

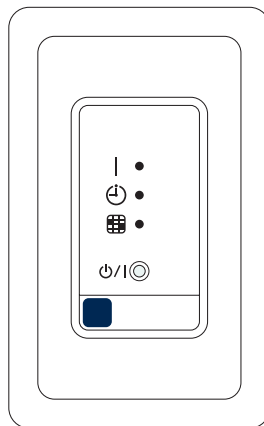
# VRF SYSTEM IR RECEIVER UNIT UTB-~~\*~~WB

English

中文

# INSTALLATION MANUAL

For authorized service personnel only.




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# 1. SAFETY PRECAUTIONS

- The "SAFETY PRECAUTIONS" indicated in this manual contain important information pertaining to your safety. Be sure to observe them.
- Details of the operation methods refer to the operating manual. Request the user to keep them on hand for future use, such as for relocating or repairing the unit.

 <b>WARNING</b>	This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.
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- Perform electrical work by an authorized service personnel in accordance with the installation manual and the electrical wiring regulations or implementation regulations of the country. Also do not install this unit by yourself. Improper electric work will cause electric shock or a fire.

- Perform installation work in accordance with the installation manual. Request an authorized service personnel to perform installation work. Do not install this unit by yourself. Improper installation will cause injury, electric shock, fire, etc.

- In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker, and consult authorized service personnel.


- Install a leakage circuit breaker to power supply cable in accordance with the related laws and regulations and electric company standards.

- Use a power source exclusively for this unit. Never share the power source with other electrical equipment. Doing so will cause fire and electric shock.

- Do not install the unit in the following areas:
- Do not install the unit near a source of heat, steam, or flammable gas.
  - Area filled with mineral oil or containing a large amount of splashed oil or steam, such as a kitchen. It will deteriorate plastic parts, causing the parts to fall or the unit to leak water.
  - Area that generates substances that adversely affect the equipment, such as sulfuric gas, chlorine gas, acid, or alkali. It will cause the copper pipes and brazed joints to corrode, which can cause refrigerant leakage.
  - Area containing equipment that generates electromagnetic interference. It will cause the control system to malfunction, preventing the unit from operating normally.
  - Area that can cause combustible gas to leak, contains suspended carbon fibers or flammable dust, or volatile inflammables such as paint thinner or gasoline. If gas leaks and settles around the unit, it can cause a fire.
  - Do not use the unit for special purposes, such as storing food, raising animals, growing plants, or preserving precision devices or art objects. It can degrade the quality of the preserved or stored objects.
  - Install the unit in a well-ventilated place avoiding rains and direct sunlight.

- Do not operate this unit when your hands are wet. Touching the unit with wet hands will cause an electric shock.

- If children may approach the unit, take preventive measures so that they cannot reach the unit.

 <b>CAUTION</b>	This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user or damage to property.
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- Pay abundant care when transporting this unit because it is a precision device. Improper transportation will cause trouble.




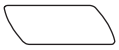




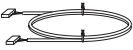


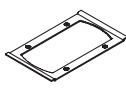

- Do not touch the switches with sharp objects. Doing so will cause injury, trouble, or electric shock.

- Do not expose this unit directly to water. Doing so will cause trouble, electric shock, or heating.


- Do not set vessels containing a liquid on this unit. Doing so will cause heating, fire, or electric shock.

- Dispose of the packing materials safely. Tear and dispose of the plastic packing bags so that children cannot play with them. There is the danger of suffocation if children play with the original plastic bags.

