BN-LINK BNQ-T7B(C)

BN-LINK Digital Cooling Thermostat Controller User Manual

Model: BNQ-T7B(C)

1. Introduction

The BN-LINK Digital Cooling Thermostat Controller is designed to provide precise temperature control for various cooling devices. This manual will guide you through the setup, operation, and maintenance of your new thermostat controller, ensuring optimal performance and longevity.



Figure 1: BN-LINK Digital Cooling Thermostat Controller. This image displays the main unit, the temperature probe with suction cup, and the power cord.

2. Safety Information

Please read all safety warnings and instructions carefully before use to prevent injury or damage.

- This temperature switch is **only** used with cooling devices. Do not connect heating devices.
- Do not expose the thermostat controller or its probe to water or excessive moisture. This device is not waterproof.
- Ensure the rated voltage (120VAC 60Hz) and maximum loading (8.3A 1000W) are not exceeded.
- For inductive loads such as fan motors, some users have reported that the unit may be more suitable for loads up to 4 Amps, despite the 8.3A resistive load rating. Always verify your device's current draw.
- Consider plugging the thermostat into a surge protector to safeguard against power fluctuations, especially during thunderstorms.

- If the thermostat delivers power to the cooling device for more than 5 consecutive hours without reaching the desired temperature, it indicates a potential issue with the cooling device or the environment. Investigate immediately.
- The thermostat has a 2-3 degree Fahrenheit buffer zone. This means it will allow the temperature to rise 2-3 degrees above the set point before activating the cooling device, and fall 2-3 degrees below before deactivating. This is normal operation to prevent rapid cycling.

3. Product Overview

The BN-LINK Digital Cooling Thermostat Controller features a clear LED display and intuitive controls for easy temperature management. It includes a durable temperature probe for accurate readings and a convenient hanging tab for flexible placement.



Figure 2: Key components of the Cooling Thermostat Controller. This diagram labels the Fahrenheit/Celsius indicators, LED display, Output Indicator, Set Target Temperature button, Up/Down buttons for adjustment, Cooling indicator, Power indicator, and the 3-Prong Output.



Figure 3: Temperature Control Range. The device maintains temperature within 40-108°F (5-42°C) and displays temperatures from 32-140°F (0-60°C).

