Johnson Controls

HITACHI
Air conditioning solutions

Touch Screen Wired Controller (Model:HCWA10NEGQ)

Compiled referring to training material in JCH

JCH-WX
Hitachi-Johnson Controls Ari Conditioning
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1. Product Information

- Figure 1 shows all the indications for reference.

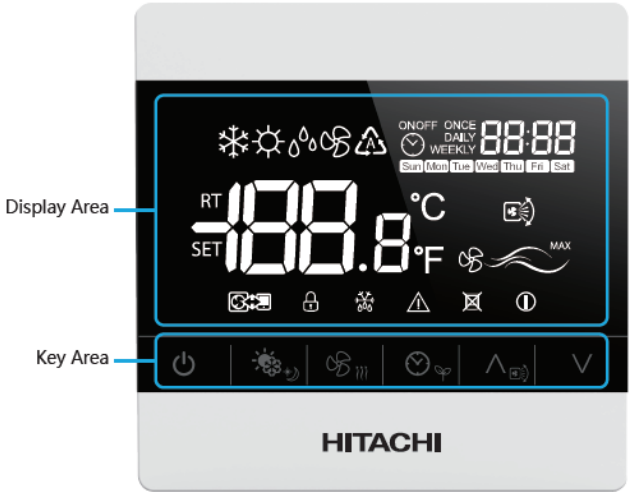


Figure 1

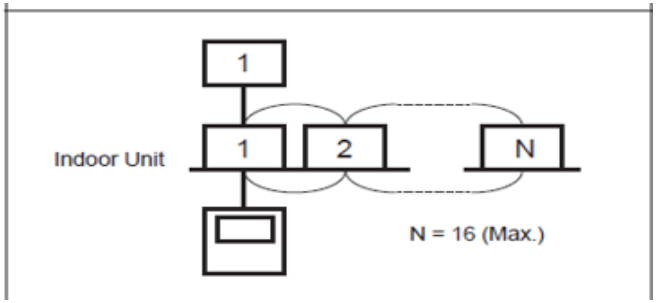
1) Key area icons illustration

Key No.	Icons	Illustration	Function
①		ON/OFF	This key is used to start/stop the equipment
②		Mode	Promptly press this key to switch mode
③		Fan speed	Promptly press this key to switch fan speed
④		Timer	Promptly press this key to set schedule timer
⑤		Up	Press this key to increase temperature, time, swing louver angle, etc.
⑥		Down	Press this key to decrease temperature, time, etc.

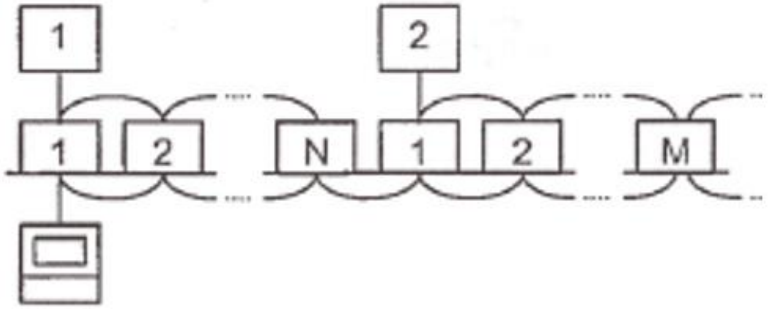
2) Display area icons illustration

Icons	Illustration	Icons	Illustration
	Automatic		Horizontal louver
	Cooling		Lock
	Heating	MAX	Fan speed
	Ventilation		Communication
	Dry		Alarm
RT	Room temperature		Defrosting
SET	Setting temperature		Remote control Lock
℃	Centigrade degree		Operating mark
℉	Fahrenheit degree		
ONOFF ONCE DAILY WEEKLY	Timer	88:88	Time, address and parameters display

- The combination of the same refrigerant System.
  A controller can control up to 16 indoor units.



- The combinations of different refrigerant Systems.



