

HSTTEC® Thermostat Installation and User Manual

The digital display fan coil unit thermostat is designed for temperature control in two-pipe water systems or air distribution systems. By comparing the ambient temperature with the set temperature, it controls the operating status of the fan coil unit and associated electric valves, electric ball valves, or air dampers at the HVAC system's terminal units to regulate ambient temperature, ensure comfort, and achieve energy savings. The thermostat employs microcomputer control technology and features a large LCD display. With its elegant design and user-friendly interface, it allows users to select heating or cooling modes and set the desired indoor temperature via the control buttons.

Model Description

DA: (Fan Not Controlled) Controls two-wire electric valves and three-speed fans; when the set temperature is reached, the electric valve closes while the fan continues to run.

DB: (Fan Controlled) Controls a two-wire electric valve and a three-speed fan; when the set temperature is reached, the electric valve and fan shut off.

Display Status

- ★ Operating Mode (Cool, Heat)
- ★ Fan Speed (High, Medium, Low, Auto)
- ★ Display Indoor Temperature
- ★ Display Set Temperature

Buttons

	Button Name	Button Function
	Power On/Off Button	Select power on or power off
M	Mode Switch Button	Switch between cooling and heating modes
	Fan Speed Selection Button	High, Medium, Low, and Auto fan speed settings
▲	Temperature Increase Button	Increase set temperature
▼	Temperature Decrease Button	Decrease Set Temperature

Technical Specifications

Temperature Sensor: NTC Thermistor

Control Accuracy: $\pm 1^{\circ}\text{C}$

Temperature Setting: $5\text{--}35^{\circ}\text{C}$

Display range: $0\text{--}50^{\circ}\text{C}$

Operating Environment: $0\text{--}45^{\circ}\text{C}$

Display: LCD

Humidity: $5\text{--}95\%$ RH (non-condensing)

Power Supply Voltage: AC 220V $\pm 10\%$, 50/60 Hz

Power Consumption: $< 1\text{W}$

Load Power: $< 300\text{W}$

Terminals: Compatible with $2 \times 1.5\text{ mm}^2$ or $1 \times 2.5\text{ mm}^2$ wires

Housing: Flame-retardant PC+ABS

Dimensions: $86 \times 86 \times 14\text{ mm}$ (W $\times$ H $\times$ D)

Mounting Hole Spacing: 60 mm (standard)

Operating Instructions

Power On/Off	Press the  button once to turn on the unit, and press it again to turn it off, simultaneously shutting down the fan coil, electric valve, or electric damper.
Temperature Setting	While the unit is on, press the “▼” button to lower the set temperature and the “▲” button to raise it; the temperature changes by 1°C with each press.
Mode Selection	While the unit is running, press the mode button to switch modes. The LCD display shows "Cool" for cooling and "Heat" for heating.
Fan Speed Selection	Press the  fan speed buttons to select the fan speed: High, Medium, Low, or Auto. In "Auto" mode, the fan speed adjusts automatically: when the room temperature differs from the set temperature by 1°C , it automatically selects Low speed; when the room temperature differs by 2°C , it automatically selects Medium speed; when the room temperature differs by 3°C , it automatically selects High speed.
Timer Start Timer Off Settings	Timer On: Press and hold the M mode button for 3 seconds to switch to Timer On mode. Press “▲” to increase the timer duration and “▼” to decrease it. The setting is automatically confirmed after 5 seconds. Once Timer On is activated, the fan and valve will immediately shut off while the unit is running. After the timer duration ends, the fan and valve will immediately turn on. Timer Shutdown: Press and hold the Mode button for 3 seconds to switch to Timer Shutdown mode. Press “▲” to increase the timer setting, and press “▼” to decrease it. Once adjusted, the setting will be automatically confirmed after 5 seconds. When the timer is enabled, the unit will shut down when the set time is reached, simultaneously turning off the fan and valves Both timed startup and shutdown are set to turn the unit on or off after a specified number of minutes or hours
Buttons Lock	Press and hold the “▲” and “▼” buttons simultaneously for 5 seconds to enter full lock mode (whether the power on/off buttons are locked depends on the advanced settings). At this point, the “LOCK” icon will appear in the clock display area at the bottom right of the screen. Press and hold the “▲” and “▼” buttons simultaneously for another 5 seconds to unlock. If the unit is locked while powered off, the “LOCK” icon will also be displayed.

