



WIRE CONTROLLER

KJR-90A

INSTALLATION & OWNER'S MANUAL

Thank you very much for purchasing our product.
Before using your unit, please read this manual carefully and keep it for future reference.



- This manual gives detailed description of the precautions that should be brought to your attention during operation.
- In order to ensure correct service of the wire controller please read this manual carefully before using the unit.
- For convenience of future reference, keep this manual after reading it.

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1. Safety precautions

- Read the safety precautions carefully before installing the unit.
- Stated below are important safety issues that must be obeyed.

 WARNING	Means improper handling may lead to personal death or severe injury.
 CAUTION	Means improper handling may lead to personal injury or property loss.



----- WARNING -----

Please entrust the distributor or professionals to install the unit.
Installation by other persons may lead to imperfect installation, electric shock or fire.
Adhere to this installation manual.
Improper installation may lead to electric shock or fire.
Reinstallation must be performed by professionals.
Improper installation may lead to electric shock or fire.

1. Safety precaution

Do not uninstall the unit randomly.

Random uninstalling may lead to abnormal operation, heating or fire of the air condition.



NOTE

Do not install the unit in a place vulnerable to leakage of flammable gases. Once flammable gases are leaked and left around the wire controller, fire may occur.

The wiring should adapt to the wire 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.

2. Installation accessory

Select the installation location

Don't install at the place where contents with heavy oil, vapor or sulfureted gas, otherwise, this product would be deformed that would lead to system malfunction.

Preparation before installation

1. Please confirm that all the following parts you have been supply.

No.	Name	Qty.	Remark
1	Wire controller	1	_____
2	Cruciform slot screw M4×25	2	This accessory is used when install the wire control inside the electric cabinet
3	Plastic bolt	2	
4	Installation and owner's manual	1	
5	The connective wires of display panel (on some models)	1	For connect between the display panel wire and shielded 5-core cable

2. Please filed install the following accessory.

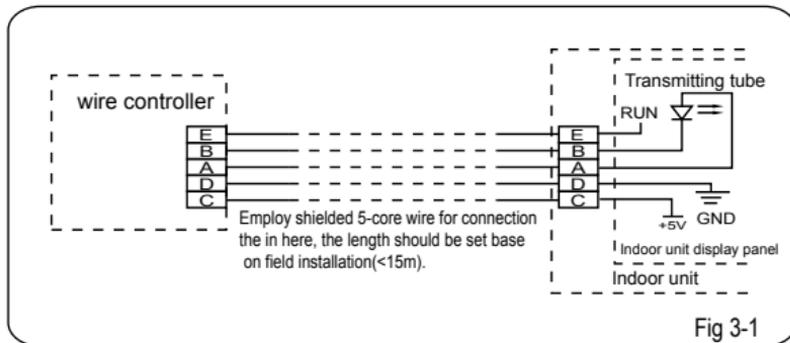
No.	Name	Qty.	Remark
1	Electric cabinet	1	Universal electric cabinet's specification. Pre-embed it into wall.
2	Shielded 5-core cable	1	Pre-embed RVVP-0.5mm2x5 into wall.
3	Wire configured tube (insulated sheath)	1	Pre-embed into wall, the longest length should not exceeding than 15m.
4	Phillips screwdriver	1	For install Cruciform slot screw.
5	Slotted head screwdriver	1	For unscrew the bottom cover of wire controller.

Precaution of install the wire control

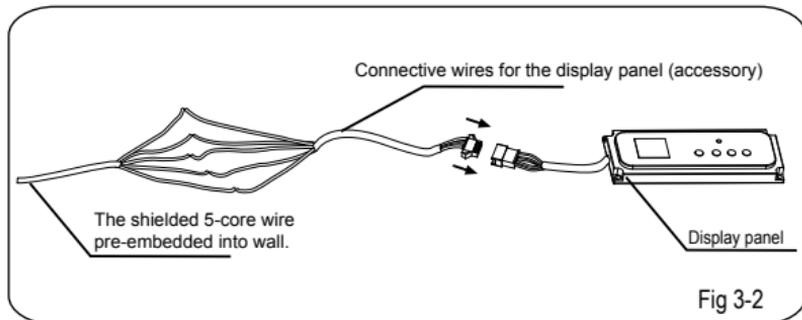
1. This manual provides the installation method of wire controller. Please refer to the wiring diagram of this installation manual to wire the wire controller with indoor unit.
2. The wire controller working in low voltage loop circuit. Forbid to directly contact the cable of 220V commercial electricity or of 380V high voltage, and don't wire this kind of wire in the said loop; wiring clearance between configured tubes should at the range of 300~500 or above.
3. The Shielded wire of the wire controller must be grounded reliable.
4. Upon finish the wire controller connection, do not employed tramegger to detect the insulation.

