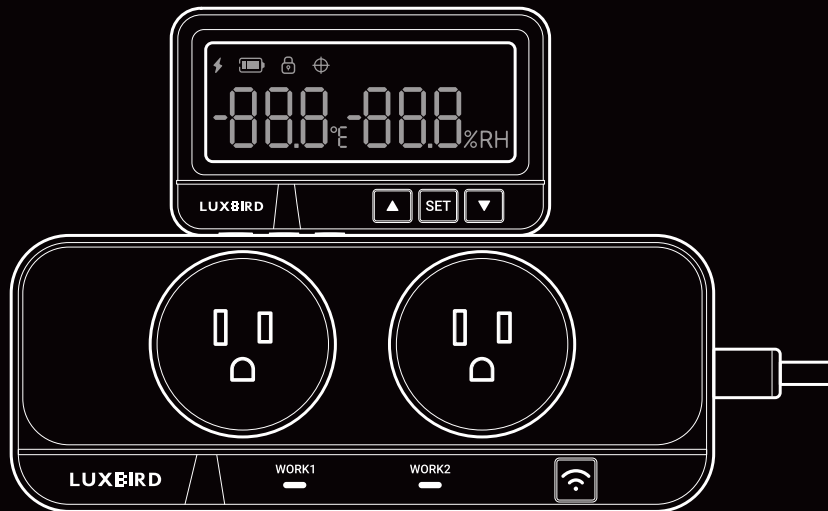


LUXEIRD

LTC-318-W

WIFI SMART TEMPERATURE AND
HUMIDITY CONTROLLER



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 cs@luxbird.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.



Warm tips

- To quickly jump to a specific chapter page, click on the relevant text on the contents page.
- You can also use the thumbnail or document outline in the top left corner to quickly find a specific page.

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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 monitor and the socket: 328 ft (100 m) 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

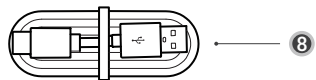
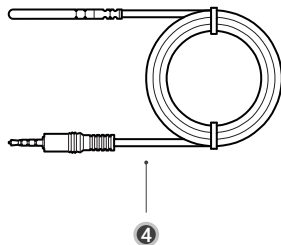
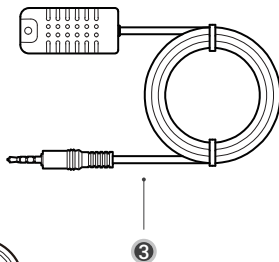
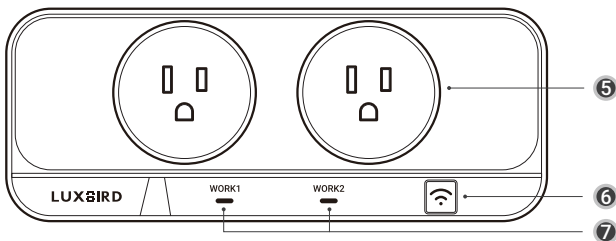
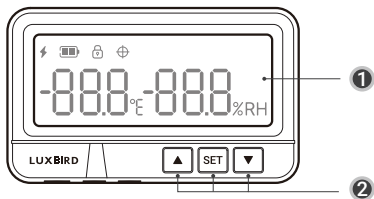
Humidity Accuracy: Typical ±3%RH, max ±5%RH

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




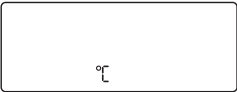



- ① **LCD screen:** The green backlight is activated upon pressing any button.
- ② **Buttons on the monitor:** SET / UP / DOWN
- ③ **Humidity probe cable:** 6.5 ft (2 m)
- ④ **Temperature probe cable:** 6.5 ft (2 m)
- ⑤ **Socket output:** US plug
- ⑥ **WiFi button and working indicator lights on the socket**
- ⑦ **Working indicator light:** When Work 1 and/or Work 2 is operating, the relevant indicator light will turn on.
- ⑧ **USB-C cable:** 4.9 ft (1.5 m)

