

深圳英博伟业科技有限公司



|      |           |      |          |       |              |
|------|-----------|------|----------|-------|--------------|
| 型号   | LTC-318-W | 设计师  | 林华美      | 编码    | 103.01.00602 |
| 零件名称 | 说明书       | 设计主管 | YUI      | 单位/比例 | MM/1:1       |
| 尺寸要求 |           | 审核   | 商祎行      | 未注公差  | ±0.1mm       |
| 重量要求 |           | 日期   | 20250516 | 版本    | V1.0         |

**材质:** 封面157g双铜纸 覆哑膜 内页80g书纸 骑马钉2个  
**尺寸:** 160mm\*120mm  
**颜色:** 黑白印刷

CONFIDENTIAL  
未经允许禁止改动

注意：封面背面不留空白页，直接印刷内容。

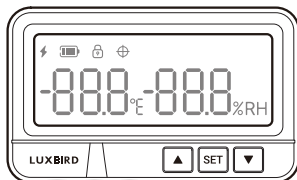
牙刀位置：虚线位置  
(不印刷)

骑马钉位置：左侧居中

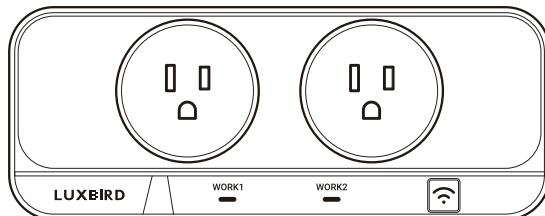


## 01 Product Features

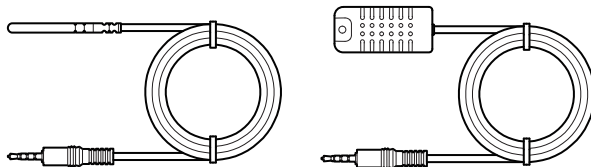
- 1 Precise temperature and humidity control, with multiple selectable modes
- 2 Separate monitor and socket design
- 3 Supports timer mode with temperature and humidity control
- 4 Product parts:



Monitor



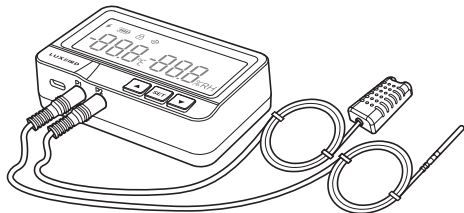
Smart Socket



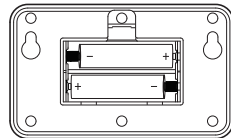
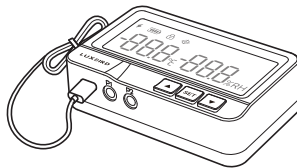
Temperature and Humidity Probe

## 02 Product Connection

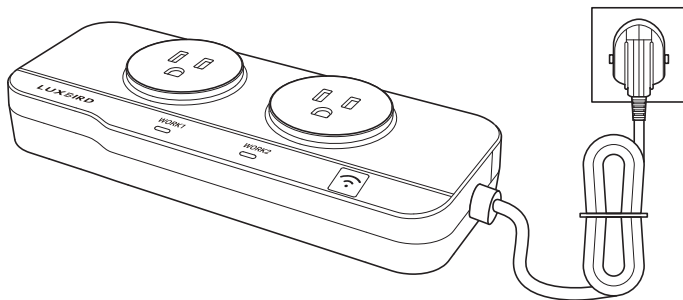
- ① **Connect the probe:** Insert the temperature and humidity probe into the probe port at the bottom of the monitor.



- ② **Power supply mode (2 options):** USB-C Powered or Battery Powered (with 2 AA batteries installed).



- ③ **Connect the socket:** Plug the socket to a power source. Once the monitor has been powered on, it will automatically pair with the socket.