## 2. MAIN UNIT AND ACCESSORIES

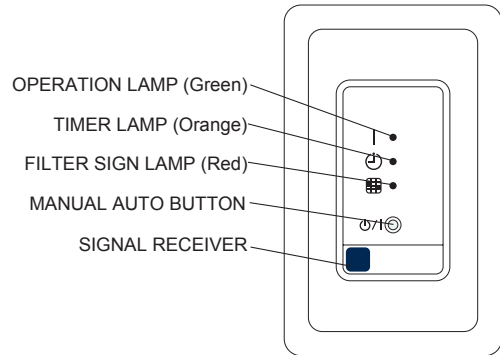
Description	Q'ty	Application
Installation manual 	1	This book
Receiver unit 	1	For receiving the signal from the wireless remote controller
Cover 	1	For receiver unit
Insulation 	1	For receiver unit
Binder 	Small 1	For receiver unit
	Medium 1	For receiver unit
Screw (M4 × 20mm) 	2	For installing receiver unit to wall, etc.
Screw (M4 × 12mm) 	1	For attaching the hook metal to the holder cover
Screw (M4 × 10mm) 	2	For attaching the hook metal to the indoor unit
Receiver unit cable A 	5m	For connecting PCB of indoor unit to receiver unit
Receiver unit cable B 	15cm	For connecting PCB of indoor unit to receiver unit
Hook metal 	1	For installing receiver unit to indoor unit
Bracket (cover) 	1	For receiver unit
Receiver unit cable D 	15cm	For connecting PCB of indoor unit to receiver unit

## 3. OPTIONAL PARTS

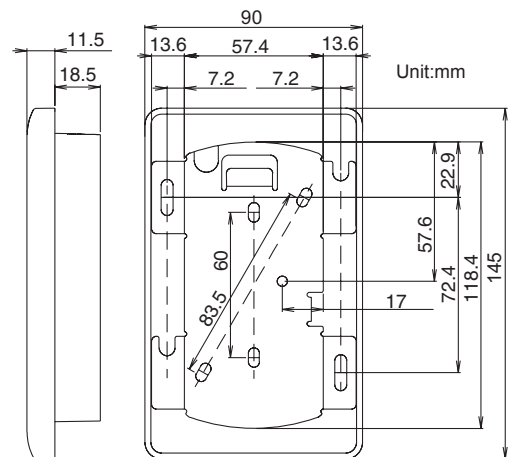
Description	Q'ty	Application	Part No.	Model
Receiver unit cable C 	10m	For extending the receiver unit cable	9378143012	UTB-YWB
			9378143036	UTB-TWB

## 4. FUNCTIONS AND DIMENSIONS

### Functions



### Dimensions

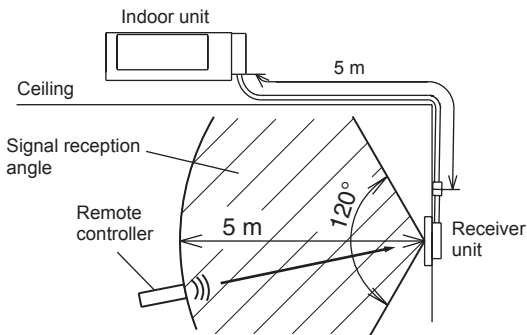


## 5. SELECTING THE INSTALLATION LOCATION

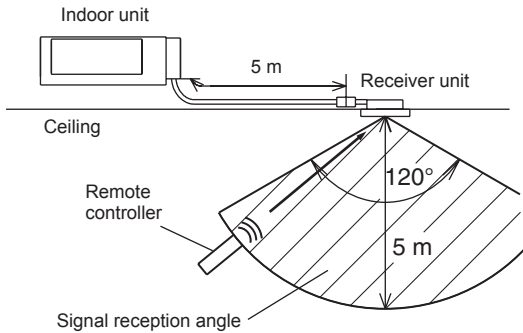
Consult the user and determine the installation location according to the following:

- (1) The receiver unit wiring can be extended up to 10 m. (To extend the wiring, purchase the optional receiver unit cable C.)
- (2) The signal reception angle of the receiver unit is shown in the following figures.
- (3) Do not install the receiver unit near a fluorescent light. (The unit must be at least 1 m away from a light source.)
- (4) Do not install the receiver unit where it will be exposed to direct sunlight.
- (5) Do not install the receiver unit where it will be exposed directly to the airflow from the indoor unit.

Ex. Installation on the wall



Ex. Installation on the ceiling



If the wiring length is 10 m, replace with receiver unit cable C (optional parts).

Receiver unit cable A (5m).

