

# TOSHIBA INSTALLATION MANUAL

## To Personnel Charged in Installation Work and Service

Wireless remote controller kit  
Model: **RBC-AXU31-E**

- Thank you for purchasing Wireless remote controller kit for TOSHIBA air conditioners.
  - Read this manual carefully for correct installation of the wireless remote controller kit before starting work.
  - After the installation is completed, execute a test run to check for normal operation and explain how to use and maintain the wireless remote controller kit to the customer according to the Owner's Manual.
- Ask the customer to keep this manual with the Owner's Manual.

Observe the safety precautions described in the Owner's Manual of the wireless remote controller kit, Installation Manual and Owner's Manual of the indoor unit.

### Accessories

No.	Part Name	Q'ty	No.	Part Name	Q'ty
1	Signal receiving unit (provided 200 mm control wire)	1	10	Remote controller	1
2	Mounting bracket	1	11	Battery	2
3	Screws M4 x 25 mm	2	12	Remote controller holder	1
4	Screws M4 x 40 mm	2	13	Screw for remote controller holder M4 x 16 mm	2
5	Wood screws	2	14	Installation Manual (This manual)	1
6	Spacer	4	15	Owner's Manual	1
7	Wire joints	2	16	CD-ROM (Owner's Manual and Installation Manual)	1
8	Cable tie	1			
9	Pattern template 95 mm x 51 mm	1			

### Settings for the signal receiving unit before installation

Before installing the signal receiving unit, make the following settings referring to each description.

- To install the wireless remote controller together with wired remote controller, configure the "Header - Follower remote controller selection"
- When two or more signal receiving units are installed in a room, a unique address can be set for each signal receiving unit.

### Installation Location of Signal Receiving Unit

- Do not install in a location where the air contains oil mist, such as in a kitchen or factory.
- Do not install next to a window, or in any other location directly exposed to sunlight and outside air.
- Do not install nearby devices which can be expected to produce electrical noise, such as elevators, automatic doors, and industrial sewing machines.
- If the Signal receiving unit is installed near a rapid-start type or inverter-type fluorescent lamp (a lamp which does not include a glow lamp), it may not be possible to receive the wireless remote controller signal in some cases. In order to prevent interference from fluorescent lamps, leave a minimum of 2 m between the Signal receiving unit and the fluorescent lamps, and install the Signal receiving unit in a location where it can receive the wireless remote controller signal when the fluorescent lamps are lit.

### How to install the signal receiving unit

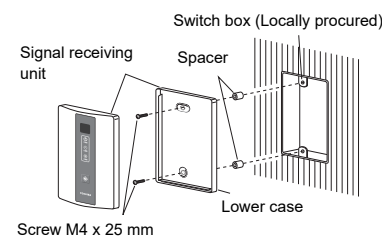
To prevent electric shocks, embed the wires in the wall and do not expose them. When installing wires on the wall, be sure to cover them with insulating materials.

#### Note:

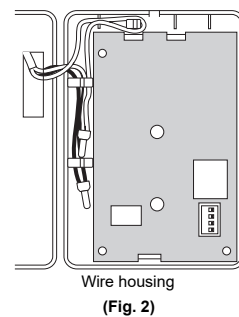
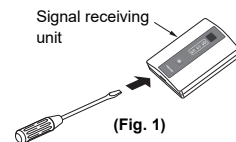
- To avoid malfunction of the remote controller, do not assemble or run remote control wiring together with the power cables, and do not enclose them in the same metal conduit.
- When the power unit induces electrical noise, it is recommended that a noise filter or the like be installed.

#### Installing into the switch box

1. Insert a flathead screwdriver or similar tool into the groove, and remove the lower case. (Fig. 1)
2. Fix the lower case with M4 x 25 mm screws provided. Do not overly tighten, and use the provided spacers. If the Signal receiving unit does not fit in the wall, cut spacers to adjust the clearance.

