote controller.)

<Full mode>

All icons are displayed for explanation.



<Basic mode>



① Operation mode

② Preset temperature

③ Clock

④ Fan speed

⑤ Button function guide

Functions of the corresponding buttons appear here.



Appears when the ON/OFF operation is centrally controlled.



Appears when the operation mode is centrally controlled.



Appears when the preset temperature is centrally controlled.



Appears when the filter reset function is centrally controlled.



Indicates when filter needs maintenance.

⑪ Room temperature



Appears when the buttons are locked.



Appears when the On/Off timer or Auto-off timer function is enabled.

appears when the timer is disabled by the centralized control system.

appears when the HOLD function is enable.



Appears when the Weekly timer is enabled.



Appears while the units are operated in the energy saving mode. (Will not appear on some models of indoor units)



Appears while the outdoor units are operated in the silent mode.



Appears when the built-in thermistor on the remote controller is activated to monitor the room temperature (⑪).

appears when the thermistor on the indoor unit is activated to monitor the room temperature.



Indicates the vane setting.



Indicates the louver setting.



Indicates the ventilation setting.



Appears when the preset temperature range is restricted.



Appears when an energy saving operation is performed using a "3D i-See sensor" function.

②③ Centrally controlled

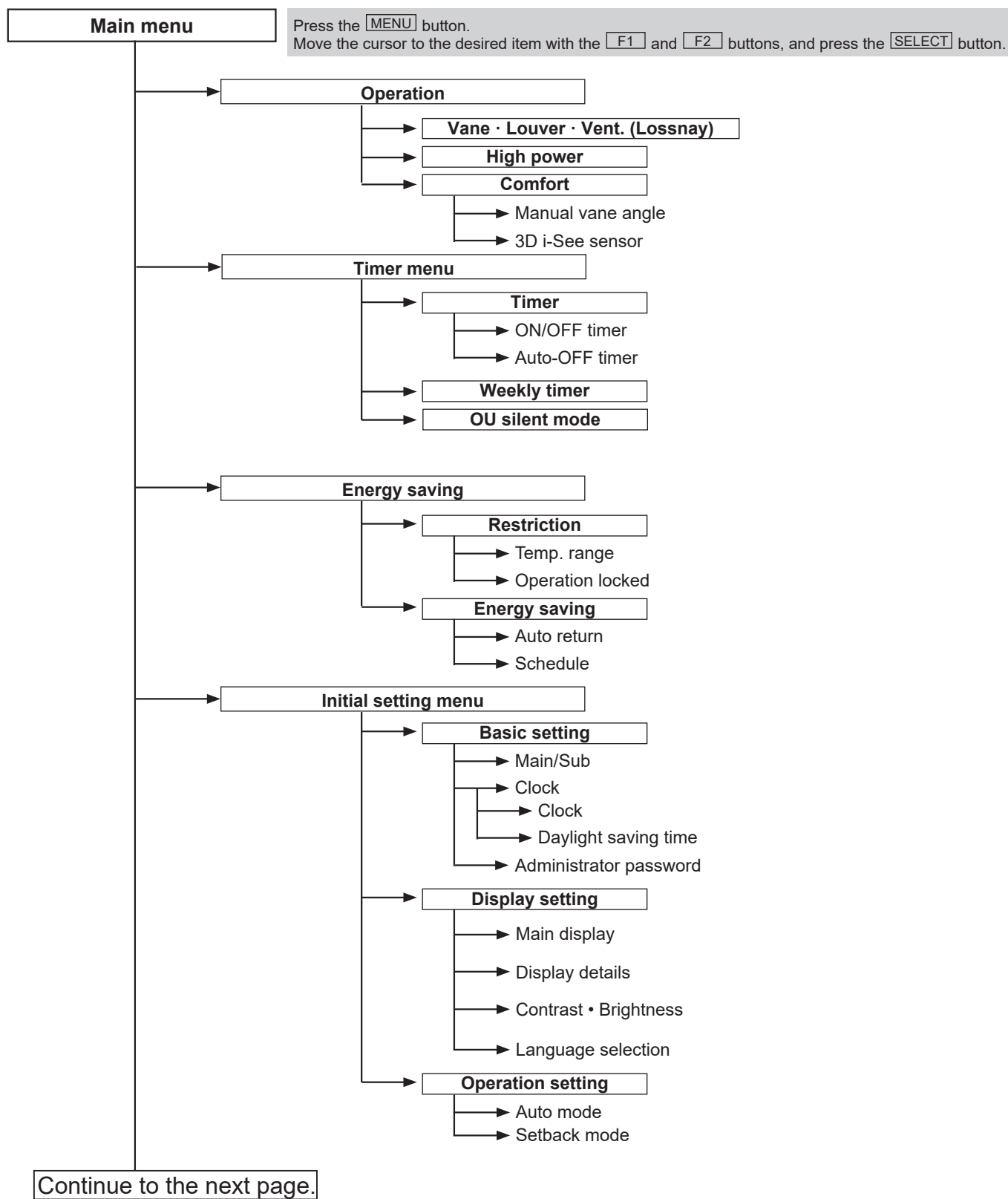
Appears for a certain period of time when a centrally-controlled item is operated.

