Haofy XH 3002

Haofy XH 3002 Microcomputer Digital Temperature Controller (12V) User Manual

Model: XH 3002 (12V)

Introduction

The Haofy XH 3002 Microcomputer Digital Temperature Controller is a versatile device designed for precise temperature management across various applications. This 12V model is suitable for environments requiring accurate temperature control, such as seed germination, reptile habitats, brewing, breeding, and incubation systems. It features a clear LCD display and simple two-step programming for both heating and refrigeration modes.

Image: Front view of the Haofy XH 3002 Digital Temperature Controller, showing the display, control buttons, and connected wires.

Setup and Installation

Proper installation is crucial for the accurate and safe operation of your temperature controller. Follow these steps to set up the device:

1. **Power Connection:** Connect the 12V DC power supply to the**INPUT** terminals (red and black wires). Ensure correct polarity.
2. **Load Connection:** Connect the device you wish to control (e.g., heating mat, fan) to the**OUTPUT** terminals (yellow and black wires).
3. **Temperature Probe:** Insert the temperature probe into the environment where temperature needs to be measured. Ensure the probe is securely placed and not directly exposed to heat sources or extreme conditions that could affect its reading.
4. **Mounting:** The controller can be embedded into a panel. The embedded hole size is approximately 73mm (2.9 inches) with a hole diameter of 4mm.

Image: Detailed wiring diagram showing connections for input power, output load, and the temperature probe.

Image: Side view of the temperature controller, highlighting the mounting tabs and screw holes for panel installation.

Operating Instructions

The XH 3002 controller features a simple interface for setting desired temperatures and calibration.

Image: Close-up view of the controller's digital display and the 'SET' button with up/down arrows.

1. **Setting Start Temperature (P0):**
    - Press the **SET** button once to enter the internal menu. The display will show **P0**.
    - Press the **SET** button again.
    - Use the **Up** and **Down** arrow buttons to adjust the desired starting temperature.
2. **Setting Stop Temperature (P1):**
    - Press the **SET** button once to enter the internal menu.
    - Use the **Up** and **Down** arrow buttons to navigate to **P1**.
    - Press the **SET** button again.
    - Use the **Up** and **Down** arrow buttons to adjust the desired stopping temperature.
3. **Setting Temperature Calibration (P2):**
    - Enter the internal menu by pressing the **SET** button once.
    - Use the **Up** and **Down** arrow buttons to navigate to **P2**.
    - Press the **SET** button again.

- Use the **Up** and **Down** arrow buttons to set the required calibration temperature. This feature allows you to fine-tune the temperature reading if there is a known offset.

The controller supports both Celsius (°C) and Fahrenheit (°F) display. Refer to the device's specific display for the current unit.

Maintenance

To ensure the longevity and accurate performance of your Haofy XH 3002 temperature controller, follow these maintenance guidelines:

- **Cleaning:** Gently wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents, as these can damage the casing or electronic components.
- **Probe Care:** Keep the temperature probe clean and free from debris. Avoid bending or damaging the probe cable.
- **Environmental Conditions:** Operate the controller within the specified applicable environment range (-15-55℃ / 20%-85%RH) to prevent damage from extreme temperatures or humidity.
- **Power Disconnection:** Always disconnect power before performing any cleaning or maintenance.

Troubleshooting

If you encounter issues with your temperature controller, consider the following common troubleshooting steps:

- **No Power/Display:**
  - Check if the 12V power supply is correctly connected and functioning.
  - Ensure the input wires are securely connected to the controller.
- **Incorrect Temperature Reading:**
  - Verify the temperature probe is properly inserted and making good contact with the environment being measured.
  - Check the probe for any visible damage.
  - Use the P2 calibration setting to adjust the temperature if you have a known accurate reference thermometer.
- **Output Not Activating/Deactivating:**
  - Review your P0 (start temperature) and P1 (stop temperature) settings to ensure they are configured correctly for your desired heating or cooling mode.
  - Ensure the load device connected to the OUTPUT is functional and correctly wired.
- **Display Error Codes:** If the display shows an error code, consult the manufacturer's support for specific interpretations.

Specifications

Model	XH 3002
Operating Voltage	12V DC

Temperature Measurement Range	-50 to 110 ℃
Temperature Measurement Accuracy	-15 to 65 ℃
Accuracy Level	0.1
Humidity Measurement Accuracy	1 (RH)
Temperature Measurement Error	±1 ℃
Applicable Environment	-15 to 55℃ / 20%-85%RH
Material	Plastic
Weight	Approx. 51g / 1.8oz
Product Embedded Hole Size	73mm / 2.9in, Hole Diameter (φ4mm)
Item Model Number (Manufacturer)	Haofy0n4wixv2od-11
ASIN	B0DMNQLJNM

Warranty Information

This product comes with a standard manufacturer's warranty. Please retain your proof of purchase for any warranty claims. For specific details regarding warranty duration and terms, refer to the documentation provided at the time of purchase or contact the seller directly.

Customer Support

For technical assistance, troubleshooting beyond this manual, or inquiries about your product, please contact your retailer or the manufacturer's customer service. You may find contact information on the product packaging or the seller's website.