

## AC Infinity AI-ATC

# AC Infinity Controller 2 User Manual

Model: AI-ATC  
Brand: AC Infinity

## INTRODUCTION

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The AC Infinity Controller 2 is an intelligent thermal fan controller designed to manage the temperature and airflow within AV cabinets, server racks, and other enclosures. It features an on-board processor and a digital LCD display, providing precise control over connected fans. This manual provides essential information for the setup, operation, and maintenance of your Controller 2.

## KEY FEATURES

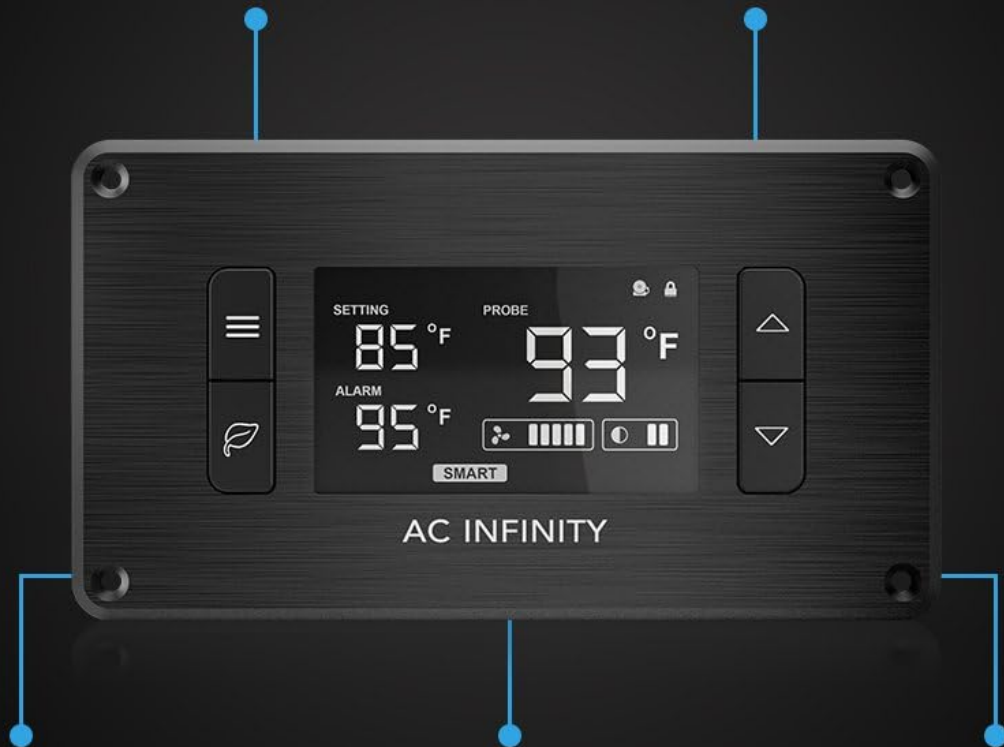
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- Intelligent thermal fan controller with on-board processor and digital LCD display.
- Controls up to six AC Infinity Cabinet and USB Fans.
- Automated programming that self-adjusts cooling power in response to changing temperatures.
- Features an alarm system, display lock, six fan speeds, two buffer options, and power failure memory.
- Complete kit includes precision thermal probe, mounting screws, and power wall adapter.

# INTELLIGENT PROGRAMMING

Automated Programming  
is Easy to Configure

Self Adjusts Cooling in  
Response to Temperatures



Six Speeds from  
Silent to Powerful

Corded Precision  
Thermal Probe

Alarm Trigger  
and Control Lock

Image: The AC Infinity Controller 2 display, highlighting its intelligent programming, six fan speeds, corded thermal probe, and alarm/control lock features.

## SETUP GUIDE

1. **Unpack Components:** Carefully remove the Controller 2, thermal probe, power adapter, and any included mounting hardware from the packaging.
2. **Mounting (Optional):** If desired, use the provided mounting screws to secure the Controller 2 to a flat surface. Ensure adequate ventilation around the unit.
3. **Connect Thermal Probe:** Plug the precision thermal probe into the designated "SENSOR" port on the Controller 2. Position the probe in the area where temperature monitoring is critical, typically near heat-generating components.
4. **Connect Fans:** Plug your AC Infinity Cabinet or USB Fans into the "FAN" ports on the Controller 2. The controller supports up to six fans.
5. **Power On:** Connect the power wall adapter to the "POWER" port on the Controller 2, then plug the adapter into a standard electrical outlet. The LCD display should illuminate.

# PLUG AND PLAY

The complete kit includes a high-precision thermal probe, a user manual, a corded AC power supply, and all hardware needed to easily mount the unit.



Image: The rear connections of the AC Infinity Controller 2, showing ports for the thermal probe, fans, and power input, illustrating its plug-and-play design.

## OPERATING INSTRUCTIONS

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### Display Overview

The LCD display shows the current probe temperature, the set temperature, and fan speed settings. Use the navigation buttons to adjust settings.



Image: Front view of the AC Infinity Controller 2, showcasing its digital LCD display and control buttons, along with the detached thermal probe.

## Setting Temperature and Fan Speed

- Press the **"SETTING"** button to enter temperature adjustment mode.
- Use the **UP** and **DOWN** arrows to set your desired temperature threshold. Fans will activate or adjust speed based on this setting.
- Press the **"FAN SPEED"** button (often integrated with setting button) to cycle through six fan speed settings, from silent to powerful.
- The controller features automated programming that self-adjusts cooling power in response to changing temperatures, ensuring optimal performance.

