

## OPTION PARTS

### Wireless kit



#### WARNING

- Fasten the wiring to the terminal securely and hold the cable securely so as not to apply unexpected stress on the terminal.  
Loose connection or hold will cause abnormal heat generation or fire.
- Make sure the power supply is turned off when electric wiring work.  
Otherwise, electric shock, malfunction and improper running may occur.



#### CAUTION

- DO NOT install the wireless kit at the following places in order to avoid malfunction.

(1) Places exposed to direct sunlight	(8) Places where the receiver is influenced by the fluorescent lamp (especially inverter type) or sunlight.
(2) Places near heat devices	(9) Places where the receiver is affected by infrared rays of any other communication devices
(3) High humidity places	(10) Places where some object may obstruct the communication with the remote controller
(4) Hot surface or cold surface enough to generate condensation	
(5) Places exposed to oil mist or steam directly	
(6) Uneven surface	
(7) Places affected by the direct airflow of the AC unit.	
- DO NOT leave the wireless kit without the cover.  
In case the cover needs to be detached, protect the receiver with a packaging box or bag in order to keep it away from water and dust.



#### Note

- Instruct the customer how to operate it correctly referring to the instruction manual.
- For the installation method of the air conditioner itself, refer to the installation manual enclosed in the package.

## FDTC Series (RCN-TC-24W-ER)






The FDTC series is an exclusive series with all wired models. However, these models can also be used wireless units by using the optional wireless kit.

### (1) Wireless kit model

Model
RCN-TC-24W-ER

### (2) Accessories

Please make sure that you have all of the following accessories.

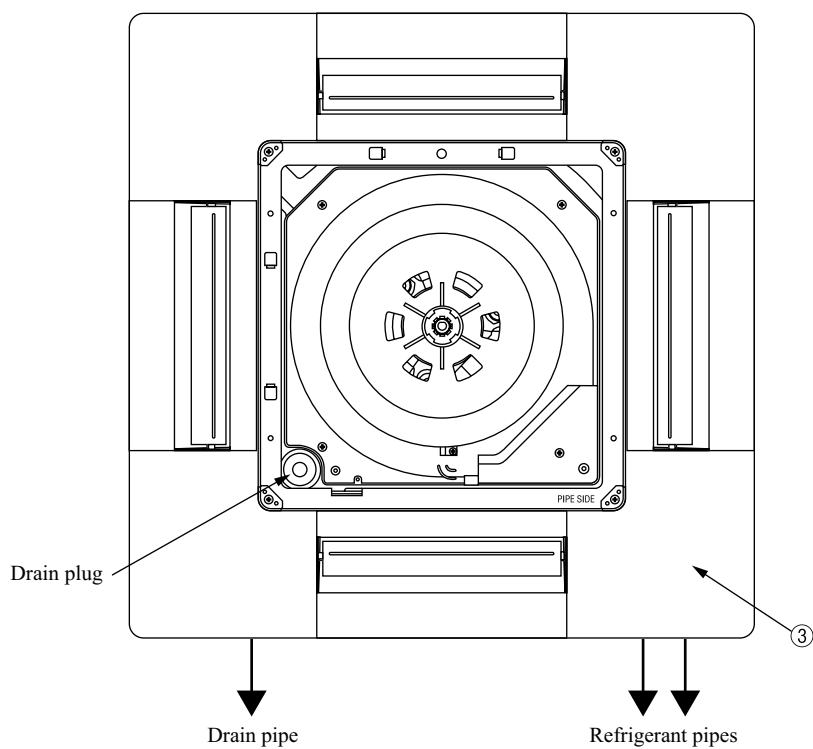
Receiver		1	Remote controller holder		1
Wireless remote controller		1	Wood screw for holder		2
Parts set		1	AAA dry cell battery (RO3)		2

### (3) How to install the receiver

The receiver can be installed by replacing with a corner panel on the applicable decorative panel.

#### Preparation before installation

- ① Attach the decorative panel onto the air conditioner according to the installation manual for the panel.
- ② Remove the air return grille.
- ③ Remove a corner panel located on the refrigerant pipes side.
- ④ Remove the screws and detach the lid from the control box of the air conditioner.