3. Installation method

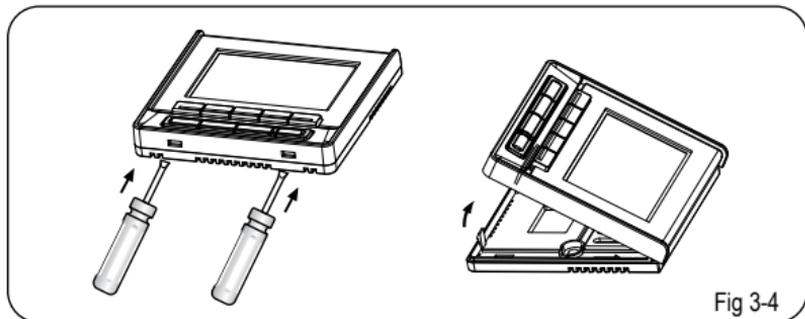
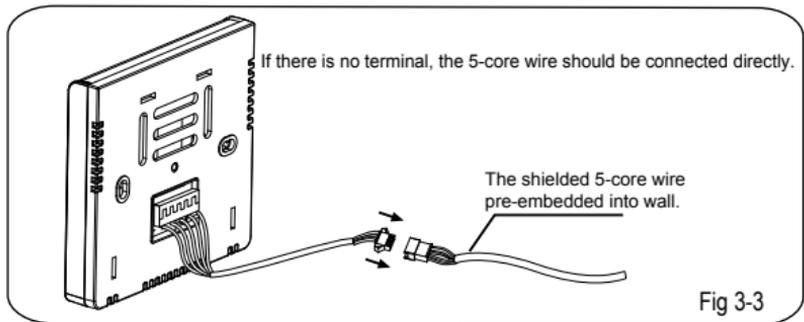
Simplified schematic of wire controller



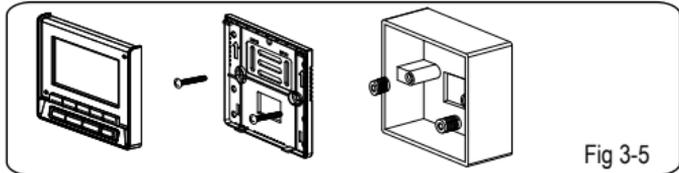
Installation diagram



3. Installation method



3. Installation method



1. Connect the male joint of 5-core wires group of the display panel with the female 5-core terminal of display panel. (See Fig.3-2)
2. Please connect the other side of display panel with the wall pre-bedded 5-core cable reliability.
3. Connect the wire control leads from wire controller with the wall pre-bedded 5-core cable reliability. (See Fig.3-3)
4. Take off the screws in the bottom cover of centralized controller by slotted head screw driver. (See Fig 3-4)
5. Adjust the length of two plastic bolts base on the length of through out from standard electric cabinet to the wall. Confirm the two bolts fixing in the cabinet are in the same length and vertical to the wall surface.
6. Fix the bottom cover to the electric cabinet by the accessory slotted head screws. Confirm the bottom cover is parallel to wall surface. And then reinstall the bottom cover to centralized controller. (See fig 3-5)

