AC Infinity AI-CLT4

AC Infinity CLOUDLINE PRO T4 Inline Duct Fan with Smart Controller User Manual

Model: AI-CLT4 | Brand: AC Infinity

1. INTRODUCTION

The AC Infinity CLOUDLINE PRO T4 is a 4-inch inline duct fan designed for efficient ventilation and environmental control. This unit features a quiet, energy-efficient EC motor and integrates with a smart controller for precise management of temperature, humidity, and Vapor Pressure Deficit (VPD). It is suitable for various applications including hydroponic grow rooms, HVAC systems, AV closets, and general exhaust purposes. The included smart controller offers WiFi connectivity for remote access and advanced automation via a dedicated app.

Image 1.1: The AC Infinity CLOUDLINE PRO T4 inline duct fan with its smart controller and mobile app interface.

2. SAFETY INFORMATION

Please read all safety instructions before operating this product to prevent injury or damage. Retain this manual for future reference.

- **Electrical Safety:** Ensure the power source matches the fan's voltage requirements (120 Volts). Do not operate with a damaged cord or plug. Avoid exposing the unit to water or excessive moisture.

- **Installation:** Install the fan securely to prevent it from falling. Ensure proper ducting is used to direct airflow and prevent obstruction.

- **Moving Parts:** Keep fingers, loose clothing, and other objects away from the fan blades during operation. The fan operates at high speeds (up to 2800 RPM) and lacks an internal safety grill, posing a potential hazard if not properly enclosed within ducting.

- **Power Disconnection:** In case of emergency or maintenance, always disconnect the power supply at the wall outlet before handling the fan. Note that disconnecting the controller may cause the fan to default to full power.

- **Environment:** This product is designed for indoor use. Do not use in explosive or flammable environments.

3. PACKAGE CONTENTS

Verify that all components are present in your package:

- AC Infinity CLOUDLINE PRO T4 Inline Duct Fan
- Smart Controller (Controller 69 PRO)
- Thermal-alloy Probe (Temperature & Humidity Sensor)
- Power Cord
- Fan to Controller Cord
- Mounting Hardware (straps, screws)

4. SETUP

4.1 Fan Installation

1. **Mounting:** Securely mount the inline duct fan in your desired location using the provided mounting hardware. Ensure the fan is oriented correctly for the intended airflow direction (indicated by arrows on the unit).

