

AIR CONDITIONER OPTIONAL PARTS IR RECEIVER UNIT

PART NO. 9374584055-04

INSTALLATION MANUAL

For authorized service personnel only.


UTB-YWC


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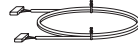





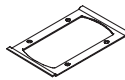



1. SAFETY PRECAUTIONS

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

 WARNING	This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.
Perform installation work in accordance with this manual. Request an authorized service personnel to perform installation work. Improper installation work will cause injury, electric shock, fire, etc.	
Perform electrical work by an authorized service personnel in accordance with this manual and the electrical wiring regulations or implementation regulations of the country. Improper electric work will cause electric shock or a fire.	
In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker, and consult authorized service personnel. Improper electric work will cause electric shock or a fire.	
Do not install the unit in the following areas: <ul style="list-style-type: none"> • Do not install the unit near a source of heat, steam, or flammable gas. Otherwise, fire could result. • 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 containing equipment that generates electromagnetic interference. It will cause the control system to malfunction, preventing the unit from operating normally. • 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.	
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.	

 CAUTION	This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user or damage to property.
Do not touch the switches with sharp objects. It will cause injury, trouble, or electrical shock.	
Do not expose this unit directly to water. It will cause trouble, electrical shock, or heating.	
Do not set vessels containing a liquid on this unit. It will cause heating, fire, or electrical shock.	

2. MAIN UNIT AND ACCESSORIES

Name and Shape	Q'ty	Name and Shape	Q'ty
Installation manual 	1	IR receiver unit 	1
Cover 	1	Insulation 	1
IR receiver unit cable A 5 m (16 ft. 4 in.) 	1	Cable tie (Medium) 	1
IR receiver unit cable B 15 cm (5-7/8 in.) 	1	Cable tie (Small) 	1
Hook metal 	1	Screw (M4 × 20 mm) 	2
Bracket (cover) 	1	Screw (M4 × 12 mm) 	1
IR receiver unit cable D 15 cm (5-7/8 in.) 	1	Screw (M4 × 10 mm) 	2

English

Deutsch

Français

Español

Italiano

Ελληνικά

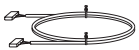
Português

Русский

Türkçe

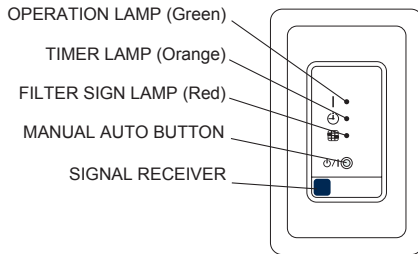
中文

3. OPTIONAL PARTS

Description	Q'ty	Application	Part No.	Model
IR receiver unit cable C 10 m (32 ft. 9 in.) 	1	For extending the IR receiver unit cable	9378143012	UTB-YWC
			9378143036	UTB-TWC

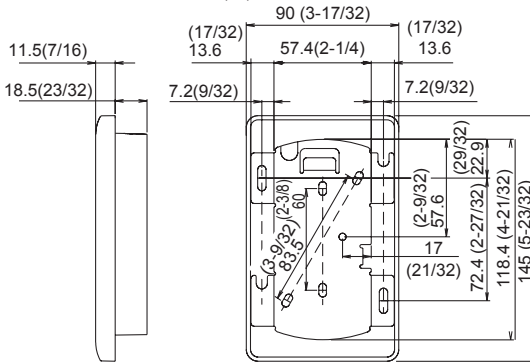
4. FUNCTIONS AND DIMENSIONS

Functions



Dimensions

Unit: mm (in.)

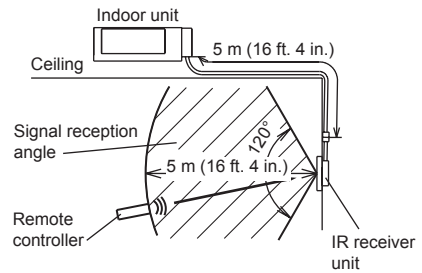


5. SELECTING THE INSTALLATION LOCATION

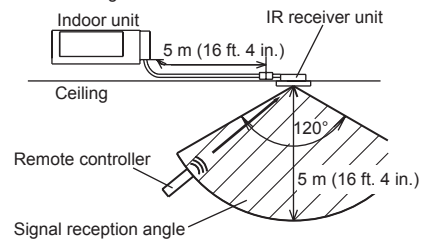
Consult the user and determine the installation location according to the following:

- (1) The IR receiver unit wiring can be extended up to 10 m (32 ft. 9 in.) (To extend the wiring, purchase the optional IR receiver unit cable C.)
- (2) The signal reception angle of the IR receiver unit is shown in the following figures.
- (3) Do not install the IR receiver unit near a fluorescent light. (The unit must be at least 1 m (40 in.) away from a light source.)
- (4) Do not install the IR receiver unit where it will be exposed to direct sunlight.
- (5) Do not install the IR 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



6. INSTALLING THE IR RECEIVER UNIT

⚠ WARNING

Always use the accessories and specified installation work parts. Not using the specified parts will cause units to fall off, electric shock, fire, etc.

