Fangzhi 3.0 Eight Key Thermostat Panel

Instruction Manual

FT08-V3.0

Before using this product, please read this manual carefully and keep it properly!

Document Version：C

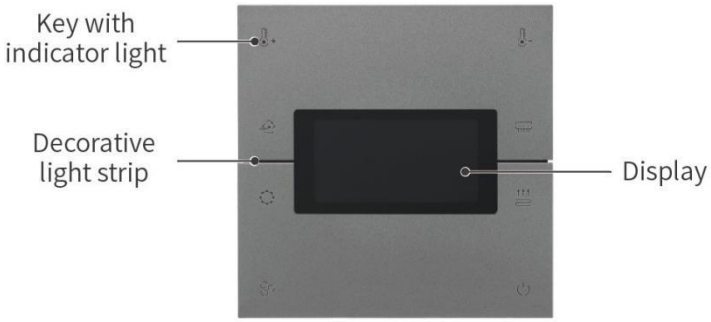
◇ ◆ Overview

Fangzhi 3.0 Eight Key Thermostat Panel provides convenient, comfortable, and efficient experiences for modern homes. It has mechanical keys and display screen, and the brightness of the key indicator light can be set through software. It can achieve control of lighting, scenes, curtains, switches, etc.

Key functions:

- Built-in temperature and humidity sensor collects the temperature and humidity of the location of the device and displays it on the screen, supporting scene linkage with other devices of HDL system.
- Proximity detection: When the human body approaches this device, the panel automatically lights up.
- Color and brightness of button indicator light can be set on HDL Studio.
- Air conditioning, floor heating, and fresh air pages, each of which can only control one device.
- Panel control includes: device switching, air conditioning switch, air conditioning mode setting, air conditioning temperature setting, air conditioning wind speed setting; Floor heating switch, floor heating temperature setting, floor heating mode setting; Fresh air switch, fresh air speed setting, fresh air mode setting.
- Support HDL Buspro online upgrade

◇ ◆ Appearance



8 key panel

Figure 1

Panel power interface

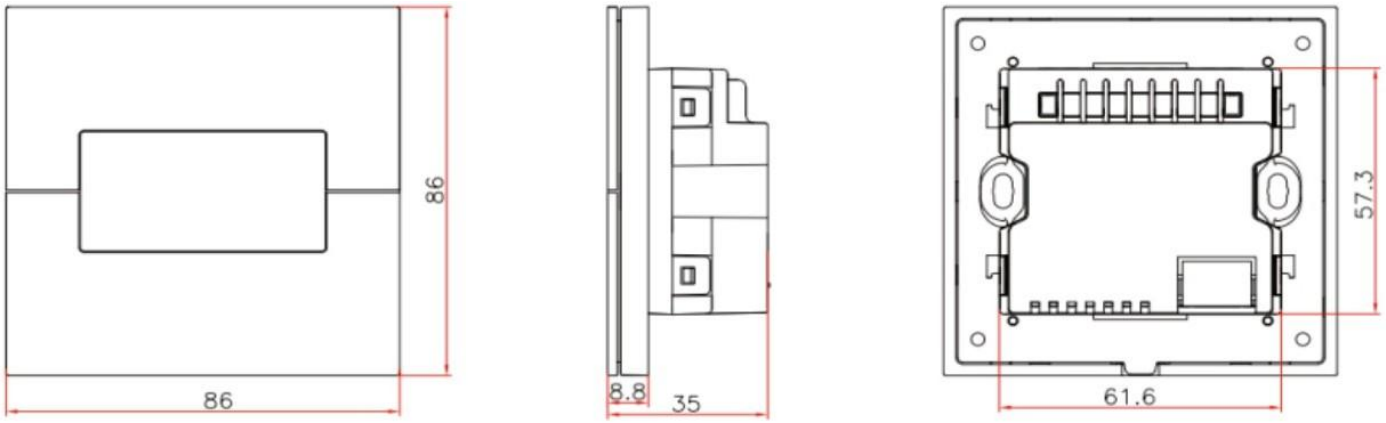
Figure 2

◇ ◆ Technical Data

Item	Parameter
Rated voltage	24V DC
Rated current	30mA/24V DC
Output power	No output
Working temperature	-5°C - 25°C
Storage temperature	-20°C - 25°C
Working humidity	10% - 65%
Storage humidity	0% - 65%
Working altitude	0 - 1000M

◇ ◆ Specifications

Item	Parameter
Size (W X H X D)	86×86×8.8mm(single gang)
Net Weight	118g
Housing Material	Metal
Installation	Wall box
IP degree (Compliant with EN 60529)	IP20



Unit: mm

Figure 5

◇◆ Safety Precaution

Danger:

Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.