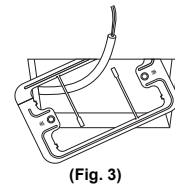


3. Connect the Signal receiving unit wiring (2-core control wire) with the wires extended from the indoor unit. (Fig. 2) (Refer to the How to wire the signal receiving unit.) Be sure to determine the correct terminal numbers on the indoor unit when wiring the Signal receiving unit. The Signal receiving unit will be damaged if high voltage (such as 208 - 240 V) is applied.
4. Reattach the upper case.

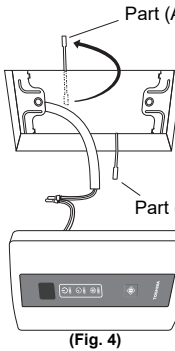


#### Mounting on the ceiling

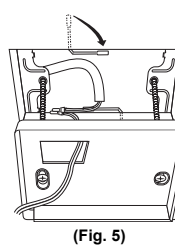
1. Cut a section out of the ceiling along the provided paper pattern (95 x 51 mm).
2. Pass the wire through the provided mounting bracket and insert the bracket into the installation hole. (Fig. 3)



3. Use bracket parts (A) and (B) to securely grip the ceiling material. (Fig. 4)
4. Connect the Signal receiving unit control wire (2-core) to the control wire from the indoor unit. (Refer to "How to wire the signal receiving unit".) Check the terminal number on the indoor unit before wiring the Signal receiving unit and be sure to wire correctly. (The unit will be damaged if high voltage, such as 208 - 240 V, is applied.)

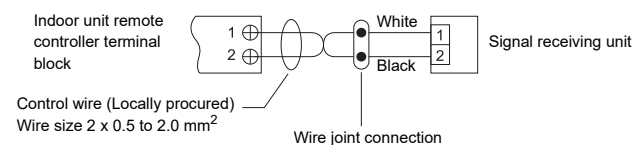


5. Insert a slotted screwdriver into the opening at the bottom of the remote controller. Remove the lower case from the signal receiving unit.
6. Adjust the provided spacers so that they are several millimeters larger than the thickness of the ceiling material. Pass the 2 supplied screws (M4 x 40 mm) through the spacers and tighten them enough to hold the Signal receiving unit in place.
7. Return parts (A) and (B) through the gap between the ceiling and Signal receiving unit so that they are contained in the openings. Then tighten the screws. Do not tighten the screws excessively. This may result in damage or deformation of the case. Tighten to the point where the Signal receiving unit can be moved slightly by hand. (Fig. 5)
8. Firmly attach the signal receiving unit to the lower case.



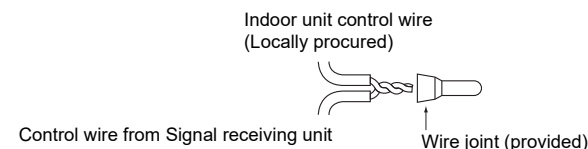
### How to wire the signal receiving unit

<Wiring diagram>



<Wire joint>

1. Strip the insulation to approximately 14 mm from the ends of the wires to be connected.
2. Twist together the 2 wires and create a crimp connection at the wire joint.
3. If a special crimping tool is not used, or if the connection is soldered, insulate the wires using insulation tape.

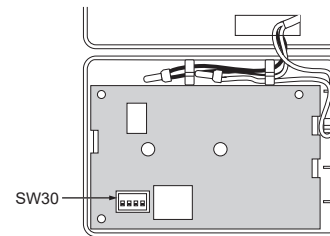


### Header - Follower remote controller selection

The control by two remote controllers is enabled by installing the wireless remote controller with the wired remote controller for an indoor unit. (Remote controller of wireless and wired can be combined one by one in the Group control. For their installation, refer to the following drawing.) The indoor unit is operated if either wireless or wired remote controller is set as header or follower remote controller. To set either wireless or wired remote controller to the follower remote controller, follow the procedure below.

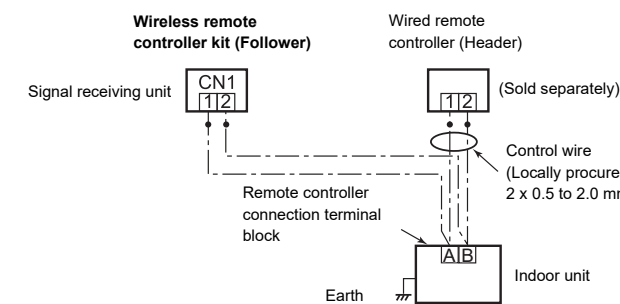
#### To set wireless remote controller to the follower remote controller.