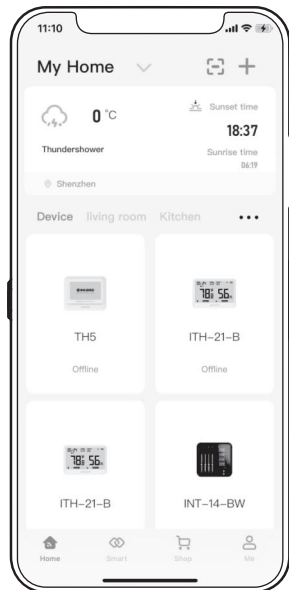


### 03 App Installation

- 1 INKBIRD APP Download and install the INKBIRD App.



- 2 Complete the registration and log in to the app, click the "+" in the top right corner to add this device, then follow the app's instructions to complete the connection.





#### **Product Installation**

- ① **Mark the fixed point:** Use the mounting template to mark the hanging location.
- ② **Install screws:** Drill holes at the marked points and install screws, ensuring that they are properly secured.
- ③ **Complete installation:** Hang up the monitor and ensure that the monitor is securely mounted.



#### **Usage Precautions**

- ① Do not connect to a load power exceeding 120V/10A/1200W.
- ② For indoor use only.
- ③ For further information on this product, please refer to the user manual.

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



Please note that this unit has the function of saving the operating state in case of power failure. When the power is restored, it will automatically resume the operating mode before the power failure. Even if the WiFi is occasionally disconnected, the unit will continue the previously set temperature and humidity control schedule until the network is restored.

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## 01 Precautions for Use

- 1 Keep children away.
- 2 Use indoors only to reduce the risk of electric shock.
- 3 Do not connect to other relocatable power sources or extension cords to avoid the risk electrical shock.
- 4 Use in a dry place only.
- 5 Do not place near water to reduce the risk of electric shock.
- 6 Do not expose to high temperatures.
- 7 The housing of the temperature probe is made of stainless steel materials. Wipe it clean if there are any stains on it (taking care to disconnect the power supply) to avoid affecting the accuracy or response time of the probe.
- 8 Do not connect it to a product that is not rated for its voltage, which may cause potential safety hazards like fire.

## 02 Overview

The LUXBIRD LTC-318-W temperature and humidity controller offers versatile functionality, supporting multiple working modes: constant mode, timer mode, manual mode, and cycle mode. This adaptable controller finds application in a variety of intelligent temperature and humidity control scenarios, including greenhouses, plant nurseries, attics, germination chambers, wood sheds, and residential settings.

## 03 Technical Specifications

**Brand:** LUXBIRD

**Model Numbe:** LTC-318-W

**WiFi:** 2.4GHz

**Input:** 120Vac 60Hz MAX 10A

**Output:** 120Vac 60Hz MAX 10A

**Wireless transmission distance between the screen and the socket:** 328 feet in open space

**Temperature Control Range:** -40°F~212°F/-40°C~100°C

**Humidity Control Range:** 5%RH~99%RH

**Temperature Resolution:** 0.1°F/0.1°C (<100°C/°F); 1°F/1°C (≥100°C/°F)

**Humidity Resolution:** 0.1%RH

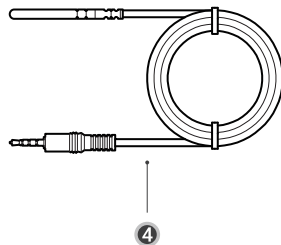
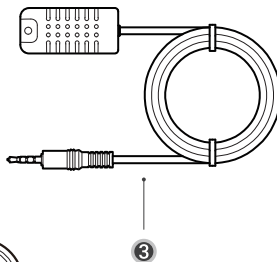
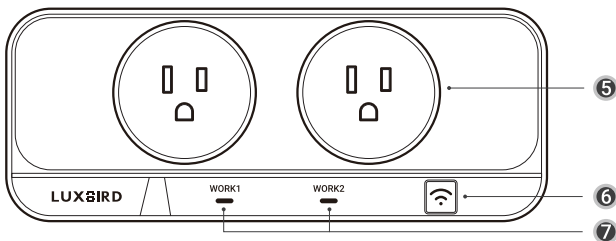
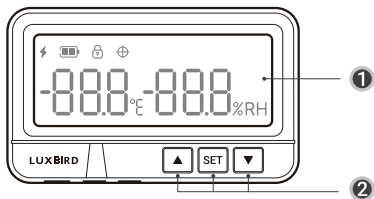
**Humidity Accuracy:** Typical ±3%RH, max ±5%RH

