USER AND INSTALLATION MANUAL

KC-03.1 SPS

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 wired 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 PRECAUTION

- Read the safety precautions carefully before installing the unit.
- Is stated below the important safety points that must be considered.

WARNING	Improper handling may lead to important injuries.
CAUTION	Improper handling may lead to lost or damage to the product.

WARNING

Please, entrust to the distributor or professionals to install wired controller.

The installation by other persons may lead to imperfect installation, electric shock or fire.

The improper installation may lead to electric shock or fire.

The reinstallation must be performed by professionals.

The improper reinstallation may lead to electric shock and fire.

Do not uninstall the controller randomly.

Random uninstalling may lead to abnormal operation, heating of the equipment or fire on the air conditioner.

NOTE

1. Do not install wired controller in a place vulnerable to leakage of flammable gases. The contact with these gases may produce a fire.
2. Do not operate wired controller with wet hands and not let the water enter inside of controller. Otherwise may occur a breakdown in the controller or even a electric shock.
3. Wiring should adapt to wire controller. Otherwise, electric leakage or excessive heating of the equipment may occur and result in fire.
4. In the wiring shall be applied specified cables by the manufacturer. No external power may be applied to the terminal. Otherwise may occur a electric short circuit or excessive heating on equipment, which can cause fire.

2. INSTALLATION ACCESSORY

Select the installation location

Don't install in a place with heavy oil, vapor or sulfurated gases. Otherwise this product would be deformed that would lead to system failure.

Preparation before installation

1. Please confirm that all the following parts, have been supplied.

No.	Name	Qty	Remarks
1	Wire controller	1	
2	Installation and owner's manual	1	
3	Screws	3	M4X20 (For Mounting on the wall)
4	Wall plugs	3	For mounting on the wall
5	Screws	2	M4X25 (For Mounting on switch box)
6	Plastic screw bars	2	For fixing on switch box
7	Battery	1	

2. Prepare the following assemblies on the site.

No.	Name	Qty	Remarks
1	Switch box	1	
2	Wiring tube (Insulating Sleeve, Tightening Screw)	1	

Precautions to install wire controller

1. This manual provides the installation method of the wire controller. Please, refer to the wiring diagram of this installation manual to install the wire controller in the indoor unit

2. This wire controller working in low voltage circuit. Is forbidden directly contact with cable of 220V of the commercial electricity or with cable of 380V of high voltage. In addition, not connect this kind of wire in the low voltage circuit of the units; this may produce damages in the equipment.

3. The shielded wire of wire controller must be grounded reliable.

4. Upon finish the connection of wire controller, do not employ megger to detect the insulation. This may produce damages in the equipment.

3. INSTALLATION METHOD

1. Dimensions of wired controller

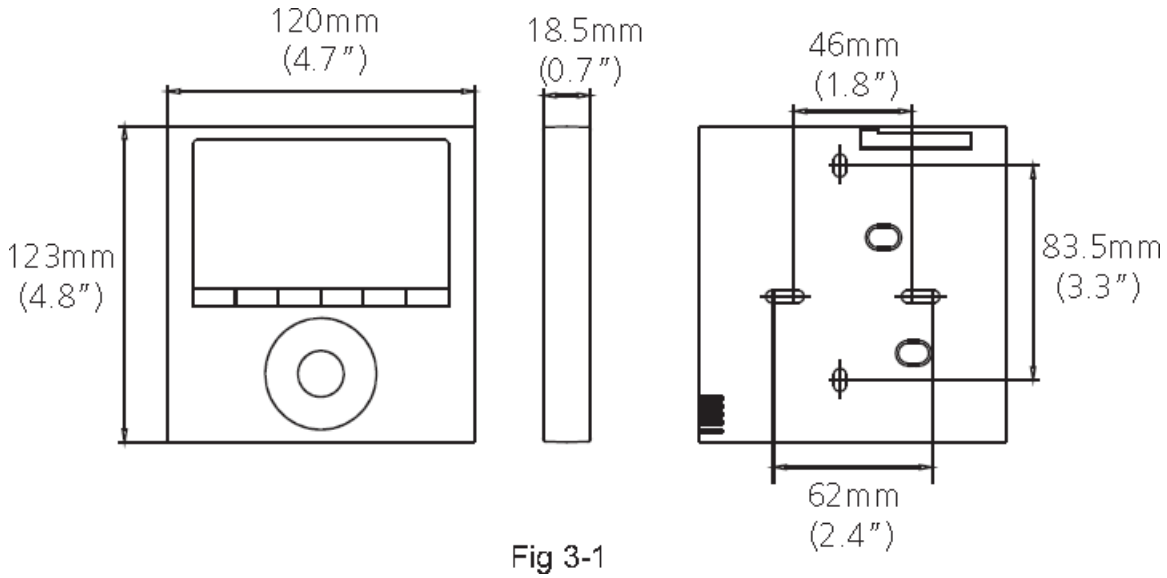


Fig 3-1

2. Remove the upper cover of wire controller

- Insert a screwdriver into slots in the lower part of the wire controller (2 places) and remove the upper part of the wire controller. (Fig. 3-2)

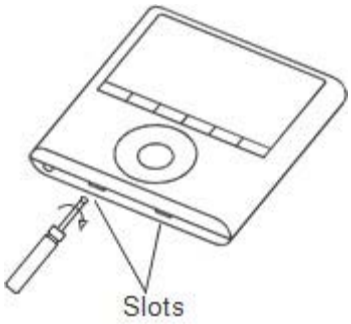


Fig 3-2

NOTICE

The PCB is mounted in the upper part of the wire controller. Be careful not to damage the board with the slot screwdriver.