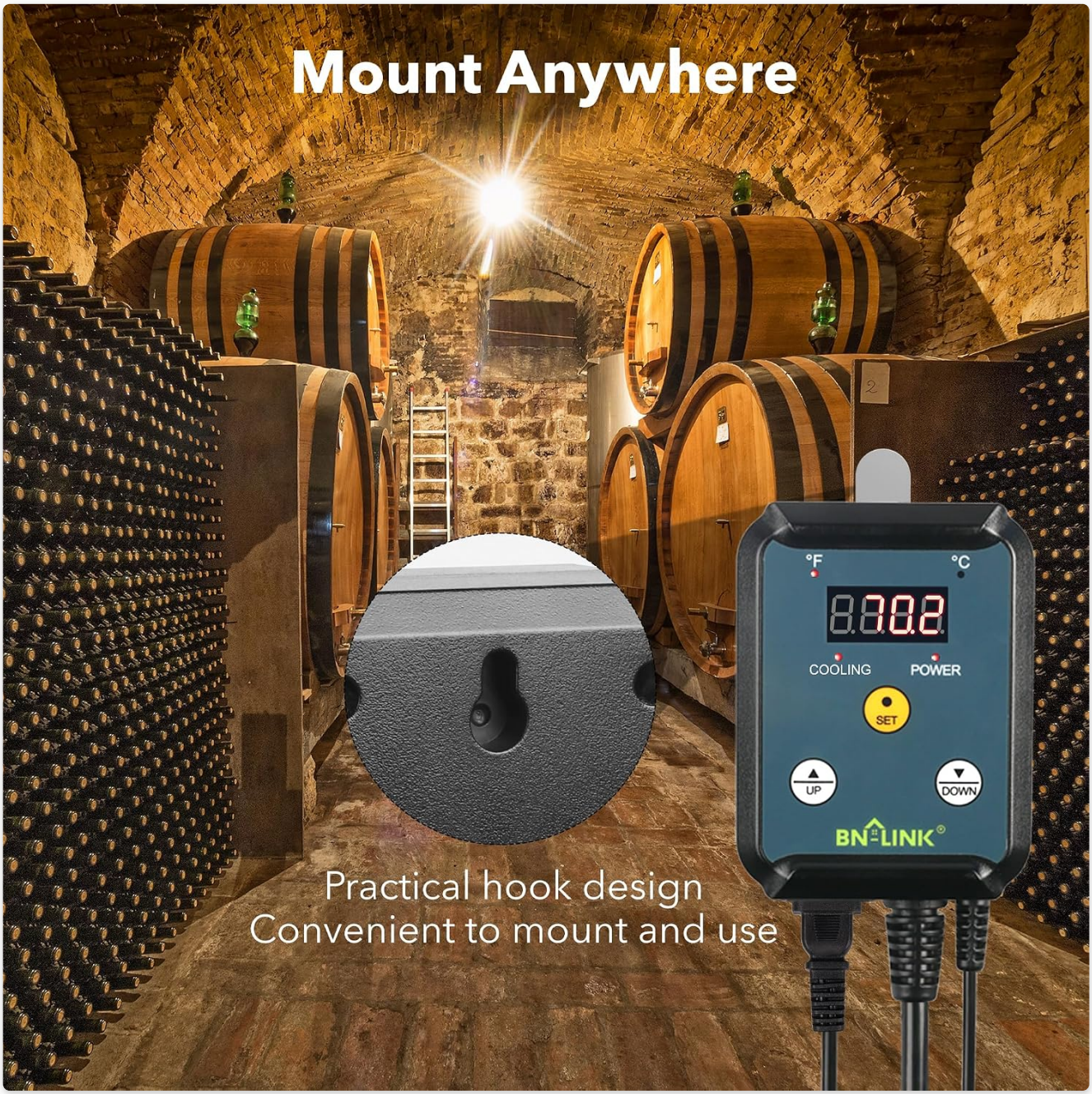


Figure 4: Mounting Options. The controller features a practical hook design on the back for convenient mounting on a wall or beam.



Figure 5: Versatile Applications. This thermostat is ideal for use in grow rooms, greenhouses, home brewing, fermentation, reptile habitats, garages, and chicken coops.

4. Setup

Follow these steps to set up your BN-LINK Digital Cooling Thermostat Controller:

1. **Plug In:** Plug the thermostat controller into a standard 120VAC 60Hz outlet.
2. **Place Temperature Probe:** Position the temperature probe in the area where you want to monitor and control the temperature. The probe comes with a suction cup for easy placement.
3. **Plug in Cooling Device:** Connect your cooling device (e.g., fan, swamp cooler) into the 3-prong output on the side of the thermostat controller.

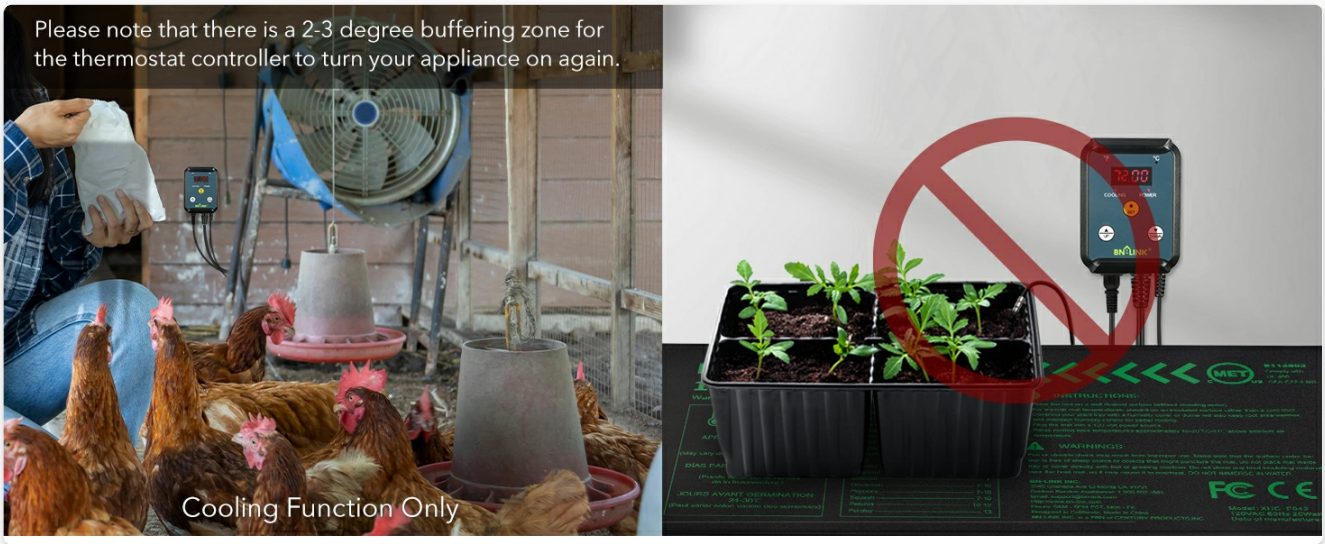


Figure 6: Setting the Target Temperature. Press and hold the "SET" button until the display blinks, then use the "UP/DOWN" buttons to adjust the target temperature. Press "SET" again to confirm.

Video 1: BN-LINK Digital Cooling Thermostat Controller Setup. This video demonstrates the initial plug-in, switching between Fahrenheit and Celsius, programming the desired temperature, and plugging in the cooling device.

5. Operating Instructions

5.1 Setting Temperature

To program your desired temperature:

1. Press and hold the **SET** button until the display starts blinking.
2. Use the **UP** and **DOWN** buttons to adjust to your target temperature. The control range is between 40-108°F (5-42°C).
3. Press the **SET** button again to confirm your selection.