## 6. INSTALLING THE RECEIVER UNIT

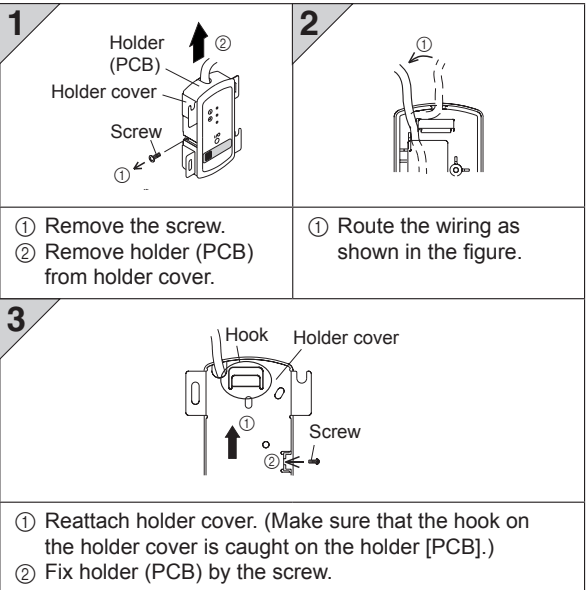
<b>⚠ WARNING</b>
<ul style="list-style-type: none"> <li>Always use the accessories and specified installation work parts. Check the state of the installation parts. Not using the specified parts will cause units to fall off, water leakage, electric shock, fire, etc.</li> <li>Install at a place that can withstand the weight of the unit and install positively so that the unit will not topple or fall.</li> <li>When installing this unit, make sure that there are no children nearby. Otherwise, injury or electric shock could result.</li> <li>After installing this unit, perform the test run to confirm that the unit is operating properly. Then, explain the operation of this unit to the customer.</li> <li>Install a circuit breaker. Otherwise, electric shock or fire could result.</li> </ul>

<b>⚠ CAUTION</b>
<ul style="list-style-type: none"> <li>Do not set the DIP switch or rotary switch of this unit except as specified in this installation manual or the instruction manual supplied with the air conditioner. Setting the switches other than specified will cause an accident or trouble.</li> <li>Before opening the case of this unit, completely discharge static electricity charged on your body. Not doing so will cause trouble.</li> </ul>

- Do not touch the circuit board and circuit board parts directly with your hands. Otherwise, injury or electric shock could result.
- Tightening the mounting screws too tight will damage the case of this unit.

### 6.1. Select the wiring method

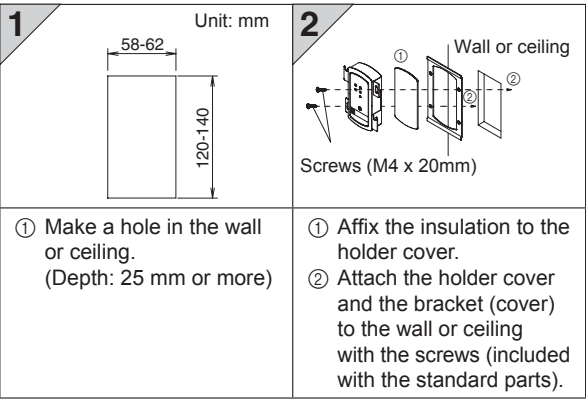
- Method 1** From the top of the receiver unit: No additional work is necessary.
- Method 2** From behind the receiver unit: Perform the following procedure to route the wiring behind the receiver unit.



### 6.2. Select the installation method

- Method 1** Receiver unit embedded in a wall or ceiling: Refer to "I. Embedding the receiver unit."
- Method 2** Receiver unit attached to a wall or ceiling: Refer to "II. Attaching the receiver unit."
- Method 3** Receiver unit cannot be imbedded in or attached to a wall or ceiling: Refer to "III. Attaching the receiver unit to the indoor unit."

I. Embedding the receiver unit



**3**

① Install the cover.  
Hook the 2 projections on the top of the cover onto the bracket (cover), and then hook the projection on the bottom of the cover onto the bracket (cover).

② Make sure that there is no gap between the cover and the wall or ceiling.

**3**

① Affix the insulation to the holder cover.

② Attach the hook metal to the holder cover with the screw (included with the standard parts).

**4**

① Attach the hook metal to the indoor unit with the screw(s).

## II. Attaching the receiver unit

**1**

① Remove the screw.  
② Remove holder (PCB) from holder cover.

**2**

① Cut the projections in the areas indicated with a ○ and remove them. (Be careful not to injure yourself on the cut edges of the holder cover.)

