

REDPINGUO Temp-01

Digital Temperature Controller Thermostat

Model: Temp-01 | Brand: REDPINGUO

1. INTRODUCTION

The REDPINGUO Temp-01 Digital Temperature Controller Thermostat is an advanced, easy-to-use device designed to precisely control temperature for a wide range of applications. It features both heating and cooling modes, along with versatile timing functions, making it suitable for environments requiring stable temperature regulation such as homebrewing, greenhouses, terrariums, incubators, and more.

2. PRODUCT FEATURES

- Smart Thermostat:** Features Heating & Cooling modes with a 1.7m NTC 10K temperature sensor probe. Automatically activates or deactivates connected devices based on your preset target temperatures, ensuring consistent comfort and energy efficiency.
- Easy Installation & Operation:** A plug-and-play unit requiring no complex installation or wiring. Simply plug it into a standard 110V AC outlet.
- Wide Temperature Range:** Controls temperatures from -40°C to 120°C (-40°F to 248°F) with an accuracy of $\pm 1^\circ\text{C}$.
- Dual Display Units:** Allows selection between Celsius (°C) or Fahrenheit (°F) temperature display on the LCD.
- Advanced Timing Functions:** Includes F01 Cycle Timer mode, F02 Countdown ON mode, F03 Countdown OFF mode, and F04 Countdown ON and Countdown OFF mode. Timing range is 0 to 99 hours and 59 minutes.
- Wide Application:** Suitable for various uses including greenhouses, reptile habitats, incubators, terrariums, freezers, refrigerators, heaters, and homebrew setups.
- Temperature Calibration:** Allows for fine-tuning of temperature readings to ensure accuracy.
- Screen Lock Protection:** Prevents accidental changes to settings.
- Memory Function:** All current settings are automatically saved and retained even after a power outage.
- Factory Reset:** Option to restore the device to its original factory settings.

3. PACKAGE CONTENTS

- 1 x REDPINGUO Digital Temperature Controller Thermostat (Model: Temp-01) with integrated 1.7m NTC 10K Sensor

4. PRODUCT OVERVIEW

The REDPINGUO Temp-01 thermostat features a clear LCD display, intuitive control buttons, a built-in power outlet, and a wired temperature sensor probe.



Figure 1: Front view of the thermostat with its display and integrated power outlet.



Figure 2: Close-up of the control panel, highlighting the display and buttons.



Figure 3: Rear view of the thermostat, displaying product information and the power plug.

5. SETUP

1. **Unpack:** Carefully remove the thermostat from its packaging.
2. **Plug In:** Insert the thermostat's plug into a standard 110V AC power outlet. The LCD display will illuminate.
3. **Position Sensor:** Place the 1.7m temperature sensor probe in the area where you wish to monitor and control the temperature. Ensure the probe is not directly exposed to heat sources or extreme cold that could skew readings.
4. **Connect Device:** Plug your heating or cooling appliance into the power outlet on the front of the thermostat.

Wide Range of Application



Plant Seeding



Greenhouse



Pet Breeding



Aquarium



Incubator



Bacon Making



Fermenter

Figure 4: The thermostat unit plugged into a power source, ready for use.

6. OPERATING INSTRUCTIONS

The thermostat offers both temperature control and various timing functions. Use the 'MODE', 'SET', 'UP', and 'DOWN' buttons to navigate and adjust settings.

6.1. Temperature Control Mode

- View Current Temperature:** The top line of the LCD displays the 'Measured Temperature'.
- Set Start Temperature (ON):** Press the 'SET' button once. The 'Start Temperature' value will flash. Use 'UP' or 'DOWN' buttons to adjust the desired temperature for the device to turn ON. Press 'SET' again to confirm.
- Set Stop Temperature (OFF):** After setting the Start Temperature, press 'SET' again. The 'Stop Temperature' value will flash. Use 'UP' or 'DOWN' buttons to adjust the desired temperature for the device to turn OFF. Press 'SET' again to confirm and exit setting mode.
- Heating Mode:** If the 'Start Temperature' is set lower than the 'Stop Temperature', the thermostat operates in heating mode. The connected device will turn on when the measured temperature drops below the Start Temperature and turn off when it reaches the Stop Temperature.