②④ Preliminary error display

An check code appears during the preliminary error.

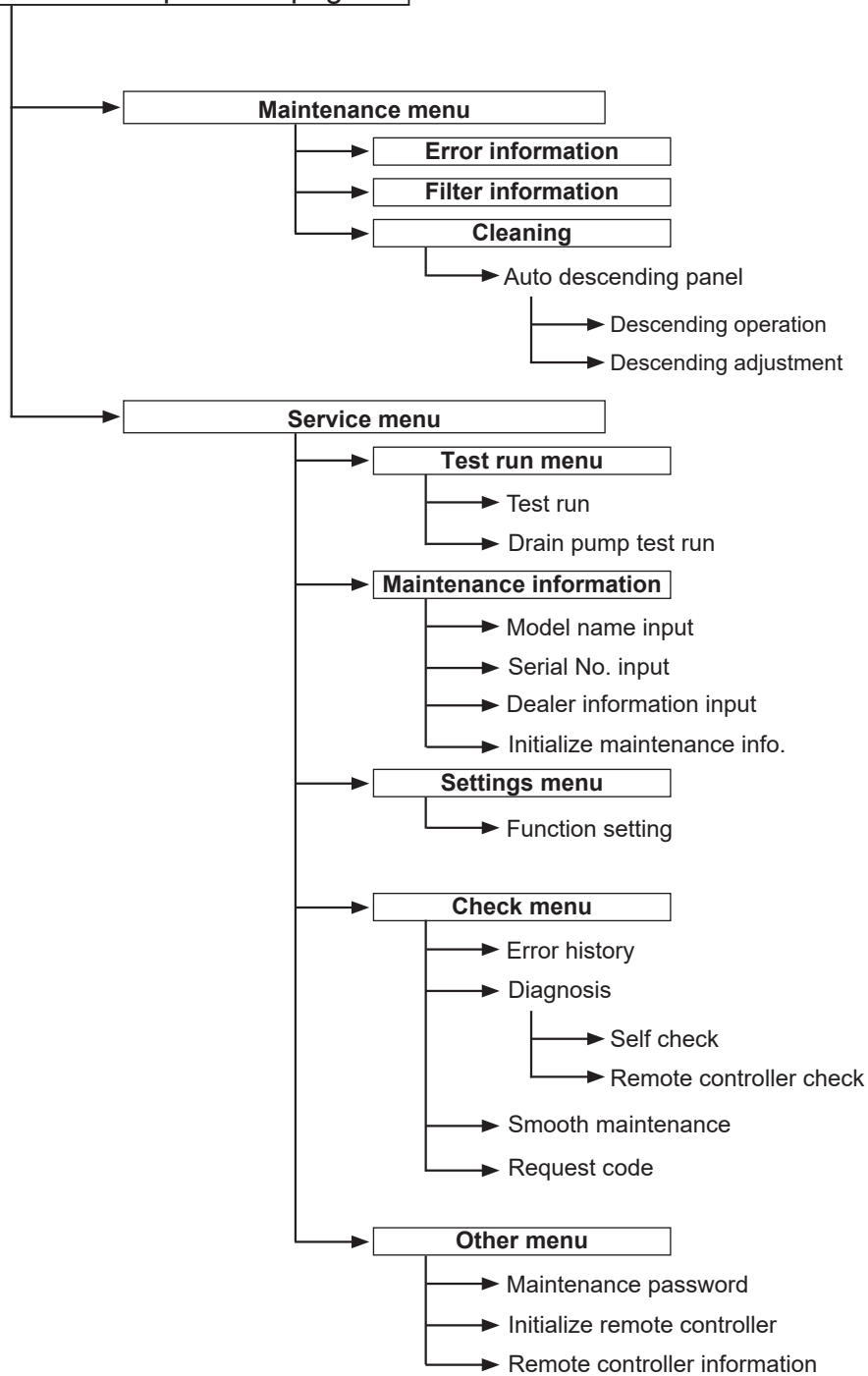
Most settings (except ON/OFF, mode, fan speed, temperature) can be made from the Main menu.