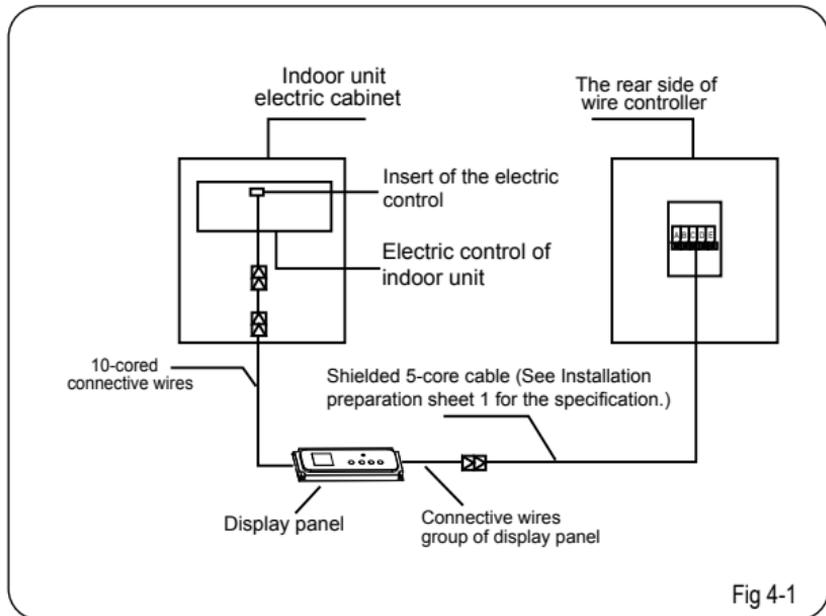


NOTE

Over tighten the screw would cause rear cover deformed and LCD damage. When installation, please maintain the screws and wire controller at the same height level without deformed.

When installation, please reserve a certain length of wire controller connective cable for future maintenance to take off the wire controller.

4. Wiring diagram for wiring wire controller with air conditioner



5. Specification

Input voltage	DC 5V
Ambient temperature	-5~43°C
Ambient humidity	RH40%~RH90%

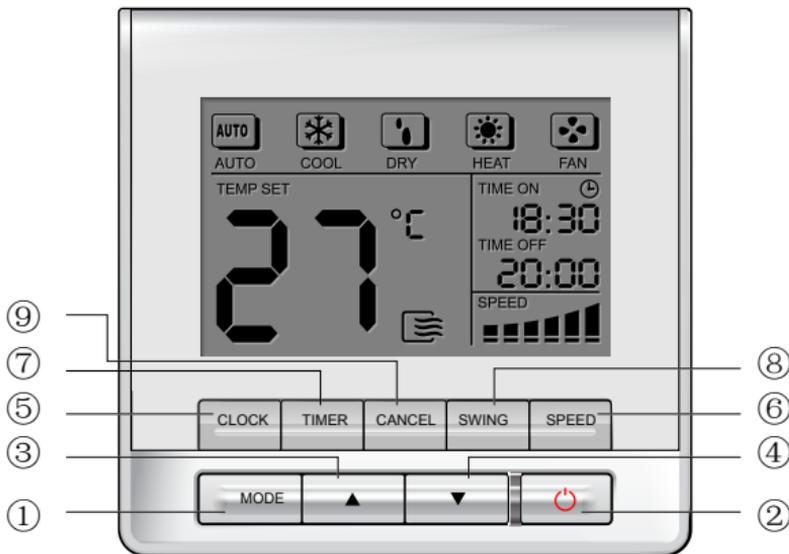
6. General function

Main functions of this wire controller as follows:

- Connect with indoor unit via the five ports of A, B, C, D, E.
- Set operation mode via buttons control.
- Provided with LCD display function.
- Provided with timing function.