- Cooling Mode:** If the 'Start Temperature' is set higher than the 'Stop Temperature', the thermostat operates in cooling mode. The connected device will turn on when the measured temperature rises above the Start Temperature and turn off when it drops to the Stop Temperature.
- Switch °C/°F:** Press and hold the 'UP' button for 3 seconds to toggle between Celsius (°C) and Fahrenheit (°F).

6.2. Timing Functions

Press the 'MODE' button repeatedly to cycle through the different timing modes (F01, F02, F03, F04) and the temperature control display.

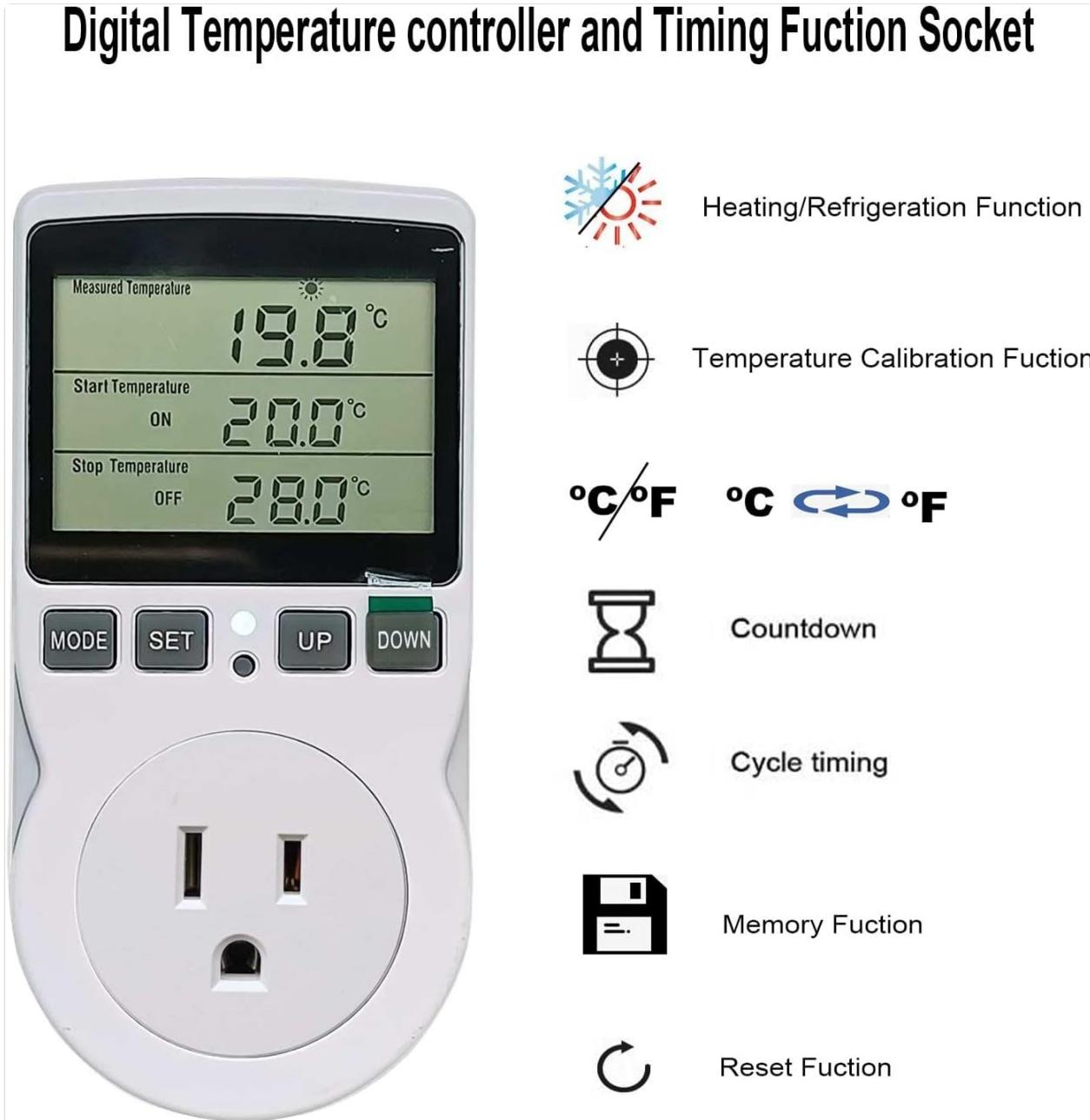


Figure 5: Overview of the timing function displays and their corresponding modes.

