

DIGITEN DTC-315

DIGITEN DTC315 15A Waterproof Temperature Controller User Manual

Model: DTC-315 | Brand: DIGITEN

Introduction	Safety Information	Product Overview	Specifications	Setup	Operation
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1. INTRODUCTION

The DIGITEN DTC315 15A Waterproof Temperature Controller is designed to precisely regulate and maintain desired temperatures across various applications. This device features a waterproof sensor probe and an IP65-rated shell, making it suitable for both indoor and outdoor use. It is ideal for environments such as greenhouses, aquariums, reptile enclosures, seedling germination, and home brewing, providing reliable temperature control to protect sensitive processes or organisms.

This manual provides detailed instructions for the safe and effective use of your DIGITEN DTC315 temperature controller.



Figure 1: DIGITEN DTC315 15A Waterproof Temperature Controller. This image shows the main unit with its display, control buttons, integrated power cord, and sensor probe.



Figure 2: The DIGITEN DTC315 is suitable for a wide range of applications, from aquariums and reptile habitats to greenhouses and home

2. SAFETY INFORMATION

Please read all safety instructions carefully before operating the device. Failure to follow these instructions may result in electric shock, fire, or damage to the product.

- Ensure the power supply voltage matches the device's requirements (120V AC, 60Hz).
- Do not exceed the maximum current load of 15A. Overloading can cause damage or fire.
- The controller unit is IP65 waterproof, meaning it is protected against dust and low-pressure water jets. While suitable for outdoor use, avoid submerging the main unit in water.
- The sensor probe is waterproof and can be fully immersed in water or soil.
- Always unplug the device from the power outlet before cleaning or performing any maintenance.
- Keep the device out of reach of children.
- Do not attempt to disassemble or repair the unit yourself. Contact qualified personnel for service.
- The high and low temperature alarm function is designed to alert you to temperature deviations. Ensure alarm settings are appropriate for your application.



Figure 3: The IP65 waterproof rating ensures the controller can withstand outdoor conditions and splashes, but should not be submerged.

3. PRODUCT OVERVIEW

The DIGITEN DTC315 temperature controller consists of a main control unit with an LED display, three control buttons, an integrated power plug, a controlled power outlet, and a waterproof temperature sensor probe.

- **LED Display:** Shows current temperature (PV), run temperature (SV), and stop temperature (PV). Illuminated for visibility in low light.
- **Control Buttons:** 'SET' button for programming, 'Up' (▲) and 'Down' (▼) buttons for adjusting values.
- **Run Indicator:** An LED light indicating when the connected device is actively heating or cooling.
- **Waterproof Sensor Probe:** Accurately measures temperature in various environments, including liquids. Comes with a suction cup for easy placement.
- **Integrated Power Plug:** Connects the controller to a standard wall outlet.
- **Controlled Outlet:** Where your heating or cooling device plugs in. The controller switches power to this outlet based on your settings.

- **Hanging Design:** Features a hook on the back for convenient wall mounting, keeping cords tidy.



Figure 4: Key components and display elements of the DTC315 controller.



Figure 5: The sensitive probe includes a suction cup for secure placement.



Figure 6: The controller can be conveniently hung on a wall or hook.



Figure 7: The 3-pin controlled outlet for connecting your heating or cooling device.

4. SPECIFICATIONS

Feature	Specification
Model Number	DTC-315
Power Supply	120V AC, 60Hz
Max Current Load	15A
Temperature Control Range	-40°F to 248°F (-40°C to 120°C)
Temperature Display Type	LED
Waterproof Rating	IP65 (Controller Unit)
Item Weight	15.5 ounces
Package Dimensions	7.09 x 3.46 x 3.31 inches

GREENHOUSE TEMPERATURE CONTROLLER

Optimal temperature control in a wide range



Figure 8: The DTC315 offers a broad temperature control range for diverse applications.



Figure 9: Physical dimensions and key features of the controller.

5. SETUP

5.1 Unpacking

1. Carefully remove the DIGITEN DTC315 temperature controller and its components from the packaging.
2. Verify that all parts are present and undamaged: the main controller unit with integrated cords, and the temperature sensor probe.

5.2 Installation

1. **Place the Controller:** Position the main controller unit in a location where the display is easily visible and the buttons are accessible. Ensure it is not directly exposed to extreme heat or cold beyond its operating range. The integrated hook allows for wall mounting.
2. **Position the Sensor Probe:** Place the waterproof sensor probe in the area where you need to monitor and control the temperature. For aquariums, use the suction cup to secure it. For soil or air, ensure it is stable and accurately

reflects the desired measurement point.