Install at a place that can withstand the weight of the unit and install positively so that the unit will not topple or fall.

During installation work, do not permit children or users to approach. It will cause injury or electric shock.

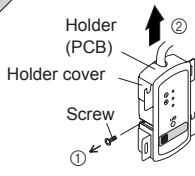

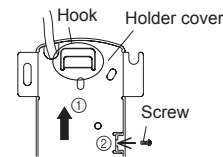
⚠ CAUTION


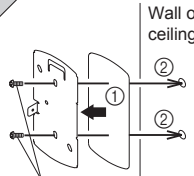
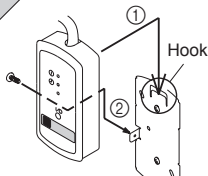
Do not touch the PC board and PC board parts directly with your hands. Otherwise, injury or electric shock could result.

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

<p>1</p>  <p>Holder (PCB) Holder cover Screw</p>	<p>2</p> 
<p>① Remove the screw. ② Remove holder (PCB) from holder cover.</p>	<p>① Route the wiring as shown in the figure.</p>
<p>3</p>  <p>Hook Holder cover Screw</p>	
<p>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.</p>	

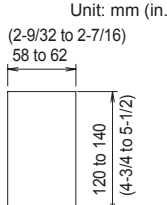
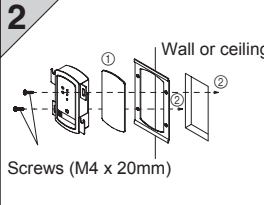
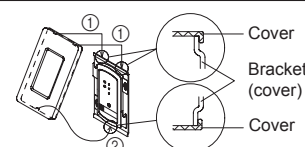
<p>① Remove the screw. ② Remove holder (PCB) from holder cover.</p>	<p>① Cut the projections in the areas indicated with a  and remove them. (Be careful not to injure yourself on the cut edges of the holder cover.)</p>
<p>3</p>  <p>Wall or ceiling Screws (M4 x 20mm)</p>	<p>4</p>  <p>Hook</p>
<p>① Affix the insulation to the holder cover. ② Attach the holder cover to the wall or ceiling with the screws (included with the standard parts).</p>	<p>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.</p>

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

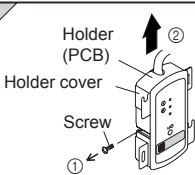
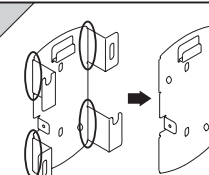
6.2. Select the installation method

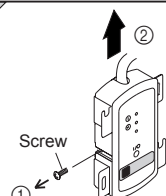
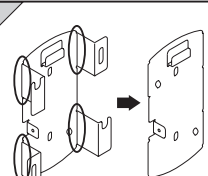

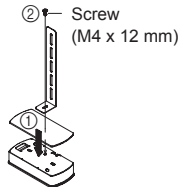
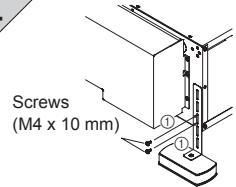
- Method 1 IR receiver unit embedded in a wall or ceiling:
Refer to "I. Embedding the IR receiver unit."
- Method 2 IR receiver unit attached to a wall or ceiling:
Refer to "II. Attaching the IR receiver unit."
- Method 3 IR receiver unit cannot be imbedded in or attached to a wall or ceiling: Refer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

I. Embedding the IR receiver unit

<p>1</p> <p>Unit: mm (in.) (2-9/32 to 2-7/16) 58 to 62</p>  <p>120 to 140 (4-3/4 to 5-1/2)</p>	<p>2</p>  <p>Wall or ceiling Screws (M4 x 20mm)</p>
<p>① Make a hole in the wall or ceiling. (Depth: 25 mm (1 in.) or more)</p>	<p>① Affix the insulation to the holder cover. ② Attach the holder cover and the bracket (cover) to the wall or ceiling with the screws (included with the standard parts).</p>
<p>3</p>  <p>Cover Bracket (cover) Cover</p>	
<p>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.</p>	

II. Attaching the IR receiver unit

<p>1</p>  <p>Holder (PCB) Holder cover Screw</p>	<p>2</p> 
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<p>1</p>  <p>Screw</p>	<p>2</p> 
<p>① Remove the screw. ② Remove holder (PCB) from holder cover.</p>	<p>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.)</p>
<p>3</p>  <p>Screw (M4 x 12 mm)</p>	<p>4</p>  <p>Screws (M4 x 10 mm)</p>
<p>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).</p>	<p>① Attach the hook metal to the indoor unit with the screw(s).</p>

7. WIRING

⚠ WARNING

Before starting installation work, turn off the power of indoor unit power supply. 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 supply cable and connection cables. Do not modify power supply 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.

Always fasten the outside covering of the connection cable with the cable tie. If the insulator is loose, short circuit may occur.

