## DSHT-040 Room Thermostat

User Guide

Zigbee TYPE

### Welcome

Thank you for your purchase.

Your new thermostat will provide uniform and comfortable temperature control throughout every room in your peoperty. We bring together technology, craftsmanship and the highest quality materials to provide you with a safe, reliable product combined with sleek, contemporary design. Please read this installation/programming manual for comprehensive instructions on installing and operating your thermostat. Please also ensure a suitably qualified person installs your thermostat and complies with all local regulations.

### In the box you will find

| | | | |
|---|---|---|---|
| Thermostat | 1pc | Screws | 4pc |
| User Guide | 2pc | QC Passed | 1pc |

### SYSTEM TYPE

1. Warm air, hot water, high efficiency furnaces, heat pumps, steam, gravity.
2. Heat only--including power to open and close zone valves, and normally open zone valves.
3. Heat only with fan.
4. Cool only.

### FEATURES

**On Appearance**
1. Negative black sceen will bring you to a secret world.
2. 4.8 inch large colorful display creates your colorful life.
3. Touch buttons to make simple operation.
4. Amazing silver frame opens your modern life.
5. The visiable thickness above the wall is only 2cm (0.787 inch).
6. The snap connection allows you to easily install.
7. Wall mounted or suitable for the installation of Europe, China, Japan, USA and Italy etc,.
8. White, black or brushed stainless steel for your selection.
9. Wrap-around cooling holes help heat to escape quickly and increase the temperature sensing accuracy.
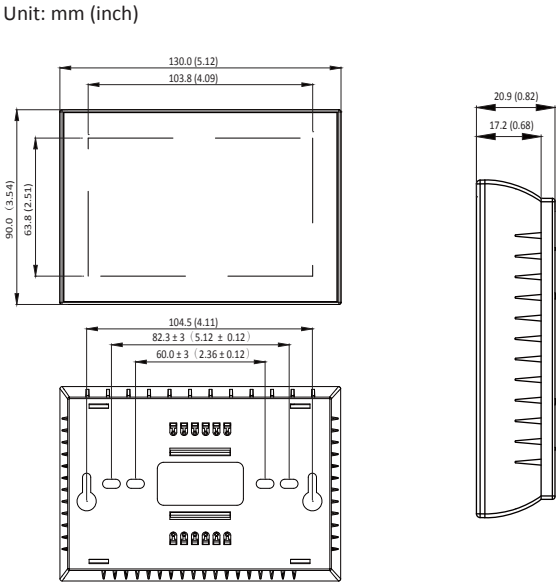10. 12 terminals are available for many systems.

**On Functionality**
1. Powerful functions are available such as WIFI etc,.
2. 1℉/0.5℃ accuracy keeps temperature within the level you set.
3. ℃ or ℉ choice.
4. 7 days four periods programmable.
5. Temporary programmable.
6. Holiday mode.
7. All setting languages sunchronize your time zone, address and language.
8. No limit to add thermostats in App.
9. Support Smart Scene.
10. Support to make two stage grouops.
11. Support device sharing.
12. Weather, UV index, humidity display help you decide what to wear today.
13. Support 3H2C Heat Pump system and 2H2C Conventional System etc,.
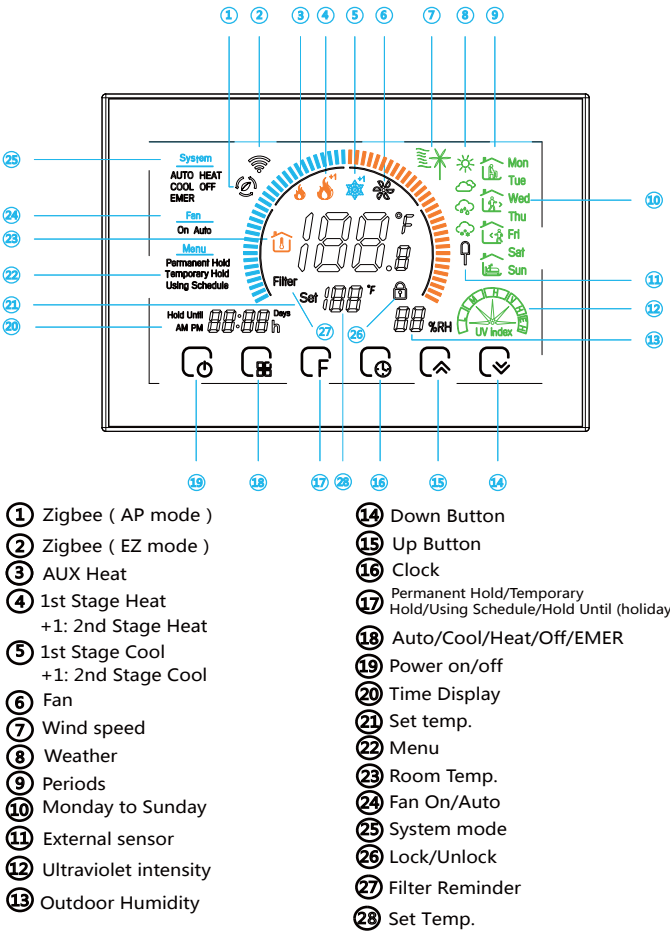
### TECHNICAL DATA