## Temperature Accuracy:

| Celsius range                                     | Celsius error           |
|---------------------------------------------------|-------------------------|
| $-40^{\circ}\text{C} \leq T < 10^{\circ}\text{C}$ | $\pm 2^{\circ}\text{C}$ |
| $10^{\circ}\text{C} \leq T < 80^{\circ}\text{C}$  | $\pm 1^{\circ}\text{C}$ |
| $80^{\circ}\text{C} \leq T < 100^{\circ}\text{C}$ | $\pm 2^{\circ}\text{C}$ |

| Fahrenheit range                                   | Fahrenheit error        |
|----------------------------------------------------|-------------------------|
| $-40^{\circ}\text{F} \leq T < 50^{\circ}\text{F}$  | $\pm 3^{\circ}\text{F}$ |
| $50^{\circ}\text{F} \leq T < 176^{\circ}\text{F}$  | $\pm 2^{\circ}\text{F}$ |
| $176^{\circ}\text{F} \leq T < 212^{\circ}\text{F}$ | $\pm 3^{\circ}\text{F}$ |

## 04 Product Appearance and Screen



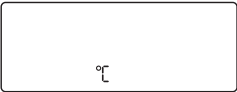
- ❶ **LCD screen:** The green backlight is activated upon pressing any button.
- ❷ **Buttons on the monitor:** SET / UP / DOWN
- ❸ **Humidity sensor:** 2 meters long
- ❹ **Temperature sensor:** 2 meters long
- ❺ **Socket output:** US plug
- ❻ **WiFi button and working indicator lights on the socket**
- ❼ **Working indicator light:** When Work 1 and/or Work 2 is operating, the relevant indicator light will turn on.

## 05 *Operating Buttons and Screen*

### 5.1 Operating Buttons on the Monitor

| Buttons                                                                                                                                                              | Functions                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     | <ul style="list-style-type: none"> <li>● Press and hold for 3 seconds to turn the monitor on or off;</li> <li>● Press once to enter the setting of temperature unit;</li> <li>● Press twice to enter the setting of temperature calibration;</li> <li>● Press three times to enter the setting of humidity calibration;</li> <li>● Press once again to save the setting and return to the initial page after the humidity calibration is complete.</li> </ul> |
|                                                                                     | <ul style="list-style-type: none"> <li>● Press to increase the parameter; long pressing for quick adjustment;</li> <li>● In the initial state, press and hold the UP button for 20 seconds to restore factory settings.</li> </ul>                                                                                                                                                                                                                            |
|                                                                                     | <ul style="list-style-type: none"> <li>● Press to decrease the parameter; long pressing for quick adjustment.</li> </ul>                                                                                                                                                                                                                                                                                                                                      |
|  +  | <ul style="list-style-type: none"> <li>● Press and hold both the UP and DOWN buttons for 3 seconds to enable/disable the child lock.</li> </ul>                                                                                                                                                                                                                                                                                                               |
| Any button                                                                                                                                                           | <ul style="list-style-type: none"> <li>● Press any button to activate the backlight, and the backlight will remain on for 10 seconds. The backlight will automatically turn off after 10 seconds of inactivity.</li> <li>● After using any button, no operation for 5 seconds can save the setting and return to the initial page.</li> </ul>                                                                                                                 |

