TOSHIBA
Carrier

**Used by installation personnel —
Electrical operation and maintenance**

**Model:
RBC-ASCU11-UL
Compact wired remote controller
Installation Manual**

[English] Installation manual and Owner's manual Download /
[Español] Descarga del Manual de instalación y del Manual del propietario /
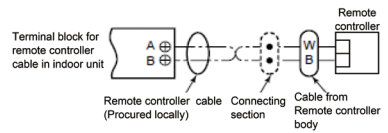[Français] Téléchargement du manuel d'installation et du manuel du propriétaire
https://www.toshiba-carrier.co.jp/global/manual/rbc-ascu11-ul.htm

Packaging list

No.	Appendix Name	Quantity	No.	Appendix Name	Quantity
1	Compact remote controller	1	4	Installation Manual	1
2	Screw 0.16"×0.98" (M4×25mm)	2	5	Owner's Manual	1
3	Wood screw	2	6	Wire terminal	2
			7	Plastic stud	2

Requirements of remote controller installation site

Do not install the remote controller in a place exposed to sunlight or outside air (near a window or the like).

The temperature sensor is embedded both in the remote controller and the indoor unit. Switch between them for use.

(When delivery, the indoor unit temperature sensor is used by default.)

When switching to the remote controller temperature sensor, please follow the instructions below to ensure that the sensor can detect the average room temperature. If not, it is recommended to use the sensor in the indoor unit.

- Install the remote controller at a place 3.3 - 4.9ft (1-1.5 meters) above the ground.
- Do not install the remote controller behind any obstacles where it cannot detect the room temperature.
- Install the remote controller only in a room that uses air conditioner.
- Install the remote controller vertically on the wall or the like.
- Do not install the remote controller at a place where it will be exposed to the direct discharge air from the air conditioner.
- Do not install the remote controller on the wall whose temperature greatly differs from room temperature.

How to wire the remote controller
■ Wiring Diagrams

Since the remote controller cable has no polarity, that's ok if the indoor unit's terminal A and terminal B are inversely connected

Terminal block for remote controller cable in indoor unit
A ⊕
B ⊕
Remote controller cable (Procured locally)
Connecting section
Cable from Remote controller body
Remote controller
W
B

- Use non-polarity 2-core cable.
- Use AWG20 - AWG16 (0.5mm^2-1.5mm^2) cable.

W：White
B：Black

Cable connection

Please use the attached wire connector to connect the remote controller cable to the indoor unit terminal board cable.

If crimping tools are not available, please use other reliable methods for connection. Do not only use the insulating tape to connect; otherwise it can be dangerous.

How to install the remote controller

■ Install the remote controller on the wall

Wall
Rear case
Remote controller body
2.36in (60mm)
Wiring slot
Screws
0.16"×0.98"
(M4×25mm)
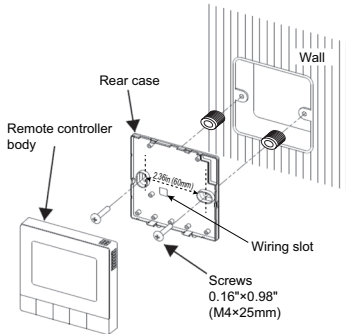
1. Insert a slot-type screwdriver or the like into the groove on the lower side of the remote controller body, and twist it to remove the rear cover.

2. Cut the plastic stud in the accessory to a suitable length for filling the gap between the rear cover of the remote controller and the studs of the bottom case, and then use the M4 screws in the accessory to fix the rear cover to the bottom case through the stud.

   Note 1: Do not tighten the screws too tightly, otherwise the rear cover will deform.

   Note 2: When using studs to fill the gap, make sure that the rear cover height is uniform to prevent deformation.

3. Connect the remote controller cable (2-core) to the cable of the remote controller body. Confirm the terminal number of indoor unit and connect the remote controller cable correctly. (The remote controller may be damaged if connecting the power supply of indoor unit.)

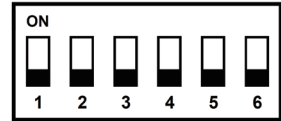4. Hang the remote controller body to the hook on the rear cover and fix it in place.

   Note 3: Allow at least 1.2in (30 mm) of space around the remote control.

DIP switch setup

The dial switch is located on the circuit board of remote controller. When switching, remove the rear cover. But be sure to turn off the air conditioner power first.

