

## 2.3 Touch key wired controller: KJR-29B



**KJR-29B**

### Wired controller specifications

Model	KJR-29B/BK-E
Power Supply Voltage	DC 5.0 V
Ambient Temperature Range	-5°C~+43°C
Ambient Humidity Range	RH40%~RH90%

### Performance features

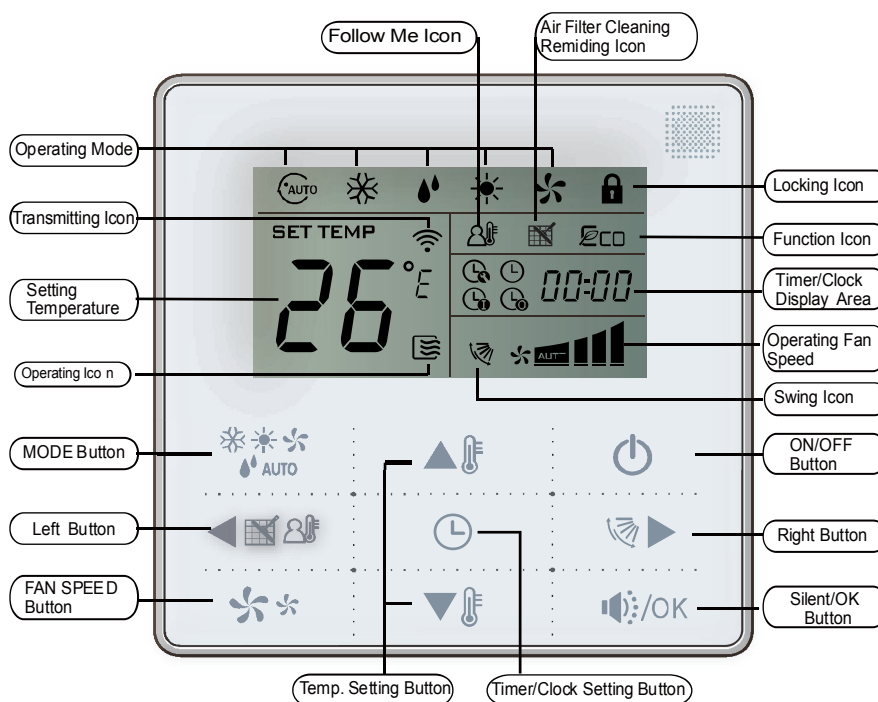
1. Operating mode: cool, heat, dry, fan and auto.
2. Set the mode through buttons.
3. Indoor setting temperature range: 17°C ~30°C.
4. LCD (Liquid Crystal Display).
5. Touch key
6. Can switch Fahrenheit degree and Centigrade degree.

### 2.3.1 Function summarize

KJR-29B is the touch key wired controller.

New function	Basic function
Air filter cleaning reminding function	ON and OFF the air-conditioner
Indoor unit address setting function	Auto-restart function
Remote control receiver function	Time ON and Time OFF setting
Lock the wired controller	Clock setting
Silent mode	Setting the Operating mode, Temperature
Follow me	Fan speed and Swing functions

## 2.3.2 Wired controller appearance



### (1) Remote signal receiving function

There is the signal receiver for wireless remote controller on the KJR-29B. You can use the wireless remote controller to control the air-conditioner through the wired controller when the system has been powered on.

**Notes:** The wired controller will not receive the swing controlling instruction. For the indoor unit with swinging function, you can directly use the remote controller to control swinging through the display panel of the indoor unit, or use the swing button on the wired remote controller to control the indoor unit for swinging.

### (2) ON/OFF button

Press the ON/OFF button to control the indoor unit on and off state. When the unit is turned off, press the ON/OFF button, the unit will be turned on and the operating icon lights up. When the unit is turned on, press the ON/OFF button, the unit will be turned off and the operating icon lights off.

### (3) Mode button

Press the mode button to set the operating mode, after each button press the operation mode will circle as follow:



When the controller has been set to cool-only, then there is no HEAT mode.

