MITSUBISHI ELECTRIC

SPLIT-TYPE, HEAT PUMP AIR CONDITIONERS

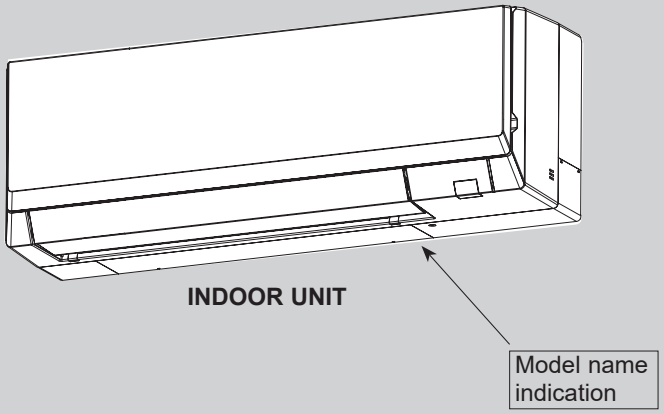
November 2023

No. TCH132

TECHNICAL & SERVICE MANUAL

Series PKFY Wall Mounted R410A

Indoor unit [Model Name]	[Service Ref.]
PKFY-P04NLMU-E	PKFY-P04NLMU-ER1.TH
PKFY-P06NLMU-E	PKFY-P06NLMU-ER1.TH
PKFY-P08NLMU-E	PKFY-P08NLMU-ER1.TH
PKFY-P12NLMU-E	PKFY-P12NLMU-ER1.TH
PKFY-P15NLMU-E	PKFY-P15NLMU-ER1.TH
PKFY-P18NLMU-E	PKFY-P18NLMU-ER1.TH



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PARTS CATALOG (TCB132)

CITY MULTI

1 SAFETY PRECAUTION

Cautions for units utilizing refrigerant R410A

Do not use the existing refrigerant piping.

The old refrigerant and lubricant in the existing piping contains a large amount of chlorine which may cause the lubricant deterioration of the new unit.

Use "low residual oil piping"

If there is a large amount of residual oil (hydraulic oil, etc.) inside the piping and joints, deterioration of the lubricant will result.

Store the piping indoors, and both ends of the piping sealed until just before brazing. (Leave elbow joints, etc. in their packaging.)

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.

The refrigerant oil applied to flare and flange connections must be ester oil, ether oil or alkylbenzene oil in a small amount.

If large amount of mineral oil enters, that can cause deterioration of refrigerant oil etc.

Charge refrigerant from liquid phase of gas cylinder.

If the refrigerant is charged from gas phase, composition change may occur in refrigerant and the efficiency will be lowered.

Do not use refrigerant other than R410A.

If other refrigerant (R22, etc.) is used, chlorine in refrigerant can cause deterioration of refrigerant oil, etc.

Use a vacuum pump with a reverse flow check valve.

Vacuum pump oil may flow back into refrigerant cycle and that can cause deterioration of refrigerant oil, etc.

Use the following tools specifically designed for use with R410A refrigerant.

The following tools are necessary to use R410A refrigerant.

Tools for R410A	
Gauge manifold	Flare tool
Charge hose	Size adjustment gauge
Gas leak detector	Vacuum pump adaptor
Torque wrench	Electronic refrigerant charging scale

Handle tools with care.

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.

Do not use a charging cylinder.

If a charging cylinder is used, the composition of refrigerant will change and the efficiency will be lowered.

Use the specified refrigerant only.

Never use any refrigerant other than that specified.
Doing so may cause a burst, an explosion, or fire when the unit is being used, serviced, or disposed of.
Correct refrigerant is specified in the manuals and on the spec labels provided with our products.
We will not be held responsible for mechanical failure, system malfunction, unit breakdown or accidents caused by failure to follow the instructions.

Ventilate the room if refrigerant leaks during operation. If refrigerant comes into contact with a flame, poisonous gases will be released.

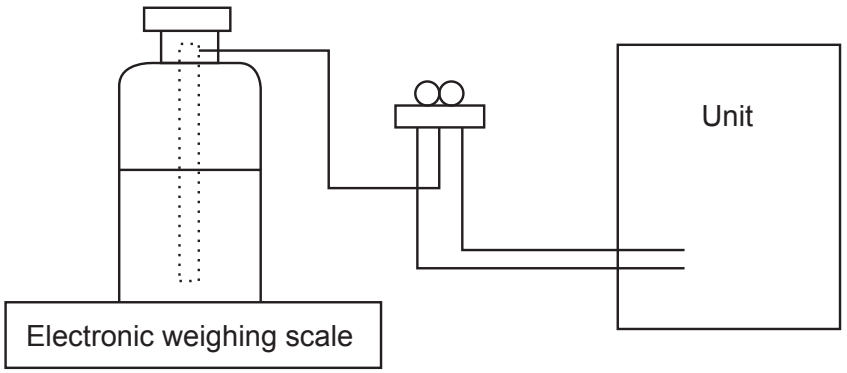
[1] Cautions for service

(1) Perform service after collecting the refrigerant left in the unit completely.
(2) Do not release refrigerant in the air.
(3) After completing service, charge the cycle with specified amount of refrigerant.
(4) When performing service, install a filter drier simultaneously.
Be sure to use a filter drier for new refrigerant.

[2] Additional refrigerant charge

When charging directly from cylinder

(1) Check that cylinder for R410A on the market is syphon type.
(2) Charging should be performed with the cylinder of syphon stood vertically. (Refrigerant is charged from liquid phase.)



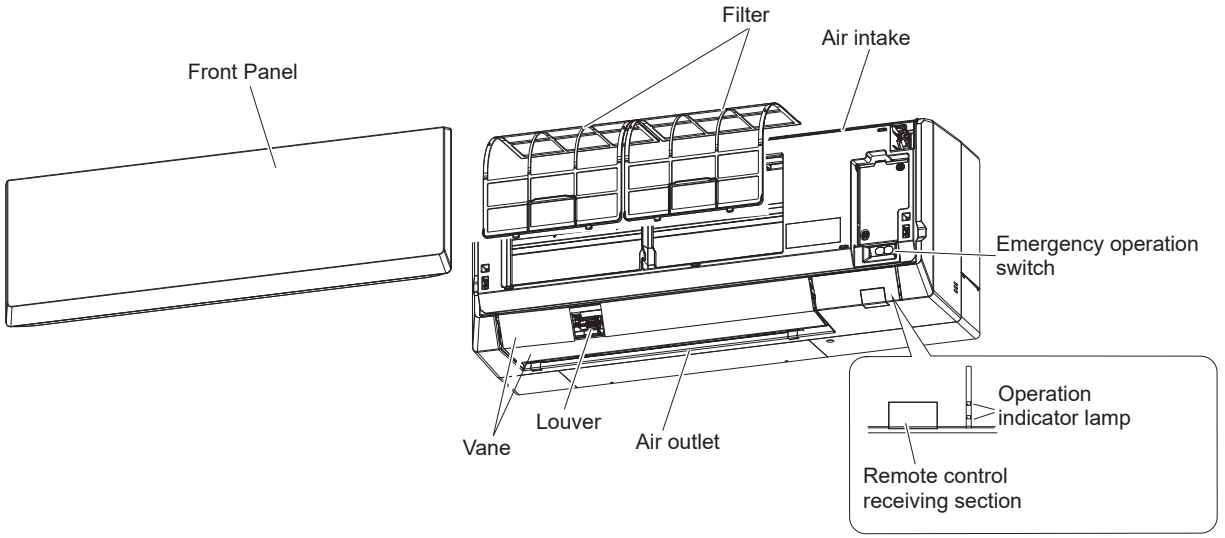
[3] Service tools

Use the below service tools as exclusive tools for R410A refrigerant.

No.	Tool name	Specifications
①	Gauge manifold	· Only for R410A
		· Use the existing fitting specifications. (UNF1/2)
		· Use high-tension side pressure of 768.7 PSIG [5.3MPa.G] or over.
②	Charge hose	· Only for R410A
		· Use pressure performance of 738.2 PSIG [5.09MPa.G] or over.
③	Electronic weighing scale	—
④	Gas leak detector	· Use the detector for R134a, R407C or R410A.
⑤	Adaptor for reverse flow check	· Attach on vacuum pump.
⑥	Refrigerant charge base	—
⑦	Refrigerant cylinder	· Only for R410A Top of cylinder (Pink) Cylinder with syphon
⑧	Refrigerant recovery equipment	—

2 PARTS NAMES AND FUNCTIONS

2-1. Indoor unit



2-2. Wired Remote Controller <PAR-41MAA> <PAC-YT53CRAU>

Wired remote controller function

The functions which can be used are restricted according to each model.

○: Supported ×: Unsupported

	Function	PAR-41MAA		PAC-YT53CRAU
		Slim	CITY MULTI	
Body	Product size H × W × D mm (inch)	120 × 120 × 14.5 (4-3/4 × 4-3/4 × 9/16)		120 × 70 × 14.5 (4-3/4 × 2-3/4 × 9/16)
	LCD	Full Dot LCD		Partial Dot LCD
	Backlight	○		○
Energy saving	Energy saving operation schedule	○	×	×
	Automatic return to the preset temperature	○		×
Restriction	Setting the temperature range restriction	○		○
Function*	Operation lock function	○		○
	Weekly timer	○		×
	ON/OFF timer	○		×
	High Power	○	×	×
	Manual vane angle	○		×

*Some functions may not be available depending on model types.

3 SPECIFICATION

3-1. SPECIFICATIONS

Model			PKFY-P04NLMU-ER1.TH	PKFY-P06NLMU-ER1.TH	PKFY-P08NLMU-ER1.TH
Power source			1-phase 208/230 V 60 Hz		
Cooling capacity *1		kW	1.1	1.8	2.3
(Nominal) *1		BTU/h	4000	6000	8000
	Power input	kW	0.02	0.02	0.03
	Current input	A	0.20	0.20	0.25
Heating capacity *2		kW	1.3	2.0	2.6
(Nominal) *2		BTU/h	4500	6700	9000
	Power input	kW	0.01	0.01	0.02
	Current input	A	0.15	0.15	0.20
External finish(Munsell No.)			Plastic (0.7PB 9.2/0.4)		
External dimension H x W x D		inch	11-25/32 x 30-7/16 x 9-11/32		
		mm	299 × 773 × 237		
Net weight		lb (kg)	23.6 (10.7)	24.5(11.1)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity		Line flow fan x 1		
	External static press	Pa (mmH2O)	0 (0)		
	Motor type		DC motor		
	Motor output	kW	0.03		
	Driving mechanism		Direct driven		
	Airflow rate (Low-Mid2 -Mid1-High)	m^3/min	3.3-3.5-3.8-4.2	4.0-4.4-4.9-5.4	4.0-4.6-5.4-6.7
		L/s	55-58-63-70	67-73-82-90	67-77-90-112
		cfm	117-124-134-148	141-155-173-191	141-162-191-237
Noise level (Low-Mid2-Mid1-High) (measured in anechoic room)		dB <A>	22-24-26-28	22-26-29-31	22-27-31-35
Insulation material			Polyethylene sheet		
Air filter			PP Honeycomb		
Protection device			Fuse		
Refrigerant control device			LEV		
Connectable outdoor unit			R410A CITY MULTI		
Diameter of refrigerant pipe	Liquid	in (mm)	ϕ1/4 (ϕ6.35)		
	Gas	in (mm)	ϕ1/2 (ϕ12.7)		
Field drain pipe size		in (mm)	I.D. 5/8 (16)		
Standard attachment			Installation Manual, Instruction Book		
Optional parts	DRAIN PUMP KIT		PAC-SK01DM-E		
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. Due to continuing improvement, above specifications may be subject to change without notice.		

Notes:
*1.Nominal cooling conditions (subject to JIS B8615-1)
Indoor: 81°FD.B./66°FW.B. (27°CD.B./19°CW.B.), Outdoor: 95°FD.B. (35°CD.B.)
Pipe length: 24-9/16 ft (7.5 m), Level difference: 0 ft (0 m)
*2.Nominal heating conditions (subject to JIS B8615-1)
Indoor: 68°FD.B. (20°CD.B.), Outdoor: 45°FD.B./43°FW.B. (7°CD.B./6°CW.B.)
Pipe length: 24-9/16 ft (7.5 m), Level difference: 0 ft (0 m)

Unit converter

kcal/h = kW × 860
Btu/h = kW × 3,412
cfm = m^3/min × 35.31
lb = kg/0.4536
Note: Above specification data is subject to rounding variation.

Model			PKFY-P12NLMU-ER1.TH	PKFY-P15NLMU-ER1.TH	PKFY-P18NLMU-ER1.TH
Power source			1-phase 208/230 V 60 Hz		
Cooling capacity *1		kW	3.5	4.4	5.3
(Nominal) *1		BTU/h	12000	15000	18000
	Power input	kW	0.04	0.04	0.05
	Current input	A	0.35	0.35	0.45
Heating capacity *2		kW	4.0	5.0	5.9
(Nominal) *2		BTU/h	13500	17000	20000
	Power input	kW	0.03	0.03	0.04
	Current input	A	0.30	0.30	0.40
External finish(Munsell No.)			Plastic (0.7PB 9.2/0.4)		
External dimension H x W x D		inch	11-25/32 x 30-7/16 x 9-11/32	11-25/32 x 35-23/64 x 9-11/32	
		mm	299 × 773 × 237	299 x 898 x 237	
Net weight		lb (kg)	24.5 (11.1)	28.4 (12.9)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)		
Fan	Type x Quantity		Line flow fan x 1		
	External static press	Pa (mmH2O)	0 (0)		
	Motor type		DC motor		
	Motor output	kW	0.03		
	Driving mechanism		Direct driven		
	Airflow rate (Low-Mid2 -Mid1-High)	m^3/min	4.3-5.4-6.9-8.4	6.3-7.4-8.6-10.0	6.8-8.3-10.2-12.4
		L/s	72-90-115-140	105-123-143-167	113-138-170-207
		cfm	152-191-244-297	222-261-304-353	240-293-360-438
Noise level (Low-Mid2-Mid1-High) (measured in anechoic room)		dB <A>	24-31-37-41	29-34-37-40	31-36-41-46
Insulation material			Polyethylene sheet		
Air filter			PP Honeycomb		
Protection device			Fuse		
Refrigerant control device			LEV		
Connectable outdoor unit			R410A CITY MULTI		
Diameter of refrigerant pipe	Liquid	in (mm)	ϕ1/4 (ϕ6.35)		
	Gas	in (mm)	ϕ1/2 (ϕ12.7)		
Field drain pipe size		in (mm)	I.D. 5/8 (16)		
Standard attachment			Installation Manual, Instruction Book		
Optional parts	DRAIN PUMP KIT		PAC-SK01DM-E		
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. Due to continuing improvement, above specifications may be subject to change without notice.		

Notes:
*1.Nominal cooling conditions (subject to JIS B8615-1)
Indoor: 81°FD.B./66°FW.B. (27°CD.B./19°CW.B.), Outdoor: 95°FD.B. (35°CD.B.)
Pipe length: 24-9/16 ft (7.5 m), Level difference: 0 ft (0 m)
*2.Nominal heating conditions (subject to JIS B8615-1)
Indoor: 68°FD.B. (20°CD.B.), Outdoor: 45°FD.B./43°FW.B. (7°CD.B./6°CW.B.)
Pipe length: 24-9/16 ft (7.5 m), Level difference: 0 ft (0 m)

3-2. ELECTRICAL PARTS SPECIFICATIONS

Service ref. / Parts name	Symbol	PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH PKFY-P08NLMU-ER1.TH PKFY-P12NLMU-ER1.TH PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH
Room temperature detection thermistor	TH21	Resistance 32°F/15 kΩ, 50°F/9.6 kΩ, 68°F/6.3 kΩ, 77°F/5.4 kΩ, 86°F/4.3 kΩ, 104°F/3.0 kΩ
Pipe temperature detection thermistor/liquid	TH22	Resistance 32°F/15 kΩ, 50°F/9.6 kΩ, 68°F/6.3 kΩ, 77°F/5.4 kΩ, 86°F/4.3 kΩ, 104°F/3.0 kΩ
Pipe temperature detection thermistor/gas	TH23	Resistance 32°F/15 kΩ, 50°F/9.6 kΩ, 68°F/6.3 kΩ, 77°F/5.4 kΩ, 86°F/4.3 kΩ, 104°F/3.0 kΩ
Fuse (Indoor controller board)	FUSE	T3.15AL250V
Fan motor (with thermal fuse)	MF	8 X 30W / RC0J30-QD
Vane motor (Upper)	MV1	NSEK302 DC12V
Vane motor (Lower)	MV2	MSBPC20 DC12V
Linear expansion valve	LEV	DC12V Stepping motor drive Port Ø3/32 (P04), Ø7/64 (P06/08/12/15/18) (0-2000pulse)
Power supply terminal block	TB2	(L1,L2) Rated to 250V 20A *
Transmission terminal block	TB5	(M1, M2, S) Rated to 250V 20A *
MA-Remote controller terminal block	TB15	(1, 2) Rated to 250V 10A *

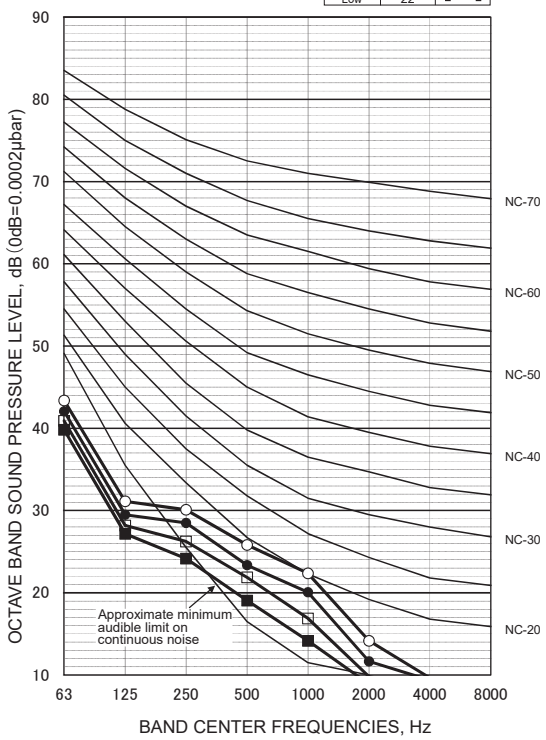
* Refer to WIRING DIAGRAM for the supplied voltage.