(Factory default)

DIP switch

ON
1 2 3 4 5 6

DIP switch	1	2	3	4	5	6
Setting item	Main remote controller / Sub remote controller	Backlight	Temperature setting	Remote controller sensor	On/Off button	Operation indicator lamp
On	Sub remote controller	Off	2°F	On	Long press	Dim
Off	Main remote controller	On	1°F	Off	Short press	Bright

■ Main remote controller /Sub remote controller: 1

Use DIP switch 1 to set the main/sub remote controller.

To use the remote controller as a sub remote controller, slide the switch to the ON position. To use the remote controller as a main remote controller, slide the switch to the OFF position.

* For details, please refer to "**Multiple Remote Controller Installation Requirements**."

■ Turn off LCD backlight: 2

Use DIP switch 2 to turn off the LCD backlight. Turn off the backlight when the switch is turned on, and turn on when the switch is turned off.

■ Temperature setting as unit of 2°F: 3

You can use DIP switch 3 to change the display unit of temperature setting.

The unit is set to 2°F when the switch is turned on, and the unit is set to 1°F when the switch is turned off.

■ Remote controller sensor: 4

Use DIP switch 4 to set the remote controller sensor. If to use the temperature sensor of the remote controller, slide the switch to the ON position.

If to use the temperature sensor of indoor unit, slide the switch to the OFF position.

* For detailed information, please see "**Switching Temperature Sensor**."

■ On/Off button setting: 5

Use DIP switch 5 to change the operation mode of ON/OFF button to long press (approx. 4 seconds or more).

It is set to long press when the switch is turned on, and it is set to normal (short press) when the switch is turned off.

■ Operation indicator lamp: 6

Use DIP switch 6 to reduce brightness of the operation indicator lamp of the remote controller.

Set the lamp to be dim when the switch is turned on and bright when the switch is turned off.

Multiple remote controller installation requirements

In a dual remote controller system, one or more units are operated by multiple remote controller.

■ How to install

For a dual remote controller system, install the remote controller as follows:

1. Set one of the remote controllers as the main remote controller. (The default setting is "Main Remote Controller.")

2. Slide the DIP switch 1 on the remote control ler circuit board to the ON position to set the other remote controller as the sub remote controller.
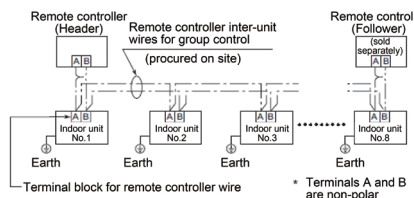
■ Basic circuit diagram

- Use the remote controllers installed in two different locations to operate the same indoor unit.
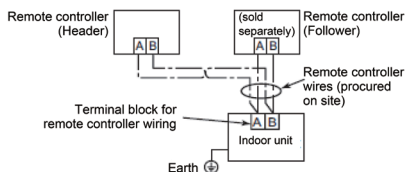
- Use the remote controllers installed in two different locations to centrally control multiple indoor units.

* The main remote controller and sub remote controller both can work in case of connecting to any indoor unit.

- Standard wiring limitation (DIP switch 6: off)

Wiring type	RVV: AWG20 - AWG16 (0.5mm² - 1.5 mm²) ×2		
Total length of remote control wiring and inter-wiring between remote controllers (L0+L1+L2+...Ln)	Only one remote controller is furnished.	Two remote controllers are furnished (set master and slave controllers).	Two remote controllers, including one wire remote controller.
	No more than 1640ft (500m)		No more than 1310ft (400m)
Total length of inter-wiring between remote controllers (L1+L2+...Ln)	No more than 660ft (200m)		
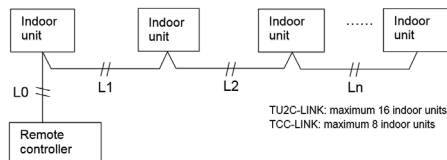
- Wiring limitation after brightness reduction setting (DIP switch 6: on)