05 Operating Buttons and Screen



5.1 Operating Buttons on the Monitor

Buttons	Functions
	<ul style="list-style-type: none"> ● Press and hold for 3 seconds to turn the monitor on or off; ● Press it to switch between the temperature unit setting, temperature calibration and humidity calibration.
	<ul style="list-style-type: none"> ● Press to increase the parameter; long pressing for quick adjustment; ● In the initial state, press and hold the UP button for 20 seconds until all values are displayed on the screen to restore factory settings. ● Double-press the UP button to toggle the backlight between " Always On " and " Off ". (This function is available only when the monitor is powered via USB-C)
	<ul style="list-style-type: none"> ● Press to decrease the parameter; long pressing for quick adjustment.
 + 	<ul style="list-style-type: none"> ● Press and hold both the UP and DOWN buttons for 3 seconds to enable/disable the child lock.
Any button	<ul style="list-style-type: none"> ● 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. ● After using any button, no operation for 5 seconds can save the setting and return to the initial page.

5.2 LCD Display Function

Characters	Functions
	<p>⚡ Power supply by power cord icon: 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>🔋 Battery level icon: This icon means that the device is powered by the battery. If the battery is low, the icon will be displayed as blank when there is no backlight, and the blank icon will flash when there is backlight.</p> <p>🔒 Child lock</p> <p>⊕ Calibration icon: 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>Temperature calibration: The minimum setting is 0.1°C/°F, in a range of ±15.0°F/±9.0°C.</p>
	<p>Humidity calibration: The minimum setting is 0.1%RH, in a range of ±20.0%RH.</p>
	<p>Refreshing Rate: 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">● After WiFi connection is successful, the WiFi indicator light stays on. After WiFi is connected, press and hold the WiFi button for 3 seconds to reset WiFi.● If the WiFi disconnects, the WiFi indicator light turns off.
	<ul style="list-style-type: none">● When the socket is working, the corresponding indicator light of Work 1/Work 2 stays on.
Buzzer Alarm	<ul style="list-style-type: none">● High and Low temperature/humidity alarms: If the temperature or humidity goes beyond the set range, the device will make a beeping sound once every second for 60 seconds. You can separately disable the high and low temperature alarms, as well as the high and low humidity alarms, using the app.● When the socket is disconnected from WiFi, the device will make a beeping sound twice every second for 60 seconds.● When the RF connection between the monitor and the socket is broken, the device will make a beeping sound three times every second for 60 seconds.● Dismiss the current alarm: When the buzzer sounds, press the WiFi button to dismiss the current alarm; when the monitor is in the initial state, pressing any button on the monitor can dismiss the alarm as well.● If you want to unmute the buzzer, you can turn it on via the app.
Memory Function	<ul style="list-style-type: none">● Once a plan has been created within the app, if the socket experiences a power cut, reconnecting to the power source will immediately resume the previous plan, eliminating the need for repetitive setup.● Even if the socket has been disconnected from WiFi, it will continue to carry out the previously set plan.

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.

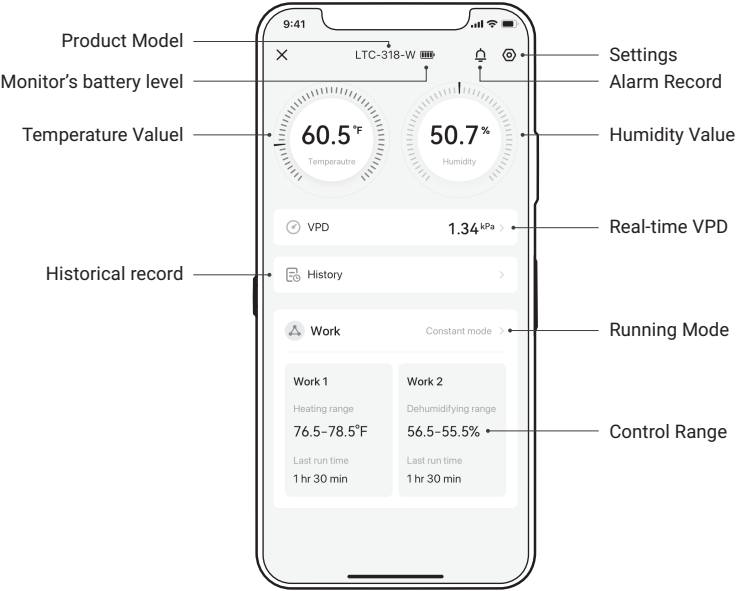
6.3 How to Connect

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.