2. **Duct Connection:** Connect appropriate 4-inch ducting to both ends of the fan. Use duct clamps or tape to ensure airtight seals. For optimal performance and noise reduction, consider using insulated ducting.
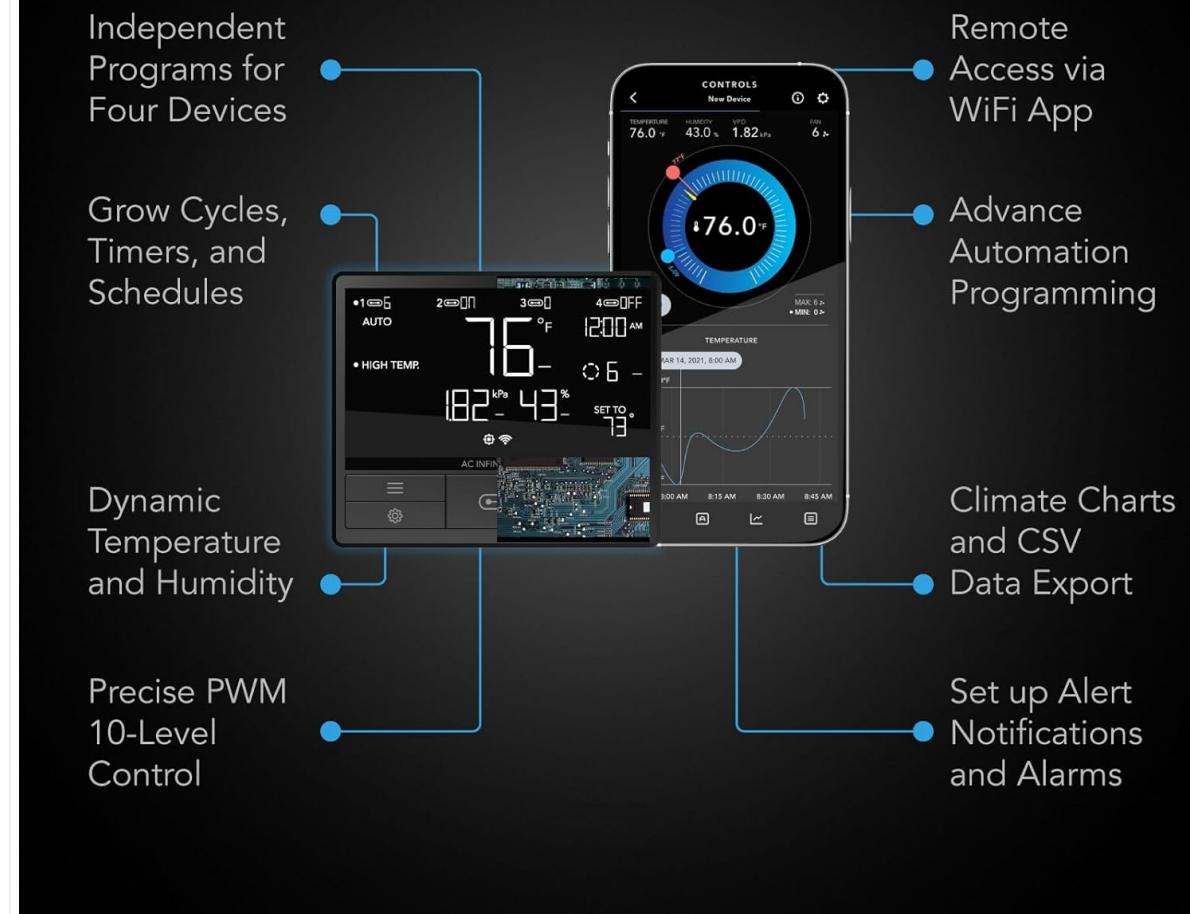
Image 4.1: Diagram illustrating a typical duct fan system setup, showing the fan connected to ducting and a carbon filter (filter not included).

4.2 Controller and Sensor Connection

1. **Connect Fan to Controller:** Use the provided fan to controller cord to connect the inline duct fan to the Controller 69 PRO.

2. **Connect Sensor:** Plug the thermal-alloy probe into the designated sensor port on the controller. Position the sensor in the area where you want to monitor temperature and humidity.

3. **Power Connection:** Plug the power cord into the controller, then plug the controller into a standard 120V electrical outlet.

4.3 App Integration (WiFi)

1. **Download App:** Download the AC Infinity app from the App Store (iOS) or Google Play Store (Android).

2. **Pair Device:** Follow the in-app instructions to pair your Controller 69 PRO with your mobile device via WiFi. This enables remote access and advanced programming features.

Image 4.2: Screenshot of the AC Infinity app showing automation settings for environmental control.

5. OPERATING INSTRUCTIONS

The CLOUDLINE PRO T4 offers both manual control via the physical controller and advanced control through the AC Infinity app.

5.1 Controller Functions

The Controller 69 PRO allows for dynamic temperature and humidity programming, including VPD settings. It features:

- **Independent Programs:** Set up to four independent programs for different devices or environmental conditions.
- **Grow Cycles, Timers, and Schedules:** Program specific operational periods.
- **Dynamic Temperature and Humidity:** Set target ranges for automatic fan speed adjustments.
- **Precise PWM 10-Level Control:** Adjust fan speed with fine granularity for optimal airflow and noise levels.