Menu structure



Not all functions are available on all models of indoor units.

Continue from the previous page.



Not all functions are available on all models of indoor units.



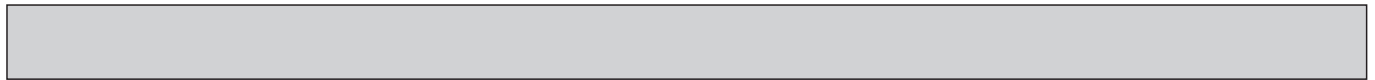
Main menu list

Main menu	Setting and display items		Setting details
Operation	Vane · Louver · Vent. (Lossnay)		Use to set the vane angle. • Select a desired vane setting. Use to turn ON/OFF the louver. • Select a desired setting from "ON" and "OFF." Use to set the amount of ventilation. • Select a desired setting from "Off," "Low," and "High."
	High power ^{*3}		Use to reach the comfortable room temperature quickly. • Units can be operated in the High-power mode for up to 30 minutes.
	Comfort	Manual vane angle	Use to fix each vane angle.
		3D i-See sensor	Use to set the following functions for 3D i-See sensor. • Air distribution • Energy saving option • Seasonal airflow
Timer	Timer	ON/OFF timer ^{*1}	Use to set the operation ON/OFF times. • Time can be set in 5-minute increments.
		Auto-Off timer	Use to set the Auto-Off time. • Time can be set to a value from 30 to 240 in 10-minute increments.
	Weekly timer ^{*1, *2}		Use to set the weekly operation ON/OFF times. • Up to 8 operation patterns can be set for each day. (Not valid when the ON/OFF timer is enabled.)
	OU silent mode ^{*1, *3}		Use to set the time periods in which priority is given to quiet operation of outdoor units over temperature control. Set the Start/Stop times for each day of the week. • Select the desired silent level from "Normal," "Middle," and "Quiet."
Energy saving	Restriction	Temp. range ^{*2}	Use to restrict the preset temperature range. • Different temperature ranges can be set for different operation modes.
		Operation locked	Use to lock selected functions. • The locked functions cannot be operated.
	Energy saving	Auto return ^{*2}	Use to get the units to operate at the preset temperature after performing energy saving operation for a specified time period. • Time can be set to a value from 30 and 120 in 10-minute increments. (This function will not be valid when the preset temperature ranges are restricted.)
		Schedule ^{*1, *3}	Set the start/stop times to operate the units in the energy saving mode for each day of the week, and set the energy saving rate. • Up to 4 energy saving operation patterns can be set for each day. • Time can be set in 5-minute increments. • Energy saving rate can be set to a value from 0% or 50 to 90% in 10% increments.
Initial setting	Basic setting	Main/Sub	When connecting 2 remote controllers, one of them needs to be designated as a sub controller.
		Clock	Use to set the current time.
		Daylight saving time	Set the daylight saving time.
		Administrator password	The administrator password is required to make the settings for the following items. • Timer setting • Energy saving setting • Weekly timer setting • Restriction setting • Outdoor unit silent mode setting

^{*1} Clock setting is required.