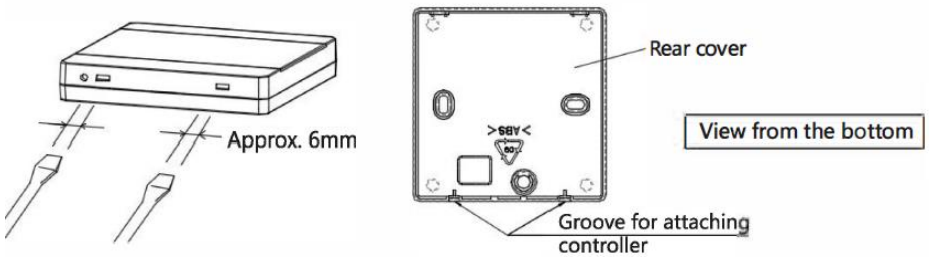
3.Main Function

- Basic function settings
- Parameter settings
- Fault display in various states
- Keyboard locks
- Timer function(Schedule)
- Support test run
- Check status of various unit
- Control multiple indoor units
- Change the indoor address and system number
- Main and Auxiliary controller and priority setting
- Work with centralized controller and remote receiver.
- Built in temperature sensor.

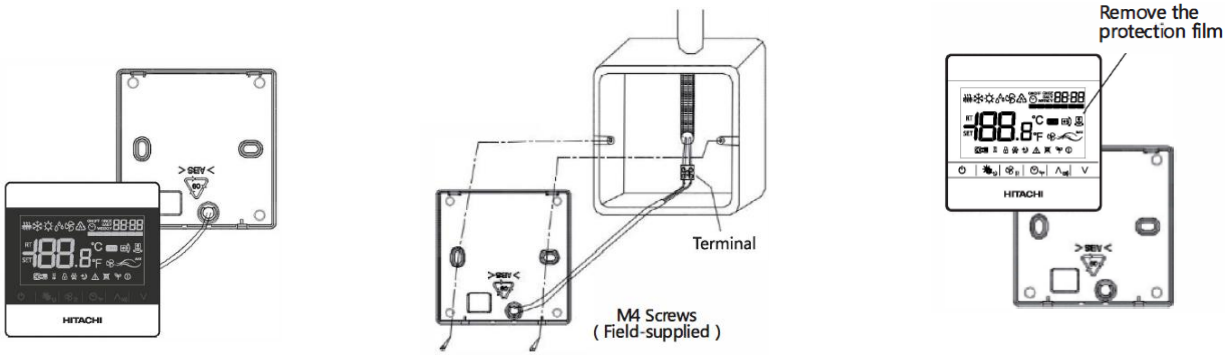
4. Differences with PC-ARF

- This wired controller does NOT support(Main difference with PC-ARF)
  - The same indoor unit to connect 2 wired controllers.
  - Voice guide.
  - Base board diagnosis.
  - Register room name.
  - Emergency operation.
  - ECO function
  - Address selection operation.
  - Lifting grille function.
  - Noise reduction settings.
  - Operation Schedule.
  - Maintenance Contact information.
  - Total heat exchanger settings.
  - Controller stop delay settings.

- 1) Insert the edge of the slotted screwdriver into the groove at the bottom of the bracket holder. Rotate the screwdriver to remove the controller from the bracket holder.