3. Fasten the back plate of wire controller

   For exposed mounting, fasten the back plate on the wall with the 3 screws (M4x20). (Fig. 3-3)

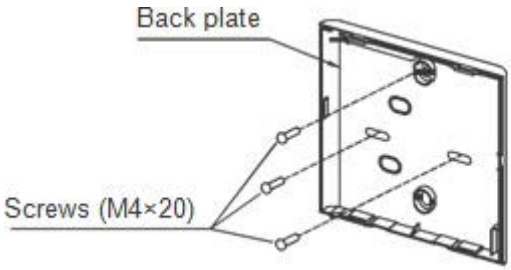


Fig 3-3

NOTICE

Put on a flat surface. Be careful not to distort the back plate the wire controller, over tightening mounting screws.

4. Battery installation

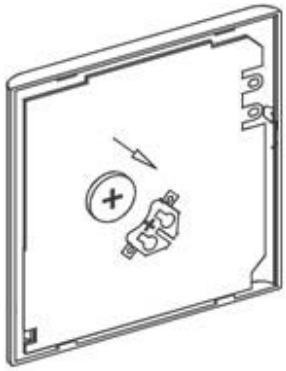


Fig 3-5

- Put the battery into the pcb board of wired controller and make sure of polarity of the battery. The positive (+) of battery with positive (+) of the installation place. (See Fig. 3- 5)
- Please, set correct time the first time that you operate with controller. The battery in the wire controller maintains the memory under power failure, this mean that wired control not loses the time on the clock neither weekly timer. When the power restored, if the time displayed is not correct, it means the battery is empty and need to be replaced.

5. Wire to the indoor unit

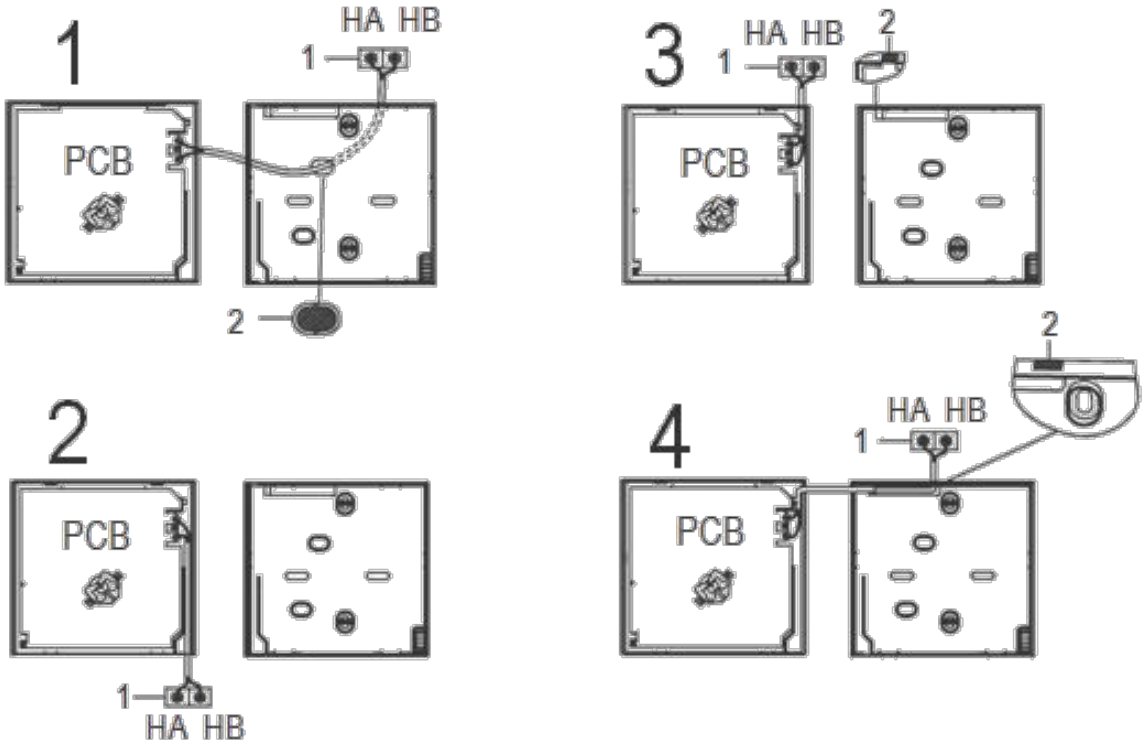
4 methods

1 from rear;

2 from the bottom;

3 from the top;

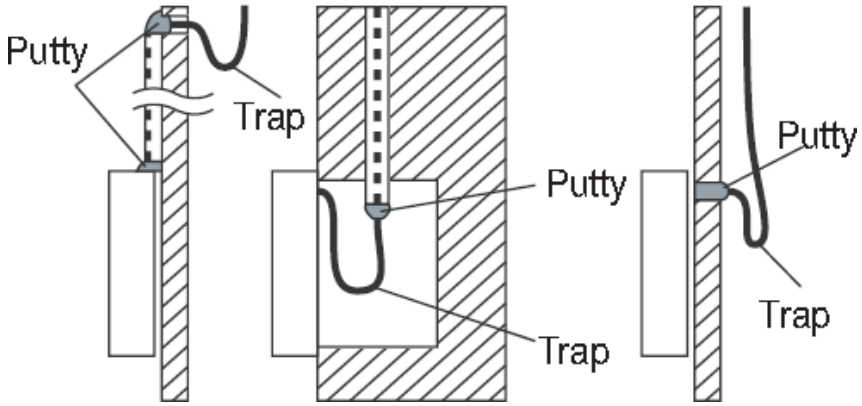
4 from the top center.



