AC Infinity AC-PK-parent

AC Infinity AI Grow System PRO 4x4 Instruction Manual

Model: AC-PK-parent

1. INTRODUCTION

This manual provides detailed instructions for the assembly, operation, and maintenance of your AC Infinity AI Grow System PRO 4x4. This integrated system is designed to create an optimized environment for plant cultivation, featuring an AI-driven controller, advanced LED lighting, and efficient ventilation components. Please read this manual thoroughly before setup and operation to ensure proper use and longevity of your system.

AC Infinity AI Grow System PRO 4x4 assembled grow tent with plants inside. This image illustrates the complete system in an operational state.

2. SAFETY INFORMATION

Observe the following safety precautions to prevent injury or damage to the product:

- **Electrical Safety:** Ensure all electrical connections are secure and comply with local electrical codes. Do not operate the system with damaged cords or plugs. Disconnect power before performing any maintenance or assembly.
- **Water and Moisture:** Keep electrical components away from water. Avoid spraying water directly onto fans, lights, or the controller. Ensure proper drainage to prevent water accumulation.
- **Ventilation:** Ensure adequate airflow around the grow tent to prevent overheating of external components.
- **Weight Distribution:** Distribute the weight of hanging components (lights, fans, filters) evenly across the tent frame to maintain stability.
- **Children and Pets:** Keep the grow system out of reach of children and pets.

3. PACKAGE CONTENTS

Verify that all components listed below are present in your package. If any items are missing or damaged, contact AC Infinity customer support.
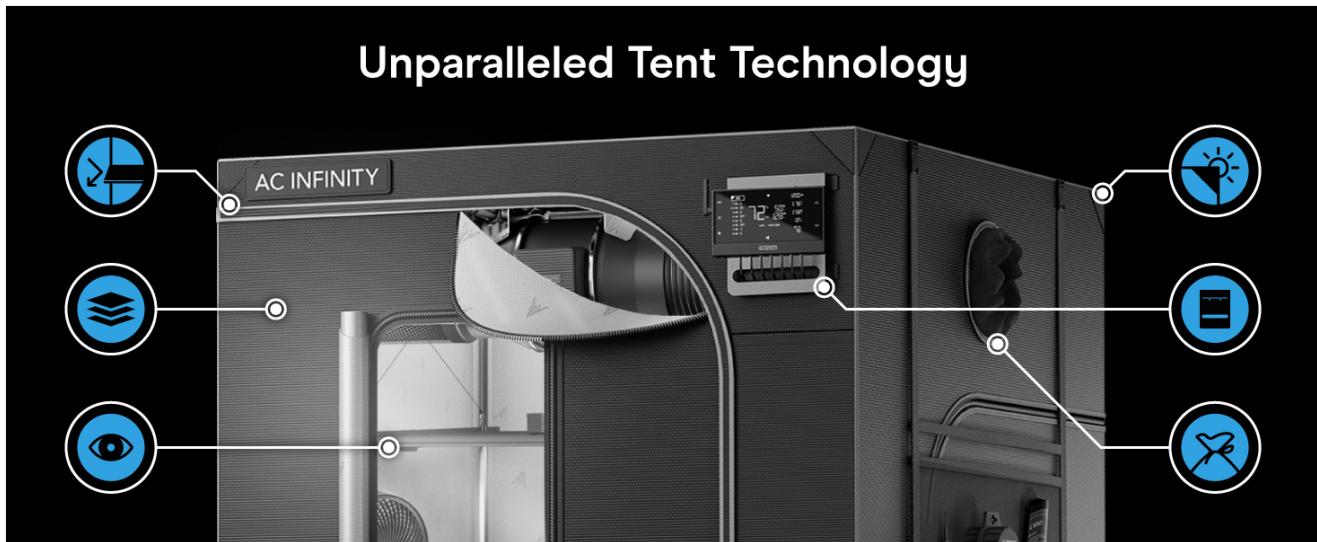

Diagram illustrating the components included in the AC Infinity AI Grow System PRO kit. Note: The tent size and pot count shown in this illustration may vary from your specific 4x4 kit.