## 5.2 LCD Display Function

| Characters                                                                       | Functions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p> <b>Power supply by power cord icon:</b> This icon means that the USB-C power cord is supplying power to the device. Please note that this icon does not indicate that the battery is charging. If you plug in both the battery and the power cord, the device will use the power from the power cord before the battery, and the battery icon will disappear.</p> <p> <b>Battery level icon:</b> This icon means that the device is powered by the battery. When the battery is low, the icon will display blank and flash when the screen backlight is on.</p> <p> <b>Child lock</b></p> <p> <b>Calibration icon:</b> It lights up when there is a temperature or humidity calibration value.</p> |
|  | <p>Temperature unit can be switched between °C and °F.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|  | <p><b>Temperature calibration:</b> The minimum setting is 0.1°C/°F, in a range of ±15.0°F/±9.0°C.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|  | <p><b>Humidity calibration:</b> The minimum setting is 0.1%RH, in a range of ±20.0%RH.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|  | <p><b>Refreshing Rate:</b> When powered by the battery, it detects the temperature and humidity every 10 seconds and sends the data to the socket one time. So, when you plug in a probe sensor, you might have to wait 10 seconds for it to be detected. When powered by the power cord, it detects the temperature and humidity every second and send the data to the socket one time.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### 5.3 Buttons and Functions on the Socket

| Characters                                                                        | Functions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>● When connected to the power supply for the first time, the device <b>will</b> automatically enter the network pairing state and the indicator <b>light will flash</b>. At this point, open the smart app to perform the pairing. See section 6 for the pairing procedure.</li><li>● After WiFi connection is successful, the WiFi indicator <b>light stays on</b>. After WiFi is connected, press and hold the WiFi button for 10 seconds to reset WiFi.</li><li>● If the WiFi disconnects, the WiFi indicator <b>light turns off</b>.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                           |
|   | <ul style="list-style-type: none"><li>● When the socket is working, the corresponding indicator <b>light of Work 1/Work 2 stays on</b>.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Buzzer Alarm                                                                      | <ul style="list-style-type: none"><li>● High and Low temperature/humidity <b>alarms</b>: If the temperature or humidity goes beyond the set range, the device <b>will</b> make a beeping sound once every second for 60 seconds. You can separately disable the high and low temperature <b>alarms</b>, as well as the high and low humidity alarms, using the app.</li><li>● When the socket is disconnected from WiFi, the device <b>will</b> make a beeping sound twice every second for 60 seconds.</li><li>● When the RF connection between the monitor and the socket is broken, the device <b>will</b> make a beeping sound three times every second for 60 seconds.</li><li>● Dismiss the current <b>alarm</b>: When the buzzer sounds, press the WiFi button to dismiss the current <b>alarm</b>; when the monitor is in the initial state, pressing any button on the monitor can dismiss the <b>alarm</b> as well.</li><li>● If you want to mute the buzzer, you can turn it off via the app.</li></ul> |
| Memory Function                                                                   | <ul style="list-style-type: none"><li>● Once a <b>plan</b> has been created within the app, if the socket experiences a power cut, reconnecting to the power source <b>will</b> immediately resume the previous <b>plan</b>, eliminating the need for repetitive setup.</li><li>● Even if the socket has been disconnected from WiFi, it <b>will</b> continue to carry out the previously set <b>plan</b>.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## 06 App Installation and Operation

### 6.1 App Download

Search for 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 iOS devices must be running iOS 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. The device supports a 2.4GHz Wi-Fi router only.
4. 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.