Power Supply: 24VDC/AC ±10%
Current Load: 1A (Inductive)　3A (Resistance)
Sensor: NTC3950, 10K
Set Temp. Range: 42-122℉ (5~50℃)
Accuracy: ±1℉
Display Temp. Range: 41~210℉ (5~99℃)
Ambient Temp: 32~113℉ (0~45℃)
Ambient Humidity: 5~95%RH(Non Condensing)
Storage Temp: 23~113℉ (-5~45℃)

Timing Error: <1%
Power Consumption: <1.5W
Shell Material: PC+ABS(Fireproof)
Available Installation 1: Wall mounted
Available Installation 2: Hole Distance of 62±5mm (Europe, China and Japan)
Available Installation 3: Hole Distance of 86±3mm (USA and Italy etc,.)
Wire Terminals: Wire 2×1.5mm2 or 1×2.5mm2
Protection Class: IP20
Buttons: Capactive Touch Buttons

### DIMENSION

Unit: mm (inch)



130.0 (5.12)
103.8 (4.09)
20.9 (0.82)
17.2 (0.68)
90.0 (3.54)
63.8 (2.51)

104.5 (4.11)
82.3 ± 3（5.12 ± 0.12）
60.0 ± 3（2.36 ± 0.12）

### HOME SCREEN QUICK REFERENCE



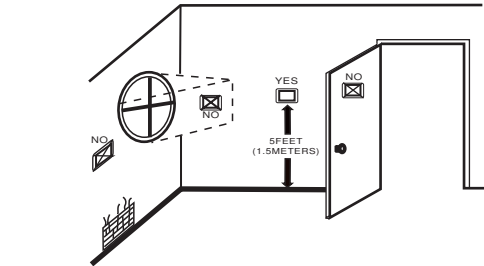| ① | Zigbee ( AP mode ) | ⑭ | Down Button |
|---|---|---|---|
| ② | Zigbee ( EZ mode ) | ⑮ | Up Button |
| ③ | AUX Heat | ⑯ | Clock |
| ④ | 1st Stage Heat +1: 2nd Stage Heat | ⑰ | Permanent Hold/Temporary Hold/Using Schedule/Hold Until (holiday) |
| ⑤ | 1st Stage Cool +1: 2nd Stage Cool | ⑱ | Auto/Cool/Heat/Off/EMER |
| ⑥ | Fan | ⑲ | Power on/off |
| ⑦ | Wind speed | ⑳ | Time Display |
| ⑧ | Weather | ㉑ | Set temp. |
| ⑨ | Periods | ㉒ | Menu |
| ⑩ | Monday to Sunday | ㉓ | Room Temp. |
| ⑪ | External sensor | ㉔ | Fan On/Auto |
| ⑫ | Ultraviolet intensity | ㉕ | System mode |
| ⑬ | Outdoor Humidity | ㉖ | Lock/Unlock |
| | | ㉗ | Filter Reminder |
| | | ㉘ | Set Temp. |

### BEFORE WIRING AND INSTALLING

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.

### ⚠ CAUTION

**Electrical Shock or Equipment Damage Hazard. Can shock individuals or short equipment circuitry.**
**Disconnect power supply before installation.**

**For wiring , please refer to another page.**

### INSTALLATION

Your thermostat can be mounted horizontally on the wall or on a 4 in. x 2 in. (101.6 mm x 50.8 mm) wiring box.

*How to select the location?*

Install your thermostat about 5 ft. (1.5m) above the floor in an area with good air circulation at average temperature.



YES
NO
5FEET (1.5METERS)

Don't install your thermostat where it could be affected by:
— Drafts or dead spots behind doors and in corners.
— Hot or cold air from ducts.
— Radiant heat from sun or appliances.
— Concealed pipes and chimneys.
— Unheated (uncooled) areas.

*Steps*

Step 1. Keep the electricity off.

Step 2. Remove the mounting plate. See Fig 1.


Fig 1

Step 3. Complete the wiring according to the wiring diagram and select the appropriate hole mounting screws. See Fig 2.


