Cloudwarm

Cloudwarm Wi-Fi Thermostat • Comfort Anywhere Anytime

MANUAL

Content

Thank you for choosing Cloudwarm. Please read this manual before installing! It is recommended that this device is installed by a qualified electrician.

1. Packing list

- Room Thermostat (Transmitter) ×1
- Receiver ×1
- Accessory package ×1
  Dowels ×2,
  Fix screws ×2,
  White sticky pads ×2,
  Black sticky magnetic pads × 3
  USB cable × 1
  Adapter × 1
- Manual ×1

2. Compatibility

Cloudwarm is compatible with most of heating systems, including:

- Combi system and heat-only boilers
- Conventional and condensing boilers

3. RF Coupling

Long press light on receiver, green light is on and red light flicks regularly. Then long press MODE button to enter coupling state. Displaying "-----" on transmitter is changed to wireless communication channel (Default channel is 10, 0-19 channels optional). RF icon on transmitter changed from flicking to constant on means coupling succeeded..

4. App Setup And Wi-Fi Configuration

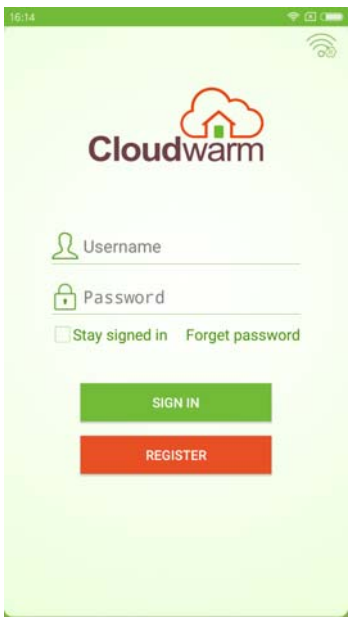
Step 1 Download App onto your mobile device

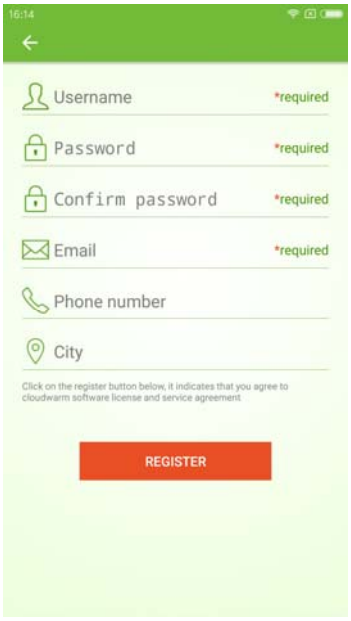
- For Android operating system, go to Google Play and search Cloudwarm;:
- For iOS operating system, go to App Store and search Cloudwarm.

Step 2 Create an account

Please make sure your mobile device is connected to Wi-Fi successfully.

1. Open Cloudwarm App, tap " Register";
2. Create an account. You will need to enter device ID to proceed. ID code is to be found at the back of thermostat or on package box;
3. Log in.





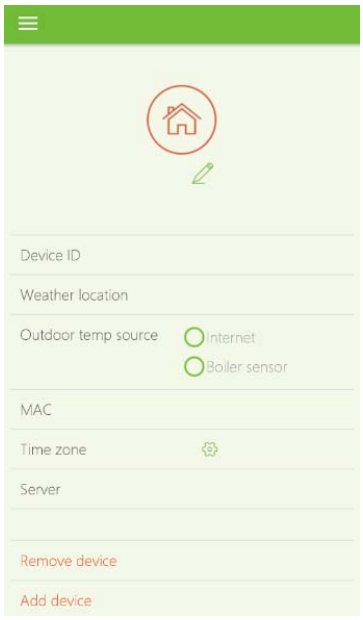
Step 3 Connect Cloudwarm to Wi-Fi

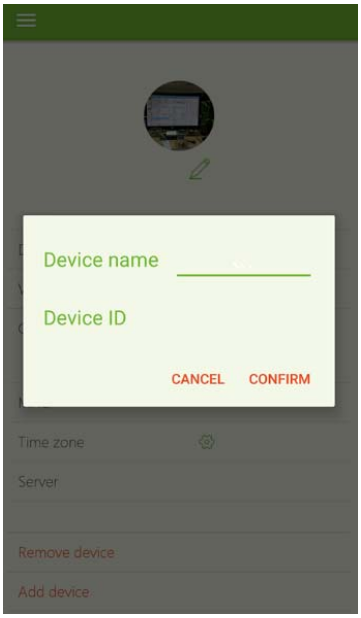
For this operation the phone must be connected to the same WIFI network with that connect the thermostat. Only after the initial connection is established, you will be able to use 3 g/4 g mobile networks to control Cloudwarm application on your mobile phone.