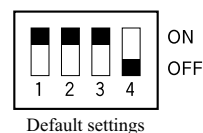
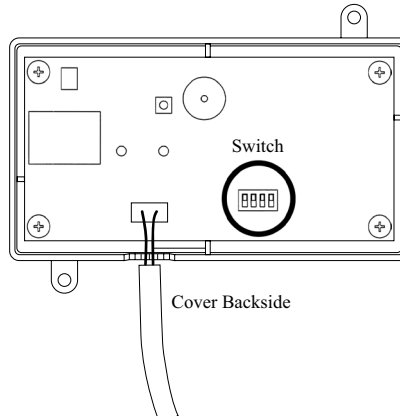
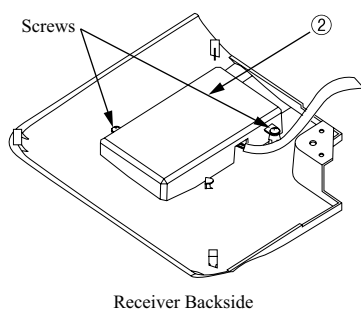
PJA012D758

## Setting on site

- ① PCB on the receiver has the following switches to set the functions. Default setting is shown with ☐ mark.

<b>SW1</b>	Customized signal setting to avoid mixed communication	<input type="checkbox"/> ON : Normal <input type="checkbox"/> OFF : Remote
<b>SW2</b>	Receiver master/slave setting	<input type="checkbox"/> ON : Master <input type="checkbox"/> OFF : Slave
<b>SW3</b>	Buzzer valid/Invalid	<input type="checkbox"/> ON : Valid <input type="checkbox"/> OFF : Invalid
<b>SW4</b>	Auto restart	<input type="checkbox"/> ON : Valid <input type="checkbox"/> OFF : Invalid

- ② Remove the cover by unscrewing two screws from the back of receiver.  
③ Change the setting by the switch on PCB.



- ④ When SW1 is turned to OFF position, change the corresponding remote controller setting as follows:

How to change the remote controller setting

Pressing **ACL** switch with **AIR FLOW** button kept pressing or inserting the batteries with pressing **AIR FLOW** button will customize the signal.

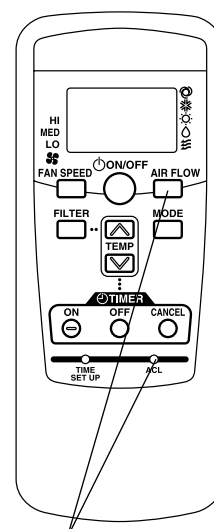
### Note

\* When the batteries are removed, the setting will return to the default setting.

Please make sure to reset it when the batteries are replaced.

### Caution

Instruct the customer to set the mentioned above when replacing the batteries.(How to set is also mentioned in the user's manual attached on the air conditioner.)