Fig 2

Step 4. Check whether the wiring is correct and look for the correct direction of the thermostat display panel. See Fig 3.


Fig 3

Step 5. Press the thermostat back onto the mounting plate to complete the installation. See Fig 4.


Fig 4

### OPERATION

**1. Power On/off:** Press to turn the thermostat on/off.

**2. Selecting System Mode:** Press to select the mode AUTO, COOL, HEAT, OFF, EMER

HEAT — Thermostat controls the heating system.
OFF — Both heating and cooling systems are off.
COOL — Thermostat controls the cooling system.
AUTO — Thermostat automatically changes between heating and cooling operation, depending on indoor temperature.
EMER — Emergency heat cycles to maintain temperature. Compressor is locked out (used only for 2H/1C or 3H/2C heat pump systems) and auxiliary heat turns on as second stage if needed.

**3. Function and Programmable**

Press to set the Permanent Hold, Temporary Hold, Using Schedule and hold until (holiday). The functions will appear on the screen.

**Permanent Hold - Manual.** In this mode, press / to set temperature by manual.

**Temporary Hold.** During Using Schedule or in this mode, press / to set the temporary temp.. It will be valid till the start time of the next scheduled period.

**Using Schedule.** 7 days a week, four periods programmable daily.

**Holiday Mode.** Changes temperature setting for a designated number of days.

*How to set your time?*

Press till the min of time will flashes;
Touch the icon / to set your minute.
Then press , the hour of time will flash; Touch the icon / to set your hour.
Then press , the week of time will flash; Touch the icon / to set your week.

*How to adjust your schedule?*

Press four times in a row. (You can see Mon and )
Use the / arrows to adjust the time for the 1st period(Get Up).
Press the icon then use the / arrows to set the temp. for the 1st period. Repeat this process for periods 2-4.

Get Up — Period when you awaken and want your home at a comfortable temperature.
Go Out — Period when you are away from home and want an energy-saving temperature.
Go Home — Period when you return home and want your home back to a comfortable temperature.
Sleep — Period when you are asleep and want an energy saving temperature.

*Factory Setting*

| Schedule Period | Time | Setpoints | |
|---|---|---|---|
| | | Heat | Cool |
| Get Up | 6:00 AM | 72℉ (22℃) | 72℉ (22℃) |
| Go Out | 8:00 AM | 72℉ (22℃) | 72℉ (22℃) |
| Go Home | 11:30 AM | 72℉ (22℃) | 72℉ (22℃) |
| Sleep | 01:30 AM | 72℉ (22℃) | 72℉ (22℃) |

*How to adjust your holiday?*

Press till the letters **Hold Until** displays and **days** flash on the screen then click / arrows to set the days of holiday .
When the flashing of days stops, you can press / arrows to set the temp. Holiday mode will be valid immediately.

**4. Advanced Options:**

In the off state, press and for three seconds at the same time.

Then press to change the different items. You can press / arrows to change settings.

| User Setup Number | Function | Setting and options | Default |
|---|---|---|---|
| 1 | Fan ON / AUTO | 0: Fan AUTO; 1: Fan ON | 0 |
| 2 | Temperature Calibration | -8 ° F to 8 ° F (-4 ° C to 4 ° C) | 0°F |
| 3 | Compressor delay time for heat pump | 0-5 minutes | 0 |
| 4 | Changeover Valve—O/B Terminal Energized in Heating or Cooling (Heat Pumps Only). Only shown if heat pump system is chosen. | 0: cooling O/B = 0, heating O/B = 1; 1: cooling O/B = 1, heating O/B = 0; | 1 |
| 5 | Minimum setting temperature | 42 ° F to 62 ° F (5 to 15 ° C) | 42°F(5℃) |
| 6 | Maximum setting temperature | 62 ° F to 122 ° F (15 to 45 ° C) | 122°F(45℃) |
| 7 | Time display | 0: 12-hour clock; 1: 24-hour clock | 1 |
| 8 | Dead-band temperature in Auto mode for heat pump. Heating and cooling setpoints can be set no closer than chosen value. Shown only if automatic changeover is selected. | 0 ° C to 5 ° C (0 ° F to 10 ° F) | 3℃ |
| 9 | Filter cleaning reminder | 0-5 months | 3 |
| A | Standby screen brightness | 1-99 | 4 |
| B | Temperature Indication Scale | 0: ℃ display; 1: ℉ display | 1 |
| C | Deadzone temperature for turning on/off load | 1 ° C to 5 ° C (2 ° F to 10 ° F) | 1℃ |
| D | Fan Control in Heating | 0: Without control; 1: With control | 1 |
| E | Change the system of heat pump and air conditioning | 0: Heat pump 1: Air conditioning | 0 |