5.2 Switching Temperature Units (Fahrenheit/Celsius)

The thermostat defaults to Fahrenheit (°F). To switch units:

- To switch to Celsius (°C): Press and hold the**DOWN** button for 3 seconds.
- To switch back to Fahrenheit (°F): Press and hold the**UP** button for 3 seconds.

An indicator light next to °F or °C will illuminate to show the current unit. The display will show the current temperature read by the probe. The cooling indicator light will be lit only when the cooling device is powered on by the thermostat.

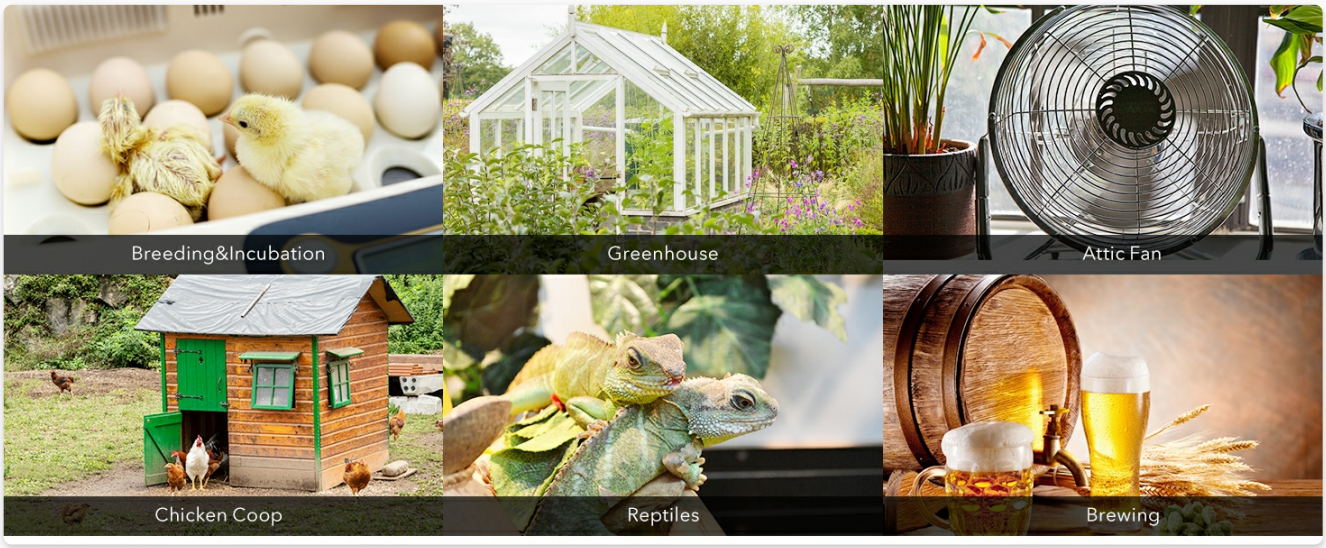


Figure 7: Switching Temperature Units. Hold the UP button for 3 seconds for Fahrenheit, or the DOWN button for 3 seconds for Celsius.

6. Maintenance

- Keep the thermostat controller and probe clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Regularly check the power cord and probe for any signs of damage. If damaged, discontinue use and contact support.
- Ensure the probe is securely placed and not obstructed, as this can affect temperature readings.

7. Troubleshooting

If you encounter issues with your thermostat controller, refer to the table below for common problems and solutions:

Error Code	Description	Solution
E1	Temperature below 32°F (0°C)	Move the probe to a warmer environment or check if the cooling device is over-cooling.
E2	Temperature above 108°F (42°C)	Move the probe to a cooler environment or ensure the cooling device is functioning correctly.
E3	Temperature sensor not working	Check the probe connection. If the issue persists, the sensor may be faulty. Contact customer support.



Figure 8: Cooling Function Only. This thermostat is designed exclusively for cooling devices. Do not use it with heating devices like seed germination mats.

8. Specifications

Feature	Detail
Brand	BN-LINK
Model Name	T7E(H)
Product Dimensions	1.6"D x 3.5"W x 4.5"H
Controller Type	Push Button
Special Feature	Temperature Display
Color	Green
Specific Uses For Product	Cooling Devices (e.g., Attic Fan, Exhaust Fan, Swamp Cooler)
Temperature Control Type	Cooling Only
Connectivity Technology	PLUG
Included Components	Probe
Power Source	AC Powered (120 Volts)
Item Weight	0.01 Ounces
Voltage	120 Volts
Display Type	LED
Control Type	Button Control
Style	Digital

Feature	Detail
Backlight	Yes
Specification Met	UL, ETL
Wattage	1000 watts (Max Loading: 8.3A)
UPC	726179400372
Manufacturer	BN-LINK
Item model number	BNQ-T7B(C)
Date First Available	September 20, 2016

9. Warranty & Support

For detailed warranty information or technical support, please refer to the official User Manual PDF provided with your product or visit the BN-LINK website. You can access the User Manual PDF directly via this link: User Manual (PDF).

© 2025 BN-LINK. All rights reserved.

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