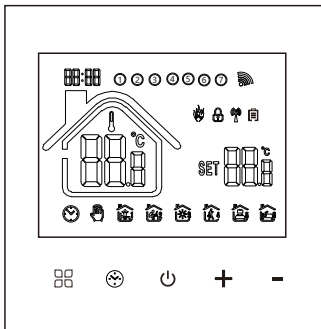


# TDR89 THERMOSTAT USER GUIDE



This thermostat is suitable for water heating, electric heating and boiler

# Welcome

Thank you for your trust and support!

We have adopted advanced technology and perfect craftsmanship so that your new thermostat will provide you with a suitable temperature environment every day in the future.

## Main Functions and Characteristics

- 1.WIFI for Android & Apple iOS
- 2.Large screen display and touch screen
- 3.Power-off memory function
- 4.Real-time data save function
- 5.5+2 or 6+1or 7days six periods program schedule
- 6.Anti-freezing function
- 7.3 sensor modes can be setting
- 8.Child lock function

## Product Packaging

Model	TDR89-EP	TDR89-WP	TDR89-WPB
Thermostat	✓	✓	✓
User Manual	✓	✓	✓
Screws *2	✓	✓	✓
External sensor	✓		

## Model Spec

Model	Current Loading	Week Program	Controlled Objects
TDR89-EP	16A	✓	For electric heating appliances
TDR89-WP	3A	✓	For water heating appliances
TDR89-WPB	3A	✓	For boilers connected via dry contact

## Technical Parameter:

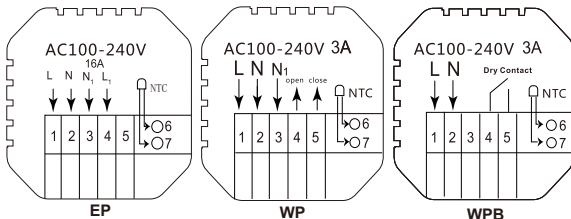
Power Supply	100 ~ 240V
Current Load	$\leq 3A$ (water heating/gas boiler) $\leq 16A$ (electric heating)
Power Consumption	<1W
External Material	PC+ABS (flame retardant)
Sensing Element	NTC
Set Temp. Range	5-95°C
Floor Set Temp. Range	5-60°C
Temperature hysteresis	$\pm 1^{\circ}C$ (Defaults adjustable 0.5-10°C)
Dimension	86x86x14mm
Ambient Temp.	0-45°C, 5-95% RH (Non-condensing)
Storage Temp.	-5~55°C
Timing Error	<1%

# User Notes

1. Please read this manual carefully. Improper operation may damage the product or cause dangerous conditions.
2. The installation personnel must be well-trained and experienced service technicians.
3. After installation, please read this manual carefully and operate the product according to the instructions.

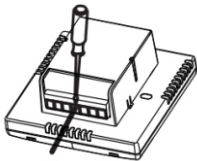
Caution: Risk of electric shock

## Wiring Diagram

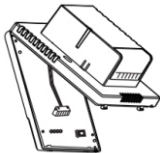


# Installation Instruction

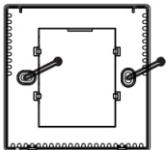
This product is suitable for standard **86\*86mm** wall box and **60 mm** european round box.



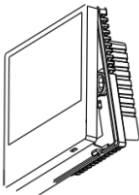
1. Connect the power box according to the wiring diagram.



2. Separate the power supply from the control board cable.

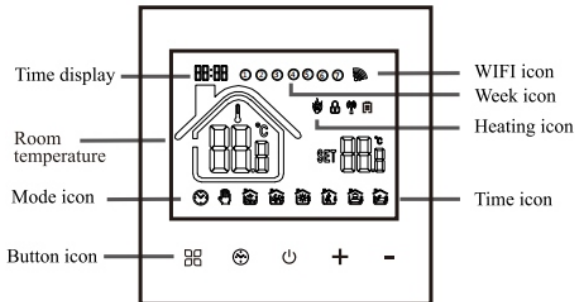


3. Screw the power supply into the box of 86.



4. Connect the power board to the board line, and align the buckle at 30 degrees to complete the installation.

# Description of display & icon



# Operation Instruction



## 1.Power on/off

Press  to turn on/off the power.