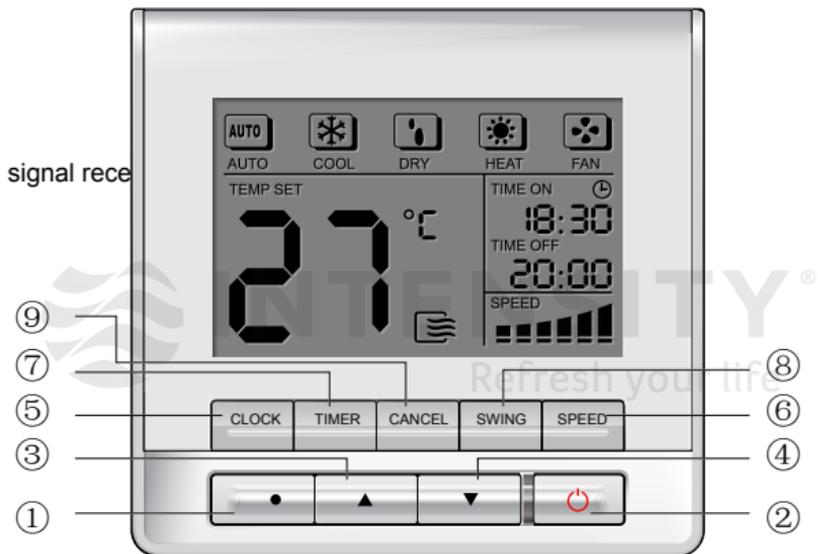
All the pictures in this manual are for explanation purpose only. Your wire controller may be slightly different. The actual shape shall prevail.

7. Name and operation of the button on the wire controller



- ① MODE Select Button ④ Adjust Button ▼ ⑦ TIMER Button
② ON/OFF Button ⑤ Time Button ⑧ SWING Button
③ Adjust Button ▲ ⑥ FAN SPEED Button ⑨ CANCEL Button

7. Name and operation of the button on the wire controller



① NO Use

④ Adjust Button ▼

⑦ TIMER Button

② ON/OFF Button

⑤ Time Button

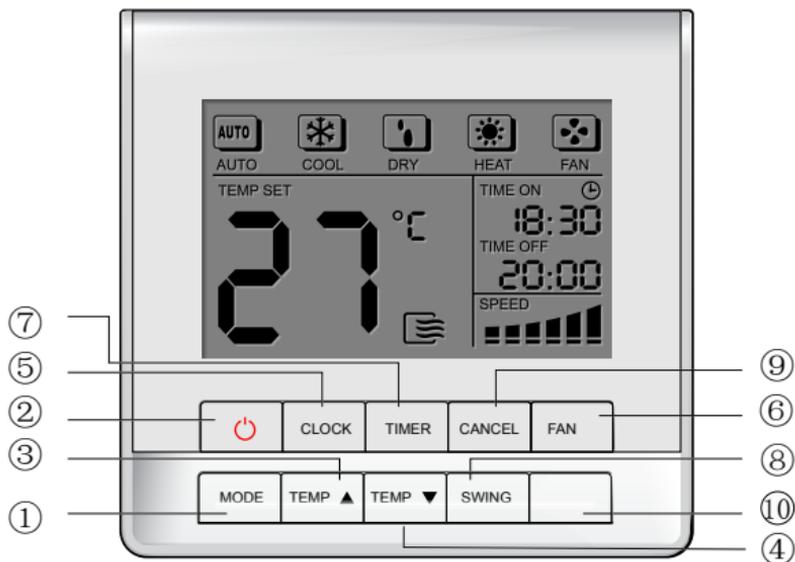
⑧ SWING Button

③ Adjust Button ▲

⑥ FAN SPEED Button

⑨ CANCEL Button

7. Name and operation of the button on the wire controller



- ① MODE Select Button ④ Adjust Button ▼ ⑦ TIMER Button
② ON/OFF Button ⑤ Time Button ⑧ SWING Button
③ Adjust Button ▲ ⑥ FAN SPEED Button ⑨ CANCEL Button
⑩ Infrared remote receiver

7. Name and operation of the button on the wire controller

① **MODE Select Button:**

Each time you push the button, a mode is selected in a sequence that goes from AUTO, COOL, DRY, HEAT and FAN as the following figure indicates:



NOTE

HEAT function is invalid for cool only type unit.

② **ON/OFF Button:**

When in off state, press this button, the indicator is on, the wire controller enter into on state, and send setting information to in door Pcb. When in on state, press this button, the indicator is off, and send instruction. If timer on or timer off has been set, it cancel this setting then send instruction to stop the machine.

③ **Adjust Button ▲:**

Press this key to increase the indoor temperature settings, 1 degree to be increased for every once press.

④ **Adjust Button ▼:**

Press this key to decrease the indoor temperature settings, 1 degree to be decreased for every once press.

