MMUNNA XH-W3005

MMUNNA XH-W3005 Digital Humidity Controller User Manual

Model: XH-W3005 (AC 110-220V)

1. Introduction

The MMUNNA XH-W3005 is a digital humidity controller designed to precisely monitor and regulate humidity levels within a specified range. It features a clear digital display, easy-to-use controls, and a high-accuracy humidity sensor, making it suitable for various applications requiring humidity management.

2. Safety Information

- Ensure the power supply voltage matches the controller's specified voltage (AC 110-220V for this model). Incorrect voltage can damage the device and pose a safety risk.
- All wiring should be performed by a qualified individual or with extreme caution, following local electrical codes.
- Do not expose the controller or sensor to water or excessive moisture, as this can lead to electrical shock or device malfunction.
- Disconnect power before performing any wiring or maintenance.
- Keep the device away from flammable materials.

3. Package Contents

- 1 x Digital Humidity Controller (XH-W3005)
- 1 x Humidity Sensor

4. Specifications

Model	XH-W3005
Operating Voltage	AC 110-220V

Humidity Range	00% ~ 99% RH
Humidity Control Precision	0.1% RH
Measuring Accuracy	+/- 2% RH
Max Output Load	10A (e.g., 1100W at 110V, 2200W at 220V)
Output Type	Direct Output
Dimensions	60mm x 45mm x 31mm (approx. 2.36 x 1.77 x 1.22 inches)
Item Weight	50 Grams (1.76 ounces)

5. Product Overview

The XH-W3005 humidity controller consists of a main control unit with a digital display and control buttons, and an external humidity sensor for accurate readings.

Figure 5.1: Overall view of the XH-W3005 Digital Humidity Controller with its connected sensor. The main unit features a digital display and control buttons, while the external sensor provides humidity readings.

Figure 5.2: Front panel of the XH-W3005 controller, highlighting the digital display for current humidity, the power indicator light, and the 'Up' and 'Down' buttons for humidity regulation settings.

Figure 5.3: Rear view of the XH-W3005 controller, showing the input and output wiring terminals and basic specifications printed on the casing.

6. Setup and Installation

Proper wiring is crucial for the safe and correct operation of the humidity controller. Refer to the wiring diagram below and ensure all connections are secure.

