**Manuals+** — User Manuals Simplified.

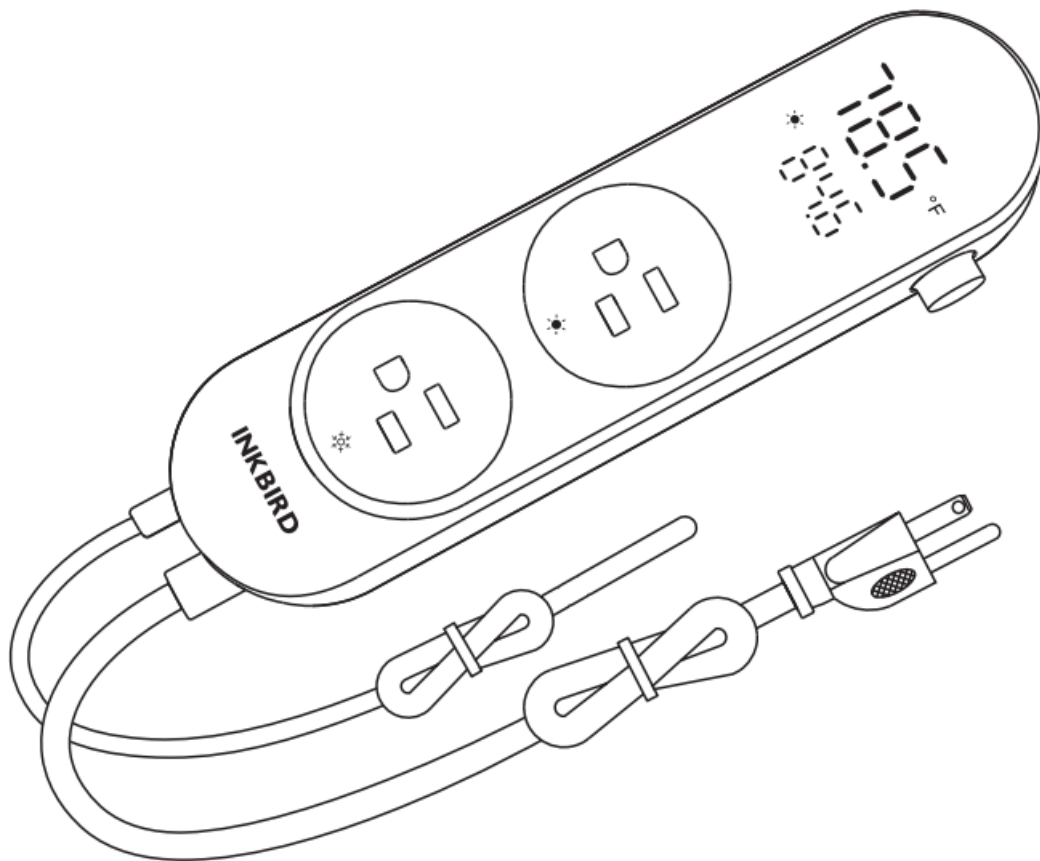# INKBIRD ITC-312 Bluetooth Smart Temperature Controller User Guide

**Contents**

**ITC-312 Bluetooth Smart Temperature Controller**

**ITC-312**
**BLUETOOTH SMART TEMPERATURE CONTROLLER**

Please keep this manual properly for reference. You can also scan the QR code to visit our official website for product usage videos. For any usage issues, please feel free to contact us at **support@inkbird.com**.



**https://inkbird.com/pages/download?brand=INKBIRD&model=ITC-312**

## OVERVIEW

The ITC-312 Bluetooth Smart Temperature Controller has three control functions—general temperature mode, day/night mode, and time mode, and supports two setting methods-range method and return differential method, making it more flexible to use. Users can choose the setting method according to their usage habits. At the same time, it supports a Bluetooth function, which enables app operation, which is more convenient. The device can store 30 days of temperature history and the phone app can store up to 1 year of temperature data It also has high and low-temperature alarm functions and is an intelligent controller that is widely used for heating, cultivation, seedling growing, wood sheds, home living, and more.

## Technical Specifications

| Brand | INKBIRD |
|---|---|
| Model | ITC-312 |
| Input | 120Vac, 60Hz, 10A Max |
| Output | 120Vac,60Hz,10A,1200W<br>(total two receptacles)Max |
| Temperature Control Range | -40°F~212°F/-40C~100C |
| Temperature Measurement Error | +2.0°F/1.0C |
| Bluetooth Function | BLES.0 |
| Bluetooth Distance | 100 meters in an open area |

**Notes:**
For the first time use or after unplugging the controller for more than 10 days, to ensure that the historical data are recorded correctly, please log in to the INKBIRD app to connect the controller, it will automatically synchronize the local time.