Warning:

- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. (hereinafter referred to as HDL) or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this datasheet.
- Please contact HDL after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to the warranty.
- Comply with the specific terms and usage scenarios of the "Low-Power Short-Range Radio Transmitting device Catalog and Technical Requirements," using a 2.4GFPC-IPEX antenna. This device can achieve functions such as system information collection, information input, information output, centralized control, remote control, and linkage control.
- It is prohibited to change usage scenarios or conditions, expand the transmission frequency range, increase transmission power (including additional installation of radio frequency power amplifiers), or change the transmission antenna without authorization.
- It should withstand interference from industrial, scientific, and medical (ISM) application equipment that radiates radio frequency energy or other legitimate radio stations.
- If harmful interference is caused to other lawful radio stations, use should be immediately stopped, and measures should be taken to eliminate the interference before further use.
- When using low-power device in electromagnetic environment protection areas such as aircraft, radio astronomy stations established in accordance with laws, regulations, relevant national standards, meteorological radar stations, satellite earth stations (including telemetry, ranging, receiving, navigation stations), and military and civilian radio stations, compliance with the regulations of electromagnetic environment protection and relevant industry regulatory authorities is required.
- It is prohibited to use various model remote controllers within a 5000-meter radius centered on the runway center point at airports.
- The working temperature for low-power device is -5℃ to 45℃, and the input voltage is AC 100-240V (50/60Hz).

Caution:

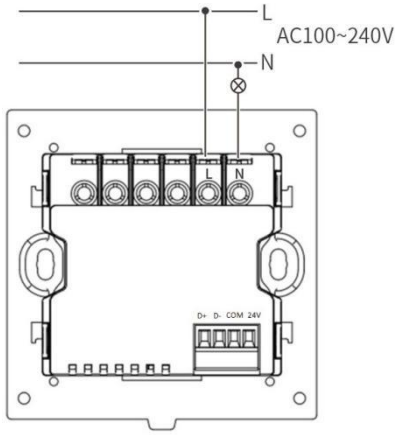
- Before performing any installation or disassembly procedures on the device, it is crucial to disconnect the device from all voltage sources. This step is necessary to ensure the safety of the technician and prevent any potential damage to the device.

- This device must be installed with a wall box.
- Maximum wireless transmission distance is 30 meters. Due to obstacles that may shorten the wireless transmission distance, to ensure good communication, it is recommended to install this device in an open location and avoid installation near large metal objects.
- To protect the device and load, it is recommended to connect one 5A circuit breaker to each channel.
- Do not use corrosive liquid to wipe the device body, especially the interface, so to avoid damage to the device. Do not wipe the device with a damp cloth.
- Before performing any maintenance or cleaning procedures on the device, it is imperative to disconnect the device from all voltage sources. This precautionary measure is necessary in order to prevent electric leakage and the risk of electric shock.

◇◆ Wiring

Note:

- The device should be used with Panel Power Interface.
- For Buspro connection, a hand-in-hand connection is recommended. Please wire according to HDL standards: D+, D-, GND and +24V.



Panel power interface

Figure 5

◇◆ Installation

- **Warning: Before installation, please cut off the power supply, it is strictly prohibited to operate with electricity.**
- **Note: Before installation, if the bracket has not been separated from the panel assembly, please refer to the disassembly instructions.**
- **Caution: Disconnect the power supply before installation and do not operate with electricity.**

Step 1. Make an opening in the wall to mount the wall box into it.

Step 2: Stick the frame onto the wall and align the opening to the wall box.

Note: Only 86 type wall box with depth≥50mm is supported.

Step 3: Insert the power base into the frame, aim the screws on both sides of the base at the holes in the wall box, install them together and lock the screws.

Step 4: Align the panel pins with the base holes, press gently and install on the base.