1 terminal of the indoor unit
2 notches, to pass the wiring.

Connect terminals (HA, HB) on the remote controller with terminals (HA, HB) of the indoor unit. (HA and HB do not have polarity).

NOTE: DO NOT allow water to enter the remote control.
Use the trap and putty to seal the wires.



6. Reattach the upper cover of wired controller

   - After adjusting situation of upper cover, push to close the wire controller; avoid pinching wiring during the assembly. (See Fig. 3-6)

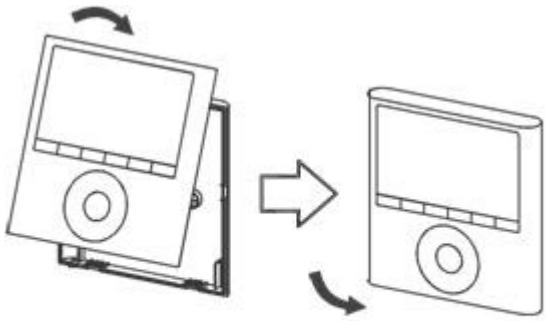


Fig 3-6

All the pictures in this manual are only for explanatory purpose. Your wired controller may be slightly different.

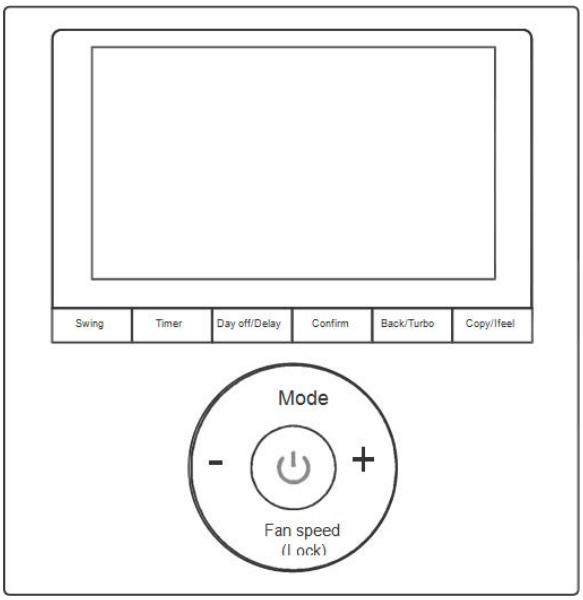
4. SPECIFICATION

Input Voltage	**DC 5V / DC 12V**
Ambient temperature	**-5~43ºC (23~110ºF)**
Ambient Humidity	**RH 40%~RH90%**

Wiring specifications

Wiring type	Size	Total Length
Shielded	**0.75-1.25 mm²**	**≤ 50 m. (164')**

5. FEATURE AND FUNCTION OF WIRED CONTROLLER



Features:

LCD Display

Malfunction code display: it can display the error code, helpful for service.

4-way wire layout design, no raised part at backside, more convenient to place the wires and install the device.

Room temperature display.

Weekly Timer

Function:

Mode: choose AUTO / COOL / DRY / HEAT / FAN

Fan speed: AUTO / LOW / MED / HIGH

Swing: (On some models)