## Product Diagram
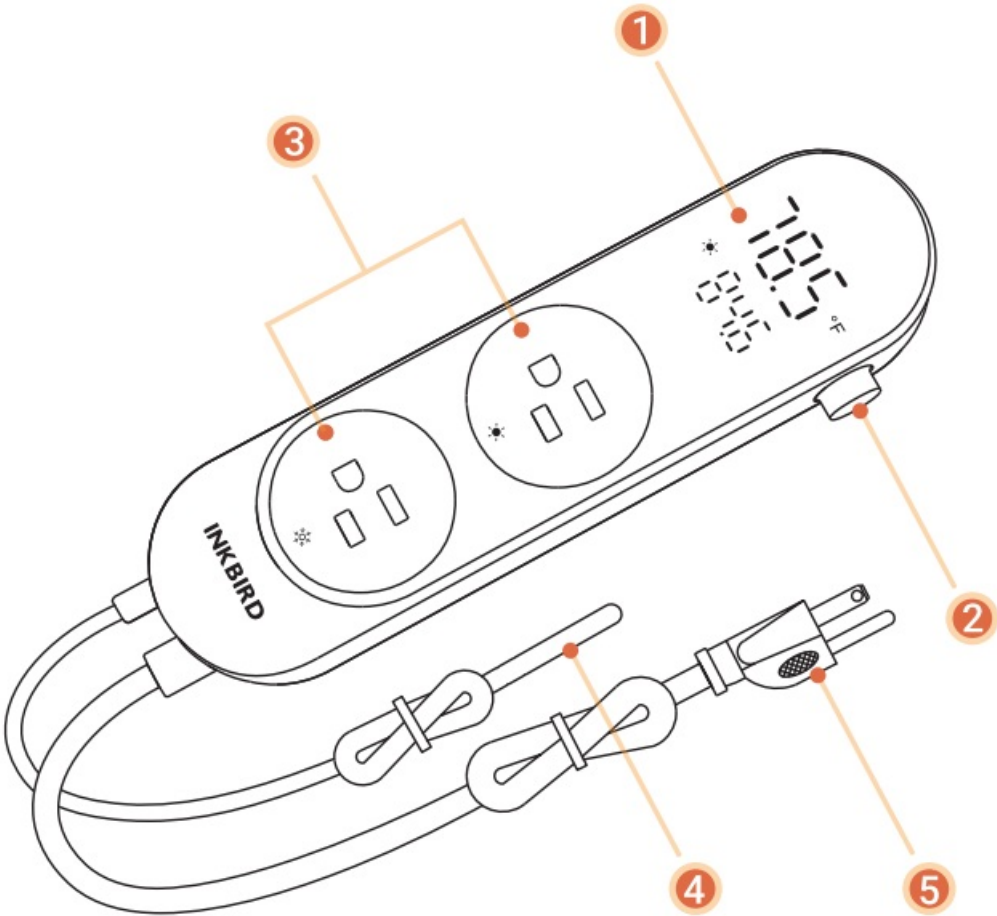


## 1. White Light LED
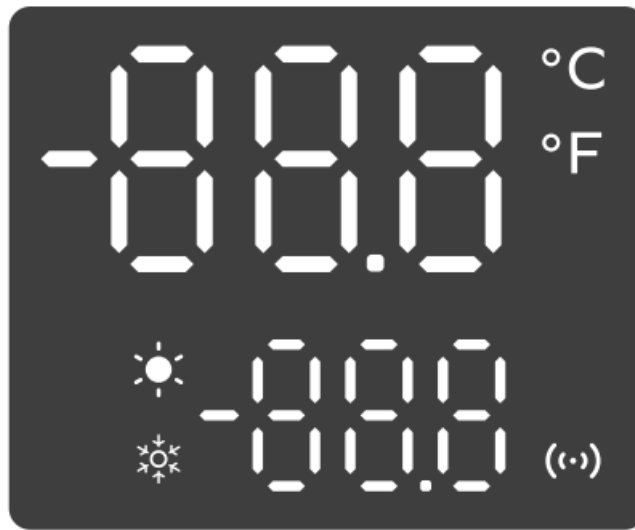
| | |
|---|---|
|  | Current Temperature and Unit |
|  | Setting Temperature Value |
| °C °F | Temperature Unit |
| ☀ | Heating Symbol |
| ❄ | Cooling Symbol |
| ((·)) | Bluetooth Symbol |