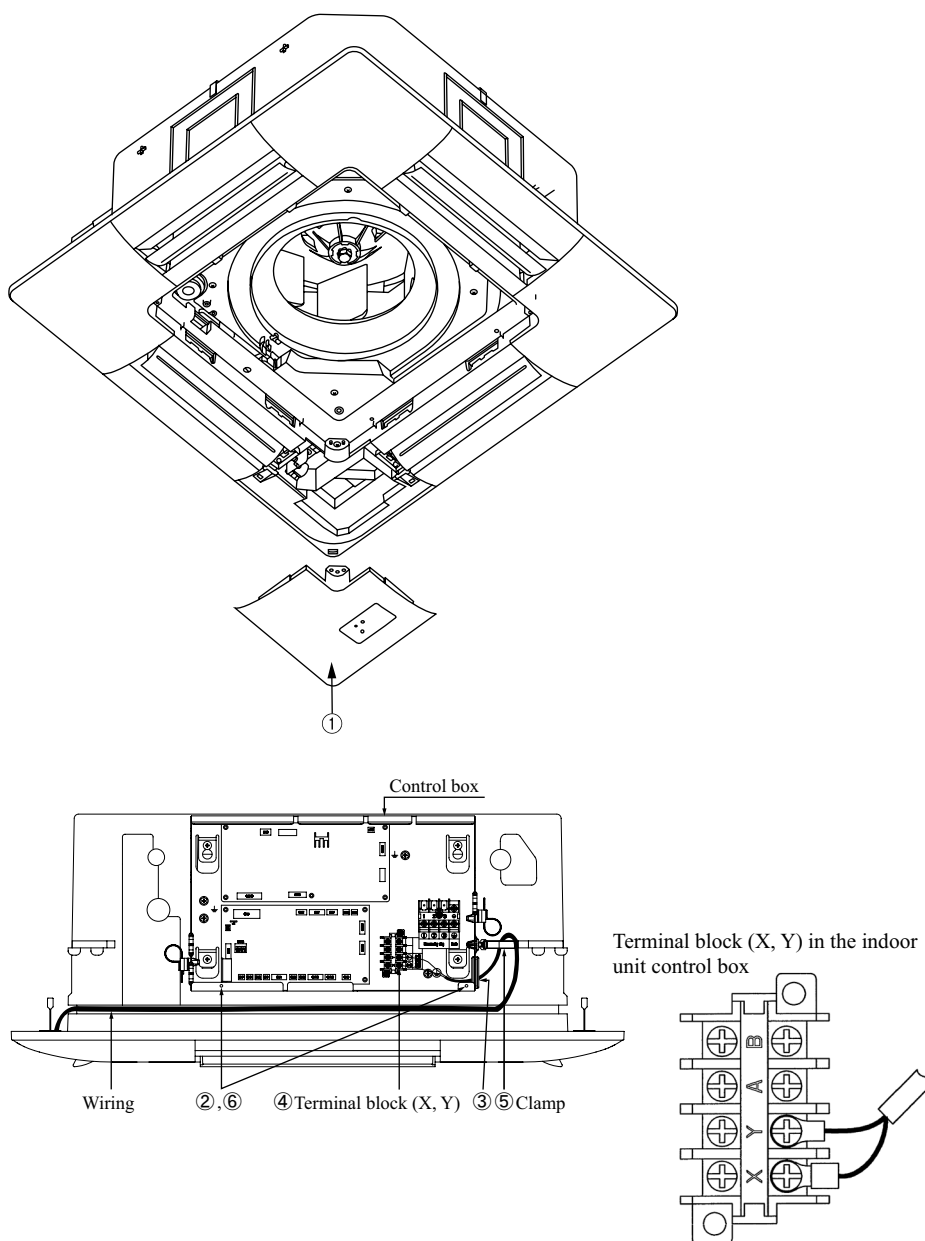


Radio interference prevention mode

### Installation of the receiver

- ① Attach the receiver to the panel according to the panel installation manual.
- ② Remove two screws and detach the lid from the control box.
- ③ Put the wiring in the control box with other wiring as shown below.
- ④ Connect the wiring to the terminal block (X, Y) provided in the control box. (Non- polarized)
- ⑤ Fix the wiring with the clamp as shown below.
- ⑥ Reattach the control box lid with 2 screws removed.

\* Note: Make sure wires not to be pinched by any other parts like panel and control box.