7. Name and operation of the button on the wire controller

⑤ **Time Button:**

Normally, LCD displays the current time of the setting clock (however, LCD would display 12:00 when the first time power to the wire controller or reset the wire controller). Press this key lasting for 4 seconds, the clock will flashing at the frequency of 0.5 Sec. by using \blacktriangle and \blacktriangledown to adjust the time, 1 minute to be increased/decreased for every once press the \blacktriangle / \blacktriangledown . Long pressing the \blacktriangle / \blacktriangledown , it will increase/decrease 4 times/sec, 10 mins/time. Release the key when finish the clock setting, the time will stop flashing automatically.

⑥ **FAN SPEED Button:**

Press this button consecutively, the fan speed will circle as follow:
(This button is unavailable when in the mode of AUTO or DRY.)



⑦ **TIMER Button:**

Press this button, the Timing will turn on. Set Timing ON time by \blacktriangle and \blacktriangledown . The clock will increase and decrease once every 10 minutes; long pressing the keys it will increase/decrease once 10 minutes/0.2 seconds.

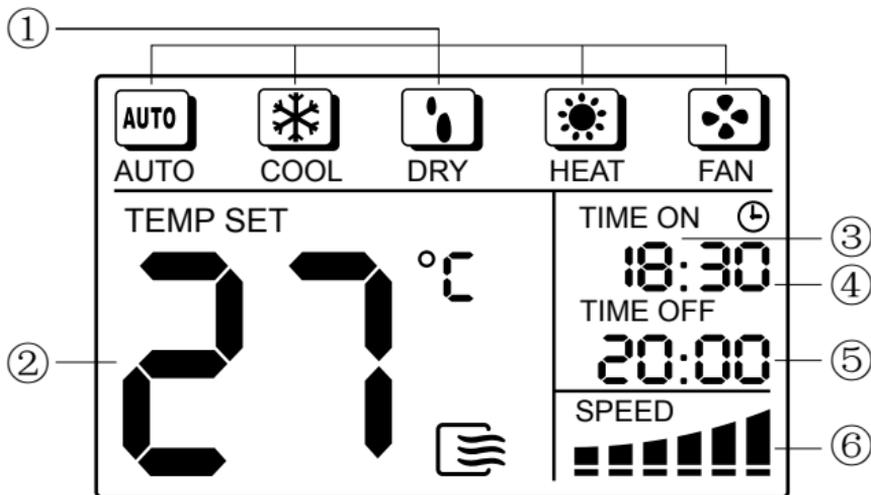
⑧ **SWING Button:**

In the unit ON status, press this key at the first time, the Swing type air supply mode to be activated. Press this key again, the function will cancel (This function could available only equip with the coordinated entire units system.)

⑨ **CANCEL Button:**

Push this button to cancel the TIMER settings.

8. Indicators and functions



- ① Operation mode indication ② Temperature display zone
- ③ Time ON indication ④ Time indication
- ⑤ Time OFF indication ⑥ Fan speed indication

8. Indicators and functions

① **Operation mode indication:**

Press MODE to display current running mode. AUTO, COOL, DRY, HEAT and FAN can be selected. (HEAT function is invalid for cool only type unit.)

② **Temperature display zone:**

Display the set temperature. Adjust temperature via ▲ and ▼. No display in this area if the unit is on FAN mode.

③ **Time ON indication:**

During setting the Timing ON or after set the Timing ON, the LCD would display "TIME ON".

④ **Time indication:**

Normally, LCD displays the current time of the setting clock. When press this Button last for 4 sec. the clock will flash at the frequency of 0.5 sec. By using ▲ and ▼ to set the minute. Release the button when finish the clock setting, the time will stop flashing automatically, which means time setting successfully.

⑤ **Time OFF indication:**

During setting the Timing OFF or after set the Timing OFF, the LCD would display "TIME OFF".

⑥ **Fan speed indication:**

Press SPEED to display the current wind speed. AUTO, LOW, MED and HIGH can be selected. The default state is high fan speed for the unit without medium fan speed.

9. Operation instructions

9.1 AUTO operation

Switch on the power and running indicator light on indoor unit flashes.