2. Rotary Button

| Button | Function |
|---|---|
| Rotary Button | Press and hold tfor 2 seconds to enter or exit setting;in the setting state, short Press to select the setting menu; in the non-setting state, short press to authorize Bluetooth connection; rotate up or down to adjust the parameter |

3. Output Port (HEATING & COOLING)
4. Temperature Probe(Length: 6.56ft (2m), P67 Waterproof)
5. Input Power Cord

## Operation Instructions

### 4.1 Setting Guideline

Select the device setting method through the App: Temperature range setting mode or Temperature return difference setting mode.

**Temperature range setting mode:** Separately set start and stop temperatures for heating and cooling devices. (Recommended)

**Temperature return difference setting mode:** Set the target temperature and the return difference value of heating and cooling temperatures. (Select this method if you are more accustomed to the setting logic of the ITC-308)

**4.2 Running Mode Guideline**

**Select the device operating mode through the App**: Temperature mode (default), Day/Night mode, or Time mode.

**Temperature Mode: P**ower on or off the plug-in devices according to the current temperature and target temperature.

**Day/Night Mode:** 2 target temperatures can be set in a day, and the controller will perform different temperature controls according to the 2 preset control periods.

**Time Mode:** Up to 12 target temperatures can be set in a day, and the controller wil perform different temperature controls according to the preset time periods
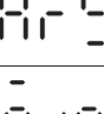
**4.3 Description of the Menu Characters**

| Character | Function | Range | Default |
|---|---|---|---|
| CF | Temperature unit switch | C or F | F |
| AH | High-temperature alarm | -40.0°C-100°C | 50°C |
| | | -40.0T-212°F | 122°F |
| AL | Low-temperature alarm | -40.0°C-100°C | 0°C |
| | | -40.0T-212°F | 32°F |
| rd | Refrigeration delay | 0-10 minutes | 0 minute |
| CA | Temperature calibration | -4.9°C-4.9°C | 0.0°C |
| | | -9.9°F-9.9T | 0.0°F |
| AS | Alarm sound | ON or OFF | ON |
| nn | Current month | 1-12 months | 1 |
| dd | Current day | 1-31 days | 1 |
| Hr-S | Current hour | 0-23 hours | 0 |
| nin | Current minute | 0-59 minutes | 0 |

**APP Installation & Connection**

**INKBIRD APP**

5.1 Search the INKBIRD App from Google Play or App Store to get it for free, or you can scan the QR code to download it directly

**NOTE:**

1. Your i0S devices must be running I0S 12.0 or above to download the app smoothly.
2. Your Android devices must be running android 7.1 or above to download the app smoothly.
3. APP Location Permission Requirement: We need to obtain your location information to discover and add nearby devices. INKBIRD promises to keep your location information strictly confidential. And your location information will only be used for the location function of the App and will not be collected, used, or disclosed to any third party. Your privacy is very important to us. We will abide by relevant laws and regulations and take reasonable security measures to protect your information security.

**5.2 Registration**
Step1: Registering an account is necessary before using the INKBIRD app for the first time.
Step2: Open the app, select your Country/Region, and a verification code will be sent to you.
Step3: Enter the verification code to confirm your identity, and the registration is complete.
**5.3 How to Connect**
Open the INKBIRD app and click the "+ in the top right corner to add a device. Then follow the app's instructions to complete the connection. Please make sure to place the device as close to your smartphone as possible during the connection process
**5.4 Application Instructions**
**5.4.1 App Guideline**
For the first time connecting the product, the App will quide the user through the following operation