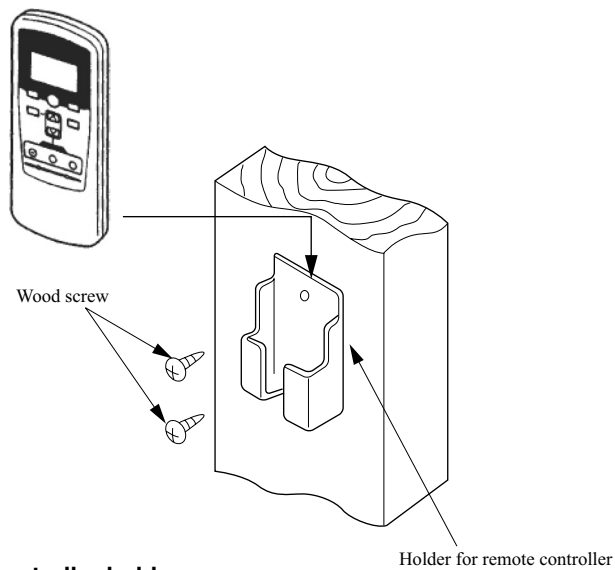
#### (4) Remote controller

##### Installation of the controller holder

###### Caution

DO NOT install it on the following places

1. Places exposed to direct sunlight
2. Places near heat devices
3. High humidity places
4. Hot surface or cold surface enough to generate condensation
5. Places exposed to oil mist or steam directly.
6. Uneven surface

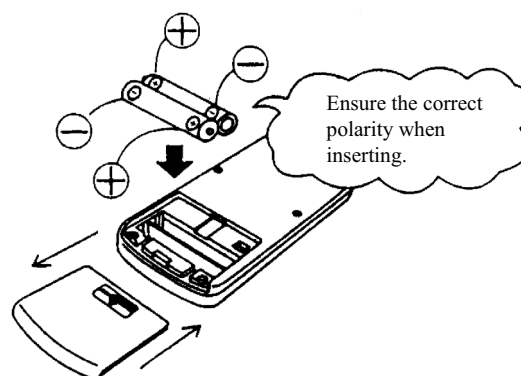


##### Installation tips for the remote controller holder

- Adjust and keep the holder upright
- Tighten the screw to the end to avoid scratching the remote controller.
- DO NOT attach the holder on plaster wall.

##### How to insert batteries

- ① Detach the back lid
- ② Insert the batteries. (two AAA batteries)
- ③ Reattach the back lid.



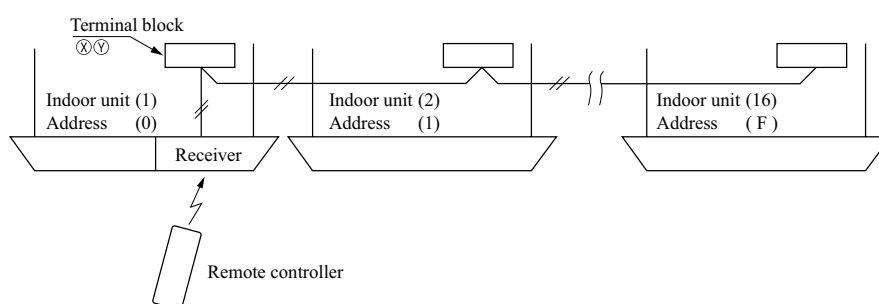
### Control plural indoor units with one remote controller

Up to 16 indoor units can be connected.

- ① Connect the XY terminal with 2-core wire. As for the size, refer to the following note.
- ② For signal packaged air conditioner series, set the indoor unit address with SW2 on the indoor unit PCB from [0] to [F] so as not to duplicate.

Restrictions on the thickness and length of wire  
(Maximum total extension 600m.)

Standard	Within 100m x 0.3 mm <sup>2</sup>
	Within 200m x 0.5 mm <sup>2</sup>
	Within 300m x 0.75mm <sup>2</sup>
	Within 400m x 1.25mm <sup>2</sup>
	Within 600m x 2.0 mm <sup>2</sup>



- ③ For VRF series, set the indoor unit address with SW1, SW2 and SW5-2 on the indoor unit PCB from [000] to [127] so as not to duplicate.

### Master/Slave setting when using plural remote controllers

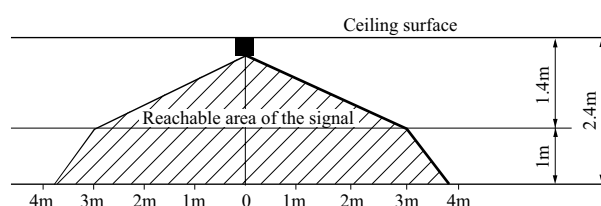
Up to two receivers can be installed in one indoor unit group.

When two receivers are used, it is necessary for a receiver to turn OFF SW2 on the receiver PCB to set it as slave.