^{*2} 2°F (1°C) increments.

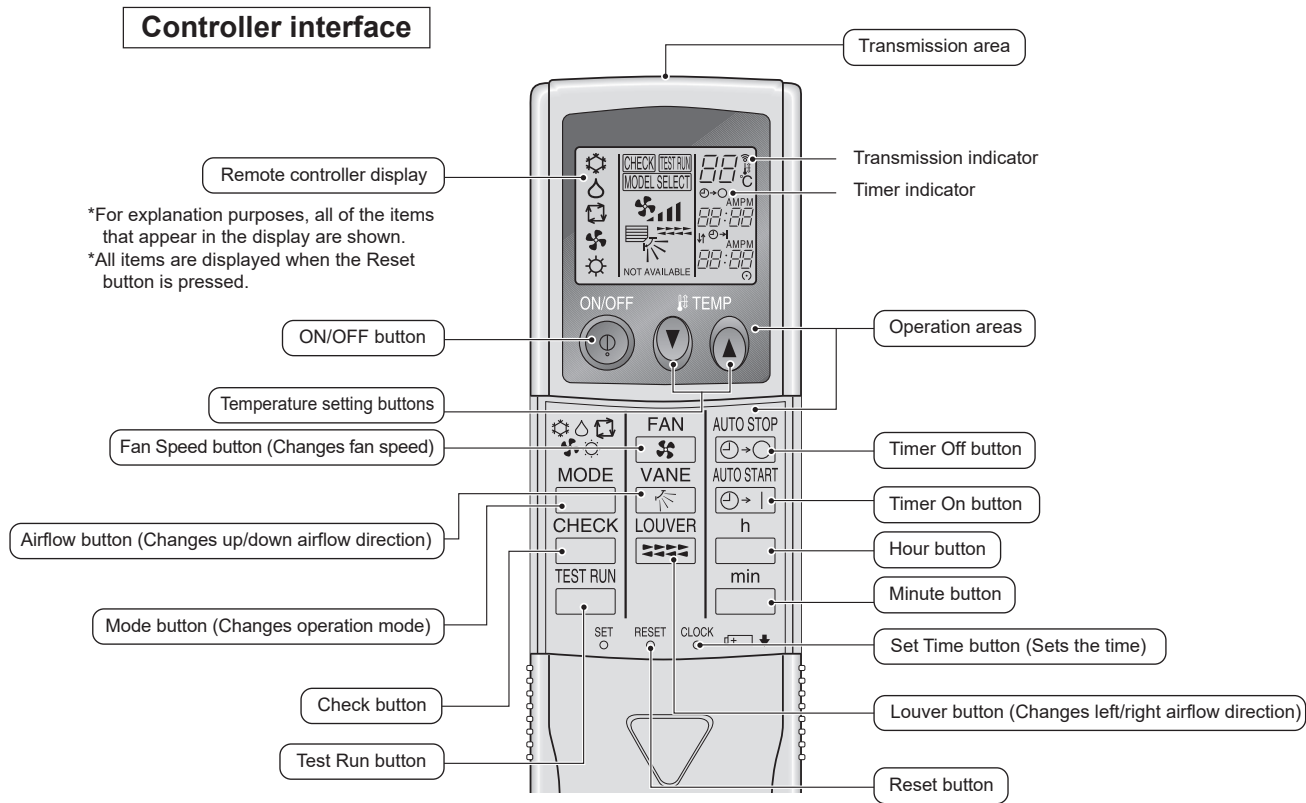
^{*3} This function is available only when certain outdoor units are connected.