4 NOISE CRITERION CURVES

NOISE CRITERION CURVES

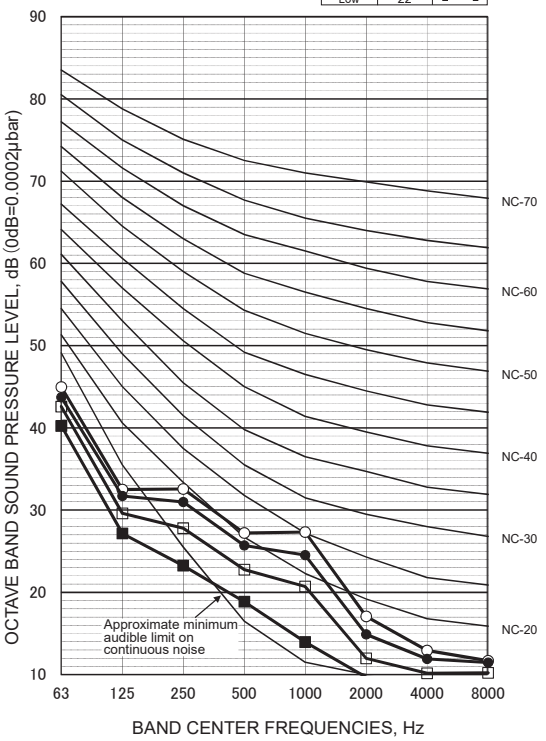
PKFY-P04NLMU-ER1.TH

FAN	SPL(dB)	LINE
High	28	
Medium1	26	
Medium2	24	
Low	22	



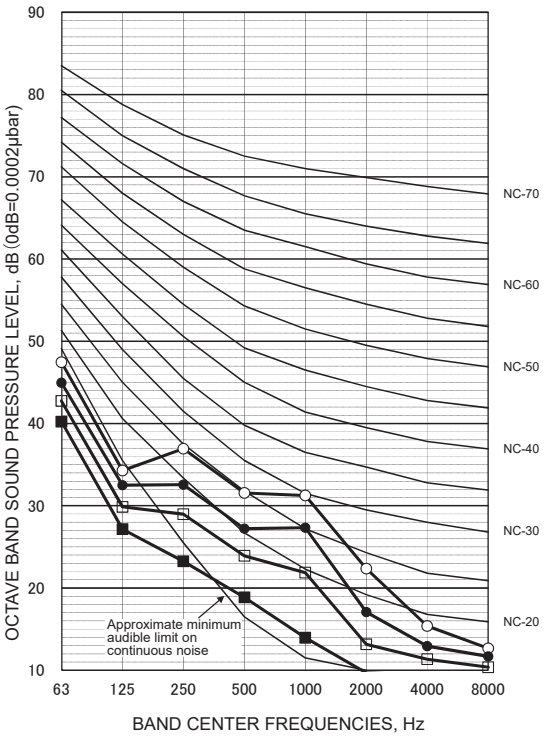
PKFY-P06NLMU-ER1.TH

FAN	SPL(dB)	LINE
High	31	
Medium1	29	
Medium2	26	
Low	22	



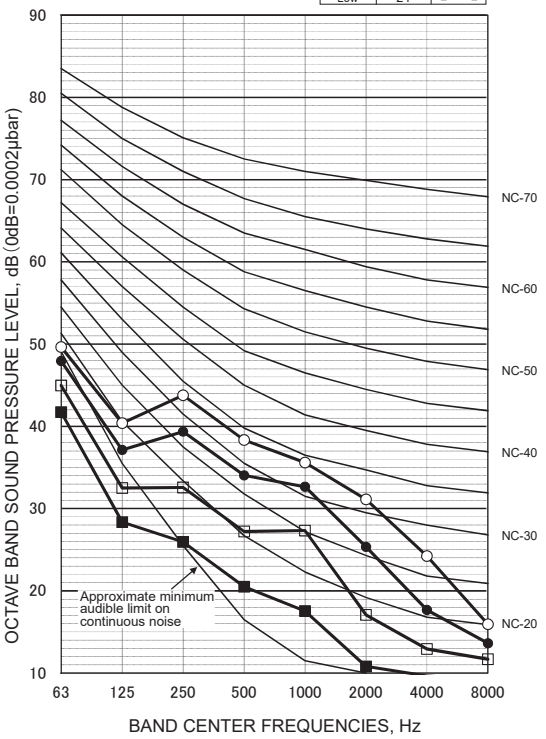
PKFY-P08NLMU-ER1.TH

FAN	SPL(dB)	LINE
High	35	
Medium1	31	
Medium2	27	
Low	22	



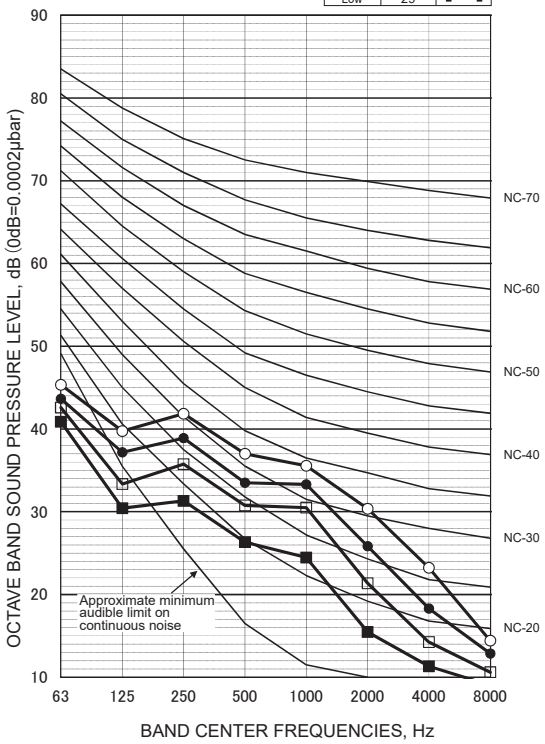
PKFY-P12NLMU-ER1.TH

FAN	SPL(dB)	LINE
High	41	
Medium1	37	
Medium2	31	
Low	24	



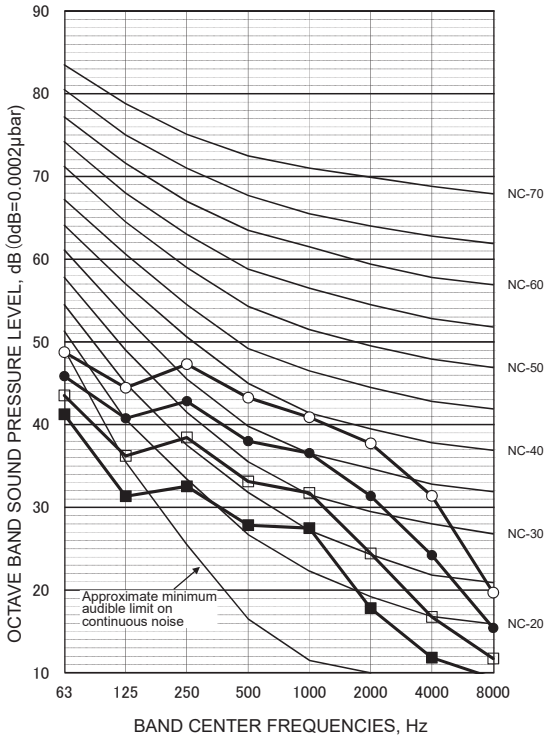
PKFY-P15NLMU-ER1.TH

FAN	SPL(dB)	LINE
High	40	
Medium1	37	
Medium2	34	
Low	29	



PKFY-P18NLMU-ER1.TH

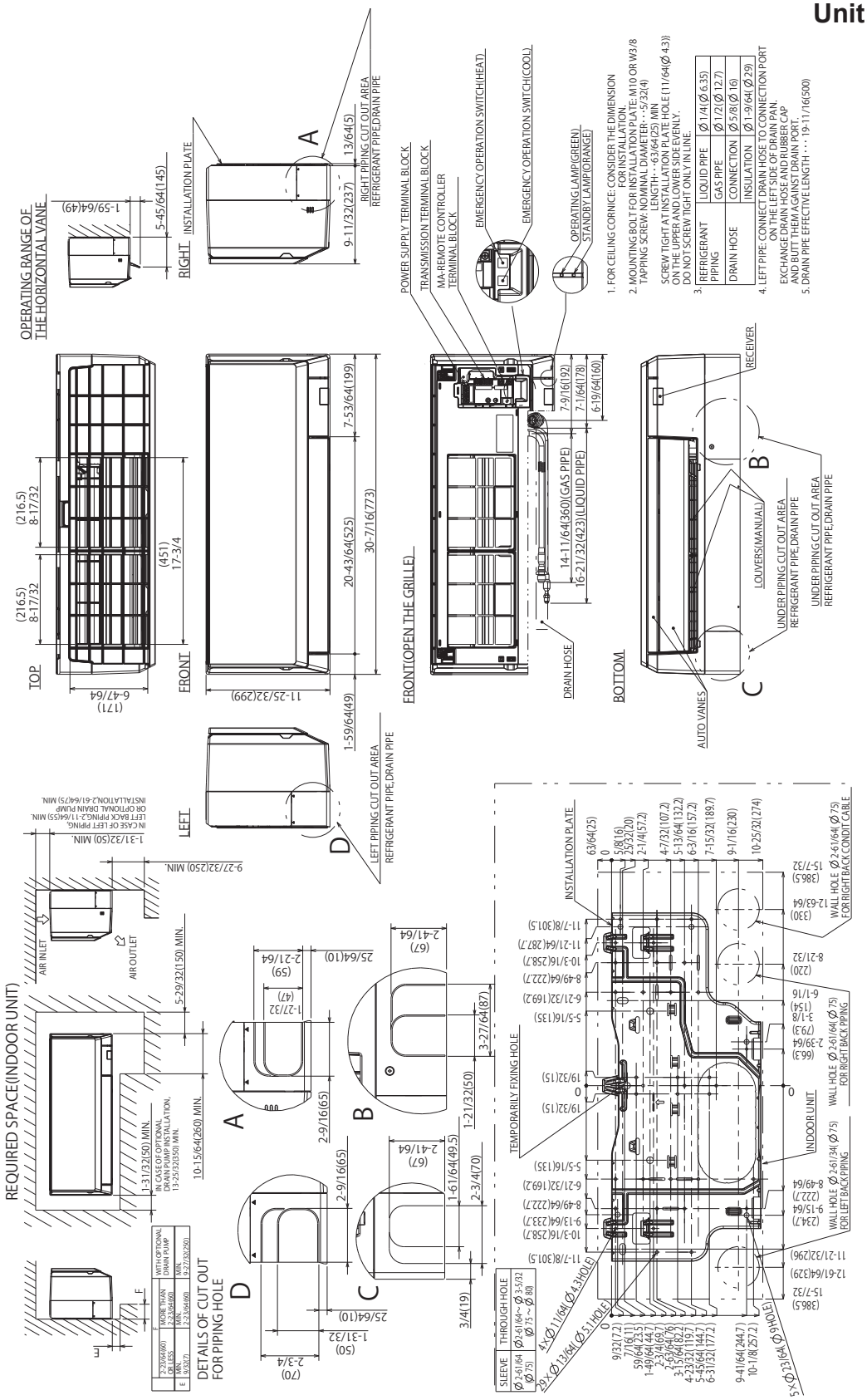
FAN	SPL(dB)	LINE
High	46	
Medium1	41	
Medium2	36	
Low	31	



5 OUTLINES AND DIMENSIONS

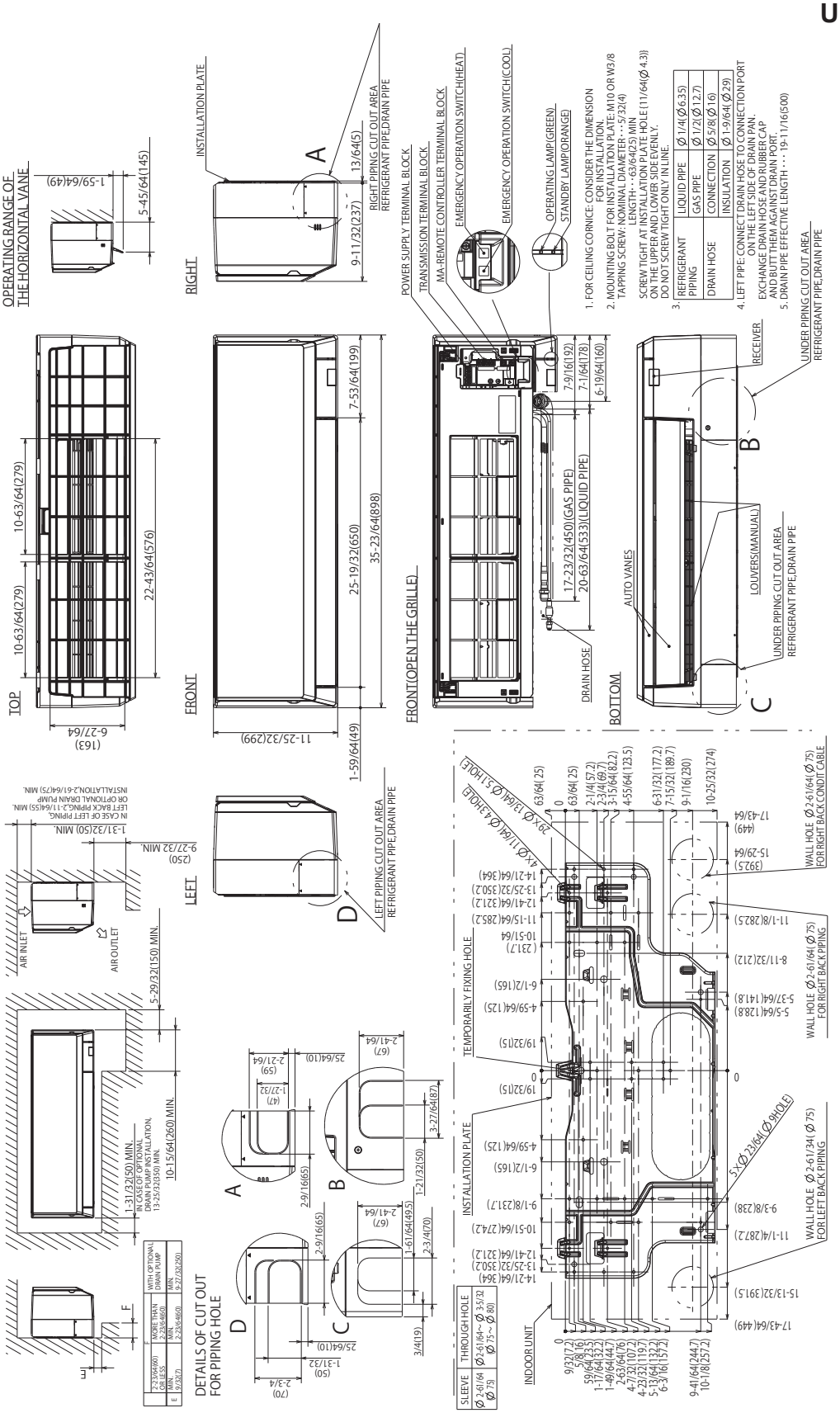
PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH
PKFY-P08NLMU-ER1.TH PKFY-P12NLMU-ER1.TH

Unit: inch(mm)



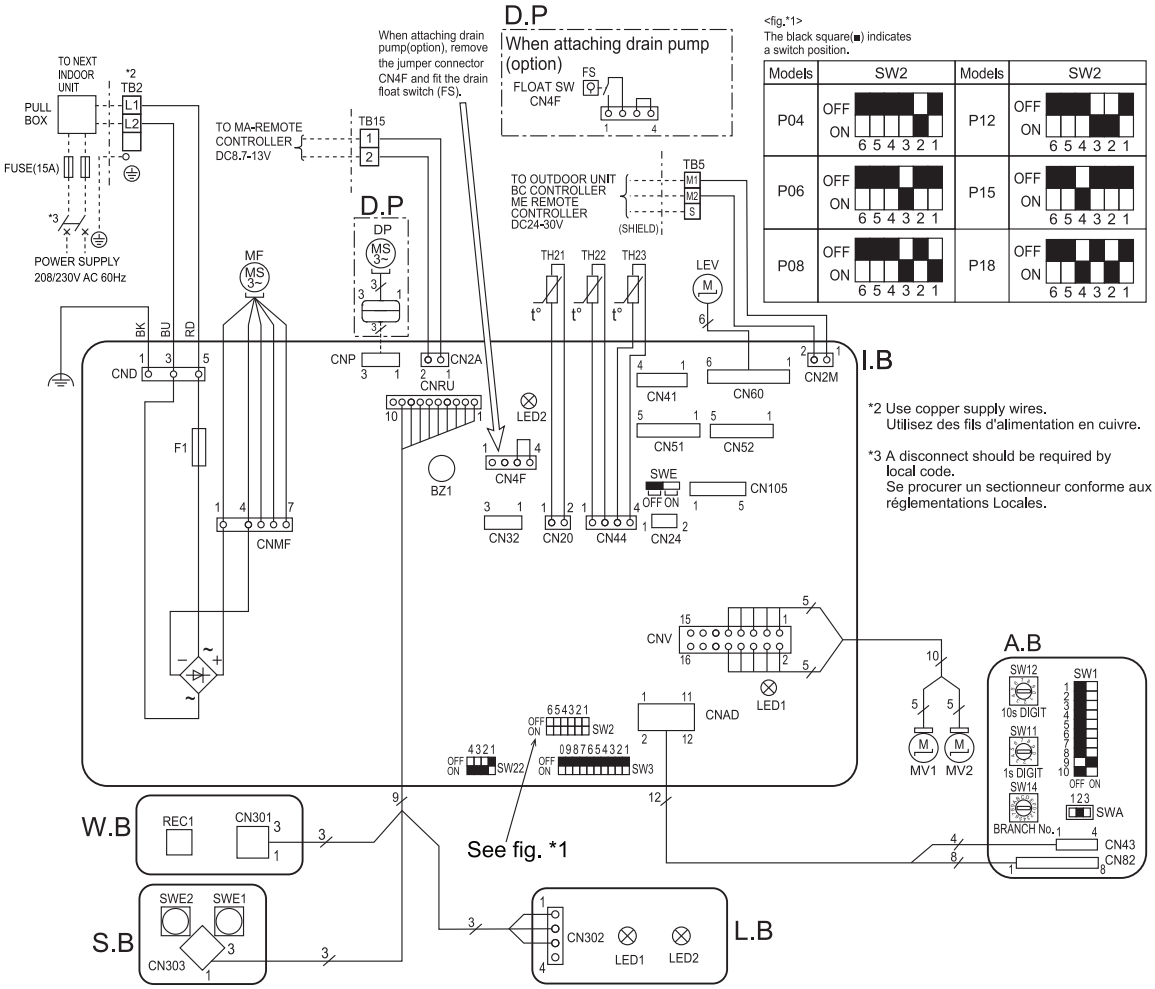
PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH

