

Remote Controller (Wired Type) INSTALLATION MANUAL

(PART NO. 9373328087-02)

For authorized service personnel only.

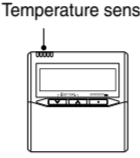
WARNING This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.

- For the air conditioner to operate satisfactorily, install it as outlined in this installation manual.
- Installation work must be performed in accordance with national wiring standards by authorized personnel only.
- Do not turn on the power until all installation work is complete.

Let the customer keep this installation manual because it is needed when the air conditioner or remote controller is serviced or moved.

CAUTION This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.

- In order to detect the room temperature correctly when using the temperature sensor of the remote controller, do not install the remote controller in a place where it will be exposed to direct sunlight or directly below the air outlet of the indoor unit.
- Do not touch the remote controller PC board and PC board parts directly with your hands.
- Do not wire the remote controller cable (cord) and the bus wire together with or parallel to the connection cables, transmission cables, and power supply cables of the indoor and outdoor units. It may cause erroneous operation.
- When installing the bus wire near a source of electromagnetic waves, use shielded wire.
- Do not set the DIP switches, either on the air conditioner or the remote controller, in any way other than indicated in this manual or the manual that is supplied with the air conditioner. Doing so may result in an accident.



1 STANDARD PARTS

The following installation parts are supplied. Use them as required.

Name and Shape	Q'ty	Application	Name and Shape	Q'ty	Application
Remote controller	1	For air conditioner operation	Tapping screw (M4 x 16)	2	For installing the remote controller
Remote controller cable (cord)	1	For connecting the remote controller	Binder	1	For remote controller and remote controller cable (cord) binding
Connecting cable (cord) (*1)	1	For connecting the remote controller cable (cord) to the wall mounted type indoor unit	Tapping screw (M4 x 14) (*1)	1	For installing the remote controller cable (cord) to the indoor unit
			Cable (cord) clammer (*1)	1	For installing the remote controller cable (cord) to the indoor unit

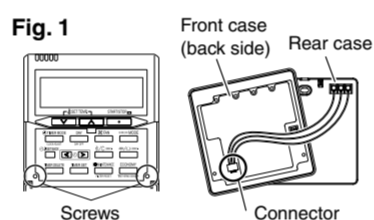
(*1) Use only if the remote controller cable (cord) must be modified for the indoor unit model.

2 REMOTE CONTROLLER SETTING

1. INSTALLING THE REMOTE CONTROLLER

Open the operation panel on the front of the remote controller, remove the two screws indicated in the following figure, and then remove the front case of the remote controller.

When installing the remote controller, remove the connector from the front case. The wires may break if the connector is not removed and the front case hangs down. When installing the front case, connect the connector to the front case.



3 CONNECTION OF REMOTE CONTROLLER CABLE

CAUTION

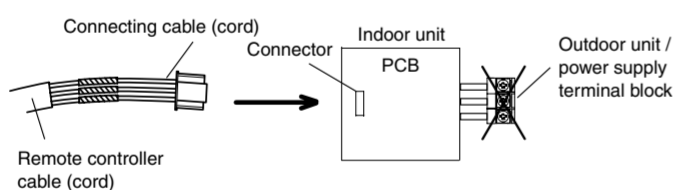
- When connecting the remote controller cable (cord) to the wall mounted type indoor unit, do not connect it to the outdoor unit or the indoor unit power terminal block. It may cause a failure.

There are 2 methods to connect the remote controller cable (cord) to the indoor unit. One is the connection using contained connecting cable (cord), and the other is the connection the remote controller cable (cord) is connected to the exclusive terminal block of the indoor unit.

Exclusive terminal block for remote controller connection method is different depending on each model. Modify the remote controller cable (cord) as per below description and connect it. (For the details, refer to the installation manual of the indoor unit to be used.)

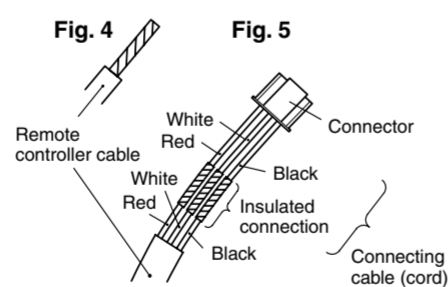
1. WHEN CONNECTING TO THE WALL MOUNTED TYPE CONNECTOR

Connect the remote controller cable (cord) to the connecting cable (cord), and insert it to the connector.