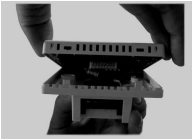
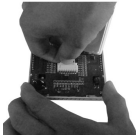
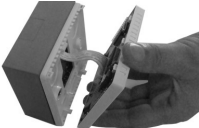
Advanced Options Settings:

While the unit is off, press and hold the Mode button and the Fan Speed button for 5 seconds to enter Advanced Options settings

Display Symbols	Option	"▲" or "▼" to adjust parameter values
1	Built-in sensor temperature compensation	-9°C to +9°C
2	Start-up temperature difference	1°C to 5°C, default 1°C
3	Low-Temperature Protection Setting	0°C–5°C. When the temperature is set to the maximum value, press the "▲" button again to display "– –" and disable the low-temperature protection function; if the indoor temperature falls below the set low-temperature protection threshold, the heating system will be forced to turn on.
4	Fan Controlled/Uncontrolled Mode Selection	00: Fan Uncontrolled 01: Fan Controlled
5	Lock Function Selection	0: In lock mode, all buttons are locked, including the power button. 1: In lock mode, all buttons are locked except the power button.

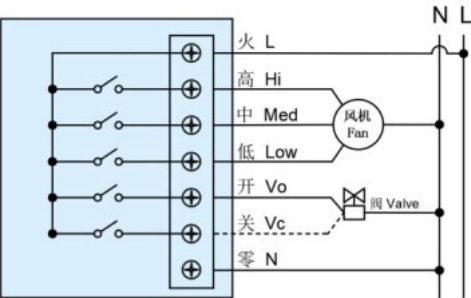
Installation Diagram

1. Disconnect the power supply during installation. Install a power switch to disconnect the power supply when the system is not in use.
2. Install the unit approximately 1.4 meters above the floor in a location that is not exposed to direct sunlight, is sheltered from drafts, is away from heat sources, and is representative of the room temperature.
3. Connect the circuit according to the wiring diagram on the base housing. If the thermostat you are using does not match the provided installation diagram, please contact your dealer or the manufacturer.
4. Select loads according to the rated current; do not overload the system.
5. Please refer to the provided wiring diagram to ensure correct wiring.

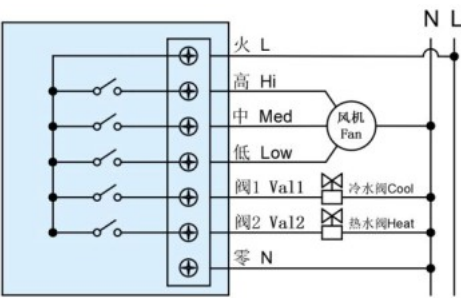
 To remove the main control board: Insert a 3.5mm-wide flathead screwdriver along the beveled edge into the slot	 Remove the 4mm section of the ribbon cable and gently pry it upward to release the latch	 Connect the wires to the terminals according to the wiring diagram, then tighten with screws
 Secure the thermostat base plate to the rear cover on the wall using screws.	 Connect the LCD board and the power board using the ribbon cable.	 First, hang it at a 30-degree angle on the two hooks at the top, then press down firmly on the side to secure the top shell. Installation complete.

Wiring Diagram:

2-pipe Fan Coil Unit Wiring



4-pipe Fan Coil Unit Wiring



Installation and Usage Instructions:

1. Ensure the power cord is installed correctly; do not reverse the live and neutral wires to avoid damaging the thermostat.
2. A power control switch or a separate power outlet should be installed at the front end of the thermostat system. The power should be turned off when the thermostat system is not in use.
3. The LCD thermostat panel requires a stable power supply to operate. Abnormal power outages or momentary power interruptions may cause the panel to shut down or malfunction. Power restoration following any type of outage may cause the heating system to stop working. Therefore, if the panel is found to be off during normal heating operation, please restart the thermostat panel to resume operation.
4. The LCD temperature control panel features an automatic memory function, which allows it to automatically resume the operating state it was in prior to the power outage when power is restored.
5. For heating control systems equipped with electric actuators, there are two options available during a power outage: maintaining heating or shutting off heating. The appropriate option should be selected based on actual needs.
6. The thermostat should be installed in a representative location that is not affected by other heat sources or air currents.

Warning: Always connect the wires strictly according to the electrical wiring diagram. Do not allow water, slurry, or other contaminants to enter the thermostat, as this may cause damage to the components!