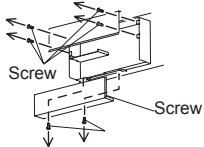
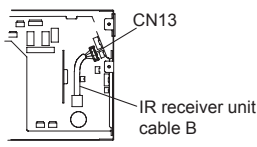
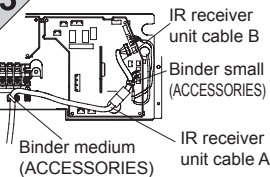
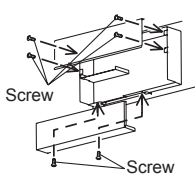
When performing cable wiring work, be sure that it does not touch the user. It will cause injury or electric shock.

If any cable is damaged, do not repair or modify it yourself. Improper work will cause electric shock or fire.

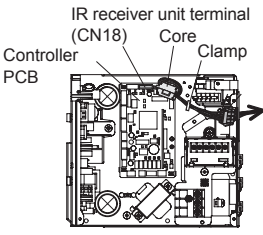
⚠ CAUTION
Do not bind up the power supply cable together with the connection cable. It will cause erroneous operation.
When performing wiring work, be careful not to damage the cable or injure yourself. Also, connect the connectors securely. Loose connectors will cause trouble, heating, fire, or electric shock.
Install the connection cables 1m (40 in.) 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 terminal block of the unit and connect the wiring in accordance with the directions given in the manual so that there is no incorrect wiring. Improper wiring work will damage the electric parts and cause smoke and fire.

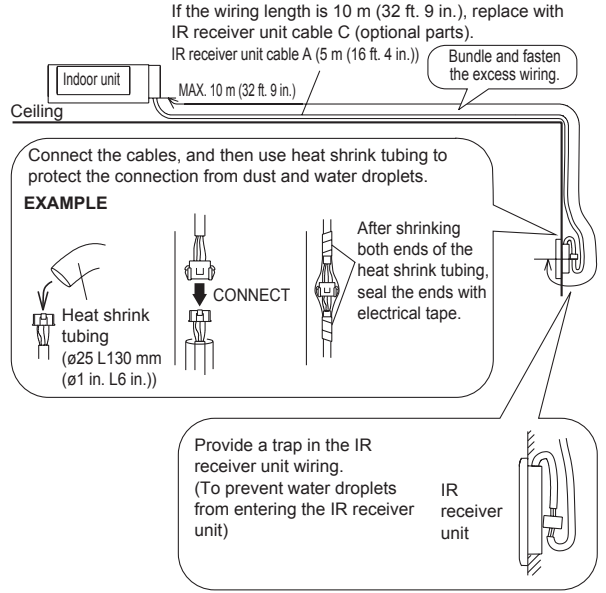
To remove the control box cover, refer to the installation manual of the indoor unit.
 Connect IR receiver unit cable B to CN13 on the PCB.
 Route the IR receiver unit cable using the same method for the remote controller cables as described in the installation manual of the indoor unit. Fasten the IR receiver unit medium binder (included with the standard parts), which is used for clamping cables, on the insulating tube. Fasten the EMI filter of IR 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

1		2	
① Remove the control box cover of indoor unit accordance with installation manual.		① Connect IR receiver unit cable B to CN13 on the PCB of indoor unit.	
3		4	
① Connect IR receiver unit cable A to IR receiver unit cable B.		① Reattach the control box cover.	

EXAMPLE : Slim Duct

	<p>① Use 7 pins for IR receiver unit cable. (IR receiver unit cable D)</p> <p>② At first, connect the IR receiver unit cable to the controller PCB.</p> <p>③ Attach the core that comes between controller PCB and the clamp.</p> <p>④ Use conduit hole when external output cable is used.</p>
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8. TURNING ON THE POWER

- Turn on the circuit breakers for the indoor unit and outdoor unit.
- 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 IR receiver unit will flash quickly to indicate the error code.

9. ERROR CODE

Error indicator			Error content
OPERATION LAMP	TIMER LAMP	FILTER SIGN LAMP	
● (1)	● (2)	◇	Remote controller communication error
● (1)	● (4)	◇	Network communication error
● (1)	● (6)	◇	Peripheral device communication error
● (2)	● (6)	◇	Address setting error
● (2)	● (9)	◇	Connection unit number error in wired remote controller system
● (3)	● (1)	◇	Indoor unit power supply abnormal
● (3)	● (2)	◇	Indoor unit main PCB error
● (3)	● (10)	◇	Indoor unit communication circuit (wired remote controller) error
● (4)	● (1)	◇	Room temp. sensor error
● (4)	● (2)	◇	Indoor unit Heat Ex. sensor error
● (5)	● (1)	◇	Indoor unit fan motor1 error
● (5)	● (2)	◇	Coil (Expansion value) error
● (5)	● (3)	◇	Water Drain Abnormal
● (9)	● (15)	◇	Outdoor unit error
● (13)	● (1)	◇	RB unit error

Display mode ● : 0.5s ON / 0.5s OFF

◇ : 0.1s ON / 0.1s OFF

() : Number of flashing

OPERATING LAMP and TIMER LAMP will blink alternately.