

INKBIRD



IHC-200 WIFI

Humidity Controller

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Part 1

Quick Guide to Use

01 | CAUTION

- KEEP CHILDREN AWAY
- TO REDUCE THE RISK OF ELECTRIC SHOCK, USE ONLY INDOORS
- RISK OF ELECTRIC SHOCK. DO NOT PLUG INTO ANOTHER RELOCATABLE POWER TAPS OR AN EXTENSION CORD.
- USE ONLY IN DRY LOCATION

ATTENTION:

- ÉLOIGNEZ LES ENFANTS
- Pour réduire le d'électrocution, Pour Usage À L'Intérieur Seulement.
- Risque de choc électrique. Ne pas brancher dans une autresource de courant portative ou une rallonge.
- UTILISER UNIQUEMENT DANS DES EMPLACEMENTS SECS

02 | Specification

Model: IHC-200-WIFI

Brand name: INKBIRD

Input: 230V ac 50Hz 10A/2300W MAX

Output: 230V ac 50Hz 10A/2300W (total two receptacles) MAX

Disconnection means: Type 1B

Pollution degree: 2

Rated impulse voltage: 2500V

Automatic action: 30000 cycles

Humidity Probe

Humidity Measurement Range: 10~99%RH

Humidity Display Accuracy: 0.1%RH

Relative Humidity Accuracy(10% to 95%RH):

Type: $\pm 3\%$ RH, Max: $\pm 5\%$ RH

Display Unit: %RH

Ambient

Ambient temperature: Room temperature

Storage environment: temperature: $0^{\circ}\text{C}\sim 60^{\circ}\text{C}/32^{\circ}\text{F}\sim 140^{\circ}\text{F}$;

humidity: 20~80%RH (Unfrozen or condensation state)

Warranty

Controller: Two years warranty

Temperature and Humidity Probe: One year warranty

3.1 Technical Assistance

If you have any problems installing or using this controller, please refer to the instruction manual for guidance. If you require further assistance, please email us at **support@inkbird.com**. We will reply within 24 hours, Monday to Saturday. Alternatively, you can visit our official website (www.inkbird.com) to find answers to common technical questions.

3.2 Warranty

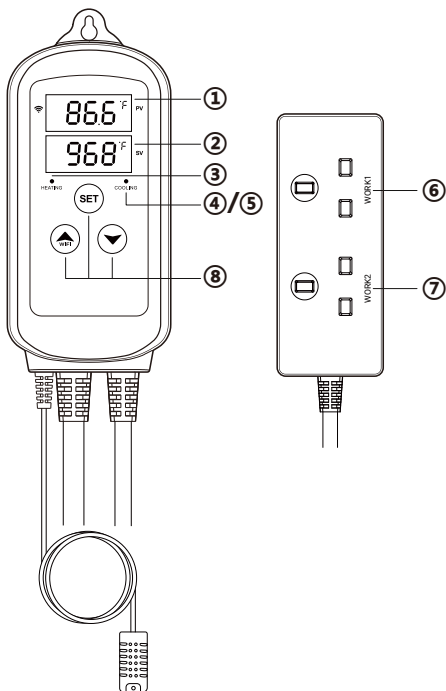
INKBIRD TECH CO., LTD warrants this controller (one year for the temperature probe) against defects caused by INKBIRD's workmanship or materials for two years (one year for the temperature probe) from the date of purchase, provided it is operated under normal conditions by the original purchaser (not transferable). This warranty is limited to the repair or replacement (at INKBIRD's discretion) of all or part of the controller.




Part 2



IHC-200-WIFI
HUMIDITY
Controller Manual

01 | Introduction



- ① PV: In the normal mode, it displays current humidity; in the setting mode, it displays menu code.
- ② SV: In the normal mode, it displays the setting humidity value; in the setting mode, it displays the setting value.
- ③ Red Indicator Light: The indicator light will turn red when the humidification output is on and the indicator light will turn off when the humidification output is off.
- ④/⑤ Green Indicator Light: The indicator light will turn green when the dehumidification output is on and the indicator light will turn off when the humidification output is off. If the green indicator light blinks, the device is in the mode of dehumidification delay protection state and the humidification output is off.
- ⑥ WORK1: Humidification Output Socket.
- ⑦ WORK2: Dehumidification Output Socket.
- ⑧ Setting Button() , Increase Button() , Decrease Button(): More details on Settings.