Timer ON / OFF

Temperature Setting

Weekly Timer

Ifeel

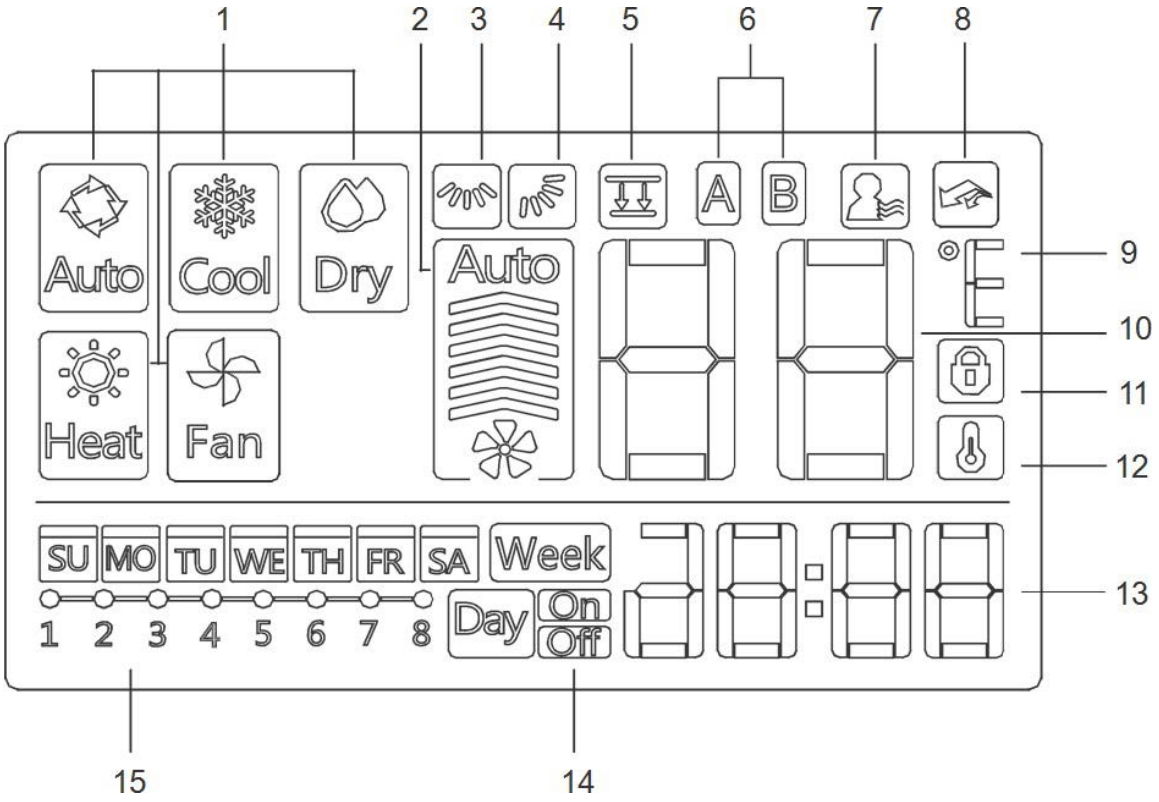
Child Lock

LCD display

Clock

Faceplate Function (On some models)

6. EXPLANATION OF THE DISPLAY OF THE WIRED CONTROLLER



1.-Operation Mode indication

2.-Fan Speed indication

3.-Left-right swing indication

4.-Up-down swing indication

5.-Faceplate function indication

6.-Main unit and secondary unit indication

7.-Ifell function indication

8.-Turbo function indication

9.- Cº/Fº Indication

10. -Temperature Display

11.-Lock indication

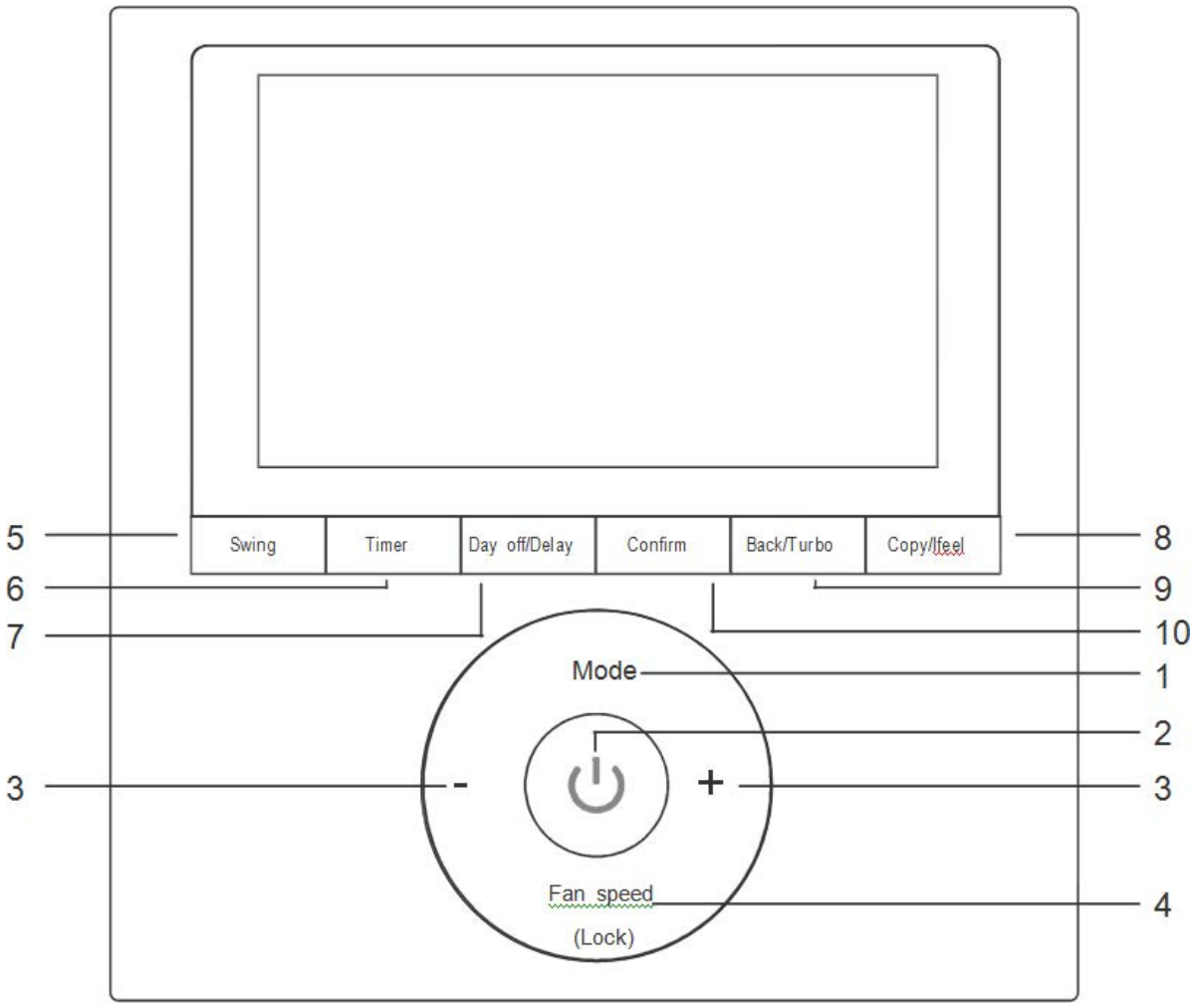
12.-Room temperature indication

13.-Clock display

14.-On / Off Timer

15.-Timer display

7. NAME OF THE BUTTONS ON THE WIRE CONTROLLER



1.-MODE button

2.-POWER button

3.-ADJUST + and - button

4.-FAN SPEED button

5.-SWING button

6.-TIMER button

7.-DAY OFF / DELAY button

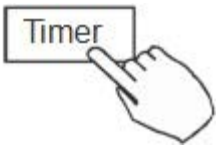
8. -COPY / IFEEL button

9.-BACK / TURBO button

10.-CONFIRM button

8. PREPARATORY OPERATION

Set the current day and time

1 

Press **TIMER** button for 3 seconds or more.
Timer display will flash.

