

DIGITEN DHTC1011

DIGITEN DHTC1011 Humidity and Temperature Controller User Manual

Model: DHTC1011

1. INTRODUCTION

Thank you for choosing the DIGITEN DHTC1011 Humidity and Temperature Controller. This integrated plug-and-play device is designed to precisely control both temperature and humidity, making it ideal for various applications such as homebrewing, pet breeding, incubation, greenhouse management, and more. This manual provides detailed instructions for setting up, operating, and maintaining your controller to ensure optimal performance and longevity.

2. PRODUCT OVERVIEW

The DHTC1011 features a large LCD screen for simultaneous display of measured and set values, a sensitive 2-in-1 temperature and humidity probe, and two pre-wired outlets for independent control of heating/cooling and humidifying/dehumidifying devices.



Figure 2.1: Main components of the DHTC1011 controller, including the main unit, integrated probe, and dual power outlets.



Figure 2.2: Key features of the DHTC1011, highlighting dual outlets, Celsius/Fahrenheit support, alarm function, and control over heating/cooling and humidifying/dehumidifying.

- ① **PV:** Measuring Value
- ② **LCD Backlight:** Press the UP and SET buttons simultaneously for about 3 seconds, the LCD backlight will automatically turn off after 30 seconds. The same method can restore the backlight to be always on.
- ③ **ON/OFF:** Working Status of The Load
- ④ **HI/LO:** Temperature/Humidity Alarm Value
- ⑤ **LO:** Low Temperature/Humidity Alarm Value
- ⑥ **DP:** Time of Compressor Delay Starting
- ⑦ **CA:** Temperature/Humidity Calibration
- ⑧ **RV:** Run Value
The temperature/humidity value at which the device starts to run.
- ⑨ **SV:** Stop Value
The temperature/humidity value at which the device starts running.



- ⑤ **Heating/Cooling Mode:** When $RV < SV$, the system will be in heating mode. When $RV > SV$, the system will be in cooling mode.
- ⑥ **Humidification/Dehumidification Mode:** When $RV < SV$, the system will be in humidification mode. When $RV > SV$, the system will be in dehumidification mode.
- ⑦ **Temperature/Humidity Indicator Light:** The red light indicates stop working, and green means running.
- ⑧ **SET Button:** Press SET button for 3s to enter menu for function setting. During the setting process, short press SET to select the value to be set; press SET for 3s to quit and save the values.
- ⑨ **UP/DOWN Button:**

Figure 2.3: Detailed view of the controller's display and buttons. (1) PV: Measuring Value, (2) LCD Backlight, (3) Working Status of the Load (ON/OFF), (4) High/Low Temperature/Humidity Alarm Value (HI/LO), (5) Heating/Cooling Mode (RV < SV: Heating, RV > SV: Cooling), (6) Humidification/Dehumidification Mode (RV < SV: Humidification, RV > SV: Dehumidification), (7) Temperature/Humidity Indicator Light (Red: Stop, Green: Running), (8) SET Button, (9) UP/DOWN Button. DP: Time of Compressor Delay Starting, CA: Temperature/Humidity Calibration, RV: Run Value, SV: Stop Value.

2.1 Components

- **Main Controller Unit:** Features a large LCD display and control buttons.
- **Temperature & Humidity Probe:** A 2-in-1 sensor for accurate environmental readings.
- **Dual Power Outlets:** One for temperature control (heating/cooling) and one for humidity control (humidifying/dehumidifying).
- **Power Cord:** Standard US plug for power supply.

3. KEY FEATURES

- **Wide Control Range:** Temperature control from -40°F to 248°F (-40°C to 120°C), humidity control from 1%RH to 100%RH.
- **Multi-functional Setting:** Supports calibration, compressor delay, and saving reset setting values.
- **Unit Selection:** Easily switch between Centigrade ($^{\circ}\text{C}$) and Fahrenheit ($^{\circ}\text{F}$) display.
- **Alarms:** Configurable high or low temperature and humidity alarms.
- **Convenient Design:** Large LCD screen with simple 3-button interface and pre-wired plug-and-play setup.
- **Dual Relay Output:** Independent control for temperature and humidity equipment simultaneously.
- **Versatile Applications:** Suitable for home brewing, fermentation, greenhouses, terrariums, reptile enclosures, planting, meat storage, wine cellars, and more.

