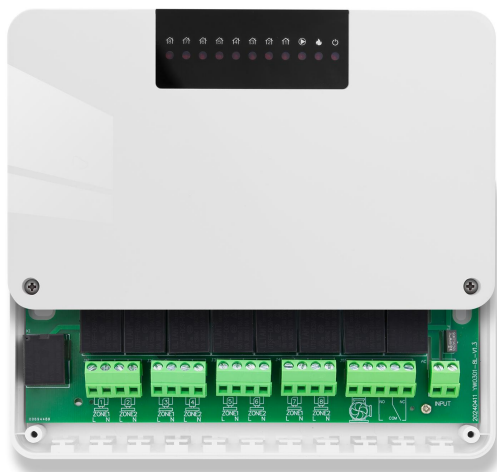


CCT-28-X Wireless Hub Controller

Box Wiring Center Product Manual



I. Product summary

CCT-28-X Wireless Hub Controllers is used in water underfloor heating system. It can control zone valves, or boiler thermostats. As central control unit, it can also control boiler and circulating pump. According to user's set temperature, hub controller can control to open or close boiler, circulating pump and electric actuators, to achieve the purpose of comfort and energy consumption saving.

II. Product Advantages

a. Easy to connect with power:

User only needs to reserve main supply in the place of manifold before installation, and directly connect one three-wires cable to thermostats. So user do not need professional wiring workers;

b. Easy to connect wires:

User only needs to connect wires according to wire colors;

c. Easy maintenance after installation:

All wires are very clear and neat;

d. To protect boiler or pump:

Because hub controller has time delay function, it opens boiler and pump only when water valve is totally opened, and closes boiler when temperature reaches requirements. Time delay to open boiler and pump when heating can realize the purpose of energy-saving;

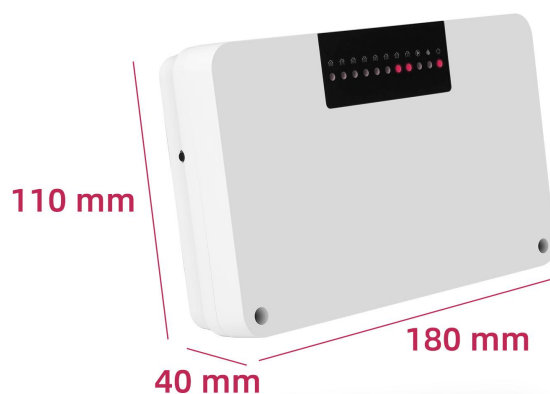
e. To extend boiler and pump life:

hub controller only start boiler and pump in appropriate temperature, in this way, it will reduce boiler and pump running time, to extend their working life.

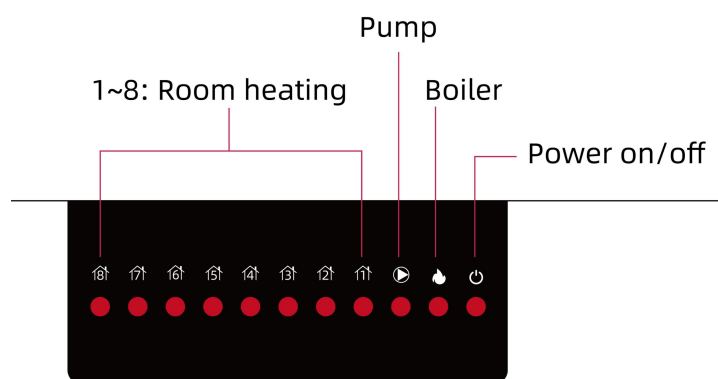
III. Technical Parameter

Power Supply:	220VAC
Current Loading:	Max 20mA
Frequency:	433MHz
Wireless Signal Distance:	30m(indoor), 200m(outdoor)
Ambient Temperature:	0-85℃
Pump Output delay:	5min
Max. Power of Pump:	1000W

IV. Product Size



V. Indicator Illustration



LED1-LED8: thermostat indicator light.

When the thermostat starts heating, the LED light will light up;
when the thermostat stops heating, the LED light will go off;
when the thermostat is pairing, the LED light will flash.

LED9: pump indicator light.

When the circulation pump is working, the LED light will light up;
when the circulation pump stops working, the LED light will go off.