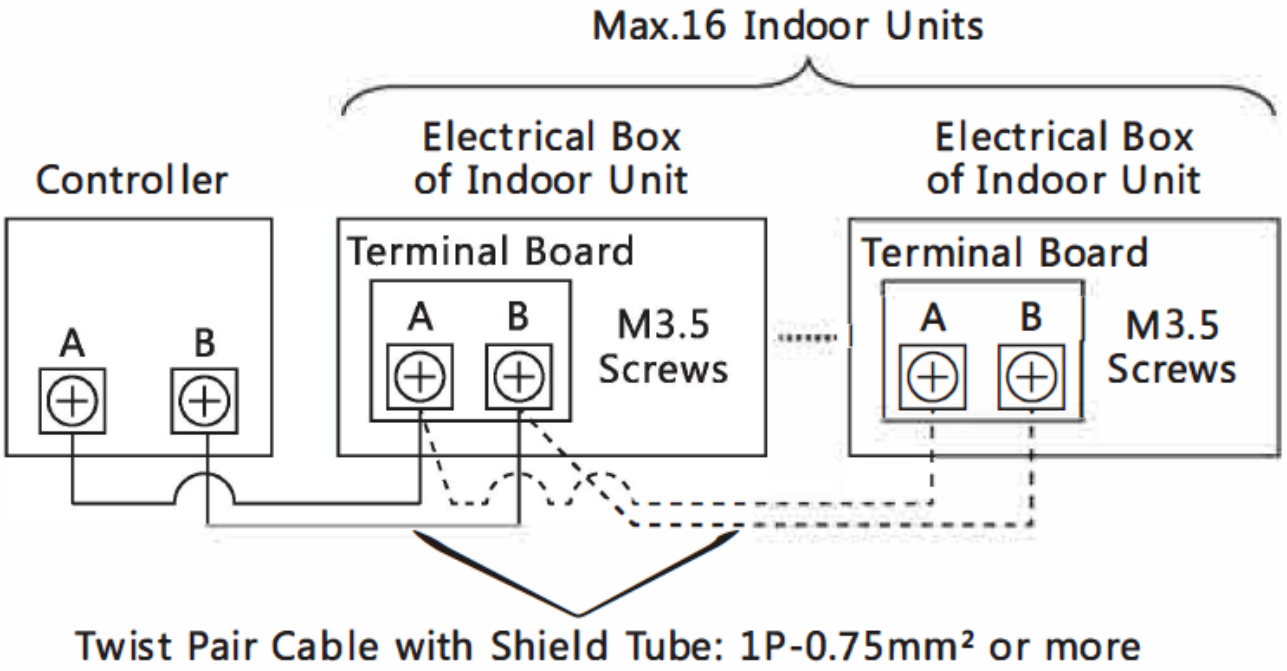
- 2) Attach the controller to the bracket holder and connect the cable as shown:
- 3) Attach the wired controller to the bracket holder.
- 4) Remove the protection film on the liquid crystal display.



- ATTENTION:

Ensure to disconnect power at the main source before initiating electrical work. Failure can cause fire, damage to internal components damage and severe/fatal electrical shock.

Example for Communication Cabling:



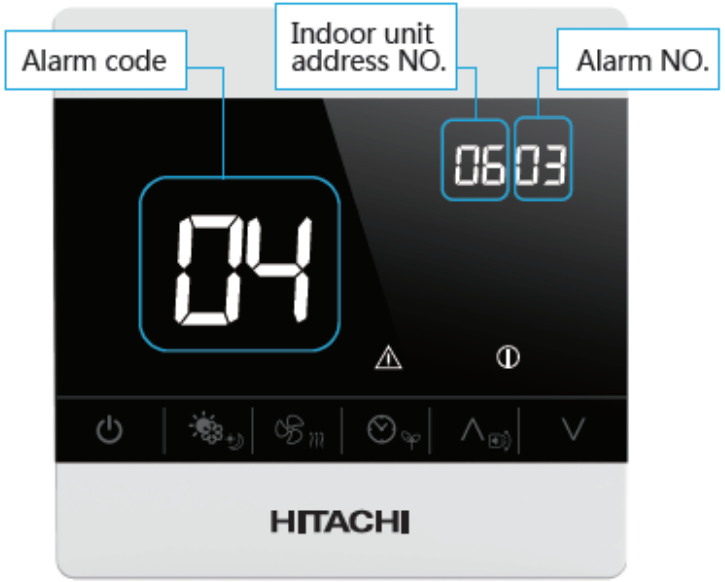


Figure 23

Figure 24

Operation Steps

1) Press any key to light up the backlight.
2) Press and hold key ⑥ for 5s to enter the alarm query interface, as shown in figure 23.
3) Promptly press key ⑤ or key ⑥ to browse the alarm.
4) Press the key ① or long press the key ⑥ for 5s to exit the alarm query interface and return to the operation interface.