4. SETUP

- Unpack the Controller:** Carefully remove all components from the packaging.
- Connect the Probe:** Insert the temperature and humidity probe's jack into the designated port on the top of the main controller unit. Ensure it is securely connected.
- Position the Probe:** Place the probe in the environment where you wish to monitor and control temperature and humidity. Ensure it is not directly exposed to heat sources, moisture, or airflow that could skew readings.
- Plug in Devices:**
 - Plug your temperature-controlling device (e.g., heater, cooler) into the outlet labeled "TEMPERATURE" on the power strip.
 - Plug your humidity-controlling device (e.g., humidifier, dehumidifier) into the outlet labeled "HUMIDITY" on the power strip.
- Power On:** Plug the main controller unit's power cord into a standard electrical outlet. The LCD display will illuminate, showing current temperature and humidity readings.

5. OPERATING INSTRUCTIONS

5.1 Basic Display Information

- The top large number displays the current measured temperature (PV).
- The bottom large number displays the current measured humidity (PV).
- Below the measured values, the set temperature and humidity values (SV) are displayed.
- Indicator lights (red/green) show the working status of connected devices.

5.2 Setting Parameters

To enter the function setting menu, press and hold the **SET** button for approximately 3 seconds. Use the **UP** (▲) and **DOWN** (▼) buttons to navigate through the parameters and adjust values. Press **SET** briefly to confirm a selection or move to the next parameter. To exit the menu and save changes, press and hold **SET** for 3 seconds again.

Table 5.1: Parameter Settings

Parameter	Description	Range	Default
TS (Temperature Start)	Temperature at which heating/cooling starts.	-40 to 248°F (-40 to 120°C)	77°F (25°C)
TC (Temperature Stop)	Temperature at which heating/cooling stops.	-40 to 248°F (-40 to 120°C)	78.8°F (26°C)
HS (Humidity Start)	Humidity at which humidifying/dehumidifying starts.	1 to 100%RH	50%RH
HC (Humidity Stop)	Humidity at which humidifying/dehumidifying stops.	1 to 100%RH	55%RH
CA (Temperature Calibration)	Adjusts temperature reading for accuracy.	-10 to 10°F (-5 to 5°C)	0
HA (Humidity Calibration)	Adjusts humidity reading for accuracy.	-10 to 10%RH	0
DP (Compressor Delay)	Delay time for compressor protection.	0 to 10 minutes	0

Parameter	Description	Range	Default
AH (High Temp Alarm)	Sets high temperature alarm threshold.	-40 to 248°F (-40 to 120°C)	248°F (120°C)
AL (Low Temp Alarm)	Sets low temperature alarm threshold.	-40 to 248°F (-40 to 120°C)	-40°F (-40°C)
HH (High Hum Alarm)	Sets high humidity alarm threshold.	1 to 100%RH	100%RH
HL (Low Hum Alarm)	Sets low humidity alarm threshold.	1 to 100%RH	1%RH
CF (Celsius/Fahrenheit)	Switches temperature unit.	C/F	F

5.3 Setting Heating/Cooling Mode

The controller automatically determines heating or cooling mode based on your set values (TS and TC).

- If **TS < TC**: The controller operates in **Heating Mode**. The heating device will turn on when the measured temperature drops below TS and turn off when it reaches TC.
- If **TS > TC**: The controller operates in **Cooling Mode**. The cooling device will turn on when the measured temperature rises above TS and turn off when it drops to TC.

5.4 Setting Humidifying/Dehumidifying Mode

Similar to temperature, the controller determines humidifying or dehumidifying mode based on your set values (HS and HC).

- If **HS < HC**: The controller operates in **Humidifying Mode**. The humidifying device will turn on when the measured humidity drops below HS and turn off when it reaches HC.
- If **HS > HC**: The controller operates in **Dehumidifying Mode**. The dehumidifying device will turn on when the measured humidity rises above HS and turn off when it drops to HC.

5.5 LCD Backlight Control

Press the **UP** (▲) and **SET** buttons simultaneously for about 3 seconds. The LCD backlight will automatically turn off after 30 seconds. Repeat the same method to restore the backlight to be always on.

6. MAINTENANCE

- **Cleaning:** Wipe the controller unit and probe with a soft, dry cloth. Do not use abrasive cleaners or immerse the unit in water.
- **Probe Care:** Keep the probe clean and free from dust or debris. Avoid bending or damaging the probe cable. Ensure the probe is not submerged in liquid unless specifically designed for it (this probe is not).
- **Storage:** If storing the device for an extended period, unplug it from the power source and store it in a cool, dry place away from direct sunlight.