Unit: inch(mm)



6 WIRING DIAGRAM

PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH PKFY-P08NLMU-ER1.TH
PKFY-P12NLMU-ER1.TH PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH



SYMBOL	NAME		SYMBOL	NAME	
I.B	INDOOR CONTROLLER BOARD		TH21	THERMISTOR	ROOM TEMP. DETECTION (0°C/15kΩ, 25°C/5.4kΩ)(32°F/15kΩ, 77°F/5.4kΩ)
CN24	CONNECTOR	EXTERNAL HEATER	TH22		PIPE TEMP. DETECTION / LIQUID (0°C/15kΩ, 25°C/5.4kΩ)(32°F/15kΩ, 77°F/5.4kΩ)
CN32		REMOTE SWITCH	TH23		PIPE TEMP. DETECTION / GAS (0°C/15kΩ, 25°C/5.4kΩ)(32°F/15kΩ, 77°F/5.4kΩ)
CN51		CENTRALLY CONTROL			
CN52		REMOTE INDICATION			
CN105		IT TERMINAL			
BZ1	BUZZER		A.B	ADDRESS BOARD	
F1	FUSE (T3.15AL250V)		SW1	SWITCH	MODE SELECTION
LED1	POWER SUPPLY (I.B)		SW11		ADDRESS SETTING 1s DIGIT
LED2	POWER SUPPLY (MA-REMOTE CONTROLLER)		SW12		ADDRESS SETTING 10s DIGIT
SW2	SWITCH	CAPACITY CODE	SW14		BRANCH No.
SW3		MODE SELECTION	S.B	SWITCH BOARD	
SW22		PAIR NO. SETTING	SWE1	EMERGENCY OPERATION(HEAT)	
SWE		FAN•DRAIN PUMP (TEST MODE)	SWE2	EMERGENCY OPERATION(COOL)	
LEV	LINEAR EXPANSION VALVE		W.B	PCB FOR WIRELESS REMOTE CONTROLLER	
MF	FAN MOTOR		REC1	RECEIVING UNIT	
MV1	VANE MOTOR (UPPER)		L.B	LED BOARD	
MV2	VANE MOTOR (LOWER)		LED1	LED(OPERATING INDICATOR:GREEN)	
TB2	TERMINAL BLOCK	POWER SUPPLY	LED2	LED(STANDBY FOR HEATING : ORANGE)	
TB5		TRANSMISSION	D.P	DRAIN PUMP KIT (OPTION)	
TB15		MA-REMOTE CONTROLLER	FS	DRAIN FLOAT SWITCH	
			DP	DRAIN PUMP	

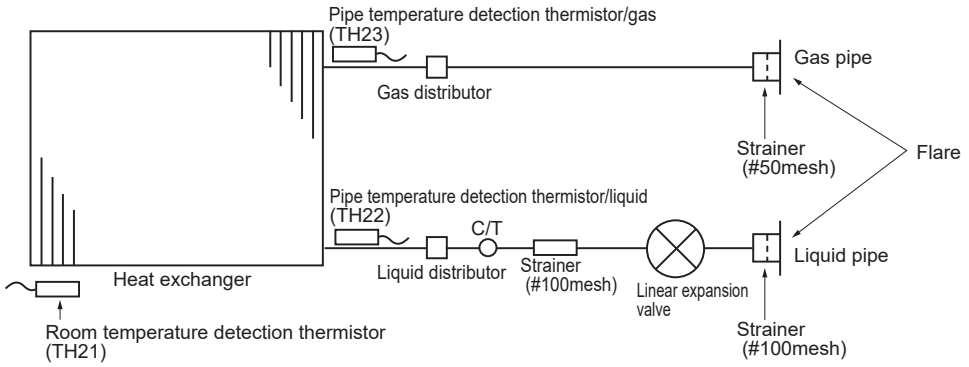
NOTES:
1. At servicing for outdoor unit,always follow the wiring diagram of outdoor unit.
2. In case of using MA-Remote controller, please connect to TB15. (Remote controller wire is non-polar.)
3. In case of using M-NET, please connect to TB5. (Transmission line is non-polar.)
4. Symbol [S]of TB5 is the shield wire connection.
5. Symbols used in wiring diagram above are,
   : terminal block, : connector.
6. The setting of the SW2 dip switches differs in the capacity.
   For the detail, refer to the fig.*1.

LED on indoor controller board for service

Symbol	Meaning	Function
LED1	Main power supply	Main power supply (Indoor unit:208/230V) Power on → lamp is lit
LED2	Power supply for MA-Remote controller	Power supply for MA-Remote controller on → lamp is lit

7 REFRIGERANT SYSTEM DIAGRAM

PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH PKFY-P08NLMU-ER1.TH
PKFY-P12NLMU-ER1.TH PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH

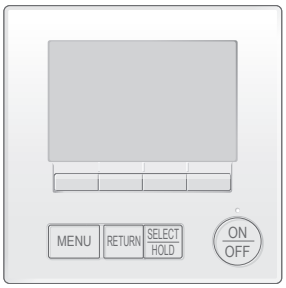


Unit: inch (mm)

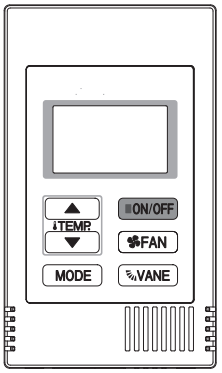
Gas pipe	ϕ1/2” (12.7)
Liquid pipe	ϕ1/4” (6.35)

8 MICROPROCESSOR CONTROL

INDOOR UNIT CONTROL
8-1. COOL OPERATION



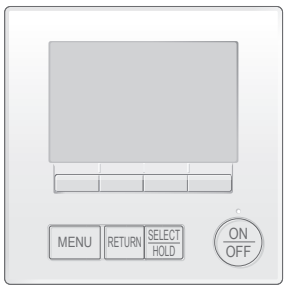
<How to operate>
① Press ON/OFF button.
② Press [F1] button to display COOL.
③ Press [F2] [F3] button to set the set temperature.
NOTE: The settable temperature range varies with the model of outdoor units and remote controller.



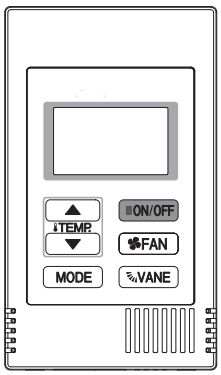
<How to operate>
① Press POWER ON/OFF button.
② Press the operation MODE button to display COOL.
③ Press the TEMP. button to set the set temperature.
NOTE: The set temperature changes 1°F when the ▽ or △ button is pressed one time. Cooling 67 to 87°F

Control Mode	Control Details	Remarks
1. Temperature adjustment function	1-1. Determining temperature adjustment function (Function to prevent restarting for 3 minutes) • Room temperature ≧ Set temperature + 2°F ⋯Thermo-ON • Room temperature ≦ Set temperature ⋯Thermo-OFF 1-2. Anti-freeze control ■ Condition to detect When the pipe temperature detection thermistor/liquid (TH22) detects 32°F or less in 16 minutes from thermo-ON, the anti-freeze control initiates, and the unit enters to the thermo-OFF. ■ Condition to release The timer which prevents reactivating is set for 3 minutes, and anti-freeze control is cancelled when any one of the following conditions has been satisfied: ① Pipe temperature detection thermistor/liquid (TH22) reaches 50°F or above. ② The condition of thermo-OFF has been completed by the thermostat. ③ The operation has changed to a mode other than COOLING.	• The ON/OFF commands by the indoor unit thermostatic control are not an ON/OFF commands to the compressor but an open/close commands to the linear expansion valve. (The compressor stops only when the thermostatic control for all the indoor units connected to the same outdoor unit turns OFF.)
2. Fan	By the remote controller setting (switch of 4 speeds+Auto) Type: 4 speeds + Auto type; Fan speed notch: Auto When [Auto] is set, fan speed is changed depending on the value of: ΔT = Room temperature − Set temperature High / Med2 / Med1 / Low 1.8°F 3.15°F 5.4°F ⊿T	
3. Drain pump	3-1. Drain pump control • The drain pump will always run when the unit is in COOL or DRYING mode. (Regardless of the thermo ON/OFF) • Whenever the operation is changed over to the other modes (including Stop), the drain pump will stop pumping after approximately 3 minutes. **Float switch control** • Float switch control judges whether the sensor is in the air or in the water by turning the float switch ON/OFF. In the water: Detected that the float switch is ON for 15 seconds. In the air: Detected that the float switch is OFF for 15 seconds Float SW ON / OFF 15 s 15 s 15 s 1 min 30 s 1 min 30 s In the water In the air In the water Error postponement Drain pump abnormal	
4. Vane (up/down vane change)	(1) The initial vane setting for COOL mode will be the horizontal position. (2) Vane position: Horizontal →Downward A →Downward B →Downward C→Downward D→Swing→Auto (3) Restriction of the downward vane setting If the vane position is set to Downward A/B/C/D in [Med1], [Med2], or [Low], the vane will return to the horizontal position after 1 hour has passed.	• "1h" appears on the wired remote controller.

8-2. DRYING OPERATION



<How to operate>
① Press ON/OFF button.
② Press [F1] button to display DRYING.
③ Press [F2] [F3] button to set the set temperature.

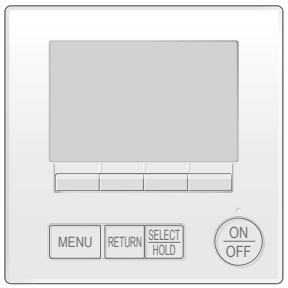


<How to operate>
① Press POWER ON/OFF button.
② Press the operation MODE button to display DRYING.
③ Press the TEMP. button to set the set temperature.
NOTE: The set temperature changes 1°F when the ▽ or △ button is pressed one time. Dry 67 to 87°F

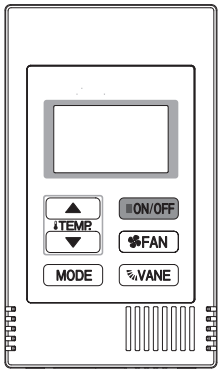
<table>
<tr><th>Control Mode</th><th>Control Details</th><th>Remarks</th></tr>
<tr><td>1. Temperature adjustment function</td><td>1-1. Determining temperature adjustment function
(Function to prevent restarting for 3 minutes)
Setting the Dry thermo by the thermostat signal and the room temperature (TH21).
Dry thermo-ON Room temperature ≧ Set temperature + 2°F
Dry thermo-OFF Room temperature ≦ Set temperature

<table>
<tr><th rowspan="2">Room temperature</th><th colspan="2">3 minutes passed since starting operation</th><th rowspan="2">Dry thermo-ON time (min)</th><th rowspan="2">Dry thermo-OFF time (min)</th></tr>
<tr><th>Thermostat signal</th><th>Room temperature (T1)</th></tr>
<tr><td rowspan="5">Over 64°F</td><td rowspan="4">ON</td><td>T1 ≧ 83°F</td><td>9</td><td>3</td></tr>
<tr><td>83°F > T1 ≧ 79°F</td><td>7</td><td>3</td></tr>
<tr><td>79°F > T1 ≧ 75°F</td><td>5</td><td>3</td></tr>
<tr><td>75°F > T1</td><td>3</td><td>3</td></tr>
<tr><td>OFF</td><td>Unconditional</td><td>3</td><td>10</td></tr>
<tr><td>Below 64°F</td><td colspan="4">Dry thermo OFF</td></tr>
</table>
1-2. Anti-freeze control
No control function</td><td></td></tr>
<tr><td>2. Fan</td><td>Indoor fan operation controlled depends on the compressor conditions.
<table>
<tr><th>Dry thermo</th><th colspan="2">Fan speed notch</th></tr>
<tr><td>ON</td><td colspan="2">[Low]</td></tr>
<tr><td rowspan="2">OFF</td><td>Excluding the following</td><td>Stop</td></tr>
<tr><td>Room temp. < 64°F</td><td>[Low]</td></tr>
</table>
Note: Fan speed change is not allowed during DRYING operation.</td><td></td></tr>
<tr><td>3. Drain pump</td><td>Operates as it would in COOL operation.</td><td></td></tr>
<tr><td>4. Vane (up/down vane change)</td><td>Settings are the same in DRYING operation as they are in COOL operation.</td><td></td></tr>
</table>

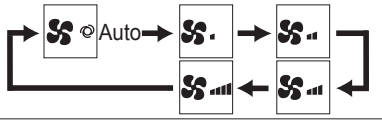
8-3. FAN OPERATION



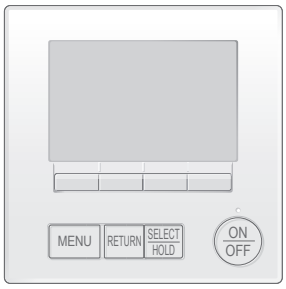
<How to operate>
① Press ON/OFF button.
② Press [F1] button to display FAN.



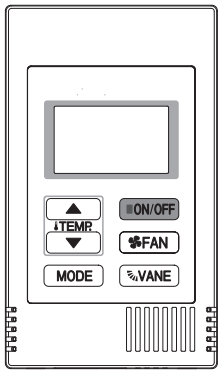
<How to operate>
① Press POWER ON/OFF button.
② Press the operation MODE button to display FAN.

Control Mode	Control Details	Remarks
1. Temperature adjustment function	Set by remote controller. Type: 4 speeds + Auto type Fan speed notch:  When [Auto] is set, fan speed becomes [Low].	
2. Drain pump	2-1. Drain pump control The drain pump turns ON for the specified amount of time when any of the following conditions has been satisfied: ① ON for 3 minutes after the operation mode is switched from COOL or DRYING to another operation mode (FAN). ② ON for 6 minutes after the float switch is submerged in the water when the float switch control judges the sensor is in the water.	
	2-2. Float switch control • Float switch control judges whether the sensor is in the air or in the water by turning the float switch ON/OFF. In the water : Detected that the float switch is ON for 15 seconds. In the air : Detected that the float switch is OFF for 15 seconds.	• Operates as it would in COOL operation.
3. Vane (up/down vane change)	Same as the control performed during the COOL operation, but with no restriction on the vane's downward blow setting	

8-4. HEAT OPERATION



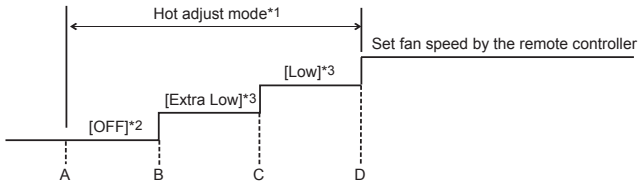
<How to operate>
① Press ON/OFF button.
② Press [F1] button to display HEAT.
③ Press [F2] [F3] button to set the set temperature.
NOTE: The settable temperature range varies with the model of outdoor units and remote controller.



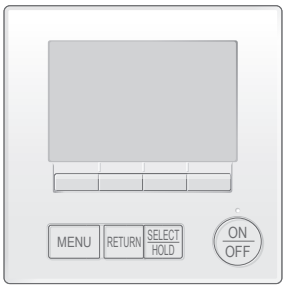
<How to operate>
① Press POWER ON/OFF button.
② Press the operation MODE button to display HEAT.
③ Press the TEMP. button to set the set temperature.
NOTE: The set temperature changes 1°F when the ▽ or △ button is pressed one time. Heating 63 to 83°F

Control Mode	Control Details	Remarks
1. Temperature adjustment function	1-1. Determining temperature adjustment function (Function to prevent restarting for 3 minutes) • Room temperature ≦ Set temperature −2°F ⋯Thermo-ON • Room temperature ≧ Set temperature ⋯Thermo-OFF	
2. Fan	By the remote controller setting (switch of 4 speeds+Auto) Type: 4 speeds + Auto type — Fan speed notch: Auto → ▪ → ▪▪ → ▪▪▪ → ▪▪▪▪ When [Auto] is set, fan speed is changed depending on the value of: ΔT = Set temperature − Room temperature Give priority to under-mentioned controlled mode 2-1. Hot adjust mode 2-2. Residual heat exclusion mode 2-3. Thermo-OFF mode (When the compressor off by the temperature adjustment function) 2-4. Cool air prevention mode (Defrosting mode)	

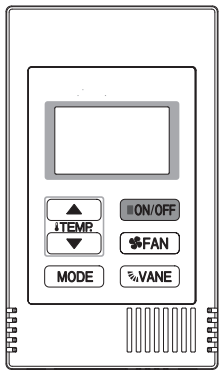
Continue to the next page.