Main menu	Setting and display items		Setting details
Initial setting	Display setting	Main display	Use to switch between "Full" and "Basic" modes for the Main display, and use to change the background colors of the display to black.
		Display details	Make the settings for the remote controller related items as necessary. Clock: The initial settings are "Yes" and "24h" format. Temperature: Set either Celsius (°C) or Fahrenheit (°F). Room temp. : Set Show or Hide. Auto mode: Set the Auto mode display or Only Auto display.
		Contrast • Brightness	Use to adjust screen contrast and brightness.
		Language selection	Use to select the desired language.
	Operation setting	Auto mode	Whether or not to use the Auto mode can be selected by using the button. This setting is valid only when indoor units with the Auto mode function are connected.
		Setback mode	Whether or not to use the Setback mode can be selected by using the button. This setting is valid only when indoor units with the Setback mode function are connected.
Maintenance	Error information		Use to check error information when an error occurs. • Check code, error source, refrigerant address, unit model, manufacturing number, contact information (dealer's phone number) can be displayed. (The unit model, manufacturing number, and contact information need to be registered in advance to be displayed.)
	Filter information		Use to check the filter status. • The filter sign can be reset.
	Cleaning	Auto descending panel	Use to lift and lower the auto descending panel (Optional parts).
Service	Test run		Select "Test run" from the Service menu to bring up the Test run menu. • Test run • Drain pump test run
	Input maintenance		Select "Input maintenance Info." from the Service menu to bring up the Maintenance information screen. The following settings can be made from the Maintenance Information screen. • Model name input • Serial No. input • Dealer information input • Initialize maintenance info.
	Settings	Function setting	Make the settings for the indoor unit functions via the remote controller as necessary.
	Check	Error history	Display the error history and execute "delete error history".
		Diagnosis	Self check: Error history of each unit can be checked via the remote controller. Remote controller check: When the remote controller does not work properly, use the remote controller checking function to troubleshoot the problem.
		Smooth maintenance *1	Use to display the maintenance data of indoor/outdoor units.
		Request code *1	Use to check operation data such as thermistor temperature and error information.
	Others	Maintenance password	Use to change the maintenance password.
		Initialize remote controller	Use to initialize the remote controller to the factory shipment status.
		Remote controller information	Use to display the remote controller model name, software version, and serial number.

*1 This function is available only when certain outdoor units are connected.