1. Turn off the indoor unit power supply.
2. Remove the screw on the signal receiving unit cover and then remove the signal receiving cover.
3. Turn on the bit 4 of DIP switch SW30 on the signal receiving unit P.C. board.



#### DIP switch [SW30]

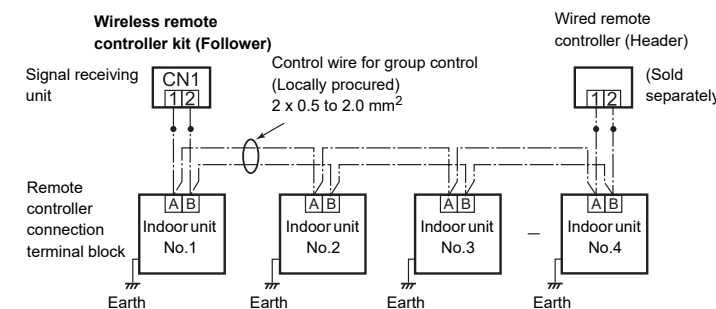
4	ON=follower OFF=header
3	ON=B OFF=A
2	Not used
1	Not used



#### Group control

Header and follower remote controllers are operable even if they are installed to any indoor unit.

\* Max. length of each remote control wiring between indoor units (No.1-No.2, No.2-No.3, No.3-No.4) : Up to 200 m



### Remote controller address (A-B selection) setting

- Address (A-B selection) must be changed on both signal receiving unit and wireless remote controller.
- For the details of address change (A-B selection) on wireless remote controller, refer to the owner's manual.
- When two or more signal receiving units are installed in a room, a unique address can be set for each signal receiving unit to prevent interference.

1. Turn off the indoor unit power supply.
2. Remove the screw on the signal receiving unit cover and then remove the signal receiving cover.
3. Turn on the bit 3 of DIP switch SW30 on the signal receiving unit P.C. board.

#### Test run

Operate the unit with the wireless remote controller as usual. For the procedure of the operation, refer to the attached Owner's Manual. A test run can be executed in the following procedure even if the operation stops by thermostat-OFF. In order to prevent a continuous operation, the test run is released after 60 minutes have passed and returns to the usual operation.

1. Turn on the power of the air conditioner. When power is turned on for the first time after installation, it takes approx. 5 minutes until the remote controller becomes available. In the case of subsequent power-on, it takes approx. 1 minute until the remote controller becomes available. Execute a test run after the predetermined time has passed.
2. Push "ON/OFF" button on the remote controller, select [Cool] or [Heat] with "MODE" button, and then select [HIGH] with "FAN" button.

3.	Cooling test run	Heating test run
	Set the temperature to 17°C with the temp. setup buttons.	Set the temperature to 30°C with the temp. setup buttons.

4.	Cooling test run	Heating test run
	After confirming a signal receiving sound "beep" immediately set the temperature to 18°C with the temp. setup buttons.	After confirming a signal receiving sound "beep" immediately set the temperature to 29°C with the temp. setup buttons.

5.	Cooling test run	Heating test run
	After confirming a signal receiving sound "beep" immediately set the temperature to 17°C with the temp. setup buttons.	After confirming a signal receiving sound "beep" immediately set the temperature to 30°C with the temp. setup buttons.

6. Repeat procedures 4. → 5. → 4. → 5. Indicators "Operation" (green), "Timer" (green), and "Ready" (orange) in the wireless receiver section flash in approx. 10 seconds, and the air conditioner starts operation. If any of these indicators does not flash, repeat procedures 2. to 5.
7. Upon completion of the test run, push "ON/OFF" button to stop operation.

