TX-928-H
Operating Manual

CONTENTS

◤ Product Introduction

TX-928-H series are available for boiler, manifold and underfloor heating system with 7-day, 6-period time program control. Models are with NTC sensor to detect ambient and floor temperature and do the control by compared with the setting one. Manual, time program and temporary mode can be switched any time by pressing the relevant keys. De-frost protection function will be active when ambient temperature below 5℃ , prevent water pipe from freezing and burning.

◤ Product Features

1、7-day, 6-period time program

2、Touch screen LCD with blue backlight

3、De-frost protection≤5℃

4、Key-lock function

5、Memory function (can not memorized on/ off condition)

6、Advanced setting

7、Double sensors to control and limit the temp.

8、Ingress Protection:IP20

9、Flame retardant PC

Technical Datas

Consumption：＜2W
Power supply：85～240VAC 50/60Hz
Output switch: Active contact (NO) and passive contact (NO)
Max. Current   20 Amp Max
On/ Off differential temp.: 1~5℃
Transport and storage temp. : -20~60℃
Relative humidity: 10%~90% (No condensation)
Setting temp.: 5~35℃/0.5℃ per step
Accuracy: 1℃
Temp. limitation: 30~60℃(external sensor)
Wiring port: 2.5 mm² at least
Working temp.: 0~50℃

LCD display and Functions

1. Manual control mode

   LCD displays " ", the controller is under manual setting. In the "ON" state, press " " to swich the manual control mode or time program control mode.

2. Time control mode

   LCD displays " ", adjust temperature of periods automatically against time program setting. In the "ON" state, press " " to switch the time program control mode or manual control mode.
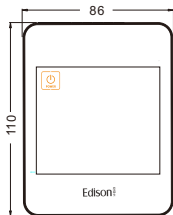
3. Temporary control mode

   LCD displays " " and " ", current period is manual control mode, but next period resume to the time program control mode. In the time program control mode, press " " or " " to enter into temporary control mode.
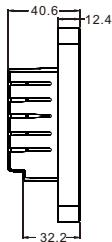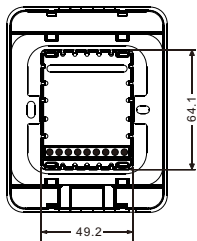

Power
Ambient Temperature
Temperature Value
Manual Control
Day Display
Time Control
Clock/ Setting Temperature/ OFF
Time Program
Heating
Setting   Increase   Reduce   Menu
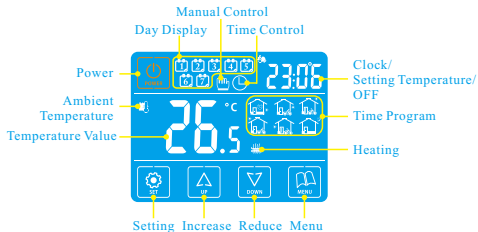
LCD display

Dimensions

① Front View

② Back View

③ Left View

Unit:mm

General Setting

1. Power on / off: Presss " ☒ " to turn on or turn off the controller. When power is off, it displays "OFF" and current time alternatly; when power is on, it displays setting temp. and current time alternately.

2. Adjust setting temp.: Press " ☒ " or " ☒ "to adjust temp. during manul control and temporary control mode.

3. Key-lock function: In the "ON" state, keep pressing " ☒ " for 3s until the coin "LOC" displays, to lock or unlock the controller.

4. Time and week setting: In the "ON" state, press " ☒ ", then press " ☒ " or " ☒ " to amend the minute; press " ☒ " to amend the hour; press " ☒ " to set the day of week, press " ☒ " to save and exit the setting.

5. Time program: In the "ON" state, keep pressing " ☒ " to start setting, press " ☒ " or " ☒ " to adjust the current time(15mins/ step). Press " ☒ " again to check related temp., press " ☒ " or " ☒ "to adjust setting temp.. Press " ☒ " to adjust next period. Press " ☒ " to save and exit the setting.

6. Control mode: Press " ☒ " to switch manual or time program control mode. In time control mode, keep pressing " ☒ " or " ☒ "to enter into temporary control mode.