## Alarm System and Display Lock

- The alarm system can be configured to alert you if the temperature exceeds a set limit. Refer to the full user manual for detailed alarm setup.
- A display lock feature prevents accidental changes to settings.

## MAINTENANCE

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- **Cleaning:** Wipe the controller and thermal probe with a soft, dry cloth. Do not use abrasive cleaners or immerse the unit in water.
- **Probe Care:** Ensure the thermal probe remains clean and free of debris for accurate temperature readings. The probe is water resistant, but avoid prolonged submersion.
- **Fan Maintenance:** Periodically clean connected fans to ensure optimal airflow and prevent dust buildup.

# PRECISE MEASUREMENTS

Each controller features six-foot corded probes. It's thermalloy head design ensures precise millisecond temperature measurements and is also water resistant.



Image: A close-up of the AC Infinity thermal probe, emphasizing its six-foot cord and thermalloy head design for precise, water-resistant temperature measurements.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Display is off / No power	Power adapter not connected or faulty outlet.	Ensure power adapter is securely plugged into the controller and a working electrical outlet. Check for power failure memory settings.
Fans not turning on	Temperature not met, fans not connected, or fan speed set to zero.	Verify the probe temperature is above the set threshold. Check fan connections. Increase fan speed setting.

Problem	Possible Cause	Solution
Inaccurate temperature readings	Thermal probe is dirty, damaged, or improperly placed.	Clean the thermal probe. Ensure it is placed in an area representative of the cabinet's temperature. Inspect for damage.
Alarm constantly triggers	Alarm threshold set too low or insufficient cooling.	Adjust the alarm threshold to a higher temperature. Ensure fans are operating effectively and consider adding more fans if needed.

## SPECIFICATIONS

Attribute	Value
Model	AI-ATC
Brand	AC Infinity
Item Weight	6.4 ounces
Display Type	LCD
Operating Temperature	32 Degrees Fahrenheit (0°C)
UPC	854759004402
Product Dimensions	5.31 x 1.1 x 3.11 inches (13.5 x 2.8 x 7.9 cm)
Fans Supported	Up to six AC Infinity Cabinet and USB Fans
Fan Speed Settings	6
Temperature Range	32 to 140°F (0 to 60°C)
Voltage	5 Volts
Color	Black
Material	Plastic

# SPECIFICATIONS

MODEL | CONTROLLER 2

FANS SUPPORTED | 10 Watt

DISPLAY | °F or °C

BACKSIDE DIM | 11.2 x 6.8 cm

ZONES | 1 Probe (6-Foot Long)

FAN SPEED | 6 Settings

TEMP RANGE | 32 to 140°F

CUT HOLE DIM | 11.4 x 7.0 cm



5.31" (13.5 cm)

3.11" (7.9 cm)



2.68" (6.8 cm)

1.10" (2.8 cm)



4.41" (11.2 cm)

Ø 0.3 cm

2.68" (6.8 cm)

Power Cord Length:



Total Probe Sensor Cord Length:

6 FT (72") (183 cm)



6 FT (72") (183 cm)

Image: Detailed diagram showing the dimensions and key specifications of the AC Infinity Controller 2 and its power components.

## WARRANTY AND SUPPORT







For warranty information and technical support, please refer to the official AC Infinity website or contact their customer service directly. Keep your purchase receipt for warranty claims.

Additional support documents, including a PDF user manual, may be available on the product's Amazon listing page or the manufacturer's website.

For further assistance, you may visit the [AC Infinity Store on Amazon](#).



## Related Documents - AI-ATC

	<p><a href="#">AC Infinity Aircom Series Component Cooling System User Manual</a></p> <p>Comprehensive user manual for the AC Infinity Aircom Series component cooling systems, detailing features, installation, operation, programming, and warranty information for various fan and controller models.</p>
	<p><a href="#">AC Infinity Airplate Series Cabinet Cooling System User Manual</a></p> <p>Comprehensive user manual for the AC Infinity Airplate Series cabinet cooling systems, covering installation, programming, features, and troubleshooting for S, T, and P series fans and controllers. Includes product details, safety warnings, and warranty information.</p>
	<p><a href="#">AC Infinity AIRPLATE Series Cabinet Cooling System User Manual</a></p> <p>Comprehensive user manual for the AC Infinity AIRPLATE Series cabinet cooling systems, covering installation, operation, features, programming, and troubleshooting for models like S-Series, T-Series, and P-Series.</p>
	<p><a href="#">AC Infinity AIRPLATE Series Cabinet Cooling System User Manual</a></p> <p>User manual for the AC Infinity AIRPLATE Series cabinet cooling system, detailing product features, installation, powering, controller programming for T-Series and Multizone models, FAQs, and warranty information.</p>
	<p><a href="#">AC Infinity MULTIFAN Series USB Cooling Fan User Manual</a></p> <p>Comprehensive user manual for the AC Infinity MULTIFAN Series USB cooling fans, detailing product features, requirements, applications, setup, and warranty information.</p>
	<p><a href="#">AC Infinity AIRPLATE Series Cabinet Cooling System User Manual</a></p> <p>User manual for the AC Infinity AIRPLATE Series Cabinet Cooling System, detailing features, installation, operation, and troubleshooting for various fan and controller models. Learn how to optimize airflow and temperature control for your equipment.</p>