### 6.2 Registration

**Step 1:** Registering an account is necessary before using the INKBIRD app for the first time.

**Step 2:** Open the app, select your Country/Region, and a verification code will be sent to you.

**Step 3:** Enter the verification code to confirm your identity, and the registration is complete.

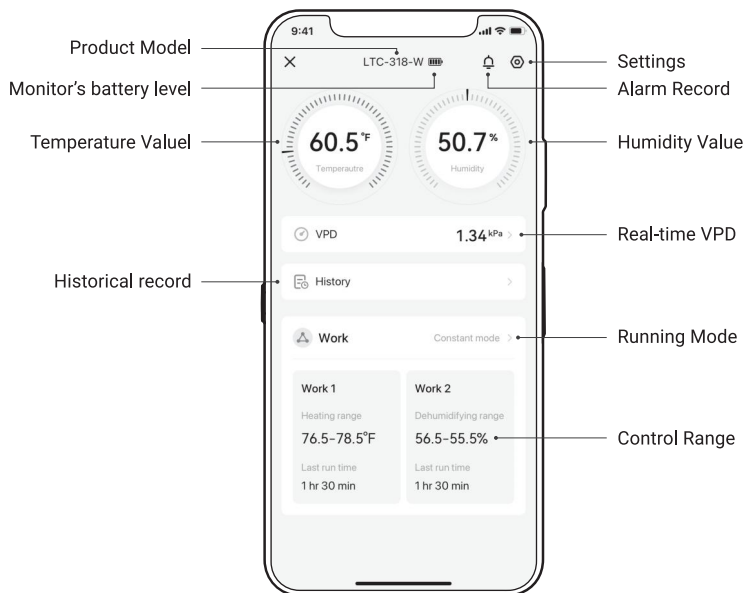
### 6.3 How to Connect

Open the INKBIRD app and click "+" on the top right corner to add a device. Then, follow the app instructions to complete the connection. Make sure that the device is placed as close as possible to the smartphone and router during the connection process.

Congratulations! You can now control this device through your smartphone.

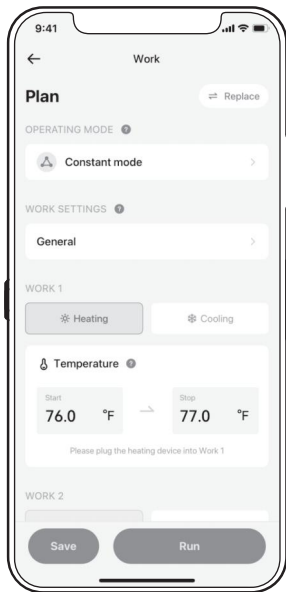
## 6.4 APP Introduction

### 6.4.1 Home Page



## 6.4.2 Operating Modes

### 6.4.2.1 Constant Mode



**Function Description:** In Constant Mode, the device automatically adjusts temperature and humidity based on the preset temperature and humidity ranges to maintain a constant environment.

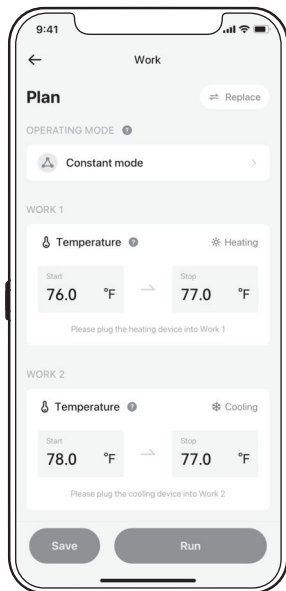
**Applicable Scenes:** Environments that require constant temperature and humidity control, such as greenhouses and seedling germination.

#### Operating Steps:

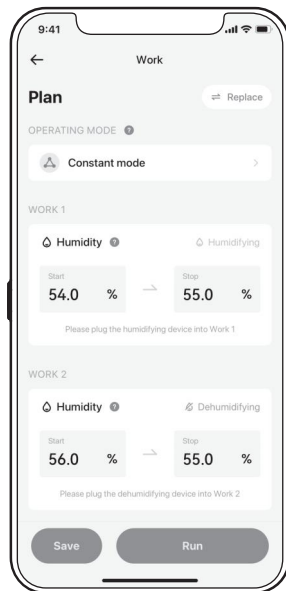
1. Select the Constant Mode.
2. Set the target ranges of temperature and humidity.
3. Select the temperature control method (heating or cooling) and humidity control method (humidifying or dehumidifying) based on your need.