<Overview of test run operations using the wireless remote controller>

#### Cooling test run:

ON/OFF → 17°C → 18°C → 17°C → 18°C → 17°C → 18°C → 17°C → (test run) → ON/OFF

#### Heating test run:

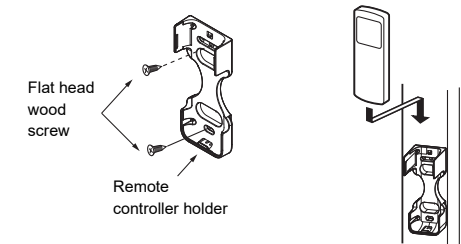
ON/OFF → 30°C → 29°C → 30°C → 29°C → 30°C → 29°C → 30°C → (test run) → ON/OFF

### Others

#### How to handle the remote controller

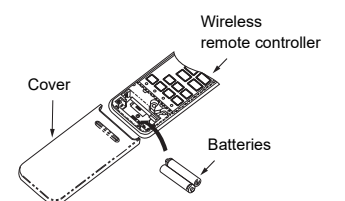
##### To set the remote controller on the wall

Push "ON/OFF" button at the installation position on the wall to check that the signal from the remote controller is received correctly.



#### Loading Batteries

1. Remove the battery cover.
2. Insert 2 new batteries (R03 or LR03 [AAA]) following the (+) and (-) positions.



#### Self-diagnosis function

- For details of indoor unit trouble, refer to the Installation Manual of the indoor unit.

#### Notes on installing remote controller

- When using a wireless remote controller in the remote controller holder on a wall, turn on a fluorescent light or equipment emitting infrared rays (Electronic whiteboard etc.) and operate the remote controller at the installation position. Make sure that the air conditioner operates normally and then secure the remote controller holder on the wall.
- When installing a remote controller that senses room temperature with the sensor, avoid the following places.
  - A place exposed to direct cool air, warm air or direct sunlight
  - A place subject to thermal effects
  - The supplied remote controller cannot be used as a wired remote controller.

#### Explanation to the customer

- After the installation work has been completed, execute a test run to check for normal operation and then hand the customer the Owner's Manual and Installation Manual of the wireless remote controller kit.
- Explain how to use and maintain the wireless remote controller to the customer according to the Owner's Manual of the wireless remote controller kit.

# TOSHIBA 安装手册

## 供负责安装和服务的人员使用

无线遥控器套件

型号：**RBC-AXU31-E**

- 感谢您购买 TOSHIBA 空调用无线遥控器套件。
  - 为了能够正确安装无线遥控器套件，请在安装前仔细阅读本手册。
  - 安装工作完成后，请进行试运行，确认机器可以正常运行，然后按照用户手册向用户说明如何使用和保养无线遥控器套件。
- 请让用户将本手册和用户手册放在一起。

遵循无线遥控器套件的用户手册，室内机安装手册和用户手册中说明的安全注意事项。

### 附件

编号	部件名称	数量	编号	部件名称	数量
1	信号接收装置 (提供的 200 mm 控制线)	1	10	遥控器	1
2	装配架	1	11	电池	2
3	螺丝 M4 x 25 mm	2	12	遥控器托座	1
4	螺丝 M4 x 40 mm	2	13	遥控器托座用螺丝 M4 x 16 mm	2
5	木螺丝	2	14	安装手册 (本手册)	1
6	垫片	4	15	用户手册	1
7	线缆接头	2	16	CD-ROM (用户手册和安装手册)	1
8	电缆扎带	1			
9	模板 95 mm x 51 mm	1			

### ■ 安装前信号接收装置的设定

安装信号接收装置前，请根据各项说明进行以下设定。

- 想要同时安装无线遥控器和有线遥控器，请进行“主-副遥控器选择”。
- 当室内安装有两个或更多个信号接收装置时，可为各信号接收装置设置一个唯一的地址。

### ■ 信号接收装置的安装位置

- 切勿安装在空气中含有油雾的地方，如厨房或工厂。
- 切勿安装在靠近窗户或直接暴露于阳光或室外空气的地方。
- 切勿安装在可能产生电噪的装置附近，如电梯、自动门和工业缝纫机。
- 如果信号接收装置安装在快速启动式荧光灯或变频荧光灯（没有辉光放电管的一种灯）附近，在某些情况下可能无法接收无线遥控器信号。当荧光灯点亮时，为了防止荧光灯的干扰，请在信号接收装置和荧光灯之间留出至少 2 m 的空间，然后在能够接收到无线遥控器信号的地方安装信号接收装置。

