

12. OPTIONAL KIT INSTALLATION (UTY-TWBXF)

This air conditioner can be connected with the following optional kits.

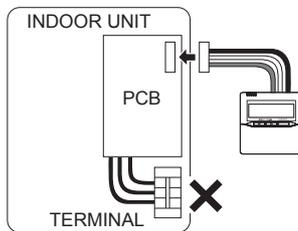
- Wired remote controller
- Simple remote controller
- External connect kit

BEFORE INSTALL WIRED REMOTE CONTROLLER

- When you use wired remote controller, some functions may not be used.

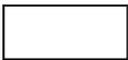
 CAUTION
Before installing, be sure to disconnect all power supply.
Don't touch the heat exchanger.
During installing or removing operation, be sure not to have wire caught by parts or draw it hard. Or it may result troubles to the air-conditioner.
Avoid place in direct sunlight.
Select place that will not be affected by the heat from a stove, etc
Before setting up the optional kit, please confirm whether air-conditioner can receive the signal.
Do not connect the wired remote controller to the terminal for power supply.
When connecting the wired remote controller with the indoor unit, use the connecting cable (supplied with wired remote controller or simple remote controller).
Recommended cable length of wired remote controller is 10 m. Make sure to do insulate of connecting part when extended the cable.

Do not connect power supply with the terminal.



12.1. Accessories (Communication kit)

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

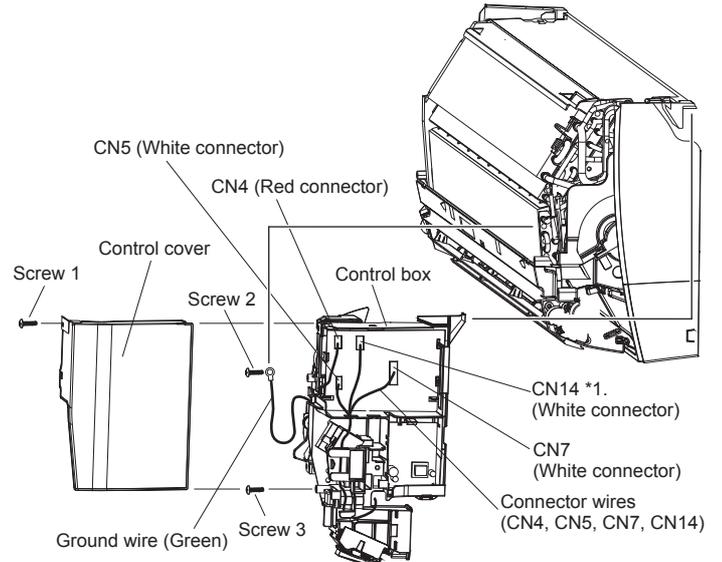
Name and Shape	Q'ty	Description
Relay control board 	1	For connecting the wired remote control unit and external connect wire.
Cable tie 	1	For fixing the wires from control box.
Relay wire 	1	For connecting the relay control board and control unit board.
Wiring label 	1	For display the additional wiring diagram.

12.2. Installation work

12.2.1. Removing intake grille and front panel

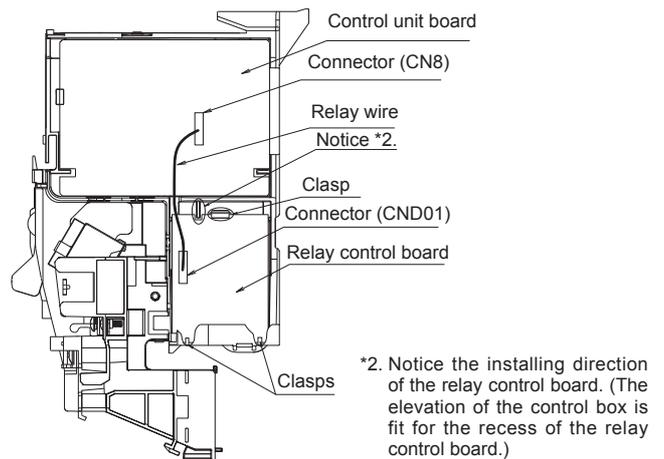
(Refer to 9.1. intake grille removal and 9.3. front panel removal)

12.2.2. Removing control cover, connector and control box



- (1) Remove the screw 1 then remove the control cover.
- (2) Remove the connector wires.
*1. When there is CN14 connector, pull it out.
- (3) Remove the connecting cables and the screw 2 and 3, then remove the control box.

12.2.3. Installing relay control board and relay wire terminal



- (1) Insert the relay control board toward 2 clasps.
- (2) Then set the board with the clasp.
- (3) Connect the relay wire terminal to the connector (CND01) on the relay control board.
- (4) Connect the relay wire terminal to the connector (CN8) on the control unit board.