### (4) Fan speed setting

Under COOL, HEAT and FAN modes, press the fan speed button can adjust the fan speed setting. After each fan speed button press will circle as follow:

AUTO→LOW→MID→HIGH→AUTO

Under AUTO and DRY modes, the fan speed is not adjustable and the default fan speed is auto.

### **(5) Temperature setting**

Under AUTO, COOL, DRY, HEAT modes, press the Temp adjust Up/Down buttons to set the temperature, the adjusting range is 17°C~30°C (or 62°F~88°F). The setting temperature cannot be adjusted under FAN mode.

### **(6) Timer on and Timer off setting**

Press the timer/clock setting button, then enter into the timer on setting state, and the screen will display timer

icon  and .

You can press Temperature setting buttons to adjust the time. When the time setting is less than 10 hours, each press the Temp setting buttons will increase or decrease 0.5 hour. When the timer setting is more than 10 hours, each press Temp setting buttons will increase or decrease 1 hour, the maximum timer setting is 24 hours. After finish adjusting the time on setting, press the Silent/OK button or wait for 5 seconds to confirm and exit the time on setting.

**Notes:** If the wired controller has been set timer on/ off, press the ON/OFF button to turn on/ turn off the unit then the timer will be canceled simultaneously.

### **(7) Clock setting**

Long press the timer/clock setting button for 3 seconds, and then enter into the clock setting state. The hour position of the clock will flash, and can press Temp setting buttons to adjust the hour value.

After finish the hour setting, press left button or right button to switch to minute position setting, then the minute position will flash, press Temp setting buttons to adjust the minute value. After finish the clock setting, press the button or wait for 5seconds to confirm and exit the setting state.

### **(8) Silent/OK button**

Under the cooling, heating and auto mode, when operate the silent mode, it can reduce the running noise through setting the fan speed to low. This will help you bring a quieter environment.

Under AUTO, DRY mode, the fan speed is auto and the Silent /OK button doesn't work.

### **(9) Wired controller locking**

Short press the temperature adjusting UP and DOWN buttons simultaneously, the wired controller enters into locking state, and the locking icon will be lighted up. Under the locking state, the wired controller will not respond to buttons by pressing and the control instruction from the wireless remote controller. Simultaneously press temperature adjusting buttons again will cancel the locking state.

### **(10) Air filter cleaning reminding function**

The wired controller records the total running time of the indoor unit, when the accumulated running time reaches the pre-set value, air filter cleaning reminding icon will be lighted up, to remind that the air filter of the indoor unit needs to be cleaned. Long press left button for 3 seconds, and clear the reminding icon and the wired controller will re-accumulate the total running time of the indoor unit.

**Notes:** The default setting value of reminding function is 2500 hours, and it can change to be 1250 hours, 5000 hours or 10000 hours.

### (11) Swing function

If the indoor unit supports swing function, press the right button to adjust the air outlet direction of the indoor unit. Long press this button for 3 seconds can turn on or turn off the auto-swing function. When the auto-swing function is turned on, the swing icon will be lighted up.

### (12) Follow me function

When the system is running and the operating mode is Cooling, Heating or Auto, press the left button will activate the Follow Me function. Press left button again will cancel follow me function. When the operating mode is changed, and then will cancel this function as well. When the Follow Me function is activated, the icon will be light up, and the wired controller will display room temperature read from the local sensor, and transmit the temperature value to the indoor unit every 3 minutes.

### (13) Setting addresses

- ✚ Press the Temp. UP and DOWN button simultaneously for more than 8 seconds, then the controller gets into address setting mode.
- ✚ In the address setting mode, there are 2 main functions:  
 Querying address: press MODE button, the corresponding indoor unit will display its address.  
 Setting address: use the UP and DOWN buttons to choose an address you want. Then press the FAN button to set the indoor unit's address. The corresponding indoor unit will display the new address and record it. After about 4 seconds, this displaying will fade out and indoor units turn to normal display mode.
- ✚ After setting addresses, users can press the Silent/OK button can exit the address setting mode.
- ✚ After re-power, users can query the indoor address again: long press the UP and DOWN button simultaneously will enter the address setting page, press ON/OFF button and then press MODE button, the indoor address will be displayed on the indoor display board.
- ✚ In the address setting mode, wired controller does not respond to any command from remote controller.