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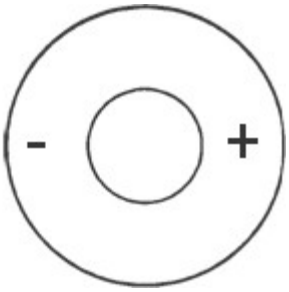
2 

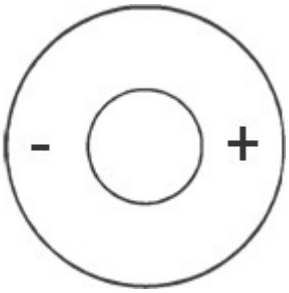
Press button **"+"** or **"-"** to set the date. The selected date will flash.

3

When you press **Timer** button or not pressing any button in 10 seconds, you confirm date setting. Next step is to adjust time of the clock.

.

Press the button **"+"** or **"-"** to set the current time.

4 

Press repeatedly to adjust current time on 1-minute increases o 1-minute decreases.
Press and hold to increase o decrease the current time of the clock, continuously.

Ex. Monday AM 11:20.

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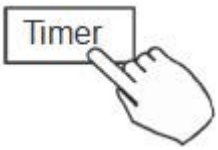
5 

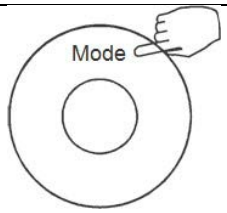
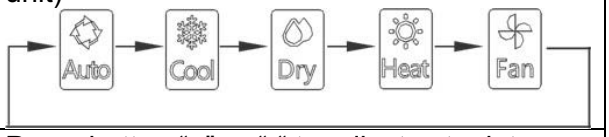
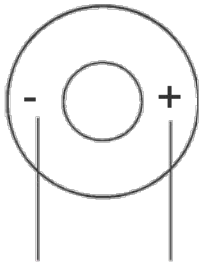
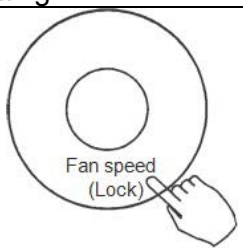
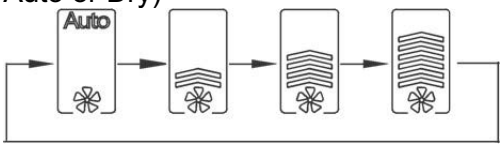
The setting is done, after pressing **Timer** button or not pressing any button in 10 seconds.

9. OPERATION

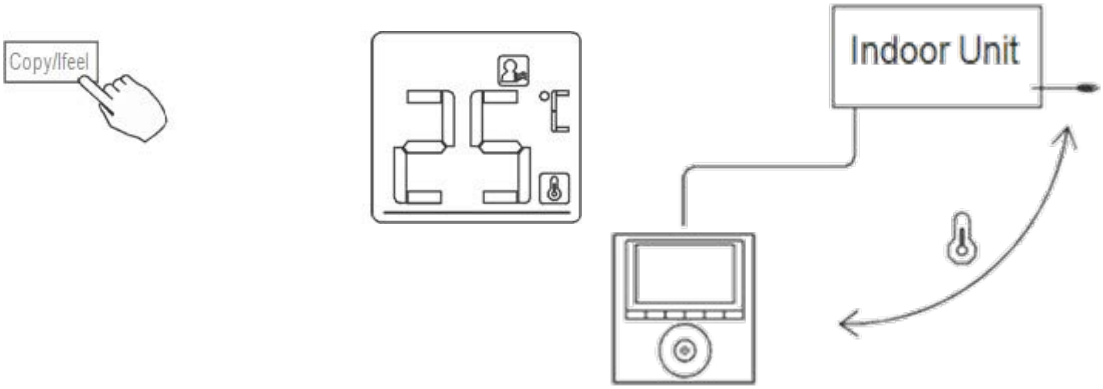
To start/stop operation

Press **Power** button.

To set operation mode

 Operation mode setting	Press **Mode** button to set operation mode. (Heat function is invalid for cool only type unit) 
 Set point temperature setting	Press button "**+**" or "**-**" to adjust setpoint temperature. Indoor Setting Temperature Range: 17~30ºC (62~86ºF/62~88ºF (Depending on models)).
 Fan speed setting	Press **Fan speed** button to set fan speed of the unit. (This button is unavailable in mode Auto or Dry) 

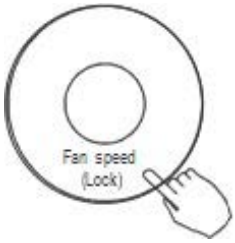
Wired control temperature sensor selection



Press **Follow me** button, to select whether the ambient temperature is detected at the indoor unit or in wired controller.

When the Follow me function indication appears, ambient temperature is detected at wired controller.

Child lock function



Press **Lock** button for 3 seconds to activate the lock function and lock all buttons on the wire controller.
Press the button again for 3 seconds to deactivate the lock function.

When the lock function is active, the mark appears

Keypad tone setting

Press buttons **Swing** and **Timer** simultaneously for 3 seconds to turn off the keypad tone.