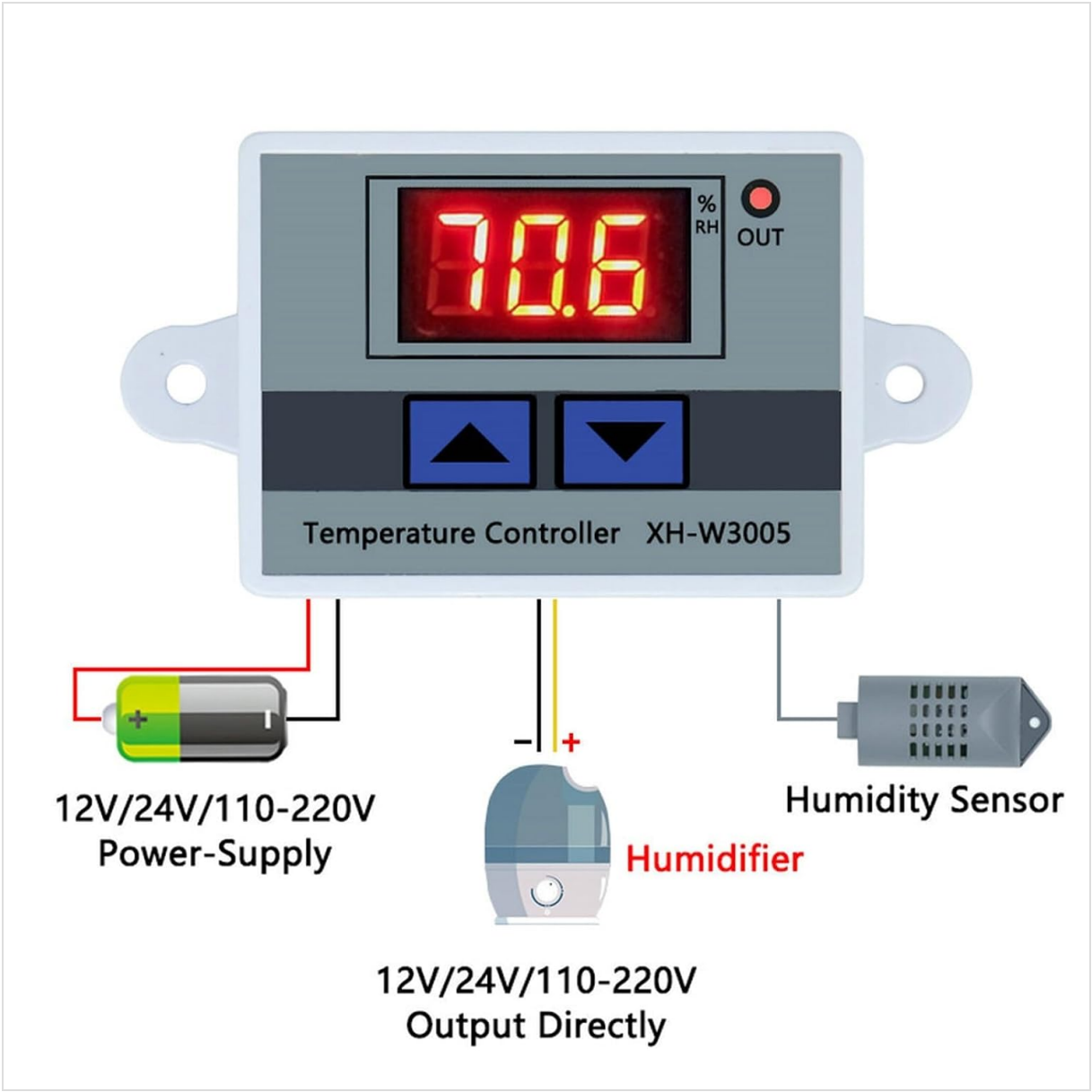

Figure 6.1: Wiring diagram for the XH-W3005 Digital Humidity Controller. It illustrates connections for the 110-220V AC power supply, the humidity sensor, and the humidifier (load) output.

Wiring Instructions:

1. **Power Supply Connection:** Connect the AC 110-220V power supply to the designated input terminals (typically marked for power input). Ensure correct polarity if applicable, though for AC, live and neutral can be interchanged.
2. **Humidity Sensor Connection:** Plug the humidity sensor into its dedicated port on the controller. The sensor cable is usually pre-wired.
3. **Load Connection:** Connect the device you wish to control (e.g., a humidifier or dehumidifier) to the output terminals of the controller. The controller acts as a switch, turning the load on or off based on the humidity settings.
4. **Verify Connections:** Double-check all wiring for tightness and correctness before applying power.

7. Operating Instructions

Once powered on, the controller will display the current humidity reading from the sensor.

7.1. Setting the Start Humidity

1. Press the **UP** button once. The display will show the current 'start humidity' value.

2. Long press the **UP** button for approximately 3 seconds until the 'start humidity' value on the display begins to flash.
3. Use the **UP** or **DOWN** buttons to adjust the desired start humidity value.
4. The setting will automatically save after a few seconds of inactivity, or you can short press any button to confirm.

7.2. Setting the Stop Humidity

1. Press the **DOWN** button once. The display will show the current 'stop humidity' value.
2. Long press the **DOWN** button for approximately 3 seconds until the 'stop humidity' value on the display begins to flash.
3. Use the **UP** or **DOWN** buttons to adjust the desired stop humidity value.
4. The setting will automatically save after a few seconds of inactivity, or you can short press any button to confirm.

Note: If the 'start humidity' is set higher than the 'stop humidity', the controller will operate in dehumidification mode. If 'start humidity' is lower than 'stop humidity', it will operate in humidification mode.

7.3. Restoring Factory Settings

To restore the controller to its default factory settings:

- Press and hold both the **UP** and **DOWN** buttons simultaneously.
- The display will show "888" briefly, indicating that the settings have been reset.
- The controller will then automatically detect and display the current humidity.

8. Troubleshooting

- **No Display/Power:** Check the power supply connection and ensure the voltage matches the controller's requirements. Verify the power source is active.
- **Incorrect Humidity Reading:** Ensure the humidity sensor is properly connected and not damaged. Avoid placing the sensor in direct contact with water or in areas with extreme temperature fluctuations.
- **Load Not Activating:** Verify the load device is functioning correctly and its wiring to the controller's output terminals is secure. Check your start and stop humidity settings.
- **Controller Malfunction:** Try restoring factory settings as described in Section 7.3. If issues persist, contact customer support.

9. Maintenance

- Keep the controller and sensor clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Avoid exposing the device to corrosive substances or extreme temperatures.
- Ensure proper ventilation around the controller to prevent overheating.

10. Warranty and Support

For warranty information or technical support, please refer to the documentation provided at the time of purchase or contact your retailer. Keep your purchase receipt as proof of purchase.