## 2.3.3 Installations

### 1) Safety precaution

- ✚ Stated below are important safety issues that must be obeyed. Confirm there is no abnormal phenomena during test operation after complete.
- ✚ Installation by other persons may lead to imperfect installation, electric shock or fire. Improper installation may lead to electric shock or fire. A random disassembly may cause abnormal operation or heating, which may result in fire.
- ✚ Do not install the controller in a place vulnerable to leakage of flammable gases. Once flammable gases are leaked and left around the wired controller, fire may occur.
- ✚ The wiring should adapt to the wired controller current. Otherwise, electric leakage or heating may occur and result in fire. The specified cables shall be applied in the wiring. No external force may be applied to the terminal. Otherwise, wire cut and heating may occur and result in fire.
- ✚ Don't place the wired controller near the lamps, to avoid the remote signal of the controller to be disturbed. Do not install the unit and controller in a place with much oil, steam, sulfide gas. Otherwise, the product may deform and fail.

※ **Preparation before Installation:**

Make sure the following parts has been prepared.

Name	Qty.	Remarks
Wired controller	1	\
Cross round head wood mounting screw	3	M4×20 (For mounting on the wall.)
Cross round head mounting screw	2	M4×25 (For mounting on the electrical switch box.)
Installation manual	1	\
Owner's manual	1	\
Plastic expansion pipe	3	For mounting on the wall
Plastic screw bar	2	For fixing on the 86 electrician box.
Switching wires for signal receiving board	1	For connecting the signal receiving board and 4-core shield wire.
Switching wires for wired controller signal	1	(If needed) For connecting the main control panel and 4-core shielding wire.

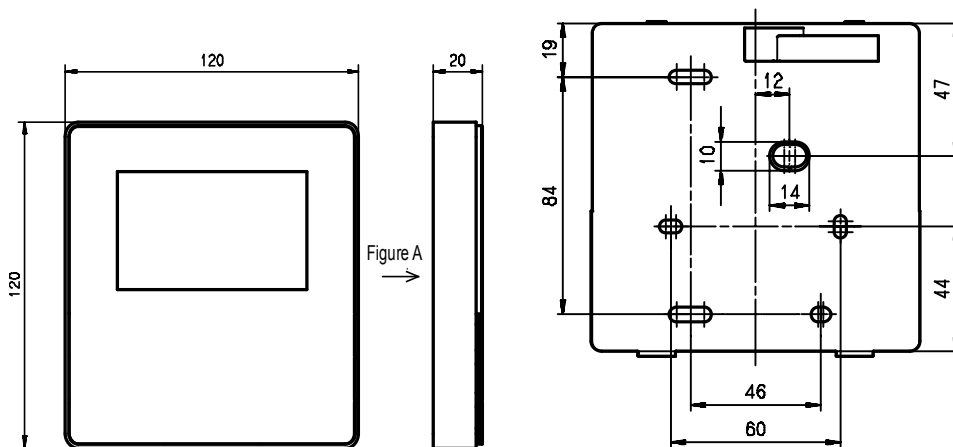
※ **Prepare for the following at installation site.**

Name	Qty.(embedded into wall)	Specification remarks (only for reference)	Remarks
4-core shield cable	1	RVVP-0.5 mm <sup>2</sup> ×4	The longest is 15M
86 electrician box	1	/	/
Wiring tube (insulating sleeve and tightening screw)	1	/	/