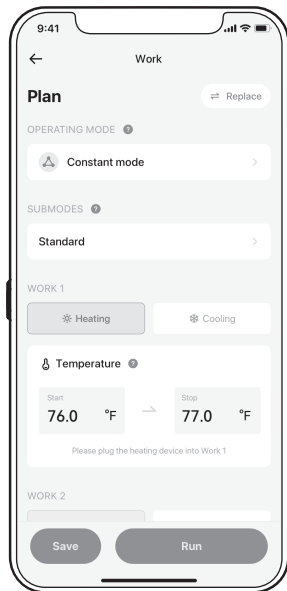
6.4 APP Introduction

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.

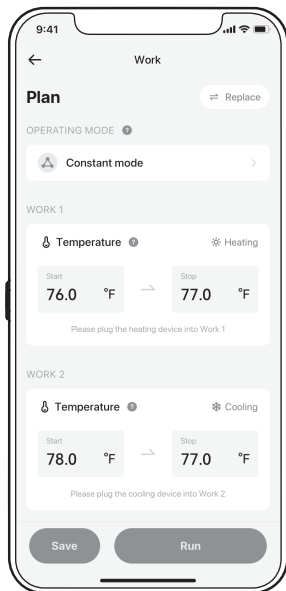
Applicable Scenes: Environments that require constant temperature and humidity control, such as greenhouses and seedling germination.

Operating Steps:

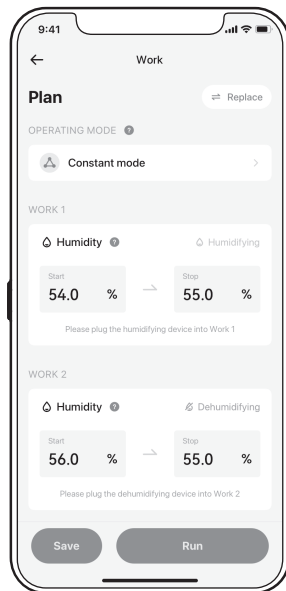
1. Select the Constant Mode.
2. Set the target ranges of temperature and humidity.
3. Select the temperature control method (heating or cooling) and humidity control method (humidifying or dehumidifying) based on your need.

WARM TIP:

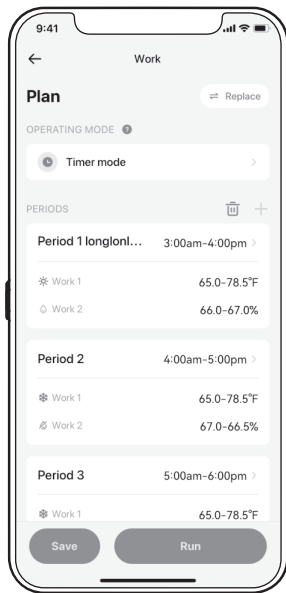
1. If only a temperature probe is inserted into the monitor, the device will control only temperature. (Work 1 is in heating mode, Work 2 is in cooling mode.)



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.

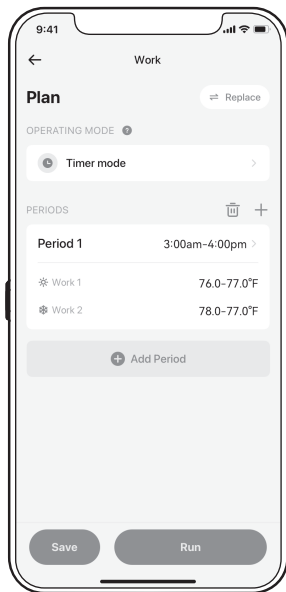
Operating Steps:

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

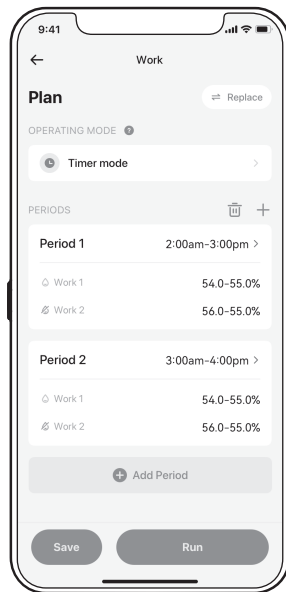
WARM TIP: A time period cannot be set to span between dates. Nighttime should be divided into two time periods.