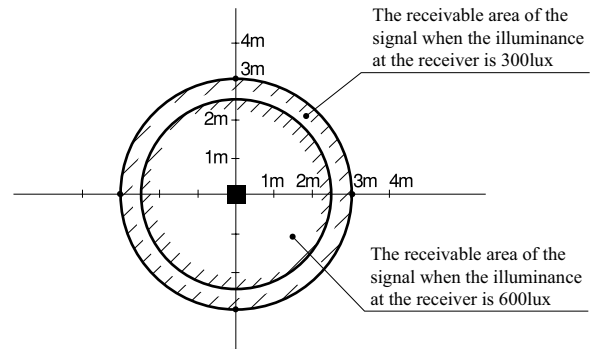
(For the method of switching, please see **Setting on site** in the section of **How to install the receiver** in this manual.)

### Wireless remote controller's operable area

- ① Standard reachable area of the signal  
[condition] Illuminance at the receiver: 300lux  
(when no lighting is installed within 1m of the receiver in an ordinary office.)



- ② Correlation between illuminance at the receiver and reachable area of the signal in a plain view. The drawing in the right shows the correlation between the reachable area of the signal and illuminance at the receiver when the remote controller is operated at 1m high under the condition of ceiling height of 2.4m.



- ③ Installation tips when several receivers are installed close Minimum distance between the indoor units which can avoid cross communication is 5m under the condition of 300lux of illuminance at the receiver.  
(When no lighting is installed within 1m of the receiver in an ordinary office )

#### (5) How to disable the Auto mode operation

VRF system (except heat recovery 3-pipe systems) cannot be operated in Auto mode.  
Make sure to set the remote controller for the models so as not to be able to choose Auto mode.

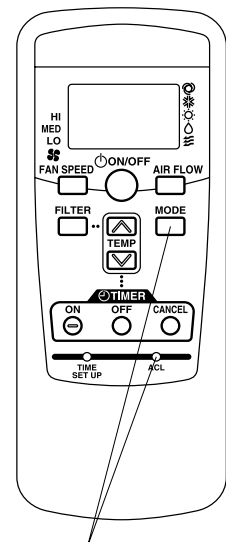
Pushing **ACL** switch with **MODE** button kept pressing or inserting the batteries with pressing **MODE** button will make auto mode operation.

#### Note

\* When the batteries are removed, the setting will return to the default setting (Auto mode is valid).

#### Caution

Instruct the customer to set the mentioned above when replacing the batteries.  
(How to set is also mentioned in the user's manual attached on the air conditioner.)

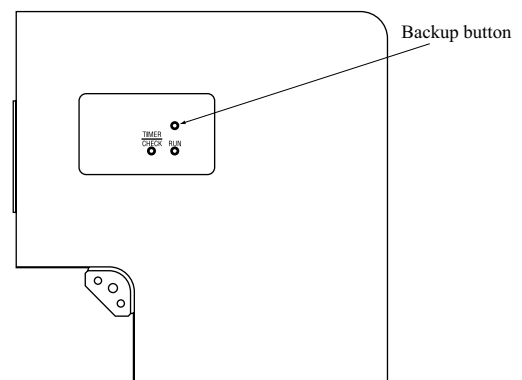


Auto mode operation setting

#### (6) Backup button

A Backup button is provided on the receiver. Even when the operation from the wireless remote controller is not possible (due to flat batteries, controller lost, or controller failure), still it possible to operate as temporary means. Press the button directly when operating it.

- The air conditioner starts the operation with the condition of Auto mode, 23°C of set point, High fan speed and horizontal louver position.
- The air conditioner stops the operation when the button is pressed when in operation.