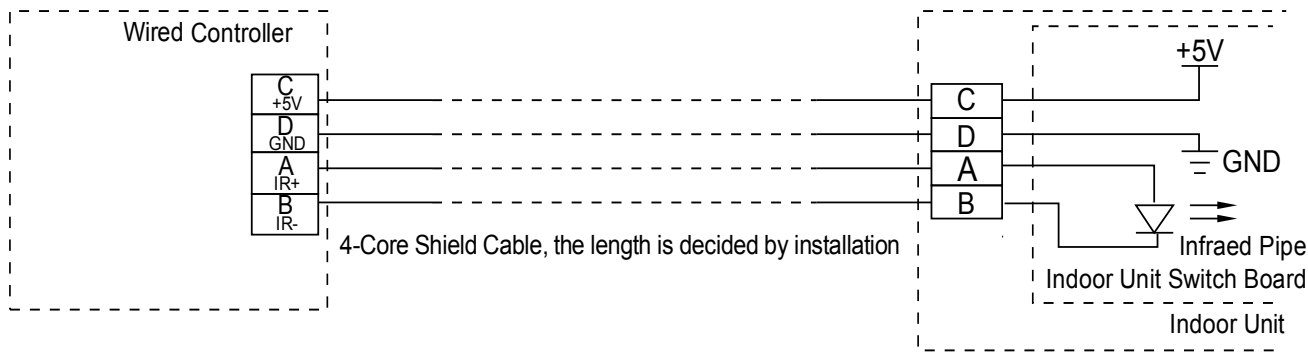
※ **Installation procedure**

- ✚ Circuit of wired controller is low voltage circuit. Never connect it with a standard 220V or 380V circuit or put it into a same wiring tube with the circuit.
- ✚ The shield cable must be connected stable to the ground, or transmission may fail.
- ✚ Don not attempt to extend the shield cable by cutting, if it is necessary, use terminal connection block to connect.
- ✚ After finishing connection, do not use mucker to have the insulation check to the signal wire.

※ **Dimensions: 120\*120\*20mm**

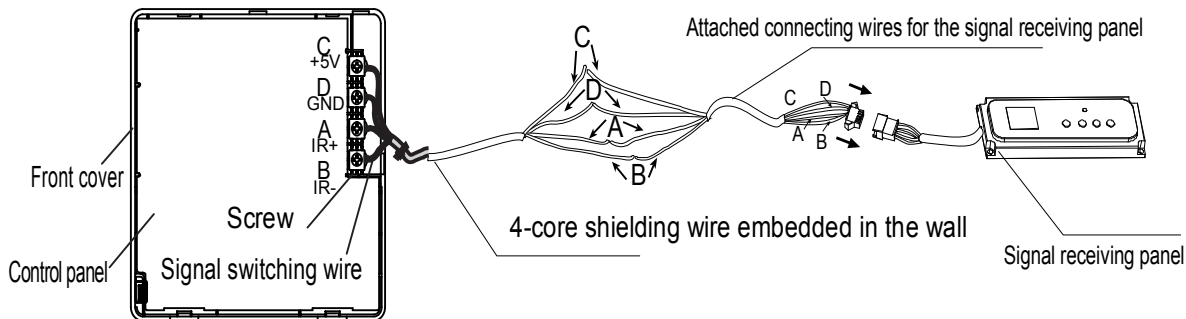


※ **Wiring principle sketch**

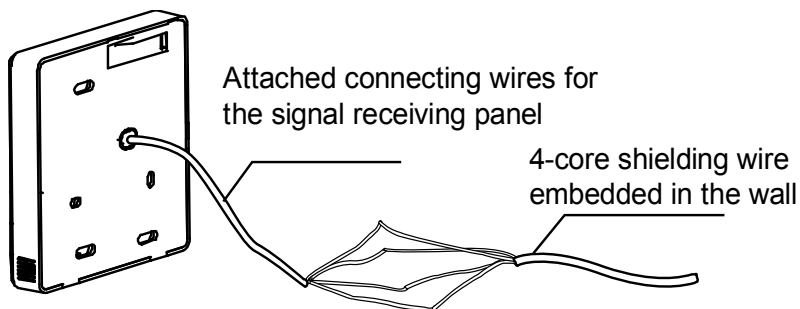


※ **Wiring figure:**

1) Connect two terminals of embedded 4-core shielding wire with the switching wires of wired remote controller and signal receiving board. Make sure the sequence of 4 terminals (A, B, C and D) should correspond to the wire sequence of signal switching wires (A, B, C and D).