Control Mode	Control Details	Remarks
	2-1. Hot adjust mode The fan controller becomes the hot adjuster mode for the following conditions. ① When starting the HEAT operation ② When the temperature adjustment function changes from OFF to ON. ③ When release the HEAT defrosting operation  A: Hot adjust mode starts. B: 5 minutes have passed since the condition A or the indoor liquid pipe temperature reached 86°F or more. C: 5 minutes have passed since the condition A or the indoor liquid pipe temperature reached 95°F or more. D: 2minutes have passed since the condition C. (Terminating the hot adjust mode) <table><tr><td colspan="2" rowspan="2"></td><td colspan="2">DIP SW 1-8</td></tr><tr><td>ON</td><td>OFF</td></tr><tr><td rowspan="2">DIP SW 1-7</td><td>ON</td><td>B to C [Extra Low] C to D [Low]</td><td>B to C [Low] C to D [Low]</td></tr><tr><td>OFF</td><td>B to C [Setting airflow] C to D [Setting airflow]</td><td>B to C [Extra Low] C to D [Low] Note: Initial setting</td></tr></table>	*1 "Heat Standby" will be displayed during the hot adjust mode. *2 The step change of A to B will not be performed at the first thermo-ON mode since the HEAT operation has started. *3 The fan speed varies according to the setting of DIP SW1-7 and 1-8 as shown in the table below.
	2-2. Residual heat exclusion mode When the condition changes the auxiliary heater ON to OFF (temperature adjustment function, or operation stop, etc.), the indoor fan operates in [Low] mode for 1 minute.	• This control is same for the model without auxiliary heater.
	2-3. Thermo-OFF mode When the temperature adjustment function changes to OFF, the indoor fan operates in [Extra low].	
	2-4. Heat defrosting mode The indoor fan stops.	
3. Drain pump	3-1. Drain pump control The drain pump turns ON for the specified amount of time when any of the following conditions has been satisfied: ① ON for 3 minutes after the operation mode is switched from COOL or DRYING to another operation mode (FAN). ② ON for 6 minutes after the float switch is submerged in the water when the float switch control judges the sensor is in the water.	
	3-2. Float switch control • Float switch control judges whether the sensor is in the air or in the water by turning the float switch ON/OFF. In the water: Detected that the float switch is ON for 15 seconds. In the air : Detected that the float switch is OFF for 15 seconds.	• Operates as it would in COOL operation.
4. Vane control (Up/down vane change)	(1) Initial setting: OFF → HEAT⋯[last setting] When the last setting is [Swing] ⋯ [Downward D] When changing the mode from exception of HEAT to HEAT operation ⋯[Downward D] (2) Vane position: Horizontal →Downward A →Downward B →Downward C→Downward D→Swing→Auto (3) Restriction of vane position ① The vane is horizontally fixed for the following modes. (The control by the remote controller is temporally invalidated and control by the unit.) • Thermo-OFF • Hot adjust [Extra low] mode • Heat defrost mode	

8-5. AUTO OPERATION [AUTOMATIC COOL/HEAT CHANGE OVER OPERATION]



<How to operate>
① Press ON/OFF button.
② Press [F1] button to display AUTO.
③ Press [F2] [F3] button to set the set temperature.
NOTE: The settable temperature range varies with the model of outdoor units and remote controller.



<How to operate>
① Press POWER ON/OFF button.
② Press the operation MODE button to display AUTO.
③ Press the TEMP. button to set the set temperature.
NOTE: The set temperature changes 1°F when the ▽ or △ button is pressed one time. Automatic 67 to 83°F

Control Mode	Control Details	Remarks
1. Initial value of operation mode	HEAT mode for room temperature < Set temperature COOL mode for room temperature ≧ Set temperature	
2. Mode change	(1) HEAT mode → COOL mode Room temperature ≧ Set temperature + 3°F or 3 minutes have passed. (2) COOL mode → HEAT mode Room temperature ≦ Set temperature − 3°F or 3 minutes have passed.	
3. COOL mode	Operates as it would in COOL operation.	
4. HEAT mode	Operates as it would in HEAT operation.	

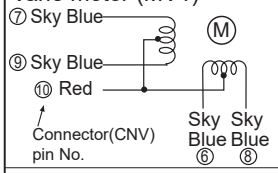
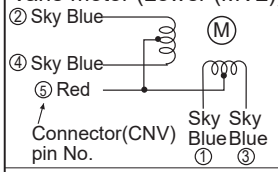
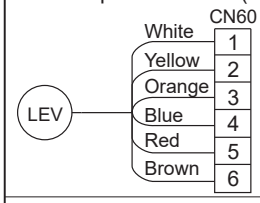
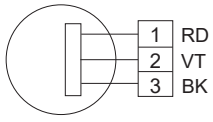
8-6. WHEN UNIT IS STOPPED CONTROL MODE

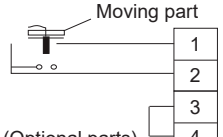
Control Mode	Control Details	Remarks
1. Drain pump	1-1. Drain pump control The drain pump turns ON for the specified amount of time when any of the following conditions has been satisfied: ① ON for 3 minutes after the operation mode is switched from COOL or DRYING to another operation mode (FAN). ② ON for 6 minutes after the float switch is submerged in the water when the float switch control judges the sensor is in the water.	
	1-2. Float switch control • Float switch control judges whether the sensor is in the air or in the water by turning the float switch ON/OFF. In the water : Detected that the float switch is ON for 15 seconds. In the air : Detected that the float switch is OFF for 15 seconds.	• Operates as it would in COOL operation.

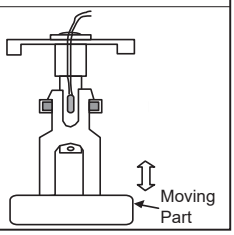
9 TROUBLESHOOTING

9-1. HOW TO CHECK THE PARTS

PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH PKFY-P08NLMU-ER1.TH
PKFY-P12NLMU-ER1.TH PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH

<table>
<tr><th>Parts name</th><th>Check points</th></tr>
<tr><td>Room temperature detection thermistor (TH21)
Pipe temperature detection thermistor/liquid (TH22)
Pipe temperature detection thermistor/gas (TH23)</td><td>Disconnect the connector then measure the resistance with a tester.
(At the ambient temperature 50 to 86ºF)
<table><tr><td>Normal</td></tr><tr><td>4.3 to 9.6 kΩ</td></tr></table>Refer to “9-1-1. Thermistor”.</td></tr>
<tr><td>Vane motor (MV1)

</td><td>Measure the resistance between the terminals with a tester. (At the ambient temperature 77ºF)
<table><tr><td colspan="4">Normal</td></tr><tr><td>⑩ - ⑨
Red-Sky Blue</td><td>⑩ - ⑧
Red-Sky Blue</td><td>⑩ - ⑦
Red-Sky Blue</td><td>⑩ - ⑥
Red-Sky Blue</td></tr><tr><td colspan="4">300 Ω±7%</td></tr></table></td></tr>
<tr><td>Vane motor (Lower (MV2))

</td><td>Measure the resistance between the terminals with a tester. (At the ambient temperature 77ºF)
<table><tr><td colspan="4">Normal</td></tr><tr><td>⑤-④
Red-Sky Blue</td><td>⑤-③
Red-Sky Blue</td><td>⑤-②
Red-Sky Blue</td><td>⑤-①
Red-Sky Blue</td></tr><tr><td colspan="4">300±26.3 Ω</td></tr></table></td></tr>
<tr><td>Fan motor (MF)</td><td>Refer to “9-1-3. DC Fan motor (fan motor/indoor controller board)</td></tr>
<tr><td>Linear expansion valve (LEV)

</td><td>Disconnect the connector then measure the resistance valve with a tester. (Coil temperature 68ºF)
<table><tr><td colspan="4">Normal</td></tr><tr><td>(1)-(5)
White-Red</td><td>(2)-(6)
Yellow-Brown</td><td>(3)-(5)
Orange-Red</td><td>(4)-(6)
Blue-Brown</td></tr><tr><td colspan="4">200 Ω±10%</td></tr></table></td></tr>
<tr><td>Drain pump (DP)


(Optional parts)</td><td>① Check if the drain float switch works properly.
② Check if the drain pump works and drains water properly in cooling operation.
③ If no water drains, confirm that the check code 2502 will not be displayed 10 minutes after the operation starts.
Note: The drain pump for this model is driven by the internal DC motor, so it is not possible to measure the resistance between the terminals.
Normal: Red–Black: Input 13 V DC → The pump motor starts to rotate.</td></tr>
<tr><td>Drain float switch (FS)


(Optional parts)</td><td>Measure the resistance between the terminals with a tester.
<table><tr><th>State of moving part</th><th>Normal</th><th>Abnormal</th><th>Drain float switch connector terminal</th></tr><tr><td>UP</td><td>Short</td><td>Other than short</td><td>①(+) – ②(-)</td></tr><tr><td>DOWN</td><td>Open</td><td>Other than open</td><td>①(+) – ②(-)</td></tr><tr><td>–</td><td>Short</td><td>Other than short</td><td>③(+) – ④(-)</td></tr></table>
</td></tr>
</table>

9-1-1. Thermistor

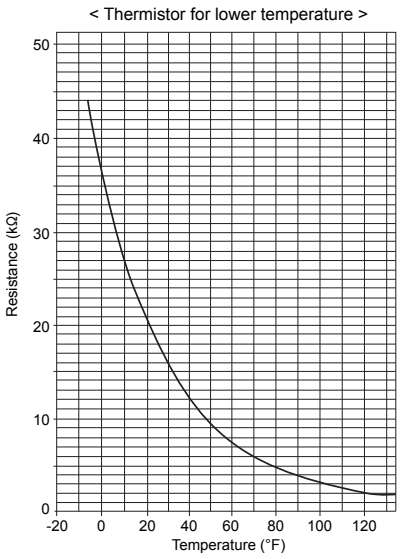
<Thermistor characteristic graph>

Thermistor for lower temperature	Room temperature detection thermistor (TH21) Pipe temperature detection thermistor/liquid (TH22) Pipe temperature detection thermistor/gas (TH23)

Thermistor R_0=15 kΩ ± 3%
Fixed number of B=3480 ± 2%

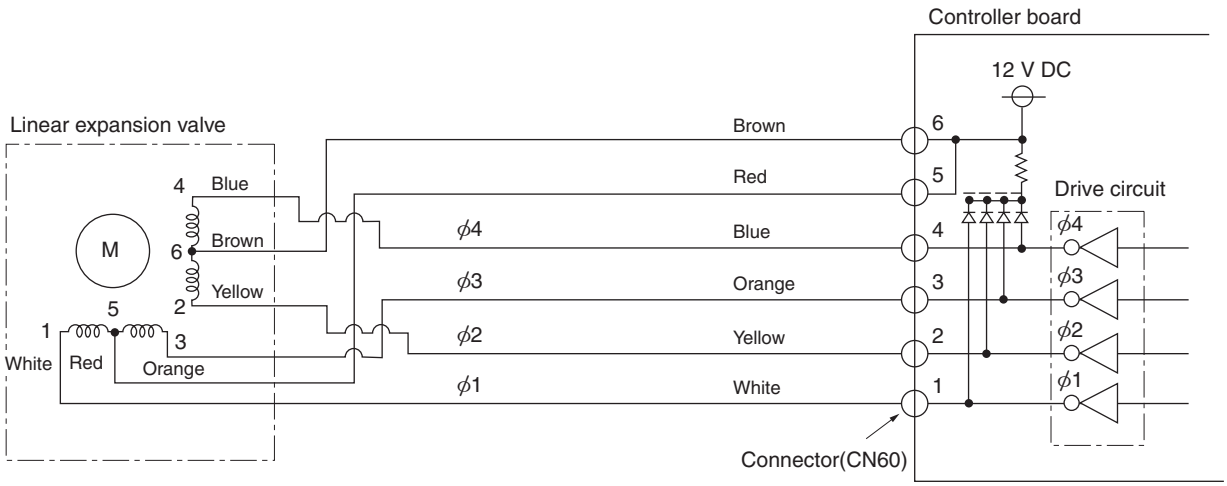
$$Rt=15\exp\{3480(\frac{1}{273+(t-32)/1.8}-\frac{1}{273})\}$$

30°F	15.8 kΩ
50°F	9.6 kΩ
70°F	6.0 kΩ
80°F	4.8 kΩ
90°F	3.9 kΩ
100°F	3.2 kΩ



9-1-2. Linear expansion valve

① **Operation summary of the linear expansion valve**
• Linear expansion valve opens/closes through stepping motor after receiving the pulse signal from the indoor controller board.
• Valve position can be changed in proportion to the number of pulse signal.
<Connection between the indoor controller board and the linear expansion valve>



Note : Since the number of the connector at the controller board side and the relay connector are different, follow the color of the lead wire.

9-1-3. DC Fan motor (fan motor/indoor controller board)

Check method of indoor fan motor (fan motor/indoor controller board)

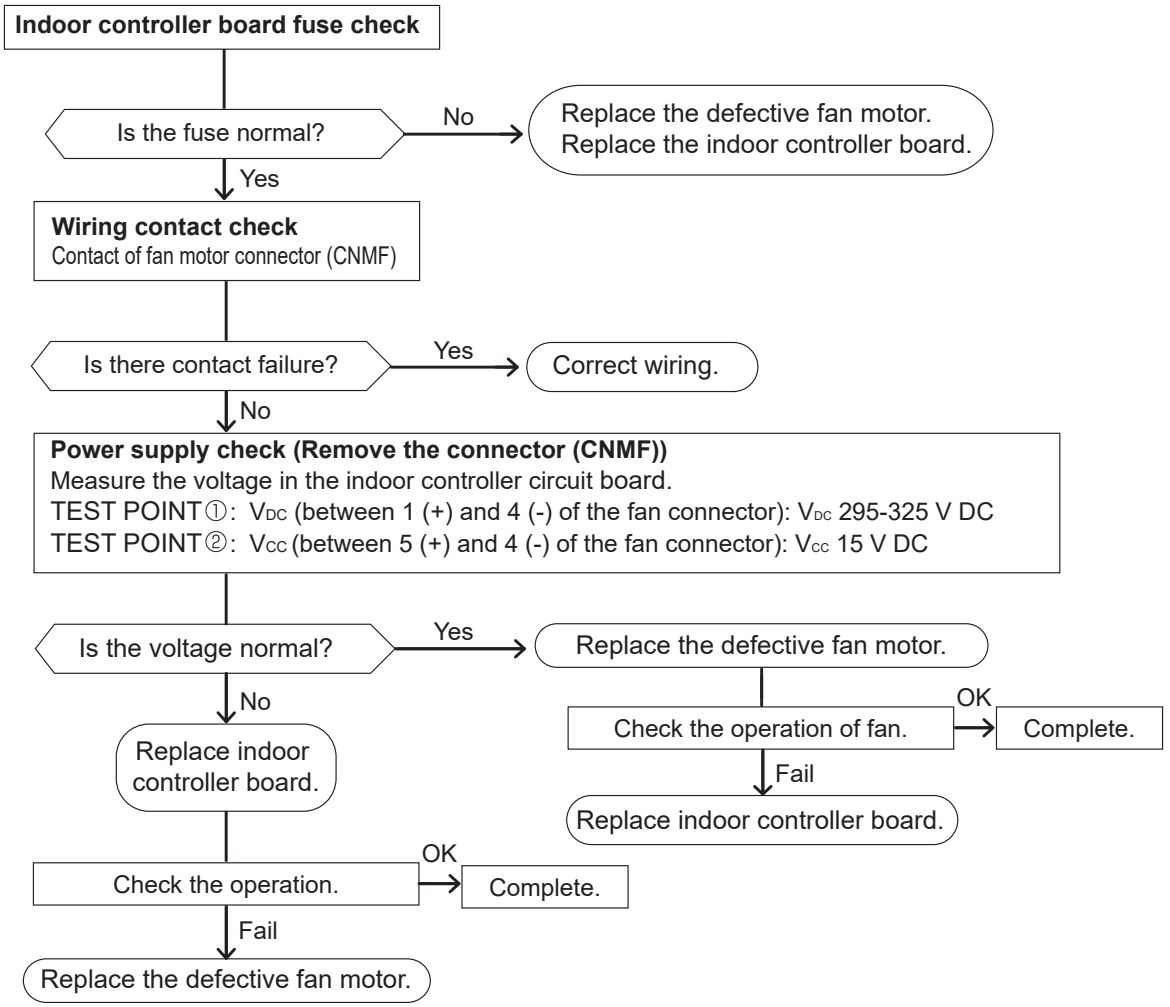
① Notes

· High voltage is applied to the connector (CNMF) for the fan motor. Pay attention to the service.

· Do not pull out the connecter (CNMF) for the motor with the power supply on.
(It causes trouble of the indoor controller board and fan motor.)

② Self check

Conditions : The indoor fan cannot rotate.



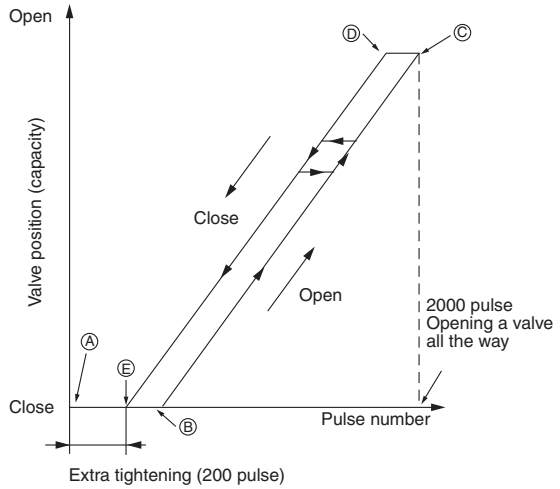
<Output pulse signal and the valve operation>

Output (Phase)	Output			
	1	2	3	4
ϕ1	ON	OFF	OFF	ON
ϕ2	ON	ON	OFF	OFF
ϕ3	OFF	ON	ON	OFF
ϕ4	OFF	OFF	ON	ON

The output pulse shifts in below order.
Closing a valve : 1 → 2 → 3 → 4 → 1
Opening a valve : 4 → 3 → 2 → 1 → 4

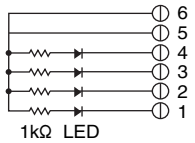
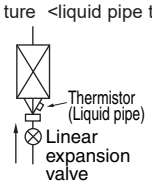
- When linear expansion valve operation stops, all output phase become OFF.
- At phase interruption or when phase does not shift in order, motor does not rotate smoothly and motor will lock and vibrate.

② Linear expansion valve operation



- When the power is turned on, 2200 pulse closing valve signal will be sent till it goes to point Ⓐ in order to define the valve position.
- When the valve moves smoothly, there is no noise or vibration occurring from the linear expansion valves : however, when the pulse number moves from Ⓔ to Ⓐ or when the valve is locked, more noise can be heard than in a normal situation.
- Noise can be detected by placing the ear against the screw driver handle while putting the screw driver tip to the linear expansion valve.