There are two steps to configure your Wi-Fi connection:

1. Tap  in top right corner of the Sign In interface and follow the instructions on APP to connect Cloudwarm to Wi-Fi;

2. Add the Wi-Fi configured thermostats onto one App.



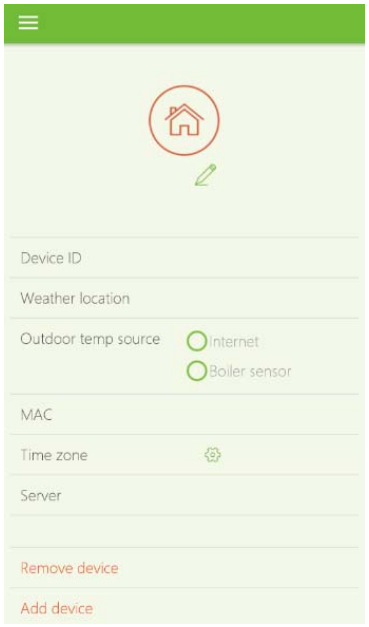


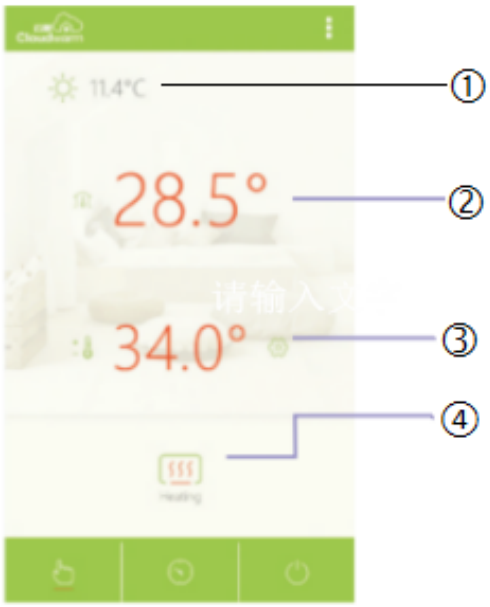
Alternatively you can carry out step 2 before step 1.

Step 4 Settings.

** To get local weather information shown on App (top left corner), please go to top left menu  and go to Account. Input location information (where Cloudwarm is being installed) at Weather Location line.