General Setting

Periods		Coins	Default Time	Default Temperature
Weekdays	1	🏠	06：00	
	2	🏠	08：00	
	3	🏠	11：30	
	4	🏠	12：30	22℃
	5	🏠	17：00	
	6	🏠	22：00	
Holiday	1	🏠	08：00	
	2	🏠	23：00	

🏠 Wake up, Period 1 🏠 Leave(am), Period 2

🏠 Return(am), Period 3 🏠 Leave(pm), Period 4

🏠 Return(pm), Period 5 🏠 Sleep, Period 6

LOC Key-LOC

Advanced Setting

Normally set by technicians during the first installation. Press " 🔲 " first, then press " 🔲 " for 3s to enter into setting in the "ON" state.

Tips: (Amend the datas via advanced setting, press "🔲" to save and exit the setting.)

01. Adj Temperature compensation, press "🔲" or "🔲" to adjust during range -9~9℃. Press " 🔲 " to enter into next setting.

02. Sen Sensor slection, press " 🔲 " or " 🔲 " to choose the sensor. "IN"-internal sensor, "OU"-external sensor, "AL"-double sensors. Press " 🔲 " to enter into next setting.

03. Lit Limitation temperature of external sensor, press " 🔲 " or " 🔲 " to change the exact limited temperature of external sensor during 30~60℃ , press " 🔲 " to enter into next setting.

04. Dif Switch deviation (bandwidth), press "🔲" or "🔲" to adjust the differential temp. during range 1-5℃ , press " 🔲 " to enter into next setting.

Main output from "OFF" to "ON": Action temp.=setting temp.-differential temp.

Main output from "ON"to"OFF": Action temp.=setting temp.+differential temp.

05. Prg 5+2/6+1/7 or off, press " 🔲 " or " 🔲 " to switch workdays, 5/6/7 workdays, or turn off the time program. Press " 🔲 " to enter into next setting .

Tips: workdays divided into 6 periods, and holidays divided into 2 periods only .

Advanced Setting

06. Rle Setting of passive linkage and main output, press "Ⓐ" or "Ⓥ" to change the condition of linkage; "00" means correspond with main loop output, "01" means opposite. Press "Ⓜ" to enter into next setting.

07. Dly Dry contact function output delay: Press "Ⓐ" or "Ⓥ" to amend from 0-5minutes, press "Ⓜ" to enter into next setting.

When the output from "ON" to "OFF", dry contact will be "OFF" at the same time.

08. Hit Press "Ⓐ" or "Ⓥ" to adjust the max.temp. from 35~60℃. Press "Ⓜ" to enter into next setting.

09. Fac Recover factory setting, press " Ⓐ ", then the coin "-" appears on the screen, hold on until it changes to "- -", finishes recover factory setting. Press "Ⓜ" to enter into next setting; or press "Ⓥ" to save and exit of setting .

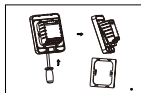| Setting	01	02	03	04	05	06	07	08
Default	0	IN	35	1	5	00	00	35

Wiring Diagrams

The highest elevation for the controller working under full load situation is 2500m; or if higher than 2500m, the rated power of external loads should be≤80% rated power of the thermostat.
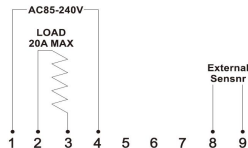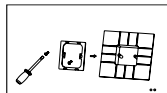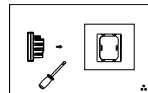

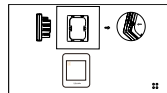Wiring diagrams

Installation Diagrams

1. Insert the screwdriver into the gap to detach the back cover and iron plate of the thermostat

2. Fix the iron plate with screw and install it on the junction box in the wall

3.To correctly connect the wires as the wiring diagram

4.Insert the thermostat and fix it on the iron plate

Fault phenomenon	Reasons	Methods
No display	Power line input errors or without Input	Check the power line connection and the power supply
Display Er1	Internal sensor errors	Check the pin of internal sensor if there is a short cirsuit
Display Er2	External sensor errors	Check the pin of external sensor if there is a short cirsuit. Choose internal sensor via advanced setting