WARM TIP:

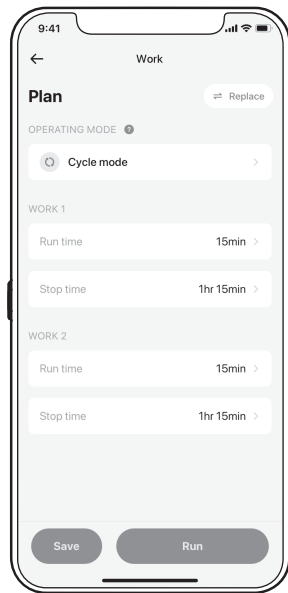
1. If only a temperature probe is inserted into the monitor, the device will control only temperature. (Work 1 is in heating mode, Work 2 is in cooling mode.)



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



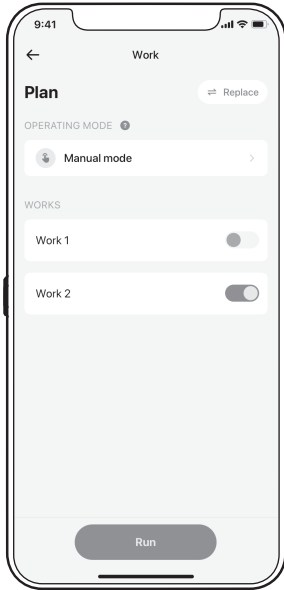
Function Description: Cycle Mode enables the device to constantly switch on and off within the preset time intervals.

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.

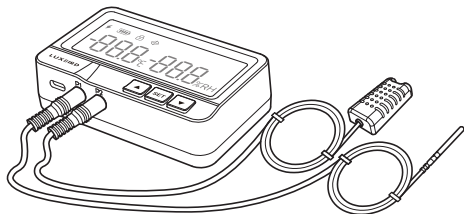
Applicable Scenes: For when users want to manually control the device to turn it on and off.

Operating Steps:

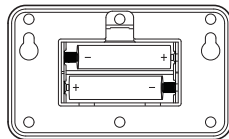
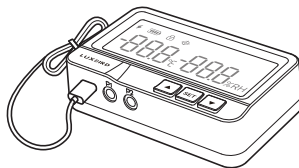
1. Select the Manual Mode.
2. Manually turn on or off the device based on your need.

07 Product Connection

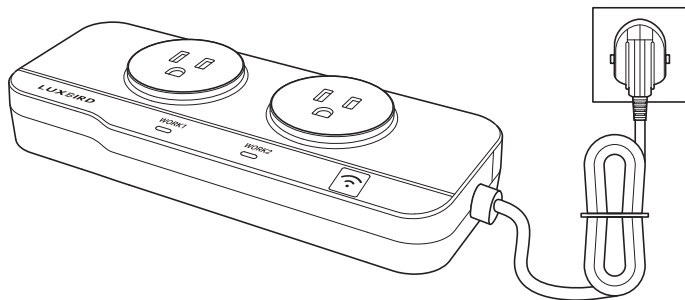
- ❶ **Connect the probe:** Insert the temperature and humidity probe into the probe port at the bottom of the monitor.



- ❷ **Powered by USB-C cable or 2*AA batteries (adapter not included).**



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





Cleaning and Maintenance

- ❶ 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.
- ❷ 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

9.1 Incorrect Probe Readings

- ❶ Check if both the probe and the probe cord are intact.
- ❷ 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.

9.2 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.

9.3 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 at cs@luxbird.com.

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 cs@luxbird.com. We will do our best to help you.

Shenzhen Inkbird Technology Co., Ltd.

cs@luxbird.com

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



V1.0

MADE IN CHINA
DESIGNED BY INKBIRD

