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AC Infinity CTR89Q

AC Infinity Controller AI+ Environmental Controller User Manual

Model: CTR89Q

INTRODUCTION

The AC Infinity Controller AI+ (Model CTR89Q) is a revolutionary environmental controller designed to optimize grow environments. It features advanced AI capabilities that learn and adapt to climate patterns, automating connected devices to maintain ideal conditions. This manual provides essential information for setting up, operating, and maintaining your Controller AI+.



Figure 1: AC Infinity Controller AI+ and companion mobile application.

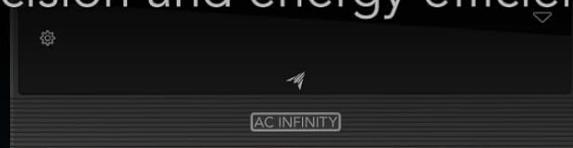
SETUP

Follow these steps to set up your AC Infinity Controller AI+:

- 1. Unpacking:** Carefully remove all components from the packaging. Verify that all parts are present according to the packing list.
- 2. Mounting:** Choose a suitable location for the controller, ensuring it is away from direct moisture and extreme temperatures. The controller can be mounted on a wall or placed on a flat surface.
- 3. Connecting Devices:** Connect your AC Infinity smart grow devices (fans, lights, humidifiers, etc.) to the controller's device ports. The controller supports up to 8 direct device connections and up to 32 devices with optional 4-in-1 splitter hubs.
- 4. Connecting Sensors:** The Controller AI+ has built-in temperature and humidity sensors. Connect any optional external sensors (CO₂, hydro, soil) to the designated sensor ports for enhanced monitoring.
- 5. Power Connection:** Plug the controller into a standard 100-240V AC power outlet.
- 6. App Connection:** Download the AC Infinity app from your device's app store. Follow the in-app instructions to connect your Controller AI+ to your Wi-Fi network and pair it with the app. This enables remote control and access to AI features.

LARGEST GROW ECOSYSTEM

Mix and match up to 32 smart grow devices that can control their output in exact percentages, providing precision and energy efficiency.



TERRAFORM Series
Air Conditioning Units



CLOUDFORGE Series
Plant Humidifiers



THERMOFORGE Series
Plant Heaters



IONFRAME Series
Commercial Grow Lights



IONBEAM Series
Supplement Grow Lights



IONBOARD Series
LED Light Boards



CLOUDLINE Series
Inline Exhaust Fans



CLOUDLIFT Series
Floor Wall Fans



CLOUDRAY Series
Clip-on Fans



AIRBLAZE Series
Circulation Blower



AIRLIFT Series
Shutter Exhaust Fans



AIRTITAN Series
Room Exhaust Fans



UIS Lighting Adapters
Control Other Brands' Lights



UIS Control Plug
Control Outlet Devices

*Devices shown sold separately

Figure 2: The Controller AI+ integrates with a wide range of AC Infinity devices.

EXPANDABLE SENSORS

Built-in precise dual-zone climate sensors, with available add-ons (sold separately) like CO₂, hydro, soil, water and more for additional device control.



Figure 3: Expandable sensor options for comprehensive environmental monitoring.

OPERATING THE CONTROLLER

The Controller AI+ offers both manual and AI-driven automated control over your grow environment.

AI Control and Automations

The core feature of the Controller AI+ is its dynamic AI. It learns climate patterns and anticipates environmental changes to proactively adjust connected devices. This ensures optimal temperature, humidity, and VPD (Vapor Pressure Deficit) levels are maintained with precision.

GROW WITH AI

Controller actively learns about its environment, providing insights and automating equipment to exact percentages to achieve the perfect grow.



Figure 4: The AI system actively learns and automates equipment for optimal growth.

ADAPTIVE AI



CLIMATE PREDICTIONS

Anticipates climate spikes and adjusts equipment early to the exact percentages needed to counteract them.



PATTERN RECOGNITION

Analyzes climate patterns to create a daily light cycle that would minimize overall temperature increases.



ENERGY-SAVING

Factors equipment efficiency and indoor/outdoor climates to determine how to reach targets with minimal power.



DEEP LEARNING

Self-teaches the need to preemptively turn on humidifiers to offset the unintended drying effects from heaters.