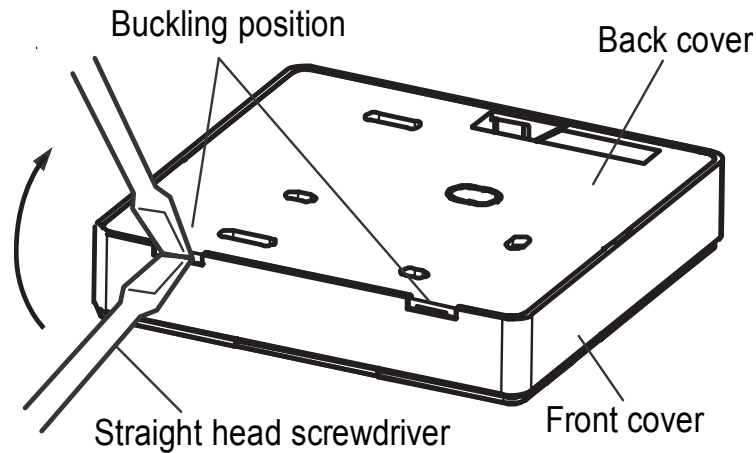


2) If embedded 4-core shielding wire cannot go through the wired controller, it can use signal switching for connection and make sure the wires are reliable and firm. The tightening torque range of the screw is 0.8~1.2N .m (8~12 kgf.cm).

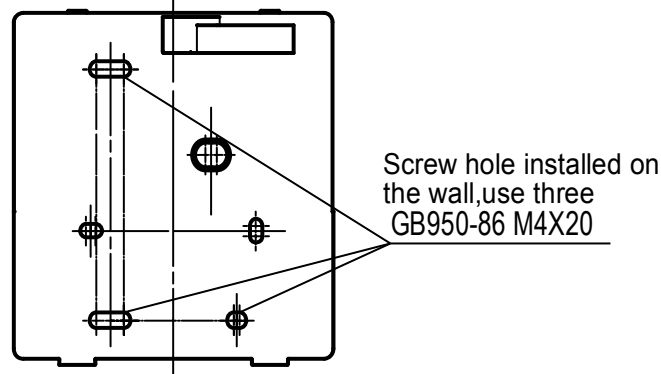


※ **Back cover installation**

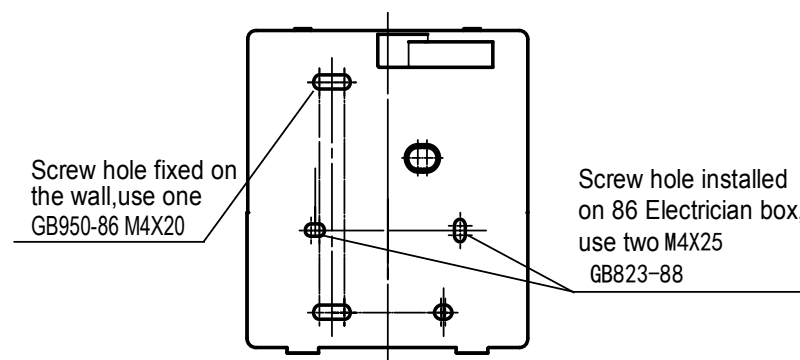
1) Use straight head screwdriver to insert into the buckling position in the bottom of a wired controller, and spin the screwdriver to take down the back cover. (Pay attention to spinning direction, if not you maybe damage the back cover.)



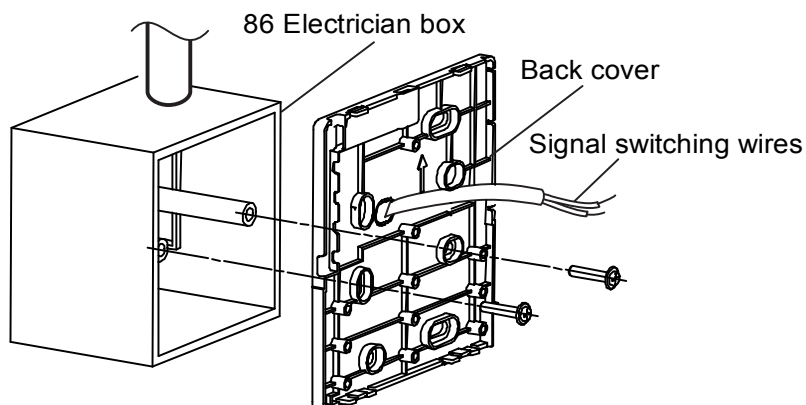
2) Use three GB950-86 M4X20 screws to directly install the back cover on the wall.