** Tap “Time zone” to set Summer/Winter time.

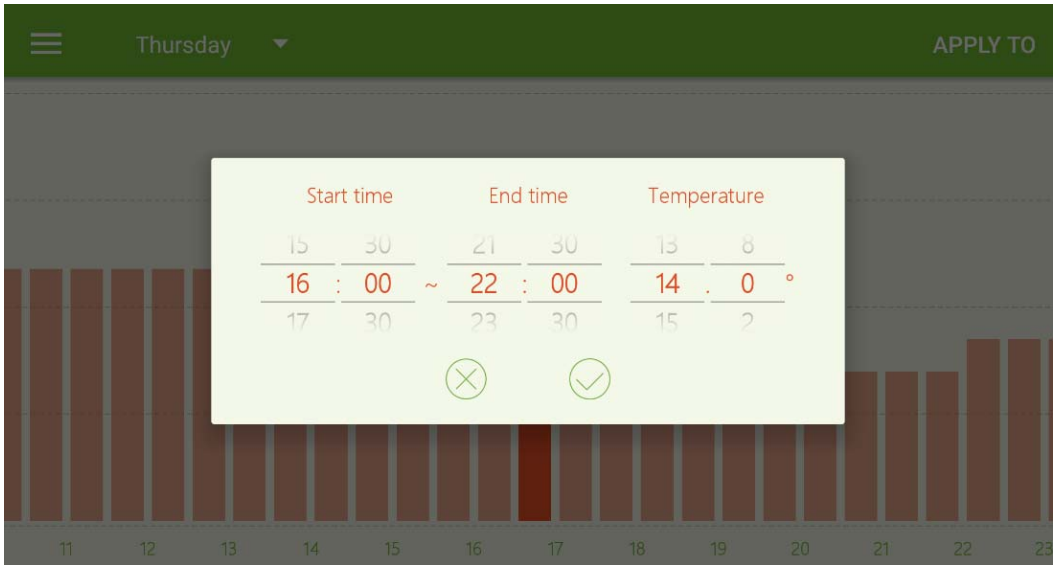




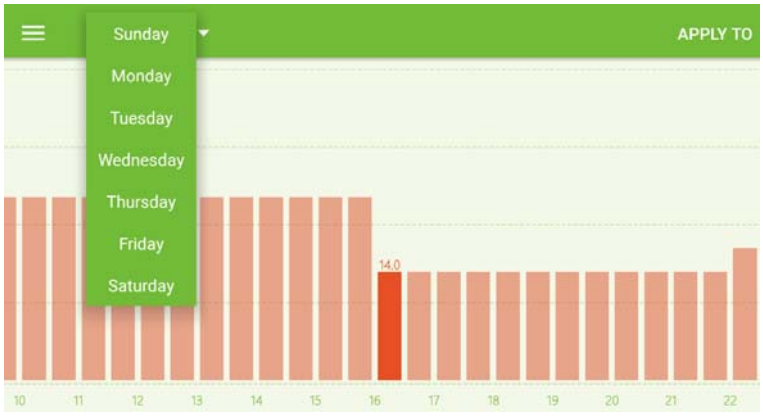
① Outdoor weather information
② Current room temperature
③ Target room temperature
④ Heating status

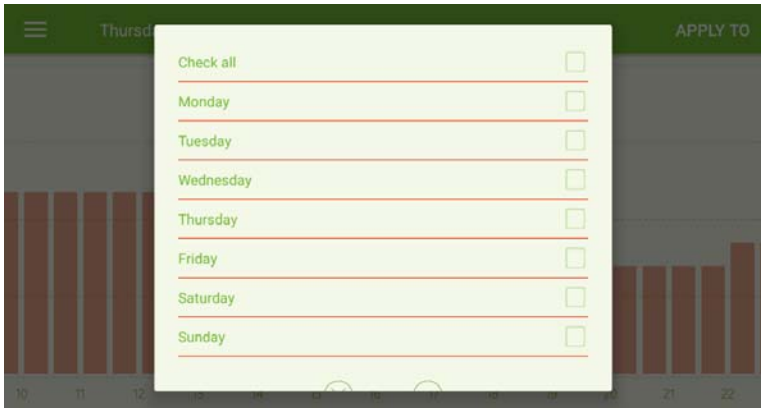
 **Manual mode:** set the desired temperature by sliding your fingers on screen；

Program mode: Tap program mode, enter programming interface, tap the screen, the below screen appears:



Set the desired temperature and time. Tap the program screen again to set temperatures and heating time for another period of time in the same day if needed. If an adjusted program to be copied to another day or set of days, go to top right corner “Apply to” and select the days desired the same operation to be repeated to.





If changes to preset program needed, switch to Manual Mode, and set per needs. To go back to the original Program Mode, just switch it back.

OFF Mode: When set to OFF Mode, Cloudwarm only heats when the room temperature drops below 5℃ to prevent frost damage.

Below underlined content is for Open Therm protocol supported boiler ONLY. (Refer to your boiler manual to know if it is Open Therm protocol supported.)

Enter " Control my boiler" to see your boiler working state.

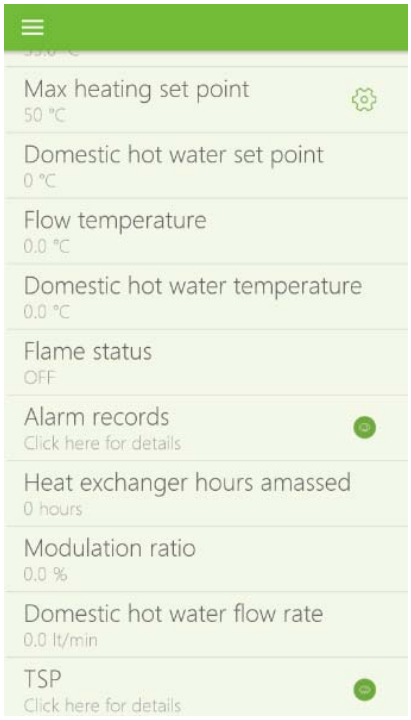
Winter mode：display heating temperature and DHW (Domestic Hot Water) temperature.