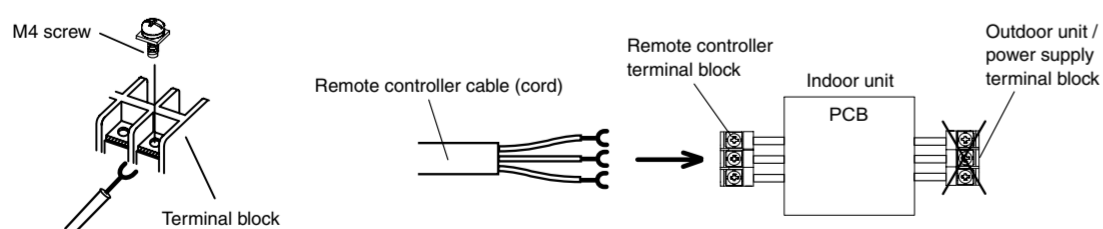
Modify the cable as per below methods.

- Use a tool to cut off the terminal on the end of the remote controller cable (cord), and then remove the insulation from the cut end of the cable as shown in Fig. 4.
- Connect the remote controller cable (cord) and connecting cable (cord) as shown in Fig. 5.
- Be sure to insulate the connection between the cables.



2. WHEN CONNECTING TO THE EXCLUSIVE TERMINAL BLOCK

Connect the end of remote controller cable (cord) directly to the exclusive terminal block.



※ It may be failed if it is connected to the outdoor unit or the terminal block for power supply.

When remote controller cable (cord) is embedded (1) Embed the remote controller cable (cord) and box.

(2) Pass the remote controller cable (cord) through the hole in the rear case and connect the remote controller cable (cord) to the remote controller terminal board specified in Fig. 2.

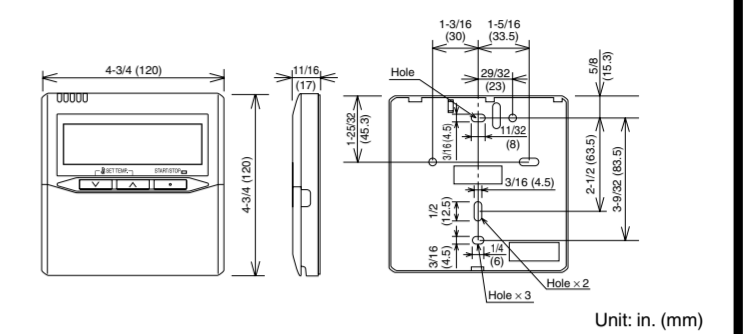
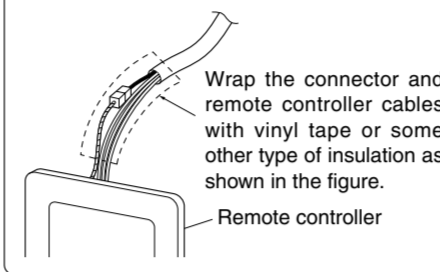
(3) Clamp the remote controller cable (cord) sheath with the binder as shown in Fig. 2.

(4) Cut off the excess binder.

(5) Install the rear case to the wall, box, etc., with two screws (Fig. 3).

CAUTION When connecting the remote controller cables, do not overtighten the screws.

Ground the remote controller if it has a ground cable.

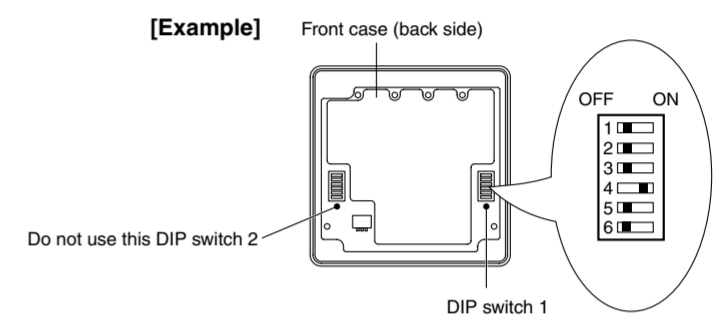


CAUTION

- Install the remote controller wires so as not to be direct touched with your hand.
- Do not touch the remote controller PC board and PC board parts directly with your hands.