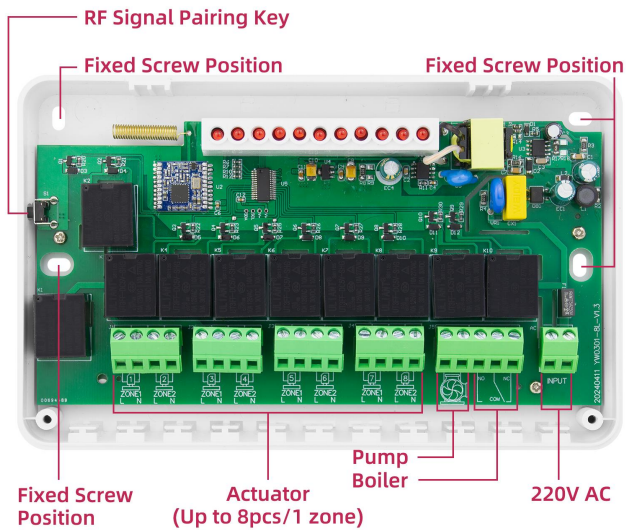
LED10: boiler heating indicator light.

When the boiler starts heating, the LED light will light up;
When the boiler stops heating, the LED light will go off.

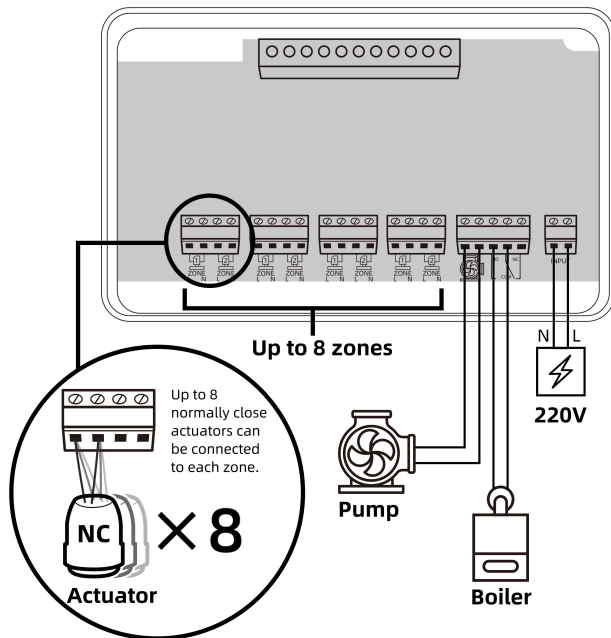
LED11: power indicator light.

The light is always on when the hub controller is powered on.

VI. Installation Illustration



VII. Wiring Diagram



Normally Closed Actuators : Zone1 L/N (Zone1-Zone8 are same)

Pump : pump L/N

Boiler : Com/NO or COM/NC

Power : 110-220V INPUT L/N

ATT:

- (1) Before installing, disassembling, cleaning or maintaining the controller, the main power supply must be cut off, the fuse must be pulled out or the switch circuit breaker must be turned off;
- (2) Before installing the controller, you must read the instructions carefully and strictly follow the instructions;
- (3) The controller should be installed by a professional engineering company with appropriate safety knowledge;
- (4) All wire connections should comply with local and national standards.

VIII. Pairing Steps

RF Paring Key



- (1) When LED11 lights up, press and hold the "RF Pairing Key" for 3 seconds until LED8 starts flashing.
- (2) Turn on pairing mode of thermostat:
 - For BOT-R6X series thermostat, when thermostat is **POWERED ON**, long press the until the " " icon appears (the icon is displayed for less than 1 second).
 - For BOT-R7X series thermostat, when thermostat is **TURNED OFF**, long press the key until the " " icon appears (the icon is displayed for less than 1 second).
- (3) After the thermostat is successfully paired, LED8 will stop flashing and go off. At this time, LED7 will start flashing. Use the next thermostat to repeat STEP (2) to pair in sequence. If you do not need to perform the next pairing, you only need to wait 15 seconds until the LED light stops flashing.
- (4) After completing the pairing of the thermostat, please turn off the thermostat and turn it on again. At this time, the thermostat's control of the hub will take effect.

ATT:

Switch the paired terminals: If you need to switch the terminals that need to be paired, please press the "pairing key", and the LED lights will jump from LED8 to LED1 in sequence. When the LED light corresponding to the terminal you need to pair starts to flash, follow STEP(2) to complete the pairing of the thermostat.

One thermostat controls multiple terminals: If you need to use one thermostat to pair all terminals, use one thermostat to pair LED8 when LED8 starts flashing; when the terminal pairing of LED8 is completed, LED7 starts flashing, use this thermostat repeats the above steps until LED1 pairing is completed.

Cancel pairing: Press and hold the "pairing button" for 3 seconds until LED8 starts to flash. Press the "pairing button" to switch the flashing of the LED light to the terminal that needs to be unpaired. At this time, press and hold the "pairing button" again for 3 seconds until the LED light is canceled flashes, and the cancellation of thermostat pairing is completed.

IX. Power outage recovery

The thermostat sends a signal to the controller every 30 minutes, the system will start working normally within 30 minutes after power is restored.