① Heating water temperature in boiler
② Water pressure in boiler
③ Heating target temperature
④ DHW target temperature
⑤ Boiler flame state
⑥ Boiler error code（defined by boiler manufacturer）
⑦ Heating state


Summer mode: display DHW temperature；heating function is off.


Off Mode：Anti-frost function.

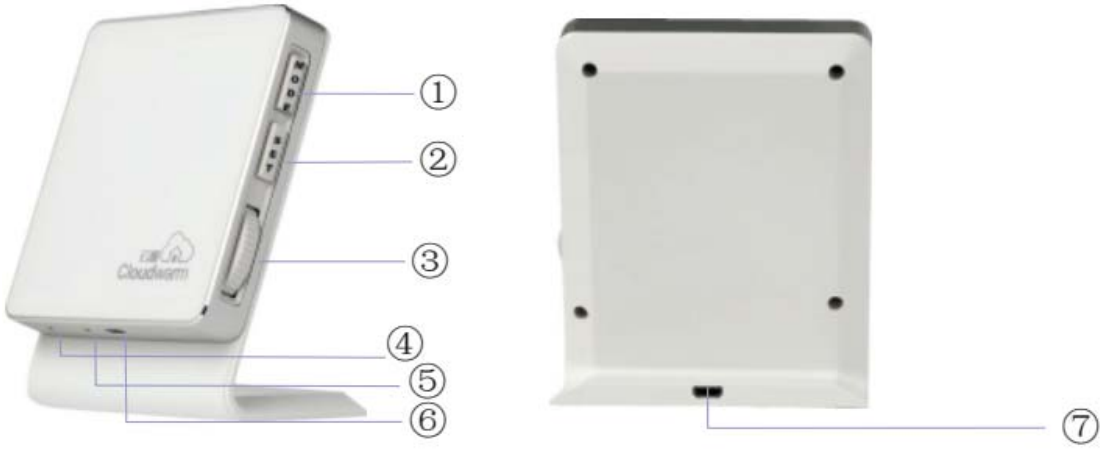
Go to top right corner, tap  drop down menu, tap " Technical" to see boiler working data and error code (defined by boiler manufacturer).



5. Room Thermostat (Transmitter)

If network is not available, thermostat still work per previous settings before net work cut off, or you can operate by pressing the buttons on thermostat.

All LED light up for 3 seconds upon powering on, followed by version of built-in hardware.



① MODE: press to select Manual Mode, Program Mode or Off Mode.

② SET: press SET to see current time and current room temperature; press 5s to connect Wi-Fi. When time displayed on screen, rotate knob to set parameters；

Icon	Description/Function
	WIFI configuration (WPS)：fast double press SET to enter Wi-Fi configuration, use router WPS function.
	Press set again and rotate the knob to set wireless communication channel (0-19) (default channel is channel 10)
	Press set again to set Hysteresis ON value（Range 0-2 ℃ in 0.1 increment). For example, when target temp set at 25℃, hysteresis ON temp at 0.5℃, room temp at 24.5℃, transmitter sends heating request signal to boiler.

	Press set again to set Hysteresis OFF value (Range 0-2 ℃ in 0.1 increment). For example, when target temp at 25℃, hysteresis OFF temp at 0.5℃, room temp at 25.5℃, transmitter sends heating off signal to boiler.
	Fast double press SET, displaying is changed from "----" to LOAD，reset completed.
	Press SET to exit current settings.

③ Knob: rotate to adjust temperature, valid only in Manual mode.
④ Room temperature sensor: detect current room temperature.
⑤ Reset button: reboot screen appears after reset button pressed.
⑥ &⑦ Micro USB port: to supply power.

Factory set defaults are:

- *Hysteresis ON: 0.4 ℃(boiler switch on at 0.4 ℃ below the target)*
- *Hysteresis OFF: 0.4 ℃(boiler switch off at 0.4 ℃ above the target)*
- *Frost protection temperature: 5 ℃*

Temperature calibration：The thermostat may indicate a temperature different from the real one due to its location in the house. After choosing the place of functioning thermostat, it is useful to calibrate it. Use a precision thermometer near the thermostat that you keep a minimum of 50 minutes. Press and hold SET and MODE until the temperature remains on the display only. Enter the thermometer indicated value standard by turning the wheel on the side of thermostat and press the SET.

Warning: the thermostat does not show correct temperature value and does not allow calibration in less than 50 minutes after the electrical supply! The temperature is correct and the device can be calibrated only after the symbol "C grade" goes from small c  to big C  .