## 2.Set Temperature

Press “+” or “-” to set the temperature.


## 3.Set the Clock

press  to set minute, Press “+” or “-” for adjusting  
Then press  to adjust the hour and the week in turn.


## 4.Switch modes

Press  key to switch between Manual and Programming mode

Manual mode:means non-programmable mode.


 display on the screen, it is in Manual mode.

Press “+” or “-” to set the temperature.

 display on the screen, it is in Programming mode.

## 5.Set the Child Lock


Simultaneously press and hold the “+” and “-” to add child lock

 will display on the screen.

Simultaneously press and hold the “+” and “-” again to cancel child lock.



## 6. Set the programming Mode.

Press and hold  into programming mode setting. time and ①②③④⑤ will display.

①②③④⑤ display in the position of week means  
5(working day)+2(rest day)


Press “+” or “-” to set the time.


Press  to enter the temperature adjustment.









Press “+” or “-” to set the temperature;

Press  to enter the next period adjustment.

Press  to exit and save.

If you want to make temporary adjustment in any period,  
press “+” or “-”, then  will display. It will run according to  
your manual settings and resume programming mode at the  
next programming time point

Press  to switch between manual mode and programming  
mode.



Period		Period Icon	Defaulted Time	Defaulted Temp.
Working day	1		6:00	20°C
	2		8:00	16°C
	3		11:30	16°C
	4		12:30	16°C
	5		17:00	22°C
	6		22:00	16°C
Rest day	1		8:00	22°C
	2		23:00	16°C



### Remark:

1.The defaulted temperature of period3 and period4 is the same as period2. Please change it according to the request.


2.Do not set the last time point of each day beyond 23:59

## 7. Advanced Setting

In the state of **power-off**, press the  key and the  key for 5 seconds to enter the advanced option setting.

Press  to enter the next option, press “+” or “-” to adjust, and press  to save and exit.

Display Code	Function	Setting And Options	Factory Defaults
01	Temperature calibration	-9.9-9.9°C	-1°C
02	Sensor selection	IN: Use the internal sensor OUT: Use the external sensor ALL: Use both internal and external sensors.	IN
03	Limit temperature value modification	25-95°C	60°C
04	Temperature hysteresis	0.5-10°C	1°C
05	Antifreeze function	OFF: Close anti-frozen ON: Open anti-frozen	OFF
06	Weekly programming mode setting	7: 7 working days 6: 6 working day+1 rest day 5: 5 working day+2 rest day OFF: turn off programming	5

07	Main and auxiliary reverse selection (optional)	00:close the main and auxiliary reversal function 01:indicate the auxiliary reversal	00
08	Backlight brightness	00:turn off the backlight 01:low brightness 02:medium brightness 03:high brightness	03
09	Set temperature upper limit	15-95°C	60°C
10	Reset	long press “+” key to adjust the display to“---”,press  button to restore the factory settings	-
11	Sound	ON:turn on the sound OFF:turn off the sound	ON

### Sensor error:

If no external sensor is connected, do not set it to **ALL** or **OUT**, otherwise **Er** will appear on the screen.And the thermostat will stop heating till the problem is solved.

If there is error of sensor **Er** will also appear on the screen.

# Phone Port Operation Instruction

## Preparation before Wi-Fi connection

APP download and account registration:

### 1.Download APP

For iOS system: Login in App Store, search “Tuya Smart”, you can download it on your iphone.

For Andriod system: Login in Google Play, search “ Tuya Smart” , you can download it on your phone.

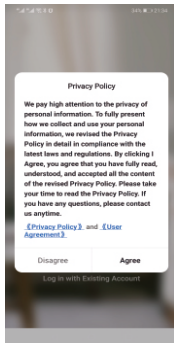
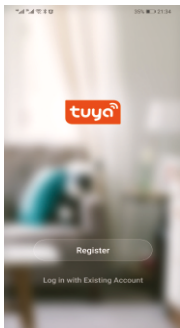
Or scan below code to download:



## 2. Register Account

If you do not have an APP account yet, you can choose to register or log in via SMS verification code. Click “Creat a new account”, you will enter the Tuya Smart Platform Privacy Policy page.