- AC Infinity CLOUDLAB Grow Tent (48" x 48" x 80")
- Controller 69 Pro (AI+ Controller)
- CLOUDRAY S6 Clip Fan 6" (x2)
- IONFRAME EVO LED Grow Light (500W)
- Ducting 6"
- CLOUDLINE Inline Fan 6"
- Refillable Carbon Filter 6"
- Fabric Pot (x8)
- Trellis Net
- Rope Hanger (x2)
- Duct Clamps (x2)
- Plant Ties
- Pruning Snip

4. SETUP INSTRUCTIONS

4.1. Grow Tent Assembly

1. **Unpack Components:** Carefully remove all parts from the packaging and verify against the package contents list.
2. **Assemble Frame:** Connect the metal poles according to the included diagram to form the tent's structural frame. Ensure all connections are secure.
3. **Install Tent Cover:** Drape the tent fabric over the assembled frame. Zip up all zippers, ensuring the fabric is taut and properly aligned.
4. **Install Hanging Bars:** Attach the cross-support bars at the top of the tent. These will be used to hang the

LED light, inline fan, and carbon filter.

4.2. Component Installation

1. **Inline Fan and Carbon Filter:** Connect the 6" inline fan to the 6" carbon filter using the provided ducting and duct clamps. Hang this assembly from the top hanging bars inside the tent. Ensure the airflow direction is correct (typically pulling air through the filter and exhausting it).

2. **LED Grow Light:** Use the rope hangers to suspend the IONFRAME EVO LED Grow Light from the top hanging bars. Adjust the height according to your plant's growth stage.

3. **Clip Fans:** Attach the two CLOUDRAY S6 Clip Fans to the tent poles at desired heights for optimal air circulation within the plant canopy.

4. **Controller 69 Pro:** Mount the Controller 69 Pro on the exterior of the tent using the integrated hooks or a suitable mounting solution. Connect all components (inline fan, LED light, clip fans) to the controller's ports.

4.3. App Connection

1. **Download App:** Download the AC Infinity app from your device's app store.

2. **Power On:** Plug in the Controller 69 Pro.

3. **Pair Device:** Follow the in-app instructions to pair your Controller 69 Pro with your WiFi network and the app. This enables remote monitoring and control.

5. OPERATING INSTRUCTIONS

5.1. AI Controller (Controller 69 Pro)

The Controller 69 Pro is the central control unit for your grow system, featuring dynamic self-learning AI capabilities.

Visual representation of the AI Controller's adaptive features, including climate predictions, pattern recognition, and deep learning capabilities.

- **Climate Predictions:** The AI anticipates environmental shifts and adjusts connected devices to maintain optimal conditions.
- **Pattern Recognition:** Optimizes your environment by analyzing climate data and offering guidance.
- **Deep Learning:** Proactively manages devices like humidifiers to counteract environmental changes.
- **WiFi App Integration:** Access real-time data, insights, and control your system remotely via the AC Infinity app.

5.2. Lighting System

The IONFRAME EVO LED Grow Light utilizes Samsung LM301H EVO LEDs to provide a full spectrum optimized for all plant growth stages.

Detailed view of the LED grow light's spectrum, showing different light wavelengths and their effects on plant growth.

- **Spectrum Control:** The light can be programmed via the Controller 69 Pro to follow specific light cycles and intensity levels suitable for different growth phases.
- **Diode Positioning:** Optimized for uniform light distribution across the grow area.