02 | Product Features

- Plug-n-Play
- Dual Relay Output: Support both humidifying equipment and dehumidifying equipment at the same time.
- Display Screens: Display set humidity value and the measured humidity value at the same time.
- Support Humidity Calibration
- Support Dehumidification Control Delay Protection
- Settable High/Low Humidity Alarm
- Probe Fault Alarm
- Wi-Fi Smart App

03 | Specifications

- Voltage: 100-230Vac 50/60Hz
- Current: 10A
- Maximum Power: 1200W(120Vac), 2200W(220Vac)
- Humidity Measurement Range: 10~99%RH
- Humidity Display Accuracy: 0.1%RH
- Relative Humidity Accuracy(10% to 95%RH):
Typ: $\pm 3\%RH$, Max: $\pm 5\%RH$
- Display Unit: %RH
- Operating Ambient Temperature:
 $-20^{\circ}C \sim 40^{\circ}C / -4^{\circ}F \sim 104^{\circ}F$

- Storage Temperature: 0°C~60°C/32°F~140°F
- Storage Humidity: 20~80%RH
(not frozen or dewed)
- Warranty:
Controller: 2 years
Probe: 1 year

04 | Wi-Fi Connection

4.1 Download INKBIRD App

Search the keyword “INKBIRD” in Appstore or Google Play to get the app, or you can scan the following QR code directly to download and install the app.



Scan QR code to download

INKBIRD APP



4.2 Connect to your phone

① Register before using the INKBIRD app. Select your Country/Region, enter your e-mail, then a verification code will be sent to your mailbox, enter it to confirm your identity and the registration is done.

② Then press “Add Home ”button to create your home.



③ Tap “+” or “add device” button in home page of the APP to add the device.

④ Press and hold the  button for 2 seconds to reset the WIFI when the controller is under normal working state. The controller will enter the Smartconfig configuration state by default. You can short press the  button to switch between the Smartconfig configuration mode and the AP mode.

As the WIFI module need time for data processing, so it will take about 5 seconds to display the corresponding LED symbol and state if the Wi-Fi states change.

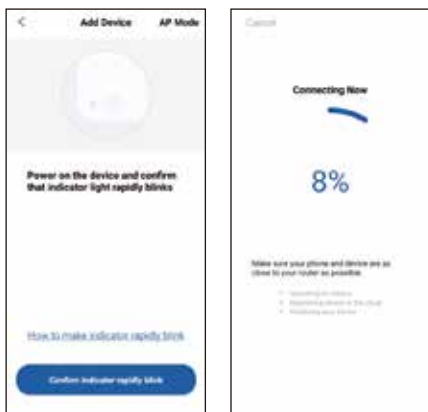
4.3 Quick Connection

(1) Plug the device in the socket and make

sure that the device is in the Smartconfig state(the LED symbol is flashing rapidly, interval flashing 250ms).

(2) Check if the LED symbol is blinking rapidly and confirm on your app if it is, then enter your Wi-Fi password to connect to wireless network, click **Confirm** to connect the device.

Note: The device only supports 2.4GHz Wi-Fi router.



4.4 Connect the device in AP mode

① Plug the device in the socket and make sure that the device is in the AP Configuration State(the LED symbol is flashing slowly, interval flashing 1500ms).

② Click "Confirm indicator slowly blink" and then select Wi-Fi network, enter Wi-Fi password, click **"Confirm"** to enter

connection process.

③ Press “Connect now” and it will go to your WLAN Setting interface on your smart phone, select the “SmartLife-XXXX” to directly connect to the router without putting in password.

④ Go back to the app to enter into the automatic connection interface.



⑤ Click “Done” after adding device successfully and enter into the device controlling interface.

⑥ In the humidity control mode, users can do some control function settings with the app.




4.5 Wi-Fi State

- **Smartconfig State:** The Wi-Fi indicator light is flashing rapidly, interval flashing 250ms.
- **AP State:** The Wi-Fi indicator light is flashing slowly interval flashing 1500ms.
- **Connection Fail State:** The Wi-Fi indicator light turns off.
- **Connection Succeed State:** The Wi-Fi indicator light keeps on.







05 | Settings

5.1 Key Setting




5.1.1 Factory Reset



Hold the  button and turn on the device, the buzzer will beep shortly to remind the users that all parameters of the the humidity probe are restored to factory settings.