After you click Agree, you will officially enter the mobile phone registration page.



The system automatically determines the current country/region. You can also select the country/region manually. After entering your mobile phone number or email address, click “get verification code”. Enter the received verification code, then enter the password, and click “Finish” to register successfully.

The image displays three sequential screens from a mobile application, illustrating the registration workflow. Each screen features a status bar at the top with signal strength, Wi-Fi, and battery indicators (34% at 21:08).

- Register Screen:** Contains a back arrow, the title "Register", a country selector showing "China +86", a text input field for "Mobile Number/Email", a "Get Verification Code" button, and a checkbox for "I Agree User Agreement and Privacy Policy".
- Enter Verification Code Screen:** Features a back arrow, the title "Enter Verification Code", a four-digit code input field, and a message: "Verification code has been sent to your mobile phone: 86-13613055496, Resend(32s)".
- Set Password Screen:** Includes a back arrow, the title "Set Password", a password input field with a strength indicator (6 to 20 characters, including letters and digits), a "Done" button, and a toggle for password visibility.

## WIFI connection

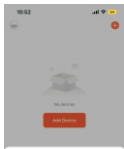
1. Turn on your mobile phone's Bluetooth and wifi  
(please make sure your mobile phone connect to **2.4Ghz Wi-Fi**).

2. Activate the thermostat WiFi module: When the thermostat is turned on, press and hold the “+” button for 5 seconds, the WIFI icon flashes on the thermostat display, and the thermostat enters the code matching state

### 3. Add Device

There are 3 ways to add a device

Method 1. Enter the Tuya APP. The main page automatically pops up "Device to be added" (as picture 1) and click "Add".



picture 1

Devices to be added: 1



Temp-5

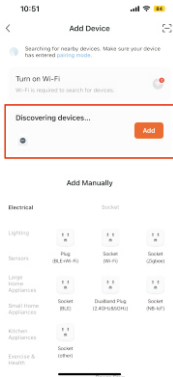
Add



Method 2: Enter the Tuya APP, Click "Add Device" or "+" (as picture 2) on the upper right corner of the APP homepage, and enter the "Add Device" interface. It will prompt: find the device to be added (as picture 3) and follow the prompts.



picture 2



picture 3

Method 3: Enter the Tuya APP, Click “+” on the upper right corner of the APP homepage, Find the temperature control product (Bluetooth + WIFI model) in the (small household appliance). (as picture 4)  
As picture 5 ignore the content of the page and tap **Next**.

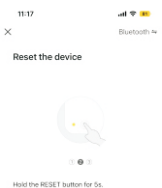


picture 4



picture 5

As picture 6 Ignore the content of the page and click **Next**  
As picture 7 tick confirm the indicator is blinking click **Next**



picture 6



picture 7

#### 4. Enter Wi-Fi information

Enter the name and password of the **2.4Ghz Wi-Fi** (please make sure that the Wi-Fi name and password contain only numbers and letters and not special symbols) Follow the prompts to the next step, you can see the device is being added, and after a few seconds, you will see that the device is added successfully (the length of time will depend on the strength of the wifi signal).

14:06

Enter Wi-Fi Information

Choose Wi-Fi and enter password

2.4Ghz Wi-Fi Name

Wi-Fi password

Next

14:06

Add Device

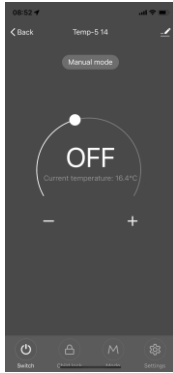
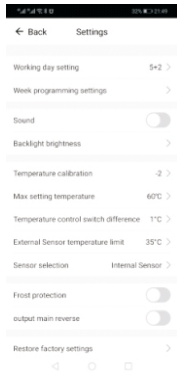
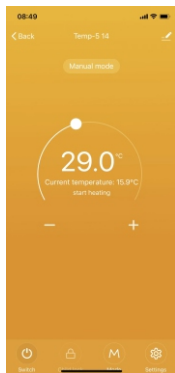
1 device(s) added successfully

Temp-5

Added successfully

Done

## 5.Display of temperature controller APP interface



If you encounter any problems during the use of the product, please feel free to contact us through the purchase platform, we will try our best to help you.