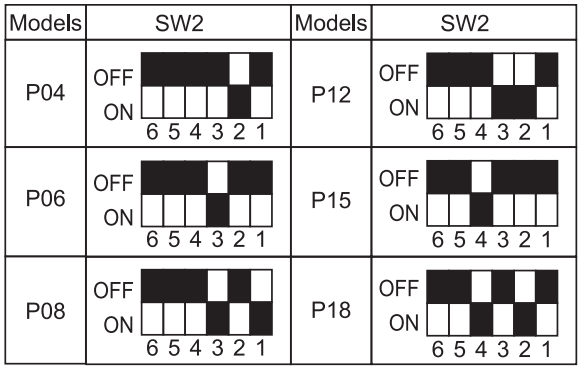
③ Troubleshooting

Symptom	Check points	Countermeasures
Operation circuit failure of the micro- processor	Disconnect the connector on the controller board, then connect LED for checking.  When power is turned on, pulse signals will output for 10 seconds. There must be some defects in the operation circuit if the LED does not light while the signals are output or keeps lighting even after the signals stop.	Exchange the indoor controller board at drive circuit failure.
Linear expansion valve mechanism is locked.	Motor will idle and make a ticking noise when the motor is operated while the linear expansion valve is locked. This ticking sound is the sign of the abnormality.	Exchange the linear expansion valve.
Short or breakage of the motor coil of the linear expansion valve	Measure the resistance between each coil (white-red, yellow-brown, orange-red, blue-brown) using a tester. It is normal if the resistance is in the range of 200 Ω ±10%.	Exchange the linear expansion valve.
Valve does not close completely.	To check the linear expansion valve, operate the indoor unit in fan mode and at the same time operate other indoor units in cooling mode, then check the pipe temperature <liquid pipe temperature> of the indoor unit by the outdoor multi controller board operation monitor. During fan operation, linear expansion valve is closed completely and if there is any leaking, detecting temperature of the thermistor will go lower. If the detected temperature is much lower than the temperature indicated in the remote controller, it means the valve is not closed all the way. It is not necessary to exchange the linear expansion valve, if the leakage is small and not affecting normal operation.  	If large amount of refrigerant is leaked, exchange the linear expansion valve.
Wrong connection of the connector or contact failure	Check the color of lead wire and missing terminal of the connector.	Disconnect the connector at the controller board, then check the continuity.

9-2. FUNCTION OF DIP SWITCH

PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH PKFY-P08NLMU-ER1.TH
PKFY-P12NLMU-ER1.TH PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH

The black square (■) indicates a switch position.

Switch	Pole	Function	Operation by switch		Effective timing	Remarks
			ON	OFF		
SW1 Mode Selection	1	Thermistor <Intake temperature detection> position	Built-in remote controller	Indoor unit	Under suspension	Address board <Initial setting> ON / OFF 1 2 3 4 5 6 7 8 9 10 *1 The model is not capable of fresh air intake. *2 Refer to <Table A> below.
	2	Filter clogging	Provided	Not provided		
	3	Filter sign indication	2,500 hr	100 hr		
	4	Air intake*1	Not effective	Not effective		
	5	Remote indication switching	Thermo-ON signal indication	Fan output indication		
	6	Humidifier control	Fan operation at Heating mode	Thermo-ON operation at heating mode		
	7	Air flow set in case of heat thermo-OFF	Low*2	Extra low*2		
	8		Setting air flow*1	Depends on SW1-7		
	9	Auto restart function	Effective	Not effective		
	10	Power ON/OFF	Effective	Not effective		
SW2 Capacity code setting	1–4				Before power supply ON	Indoor controller board <Initial setting> Set for each capacity.
SW3 Function Selection	1	Heat pump/Cool only	Cooling only	Heat pump	Under suspension	Indoor controller board <Initial setting> ON / OFF 1 2 3 4 5 6 7 8 9 0
	2	—	—	—		
	3	—	—	—		
	4	—	—	—		
	5	—	—	—		
	6	—	—	—		
	7	Changing the opening of linear expansion valve	Effective	Not effective		
	8	Heating 4 degree up	Not effective	Effective		
	9	—	—	—		
	10	—	—	—		

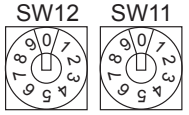
<Table A>

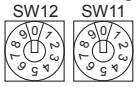
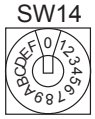
SW1-7	SW1-8	
OFF	OFF	Extra low
ON	OFF	Low
OFF	ON	Setting air flow
ON	ON	stop

Continue to the next page

The black square (■) indicates a switch position.

<table>
<tr><th>Switch</th><th>Pole</th><th>Function</th><th>Effective timing</th><th>Remarks</th></tr>
<tr><td>SW11
1s digit address setting

SW12
10s digit address setting</td><td>Rotary switch</td><td>SW12 SW11

10 1

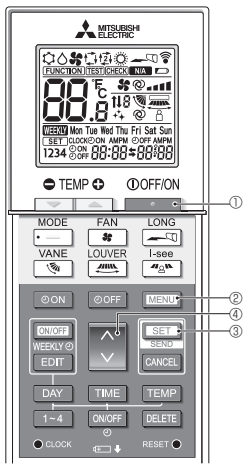
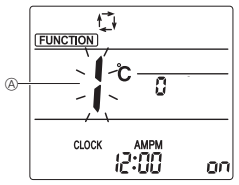
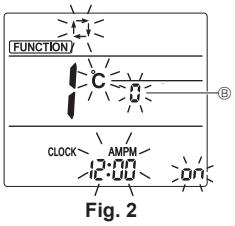
Address setting should be done when M-NET remote controller is being used.</td><td rowspan="2">Before power supply ON</td><td>Address board
<Initial setting>
SW12 SW11
</td></tr>
<tr><td>SW14
Connection No. setting</td><td>Rotary switch</td><td>SW14


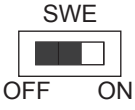
This is the switch to be used when the indoor unit is operated with R2 series outdoor unit as a set.</td><td>Address board
<Initial setting>
SW14
</td></tr>
<tr><td>SW22
Function selection</td><td>Jumper</td><td>
<table>
<tr><th></th><th>Function</th><th>ON</th><th>OFF</th></tr>
<tr><td>1</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td>2</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td>3</td><td>Pair No. of wireless remote controller</td><td colspan="2" rowspan="2">Depends on SW22-3, 22-4</td></tr>
<tr><td>4</td><td>Pair No. of wireless remote controller</td></tr>
</table>
• To operate each indoor unit by each remote controller when installed 2 indoor units or more are near, Pair No. setting is necessary.
●Pair No. setting is available with the 4 patterns (Setting patterns A to D).

• You may not set it when operating it by one remote controller. Setting for indoor unit.

Wireless remote controller pair number:
●Setting operation (Fig. 1 Ⓐ)
1. Press the [ ] button ① to stop the air conditioner.
2. Press the [MENU] button ②.
3. Check that function No."1" is displayed, and then press the [SET] button ③. The Screen display setting screen will be displayed. (Fig. 2.)

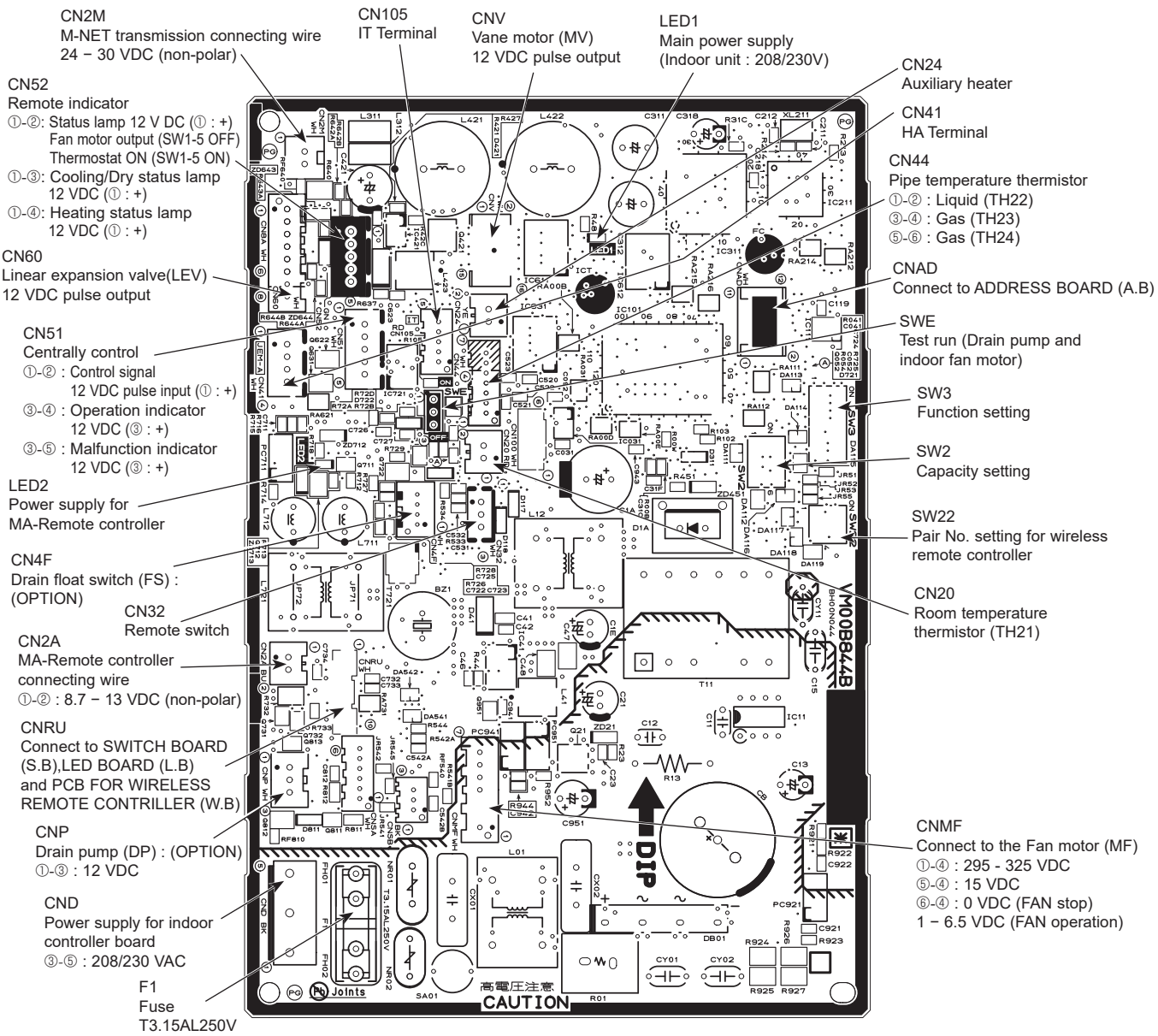
●Pair No. changing operation (Fig. 2 Ⓑ)
1. Press the [^ v] button ④.
2. Each time the [^ v] button ④ is pressed, the pair No.0–3 changes.
3. Press the [SET] button ③ to check the setting.
4. Press the [MENU] button ②.

<table>
<tr><th colspan="2">Indoor unit SW22</th><th rowspan="2">Pair No. of wireless remote controller</th><th></th></tr>
<tr><th>SW22-3</th><th>SW22-4</th><th></th></tr>
<tr><td>ON</td><td>ON</td><td>0</td><td>Initial setting</td></tr>
<tr><td>OFF</td><td>ON</td><td>1</td><td>—</td></tr>
<tr><td>ON</td><td>OFF</td><td>2</td><td>—</td></tr>
<tr><td>OFF</td><td>OFF</td><td>3–9</td><td>—</td></tr>
</table>
</td><td>Under operation or suspension</td><td><Initial setting>


Fig. 1

Fig. 2</td></tr>
<tr><td>SWE
Test run for Drain pump</td><td>Connector</td><td>Drain pump and fan are activated simultaneously after the connector SWE is set to ON and turn on the power.

The connector SWE is set to OFF after test run.</td><td>Under operation</td><td><Initial setting>
</td></tr>
</table>

9-3. TEST POINT DIAGRAM
9-3-1. Indoor controller board (I.B)

PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH PKFY-P08NLMU-ER1.TH
PKFY-P12NLMU-ER1.TH PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH

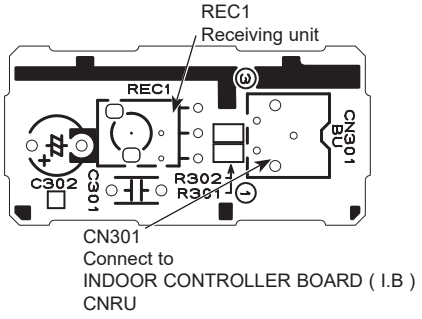


Note: The voltage range of 12 VDC in this page is between 11.5 to 13.7 VDC.

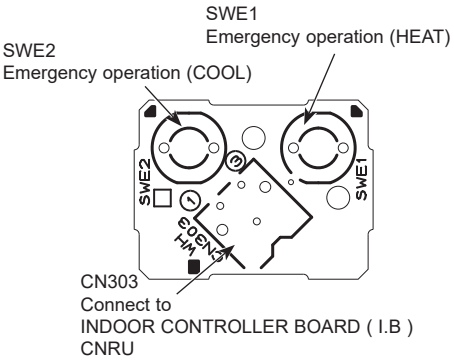
9-3-2. PCB FOR WIRELESS REMOTE CONTROLLER (W.B), SWITCH BOARD (S.B) and LED BOARD (L.B)

PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH PKFY-P08NLMU-ER1.TH
PKFY-P12NLMU-ER1.TH PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH

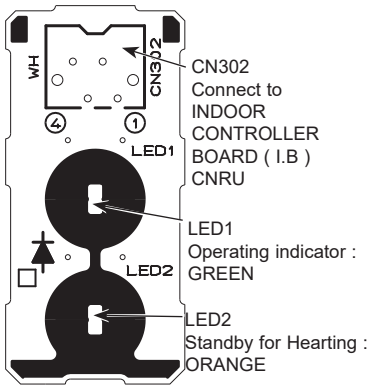
PCB FOR WIRELESS REMOTE CONTROLLER (W.B)



SWITCH BOARD (S.B)

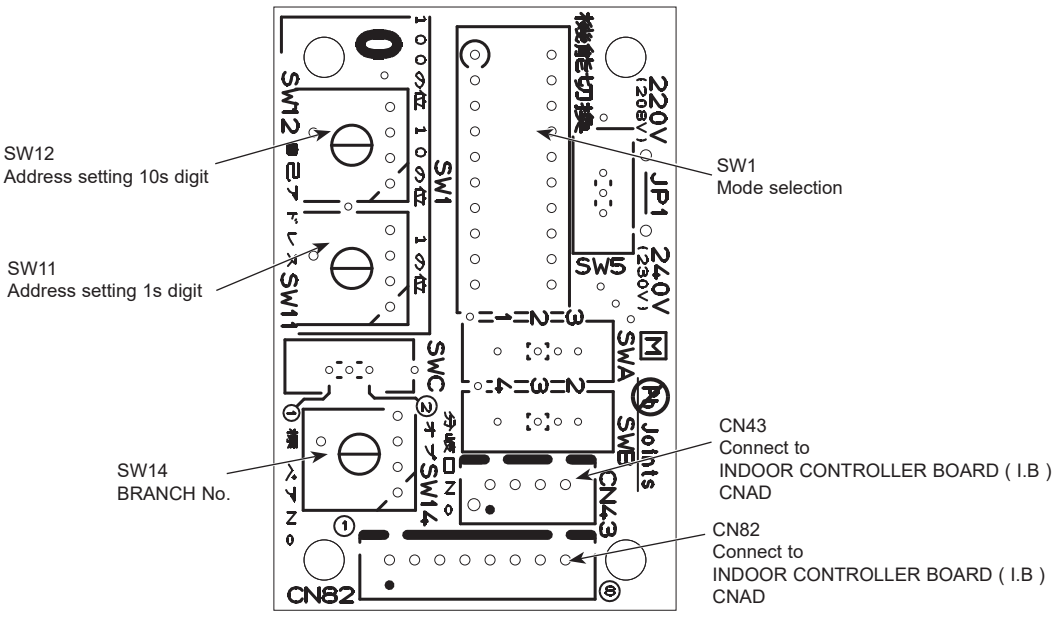


LED BOARD (L.B)



9-3-3. Address board (A.B)

PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH PKFY-P08NLMU-ER1.TH
PKFY-P12NLMU-ER1.TH PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH



10 DISASSEMBLY PROCEDURE

PKFY-P04NLMU-ER1.TH PKFY-P06NLMU-ER1.TH PKFY-P08NLMU-ER1.TH
PKFY-P12NLMU-ER1.TH PKFY-P15NLMU-ER1.TH PKFY-P18NLMU-ER1.TH

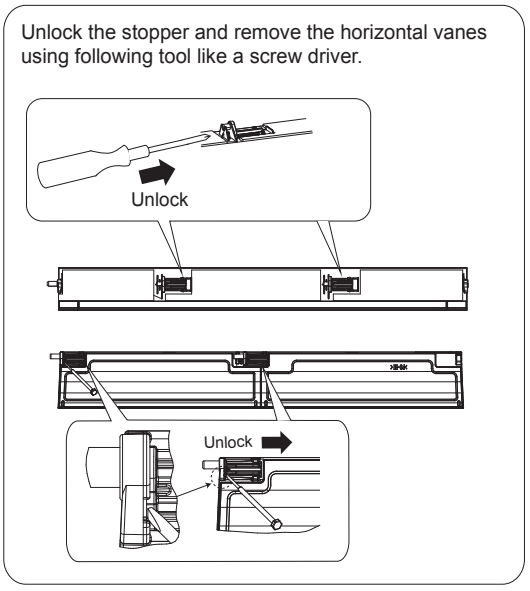
Be careful when removing heavy parts.
NOTE: Turn OFF the power supply before assembly.

——→ : Indicates the visible parts in the photos/figures.
- - - - - - - - → : Indicates the invisible parts in the photos/figures.

OPERATION PROCEDURE

1. REMOVING THE PANEL

(1) Insert the driver to the hole at VANE LOWER shaft and slide the VANE LOWER shaft (2 places each). Push VANE UPPER shaft with the driver.
(2) Pull the VANE LOWER and VANE UPPER from unit.
(3) Remove 2 screw caps of the front panel. Remove 2 screws. (See Photo 1)
(4) Hold the lower part of both ends of the front panel and pull it slightly toward you, and then remove the front panel by pushing it upward.
(5) Remove the screw of the corner box. (See Photo 1)
Remove the corner box.