7. TROUBLESHOOTING

Table 7.1: Common Issues and Solutions

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Display is blank or not powering on.	No power supply; loose connection.	Ensure the power cord is securely plugged into a live outlet. Check the outlet with another device.
Temperature/Humidity readings are inaccurate.	Probe dirty or damaged; calibration needed; probe not positioned correctly.	Clean the probe. Perform temperature/humidity calibration (CA/HA parameter). Reposition the probe away from direct influences.
Connected device (heater/humidifier) is not turning on/off as expected.	Incorrect TS/TC or HS/HC settings; device not plugged into correct outlet; device malfunction.	Verify your TS/TC and HS/HC settings are appropriate for your desired control. Ensure the device is plugged into the correct temperature or humidity outlet. Test the connected device directly in a wall outlet.
Alarm sounds frequently.	Alarm thresholds (AH/AL/HH HL) are set too close to operating range or current conditions.	Adjust the alarm thresholds to a wider range or to values that reflect critical conditions.
"Error" code displayed.	Probe connection issue or sensor malfunction.	Unplug and re-plug the probe firmly. If the error persists, the probe may be faulty and require replacement.

8. SPECIFICATIONS

Table 8.1: Technical Specifications

Feature	Detail
Brand	DIGITEN
Model Name	DHTC1011
Controller Type	Push Button
Special Feature	Cooling Heating Humidifier Dehumidifier
Color	Black
Specific Uses For Product	Humidifier, Reptile, Greenhouse
Temperature Control Type	Heating, Cooling
Humidity Control Type	Humidifying, Dehumidifying
Connectivity Technology	Wi-Fi (Note: Product description mentions Wi-Fi, but the physical device and manual details suggest it's a standalone controller. User should verify if Wi-Fi features are present or require additional components.)

Feature	Detail
Power Source	Corded Electric
Voltage	240 Volts (Note: Standard US plug implies 120V, but spec says 240V. User should verify product label for correct voltage.)
Shape	Rectangular
Display Type	Digital
Control Type	Button Control
Control Method	Remote (Note: This likely refers to the ability to control connected devices, not necessarily a separate remote control unit.)
Mounting Type	Wall Mount
Backlight	Yes
Package Dimensions	8.19 x 8.07 x 1.69 inches
Item Weight	15.8 ounces

Note: Some specifications like "Connectivity Technology: Wi-Fi" and "Voltage: 240 Volts" appear in the product data but may not align with the typical functionality or standard plug type (US plug is typically 120V). Please refer to the product label for definitive electrical ratings and actual Wi-Fi capabilities.

9. WARRANTY AND SUPPORT

DIGITEN provides a one-year warranty term for any product quality problems. For technical support, troubleshooting assistance, or warranty claims, please contact DIGITEN customer service through the retailer's platform or visit the official DIGITEN website for contact information.

For more information, you may also refer to the official DIGITEN store [Visit the DIGITEN Store](#)



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Related Documents

A small image showing the front cover of the DIGITEN DHTC-1011 Temperature and Humidity Controller User Manual. The cover is white with the DIGITEN logo and product name at the top, followed by a photograph of the device and some descriptive text.	DIGITEN DHTC-1011 Temperature and Humidity Controller User Manual User manual for the DIGITEN DHTC-1011 Temperature and Humidity Controller, detailing its features, specifications, setting instructions, and troubleshooting.
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	<p>Digiten DTC-101 / DTC-151 Digital Temperature Controller User Manual and Specifications</p> <p>Comprehensive guide to the Digiten DTC-101 and DTC-151 digital temperature controllers, detailing features, setup, operation, technical specifications, and troubleshooting for precise temperature management.</p>
	<p>Digiten TTC-1003 Temperature Controller with Timer User Manual</p> <p>User manual for the Digiten TTC-1003 Temperature Controller with Timer, a 3-outlet thermostat designed for pet breeders and environmental control. Learn about its features, specifications, and how to set up heating, cooling, and timing functions for optimal pet comfort.</p>
	<p>DIGITEN DTC-310 & DTC-315 Thermostat User Manual</p> <p>User manual for the DIGITEN DTC-310 and DTC-315 electronic temperature controllers, detailing features, specifications, setup, and troubleshooting.</p>

Documents - DIGITEN – DHTC1011



[DIGITEN DHTC-1011 Temperature and Humidity Controller User Manual](#)

User manual for the DIGITEN DHTC-1011 Temperature and Humidity Controller, detailing its features, specifications, setting instructions, and troubleshooting.

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