QUIET AND ENERGY EFFICIENT

Each unit features a precise Pulse Width Modulated (PWM) controlled EC-motor that is exceptionally quieter and uses less power than conventional AC-motors.
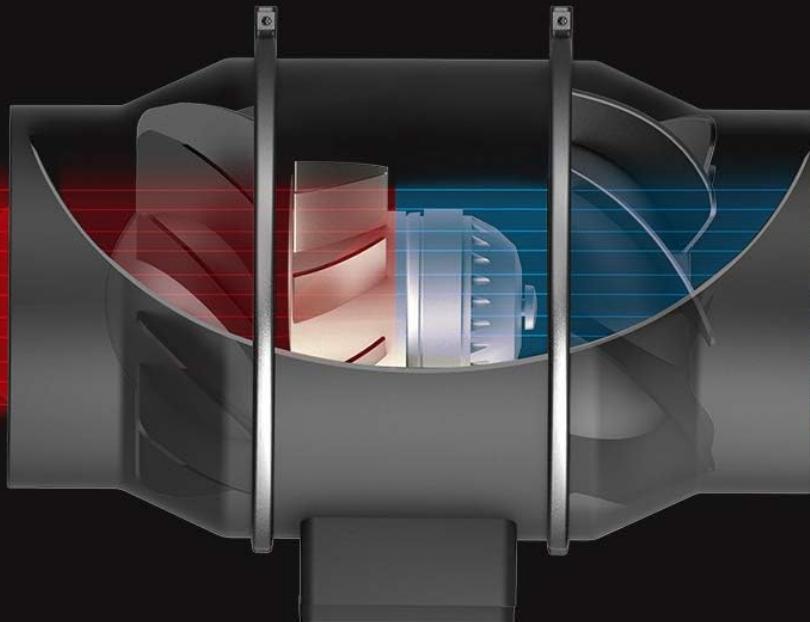
CLOUDLINE T6 shown. May not be the same model as this listing.

Image 5.1: Diagram detailing the smart control features of the Controller 69 PRO and its app interface.

5.2 App Control Features

The AC Infinity app provides enhanced control and monitoring capabilities:

- **Remote Access:** Control your fan and monitor environmental data from anywhere.
- **Advanced Automation Programming:** Create complex automation rules based on sensor readings, schedules, and grow cycles.
- **Climate Charts and CSV Data Export:** Visualize historical climate data and export it for analysis.
- **Alert Notifications and Alarms:** Receive push notifications for critical environmental changes or system events.

Image 5.2: Screenshot of the AC Infinity app displaying alert notifications.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your CLOUDLINE PRO T4 fan.

- **Cleaning Fan Blades:** Periodically inspect the fan blades for dust and debris accumulation. Disconnect power before cleaning. Use a soft brush or compressed air to gently remove buildup.

- **Ducting Inspection:** Check ducting for any leaks, tears, or obstructions that could impede airflow.

- **Sensor Cleaning:** Keep the thermal-alloy probe clean and free of dust for accurate readings.

- **General Inspection:** Regularly check all connections and mounting points to ensure they are secure.

7. TROUBLESHOOTING

If you encounter issues with your CLOUDLINE PRO T4, refer to the following common troubleshooting steps:

- **Fan Not Turning On:**

  - Ensure the power cord is securely plugged into both the controller and the wall outlet.
  - Verify the fan to controller cord is properly connected.
  - Check the controller settings to ensure the fan is not set to 'OFF' or a very low speed.

- **Incorrect Temperature/Humidity Readings:**

  - Ensure the thermal-alloy probe is securely connected to the controller.
  - Clean the sensor tip to remove any dust or debris.
  - Relocate the sensor if it is in direct contact with heat sources, cold drafts, or excessive moisture.

- **App Connectivity Issues:**

  - Ensure your mobile device is connected to a stable WiFi network.
  - Restart the AC Infinity app.
  - Check if the controller's WiFi indicator is active. If not, try re-pairing the device through the app.

- **Excessive Noise:**

  - Verify that the fan is securely mounted and not vibrating against surfaces.
  - Check for obstructions in the ducting or fan blades.
  - Ensure ducting is properly installed and not causing airflow restrictions.