2. REMOVING THE ELECTRICAL BOX

(1) Remove the panel and the corner box. (Refer procedure to 1)
(2) Remove the front and side electrical box covers (each 2 screw). (See Photo 2)
(3) Disconnect the connectors below.
CNMF : For fan motor
CN44 : For indoor piping (2 phase pipe and liquid pipe)
CN60 : For LEV
(4) Disconnect the connectors below.
CN2M : For transmission
CND : For power supply
CN2A : For MA-remote controller
(5) Disconnect the connector for ground wire.
(6) Remove the screw on lower side of the electrical box. (See Photo 3)
(7) Push up the upper fixture catch to remove the box, then remove it from the box fixture.

PHOTOS/FIGURES

Photo 1

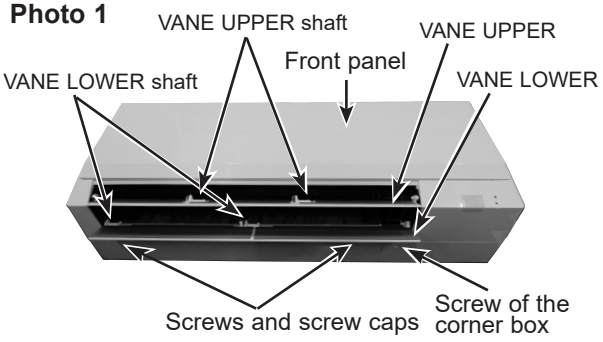


Photo 2

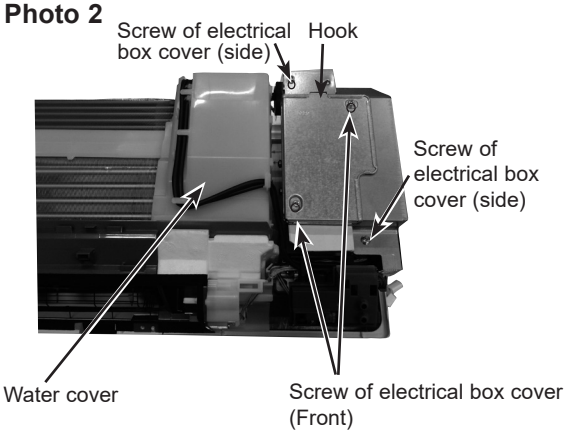
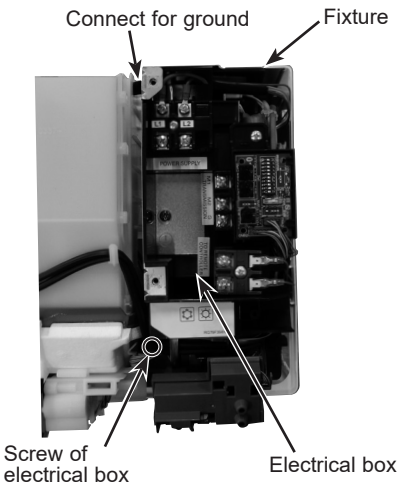


Photo 3



OPERATION PROCEDURE

3. REMOVING THE ADDRESS BOARD, THE INDOOR CONTROLLER BOARD, THE WIRELESS CONTROLLER BOARD, LED BOARD

(1) Remove the panel and the corner box. (Refer to procedure 1)
(2) Remove the front and side electrical box covers (each 2 screw).
(3) Disconnect the connectors of address board.
(4) Disconnect the connectors on the indoor controller board. (See Photo 4)
(5) Remove the switch board holder and open the cover.
(6) Pull out the indoor controller board toward you then remove the indoor controller board and switch board. (See Photo 4)
(7) Remove the holder of wireless remote controller board and LED board.
(8) Disconnect the connector of wireless remote controller board and LED board.
(9) Remove the wireless remote controller board and LED board from the holder.

4. REMOVING THE NOZZLE ASSEMBLY (with VANE and VANE MOTOR) AND DRAIN HOSE

(1) Remove the panel and corner box. (Refer to procedure 1)
(2) Remove the electrical box covers. (Refer to procedure 2)
(3) Disconnect the vane motor connector (CNV) on the indoor controller board.
(4) Push fixture and pull out the drain hose from the nozzle assembly, and remove nozzle assembly. (See Photo 6)

5. REMOVING THE VANE MOTOR

(1) Remove the nozzle assembly. (Refer to procedure 4)
(2) Remove 2 screws of the vane motor unit cover, and pull out the vane motor unit. (See Photo 6)
(3) Remove screw of the vane motor (LOWER).
(4) Remove the vane motor (LOWER) from the vane motor unit cover.
(5) Disconnect the connector (white) from the vane motor. (LOWER)
(6) Remove 2 screw of the vane motor (UPPER).
(7) Remove the vane motor (UPPER) from the vane motor unit cover. (See Photo 7)
(8) Disconnect the connector (blue) from the vane motor (UPPER).

PHOTOS/FIGURES

Photo 4

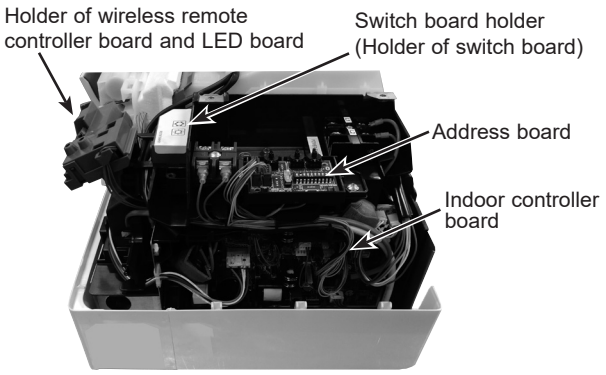


Photo 5 (see the bottom)

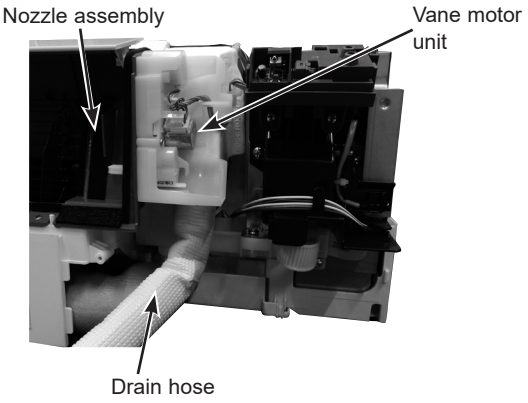


Photo 6

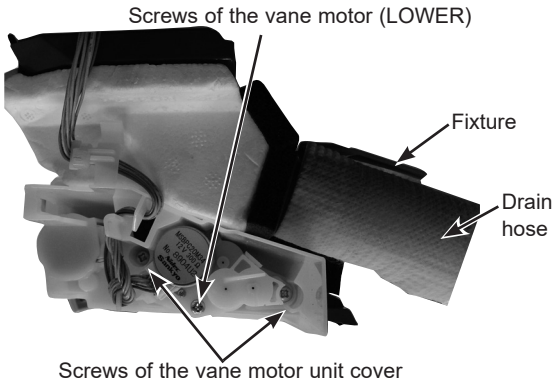
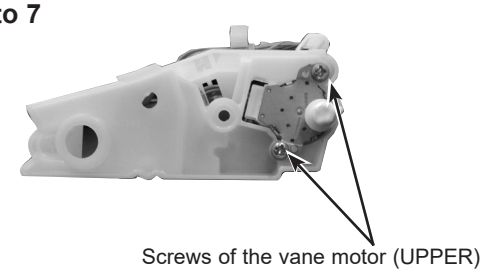
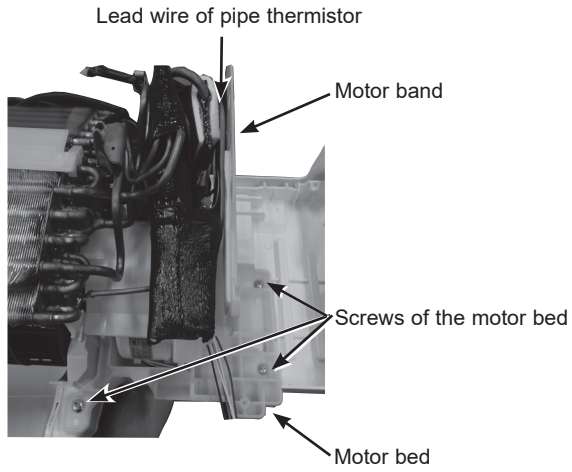
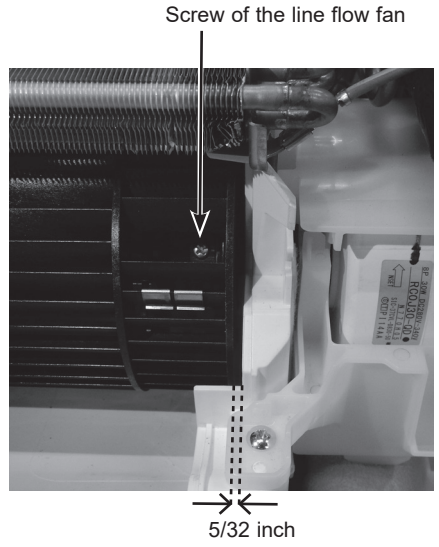
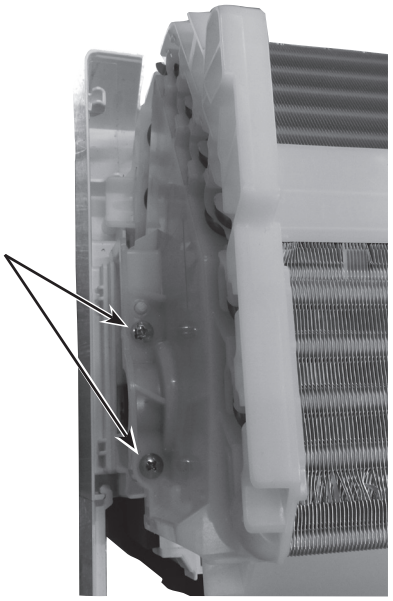
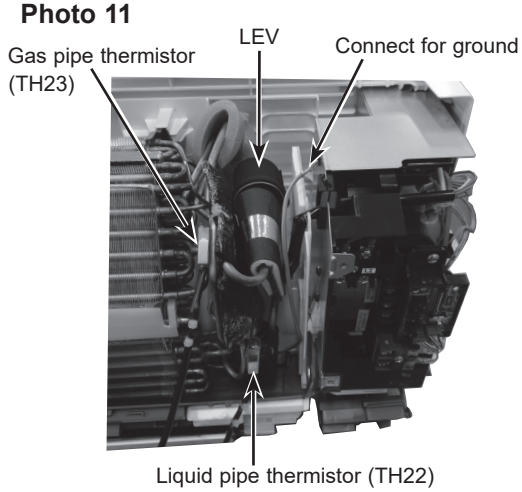
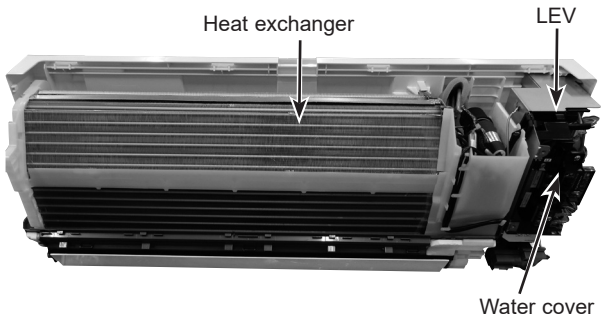
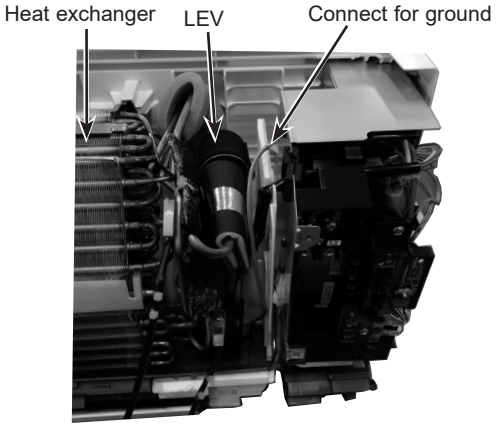
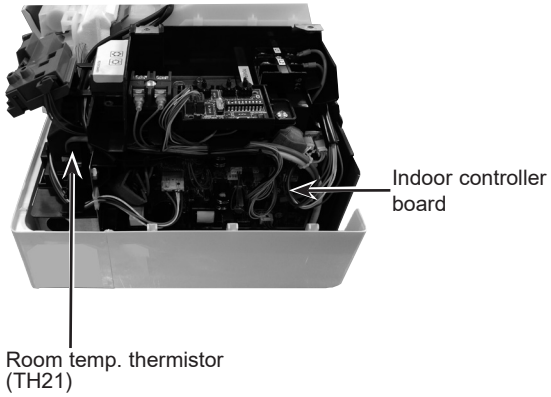


Photo 7



OPERATION PROCEDURE	PHOTOS/FIGURES
6. REMOVING THE INDOOR FAN MOTOR AND THE LINE FLOW FAN (1) Remove the panel and the corner box. (Refer to procedure 1) (2) Remove the electrical box (Refer to procedure 2) and the nozzle assembly (Refer to procedure 4). (3) Remove the water cover. (See Photo 2) (4) Loosen the screw fixing the line flow fan. (See Photo 9) (5) Remove 3 screws fixing the motor bed. (See Photo 8) (6) Remove the motor bed together with fan motor and motor band. (7) Release the 2 hooks of the motor band. Remove the motor band. Pull out the indoor fan motor. (8) Remove 2 screws fixing the left side of the heat exchanger. (See Photo 10) (9) Lift the heat exchanger, and pull out the line flow fan to the lower-left. * When attaching the line flow fan, screw the line flow fan so 4mm gap is provided between the right end of the line flow fan and the right wall of the air passage of the box. (Photo 9)	**Photo 8**  **Photo 9** 
Photo 10  	
7. REMOVING THE LIQUID PIPE THERMISTOR AND GAS PIPE THERMISTOR (1) Remove the panel and the corner box. (Refer to procedure 1) (2) Remove the electrical box covers. (Refer to procedure 2) (3) Remove the water cover. (See Photo 2) (4) Remove the liquid pipe thermistor and gas pipe thermistors. (5) Disconnect the connector (CN44) on the indoor controller board. (TH22 and TH23/CN44)	**Photo 11** 

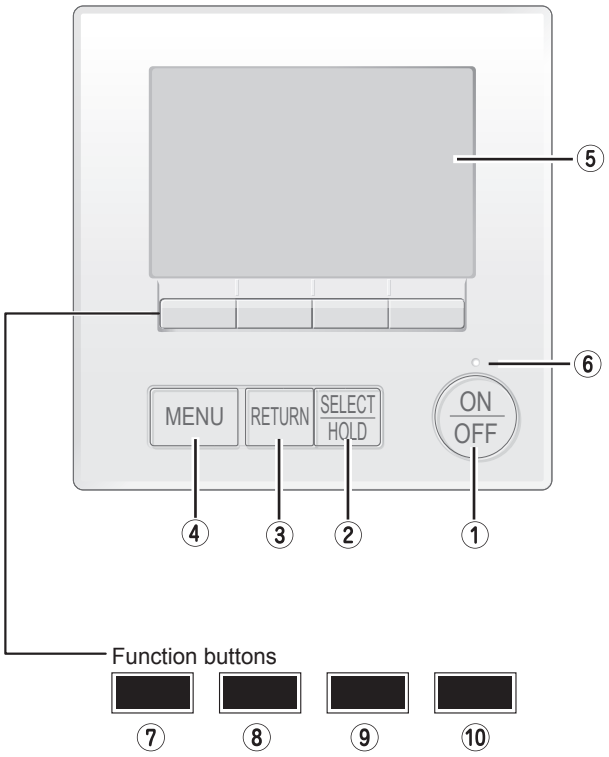
OPERATION PROCEDURE	PHOTOS/FIGURES
8. REMOVING THE HEAT EXCHANGER AND LEV (1) Remove the panel and the corner box (Refer to procedure 1). (2) Remove the electrical box (Refer to procedure 3) and the nozzle assembly (Refer to procedure 4). (3) Remove the water cover. (4) Remove the pipe thermistors. (Refer to procedure 7). (5) Disconnect the connector (CN60) on the indoor controller board. (6) Remove the motor bed together with fan motor and motor band (Refer to procedure 6). (7) Remove 2 screws fixing the left side of the heat exchanger. (See Photo 10) (8) Remove the heat exchanger with LEV.	**Photo 12**  **Photo 13** 
9. REMOVING THE ROOM TEMPERATURE THERMISTOR (1) Remove the panel and corner box. (Refer to procedure 1) (2) Remove the electrical box covers. (Refer to procedure 2) (3) Remove the room temperature thermistor. (4) Disconnect the connector (CN20) on the indoor controller board.	**Photo 14** 

11 REMOTE CONTROLLER

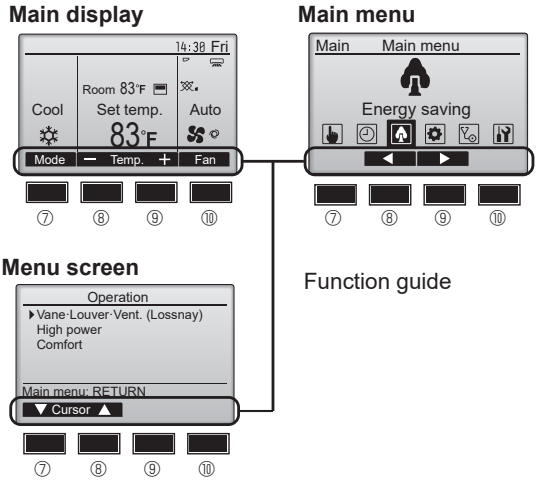
11-1. REMOTE CONTROLLER FUNCTIONS

<PAR-41MAA>

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.