3) Use two M4X25 GB823-88 screws to install the back cover on the 86 electrician box, and use one GB950-86 M4X20 screw for fixing the wall.



4) Adjust the length of two plastic screw bars in the accessory to be the standard length from the electrical box screw bar to the wall. Make sure when install the screw bar to the electrical box screw bar, make it as flat as the wall.

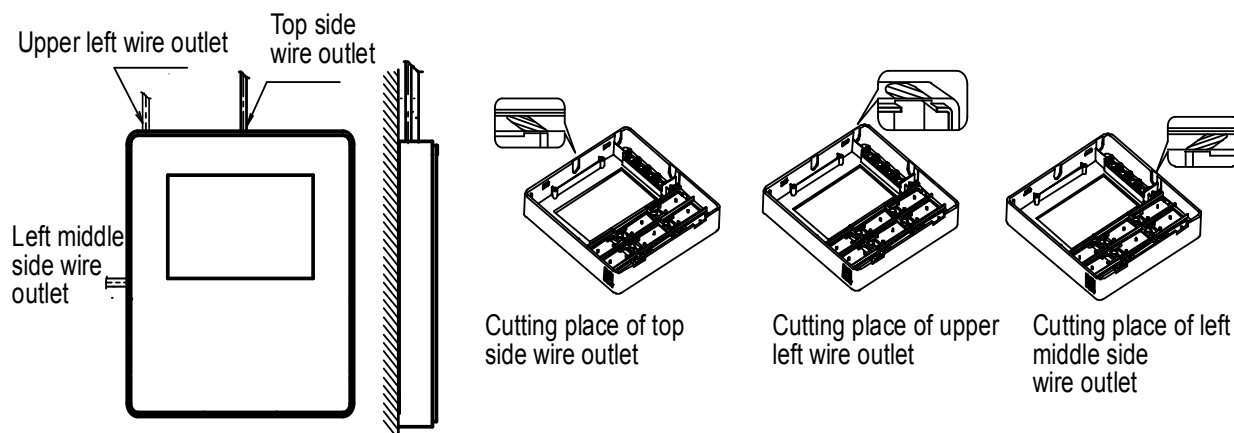


#### Notes:

1. Use cross head screws to fix the wired controller bottom cover in the electric control box through the screw bar. Make sure the wired controller bottom cover is on the same level after installation, and then install the wired controller back to the bottom cover.
2. Over fasten the screw will lead to deformation of the back cover.

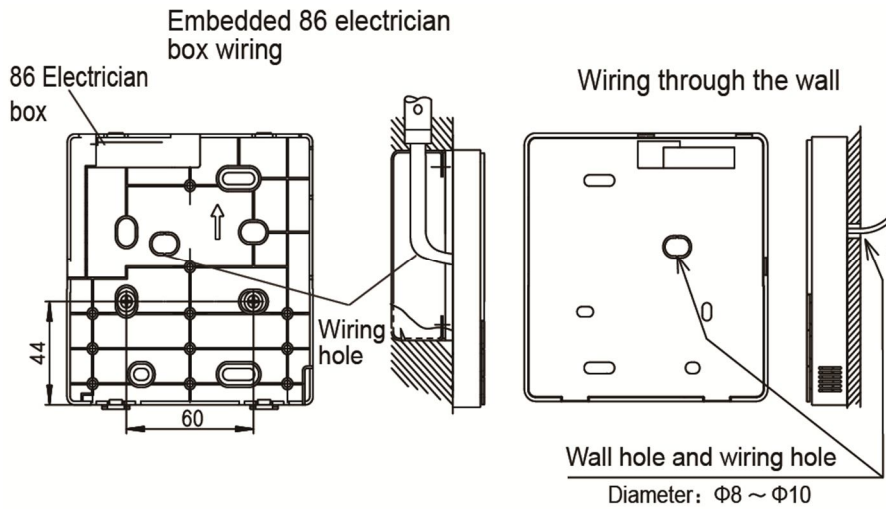
#### ※ Neaten the wires

1) There are three positions of signal wire outlet around the wired controller, when the wired controller directly is installed on the flat wall.