1. Select the setting method (Set temperature range or Set temperature return difference)
2. Set the temperature unit
3. Select the running mode of the device (Temp Mode, Day/Night Mode, or Time Mode)
4. Set the temperatures
5. Set the high and low-temperature alarms
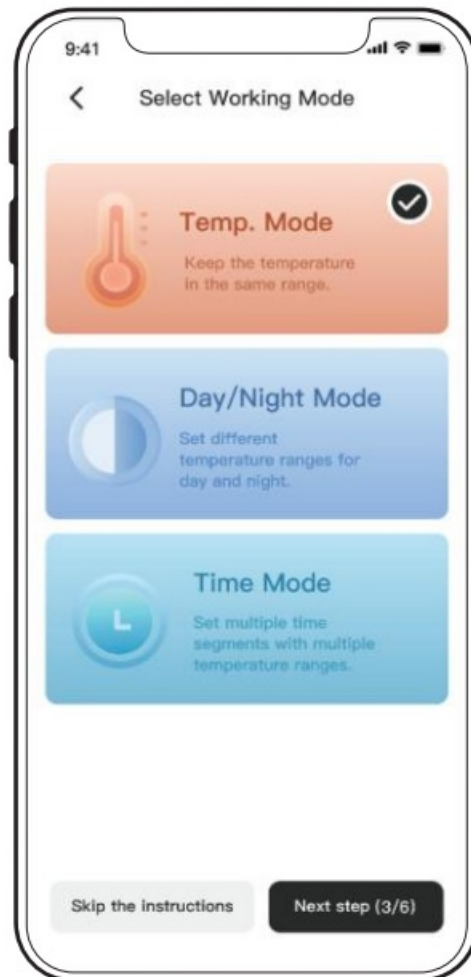6. Set the refrigeration delay.
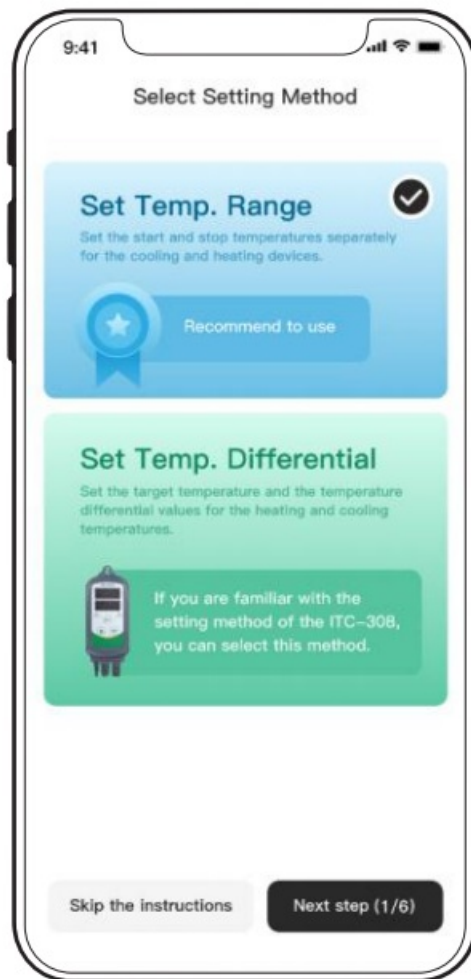
1. Select the setting method (Set temperature range or Set temperature return difference)

2. Set the temperature unit



3. Select the running mode of the device (Temp Mode, Day/Night Mode, or Time Mode)

4. Set the temperatures



**Set High/Low-temp Alarm**

High-temp Alarm

0.5 °F

Low-temp Alarm

0.0 °F

Skip the instructions    Next step (5/6)