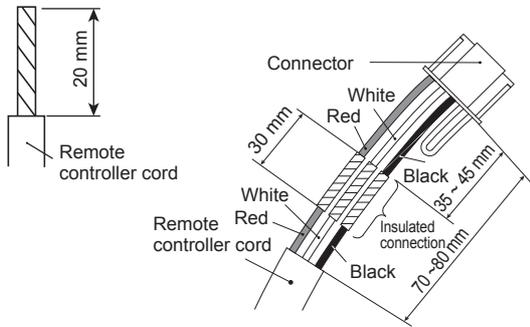
CAUTION

Be careful not to damage the parts on the board. Otherwise, it will cause malfunction.

12.2.4. Installing option kit

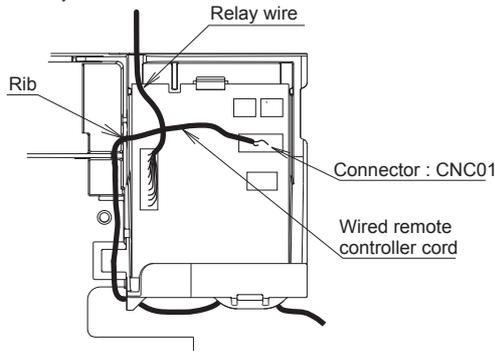
Remote controller cord modification

- (1) Use a tool to cut off the terminal on the end of the remote controller cord, and then remove the insulation from the cut end of the cord.
 - (2) Connect the remote controller cord and connecting cord.
(Supplied with wired remote controller.)
- Important: Be sure to insulate the connection between the cords.



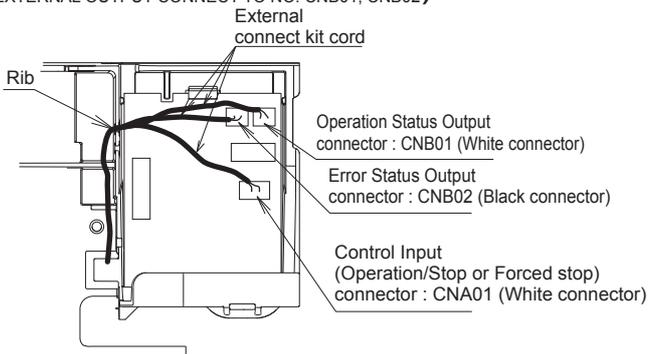
Installing the wired remote controller terminal (sold separately)

Connect the wired remote controller terminal to the connector (CNC01) on the relay control board.



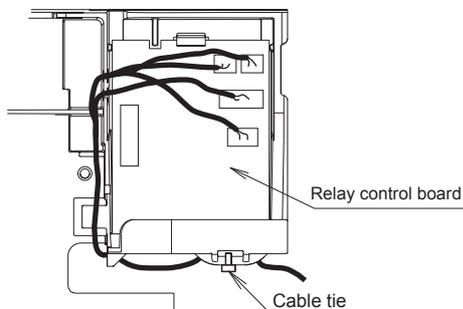
Installing the external connect kit terminal (sold separately)

Connect the wire of external input/output to the board of external connect kit.
(EXTERNAL INPUT CONNECT TO NO. CNA01
(EXTERNAL OUTPUT CONNECT TO NO. CNB01, CNB02))



Fixing the wires

After connecting the terminals, thread the wires through the notches and clasp of the control box as circled on the figure below. Then fix the wires onto the control box with the provided cable tie.



12.2.5. Installing the control box, connector and the control cover

- (1) Attach the control box to the indoor unit.
- (2) Connect the connector wires.
- (3) Attach the control cover.
- (4) Attach the 3 screws. Screw 2 is the screw which installs the ground wire.

12.2.6. Labelling

Paste the wiring label beside the label for schematic diagram inside the front panel.

12.2.7. Installing the front panel and intake grille

(Refer to 9.2. intake grille installation and 9.4. front panel installation)

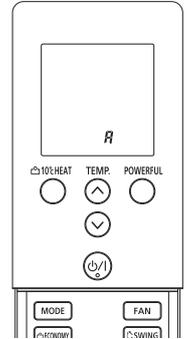
13. SELECTING THE REMOTE CONTROLLER SIGNAL CODE

When two or more air conditioners are installed in a room and the remote controller is operating an air conditioner other than the one you wish to set, change the signal code of the remote controller to operate only the air conditioner you wish to set (4 selections possible). When two or more air conditioners are installed in a room, please contact your retailer to set the individual air conditioner signal codes.