2. Alarm deletion

Operation Steps

1) Press any key to light up the backlight.
2) Press and hold key ⑥ for 5 s to enter the alarm query interface.
3) Press and hold key ③ and key ④ for 5 s to delete all alarm records, as shown in figure24.

In case of no alarm, the alarm record displays 00, and the minute area displays 00.

4) Press the key ① or long press the key ⑥ for 5 seconds to exit the alarm query interface and return to the operation interface.

TIPS :

- 30 alarm messages can be recorded at most in the wired controller alarm query.

8. Input / Output Setting from Controller

• Table A Input and Output Number Display and Connectors

Input/output Indication	Port	Factory Setting	
		Setting Features	Indication
Input 1	CN3 1-2#	Remote ON/OFF 1	03
Input 2	CN3 3-2#	Prohibiting Remote Control after Manual Stopping	06
Output 1	CN7 1-2#	Operation	01
Output 2	CN7 1-3#	Alarm	02
Output 3	CN8 1-2#	Thermo-ON for Heating	06

• Table B Input and Output Settings and Display Codes

Indication	Input	Output
00	Not Set	Not Set
01	Room thermo(for cooling)	Operation
02	Room thermo (for heating)	Alarm
03	Remote ON/OFF 1	Cooling
04	Remote ON/OFF 2 (Operation)	Thermo-ON for Cooling
05	Remote ON/OFF 2 (Stoppage)	Heating
06	Forbidding Remote Control after Manual Stoppage	Thermo-ON for Heating
07	Remote Cooling / Heating Change	Not Set