5. Set the high and low-temperature alarms



**Set Refrigeration Delay**
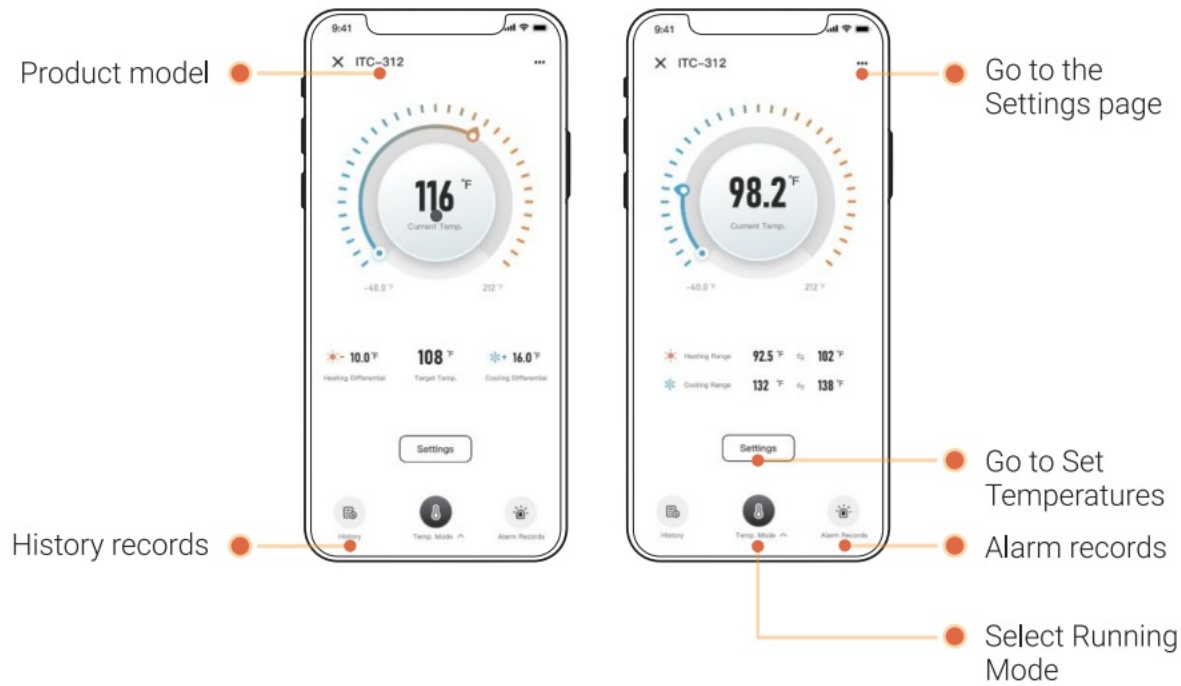
Refrigeration Delay ⊙

Delay

−    0    +

★ The refrigeration delay time is the shortest time between the stop time and the next start time of the cooling device.

For example, set it to 5 minutes. And, no matter how the temperature changes, the cooling device will not restart within 5 minutes after being switched off.
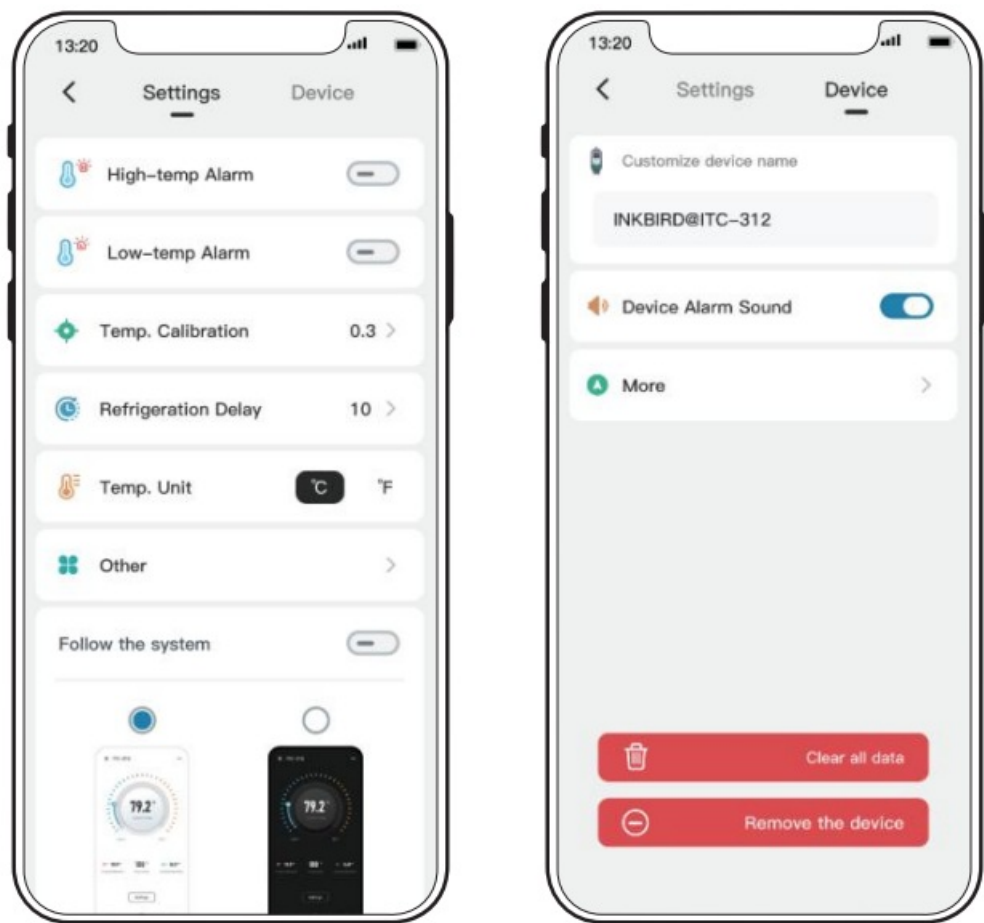
Skip the instructions    Confirm