Selecting the Remote Controller Signal Code

Use the following steps to select the signal code of the remote controller. (Note that the air conditioner cannot receive a signal code if the air conditioner has not been set for the signal code.)

- (1) Press the START/STOP (⏻/⏷) button until only the clock is displayed on the remote controller display.
- (2) Press the MODE button for at least 5 seconds to display the current signal code (initially set to **A**).
- (3) Press the SET TEMP. (⏴ / ⏵) buttons to change the signal code between **A** ↔ **B** ↔ **C** ↔ **D**.
Match the code on the display to the air conditioner signal code.
- (4) Press the MODE button again to return to the clock display. The signal code will be changed.



- If no buttons are pressed within 30 seconds after the signal code is displayed, the system returns to the original clock display. In this case, start again from step 1.
- The air conditioner signal code is set to A prior to shipment.

14. FUNCTION SETTING

Perform the "FUNCTION SETTING" according to the installation conditions using the remote controller.

CAUTION

Confirm whether the wiring work for outdoor unit has been finished.

Confirm that the cover for the electrical enclosure on the outdoor unit is in place.

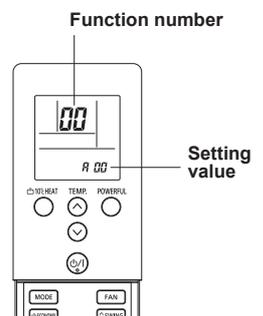
- This procedure changes to the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit to malfunction.
- After the power is turned on, perform the "FUNCTION SETTING" according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number or Setting Value.
- Settings will not be changed if invalid numbers or setting values are selected.
- Refer to the installation manual enclosed with the remote control unit when the wired remote control unit (option) is used.
- Adjust the signal code of the indoor unit and the signal code of the remote controller.

Entering the Function Setting Mode

While pressing the POWERFUL button and SET TEMP. (⏴ / ⏵) simultaneously, press the RESET button to enter the function setting mode.

Selecting the Function Number and Setting Value

- (1) Press the SET TEMP. (⏴ / ⏵) buttons to select the function number. (Press the 10°C HEAT button to switch between the left and right digits.)
- (2) Press the POWERFUL button to proceed to setting the value. (Press the POWERFUL button again to return to the function number selection.)
- (3) Press the SET TEMP. (⏴ / ⏵) buttons to select the setting value. (Press the 10°C HEAT button to switch between the left and right digits.)
- (4) Press the MODE button, in the order listed to confirm the settings.
Please confirm that the beep sounds.
- (5) Next, please press START/STOP (⏻/⏷) button.
Please confirm that the beep sounds.
- (6) Press the RESET button to cancel the function setting mode.
- (7) After completing the FUNCTION SETTING, be sure to turn off the power and turn it on again.



CAUTION

After turning off the power, wait 10 seconds or more before turning it on again. The Function Setting does not become active unless the power is turned off then on again.

Filter Sign

The indoor unit has a sign to inform the user that it is time to clean the filter. Select the time setting for the filter sign display interval in the table below according to the amount of dust or debris in the room. If you do not wish the filter sign to be displayed, select the setting value for "No indication".

(◆... Factory setting)

Setting Description	Function Number	Setting Value
Standard (400 hours)	11	00
Long interval (1,000 hours)		01
Short interval (200 hours)		02
◆ No indication		03

Cooling 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.

(◆... Factory setting)

Setting Description	Function Number	Setting Value
◆ Standard	30	00
Slightly lower control		01
Lower control		02
Warmer control		03

Heating 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.

(◆... Factory setting)

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

Auto Restart

Enable or disable automatic system restart after a power outage.

(◆... Factory setting)

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

* Auto restart is an emergency function such as for power failure etc. Do not start and stop the indoor unit by this function in normal operation. Be sure to operate by the control unit, or external input device.

Indoor room temperature sensor switching function

(Only for wired remote controller)

The following settings are needed when using the wired remote controller temperature sensor.

(◆... Factory setting)

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

* 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 controller unit sensor.

Remote controller signal code

Change the indoor unit Signal Code, depending on the remote controllers.

(◆... Factory setting)

Setting Description	Function Number	Setting Value
◆ A	44	00
B		01
C		02
D		03

External input control

"Operation/Stop" mode or "Forced stop" mode can be elected.

(◆... Factory setting)

Setting Description	Function Number	Setting Value
◆ Operation/Stop mode	46	00
(Setting forbidden)		01
Forced stop mode		02

Setting record

Record any changes to the settings in the following table.