LED actions

To avoid the disturbance of a strong light, illumination of the display of the thermostat will be reduced during the night. This function is automatically activated during night hours (20:00-8:00).

① Current room temperature

② Wi-Fi connection state:

Flicking	Establishing connection to server;
Light on constantly	Connection to server established;
Light off:	Connection to router failed.

In case the Wi-Fi LED remains flashing, restart all components of your internet home-system (e.g. router, gateway, optical-fiber gate a.s.o.) and then restart the thermostat too. You can simply do this by cutting off the power of the devices. If the Wi-Fi LED still remains flashing, please contact our customer support. Also please note that the server may be down for a short while for maintenance. Try to be always updated with the last version of the Cloudwarm Application ".

RF icon :

Slow flicking	RF communication error
Fast flicking	RF hardware error
On	RF communication is normal

Radio communication inside the house building structure can be influenced by many factors and external variable and impossible to predict. Generally concrete structure of the metallic support of plasterboard panels or large metal objects are an obstacle to the airwaves. Placing the thermostat in the control room and the receiver near the boiler must be carried out so that radio communication to be more stable.

③ Manual mode: When set to Manual, Cloudwarm keeps the room temperature at the selected set point temperature.

④ Program mode: When set to Program, Cloudwarm runs the program preset via App on mobile devices or web use.

⑤ Off mode: When set to OFF, Cloudwarm only heats when the room temperature

drops below 5℃ to prevent frost damage.

⑥ Heating status:

Flicking	Open Therm communication error.
On	Heating is on.
Off	Heating is off.

6. Receiver

Explanation of status LEDs displayed on Receiver

			Use as an ON/OFF thermostat	**Use as a thermostat with Open Therm protocol**		
Red Light	**Green Light**	**Radio Frequency Communication**	**Relay (Central command)**	**Open Therm Communication**	**Flame**	**Boiler Fault**
Off	On	√	/	√	√	No
Off	Regular Flicking	√	/	√	√	Yes
Off	Irregular Flicking	×	√	×	×	/
On	Off	√	/	√	×	No
On	Regular Flicking	√	√	×	/	/
On	Irregular Flicking	×	/	√	×	No
Regular Flicking	On	√	×	×	/	/
Regular Flicking	Irregular Flicking	×	/	√	×	Yes
Regular Flicking	Off	√	/	√	×	Yes
Irregular Flicking	Regular Flicking	×	/	√	√	Yes
Irregular Flicking	Off	×	×	×	/	/
Irregular	On	×	/	√	√	No

Flicking						

① There are 4 wires from receivers: wires from receiver labeled “OT” to be connected with thermostat port of Open Therm protocol supported boiler; Wires labeled “ON/OFF” to be connected with thermostat port of Non-Open Therm supported boiler. Use screw driver to connect the wires respectively.

② Use black magnetic pad or white double side sticker in the accessory bag to stick receiver to a proper place depending on the wall surface quality, or use the screws to fix receiver onto wall.

Schematic Diagram

Please go to www.cloudwarm.com and see installation video if needed.

7. Technical Specifications

Basic specs	Power supply	100~240V AC，50~60HZ
	Power consumption	1.2W
	Relay load	0.5A 125V AC， 2A 30V DC
	Transmitter dimensions	86 X 86 X 35mm
	Receiver dimensions	86 X 86 X 20mm
	Housing material	ABS+PC+Aluminum
	Temperature sensor	Built in
	Boiler control protocol	Open Therm v2.1
	Wi-Fi standard	802.11b/g/n
	Frequency	2.412GHz – 2.462GHz
	Wireless frequency band	915MHZ(FSK)

Wi-Fi	RF transmit range	100m in the open air
	Safety mode	WEP/WPA-PSK/WPA2-PSK
	Net protocol	IPv4, TCP
	Net type	STA

The manufacturer reserves the right to change specification without prior notice.

***OT** is short for Open Therm, a point-to-point communication system and connects boilers with room controllers. Open Therm assumes that the room controller is calculating a heating demand signal in the form of a water temperature Control Set point based on room temperature error which it needs to transmit to the boiler so that it can control the output of the boiler. The boiler in turn can transmit fault and system information to the room controller for display or diagnostics. (Selected from "Open Therm Protocol Specification v2.1")*

Caution:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject t o the following two conditions: (1) this device may
not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exe mpts de licence. L'exploitation est autorisée aux
deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'

appareil doit accepter tout brouillage radioélectrique
subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Exposure

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:
Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.