6. Set the refrigeration delay

## 5.4.2 Main Interface Introduction



Product model — ITC-312

Go to the Settings page

History records

Go to Set Temperatures

Alarm records

Select Running Mode

## 5.4.3 Setting Interface Introduction



Go to the Settings page
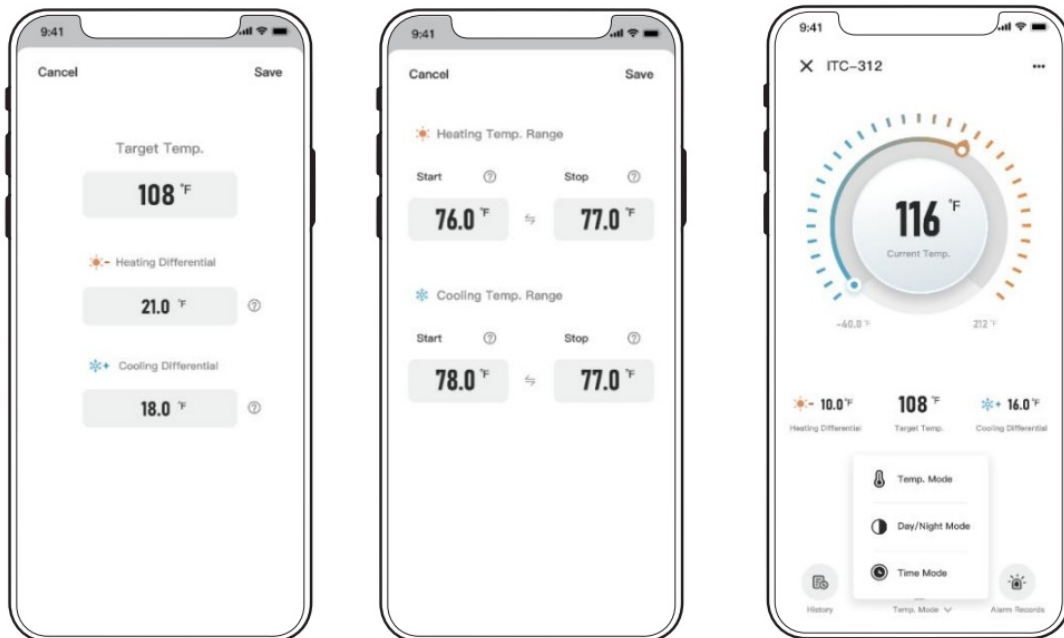
● Set the Temperatures

● Select Running Mode



Heating condition

Cooling condition
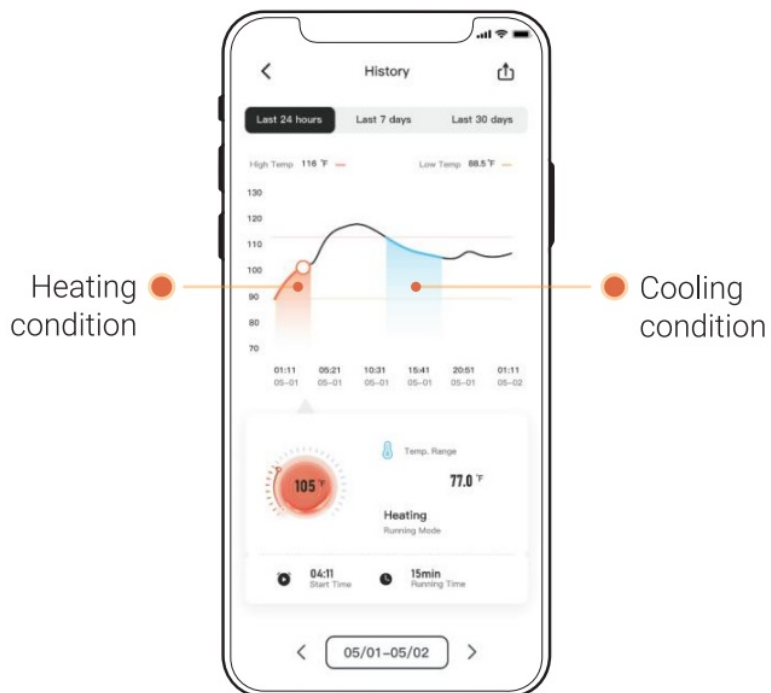
● History records
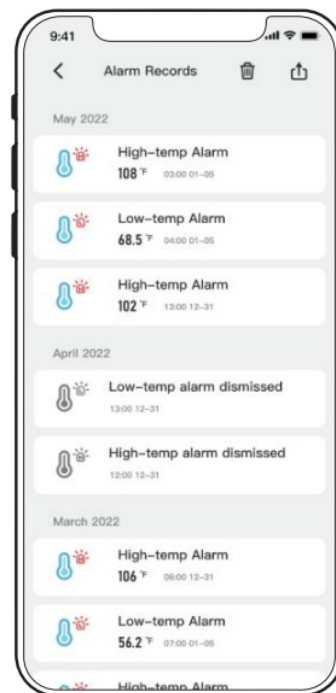
● Alarm records