Press the buttons again for 3 seconds to turn on the keypad tone.

ºC and ºF scale selection (on some models)

Press the buttons **Back** and **Copy** simultaneously for 3 seconds will alternate the temperature display between ºC and ºF.

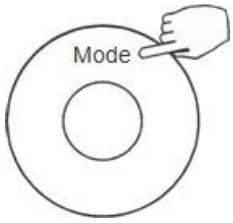
Turbo Function (on some models)

Press **Turbo** button to activate the turbo function.

Press button again to deactivate the turbo function.

When the turbo function is activated, the mark appears

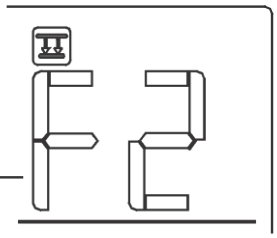
Faceplate function (on some models)



When the unit is off, press **Mode** button long to activate the faceplate function.

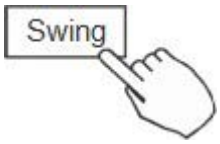
The mark will flash.

The F2 appears in the screen when the faceplate is adjusted.



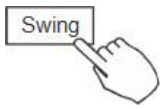
Press the button **"+"** and **"-"** to control the lift and drop of the faceplate.
Pressing **"+"** button can stop the faceplate, while it is dropping.
Pressing **"-"** button can stop the faceplate, while it is lifting.

Swing function (For the unit left & right auto swing models only) Left-Right swing



Press **Swing** button to start Left-Right swing function.
Press it again to stop.
When the Left-Right swing function is activated, the mark appears.

Up-Down swing

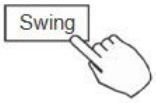


Press **Swing** button long to start Up-Down swing function.
Press it again to stop.

When the Up-Down swing function is activated, the mark appears

Swing function (For the unit without left & right auto swing function models)

Up-Down airflow direction and swing



- Use Swing button to adjust the Up-down airflow direction.

1.Press the button, with every press, the louver swings 6 degrees.
2.Press and hold the button for 2 seconds, it turns into up-down swing mode, press it again to stop.

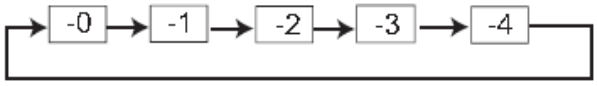
When the Up-Down swing function is activated, the mark appears. (Not applicable to all the models)

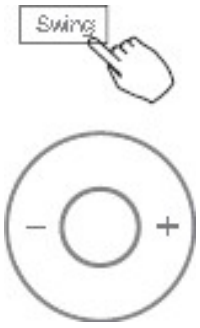
- The operation can refer to the following instructions for the unit with four Up-Down louvers can be operated individually.

1.Press the Swing button to activate the Up-Down adjusting louver function.

The mark will flash. (Not applicable to all the models)

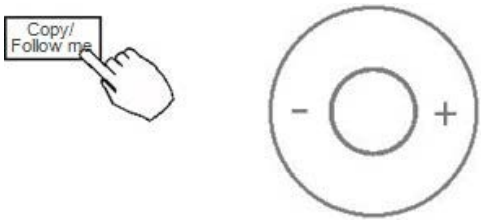
2. Pressing the button “+” or “-” can select the movement of four louvers. Each time you push the button, the wire controller selects in a sequence that goes from :(the icon -0 means the four louvers move at the same time.)





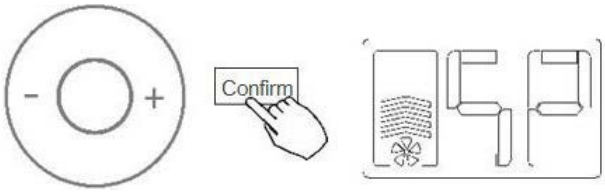
3. And then use Swing button to adjust the Up-Down airflow direction of the selected louver.

Indoor unit Tx temperature query function

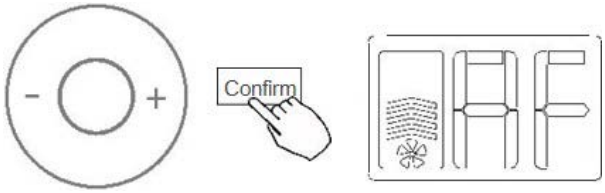


When the air conditioning unit is switch machine, long press “COPY” for 3 seconds to enter a query indoor unit Tn(T1~T4) temperature and fan Fault (CF), press“+”or “-”to select.

Not operating keys 15 seconds or press “Back” or press “ON/OFF” drop out of query temperature.



When the air conditioning unit is off, into the query function of temperature, press“ +” or “-” to select SP, press “Confirm” to adjust the static pressure value.



When the air conditioning unit is off, into the query function of temperature, press“ + ”or “-” to select AF, press “Confirm” into test mode, press “Back” or press “ON/OFF” or press “Confirm” drop out of test mode.

10. TIMER FUNCTIONS

WEEKLY Timer

Use this timer function to set operating times for each day of the week.

ON Timer

Use this timer function to start air conditioner operation. Air conditioner will start up when the configured time has passed.

OFF Timer

Use this timer function to stop air conditioner operation. Air conditioner will stop when the configured time has passed.

ON and OFF Timer

Use this timer function to start and stop air conditioner operation. The timer operates and air conditioner operation starts and stops after the time has passed.

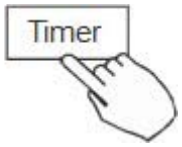
To set the ON or OFF TIMER

Press **Timer** button repeatedly to select the

or

.