1. F01: Cycle Timer Mode

In this mode, you set an ON duration and an OFF duration for the connected device to cycle repeatedly. Press 'SET' to enter editing, use 'UP'/'DOWN' to adjust hours/minutes for ON time, then press 'SET' to move to OFF time, adjust, and press 'SET' again to confirm.

2. F02: Countdown ON Mode

The device will turn ON after a set countdown period. Press 'SET' to enter editing, use 'UP'/'DOWN' to set the countdown hours/minutes, then press 'SET' to confirm.

3. F03: Countdown OFF Mode

The device will turn OFF after a set countdown period. Press 'SET' to enter editing, use 'UP'/'DOWN' to set the countdown hours/minutes, then press 'SET' to confirm.

4. F04: Countdown ON and Countdown OFF Mode

This mode combines F02 and F03. You set a countdown for the device to turn ON, and then a separate countdown for it to turn OFF. Press 'SET' to enter editing, set the ON countdown, press 'SET', then set the OFF countdown, and press 'SET' again to confirm.

6.3. Temperature Calibration

If the measured temperature is inaccurate, you can calibrate the sensor. Press and hold the 'SET' button for 3 seconds to enter the calibration menu. Use 'UP' or 'DOWN' to adjust the offset value (e.g., +0.5°C or -0.5°F). Press 'SET' to save and exit.

6.4. Screen Lock Protection

To prevent accidental changes, the screen can be locked. Press and hold the 'MODE' button for 3 seconds to lock or unlock the screen. A lock icon may appear on the display when locked.

6.5. Memory Function

The thermostat is equipped with a memory function. All your configured settings (temperature and timing modes) will be automatically saved and restored in case of a power interruption.

6.6. Factory Reset

To restore the thermostat to its original factory settings, press and hold the 'DOWN' button for 3 seconds. Confirm the reset if prompted.

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Video: A demonstration of the REDPINGUO Digital Temperature Controller's features and operation, including button presses and display changes.

7. MAINTENANCE

- **Cleaning:** Wipe the unit with a soft, dry cloth. Do not use abrasive cleaners or immerse the unit in water.
- **Sensor Care:** Ensure the temperature sensor probe is kept clean and free from debris for accurate readings. Avoid bending or damaging the sensor cable.
- **Storage:** When not in use for extended periods, store the thermostat in a cool, dry place away from direct sunlight and extreme temperatures.

8. TROUBLESHOOTING

- **Display Not Working:** Ensure the unit is properly plugged into a live 110V AC outlet. Check the power source.
- **Inaccurate Temperature Reading:** Verify the temperature sensor probe is correctly positioned and not damaged. Perform a temperature calibration (refer to Section 6.3).
- **Device Not Turning ON/OFF:** Check that the Start and Stop temperatures are set correctly for either heating or cooling mode. Ensure the connected appliance is functioning properly and is plugged securely into the thermostat's outlet.
- **Settings Not Saving:** The unit has a memory function. If settings are not retained, ensure the unit is not being subjected to extreme electrical fluctuations.

9. SPECIFICATIONS

Specification	Value
Model Number	Temp-01
Power Supply	AC 110V ±15% 50Hz
Max. Load	15A / 110V (Max 1800W)
Temperature Control Range	-40°C to 120°C (-40°F to 248°F)
Control Accuracy	±1°C
Sensor Type	1.7m NTC10K/B3950
Timing Accuracy	MAX 10 minutes
Ambient Temperature	-20°C to 60°C (-4°F to 140°F)
Display Type	LED
Product Dimensions	2.28 x 1.53 x 4.72 inches
Item Weight	6.4 ounces
Material	Acrylonitrile Butadiene Styrene (ABS)
Country of Origin	China

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the documentation included with your product packaging or visit the official REDPINGUO website. Keep your purchase receipt for warranty claims.