**5.4.4 Introduction to the Temperature Range Main Interface and the Temperature Setting Pop-up Window Temp Mode**

● Main interface

**Day/Night Mode**



● Main interface

● Set the temperatures for Day/Night mode

**Time Mode**
a. Main interface

● Main interface

● Set the periodic temperatures

● Rename the current time segment

## Cleaning and Maintenance

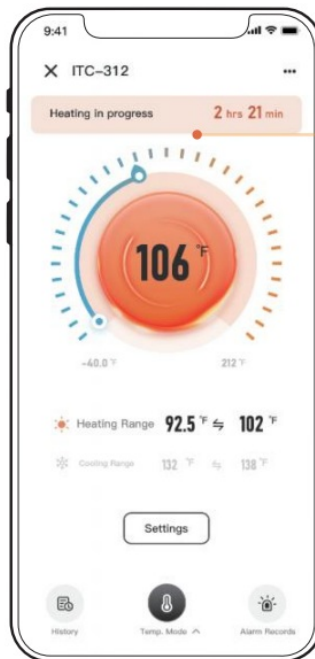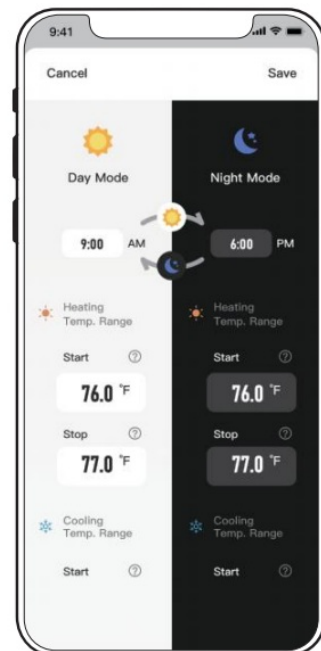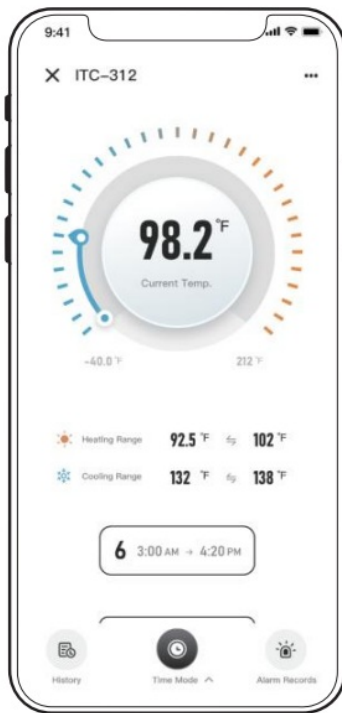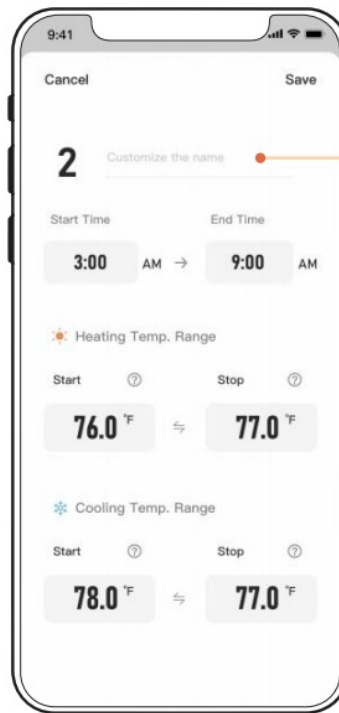6.1 Please make sure to unplug the temperature controller before cleaning. If cleaning is necessary, use a dry, clean cloth to wipe it; do not clean with water or a wet cloth.
6.2 Do not place it where children can touch it. Store in a dry, ventilated place.