2. SETTING THE DIP SWITCHES

Set the remote controller DIP switches. Set DIP switch 1 - NO.6 to ON. For the other switch, set it according to the situation.



NO.	Switch state		Detail
	OFF	ON	
1	★		Cannot be used. (Do not change)
2	★		Dual remote controller setting *Refer to 2. DUAL REMOTE CONTROLLERS in 4 INSTALLATION METHODS.
3	★ Follow the selection in FUNCTION SETTING	Invalidity	Filter reset operation and filter display
4		★	Cannot be used. (Do not change)
5	★		Cannot be used. (Do not change)
6	★ Invalidity	Validity	Memory backup setting *Set to ON to use batteries for the memory backup. If batteries are not used, all of the settings stored in memory will be deleted if there is a power failure.

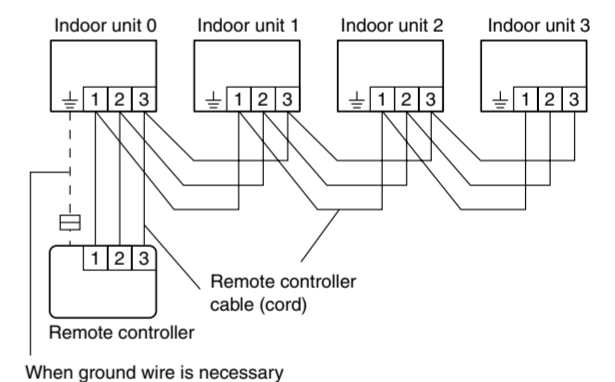
(★ Factory setting)

4 INSTALLATION METHODS

1. GROUP CONTROL

- A number of indoor units can be operated at the same time using a single remote controller.
- Depending on the model, some indoor units cannot be connected for group control. (Option is not available for U.S.A. wall mounted type indoor unit.)
- Some functions may become unusable, depending on the combination of the indoor units that are connected in a group.

(1) Wiring method (indoor unit to remote controller)

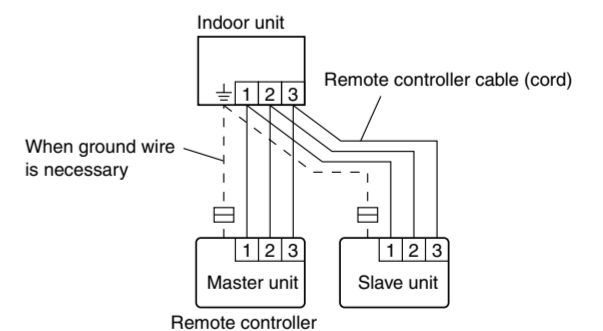


(2) Indoor unit address setting
Set each indoor unit address using the DIP switch of each indoor unit. (Refer to the installation manual for the indoor unit.)

2. DUAL REMOTE CONTROLLERS

- Depending on the model, some indoor units cannot be connected for dual remote controllers. (Option is not available for U.S.A. wall mounted type indoor unit.)
- Two separate remote controllers can be used to operate the indoor units.
- The timer and self-diagnosis functions cannot be used on the slave units.

(1) Wiring method (indoor unit to remote controller)

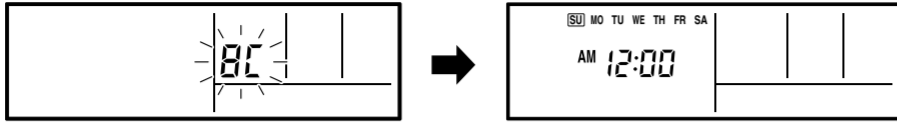


(2) Remote controller DIP switch 1 setting
Set the remote controller DIP switch 1-No. 2 according to the following table.

