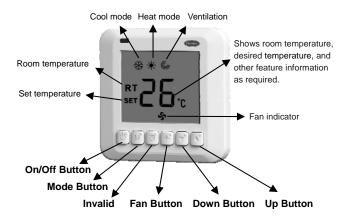
# NON-PROGRAMMABLE

# **DIGITAL THERMOSTAT**



### TST-EGND06413SCS09 / TST-EGND06413SCS10 TST-EGND06423SCS09 / TST-EGND06423SCS10

- -Cool, Heat and Ventilation
- -Large, Easy To Read Display
- -Blue Backlight
- -Fahrenheit or Centigrade
- -Auto Recovery
- -2-pipe or 4-pipe Selection
- -DA or DB Type Selection
- -Key Card Function



# Specification

Set-Point Range: 5°C-35°C(41°F-95°F)

Operating difference:  $\pm$  1  $^{\circ}$ C Switch current rating: < 2A Sensing element : NTC

Display: LCD

Power supply:

TST-EGND06413SCS09: AC85V~260V 50Hz/60Hz

TST-EGND06413SCS10: AC85V~260V 50Hz/60Hz

TST-EGND06423SCS09: AC24V ±10% 50Hz/60Hz

TST-EGND06423SCS10: AC24V  $\pm 10\%$  50Hz/60Hz

Dimensions:  $86 \times 86 \times 29.5 \text{ mm (W} \times \text{H} \times \text{D)}$ Housing: ABS Flame Retardant

# Basic Operation

## Power ON/OFF

- To turn the thermostat on, press "○". Mode symbol (★, ★ or ⑤),

  "RT", and room temperature will be displayed.
- To turn the thermostat off, press "(¹)" again. There is no any display on LCD and no any output.

## **Select Mode**

- Cool Setting: Press "M", until the "\*\* is displayed, it will be confirmed automatically after 6 seconds.
- Heat Setting: Press "M", until the "\*" is displayed, it will be confirmed automatically after 6 seconds.
- Ventilation Setting: Press "M", until the "©" is displayed, it will be confirmed automatically after 6 seconds.

## Fan Setting

Fan speed select: press the fan button to select "\$\sigma(\text{Hi}), \sigma(\text{Med}), \sigma(\text{Med}), \sigma(\text{Med}), \sigma(\text{Med}), \text{Med}). In mode "\$\mathbb{Q}(\text{Auto}), the fan-speed changed automatically. Auto LOW-speed When the difference between room-temperature and setting-temperature exceed 1°C(2°F), Auto MED-speed When exceed 2°C(4°F), Auto HI-speed When exceed 3°C(6°F).

# **Setting Temperature**

- To enter the configuration mode: press "↑" or "▼" buttons, The "

  and "SET" will appear on the display.
- Press"♠" or "▼" to adjust the Cool Temperature.
- Press "♠" or "▼" to adjust the Heat Temperature.

### **Key Card Function**

TST-EGND06413SCS09 / TST-EGND06423SCS09:

If the card was removed, The thermostats will set to 26℃ automatically in Cooling Mode and 18℃ in Heating Mode; Fan will run in speed of low under all of the modes.

TST-EGND06413SCS10 / TST-EGND06423SCS10:

Fig. 16 If the card was removed, The thermostats will switch OFF

#### **Error Codes**

**E1** — If the thermostat cannot properly read room temperature, and it needs to be adjusted, E1 will be displayed.

### **Set Thermostat Configuration**

Configuration options are intended to be selected at installation and normally should not be modified by the home owner. These options are not discussed in the Homeowner's Guide and therefore must be made as part of the installation. A special procedure allows entry in to the configuration mode. The thermostat will automatically exit this if no button is pressed for 90 seconds.

An explanation for each of these and how to enter the configuration mode follows.

To enter the configuration mode:

Turn off the thermostat hold the fan button down for approximately 15 seconds. After 15 the second periof, Option"01" will appear in the display.

#### OPTION 01-LOW TEMPERATURE PROTECTION (FROST PROTECTION)

In the low temperature protection mode, When the thermostat is off , and the room temperature is lower than  $5\,^\circ\!\mathbb{C}$ , it will be turned on automatically and in heating mode; When the room temperature is higher than  $7\,^\circ\!\mathbb{C}$ , it will be turned off automatically.

#### TO ADJUST:

Enter configuration mode (if not already there).

Use "♠" and "♥" buttons to display Option 01.The SET icon should be off.

Press "M" button once. The SET icon will be come on. The display now shows Option 01 setting.

Use "♠" and "▼" buttons to move between the available Option 01 choices of 00(disable) or 01(enable). Factory default is 00.

Press "M" button again to return to Option 01. The SET icon will now be

Use "▲" and "▼" buttons to select another Option, or press" ( ) "button to exit configuration mode.

### OPTION 02 -FAHRENHEIT/CELSIUS SELECTION

This option selects Fahrenheit or Celsius operation.

TO ADJUST:

Enter configuration mode (if not already there).

Use "♠" and "♥" buttons to display Option 02.The SET icon should be off.

Press "M"button once. The SET icon will be come on. The display now shows Option 02 setting.

Use "♠" and "▼" buttons to move between the available Option 02 choices of F (Fahrenheit) or C (Celsius). Factory default is C.

Press "M" button again to return to Option 02. The SET icon will now be off.

Use "▲" and "▼" buttons to select another Option, or press "()" button to exit configuration mode.