8. SPECIFICATIONS

Detailed technical specifications for the AC Infinity CLOUDLINE PRO T4.
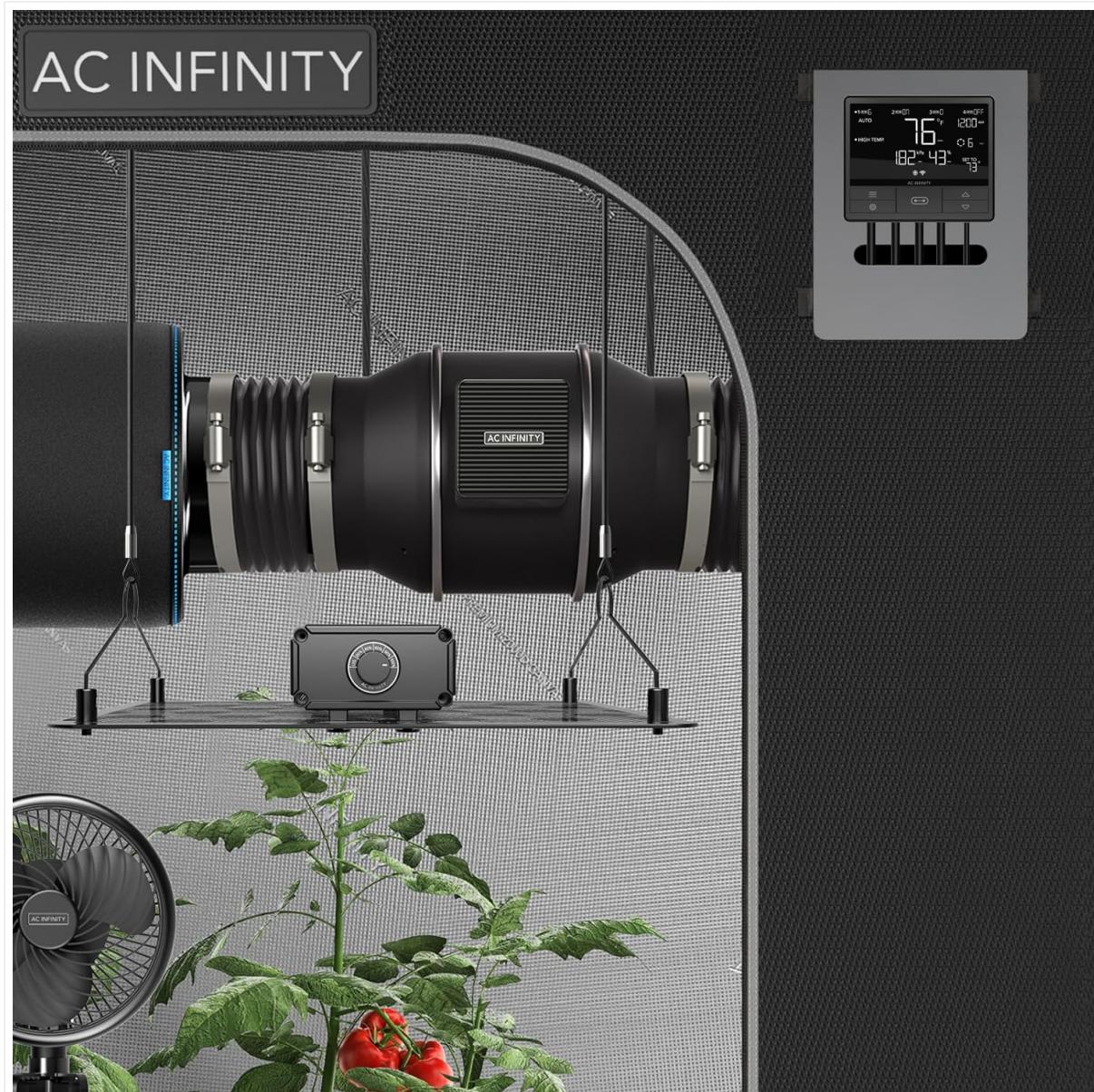
Image 8.1: Detailed specifications and physical dimensions of the CLOUDLINE T4 fan and controller.