Number of remote controllers	Master unit	Slave unit
	DIP Switch 1-No. 2	DIP Switch 1-No. 2
1 (Normal)	OFF	-
2 (Dual)	OFF	ON

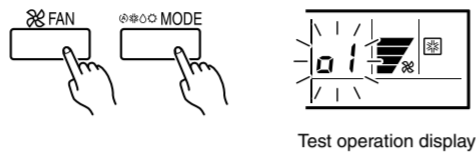
5 TURNING ON THE POWER

- Check the remote controller wiring and DIP switch settings.
- Install the front case.
 - When installing the front case, connect the connector to the front case (in 2 REMOTE CONTROLLER SETTING).
- Check the indoor and outdoor unit wiring and circuit board switch settings, and then turn on the indoor and outdoor units. After "8C" has flashed on the set temperature display for several seconds, the clock display will appear in the center of the remote controller display. The clock display will appear in the center of the remote controller display.



6 TEST OPERATION

- If the operation lamp is on, press the Start/Stop button to turn it off.
- Press the Master Control and Fan Control buttons at the same time for more than two seconds to start the test operation. The operation lamp will light up and "01" will be displayed on the set temperature display.
- Perform the test operation for 60 minutes.
- Pressing the Start/Stop button will stop the test operation.

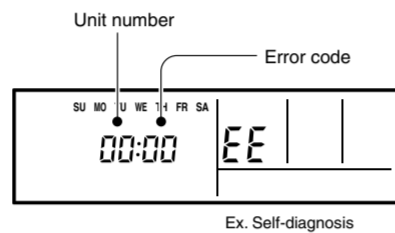


Test operation display

SELF-DIAGNOSIS

If an error occurs, the following display will be shown. ("EE" will appear in the set room temperature display.)

Unit number	Error code	Contents
C0	1d	Incompatible indoor unit is connected
C0	1c	Indoor unit ↔ remote controller communication error

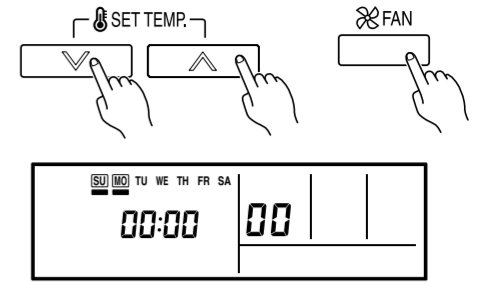


Ex. Self-diagnosis

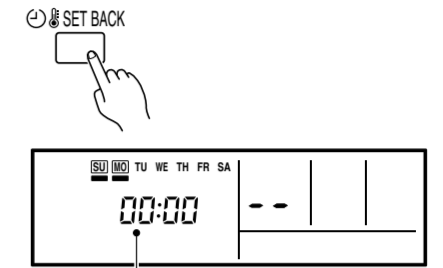
7 FUNCTION SETTING

This procedure changes the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit to malfunction. This procedure should be performed by authorized installation or service personnel only. Perform the "FUNCTION SETTING" according to the installation conditions using the remote controller. (Refer to the indoor unit installation manual for details on the function numbers and setting values.)

- Press the set temperature buttons (V) (Λ) and fan control button simultaneously for more than 5 seconds to enter the function setting mode.

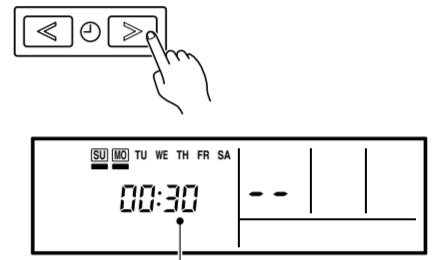


- Press the SET BACK button to select the indoor unit number.



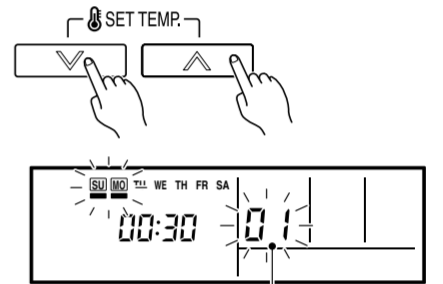
Unit number of INDOOR UNIT

- Press the set time buttons to select the function number.