### ■ 如何安装信号接收装置

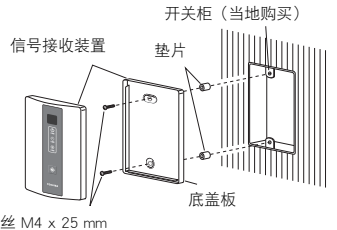
为了防止触电，请将线缆埋入墙壁内，切勿将其暴露在外部。在墙上安装线缆时，请务必用绝缘材料包裹线缆。

注意：

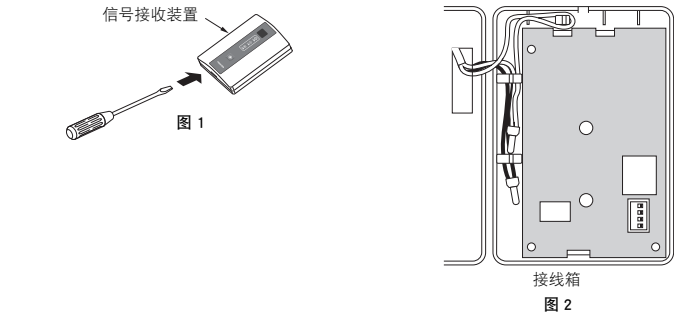
- 为了避免遥控器故障，切勿将遥控器接线与电源线装配或缠绕在一起，也请勿将它们密封在同一金属导管中。
- 当电源装置产生电噪时，建议安装噪音滤波器或类似装置。

#### 安装在开关柜内

- 将平头螺丝刀或类似工具插入槽内，然后卸下底盖板。(图 1)
- 用提供的 M4 x 25 mm 螺丝固定底盖板。切勿拧得过紧，请使用提供的垫片。如果信号接收装置无法嵌入墙壁，请切割垫片以调整间隙。

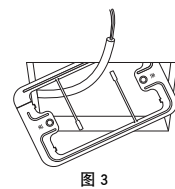


- 将信号接收装置的线缆（两芯线）与室内机的延长线连接起来。(图 2) (请参阅信号接收装置的线路连接。) 进行信号接收装置接线时请务必确认室内机上正确的端子数。如果使用了高压（如 220 - 240 V），信号接收装置将会被损坏。
- 重新安装顶盖板。

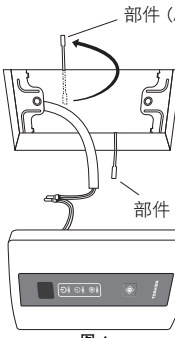


#### 安装在顶棚上

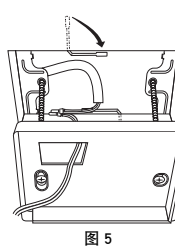
- 按照提供的纸型（95 x 51 mm）从顶棚上切出一块。
- 将线缆从提供的装配架穿过，然后将装配架嵌入安装凹槽内。(图 3)



- 使用装配架部件 (A) 和 (B)，将其牢牢固定在顶棚材质中。(图 4)
- 将信号接收装置的控制线（两芯线）连接至室内机的控制线。(请参阅信号接收装置的线路连接。) 进行信号接收装置接线前请确认室内机上的端子数，然后确保接线正确。(如果使用了高压，如 220 - 240 V，装置将会被损坏。)
- 将平头螺丝刀插入遥控器底部的开口中。从信号接收装置上卸下底盖板。
- 调整提供的垫片，使其比顶棚材质的厚度多出几毫米。将两颗提供的螺丝（M4 x 40 mm）穿过垫片，然后拧紧螺丝，从而固定住信号接收装置。