5.1.2 Fast Setting

Press the  button lightly to enter quick set-up mode and set the value, the SV screen will display the current setting value and keep flashing. Press the  button or the  button to change the value, hold the  button or the  button to change the value quickly, press the  button again to save settings and quit the setting mode, the controller will also save settings and quit the setting mode if there is no operation for 10 seconds.

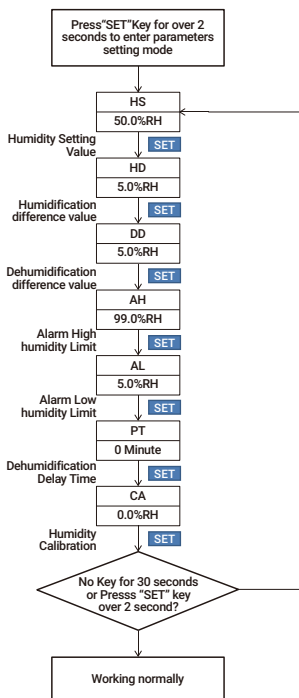
5.1.3 Normal Setting

Hold the  button for 2 seconds to enter setting mode when the controller working normally, the PV screen will display the code "HS" of the first menu item and the SV screen will display the corresponding setting value. Press the  button to switch between menu items, press the  button or








the  button to change the value, the value will be saved automatically when you switch to another menu item by pressing the  button.

Press and hold the  button for 2 seconds to save settings and quit the setting mode, the controller will also quit the setting mode and turn to normal working mode if there's no operation for 30 seconds.

5.2 Flowchart of the Settings



5.3 Icons in this Manual

Symbol	Icon	Function	Setting Range	factory Settings	Note
HS		Humidity Setting Value	5.0%RH ~99.0%RH	50.0%RH	See 6.1
HD		Humidification Difference Value	1.0%RH ~20.0%RH	5.0%RH	
DD		Dehumidification Difference Value	1.0%RH ~20.0%RH	5.0%RH	
AH		Alarm High Humidity Limit	5.0%RH ~99.0%RH	99.0%RH	See 6.2
AL		Alarm Low Humidity Limit	5.0%RH ~99.0%RH	5.0%RH	
PT		Dehumidification Delay Time	0~10 Minutes	0 Minute	See 6.3
CA		Humidity Calibration	-20.0%RH ~20.0%RH	0.0%RH	See 6.4

06 | Basic Operations

6.1 Instructions for Humidity Control Setting(HS,HD,DD)

The PV Screen displays the measured value of current humidity when working normally, recognize and switch between humidification mode and dehumidification mode automatically.

If the measured Humidity(PV) \leq Humidity Setting Value(HS)-Humidification Differential Value(HD), the equipment will enter humidification state, the red led is on, WORK1 output socket turns on. If the measured Humidity(PV) \geq Humidity Setting Value(HS), the red led is off, WORK1 output socket turns off.

If the measured Humidity(PV) \geq Humidity Setting Value(HS)+Dehumidification Differential Value(DD), the equipment will enter dehumidification state, the green led is on, WORK2 output socket turns on. If the green led is blinking, indicating that the dehumidification device is in the state of the dehumidification delay protection, WORK2 output socket turns off. If the measured Humidity(PV) \leq Humidity Setting Value(HS), the green led is off, WORK2 output socket turns off.

Example: HS=50.0%RH, HD=5.0%RH, DD=8.0%RH, If PV(the measured humidity) \geq 58.0%RH(HS+DD), the equipment will enter the dehumidification state, the green led is on, WORK2 output socket turns on. If PV \leq 55.0%RH(HS), the green led is off, WORK2 output socket turns off. If PV \leq 45.0%RH (HS-HD), the equipment will enter the humidification state, the red led is on, WORK1 output socket turns on. If PV \geq 50.0%RH(HS), the red led is off, WORK1 output socket turns off.

Note: There is no need to judge the differential value of humidification or dehumidification when power on or exiting the setting state. For example: when power on or exiting the setting state HS=50.0%RH, HD=5.0%RH, DD=8.0%RH. If PV(the measured humidity) $>$ 50.0%RH(HS), it will enter the dehumidification state. When PV \leq 50.0%RH(HS), the dehumidification stops, then return to normal humidity control mode. If PV $<$ 50.0%RH, it will enter the

humidification state. When $PV \geq 50.0\%RH$, the humidification stops, then return to normal humidity control mode.