Function number

- Press the set temperature buttons (V) (Λ) to select the setting value. The display flashes as shown to the right during setting value selection.



Setting value

- Press the SET button to confirm the setting. Press the SET button for a few seconds until the setting value stops flashing. If the setting value display changes or if "-" is displayed when the flashing stops, the setting value has not been set correctly. (An invalid setting value may have been selected for the indoor unit.)

- Repeat steps 2 to 5 to perform additional settings. Press the set temperature buttons (V) (Λ) and fan control button simultaneously again for more than 5 seconds to cancel the function setting mode. In addition, the function setting mode will be automatically canceled after 1 minute if no operation is performed.

- After completing the FUNCTION SETTING, be sure to turn off the power and turn it on again.

Setting the Cooler Room Temperature Correction

- Depending on the installed environment, the room temperature sensor may require a correction. The settings may be selected as shown in the table below.

Setting Description	Function Number	Setting Value
Standard	30	★ 00
Lower control		01

(★ Factory setting)

Setting the Heater Room Temperature Correction

- Depending on the installed environment, the room temperature sensor may require a correction. The settings may be changed as shown in the table below.

Setting Description	Function Number	Setting Value
Standard	31	★ 00
Lower control		01
Slightly warmer control		02
Warmer control		03

(★ Factory setting)

Setting Other Functions

- The following settings are also possible, depending on the operating conditions.

Auto Restart

Setting Description	Function Number	Setting Value
Yes	40	★ 00
No		01

(★ Factory setting)

Indoor Room Temperature Sensor Switching Function

Setting Description	Function Number	Setting Value
No	42	★ 00
Yes		01

(★ Factory setting)

- If setting value is "00", room temperature is controlled by the indoor unit temperature sensor.
- If setting value is "01", room temperature is controlled by either indoor unit temperature sensor or remote control unit sensor.

Setting record

- Record any changes to the settings in the following table.

Setting	Setting Value
Cooler room temperature correction	
Heater room temperature correction	
Auto restart	
Indoor room temperature sensor switching function	

After completing the FUNCTION SETTING, be sure to turn off the power and turn it on again.

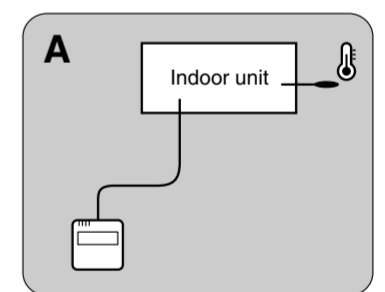
8 SETTING THE ROOM TEMPERATURE DETECTION LOCATION

The detection location of the room temperature can be selected from the following two examples. Choose the detection location that is best for the installation location. (This function is not available for the wall mounted type indoor units)

A. Indoor unit setting (factory setting)

The room temperature is detected by the indoor unit temperature sensor.

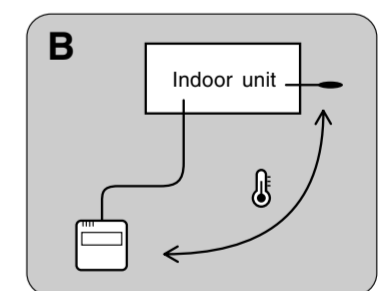
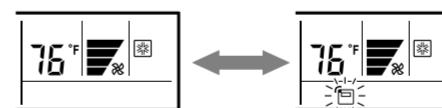
- When the THERMO SENSOR button is pressed, the lock display flashes because the function is locked at the factory.



B. Indoor unit/remote controller setting (room temperature sensor selection)

The temperature sensor of the indoor unit or the remote controller can be used to detect the room temperature. When use this function, set "Indoor Room Temperature Sensor Switching Function (Function Number:42)" of "7. FUNCTION SETTING" to "Yes(01)".

- Enable the room temperature sensor selection in FUNCTION SETTING, which will be described later.
- Press the THERMO SENSOR button for 5 seconds or more to select the temperature sensor of the indoor unit or the remote controller.



NOTES

If the function to change the temperature sensor is used as shown in examples A (other than example B), be sure to lock the detection location. If the function is locked, the lock display will flash when the THERMO SENSOR button is pressed.