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]

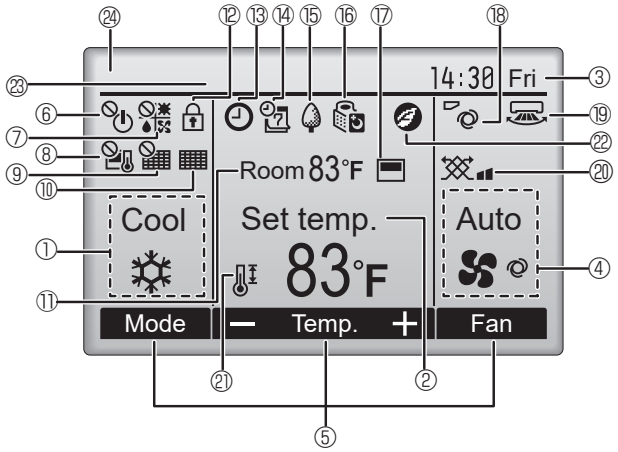
Main display: Press to change the fan speed.
Menu screen: The button function varies with the screen.

Display

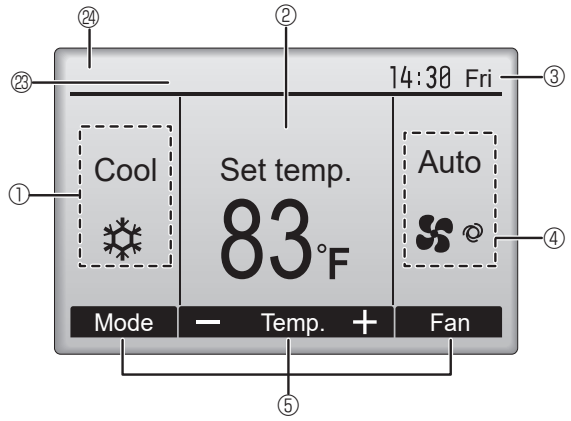
The main display can be displayed in two different modes: “Full” and “Basic”. The initial setting is “Full”. To switch to the “Basic” mode, change the setting on the Main display setting. (Refer to operation manual included with remote controller.)

<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.

⑥

Appears when the ON/OFF operation is centrally controlled.

⑦

Appears when the operation mode is centrally controlled.

⑧

Appears when the preset temperature is centrally controlled.

⑨

Appears when the filter reset function is centrally controlled.

⑩

Indicates when filter needs maintenance.

⑪ Room temperature

⑫

Appears when the buttons are locked.

⑬

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.

⑭

Appears when the Weekly timer is enabled.

⑮

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

⑯

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

⑰

Appears when the built-in thermistor on the remote controller is activated to monitor the room temperature (1).

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

⑱

Indicates the vane setting.

⑲

Indicates the louver setting.

⑳

Indicates the ventilation setting.

㉑

Appears when the preset temperature range is restricted.

㉒

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

㉓ Centrally controlled

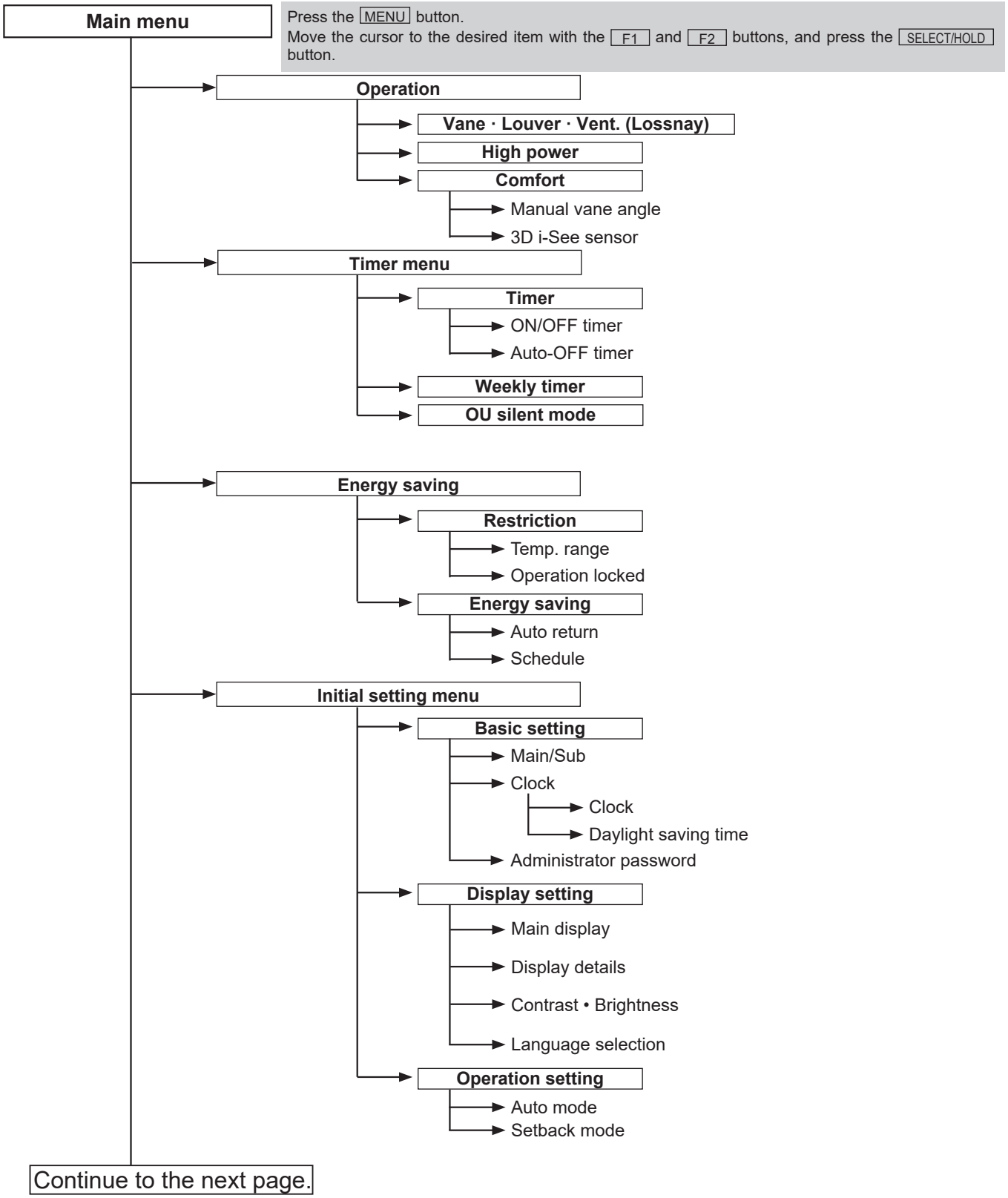
Appears for a certain period of time when a centrally-controlled item is operated.

㉔ Preliminary error display

A check code appears during the preliminary error.

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

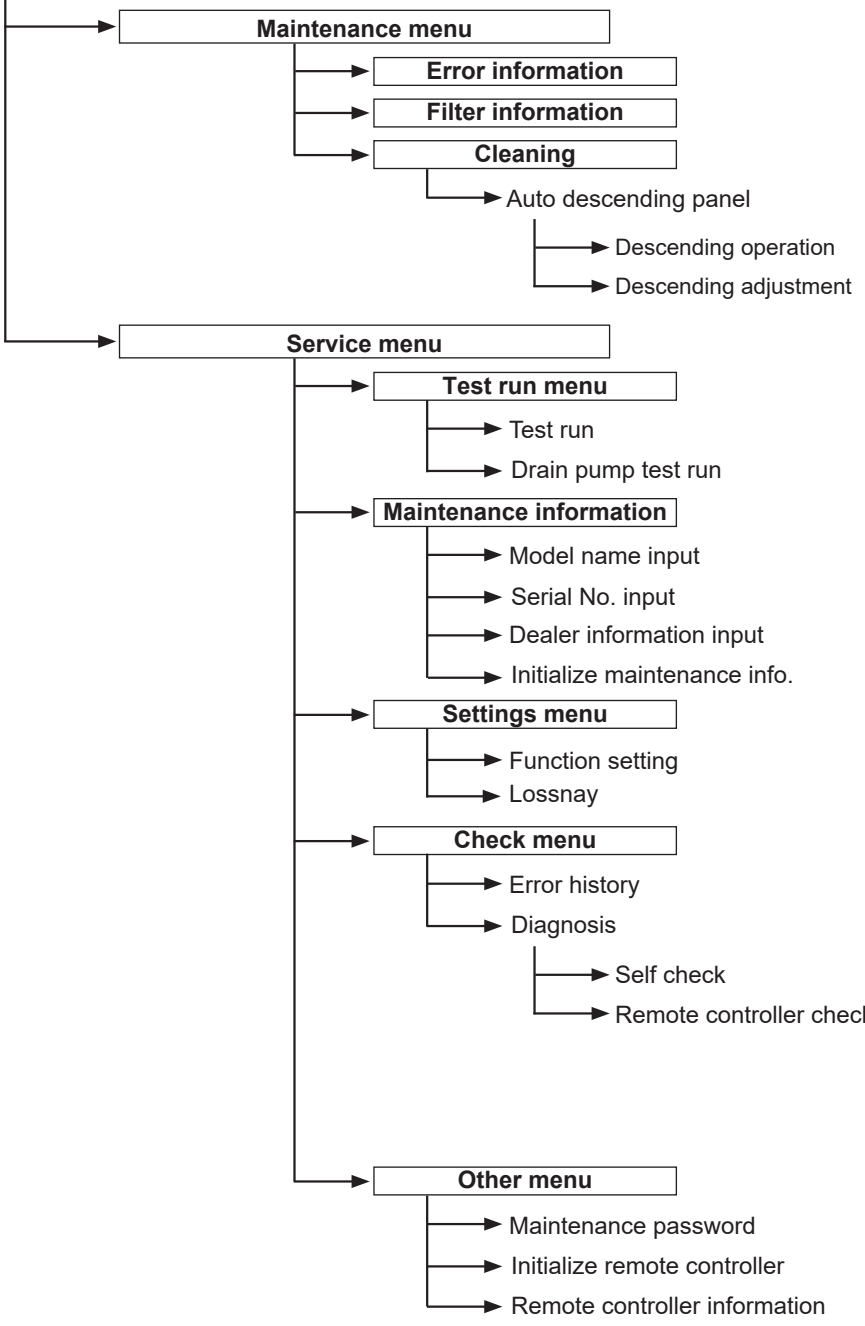
Menu structure



Continue to the next page.

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 from 5 different settings. **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		**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		**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 lock	**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	**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.

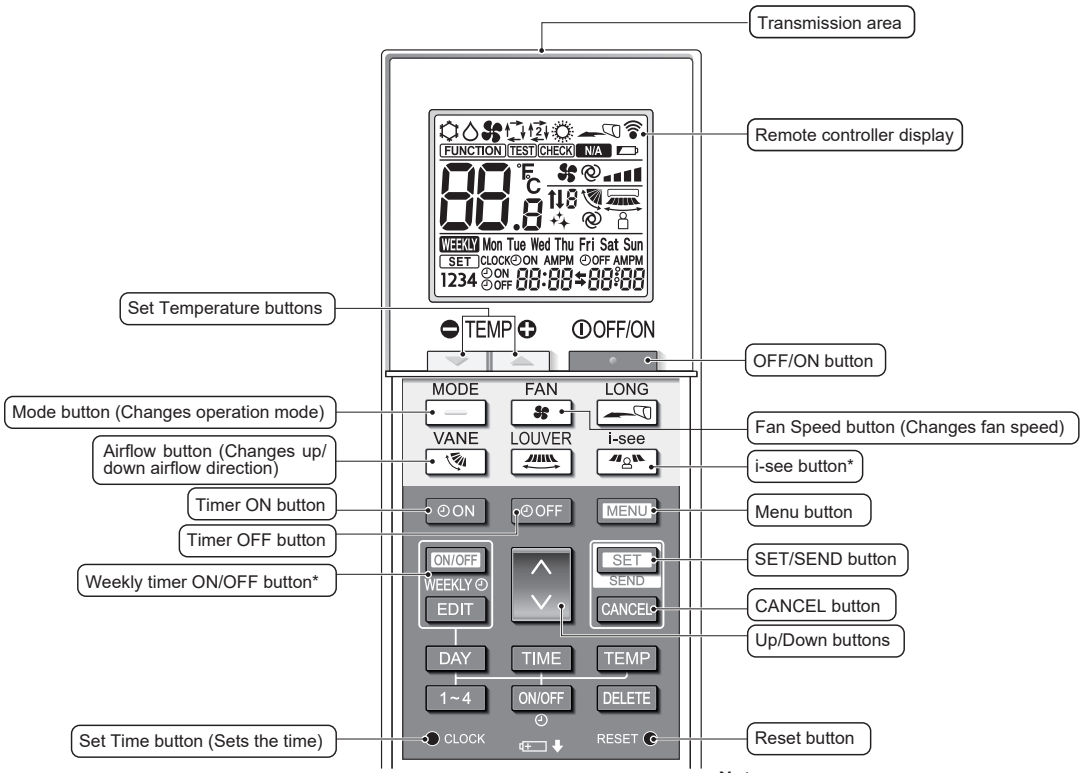
*1 Clock setting is required.

*2 33.8°F (1°C) increments.

Main menu	Setting and display items		Setting details
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 • Night set back
	Display setting	**Main display**	**Use to switch between "Full" and "Basic" modes for the Main display.** • The initial setting is "Full."
		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.**
		LOSSNAY setting	**This setting is required only when the operation of CITY MULTI units is interlocked with LOSSNAY units.**
	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.
	Other	**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.**

<PAR-SL101A-E>

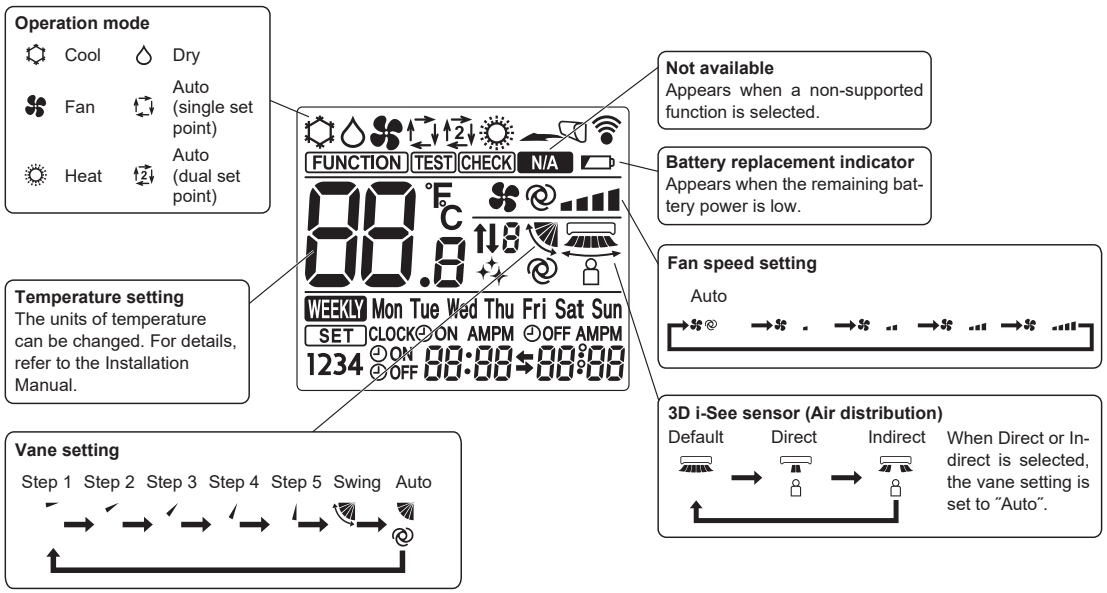
Controller interface



Note:

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

Display

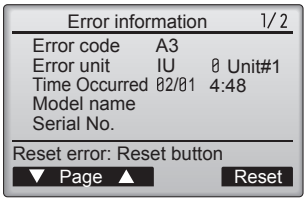


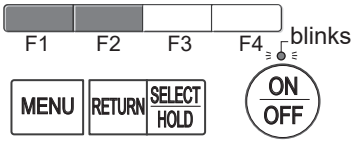
11-2. ERROR INFORMATION

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

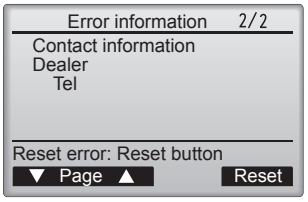
1. Check code, error unit, refrigerant address, model name, and serial number will appear.
   The model name and serial number will appear only if the information has been registered.

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





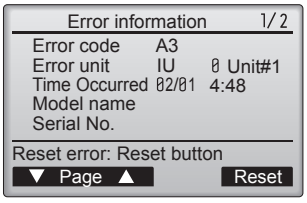
Contact information (dealer's phone number) will appear if the information has been registered.

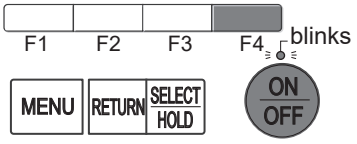


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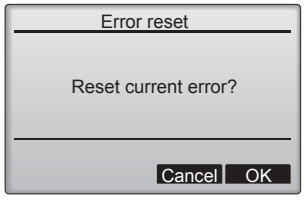
2. Press the F4 button or the [ON/OFF] button to reset the error that is occurring.

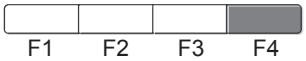
Errors cannot be reset while the ON/OFF operation is prohibited.

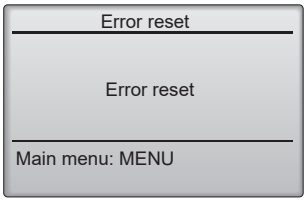




Select "OK" with the F4 button.





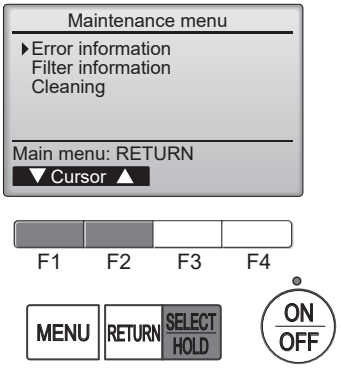


Navigating through the screens

• To go back to the Service 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.