## WARM TIP:

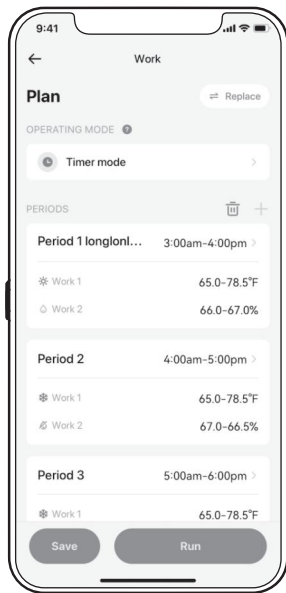
1. If only a temperature probe is inserted into the monitor, the device will control only temperature. (Work 1 is in heating mode, Work 2 is in cooling mode.)



2. If only a humidity probe is inserted into the monitor, the device will control only humidity. (Work 1 is in humidifying mode, Work 2 is in dehumidifying mode.)



### 6.4.2.2 Timer Mode



**Function Description:** Timer Mode enables users to automatically regulate temperature and humidity within a preset time period.

**Applicable Scenes:** Environments that require regular temperature and humidity adjustments, such as attics and culturing farms.

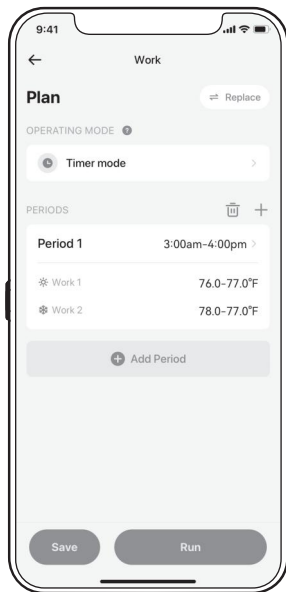
**Operating Steps:**

1. Select the Timer Mode.
2. Set multiple time periods—up to 12—and set the target temperature and humidity for each.
3. Confirm your setting and start.

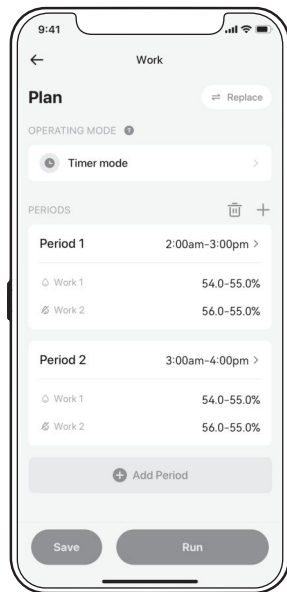
**WARM TIP:** A time period cannot be set to span between dates. Nighttime should be divided into two time periods.

### WARM TIP:

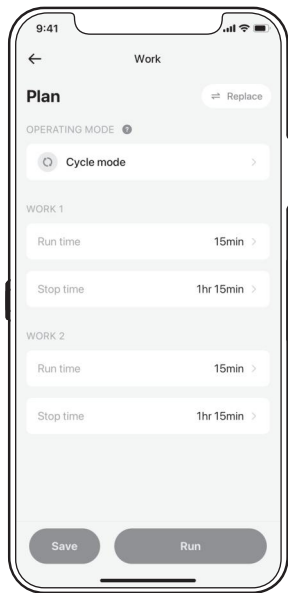
1. If only a temperature probe is inserted into the monitor, the device will control only temperature. (Work 1 is in heating mode, Work 2 is in cooling mode.)



2. If only a humidity probe is inserted into the monitor, the device will control only humidity. (Work 1 is in humidifying mode, Work 2 is in dehumidifying mode.)