3. **Connect Your Device:** Plug your heating or cooling device (e.g., heat mat, fan, heater) into the controlled 3-pin outlet on the bottom of the DIGITEN controller. Ensure the device's power consumption does not exceed 15A.
4. **Power On:** Plug the DIGITEN controller's main power plug into a standard 120V AC wall outlet. The display will illuminate, showing the current temperature.

Greenhouse Temperature Controller

Optimal temperature control in a wide range



Figure 10: A typical setup demonstrating how the controller connects to both a heating and cooling device (though only one can be active at a time based on settings) and monitors temperature via its probe.

Keep your plants at the suitable temperature



Figure 11: The controller maintaining optimal temperature for seedling growth using a heat mat.

6. OPERATION

6.1 Display Overview

The LED display shows three main values:

- **PV (Process Value):** The current temperature measured by the sensor probe.
- **SV (Set Value):** The desired 'Run Temperature' at which the connected device will activate (e.g., heater turns on, fan turns off).
- **Stop Value:** The 'Stop Temperature' at which the connected device will deactivate (e.g., heater turns off, fan turns on).

6.2 Switching Temperature Units (°F/°C)

To switch between Fahrenheit (°F) and Celsius (°C):

1. Press the 'Up' (▲) and 'Down' (▼) buttons simultaneously.
2. The display will change to the selected unit.



Figure 12: Visual guide for programming temperature settings.

6.3 Programming Temperature Settings

The controller operates in either heating or cooling mode, determined by the relationship between the Run Temperature (SV) and Stop Temperature. If $SV < \text{Stop Temp}$, it's heating mode. If $SV > \text{Stop Temp}$, it's cooling mode.

1. **Enter Preset Mode:** Long press and hold the 'SET' button for approximately 3 seconds until the display starts flashing. This indicates you are in the temperature preset mode.
2. **Set Run Temperature (SV):** The first flashing value is the 'Run Temperature' (SV). Use the 'Up' (▲) or 'Down' (▼) buttons to adjust this value to your desired activation temperature.
3. **Confirm Run Temperature & Set Stop Temperature:** Short press the 'SET' button. The next flashing value is the 'Stop Temperature'. Use the 'Up' (▲) or 'Down' (▼) buttons to adjust this value to your desired deactivation temperature.
4. **Save Settings:** Long press and hold the 'SET' button for approximately 3 seconds again. The display will stop flashing, and the new settings will be saved. The controller will now operate according to these parameters.

6.4 High and Low Temperature Alarm

The DTC315 supports high and low temperature alarms to notify you if the temperature deviates significantly from your set range. Refer to the detailed programming instructions in the full user manual (PDF) for setting specific alarm thresholds and compressor delay functions.

7. MAINTENANCE

7.1 Cleaning

1. Always unplug the controller from the power outlet before cleaning.
2. Wipe the main unit with a soft, damp cloth. Do not use abrasive cleaners or solvents.
3. The sensor probe can be cleaned with water and a mild detergent if necessary. Rinse thoroughly.

7.2 Sensor Care

- Avoid bending or kinking the sensor cable sharply, as this can damage the internal wiring.
- Ensure the sensor tip is free from debris or buildup that could affect accurate temperature readings.
- If the sensor appears damaged or provides inconsistent readings, it may need replacement.

8. TROUBLESHOOTING

If you encounter issues with your DIGITEN DTC315 controller, please refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
Display is blank	No power; power outage.	Check power connection. Ensure the wall outlet is functional.
Controller not activating connected device	Incorrect temperature settings; device not plugged in; device malfunction.	Verify Run and Stop temperatures are set correctly. Ensure the connected device is properly plugged into the controller's outlet and is functional.
Inaccurate temperature readings	Sensor probe improperly placed or damaged; calibration needed.	Reposition the sensor probe. Check for physical damage to the probe. Perform temperature calibration if necessary (refer to full manual).
Controller beeps continuously	High/low temperature alarm triggered.	Check the current temperature and compare it to your alarm settings. Adjust settings or address the temperature deviation. Press any button to silence the alarm temporarily.
Difficulty programming settings	Incorrect button sequence or timing.	Follow the programming steps in Section 6.3 precisely, paying attention to short vs. long presses of the 'SET' button.

9. WARRANTY AND SUPPORT

9.1 Warranty Information

The DIGITEN DTC315 15A Waterproof Temperature Controller comes with a**12-month warranty** from the date of purchase, covering manufacturing defects and malfunctions under normal use. This warranty does not cover damage caused by misuse, accident, unauthorized modification, or improper installation.

9.2 Customer Support

For technical assistance, warranty claims, or any questions regarding your DIGITEN product, please contact DIGITEN customer support through the retailer's platform where you purchased the item or visit the official DIGITEN website for contact information. Please have your product model number (DTC-315) and purchase details ready when contacting support.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question