**(7) Cooling test run operation**

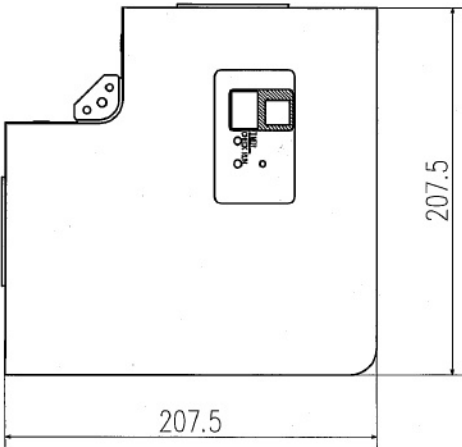
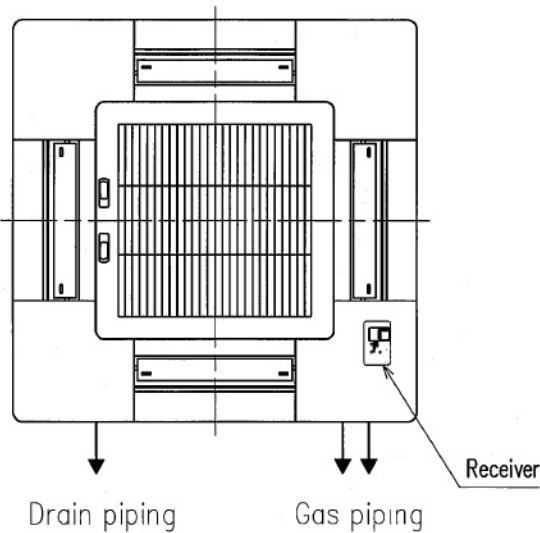
- After safety confirmation, turn on the power.
- Transmit a cooling operation command with wireless remote controller, while the backup button on the receiver is pressed.
- If the backup button on the receiver is pressed during a test run, it will end the test run.
- If you cannot operate the unit properly during a test run, please check by consulting with inspection guides on the wiring diagram of outdoor units.

**(8) How to read the two-digit display**

On the receiver of a wireless kit, a two-digit (7-segment) display is provided.

- (a) An indication will be displayed for one hour after power on.
- (b) An indication will be displayed for 3.5 seconds after transmitting a “STOP” command from the wireless remote controller or the operation of the backup button to stop the unit.
- (c) An indication appearing in (a) or (b) above will go off as soon as the unit starts operation.
- (d) When there are no error records to indicate, addresses of all the connected units are displayed.
- (e) When there are some error records remaining, the error records are displayed.
- (f) Error records can be cleared by transmitting a “STOP” command from the wireless remote controller, while the backup button is pressed.

Installation position of wireless kit

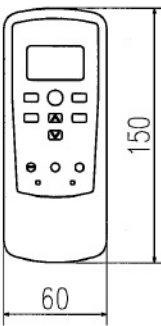


Receiver

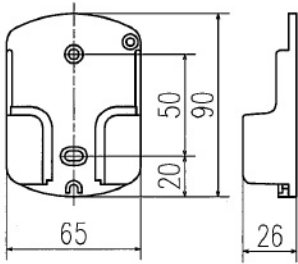
Setting switch on PCB of receiver

SW1	Customized signal setting to avoid mixed communication	ON: Normal	OFF: Remote
SW2	Receiver master/slave setting	ON: Master	OFF: Slave
SW3	Buzzer valid/invalid	ON: Valid	OFF: Invalid
SW4	Auto restart	ON: Valid	OFF: Invalid

Default setting : ☐ mark



Remote controller



Remote controller holder

Installation of wireless kit

DO NOT install the wireless kit at the following places in order to avoid malfunction.

- (1) Places exposed to direct sunlight
- (2) Places near heat devices
- (3) High humidity places
- (4) Hot surface or cold surface enough to generate condensation
- (5) Places exposed to oil mist or steam directly
- (6) Uneven surface
- (7) Places affected by the direct airflow of the AC unit.
- (8) Places where the receiver is influenced by the fluorescent lamp (especially inverter type) or sunlight.
- (9) Places where the receiver is affected by infrared rays of any other communication devices
- (10) Places where some object may obstruct the communication with the remote controller

- Note
- (1) Receiver can install the position as shown.
  - (2) Two R03 AAA dry cell batteries for remote controller are enclosed.
  - (3) See spec sheet of "Wireless remote controller" about remote controller.