### 6.4.2.3 Cycle Mode



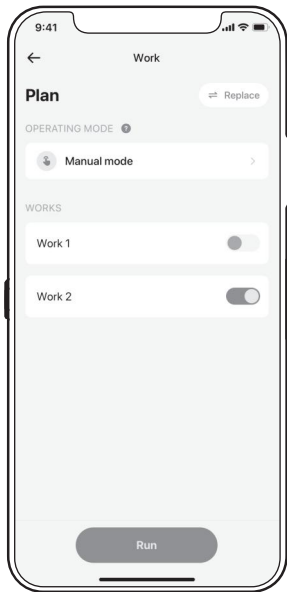
**Function Description:** Cycle Mode enables the device to constantly switch on and off within the preset time intervals.

**Applicable Scenes:** Equipment that needs to be regularly switched on or off, such as the inline duct fan or plant growth light in the grow tent.

**Operating Steps:**

1. Select the Cycle Mode.
2. Set power-on time and power-off time.
3. After the setting is complete, the device will automatically work in cycles.

#### 6.4.2.4 Manual Mode



**Function Description:** In Manual Mode, users can turn the device on or off at any time.

**Applicable Scenes:** For when users want to manually control the device to turn it on and off.

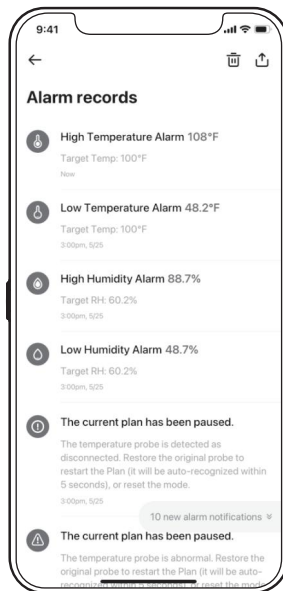
**Operating Steps:**

1. Select the Manual Mode.
2. Manually turn on or off the device based on your need.

## 6.5 History and Alarm Record

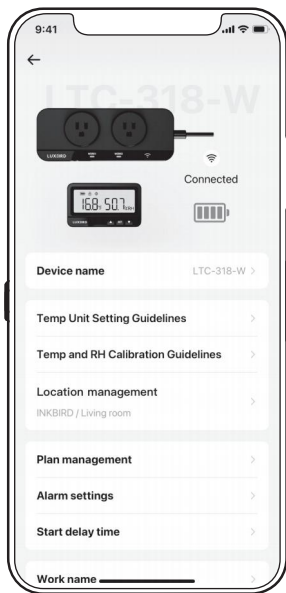


History

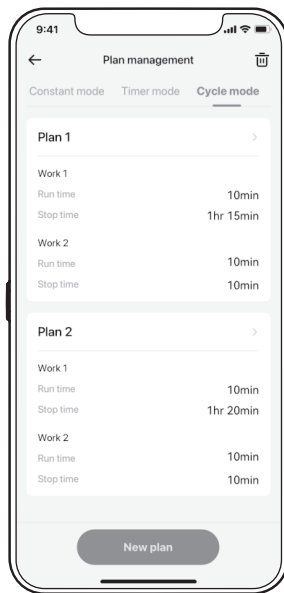


Alarm record

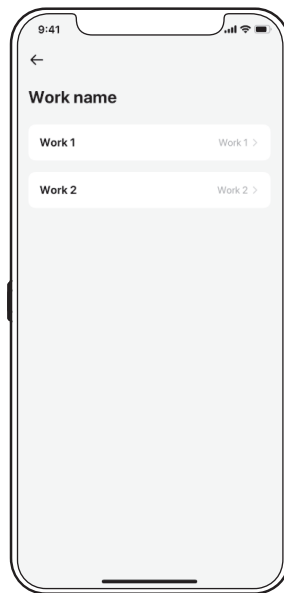
## 6.6 Setting Pages



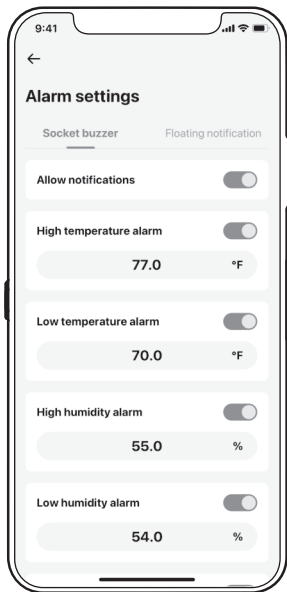
Settings



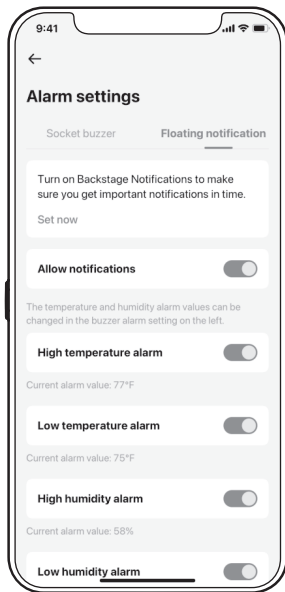
Plan management



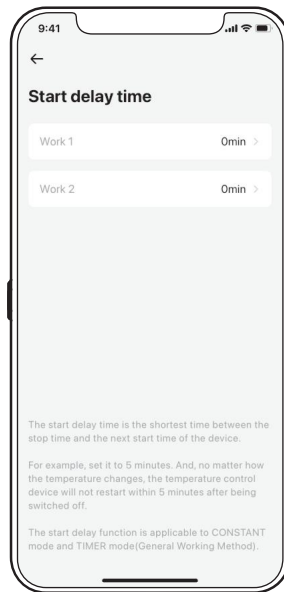
Rename



Socket's buzzer setting



App alarm settings



Start delay time settings



## **Cleaning and Maintenance**

- ① This product is highly electrified, not waterproof, and not suitable for cleaning. If cleaning is necessary, it must be disconnected from the power source and wiped only with a cloth.
- ② When not in use, this product should be stored in a safe, dry place to keep it out of the reach of children, which will prevent personal injury. Storing the product in this way will also prevent moisture from aging components, which will affect the service life of the product.



