AC Infinity Bluetooth + WiFi

AC Infinity Controller 69 PRO Instruction Manual

Model: Bluetooth + WiFi
Brand: AC Infinity

1. INTRODUCTION AND OVERVIEW

The AC Infinity Controller 69 PRO is a smart environmental controller designed to provide precise control over various AC Infinity devices within a grow tent or similar controlled environment. It allows for automated adjustments of temperature, humidity, and Vapor Pressure Deficit (VPD) to maintain optimal conditions for plant growth. This controller supports connectivity via both Bluetooth and WiFi, enabling advanced programming, real-time data monitoring, alarms, and notifications through a dedicated mobile application.

The unit is capable of controlling up to four devices independently, including fans, grow lights, humidifiers, and heaters, offering comprehensive environmental management. Its robust design includes a thermal-alloy probe for accurate measurements and power-failure memory to retain settings, ensuring continuous operation.

Figure 1: AC Infinity Controller 69 PRO and its accompanying mobile application interface.
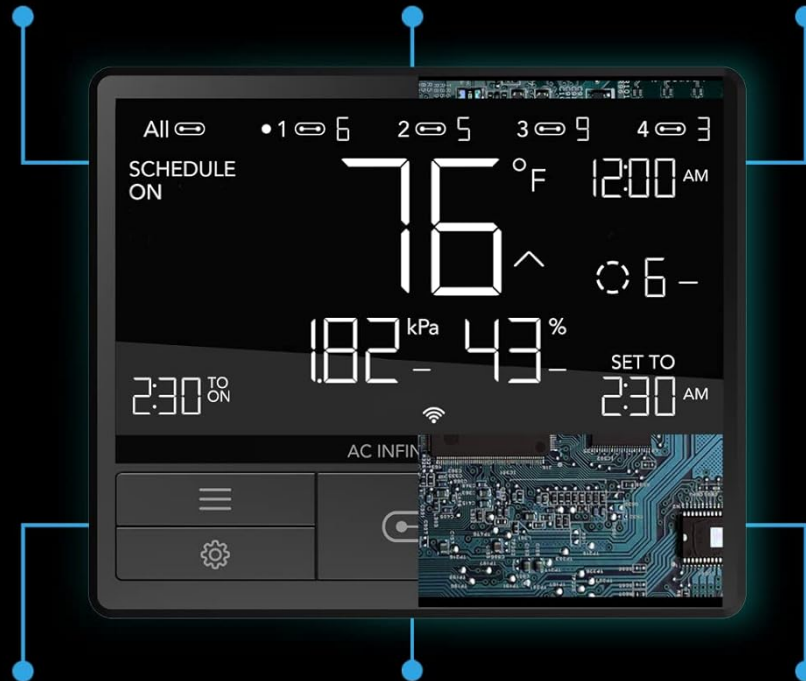
2. KEY FEATURES

- **Smart Environmental Control:** Automates temperature, humidity, and VPD levels.
- **Multi-Device Management:** Controls up to four independent devices (fans, lights, humidifiers, heaters).
- **Advanced Programming:** Features grow cycles, scheduling, timers, minimum levels, and custom transitions.
- **App Connectivity:** Bluetooth and WiFi support for remote control, data logging, alarms, and notifications.
- **Accurate Sensing:** Equipped with a thermal-alloy probe for precise temperature, humidity, and VPD measurements.
- **Power-Failure Memory:** Retains all settings and resumes programs automatically after power restoration.
- **UIS Platform Compatibility:** Designed to integrate seamlessly with the AC Infinity UIS platform for a comprehensive grow ecosystem.

Figure 2: Overview of the Controller 69 PRO's smart programming capabilities.

3. SETUP

3.1. Physical Installation

1. **Mounting the Controller:** The Controller 69 PRO can be mounted on a flat surface using the integrated mounting holes on the back. Ensure it is placed in a location where the display is easily visible and the sensor probe can reach the desired measurement area.

2. **Connecting Devices:** Connect your AC Infinity UIS-compatible devices (fans, lights, humidifiers, heaters) to the numbered ports on the back of the controller using their respective UIS cables. The controller can power itself via a connected AC Infinity UIS device, or an optional power adapter can be used if no UIS device is available for power.

3. **Positioning the Sensor Probe:** The thermal-alloy sensor probe (12 feet long) should be positioned within your grow environment to accurately measure temperature, humidity, and VPD. For optimal readings, place the probe near the plant canopy, away from direct airflow from fans or direct light from grow lights.