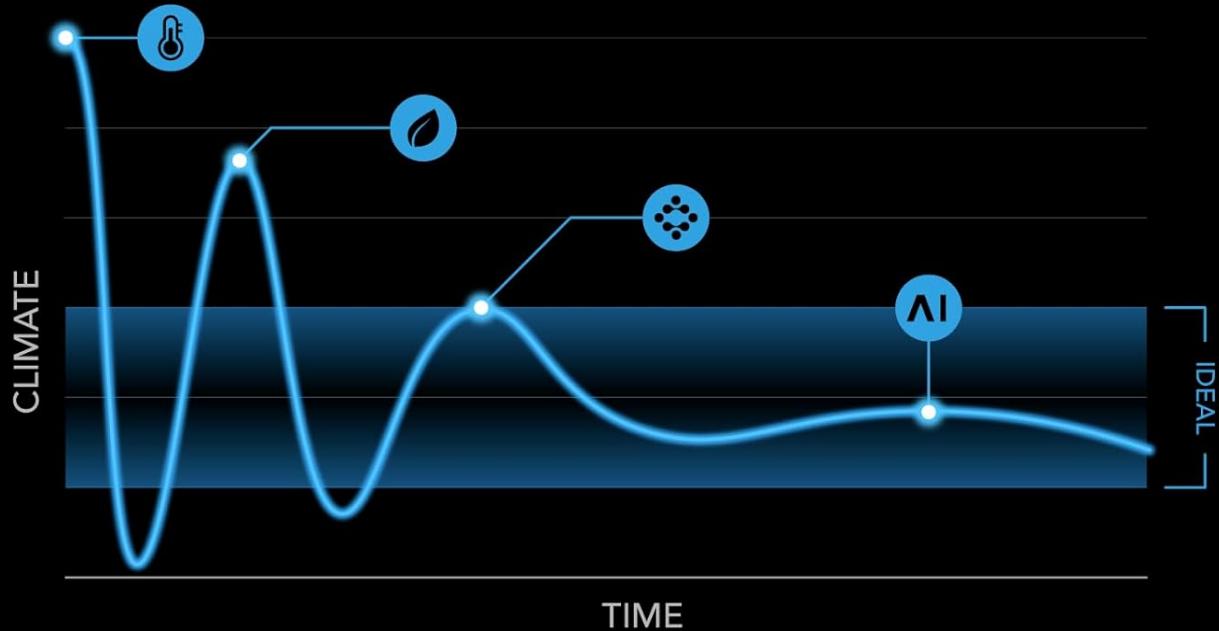


Figure 5: Adaptive AI capabilities for intelligent environmental management.

Mobile App Features

The AC Infinity app provides comprehensive control and monitoring capabilities:

- **Real-time Insights:** View current environmental data and AI-driven recommendations.
- **Guides and Alerts:** Access helpful growing guides and receive notifications for critical environmental changes.
- **Charts and Data Analysis:** Track historical data and analyze trends to optimize your grow cycles.
- **AI Chat Bot:** Interact with an AI assistant for personalized advice and troubleshooting.
- **Remote Control:** Adjust settings and control connected devices from anywhere via Wi-Fi.

AI APP ASSISTANT

Control your grow from anywhere with our Wi-Fi app. Features real-time AI insights, guides, and an AI bot that will answer questions about your grow.



Figure 6: The AI App Assistant provides comprehensive control and information.

Universal Compatibility

The Controller AI+ can integrate with non-AC Infinity grow lights and outlet devices using UIS™ adapters (sold separately), expanding its control capabilities.

MAINTENANCE

To ensure the longevity and optimal performance of your Controller AI+:

- Cleaning:** Regularly wipe the controller's display and casing with a soft, dry cloth. Avoid using abrasive cleaners or solvents.
- Sensor Care:** Keep the sensor probes clean and free from debris. For external sensors, follow their specific cleaning instructions.
- Environmental Conditions:** Ensure the controller is operated within its specified temperature and humidity ranges. Avoid exposing it to excessive dust or moisture.

- **Software Updates:** Periodically check the AC Infinity app for firmware updates for your controller. Updates often include performance improvements and new features.

TROUBLESHOOTING

If you encounter issues with your Controller AI+, refer to the following common troubleshooting steps:

- **Controller Not Responding:**

- Check power connection.
- Unplug and re-plug the power cable to perform a soft reset.
- Ensure the power outlet is functional.

- **Devices Not Recognized/Controlled:**

- Verify that devices are securely plugged into the controller's ports.
- If using splitters, ensure they are correctly connected.
- Check device settings within the AC Infinity app to ensure they are enabled and configured correctly.
- Perform a controller restart.

- **Wi-Fi Connectivity Issues:**

- Ensure your Wi-Fi network is active and the signal strength is adequate where the controller is located.
- Verify correct Wi-Fi password entry in the app.
- Restart your Wi-Fi router.
- Attempt to re-pair the controller with the app.

- **Inaccurate Sensor Readings:**

- Ensure sensor probes are clean and free from obstructions.
- Verify external sensors are securely connected to their respective ports.
- Calibrate sensors if the app or controller interface provides this option.

For persistent issues, consult the AC Infinity online support resources or contact customer service.