## **Troubleshooting Guide**

### **8.1 Incorrect Probe Readings**

- ① Check if both the probe and the probe cord are intact.
- ② First, wipe clean both the probe and the probe cord. Next, use a hair dryer to dry the entire unit. Finally, check to see if the probe can read the temperature correctly.

### **8.2 Monitor's Screen Got Stuck/Frozen?**

Unplug the power cord or remove the battery and then restart the monitor. If the problem persists, please contact our customer support team.

### **8.3 Socket Melted/Burned?**

Check if the load power of the external device is within the rated power 1200 W 120 Vac of this product, or contact our customer support team.

## **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 a 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.

## **Technical Support and Warranty**

This item carries a 2-year warranty against defects in either components or workmanship. During this period, products that prove to be defective will, at the discretion of INKBIRD, be either repaired or replaced without charge. For any problems in use, please feel free to contact us at [support@inkbird.com](mailto:support@inkbird.com). We will do our best to help you.

## **Shenzhen Inkbird Technology Co., Ltd.**

**support@inkbird.com**

**Consignor:** Shenzhen Inkbird Technology Co., Ltd.

**Office Address:** Room 1803, Guowei Building, No.68 Guowei Road, Xianhu Community, Liantang, Luohu District, Shenzhen, China

**Manufacturer:** Shenzhen Inkbird Technology Co., Ltd.

**Factory Address:** 5th and 6th Floor, Building 138, No. 71, Yiqing Road, Xianhu Community, Liantang Street, Luohu District, Shenzhen, Guangdong, China



MADE IN CHINA  
DESIGNED BY INKBIRD