Setting Description	Setting Value
Filter sign	
Cooler room temperature correction	
Heater room temperature correction	
Auto restart	
Indoor room temperature sensor switching function	
Remote controller signal code	
External input control	

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

15. CUSTOMER GUIDANCE

Explain the following to the customer in accordance with the operating manual:
 (1) Starting and stopping method, operation switching, temperature adjustment, timer, air flow switching, and other remote control unit operations.
 (2) Air filter removal and cleaning, and how to use the air louvers.
 (3) Give the operating manual to the customer.

16. ERROR CODES

If you use a wireless remote controller, the lamp on the photo detector unit will output error codes by way of blinking patterns. If you use a wired remote controller, error codes will appear on the remote controller display. See the lamp blinking patterns and error codes in the table. An error display is displayed only during operation.

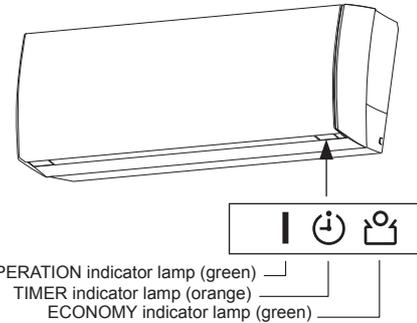
Error display			Wired remote controller Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(1)	●(1)	◇	11	Serial communication error
●(1)	●(2)	◇	12	Wired remote controller communication error
●(1)	●(5)	◇	15	Check run unfinished
●(2)	●(1)	◇	21	Unit number or Refrigerant circuit address setting error [Simultaneous Multi]
●(2)	●(2)	◇	22	Indoor unit capacity error
●(2)	●(3)	◇	23	Combination error

Error display			Wired remote controller Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(2)	●(4)	◇	24	• Connection unit number error (indoor slave unit) [Simultaneous Multi] • Connection unit number error (indoor unit or branch unit) [Flexible Multi]
●(2)	●(7)	◇	27	Master unit, slave unit set-up error [Simultaneous Multi]
●(3)	●(2)	◇	32	Indoor unit PCB model information error
●(3)	●(5)	◇	35	Manual auto switch error
●(4)	●(1)	◇	41	Room temp. sensor error
●(4)	●(2)	◇	42	Indoor unit Heat Ex. Middle temp. sensor error
●(5)	●(1)	◇	51	Indoor unit fan motor error
●(5)	●(3)	◇	53	Drain pump error
●(5)	●(7)	◇	57	Damper error
●(5)	●(8)	◇	58	Intake grille error
●(5)	●(15)	◇	5U	Indoor unit error
●(6)	●(2)	◇	62	Outdoor unit main PCB model information error or communication error
●(6)	●(3)	◇	63	Inverter error
●(6)	●(4)	◇	64	Active filter error, PFC circuit error
●(6)	●(5)	◇	65	Trip terminal L error
●(6)	●(10)	◇	6A	Display PCB microcomputers communication error
●(7)	●(1)	◇	71	Discharge temp. sensor error
●(7)	●(2)	◇	72	Compressor temp. sensor error
●(7)	●(3)	◇	73	Outdoor unit Heat Ex. liquid temp. sensor error
●(7)	●(4)	◇	74	Outdoor temp. sensor error
●(7)	●(5)	◇	75	Suction Gas temp. sensor error
●(7)	●(6)	◇	76	• 2-way valve temp. sensor error • 3-way valve temp. sensor error
●(7)	●(7)	◇	77	Heat sink temp. sensor error
●(8)	●(2)	◇	82	• Sub-cool Heat Ex. gas inlet temp. sensor error • Sub-cool Heat Ex. gas outlet temp. sensor error
●(8)	●(3)	◇	83	Liquid pipe temp. sensor error
●(8)	●(4)	◇	84	Current sensor error
●(8)	●(6)	◇	86	• Discharge pressure sensor error • Suction pressure sensor error • High pressure switch error
●(9)	●(4)	◇	94	Trip detection

Error display			Wired remote controller Error code	Description
OPERATION lamp (green)	TIMER lamp (orange)	ECONOMY lamp (green)		
●(9)	●(5)	◇	95	Compressor rotor position detection error
●(9)	●(7)	◇	97	Outdoor unit fan motor error
●(9)	●(9)	◇	99	4-way valve error
●(10)	●(1)	◇	A1	Discharge temp. error
●(10)	●(3)	◇	A3	Compressor temp. error
●(10)	●(4)	◇	A4	High pressure error
●(10)	●(5)	◇	A5	Low pressure error
●(13)	●(2)	◇	J2	Branch boxes error [Flexible Multi]

Display mode ● : 0.5s ON / 0.5s OFF
◇ : 0.1s ON / 0.1s OFF
() : Number of flashing

[Troubleshooting with the indoor unit display]



[Troubleshooting with the wired remote controller display (Option)]

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