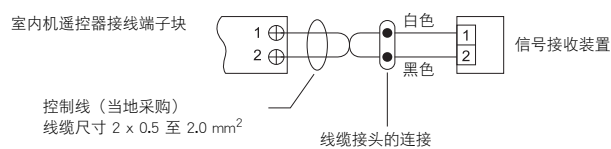


- 将部件 (A) 和 (B) 从顶棚和信号接收装置之间的空隙中退回开口内，然后拧紧螺丝。切勿将螺丝拧得过紧。否则可能会导致盖板损坏或变形。将螺丝拧到用手可轻微移动信号接收装置即可。(图 5)
- 将底盖板装上信号接收装置。



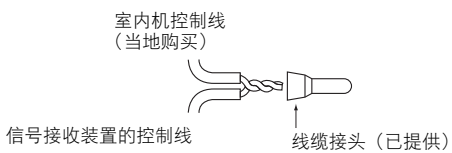
### ■ 如何进行信号接收装置接线

< 配线图 >



< 线缆接头 >

- 将想要连接的线缆的绝缘外皮从未端剥去约 14 mm。
- 将两根线缆拧在一起，然后在线缆接头处进行压接。
- 如果没有使用特殊的压接工具，或使用了焊接，请使用绝缘带将线缆绝缘。



### ■ 主-副遥控器选择

若为一台室内机同时安装无线遥控器和有线遥控器，则可使用两个遥控器进行控制操作。

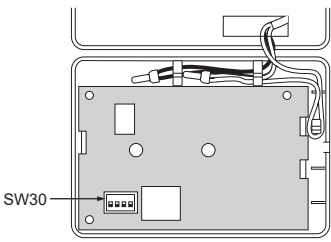
(可在群组控制中将无线和有线遥控器逐一组合。关于其安装，请参考下图。)

如果将无线或有线遥控器设置为主或副遥控器，则室内机将运行。

要将无线或有线遥控器设置为副遥控器，请按照以下步骤操作。

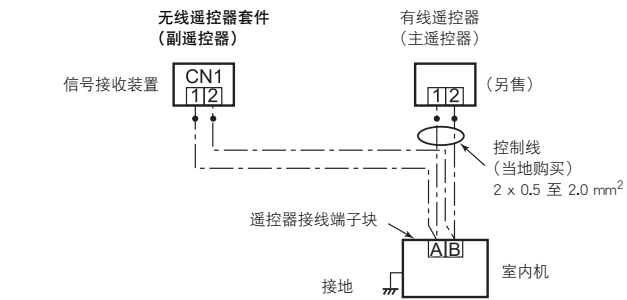
- 将无线遥控器设置为副遥控器。

- 关闭室内机电源。
- 取下信号接收装置盖上的螺丝，然后取下信号接收盖。
- 打开信号接收装置印刷电路板上 DIP 开关 SW30 的第 4 位。



#### 指拨开关 [SW30]

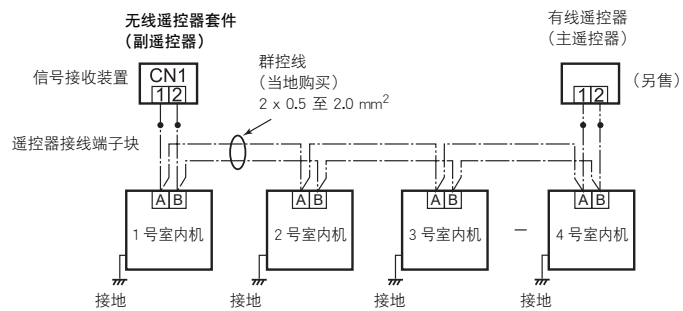
4	ON= 副遥控器 OFF= 主遥控器
3	ON=B OFF=A
2	未使用
1	未使用



#### 群组控制

主副遥控器安装在任何一台室内机上均可进行操作。

\* 室内机之间的各遥控排线最大长度 (No.1-No.2, No.2-No.3, No.3-No.4): 最长 200 m



### ■ 遥控器地址 (A-B 选择) 设定

- 在信号接收装置和无线遥控器上都必须更改地址 (A-B 选择)。
- 有关在无线遥控上更改地址 (A-B 选择) 的详细说明，请参阅用户手册。
- 当室内安装了两个或多个信号接收装置时，为了防止相互干扰，每个信号接收装置可以设定一个独有的地址。