SPECIFICATIONS

UIS™

MODEL | CONTROLLER 69 PRO (CTR69P)

DEVICES SUPPORTED | 4 Devices

SENSORS | Temp & Humidity

PROGRAMMING | Independent

DEVICE LEVELS | PWM 10-Levels

PROBE LENGTH | 12 Feet

Figure 3: Physical dimensions and sensor probe details for installation.

3.2. Initial Power-Up and Connectivity

- Once connected, the controller display will illuminate.

- **Bluetooth Pairing:** To pair with the AC Infinity app, enable Bluetooth on your mobile device and open the app. The app will guide you through the pairing process.

- **WiFi Connection:** For remote access and advanced features, connect the controller to your WiFi network via the app. Ensure your mobile device is connected to a 2.4GHz network during the initial setup, as the controller may not support 5GHz networks directly.
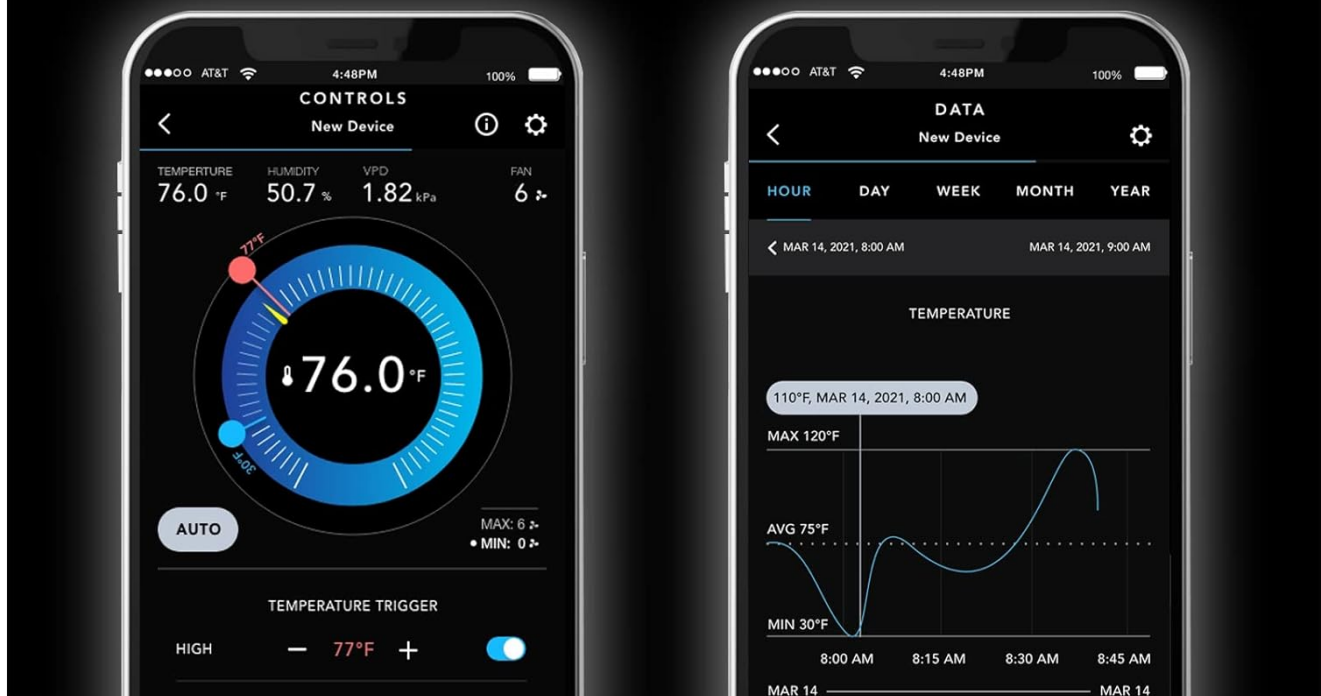
Figure 4: AC Infinity App interface for control and data monitoring.

4. OPERATING INSTRUCTIONS

4.1. On-Device Controls

The Controller 69 PRO features an intuitive display and physical buttons for direct control and monitoring:

- **Menu Button:** Access settings and programming options.
- **Link Button:** Used for pairing and device management.
- **Up/Down Arrows:** Navigate menus and adjust values.
- The display shows real-time temperature, humidity, VPD, and device status.

4.2. Mobile Application Controls

The AC Infinity app provides comprehensive control and monitoring capabilities:

- **Real-time Data:** View current temperature, humidity, and VPD.
- **Historical Data:** Access graphs and logs of environmental conditions over time.