9. Individual Louver Setting

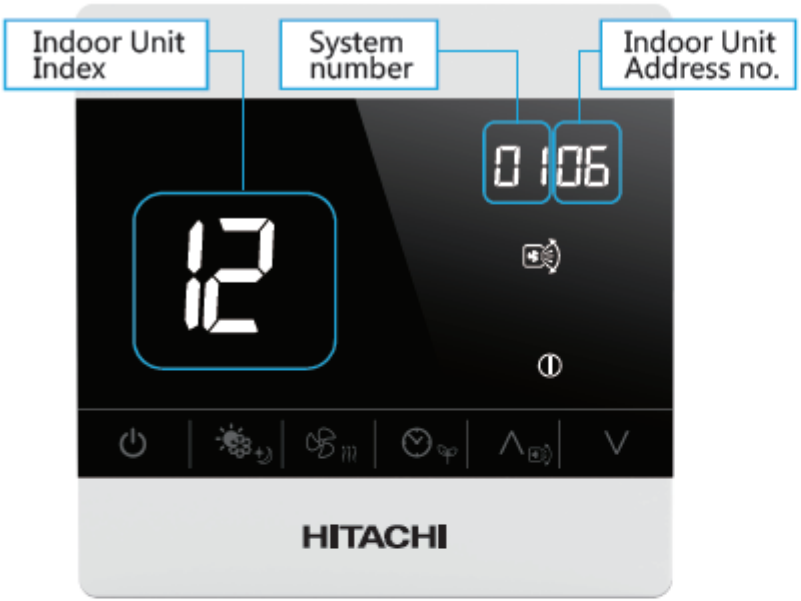


Figure 6

Figure 7

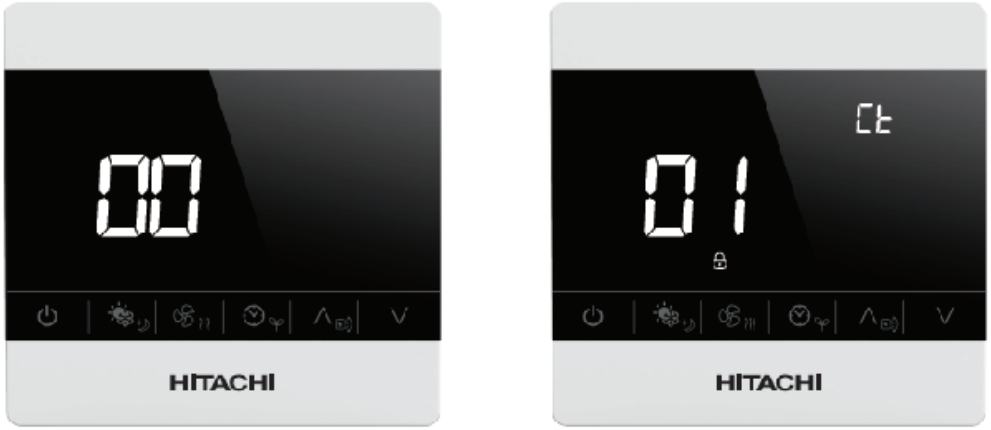
1. When the wired controller controls multiple indoor units, the steps to adjusting the individual swing Louver angle are as follows:

Operation Steps

1) Press any key to light up the backlight.
2) If unit operation is start, press key ⑤ for 5s to enter the automatic louver mode.
3) Press key ⑤ and key ⑥ for 5s to enter the individual louver adjustment interface, as shown in figure 6.
4) Press key ⑤ or key ⑥ to select the specific indoor unit.
5) Press key ③ for confirmation.
6) Press key ⑥ to select the louver number, as shown in figure 7.
7) Press key ⑤ to select the louver angle.
8) Press key ③ to confirm and return to the normal operation interface .

10. Priority Setting

1. **If there is no main controller in a system, the system will automatically specify a main controller after power on, but the priority will not be set up. If users want to set up a main controller with high priority, the setting can be made based on the following method:**



Operation Steps

1) Press any key to light up the backlight.
2) If operation is stop, press the key ③ and key ④ for 5 s to enter the priority setting interface, as shown in figure 20.
3) Press key ⑤ or key ⑥, select 01 or02, and set high priority for this wired controller. 00 indicates cancel priority setting ,01 indicates priority setting of operation mode, 02 indicates priority setting of operation mode and setting temperature.

(The priority setting of operation mode means the sub wired controller can only set the specified mode after the main controller sets operation mode, and refer to the table below for the setting mode. The priority setting of operation mode and setting temperature means that the sub wired controller can only set the specified mode after the main controller sets operation mode. After the main controller sets the temperature, the sub wired controller will automatically synchronize to the same temperature.)

Main controller mode	Setting mode of the sub wired controller
Cooling	Cooling, dry, ventilation
Heating	Heating and ventilation
Ventilation	Ventilation
Dry	Cooling, dry, ventilation
Automatic	Unlimited

4) Press the key ③ for confirmation, and return to the operation interface.
(See serial numbers of the keys in the panel key description on the home page, for key ① to ⑥ from left to right.)

2. If there are other main controllers inside the system already, users can set up according to the method below if want to assign a new main controller:

Operation Steps

1) Press any key to light up the backlight.
2) In case of operation is stopped, press key ③ and key ④ for 5 s, to enter the seizing the setting interface of the main controller, as shown in figure 21. No operation is supported in this interface. After successful seizure (10 seconds), it will automatically jump into the priority settings interface, as shown in figure 20.
3) Press key ⑤ or key ⑥, select 01 or 02,and set high priority for this wired controller.
   00 indicates cancel priority setting ,
   01 indicates priority setting of operation mode,
   02 indicates priority setting of operation mode and setting temperature.
4) Press the key ③ for confirmation, and return to the operation interface.

Figure 22

On the operation interface, the sub wired controller displays ☒ and the main controller does not display this icon, as shown in figure 22, which is the operation interface of the sub wired controller.