- 关闭室内机电源。
- 取下信号接收装置盖上的螺丝，然后取下信号接收盖。
- 打开信号接收装置印刷电路板上 DIP 开关 SW30 的第 3 位。

### ■ 试运行

照常使用无线遥控器操作本机。有关操作步骤，请参阅随附的用户手册。即使因恒温器 OFF 导致操作停止，也可按照以下步骤执行试运行。为防止连续操作，经过 60 分钟后，将解除试运行并返回至常规操作。

- 打开空调机的电源。安装后首次打开电源时，大约需要等待 5 分钟才可使用遥控器。此后开启电源时，则大约需要等待 1 分钟才可使用遥控器。在预定时间过去之后执行试运行。
- 按遥控器上的“ON/OFF”按钮，通过“MODE”按钮选择 [ 制冷 ] 或 [ 制热 ]，然后通过“FAN”按钮选择 [ 高 ]。

3.	制冷试运行	制热试运行
	用温度设置按钮将温度设为 17° C。	用温度设置按钮将温度设为 30° C。

4.	制冷试运行	制热试运行
	确认听到信号接收声“哔”后，立即用温度设置按钮将温度设为 18° C。	确认听到信号接收声“哔”后，立即用温度设置按钮将温度设为 29° C。

5.	制冷试运行	制热试运行
	确认听到信号接收声“哔”后，立即用温度设置按钮将温度设为 17° C。	确认听到信号接收声“哔”后，立即用温度设置按钮将温度设为 30° C。

- 重复步骤 4. → 5. → 4. → 5. 无线接收器部分的“操作”（绿色）、“定时器”（绿色）和“就绪”（橙色）指示灯大约闪烁 10 秒钟，接着空调机开始运行。如果这些指示灯中的任何一个不闪烁，请重复步骤 2 至 5。
- 试运行完成后，按“ON/OFF”按钮停止操作。

< 使用无线遥控器进行试运行操作概述 >

#### ▼ 制冷试运行：

ON/OFF → 17° C → 18° C → 17° C → 18° C → 17° C → 18° C → 17° C → (试运行) → ON/OFF

#### ▼ 制热试运行：

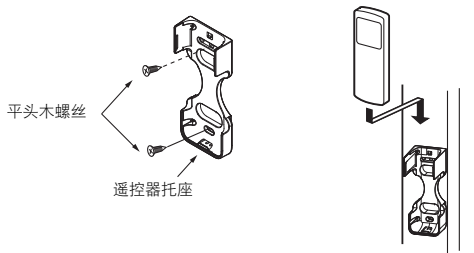
ON/OFF → 30° C → 29° C → 30° C → 29° C → 30° C → 29° C → 30° C → (试运行) → ON/OFF

### ■ 其他

#### 如何使用遥控器

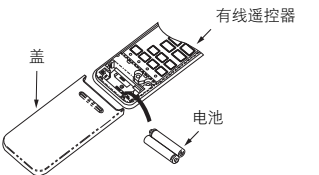
##### • 将遥控器安装在墙上

在墙壁的安装位置按下“ON/OFF”按钮，确认遥控器信号接收正常。



##### • 装入电池

- 卸下电池舱盖。
- 按照 (+) 极和 (-) 极的位置装入两节电池 (R03 或 LR03 [AAA])。



#### 自诊断功能

- 有关室内机故障的详细信息，请参阅室内机的安装手册。

#### 安装遥控器的注意事项

- 将无线遥控器放在墙壁上的遥控器座中使用时，请打开安装位置的荧光灯或发出红外线的设备（电子白板等）再操作遥控器。确保空调机正常运行，然后将遥控器座固定至墙上。
- 安装以传感器感应室温的遥控器时，请避免以下位置。
  - 冷空气，热空气直接吹到或太阳直射的地方
  - 受到热效应影响的地方
  - 随附的遥控器不能用作有线遥控器。

#### 对用户的说明

- 安装工作完成后，请进行试运行，确认机器可以正常运行，然后将无线遥控器套件的用户手册和安装手册交给用户。
- 根据无线遥控器套件的用户手册向客户说明如何使用及维护无线遥控器。