Note: After all of the cables are terminated, check for correct and good terminations. Before powering on, please ensure the device is tightly on the wall body.

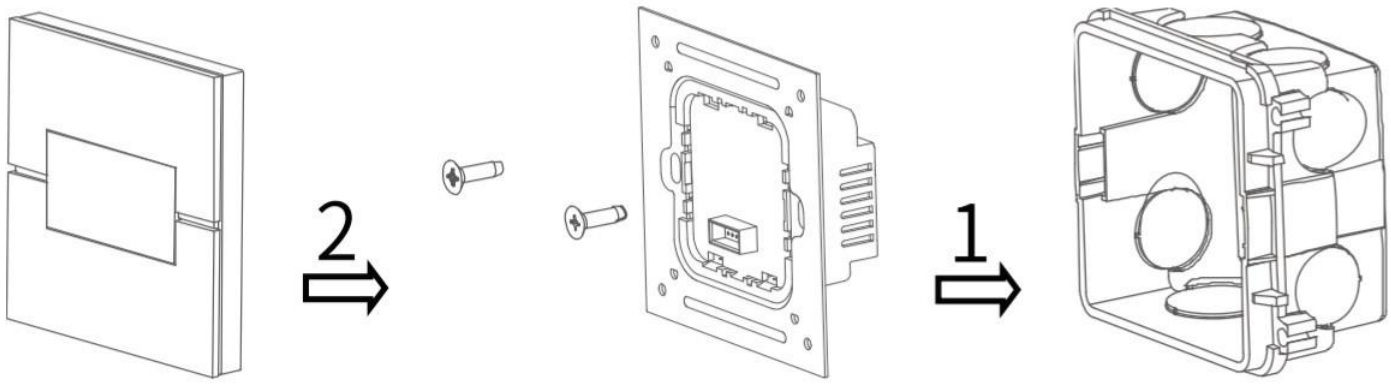


Figure 8

◇ ◆ Disassembly

Warning: Before performing any disassembly procedures on the device, it is crucial to disconnect the device from all voltage sources. This step is necessary to ensure the safety of the technician and prevent any potential damage to the device.

Step 1. It is recommended to use a screwdriver to pry the panel open from the bottom.

Step 2. To remove the panel and power base, please refer to the section Installation and do it reversely.

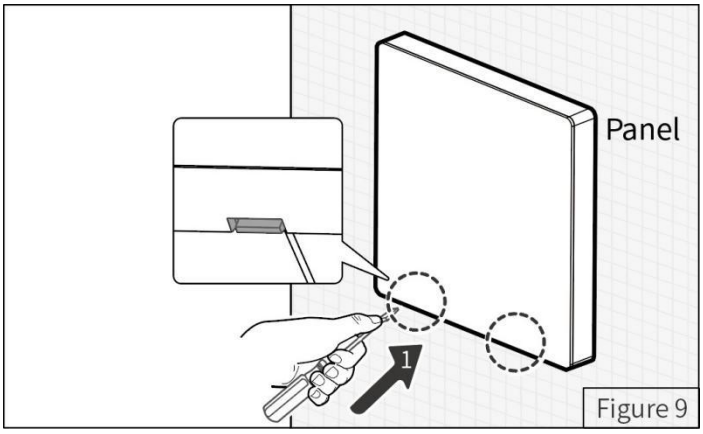


Figure 9

◇ ◆ Operation

HDL Studio V1.9.54 or above can be used to debug and configure key targets; After long pressing any key for 15 seconds, the key indicator light flashes white and enters programming mode. In programming mode, subnet IDs and device IDs can be modified in the debugging software.

According to specific project requirements, the following configurations can be made by debugging software:

1. The microwave sensing distance can be set, with factory default being 5;
2. Can be set to enable sleep mode, factory default enabled; sleep time defaults to 30s;
3. The brightness of the key indicator light and decorative light strip can be adjusted.

◇◆ Packing List

- Fangzhi 3.0 Eight Key Thermostat Panel*1
- Screw*2

◇◆ Copyright Statement

Update History:

The form below contains the information of every update. The latest version contains all the updates of all former versions.

Version	Update Information	Date
V1.0	Initial release	May 9, 2025

◇◆ Technical Support

E-mail: hdltickets@hdlautomation.com

Website: https://www.hdlautomation.com