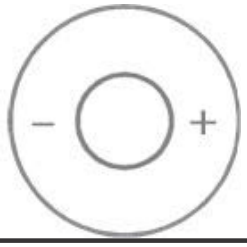
1

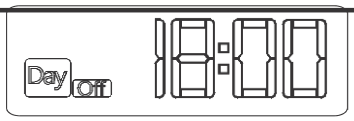


2

Press **Confirm** button and Clock display will flash.

3





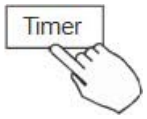
Ex. Off timer set at PM 6.00

Press the button **"+"** or **"-"** to set the time. After the time is set, the timer will start or stop automatically

4

Press **Confirm** button to finish the settings.

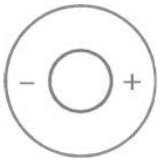
To set the ON and OFF TIMER

1 

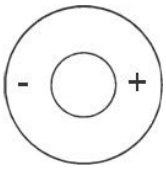
Press **Timer** button to select the Day On Off .

2

Press **Confirm** button and Clock display will flash.

3 

Press the button **"+"** or **"-"**to set the time of ON TIMER, and then press **Confirm** button to confirm setting.

4 

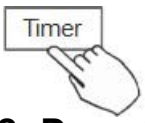
Press the button **"+"** or **"-"** to set the time of OFF TIMER

5

Press **Confirm** button to finish settings.

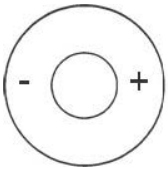
11. WEEKLY TIMER

1.-Weekly timer setting



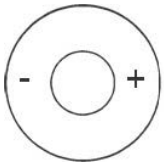
Press **Timer** button, the mark Week appears on the LCD, and then press **Confirm** button to confirm.

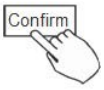
2.-Day of the week setting



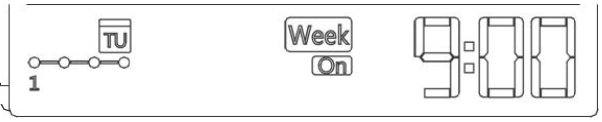
Press the button**"+"** or **"-"** to select the day of the week, and then press **Confirm** button to confirm the setting.

3.-ON TIMER setting of timer setting 1





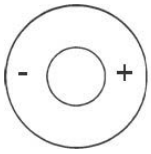
Press the button **"+"** or **"-"** to set the time of ON TIMER, and then press **Confirm** button to confirm the setting.



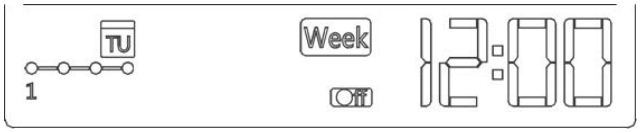
Ex. Tuesday time scale 1

Up to 4 timer settings can be saved for each day of the week.

4.-OFF TIMER setting of timer setting 1



Press the button **"+"** or **"-"** to set the time of OFF TIMER, and then press **Confirm** button to confirm the setting.



ex.Tuesday time scale 1

5. - Different timer setting can be set by repeating step 3 to 4

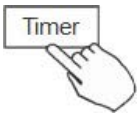
6. - Other days in one week can be set by repeating step 2 to 5

NOTE:

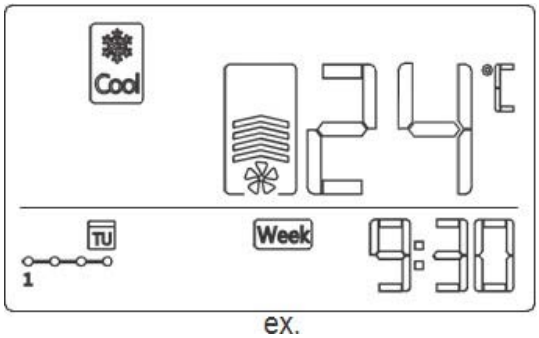
- The weekly timer setting can be returned to the previous step by pressing **Back** button.
- The time of timer setting can be deleted by pressing **Day Off** button.
- When no operation for 30 seconds, the current setting will be restored and automatically we will leave of the weekly timer.

WEEKLY timer operation

- To activate WEEKLY TIMER operation.

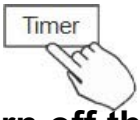


Press **Timer** button and the mark Week appears on the LCD.



ex.

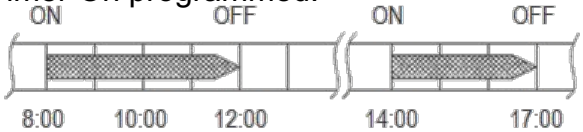
- To deactivate WEEKLY TIMER operation.



Press **Timer** button and the mark Week disappear from the LCD.

To turn off the air conditioner during the weekly timer

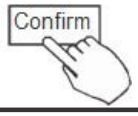
1. If press **Power** button once, the air conditioner will turn off temporarily. And the air conditioner will turn on automatically on the next Timer On programmed.



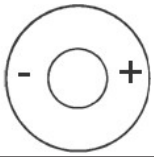
ex. If you press **Power** button once at 10:00, the air conditioner will turn on at 14:00.

2. If press **Power** button for 2 seconds, the air conditioner will turn off completely.

To set the DAY OFF (for a holiday)

1 

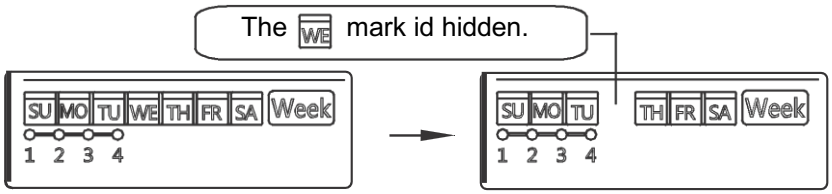
During the weekly timer, press **Confirm** button.