## Important Notes/Warnings

7.1 KEEP CHILDREN AWAY.
7.2 USE INDOORS ONLY TO REDUCE THE RISK OF ELECTRIC SHOCK.
7.3 DO NOT CONNECT TO OTHER RELOCATABLE POWER SOURCES OR EXTENSION CORDS.
7.4 USE IN A DRY PLACE ONLY.
7.5 DO NOT PLACE NEAR WATER TO REDUCE THE RISK OF ELECTRIC SHOCK,
7.6 DO NOT EXPOSE TO HIGH TEMPERATURES.
7.7 THE HOUSING OF THE TEMPERATURE PROBE IS MADE OF STAINLESS STEEL MATERIALS. WIPE OFF ANY STAINS TO AVOID AFFECTING THE ACCURACY OR RESPONSE TIME OF THE PROBE.
7.8 DO NOT CONNECT IT TO A PRODUCT THAT IS NOT RATED FOR ITS VOLTAGE, WHICH MAY CAUSE FIRE HAZARDS.

## Troubleshooting Guide

### Cannot connect Bluetooth?

1. Check that your smartphone has Bluetooth enabled.

2. Check that the device is in the connecting state.

### Incorrect probe readings?
Wipe to clean the stainless steel part of the probe and blow with a hairdryer to completely evaporate the moisture inside the probe (making sure that the device is disconnected from the power supply).
**Failure to switch on or off the heating/cooling output?**

1. Test the electric power.

   A. Unplug the controller, and plug a heating or cooling device. (Note that the device voltage must not exceed the rated voltage of this product.)

   B. Press and hold the SET button (until the Controller is turned on)

   C. Connect the power supply to start up, then release the SET button.

   D. Turn the knob button to the left, and the heating symbol will light up on the LCD, indicating that the heating output is open. At this point, check that the unit is turned on

   E. Turn the knob button to the right, and the cooling symbol willlight up on the LCD, indicating that the cooling output is open. At this point, check that the unit is turned on.

2. Please check that the load power of the external device is within the rated power of this product, 1200W (120Vac) or 2200W (220Vac). If the above operational steps still do not resolve your issue, please contact our customer support team

**The screen of the controller gets stuck/frozen?**
Unplug the controller and reboot it. If the problem persists, please contact Customer Support
**The controller will sound an alarm and AL/AH will flash on the screen. How to turn off the AL/AH alarm sound?**
See details on 06 Operation Instructions 6.1.2
**Probe readings are changing repeatedly (sudden rise or fall)/Readings are changing very slowly?**
Wipe to clean the stainless steel part of the probe and blow with 2 hairdryer to completely evaporate the moisture inside the probe (making sure that the device is disconnected from the power supply)
**Outlet melted/burnt?**
Please check that the load power of the external device is within the rated power of this product, 1200W (120Vac) or 2200W (220Vac), or contact Customer Support instead.
**Deficient screen display** / **The screen keeps flashing** / **The sound of electricity is audible** / **Displaying ER?**
Please contact Customer Support.

## FCC Requirement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and

2. this device must accept any interference received, including interference that may cause undesired operation

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This
equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with @ minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## IC Warning

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canadafs licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

## Customer service

**INKBIRD**

**INKBIRD TECH.C.L.**
**support@inkbird.com**
**Factory address: 6th Floor, Building 713, Pengji Liantang Industrial Area, NO.2 Pengxing Road, Luohu District, Shenzhen, China**
**Office address: Room 1803, Guowei Building, NO.68 Guowei Road, Xianhu Community, Liantang, Luohu District, Shenzhen, China**
**MADE IN CHINA**
**V1.0**

FC IC RoHS

## Documents / Resources

| | |
|---|---|
| | **INKBIRD ITC-312 Bluetooth Smart Temperature Controller** [pdf] User Guide 2AYZDITC-312, 2AYZDITC312, ITC-312, ITC-312 Bluetooth Smart Temperature Controller, Bluetooth Smart Temperature Controller, Smart Temperature Controller, Temperature Controller, Controller |

## References

- [**User Manual**](#)