1. Press MODE to select AUTO.
2. Adjust temp via ▲ and ▼. Generally the range is 17 °C ~30°C.
3. Press ON/OFF and running indicator light on indoor unit is lightened. Air conditioner will work on AUTO mode and fan speed is AUTO which is non adjustable. Press the ON/OFF button again to stop the unit operation.



NOTE

In the AUTO mode, the air conditioner can logically choose the mode of COOL, FAN by sensing the difference between the actual ambient room temperature and the set temperature on the remote controller. If the AUTO mode is not comfortable for you, the desired mode can be selected manually.

9.2 COOL/HEAT/FAN operation

1. Press MODE to select COOL, HEAT or FAN.
2. Adjust temp via ▲ and ▼. Generally the range is 17°C ~30°C.

9. Operation instructions

3. Press FAN SPEED to select AUTO, LOW, MED or HIGH.
4. Press ON/OFF and running indicator light on indoor unit is lightened. Air conditioner will work on the set mode. Stop operation via ON/OFF.



NOTE

The FAN mode cannot be used to control the temperature. While in this mode, only steps 1、3 and 4 may be performed.

9.3 DRY operation

1. Push the MODE button to select DRY.
2. Push the TEMP button to set the desired temperature from 17°C to 30°C.
3. Push the ON/OFF button. The operation lamp lights and the air conditioner starts to operate in the DRY mode. Push the ON/OFF button again to stop this unit operation.



NOTE

Due to the difference of the set temperature of the unit and the actual indoor temperature, the Air Conditioner when in DRY mode will automatically operate many times without running the COOL and FAN mode.

9. Operation instructions

9.4 Timing set

TIMER button is for set TIME ON /TIME OFF these two types of timing.

Timing ON time and CLOCK are display at the same displayed zone. When the Timing ON has been set, the CLOCK displayed zone would show the Timing ON information. Press the CLOCK key to query the current time, which would last for 3 seconds and then recover to Timing ON information.

During the setting the timing, press the CANCEL button to exit the timing set.

For the first time press the TIMER button, the icon of “TIME ON” will display and the timing time will flashing at the 1Hz, while the “TIMER OFF” icon will not show and the timing off time would not flash (in the case of without timing off setting, the information will not show). Press the TIMING key again, the “TIME OFF” icon will show and the timing time will flashing at 1Hz; while the “TIME ON” icon will not show and the timing on time would not flash (in the case of without timing on setting, the information will not show). Button pressing base on this circulating logic.

9.4-1 Set the Timing ON time only

In case originally provide with timing set in the system, please press the CANCEL button to cancel the current settings.

1. Press the TIMER button, the LCD in the wire controller will show “TIME ON”, at the same time the time zone will display the last setting time, which flash at the frequency of 1Hz, the wire control enters to Timing ON status.
2. By using ▲ and ▼ to set the desired Timing ON time.
3. After 0.5 seconds of done the setting, the wire controller will deliver the Timing ON information, 2 seconds later, the Timing ON information will stop flashing. Timing ON has been set.

9. Operation instructions

9.4-2 Set Timing ON and OFF

In case originally provide with timing set in the system, please press the CANCEL button to cancel the current settings.

1. Press the TIMER button, the LCD in the wire controller will show “TIME ON”, at the same time the time zone will display the last setting time, which flash at the frequency of 1Hz, the wire control enters to Timing ON status.
2. By using ▲ and ▼ to set the desired Timing ON time.
3. Press the TIMER button again, the LCD in the wire controller will show “TIME OFF”, at the same time the time zone will display the last setting time, which flash at the frequency of 1Hz, the wire control enters to Timing OFF status.
4. By using ▲ and ▼ to set the desired Timing OFF time.
5. After 0.5 seconds of done the setting, the wire controller will deliver the Timing OFF information, 2 seconds later, the Timing OFF information will stop flashing. Timing OFF has been set.

9.4-3 Modify the timing settings

For modify the TIMING OFF/TIMING ON, please press the corresponding timing button to reset it.



NOTE

The set time is the relative time that is relative to the standard time when setting the wire controller, which would delay for a while.

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.