**3**

① Affix the insulation to the holder cover.  
② Attach the holder cover to the wall or ceiling with the screws (included with the standard parts).

**4**

① Reattach holder cover. (Make sure that the hook on the holder cover is caught on the holder [PCB].)  
② Fix holder (PCB) by the screw.

## III. Attaching the receiver unit to the indoor unit (EXAMPLE AR07-18)

**1**

① Remove the screw.  
② Remove holder (PCB) from holder cover.

**2**

① Cut the projections in the areas indicated with a ○ and remove them. (Be careful not to injure yourself on the cut edges of the holder cover.)

## 7. WIRING

### ⚠ WARNING

- Before starting installation work, turn off the power of this unit and the connection destination. Do not turn on the power again until installation is completed. Otherwise, it will cause electric shock or fire.
- Use the accessories or specified power cable and connection cables. Do not modify power cable and connection cables other than those specified, do not use extension cables, and do not use independent branch wiring. The allowable current will be exceeded and cause electric shock or fire.
- Install the connection cables securely to the terminal board. Confirm that external force is not applied to the cable. Use connection cables made of the specified cable. If intermediate connection or insertion fixing are imperfect, it will cause electric shock, fire, etc.
- When connecting the power cable and communication cable, layout the wiring so that the cover of this unit is securely fixed. If the cover is imperfectly fixed, it may cause fire or overheating of the terminals.
- Perform ground work positively. Do not connect the ground cable to a telephone ground cable, water pipe, or conductor rod.
- Always fasten the outside covering of the connection cable with the cable clamp. (If the insulator is chafed, electric leakage may occur.)
- When performing cable wiring work, be sure that it does not touch the user. Doing so will cause injury or electric shock.
- If any cable is damaged, do not repair or modify it yourself. Improper work will cause electric shock or fire.

**⚠ CAUTION**

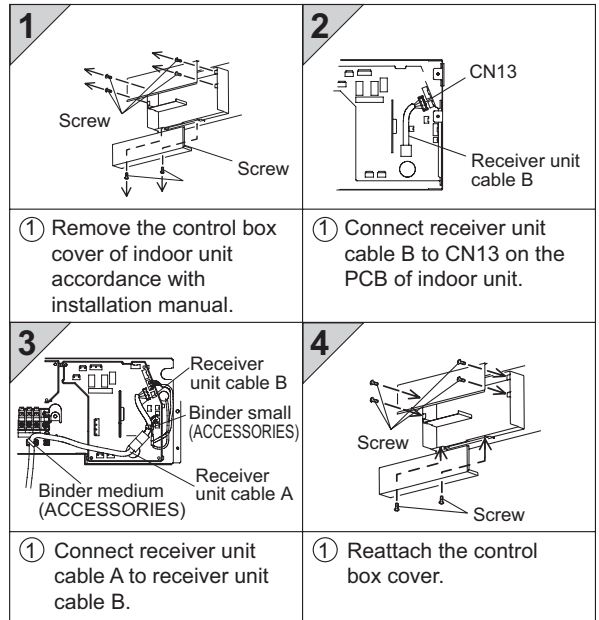
- Do not bind up the power cable together with the transmission cable or remote controller cable. It will cause erroneous operation.
- When performing wiring work, be careful not to damage the cable or injure yourself. Also, connect the connectors securely. Loose connectors will cause trouble, heating, fire, or electric shock.
- Install the indoor and outdoor units, power cable, signal cable and remote control cable 1 m away from television and radio to avoid distorted images and noise.
- Perform wiring so that water does not enter this unit along the external wiring. Always install a trap to the wiring or take other countermeasures. Otherwise it will cause trouble or electric shock or fire.
- Confirm the name of each unit and name of each terminal board of the unit and connect the wiring in accordance with the directions given in the manual so that there is no incorrect wiring. Incorrect wiring will damage the electric parts and cause smoke and fire.
- When installing the connection cables near a source of electromagnetic waves, use shielded cable. Otherwise, a breakdown or malfunction could result.
- The terminal screws and ground screws have different shapes. Be sure to install the screws in the correct locations. If the screws are installed in the wrong locations, the circuit board could be damaged.

To remove the control box cover, refer to the installation manual of the indoor unit.