2 

Press the button **"+"** or **"-"**to select the day in this week.

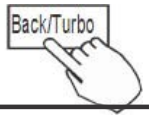
3

Press **Day off** button to set the DAY OFF.



Ex. The DAY OFF is set for Wednesday.

4 The DAY OFF function can be used for other days by repeating the steps 2 and 3.

5 

Press **Back** button to back to the weekly timer.

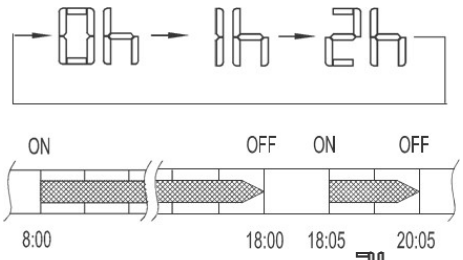
- To cancel this function, need the same described procedures.
- Notes:
  The DAY OFF setting is cancelled automatically after the set day has passed.

DELAY function

During the weekly timer, if you pressing the **Delay** button once, LCD screen display 0h.

Press this button twice, LCD screen show 1h and wait 3 seconds to confirm. This means the unit will override 1 hour.

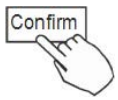
Press this button three times, LCD screen show 2h and wait 3 seconds to confirm. This means the unit will override 2 hours.



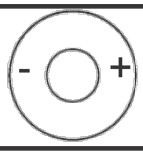
ex. If press the DELAY button to select 2h at 18:05
The air conditioner will delay to turn off at 20:05.

Copy settings of one day to another

- Every timer program done once can be copied to other day of the week.
  Whole program of the selected day of the week can be copied.
  The effective use of the copy mode, is the easier way to make the weekly program.

1 

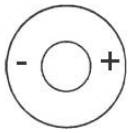
During the weekly timer, press **Confirm** button.

2 

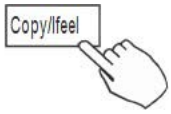
Press the button **"+"** or **"-"** to select the day to copy from.

3

Press **Copy** button. The letters "CY" will appear on the LCD.

4 

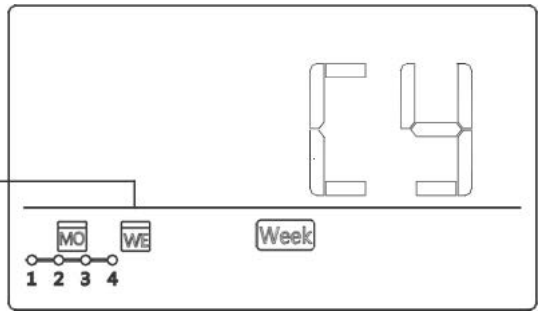
Press the button **"+"** or **"-"** to select the day to copy to.

5 

Press **Copy** button to confirm.

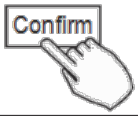
The

mark flashes quickly



ex. Copy the setting of the Monday to Wednesday.

6 The other days can be copied by repeating step 4 and 5.

7 

Press **Confirm** button to accept settings.

8

Press **Back** button to back to the weekly timer.

12. SETTING STATIC PRESSURE FOR A6 DUCTS

1.When the unit is in standby, press ‘copy’ button for 3s, the unit will enter into temperature query status, showing T1.

2.Press ‘+’ and ‘-’ button to select on-way resistance test item (shows AF), then press ‘confirm’ to make the unit will enter into on-way resistance test mode, and runs for 3~6mins, then it will get the on-way resistance.

1.When the unit is in standby, press ‘copy’ button for 3s, the unit will enter into temperature query status, showing T1.

2.Press ‘+’ and ‘-’ button to select ‘SP ‘to enter into parameter selecting interface. Then press ‘confirm’ button to adjust the parameter.

You can choose 0~4.

0: constant airflow function. Unit adjust the airflow volume automatically to be

the same as standard airflow volume, by adjusting the fan speed.

1: non-constant airflow, airflow decreases as on-way resistance increases

2: non-constant airflow, airflow decreases as on-way resistance increases

3: non-constant airflow, airflow decreases as on-way resistance increases

4: non-constant airflow, airflow decreases as on-way resistance increases

From 1 to 4, static pressure increases.

13. FAULT ALARM HANDING

If the system does not properly operate, maybe any of alarm codes of the below table may appear in the LCD display of the wired controller.

	MALFUNCTION &PROTECTION DEFINE	DISPLAY LCD
1	Communication error between wire controller and indoor unit	F0
2	The face plate is abnormal	F1

If the system continues still doesn't work well, please check the display in the indoor unit to see if an alarm code appears in it. If appear an alarm code, please check it in the technical manual of the indoor unit.

14. TECHNICAL INDICATION AND REQUIREMENT

EMC and EMI comply with the CE certification requirements.

USTREDIE
Blasco de Garay, 4-6
08960 Sant Just Desvern
(Barcelona)
Tel. +34 93 480 33 22
http://www.frigicoll.es/
http://www.kaysun.es/en/

MADRID
Senda Galiana, 1
Polígono Industrial Coslada
Coslada (Madrid)
Tel. +34 91 669 97 01
Fax. +34 91 674 21 00
madrid@frigicoll.es