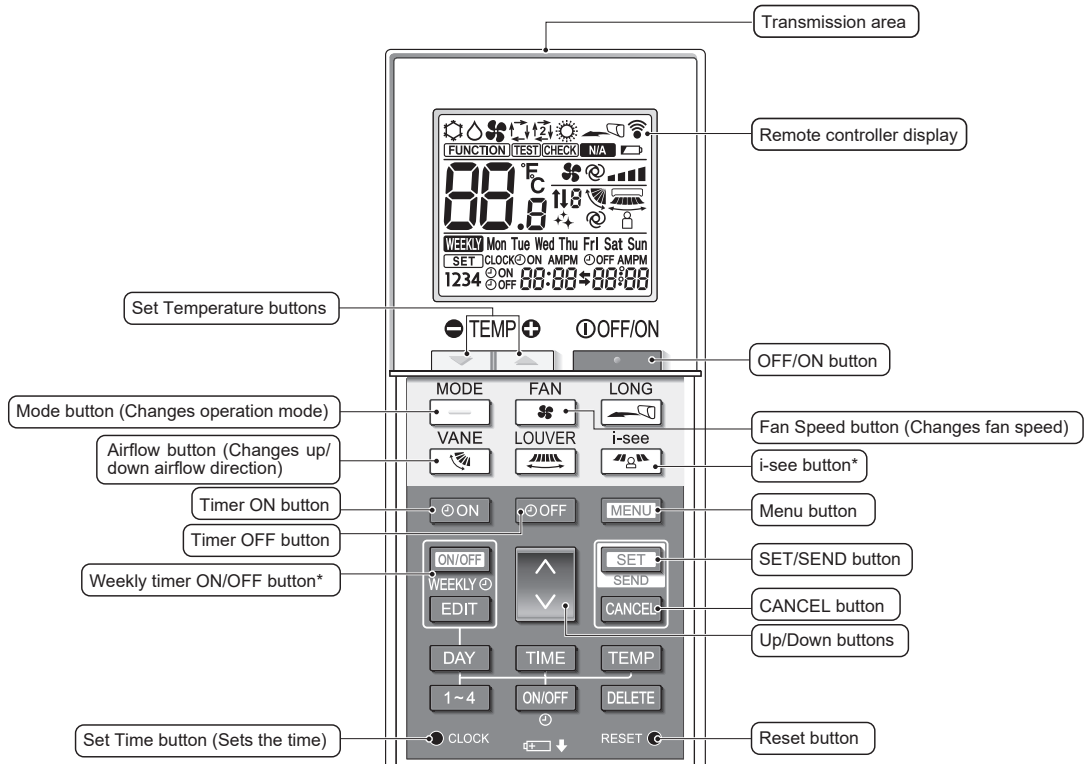
<PAR-SL97A-E>



- When using the wireless remote controller, point it towards the receiver on the indoor unit.
- If the remote controller is operated within approximately two minutes after power is supplied to the indoor unit, the indoor unit may beep twice as the unit is performing the initial automatic check.
- The indoor unit beeps to confirm that the signal transmitted from the remote controller has been received. Signals can be received up to approximately 7 meters in a direct line from the indoor unit in an area 45° to the left and right of the unit. However, illumination such as fluorescent lights and strong light can affect the ability of the indoor unit to receive signals.
- If the operation lamp near the receiver on the indoor unit is blinking, the unit needs to be inspected. Consult your dealer for service.
- Handle the remote controller carefully! Do not drop the remote controller or subject it to strong shocks. In addition, do not get the remote controller wet or leave it in a location with high humidity.
- To avoid misplacing the remote controller, install the holder included with the remote controller on a wall and be sure to always place the remote controller in the holder after use.

<PAR-SL100A-E>

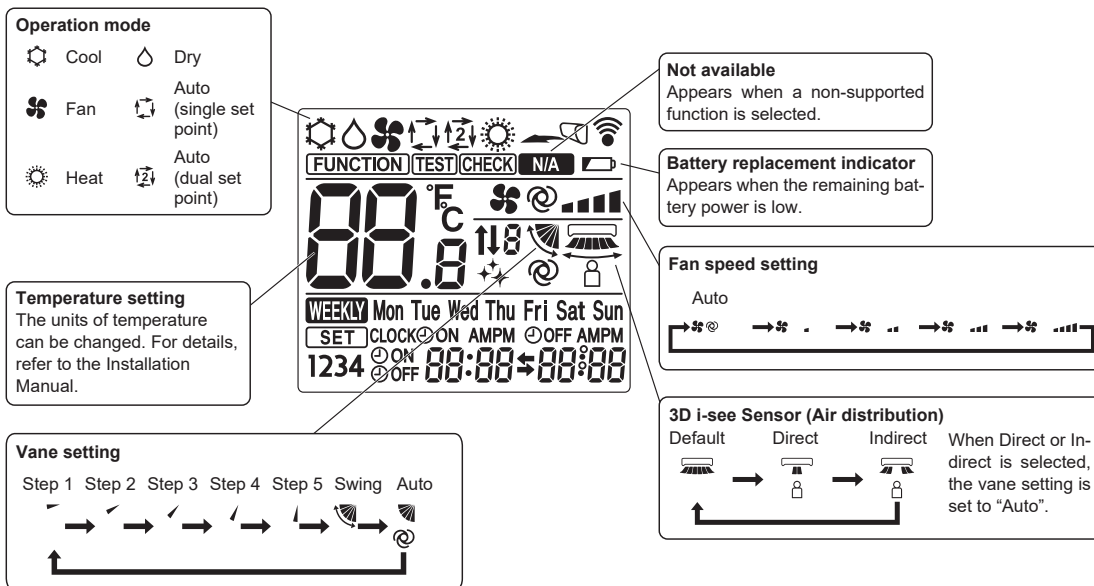
Controller interface



Note:

* This button is enabled or disabled depending on the model of the indoor unit.

Display



15-2. ERROR INFORMATION

When an error occurs, the following screen will appear.
Check the error status, stop the operation, and consult your dealer.

1. Check code, error unit, refrigerant address, unit model name, and serial number will appear.
The model name and serial number will appear only if the information has been registered.

Press the **F1** or **F2** button to go to the next page.

