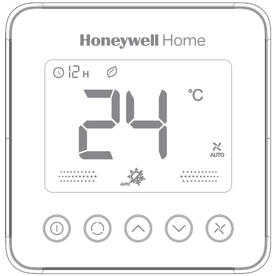
Honeywell Home

User Manual

TF428 RSS Series Digital Thermostat

Thermostat Appearance



Operating Your Thermostat

Power On/Off Time-off

- Press ⏻ to switch on/off thermostat. When in off mode, OFF icon and indoor temperature will display.
- Press ⏻ could set the automatical turn off time when the thermostat is working.

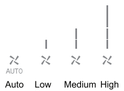
  Press ⏻ and hold for more than 3s. After timer icon flashes, press ∧ or ∨ to set turn off time, then press ⏻ button to exit.

Temperature Setting

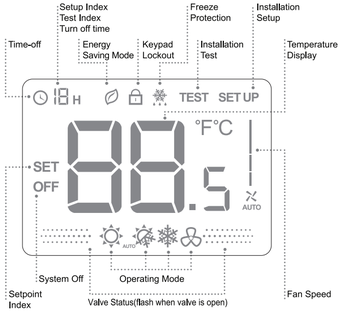
In ☼ or ☼ or ❄ mode, press ∧ or ∨ to set the target room temperature.

Operating Mode

Fan Speed



LCD Display



Trouble Shooting Tips

If....	Then....
☼ Doesn't work	· Set the mode to ☼ (heating mode) by press ⏻ · Make sure the temperature is set above the room temperature · Check that the valve open icon is flashing · Wait 5 minutes for the system to respond
❄ Doesn't work	· Set the mode to ❄ (cooling mode) by press ⏻ · Make sure the temperature is set below the room temperature · Check that the valve open icon is flashing · Wait 5 minutes for the system to respond
⏻ Doesn't work	· Make sure keypad is unlocked · Check that the thermostat is on
∧∨ Doesn't work	· Make sure keypad is unlocked · Make sure the system isn't in ⏻ mode · Check that the thermostat is on
The system turns off automatically	· Make sure the memorized time off value isn't set to "0"
Time-off doesn't work	Make sure the button is unlocked Make sure the turn off time is not 0 Make sure the thermostat is not in ISU Make sure the thermostat is not off

Installation Guide

Must be installed by a trained and experienced installer

- Read instruction carefully. Failure to follow instruction will damage the product or cause a hazardous condition.
- Check the ratings in this booklet to verify that this product is suitable for operation.
- Always test for proper operation after installation.

Caution: ELECTRICAL HAZARD can cause electrical shock or equipment damage. Disconnect power before installation, reparation and detachment.

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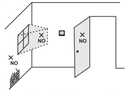
Installation Tips

TF428 Series is designed for standard 75x75x50mm wall mounting box installation. Install the thermostat about 5 feet (1.5m) above the floor in an area with good air circulation at average temperature.



Do not install in locations where the thermostat can be affected by:

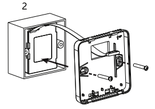
- Dead spots behind doors and in corners
- Hot or cold air from ducts
- Sunlight or radiant heat from appliances
- Concealed pipes or chimneys

Wiring and Installation

The screw must be locked tightly to avoid wire break off from the terminal.

1

2



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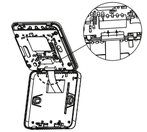

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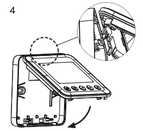

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Terminal Designations

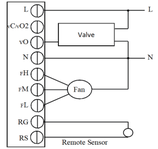
Terminal	Description
L	Live wire
vC/ vO2	Heating valve close/Cooling valve close, 2 pipes only Cooling valve open, 4 pipes (VC/VN 4013) only
vO	Heating valve open/Cooling valve open, 2 pipes only Heating valve open, 4 pipes (VC/VN 4013) only
N	Neutral wire
FH	High speed fan
FM	Medium speed fan
FL	Low speed fan
RG	Ground for remote setback
RS	Remote sensor

* The temperature of mounting box and wall should be in the operating temperature range.

Two pipe application

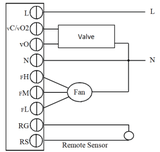
Wiring Diagram 1

VC4013
VN4013 Wiring



Wiring Diagram 2

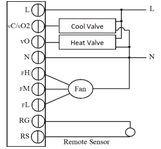
VC6013
VN6013 Wiring



Four pipe application

Wiring Diagram 1

VC4013
VN4013 Wiring



Installation Setup

3s → Enter or Exit Installation Setup Mode

ISU Code	Description	Possible Options
1	System Type	0 Heat only
		1 Cool only
		2 Two pipes heating/cooling (Default)
		4 Four pipes manual
		5 Four pipes auto
2	Remote sensor	**0 Onboard Sensor (Default)**
		1 Remote Sensor (NTC20K)
3	Temperature Scale	0 ºF
		1 ºC (Default)
4	Fan Control Type	0 Auto only Auto has fan ramping algorithm
		1 Manual only (3 speed: Low->Med->High-> Low)
		2 User can choose Auto or Manual (Default) (3 speed: Low->Med->High-> Auto-> Low)

ISU Code	Description	Possible Options
5	Switching differential for 4 pipe auto changeover with single setpoint	1ºC (2ºF)
		1.5ºC (3ºF) (Default)
		2ºC (4ºF)
		3ºC (5ºF)
6	CPH value For Heat	1-12 **4 (Default)**
7	CPH value For Cool	1-6 **3 (Default)**
8	Display Temperature adjustment	-2 ºC- 2 ºC, 0.5 ºC, **Default 0 ºC** (-4 ºF- 4 ºF, 1 ºF, **Default 0 ºF**)
9	Temperature Display mode	**0 Display room temperature (Default)**
		1 Display set point
10	Heating Range Stops	10-32 ºC **Default 32 ºC** (50-90ºF **Default 90 ºF**)
11	Cooling Range Stops	10-32ºC **Default 10 ºC** (50-90ºF **Default 50 ºF**)
12	Keypad Lockout	**0 All keys are available (Default)**
		1 System button Locked out
		2 Fan and System button Locked out

ISU Code	Description	Possible Options
		3 **All** button locked out except power button
		4 **All** buttons are locked
14	Remote setback Heating setpoint	Range 10-21ºC **Default : 18 ºC** (Range 50-70ºF **Default : 64 ºF**)
15	Remote setback cooling setpoint	Range 22-32ºC **Default : 26 ºC** (Range 72-90 ºF **Default : 79 ºF**)
16	Freeze Protection	0 Disabled
		1 Enabled (Default)
17	Power Recovery Status	0 OFF
		1 Previous status (Default)
19	Fan mode in ES mode	**0 Run as Auto fan speed when ISU_4=2 (Default)**
		1 Run as Low fan speed when ISU_4=2