6.2 High/Low Humidity Alarm(AH,AL)

The equipment will alarm if the value of measured humidity(PV) \geq the set value of high humidity alarm(AH), the PV screen will display the set value of high humidity alarm(AH) and the current humidity value alternately, the buzzer will alarm like "bi-bi-Biii" until the value of measured humidity(PV) $<$ the set value of high humidity alarm(AH). You can also stop the alarming by pressing any button of the equipment.

The equipment will alarm if the value of measured humidity(PV) \leq the set value of Low humidity alarm(AL), the PV screen will display the set value of low humidity alarm(AL) and the current humidity value alternately, the buzzer will alarm like "bi-bi-Biii" until the value of measured humidity(PV) $>$ the set value of low humidity alarm(AL). You can also stop the alarming by pressing any button of the equipment.

Note: The setting value of low humidity alarm(AL) should be less than the setting value of high humidity alarm(AH).

6.3 Dehumidification Delay Time(PT)

The equipment will not start immediately in the mode of dehumidification for the first

time if the measured value is larger than the sum value of set humidity value and dehumidification return difference, the equipment will start to dehumidify after the set delay time.

The equipment will dehumidify immediately if the interval time of two adjacent dehumidification is longer than the delay time.

The equipment will dehumidify after delay time if the interval time of two adjacent dehumidification is shorter than the delay time.

The delay time start timing when last dehumidification is done.

Note: There is no need to judge the delay time when power on or exiting the setting state.

6.4 Humidity Calibration(CA)

If the measured humidity differs from the standard humidity, you can calibrate the device by adding or reducing the correction value to align the measured humidity to the standard humidity. The calibrated humidity = the measured humidity value + the calibration value.

07 | Sensor Fault Alarm

If the humidity sensor is in circumstances of short circuit or open circuit, the controller will enter probe fault mode and stop running, the buzzer will alarm and the screen will display ER. You can press any key to stop the buzzer and the controller will back to normal working state when all malfunctions are resolved.

08 | Important Safeguards

It's important that you take special care when using electrical appliances. Follow our tips to stay safe.

- Read all instructions.
- Check that flexible leads and the appliance are in good condition.
- Check your plug sockets are not overloaded with too many electrical appliances as this can lead to overheating.
- Do not use appliance for other than intended use.
- Do not cut the cord, or put it on hot surfaces.
- Do not place on or near a hot gas or electric burner, or in a heated oven.
- Don't try to clean or repair the appliance when it is still plugged in.

- Don't wrap flexible cables around the appliance when it is still warm.
- Switch off the device when not in use.
- Please disconnect the power as soon as possible if the device falls into the water, the Warranty does not include water damage.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. Close supervision is necessary when any appliance is used by or near children.

09 | Warranty

This Limited Warranty applies only to INKBIRD IHC-200-WIFI Humidity Controller.

What is Covered and for How Long

INKBIRD warrants that all new products are free from defects in manufacturing, materials and workmanship for a period of one year from date of retail purchase.

What this Warranty Does not Cover

The warranty does not cover defects or malfunction caused by misuse, abuse or improper maintenance, failure to follow operating instructions, or use with equipment with which it is not intended to be used. Also, the warranty will not apply to damage caused by unauthorized alteration, modification or repair of the product. INKBIRD does not warrant or provide service or support for any third party products, including, but not limited to iPhones and Android Phones.

How to Obtain Warranty Service

To obtain warranty service for products purchased from a third-party, retail or directly from INKBIRD you must return the product with proof of purchase using the following procedures:

- Contact INKBIRD Customer Support for specific return and shipping instructions by email.

Email Address: support@inkbird.com

You may be asked to complete a warranty service request form. And to help ensure warranty claims are for INKBIRD products, our technical support department may also require you to email a copy of your purchase receipt to us.

- Label and ship the product, freight prepaid, to the address provided by INKBIRD.

Exclusions and Limitations

THIS WARRANTY IS YOUR EXCLUSIVE WARRANTY AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. AS SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF EXPRESS OR IMPLIED WARRANTIES, THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES APPLY ONLY TO THE EXTENT AND FOR SUCH DURATION AS REQUIRED BY LAW AND ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. AS SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON THE DURATION OF AN IMPLIED WARRANTY, THE ABOVE LIMITATION ON DURATION MAY NOT APPLY TO YOU.

10 | 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.

11 | IC Warning

This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's 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.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) L'appareil ne doit pas produire de brouillage;*
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*





Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.









Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur.





Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

12 | Troubleshooting Guide

Issues	Causes	Solutions
Can not connect to WIFI.	1. Incorrect phone settings. 2. Incorrect router settings. 3. Incorrect connection mode selection. 4. Device malfunction.	1. In the phone settings, all permissions for the INKBIRD app are turned on. The Bluetooth and location functions of the phone are turned on. 2. Please ensure that the router can transmit 2.4GHz wifi signal alone, and the mobile phone remains connected to the 2.4GHz wifi that can access the Internet. Please make sure the SSID of the 2.4GHz wifi is not hidden. The password is not empty. There is no limit on the number of connected devices to the router. If you are not sure whether the upper limit has been reached, please turn off 2-3 WIFI devices. Router settings are as follows: ·Wireless protocol: 802.11 b/g/n, but cannot be set to 11n only; ·Security mode: WPA/WPA2 ·Authentication type: AES ·Enable DHCP service ·No VPN service. 3. Select the correct WiFi mode in the app. If there are many WiFi products interfering nearby, please switch the device to slow flash (AP) mode to connect. If it still does not work, please contact customer service.

Issues	Causes	Solutions
The probe reading is incorrect.	<ol style="list-style-type: none"> 1. Water or condensation enters the probe. 2. The probe is placed in a area with poor humidity circulation. 3. The probe is damaged. 	<ol style="list-style-type: none"> 1. Adjust the position of the probe. 2. Use a dry cloth to clean. 3. If the probe is used in a high humidity environment, dry it using a hairdryer and then test it at room. 4. Check if the probe is intact. 5. If the deviation is small, use the CA function to calibrate.
work1 output will not turn on.	<ol style="list-style-type: none"> 1. Incorrect settings. 2. Incompatible humidifier. 3. Output malfunction. 	<ol style="list-style-type: none"> 1. Verify the settings are correct. 2. The humidifier power is within the range of 100-240V, 10A. The humidifier can automatically turn on when plugged in. The humidifier can reach the target humidity. 3. There is no problem with 1&2, please: <ul style="list-style-type: none"> · Unplug the controller. · Press and hold the  button. · Plug the controller to power on, then release the  button · Quickly press the  button (do not press the  button). The "work1 " indicator and output should activate. <p>If the humidifier still does not work, please contact customer service.</p>
work2 output will not turn on.	<ol style="list-style-type: none"> 1. Incorrect settings. 2. Incompatible dehumidifier. 3. Output malfunction. 	<ol style="list-style-type: none"> 1. Verify the settings are correct. 2. The dehumidifier power is within the range of 100-240V, 10A. The dehumidifier can automatically turn on after

Issues	Causes	Solutions
		<p>power is connected. The dehumidifier can reach the target humidity.</p> <p>3. There is no problem with 1&2, please:</p> <ul style="list-style-type: none"> · Unplug the controller. · Press and hold the  button. · Plug the controller to power on, then release the  button · Quickly press the  button (do not press the  button). <p>The " work2 " indicator and output should activate.</p> <p>If the dehumidifier still does not work, please contact customer service.</p>
work1 output will not turn off.	<p>1. Incorrect settings.</p> <p>2. Humidifier power exceeds limit.</p> <p>3. Output malfunction.</p>	<p>1. Verify the settings are correct.</p> <p>2. The humidifier power is within the range of 100-240V, 10A.</p> <p>3. There is no problem with 1&2, please:</p> <ul style="list-style-type: none"> ·Unplug the controller. ·Press and hold the  button. ·Plug the controller to power on, then release the  button · Quickly press the  button (do not press the  button). <p>The " work2 " indicator and output should activate.</p> <p>If the humidifier still does not off, please contact customer service.</p>

Issues	Causes	Solutions
work2 output will not turn off.	1. Incorrect settings. 2. Dehumidifier power exceeds limit. 3. Output malfunction.	1. Verify the settings are correct. 2. The dehumidifier power is within the range of 100-240V, 10A. 3. There is no problem with 1&2, please: ·Unplug the controller. ·Press and hold the  button. ·Plug the controller to power on, then release the  button · Quickly press the  button (do not press the  button). The 'work1' indicator and output should activate. If the dehumidifier still does not off, please contact customer service.

Shenzhen Inkbird Technology Co., Ltd.

support@inkbird.com

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Manufacturer: Shenzhen Lerway Technology Co., Ltd.

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V1.0

MADE IN CHINA

DESIGNED BY INKBIRD

