

Senzooe XY-ST30-W

Senzooe XY-ST30-W 30A Current Temperature Controller Module

User Manual

1. INTRODUCTION

The Senzooe XY-ST30-W is a versatile 30A current temperature controller module designed for precise temperature acquisition and control in both refrigeration and heating applications. This module allows users to set specific start and stop temperatures to maintain a desired thermal environment. It is suitable for a wide range of industrial and scientific uses requiring automated temperature management.

2. PRODUCT OVERVIEW



This image shows the Senzooe XY-ST30-W temperature controller module. It features a digital display showing the current temperature (25.7°C), start temperature (30.0), and stop temperature (40.0). Control buttons for up, down, settings, and power are visible. A wired temperature sensor and a wireless communication module are connected to the main unit.

The module features a clear digital display for real-time temperature monitoring and parameter settings. It includes intuitive buttons for navigation and adjustment. The wired temperature sensor provides accurate readings, and the integrated wireless communication module (indicated by 'W' in the model name) allows for remote monitoring or control capabilities, if supported by compatible systems.

3. SAFETY INFORMATION

- Ensure all wiring is performed by qualified personnel and adheres to local electrical codes.
- Disconnect power before making any connections or performing maintenance.
- Do not exceed the maximum current rating of 30A for the load connected to the module.
- Avoid exposing the module to moisture, extreme temperatures, or corrosive environments.
- Keep out of reach of children.

4. SETUP

4.1 Wiring Connections

1. **Power Supply:** Connect the appropriate DC power supply (voltage not specified, refer to product labeling for exact requirements) to the module's power input terminals. Ensure correct polarity.
2. **Temperature Sensor:** Plug the wired temperature sensor into the designated sensor input port. Ensure a secure connection.
3. **Load Connection:** Connect your heating or cooling device (the load) to the module's output terminals. Ensure the load's current draw does not exceed 30A.
4. **Wireless Module (if applicable):** If using the wireless communication feature, ensure the external wireless module is securely connected to its dedicated port.

4.2 Initial Power-On

After all connections are made, apply power to the module. The digital display should illuminate, showing the current ambient temperature detected by the sensor.

5. OPERATING INSTRUCTIONS

5.1 Display Overview

- The large central digits display the **Current Temperature**.
- "Start Temp" (or similar indicator) shows the temperature at which the load will activate.
- "Stop Temp" (or similar indicator) shows the temperature at which the load will deactivate.
- An "ON" indicator typically shows when the load is active.

5.2 Setting Temperature Parameters

1. **Enter Settings Mode:** Press and hold the 'Settings' button (often represented by a gear icon) for a few seconds until the display changes to show a parameter code or the 'Start Temp' value starts flashing.
2. **Adjust Start Temperature:** Use the 'Up' and 'Down' arrow buttons to adjust the desired start temperature. This is the temperature at which the heating or cooling process will begin.
3. **Adjust Stop Temperature:** Navigate to the 'Stop Temp' setting (usually by pressing the 'Settings' button again briefly) and use the 'Up' and 'Down' arrow buttons to set the desired stop temperature. This is the temperature at which the heating or cooling process will cease.
4. **Save Settings:** Press and hold the 'Settings' button again, or wait for a few seconds, for the module to save the new settings and return to the normal display mode.

5.3 Mode Selection (Heating/Cooling)

The module automatically determines heating or cooling mode based on the relationship between the Start and Stop temperatures:

- **Heating Mode:** If the Start Temperature is set *lower* than the Stop Temperature, the module will operate in heating mode. The load will turn on when the temperature drops to the Start Temp and turn off when it reaches the Stop Temp.
- **Cooling Mode:** If the Start Temperature is set *higher* than the Stop Temperature, the module will operate in cooling mode. The load will turn on when the temperature rises to the Start Temp and turn off when it drops to the Stop Temp.

6. MAINTENANCE

- **Cleaning:** Gently wipe the module's surface with a dry, soft cloth. Do not use abrasive cleaners or solvents.
- **Sensor Care:** Ensure the temperature sensor is clean and free from debris. Avoid bending or damaging the sensor probe.
- **Connection Checks:** Periodically inspect all wiring connections to ensure they are secure and free from corrosion.

7. TROUBLESHOOTING

- **Display Not On:** Check power supply connections and ensure the power source is active.
- **Incorrect Temperature Reading:** Verify the temperature sensor is properly connected and not damaged. Ensure the sensor is placed in the correct environment for measurement.
- **Load Not Activating/Deactivating:**
 - Check if the Start and Stop temperatures are set correctly for the desired heating or cooling mode.
 - Ensure the load is properly wired and functional.
 - Verify that the current temperature is within the set activation range.
- **Module Overheating:** Ensure adequate ventilation around the module and that the load current does not exceed 30A.

8. SPECIFICATIONS

Model	XY-ST30-W
Current Rating	30A (Maximum Load)
Function	Temperature Controller, Refrigeration, Heating, Temperature Acquisition
Manufacturer	Senzooe
ASIN	B0C7739RRF
Reference Number	707638016044
Country of Origin	China
Temperature Range	Refer to device display/manual for specific range

9. WARRANTY AND SUPPORT

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