Specification	Value
Model Name	CLOUDLINE T4 (AI-CLT4)
Duct Size	4-Inch
Air Flow Capacity	205 CFM
Noise Level	28 dBA
Wattage	21 watts
Voltage	120 Volts
Speed	2800 RPM
Motor Type	EC motor (PWM-controlled)
Product Dimensions	6.9"D x 7.4"W x 11.9"H

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Item Weight	0.01 Ounces (Note: This weight seems incorrect and likely refers to packaging or a component, not the full unit.)
Included Components	Remote, Cord
Control Method	Remote, App
Special Feature	App Operable, Remote Controlled, Water Resistant
Sensor Range (Temperature)	-40 to 257 °F
Sensor Range (Humidity)	0 to 100 %
Sensor Range (VPD)	0.01 to 9.99 kPa
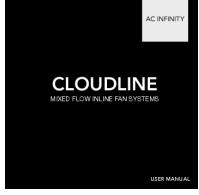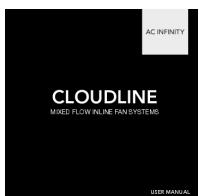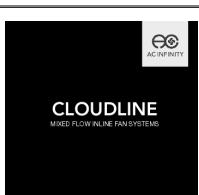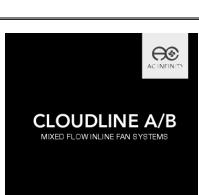
9. WARRANTY AND SUPPORT
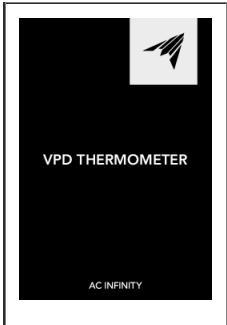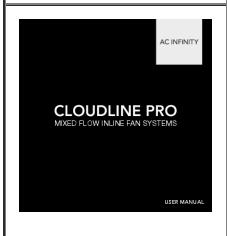
For warranty information and technical support, please contact AC Infinity directly. Details regarding specific warranty periods and terms can typically be found on the manufacturer's official website or by contacting their customer service department. Protection plans may also be available for extended coverage.

Manufacturer: **AC Infinity**

For further assistance, visit the AC Infinity Store on Amazon.

Related Documents - AI-CLT4

	AC Infinity CLOUDLINE Mixed Flow Inline Fan Systems User Manual User manual for AC Infinity CLOUDLINE mixed flow inline fan systems, detailing installation, setup, programming, app control, and maintenance for models like CLOUDLINE S4, S6, S8, S10, S12, T4, T6, T8, T10, T12.
	AC Infinity CLOUDLINE Mixed Flow Inline Fan Systems User Manual Comprehensive user manual for AC Infinity CLOUDLINE mixed flow inline fan systems, detailing installation, setup, operation, and features for S-Series and T-Series models. Learn about smart controls, quiet motors, and IP-44 protection.
	AC Infinity CLOUDLINE Mixed Flow Inline Fan Systems User Manual Comprehensive user manual for AC Infinity CLOUDLINE mixed flow inline fan systems, covering installation, setup, programming, maintenance, and troubleshooting for models like S4, S6, S8, S10, S12, T4, T6, T8, T10, T12.
	AC INFINITY CLOUDLINE A/B Mixed Flow Inline Fan Systems User Manual Comprehensive user manual for AC INFINITY CLOUDLINE A/B Mixed Flow Inline Fan Systems. Covers key features, installation, programming, and FAQs for optimal ventilation in grow tents and similar environments.

VPD THERMOMETER AC INFINITY	[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 **CLOUDLINE PRO** MIXED FLOW INLINE FAN SYSTEMS USER MANUAL	[AC Infinity Cloudline Pro Mixed Flow Inline Fan Systems User Manual](#) This user manual provides comprehensive instructions for the AC Infinity Cloudline Pro series of mixed flow inline fan systems, covering installation, features, programming, and support.