SPECIFICATIONS

Feature	Detail
Model	CTR89Q
Manufacturer	AC Infinity
Product Dimensions	5.87 x 0.94 x 3.43 inches (14.9 x 2.4 x 8.7 cm)
Item Weight	2.25 pounds
ASIN	B0DKZZCLP
Country of Origin	China
Batteries Required	No
Color	Black

Material	Plastic
Display Type	Digital display (4.5" Backlit LCD)
UPC	819137024403
App Control	Wi-Fi + Bluetooth
Devices Supported	8 (32 with Splitters)
Sensors Supported	3 (1 Built-In)
Voltage	100-240V AC

SPECIFICATIONS

MODEL | CONTROLLER AI+ (AC-CTR89Q)

APP CONTROL | Wi-Fi + Bluetooth

DEVICES SUPPORTED | 8 (32 with Splitters)

DISPLAY | Large 4.5" Backlit LCD

SENSORS SUPPORTED | 3 (1 Built In)

VOLTAGE | 100-240V AC



3.42"
(8.7 cm)

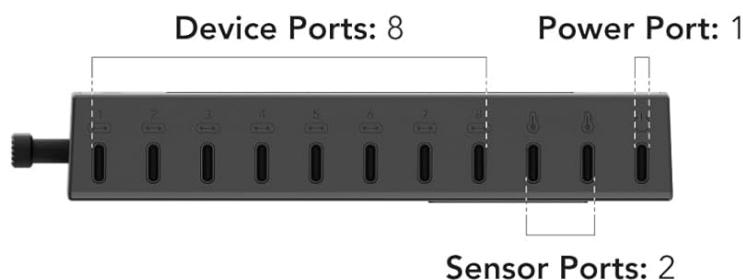
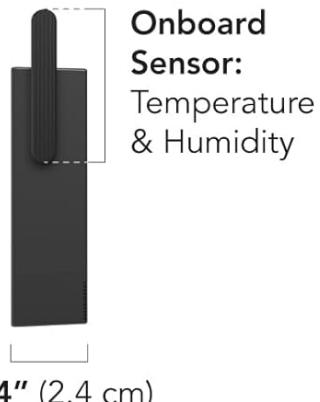


Figure 7: Physical specifications and port layout of the Controller AI+.

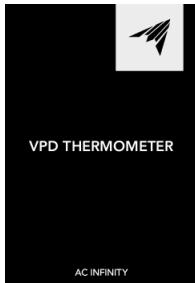
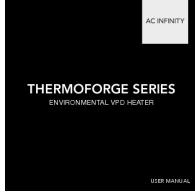
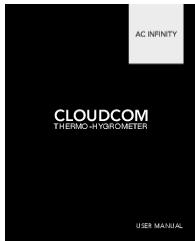
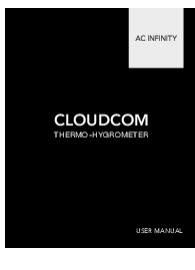
WARRANTY AND SUPPORT

AC Infinity products are designed for durability and performance. For information regarding product warranty, please refer to the official AC Infinity website or the warranty card included with your purchase.

For technical support, troubleshooting assistance, or to inquire about additional products and accessories, please visit the official AC Infinity support page or contact their customer service department. You can find contact information on the AC Infinity website: www.acinfinity.com.

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Related Documents - CTR89Q

	<p><u>AC Infinity VPD Thermometer User Manual - Model AC-TRV3</u></p> <p>Comprehensive user manual for the AC Infinity VPD Thermometer (Model AC-TRV3), covering features, setup, operation, programming, and warranty information. Learn to measure air and leaf VPD, temperature, and humidity for optimal environmental control.</p>
	<p><u>AC Infinity Controller 69 PRO+ Quick Start Guide</u></p> <p>A concise guide to setting up and operating the AC Infinity Controller 69 PRO+, an 8-port environmental controller for grow tents.</p>
	<p><u>AC Infinity Hydrene Series Dehumidifier Quick Start Guide - DHT2411X1</u></p> <p>Quick start guide for the AC Infinity Hydrene Series dehumidifier (model DHT2411X1). Learn how to set up, power, drain, clean, and program your dehumidifier for optimal environmental control in grow tents.</p>
	<p><u>AC Infinity ThermoForge Series Environmental VPD Heater User Manual</u></p> <p>Comprehensive user manual for the AC Infinity ThermoForge Series Environmental VPD Heater (models T3 and T7), covering installation, setup, programming, features, safety guidelines, troubleshooting, and warranty information.</p>
	<p><u>AC Infinity Cloudcom Thermo-Hygrometer User Manual</u></p> <p>User manual for the AC Infinity Cloudcom Thermo-Hygrometer, covering installation, features, app integration, programming, and warranty information.</p>
	<p><u>AC Infinity Cloudcom Thermo-Hygrometer User Manual</u></p> <p>User manual for the AC Infinity Cloudcom Thermo-Hygrometer, detailing features, installation, app integration, programming, and warranty information for models AC-CCB1 and AC-CCB2.</p>