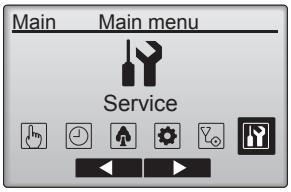


11-3. SERVICE MENU

Maintenance password is required

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

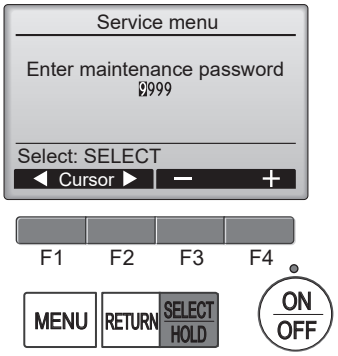
   To enter the current maintenance password (4 numerical digits), move the cursor to the digit you want to change with the F1 or F2 button.

   ▼

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

   ▼

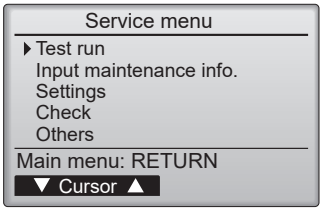
   Then, press the [SELECT/HOLD] button.



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.



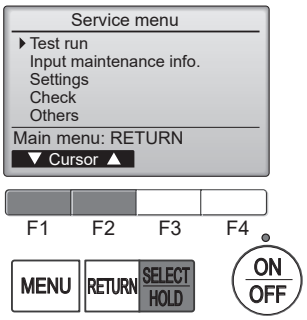
Navigating through the screens

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

11-4. TEST RUN

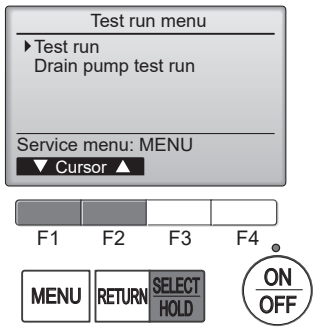
11-4-1. PAR-41MAA

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



Select "Test run" with the F1 or F2 button, and press the [SELECT/HOLD] button.

2. Select "Test run" with the F1 or F2 button, and press the [SELECT/HOLD] button.



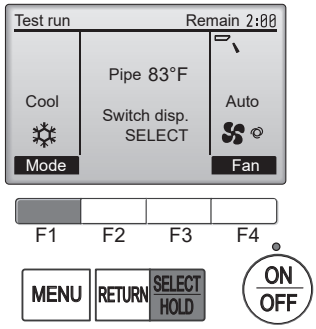
Test run operation

Press the F1 button to go through the operation modes in the order of "Cool and Heat".

Cool mode: Check the cold air blows out.
Heat mode: Check the heat blows out.

Check the operation of the outdoor unit's fan.

Press the [SELECT/HOLD] button and open the Vane setting screen.



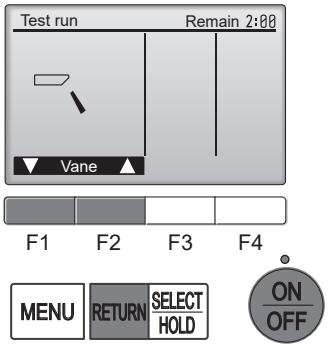
Auto vane check

Check the auto vane with the F1 F2 buttons.

Press the [RETURN] button to return to "Test run operation".

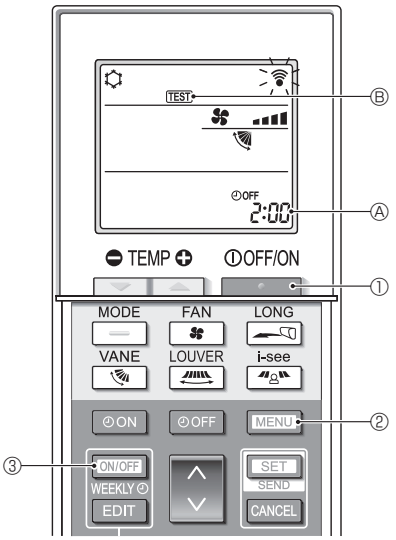
Press the [ON/OFF] button.

When the test run is completed, the "Test run menu" screen will appear.
The test run will automatically stop after 2 hours.
*The function is available only for the model with vanes.



11-4-2. PAR-SL101A-E

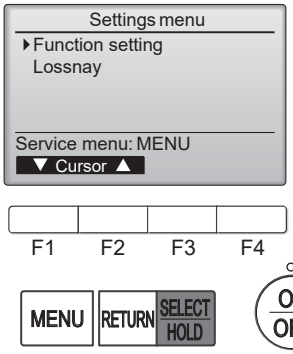
1. Press the [ ] button ① to stop the air conditioner.
   • If the weekly timer is enabled (WEEKLY is on), press the [ON/OFF WEEKLY] button ③ to disable it (WEEKLY is off).
2. Press the [MENU] button ② for 5 seconds.
   • CHECK comes on and the unit enters the service mode.
3. Press the [MENU] button ②.
   • TEST Ⓑ comes on and the unit enters the test run mode.
4. Press the following buttons to start the test run.
   [—]: Switch the operation mode between cooling and heating and start the test run.
   [ ]: Switch the fan speed and start the test run.
   [ ]: Switch the airflow direction and start the test run.
   [ ]: Switch the louver and start the test run.
   [SET]: Start the test run.
5. Stop the test run.
   • Press the [ ] button ① to stop the test run.
   • After 2 hours, the stop signal is transmitted.



11-5. FUNCTION SETTING

11-5-1. PAR-41MAA

1. Select ″Service″ from the Main menu, and press the [SELECT/HOLD] button.

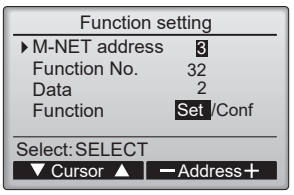


Select ″Setting″ from the Service menu, and press the [SELECT/HOLD] button.

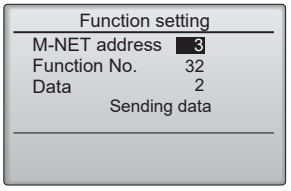
Select ″Function setting″, and press the [SELECT/HOLD] button.

---

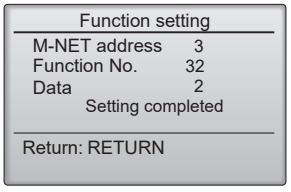
2. The Function setting screen will appear.
   Press the F1 or F2 button to move the cursor to one of the following: M-NET address, function setting number, or setting value. Then, press the F3 or F4 button to change the settings to the desired settings.



Once the settings have been completed, press the [SELECT/HOLD] button.
A screen will appear indicating that the settings information is being sent.
To check the current settings of a given unit, enter the setting for its M-NET address and function setting number, select Conf for the Function, and press the [SELECT/HOLD] button.
A screen will appear indicating that the settings are being searched for.
When the search is done, the current settings will appear.



When the settings information has been sent, a screen will appear indicating its completion.
To make additional settings, press the [RETURN] button to return to the screen shown in the above step. Set the function numbers for other indoor units by following the same steps.



Note:
- Refer to the indoor unit Installation Manual for information about the factory settings of indoor units, function setting numbers, and setting values.
- Be sure to write down the settings for all functions if any of the initial settings has been changed after the completion of installation work.

11-5-2. PAR-SL101A-E

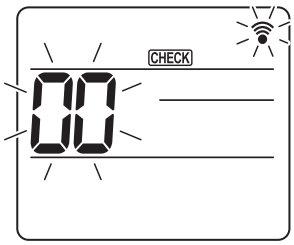


Fig. 1

1. Going to the function select mode
   Press the MENU button between of 5 seconds.
   (Start this operation from the status of remote controller display turned off.)
   [CHECK] is lit and "00" blinks. (Fig. 1)
   Press the ▲▼ button to set the "50".
   Direct the wireless remote controller toward the receiver of the indoor unit and press the SET button.

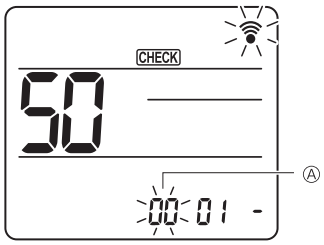


Fig. 2

2. Setting the unit number
   Press the ▲▼ button to set unit number Ⓐ. (Fig. 2)
   Direct the wireless remote controller toward the receiver of the indoor unit and press the SET button.

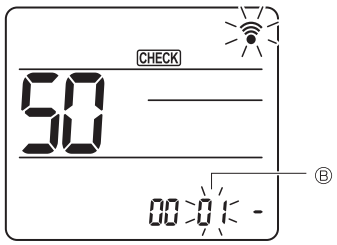


Fig. 3

3. Select a mode
   Press the ▲▼ button to set Mode number Ⓑ. (Fig. 3)
   Direct the wireless remote controller toward the receiver of the indoor unit and press the SET button.
   Current setting number: 1=1 beep (1 second)
   2=2 beep (1 second each)
   3=3 beep (1 second each)

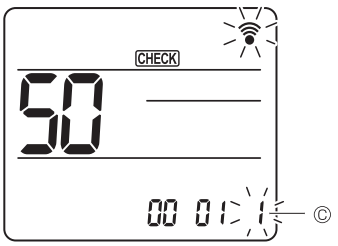


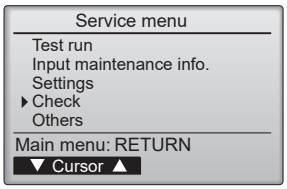
Fig. 4

4. Selecting the setting number
   Use the ▲▼ button to change the Setting number Ⓒ. (Fig. 4)
   Direct the wireless remote controller toward the receiver of the indoor unit and press the SET button.
5. To select multiple functions continuously
   Repeat select ③ and ④ to change multiple function settings continuously.
6. Complete function selection
   Direct the wireless remote controller toward the sensor of the indoor unit and press the ①OFF/ON button.

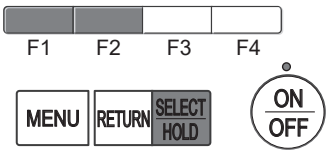
Note: Be sure to write down the settings for all functions if any of the initial settings has been changed after the completion of installation work.

11-6. ERROR HISTORY

1. Select ″Service″ from the Main menu, and press the [SELECT/HOLD] button.

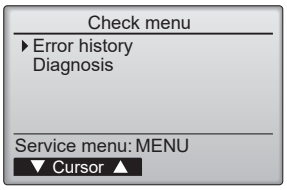


Select ″Check″ with the F1 or F2 button, and press the [SELECT/HOLD] button.



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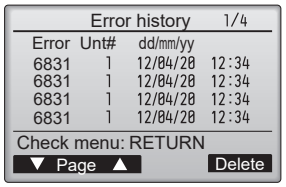
2. Select ″Error history″ with the F1 or F2 button, and press the [SELECT/HOLD] button.

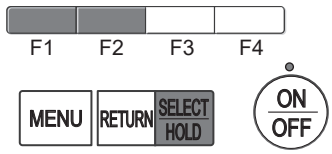


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3. 16 error history records will appear.

4 records are shown per page, and the top record on the first page indicates the latest error record.





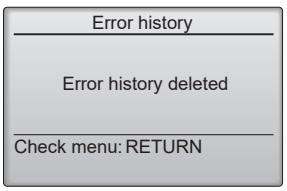
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4. Deleting the error history

To delete the error history, press the F4 button (Delete) on the screen that shows error history.
A confirmation screen will appear asking if you want to delete the error history.



Press the F4 button (OK) to delete the history.



″Error history deleted″ will appear on the screen.

Press the [RETURN] button to go back to the Check menu screen.

11-7. SELF-DIAGNOSIS

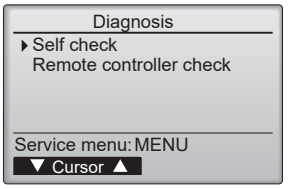
11-7-1. PAR-41MAA

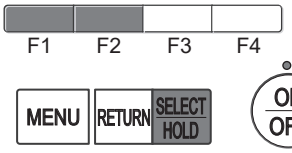
1. Select ″Service″ from the Main menu,
   and press the [SELECT/HOLD] button.

   Select ″Check″ from the Service menu,
   and press the [SELECT/HOLD] button.

   Select ″Diagnosis″ from the Check menu,
   and press the [SELECT/HOLD] button.

   Select ″Self check″ with the F1 or F2 button,
   and press the [SELECT/HOLD] button.



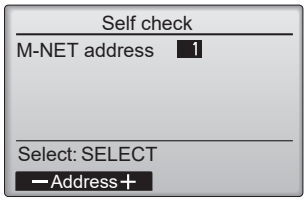


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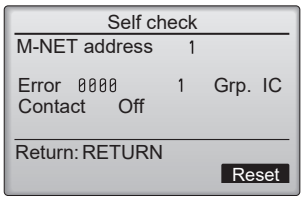
2. Select “Self check” from the Diagnosis menu, and press the [SELECT/HOLD] button to view the Self check screen.

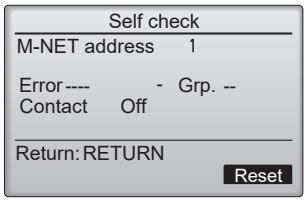
   With the F1 or F2 button, enter the M-NET address, and press the [SELECT/HOLD] button.

   Check code, unit number, attribute, and indoor unit demand signal ON/OFF status at the contact will appear. “-” will appear if no error history is available.



When there is no error history

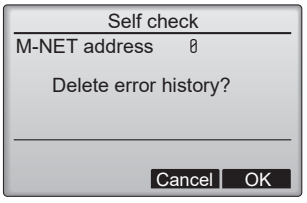


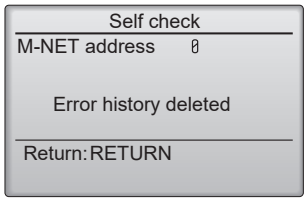


3. <u>Resetting the error history</u>

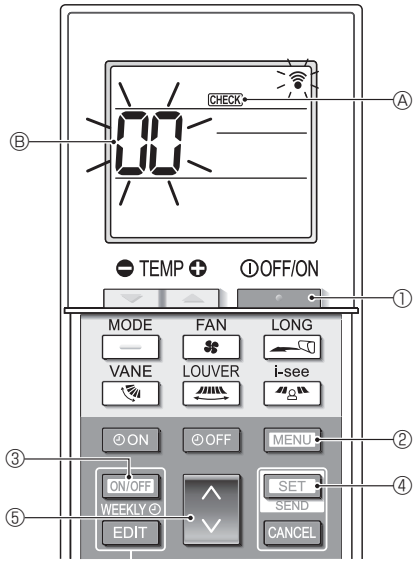
   Press the F4 button (Reset) on the screen that shows the error history. A confirmation screen will appear asking if you want to delete the error history.

   Press the F4 button (OK) to delete the error history. If deletion fails, “Request rejected” will appear, and “Unit not exist” will appear if indoor units that are correspond to the entered address are not found.





11-7-2. PAR-SL101A-E

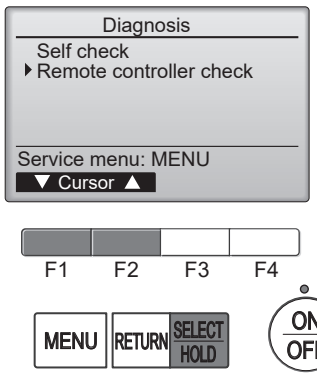


1. Press the [ ] button ① to stop the air conditioner.
   - If the weekly timer is enabled (WEEKLY is on), press the [ON/OFF WEEKLY] button ③ to disable it (WEEKLY is off).
2. Press the [MENU] button ② for 5 seconds.
   - CHECK Ⓐ comes on and the unit enters the self-check mode.
3. Press the [▲▼] button ⑤ to select the refrigerant address (M-NET address) Ⓑ of the indoor unit for which you want to perform the self-check.
4. Press the [SET] button ④.
   - If an error is detected, the check code is indicated by the number of beeps from the indoor unit and the number of blinks of the OPERATION INDICATOR lamp.
5. Press the [ ] button ①.
   - CHECK Ⓐ and the refrigerant address (M-NET address) Ⓑ go off and the self-check is completed.

11-8. REMOTE CONTROLLER CHECK

If operations cannot be completed with the remote controller, diagnose the remote controller with this function.

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



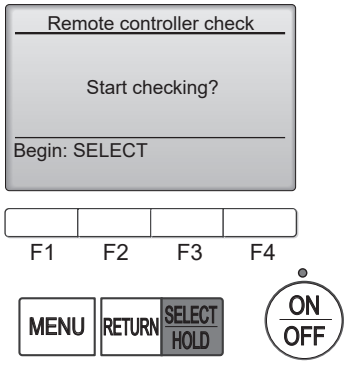
Select "Check" from the Service menu, and press the [SELECT/HOLD] button.

Select "Diagnosis" from the Check menu, and press the [SELECT/HOLD] button.

Select "Remote controller check" with the F1 or F2 button, and press the [SELECT/HOLD] button.

---

2. Select "Remote controller check" from the Diagnosis menu, and press the [SELECT/HOLD] button to start the remote controller check and see the check results.



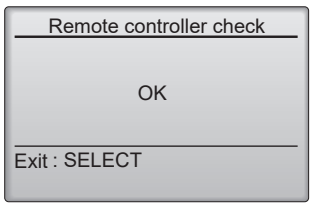
To cancel the remote controller check and exit the "Remote controller check" menu screen, press the [MENU] or the [RETURN] button.

The remote controller will not reboot itself.

---

3. OK: No problems are found with the remote controller. Check other parts for problems.
E3, 6832: There is noise on the transmission line, or the indoor unit or another remote controller is faulty. Check the transmission line and the other remote controllers.
NG (ALL0, ALL1): Send-receive circuit fault. The remote controller needs replacing.
ERC: The number of data errors is the discrepancy between the number of bits in the data transmitted from the remote controller and that of the data that was actually transmitted over the transmission line. If data errors are found, check the transmission line for external noise interference.

Remote controller check results screen



If the [SELECT/HOLD] button is pressed after the remote controller check results are displayed, remote controller check will end, and the remote controller will automatically reboot itself.

Check the remote controller display and see if anything is displayed (including lines). Nothing will appear on the remote controller display if the correct voltage (8.5–12 VDC) is not supplied to the remote controller. If this is the case, check the remote controller wiring and indoor units.

CITY MULTI

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