- **Automations:** Set up complex rules to automatically adjust device output based on environmental triggers (e.g., turn on exhaust fan if temperature exceeds 80°F).
- **Grow Cycles:** Program different environmental settings for various stages of plant growth.
- **Schedules & Timers:** Set specific on/off times or duration-based operations for devices.
- **Alarms & Notifications:** Receive alerts on your phone for critical environmental changes or device status.

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Video 1: An overview of the AC Infinity UIS Platform, demonstrating how the Controller 69 PRO integrates with various devices for automated environmental control.

5. MAINTENANCE

- **Cleaning:** Regularly wipe the controller's display and body with a soft, dry cloth to remove dust. Do not use abrasive cleaners or immerse the unit in water.
- **Sensor Probe Care:** Keep the thermal-alloy sensor probe clean and free from debris. Avoid bending or damaging the probe cable.
- **Software Updates:** Periodically check the AC Infinity app for firmware updates for your controller to ensure optimal performance and access to new features.

6. TROUBLESHOOTING

- **Controller Not Powering On:** Ensure the controller is properly connected to a powered AC Infinity UIS device or an appropriate power adapter. Check all cable connections.
- **Inaccurate Readings:** Verify the sensor probe is clean and correctly positioned. Ensure it is not exposed to direct light, heat sources, or strong airflow that could skew readings.
- **App Connectivity Issues:**
  - For Bluetooth, ensure your mobile device is within range of the controller.
  - For WiFi, confirm your router is broadcasting a 2.4GHz signal and the controller is within range. Restarting your router or the controller may resolve temporary connection issues.
  - Check if the app or controller firmware needs an update.
- **Devices Not Responding:** Ensure devices are correctly plugged into the controller's ports. Check the programming settings in the controller or app to confirm they are configured to activate the devices under current conditions.

7. SPECIFICATIONS

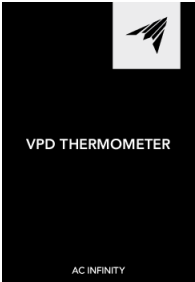| Feature	Detail
Model Number	Bluetooth + WiFi
Brand	AC Infinity
Display Type	LCD
Product Dimensions	3.66 x 3.11 x 0.98 inches (9.3 x 7.9 x 2.5 cm)
Item Weight	1.1 pounds (0.5 Kilograms)
Voltage	2.3E+2 Volts

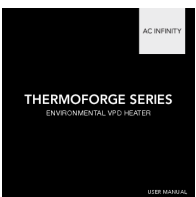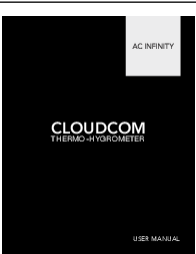| Feature	Detail
Connectivity	Bluetooth, WiFi
Sensor Probe Length	12 feet (366 cm)
Devices Supported	4
Sensors	Temperature & Humidity (VPD calculated)
Power-Failure Memory	Yes
Batteries Required	No
Country of Origin	China
UPC	819137023659

8. IMPORTANT SAFETY INFORMATION

- Read all instructions before using this product.
- Do not expose the controller or probe to water or excessive moisture.
- Ensure all electrical connections are secure and meet local electrical codes.
- Do not attempt to disassemble or repair the unit yourself. Contact qualified personnel for service.
- Keep out of reach of children and pets.
- Use only with compatible AC Infinity UIS devices or approved power adapters.

Related Documents - Bluetooth + WiFi

	[AC Infinity Controller 69 PRO+ Quick Start Guide](#) A concise guide to setting up and operating the AC Infinity Controller 69 PRO+, an 8-port environmental controller for grow tents.
	[AC Infinity VPD Thermometer User Manual - Model AC-TRV3](#) 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.
	[AC Infinity Hydrone Series Dehumidifier Quick Start Guide - DHT2411X1](#) Quick start guide for the AC Infinity Hydrone Series dehumidifier (model DHT2411X1). Learn how to set up, power, drain, clean, and program your dehumidifier for optimal environmental control in grow tents.

	[AC Infinity Controller 69 Pro User Manual - Environmental Control Guide](#) User manual for the AC Infinity Controller 69 Pro (CTR69P). Learn about setup, programming, key features like app control and UIS connectivity, and troubleshooting for optimal environmental management.
	[AC Infinity Thermoforge Series Environmental VPD Heater User Manual](#) 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.
	[AC Infinity Cloudcom Thermo-Hygrometer User Manual](#) User manual for the AC Infinity Cloudcom Thermo-Hygrometer, covering installation, features, app integration, programming, and warranty information.