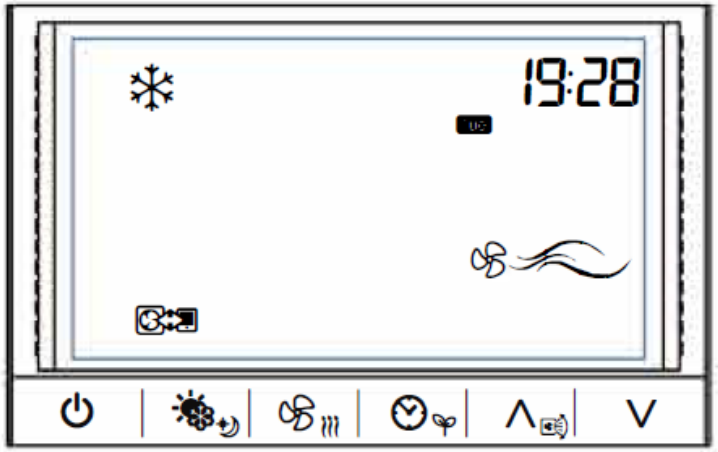
(See serial numbers of the keys in the panel key description on the home page, for key ① to ⑥ from left to right.)

TIPS :

- The priority settings are only performed when operation is stopped.
- The priority settings are dependent on the indoor unit model, and the main-sub settings are not supported in individual cases. Please consult the local distributor for more details.

11. Test run

1) Turn ON the power supply for all indoor units.
2) The addressing is automatically performed approximately after 1-3 minutes and displays the screen illustrated in the figure.

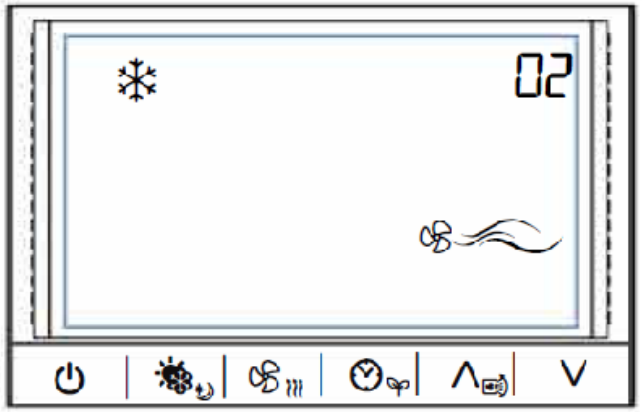


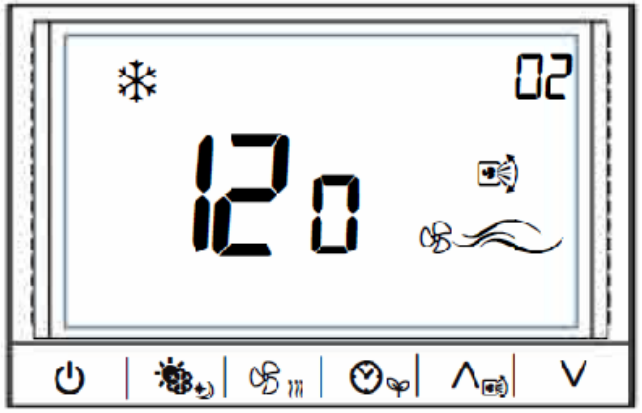
- * Press ∧ and ∨ to select the following run times:
30<=>60<=>90<=>120<=>150<=>...<=>600(minute).
- **NOTE:**

* Louver is in auto swing mode
*The settings are available for all units connected to the controller.

5) To cancel the Test Run mode:
* Press and hold both (mode) and ∧ for at least 5 seconds or press .

3) Press and hold (mode) and ∧ (up) simultaneously for at least 5 seconds. The controller displays the test run screen.
4) In the test run screen:
- Top right corner indicates total number of indoor units connected
- The mode and fan icons blink continuously.
- * Press to select the mode : Cool/Heat/ Ventilation /Dry
- * Press to select fan speed.
- * Press to start/stop the test run.





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Questions?

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