Wiring type	RVV: AWG20 - AWG16 (0.5mm² - 1.5mm²) ×2		
Equivalent wiring length between remote controller and indoor unit (Leq)	No more than 490ft (150m) $Leq=\sum_0^x \leq 490ft (x \leq n , x \in N)$		
Total length of remote control wiring and inter-wiring between remote controllers (L0+L1+L2+...Ln)	Only one remote controller is furnished and brightness reduction is set.	Two remote controllers are furnished (set master and slave controllers), and one with brightness reduction setting.	Two remote controllers, including one wire remote controller, and one with brightness reduction setting.
	No more than 1150ft (350m)		
Total length of inter-wiring between remote controllers (L1+L2+...Ln)	No more than 660ft (200m)		

The remote controller is directly connected to master indoor unit (most common mode) (Leq=L0).
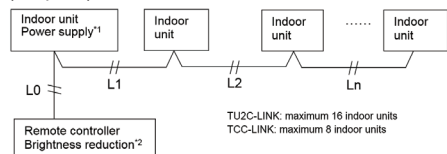
In this case,

1. The wiring between the remote controller and master unit is no more than 490ft (L0≤490ft),

2. The sum of wiring among indoor units is no more than 660ft (L1+L2+…+Ln≤660ft).

Switching of temperature sensor

Both the remote controller and the indoor unit have built-in temperature sensors, and the two sensors cannot work at the same time.

The temperature sensor in the indoor unit is the default sensor.

If to switch to the temperature sensor in the remote controller, slide dial switch 4 on the remote controller circuit board to the ON position.

Note 1: On the main remote controller, you can switch to the sensor in the remote controller. (If the remote controller is a sub remote controller, it is unable to switch.)

Note 2: When using a separately sold remote controller sensor, set the sensor inside the remote controller to OFF.

Requirements

When using the remote controller for the first time, the initial operation after power on will last for a while. This is not a fault.
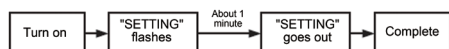<Initial turn on time>
Let the remote controller run for **about 5 minutes.**

| Turn on | → | "SETTING" flashes | About 5 minutes → | "SETTING" goes out | → | Complete |
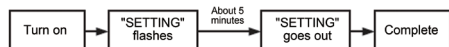
<Turn on time after the second turn on>
Let the remote controller run for **about 1 minute.**

| Turn on | → | "SETTING" flashes | About 1 minute → | "SETTING" goes out | → | Complete |

The address setting of the multi-split air conditioners cannot be completed just by turning on the power ("SETTING" always flashes). You must perform the operation on the outdoor interface circuit board to complete the address setting. The remote controller cannot be operated when setting the address. It takes at most 10 minutes to set the address.

Remote controller test run setup

1. Press the ON/OFF button.
   Turn off the air conditioner.

2. Press the timer off button and the " △ " set button at the same time for at least 10 seconds. The LCD display area shows "TEST" and becomes test mode.

3. The test run shall be performed in heating or cooling mode.

   • During test run, "TEST" is displayed on the LCD display.

   • When "TEST" is displayed, the temperature cannot be adjusted.

   • During test run, the machine will bear a considerable load; therefore, it is advisable not to carry out a test run unless necessary.

Note 1: After power up, the outdoor unit will not work within about 3 minutes; otherwise the operation will stop.

4. After exiting the test run mode, press the timer off button again to ensure that "TEST" on the LCD display disappears.(The remote controller has a 60-minute timer off function to prevent continuous test run.)

Remote controller DN setting

1. Press the On/Off button to shut down the air conditioner.

2. Hold down the menu button and the " ▽ " setting button for at least 10s. The LCD displays "SETTING" and the lower left corner displays indoor unit address, e.g. 1-1. After verifying the address, press the timer off button to access the DN setting mode.

3. After accessing the DN setting mode, use the menu keys to switch between DN code and data. Flashing means editable state. Use " △ " and " ▽ " for setting. After this is done, use the timer off button to save the setting (this step is required for each setting). After the setting is over, press the On/Off button to exit the DN setting mode.

Note 1: When in the DN setting mode, the fan of the indoor unit will start working. Before this, please make sure there is no foreign matter around the fan blades that may obstruct their normal rotation and be cautious.

Remote controller state monitoring mode

1. Hold down the menu button for 10s (in either on or off state) to access the remote controller state monitoring mode.

2. After verifying the address, press the timer off button to access the state monitoring mode. Use " △ " and " ▽ "to select the code to check data.

   • Refer to the Installation Manual supplied with the indoor unit or outdoor unit or service manual for details about the check code and data.

3. Press the On/Off button to return to the normal display interface.

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