## OPTION 03-ROOM TEMPERATURE OFFSET

This option allows calibration (or deliberate miscalibration) of room temperature sensor. There are various reasons why the home owners want to adjust the displayed temperature. The selected number is the number of degrees, plus or minus, which will be added to the actual temperature. The number can range between -5 and +5. Factory default is 0. This adjusted value will be used as actual temperature for both display and control action. For example, if 2 is selected, 72F actual will read 74F. If setpoint is 72, the room will control to an actual value of 70 which will be displayed and acted upon as if it were 72. The effect is that a positive number selection will make the room temperature lower and vice versa. This thermostat is factory calibrated within an accuracy of plus or minus 1F, so this adjustment will provide the best accuracy when set to 0. TO ADJUST:

Enter configuration mode(if not already there).

Use "♣" and "▼" buttons to display Option 03.The SET icon should be off.

Press "M" button once. The SET icon will be come on. The display now shows Option 03 setting.

Use "♠" and "▼" buttons to move between the available Option 01 choices of -5 through +5 in 1 step. Factory default is 0.

Press "M "button again to return to Option 03. The SET icon will now be off.

Use "♠" and "▼" buttons to select another Option, or press "(¹)" button to exit configuration mode.

## OPTION 04 -AUTO RECOVERY

Auto recovery feature means the thermostat will retain the previous status when power is back. This option can be used to choose whether auto

recovery feature is enabled.

#### TO ADJUST:

Enter configuration mode (if not already there).

Use "▲" and "▼" buttons to display Option 04.The SET icon should be

Press "M" button once. The SET icon will be come on. The display now shows Option 04 setting.

Use "♠" and "♥" buttons to move between the available Option 04 choices of 00(disable) or 01(enable). Factory default is 01.

Press "M" button again to return to Option 04. The SET icon will now be off.

Use "▲" and "▼" buttons to select another Option, or press "(¹)" button to exit configuration mode.

#### **OPTION 06 -DA/DB TYPE SELECTION**

This option selects DA type or DB type operation. DA means that when temperature reaches the set point, valve will close, fan will keep running; DB means that when temperature reaches the set point, Valve and fan will close together.

#### TO ADJUST:

Enter configuration mode (if not already there).

Use "♠" and "▼" buttons to display Option 06. The SET icon should be off.

Press "M" button once. The SET icon will be come on. The display now shows Option 06 setting.

Use "▲" and "▼" buttons to move between the available Option 06 choices of 00 (disable) or 01(enable). Factory default is 01.

Press "M" button again to return to Option 06. The SET icon will now be off.

Use "  $\stackrel{\blacktriangle}{-}$  " and "  $\stackrel{\blacktriangledown}{-}$  " buttons to select another Option, or press "  $\stackrel{\circlearrowright}{\cup}$  " button to exit configuration mode.

#### OPTION 07 -2-PIPE/4-PIPE SELECTION

This option selects 2-pipe or 4-pipe operation.

### TO ADJUST:

Enter configuration mode (if not already there).

Use "♠" and "▼" buttons to display Option 07. The SET icon should be off.

Press "M" button once. The SET icon will be come on. The display now shows Option 07 setting.

Use "♠" and "▼" buttons to move between the available Option 07 choices of 2 (2-pipe) or 4(4-pipe). Factory default is 2.

Press "M" button again to return to Option 07. The SET icon will now be off.

Use "♠" and "▼" buttons to select another Option, or press "Ü" button to exit configuration mode.

OPTION 08 -TYPE OF KEY CARD CONTACT

This option selects the type of key card contact...

TO ADJUST:

Wire Diagram

Enter configuration mode (if not already there).

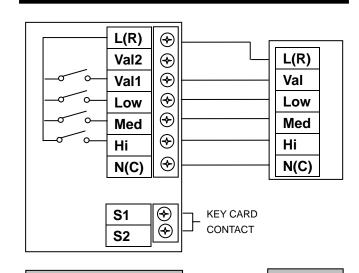
Use "▲" and "▼" buttons to display Option 08. The SET icon should be off.

Press" M " button once. The SET icon will come on. The display now shows Option 08 setting.

Use "♠" and "▼" buttons to move between the available Option 08 choices of 00(When key card is inserted, the contact of S1 and S2 is open) or 01(When key card is inserted, the contact of S1 and S2 is closed). Factory default is 00.

Press " M" button again to return to Option 08. The SET icon will now be off.

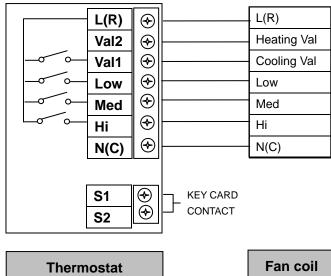
Use "♠" and "▼" buttons to select another Option, or press " (¹) "button to exit configuration mode.



2-pipe

**Thermostat** 

Fan coil



4-pipe

### Installation

Thermostat Location

Thermostat should be mounted:

- Approximately 5 ft (1.5m) from floor.
- Close to or in a frequently used room, preferably on an inside partitioning wall.
- On a section of wall without pipes or duct work.
- 1. Cut off the power, the mark of wire should be clear.

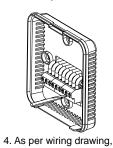


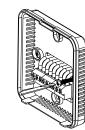


2. Take the main control panel

apart.

3. Push up by force, open the





connect with terminals, fix it by

crewdriver.

5. Fix by the two screws in the packing box.



6. Push the downside by force, lock the up panel, and finish the installation.