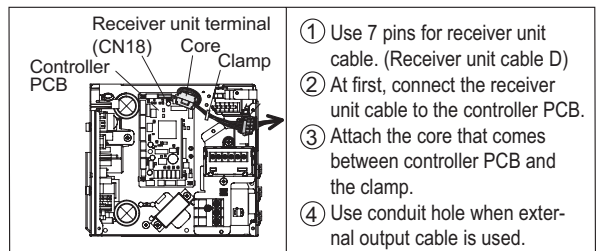
Connect receiver unit cable B to CN13 on the PCB. Route the receiver unit cable using the same method for the remote controller cables as described in the installation manual of the indoor unit.

Fasten the receiver unit medium binder (included with the standard parts), which is used for clamping cables, on the insulating tube. Fasten the EMI filter of receiver unit cable B to the surrounding cables with the small binder (included with the standard parts) so that it does not contact other electrical parts.

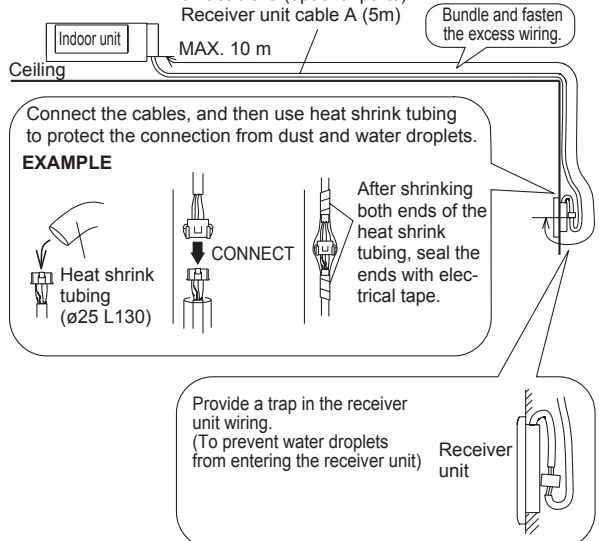
EXAMPLE : Compact Duct



EXAMPLE : Slim Duct



If the wiring length is 10 m, replace with receiver unit cable C (optional parts).  
Receiver unit cable A (5m)



## 8. TURNING ON THE POWER

### ⚠ CAUTION

- Before turning on the power, check that the voltage is within the rated range. If operated outside the rated range, erroneous operation cannot be prevented and cannot be compensated.

- (1) Turn on the circuit breakers for the indoor unit and outdoor unit.
- (2) Make sure that the operation lamp and timer lamp are slowly flashing alternately.
  - If the auto restart function has been set, the air conditioner will operate with the settings immediately before the power supply was turned off.
  - If an error has occurred, the lamps on the receiver unit will flash quickly to indicate the error code.

## 9. ERROR CODE DISPLAY

Error display			Error content
OPERATION LAMP	TIMER LAMP	FILTER SIGN LAMP	
-	-	-	No error
● (1)	● (2)	◇	Remote controller communication error
● (1)	● (3)	◇	Communication error between Outdoor unit
● (1)	● (4)	◇	Network communication error
● (1)	● (5)	◇	Scan error
● (1)	● (6)	◇	Peripheral device communication error
● (2)	● (1)	◇	Initial setting error
● (2)	● (6)	◇	Address setting error
● (2)	● (8)	◇	Other setting error
● (3)	● (1)	◇	Indoor unit power supply abnormal
● (3)	● (2)	◇	Indoor unit main PCB error
● (3)	● (5)	◇	Manual auto switch error
● (3)	● (7)	◇	Indoor unit transmission PCB error
● (3)	● (8)	◇	Network convertor PCB error
● (4)	● (1)	◇	Room temp. sensor error
● (4)	● (2)	◇	Indoor unit Heat Ex. sensor error
● (5)	● (1)	◇	Indoor unit fan motor error
● (9)	● (15)	◇	Outdoor unit error

Display Method ◇ : 0.1 sec. ON / 0.1 sec. OFF flashing  
 ● : 0.5 sec. ON / 0.5 sec. OFF flashing  
 ( ) : Flashing times

OPERATING LAMP and TIMER LAMP will blink alternately.