Error information 1/2

Error code	A3
Error unit	IU 8 Unit#1
Time Occurred	02/01 4:48
Model name	
Serial No.	

Reset error: Reset button

▼ Page ▲

Reset

F1

F2

F3

F4

blinks

MENU

RETURN

SELECT
HOLD

ON

OFF

Contact information (dealer's phone number) will appear if the information has been registered.

Error information 2/2

Contact information	
Dealer	
Tel	

Reset error: Reset button

▼ Page ▲

Reset

2. Press the **F4** button or the [ON/OFF] button to reset the error that is occurring.

Errors cannot be reset while the ON/OFF operation is prohibited.

Error information 1/2

Error code	A3
Error unit	IU 8 Unit#1
Time Occurred	02/01 4:48
Model name	
Serial No.	

Reset error: Reset button

▼ Page ▲

Reset

F1

F2

F3

F4

blinks

MENU

RETURN

SELECT
HOLD

ON

OFF

Select "OK" with the **F4** button.

Error reset

Reset current error?

Cancel

OK

F1

F2

F3

F4

Error reset

Error reset

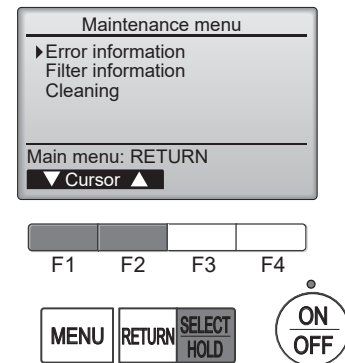
Main menu: MENU

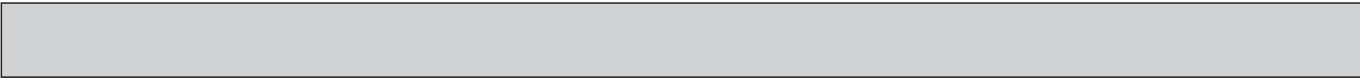
Navigation through the screens

- To go back to the Main menu [MENU] button

• Checking the error information

While no errors are occurring, page 2/2 of the error information can be viewed by selecting "Error information" from the Maintenance menu. Errors cannot be reset from this screen.



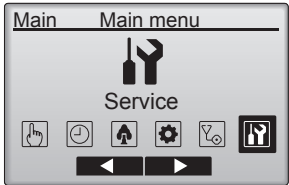


15-3. SERVICE MENU

Maintenance password is required

1. Select "Service" from the Main menu, and press the [SELECT] button.

*At the main display, the menu button and select "Service" to make the maintenance setting.



2. When the Service menu is selected, a window will appear asking for the password.

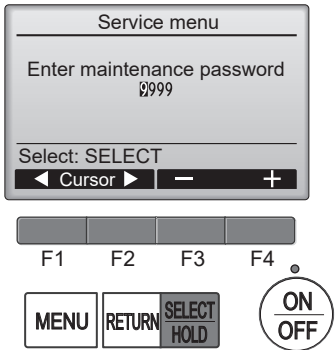
To enter the current maintenance password (4 numerical digits), move the cursor to the digit you want to change with the [F1] or [F2] button.



Set each number (0 through 9) with the [F3] or [F4] button.



Then, press the [SELECT] button.



Note: The initial maintenance password is "9999". Change the default password as necessary to prevent unauthorized access. Have the password available for those who need it.
: If you forget your maintenance password, you can initialize the password to the default password "9999" by pressing and holding the [F1] button for 10 seconds on the maintenance password setting screen.

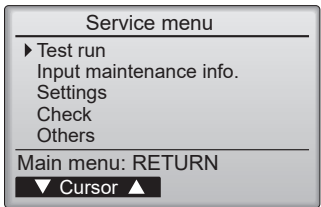
3. If the password matches, the Service menu will appear.

The type of menu that appears depends on the connected indoor units' type.

Note: Air conditioning units may need to be stopped to make only at "Settings". There may be some settings that cannot be made when the system is centrally controlled.



A screen will appear that indicates the setting has been saved.



Navigating through the screens

- To go back to the Service menu [MENU] button
- To return to the previous screen..... [RETURN] button