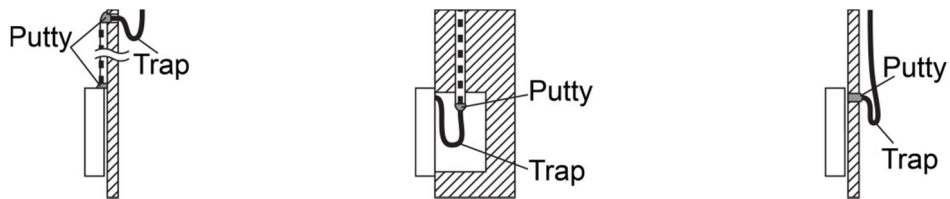


2) Shielded wiring

When the wired controller is stalled with electrician box, the back cover of wired controller is already reserved one hole for wire outlet. It is also available for the shielded wire passing by the wall.

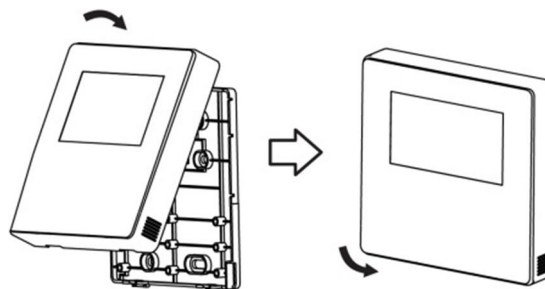


3) Avoid the water enter into the wired controller, use trap and putty to seal the connectors of wires during wiring installation. When under installation, reserve certain length of the connecting wire for convenient to take down the wired controller while during maintenance.

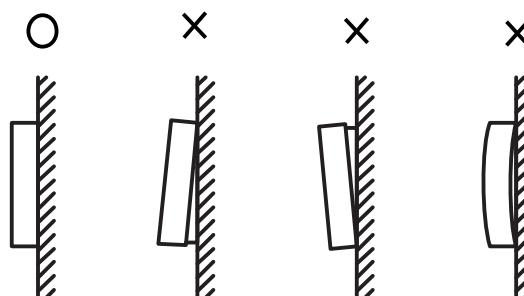


※ Front cover installation

1) After adjusting the front cover and then buckle the front cover; avoid clamping the communication switching wire during installation.



2) Correct install the back cover and firmly buckle the front cover and back cover, if not you maybe make the front cover drop off.



※ **Wired controller initial parameters setting:**

1. Change the related functions of the controller through adjusting the initial parameters, details refer to table 1
2. The wired controller initial parameter includes two codes "XY", the first code "X" means functions class, and the second code "Y" means the detailed configuration of this function.
3. Setting method:
  - 1) Press "Mode" and "Fan" button simultaneously for 5 seconds to enter the parameter setting state;
  - 2) The value of this first code "X" is "0"; press the temperature setting button UP and DOWN to adjust the second code value;
  - 3) After setting the second code value, press Silent/OK button to switch the first code to the next value;
  - 4) When the first code value is "6", press Silent /OK button again to exit the parameters setting.
4. The parameters setting function only under the situation which needs to adjust the default functions' setting states; otherwise do not need to be set.

Table 1

First code	Functions	Second code				
		0	1	2	3	4
0	Cool-only/ Cool-Heat selection	Cool-Heat (Default)	Cool-only	/		/
1	Indoor unit communication address setting	Yes(Default)	None	/	/	/
2	Auto-restart	Yes(Default)	None	/	/	/
3	Air filter cleaning reminding function	Cancel the reminding function	1250 hours	2500 hours (Default)	5000hours	10000 hours
5	Remote receiving function	Yes(Default)	None	/	/	/
6	Centigrade/ Fahrenheit display	Centigrade	Fahrenheit	/	/	/

**Notes:**

The second code of the filter cleaning reminding is 2500 hours, which as default.