5.3. Ventilation System

The system includes an EC inline fan and a refillable carbon filter for fresh air exchange and odor elimination.
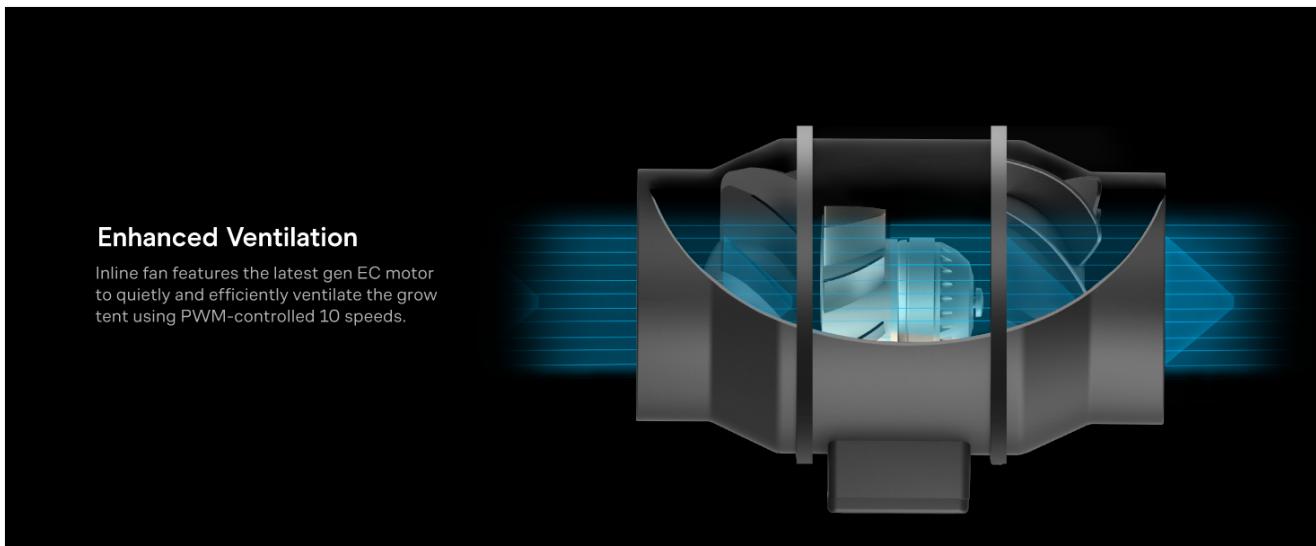

Illustration of the inline fan, carbon filter, and oscillating clip fan, highlighting the airflow components.

- **EC Inline Fan:** Features PWM-controlled EC motor with 10 speeds for quiet and efficient air movement, ventilation, and temperature/humidity regulation.
- **Carbon Filter:** Utilizes premium activated carbon for effective odor elimination. The refillable design allows for easy maintenance.

5.4. Air Circulation

The CLOUDRAY S6 Clip Fans provide tailored air movement within the tent.

- **Oscillating Clip Fans:** Offer 10 speeds, 10 oscillation ranges, and 10 dynamic wind modes to target specific areas and ensure uniform air distribution.

6. MAINTENANCE

6.1. Grow Tent Cleaning

- **Interior:** Wipe down the Mylar interior with a damp cloth and mild, plant-safe cleaning solution as needed to maintain reflectivity and hygiene.
- **Exterior:** Clean the exterior fabric with a soft brush or damp cloth to remove dust and debris.

6.2. Carbon Filter Maintenance

- **Refilling:** The carbon filter is refillable. Replace the activated carbon media periodically (typically every 6-12 months, depending on usage) to maintain odor elimination effectiveness. Refer to the filter's specific instructions for refilling procedures.

6.3. Component Inspection

- **Fans:** Periodically check inline and clip fans for dust buildup and clean as necessary to ensure efficient operation.
- **LED Light:** Inspect the LED light for any debris or dust on the diodes. Clean gently with a soft, dry cloth if needed.
- **Cables and Connections:** Regularly inspect all power cables and component connections for wear or damage.

7. TROUBLESHOOTING

If you encounter issues with your AC Infinity AI Grow System PRO 4x4, refer to the following common troubleshooting steps:

- **No Power to Components:** Check all power connections, ensure the Controller 69 Pro is plugged in, and verify that the power outlet is functional.
- **Controller Not Connecting to WiFi/App:** Ensure your WiFi network is active and within range. Restart the controller and your mobile device. Re-attempt the pairing process in the app.
- **Environmental Readings Inaccurate:** Ensure the sensor probe is positioned correctly and not obstructed. Clean the sensor if dust or debris is present.
- **Fans Not Operating/Making Unusual Noise:** Check power connections to the fans. Inspect for any obstructions in the fan blades. If noise persists, contact support.
- **LED Light Not Illuminating:** Verify the light is securely connected to the controller. Check the controller settings to ensure the light schedule is active and intensity is set above zero.
- **Odor Persists:** Check if the carbon filter is properly installed and sealed. If the filter media is old, consider refilling or replacing it.

For more detailed troubleshooting or specific error codes, consult the AC Infinity app's help section or contact customer support.

8. SPECIFICATIONS

Feature	Specification
Brand	AC Infinity
Model Number	AC-PK-parent

Product Dimensions	48"L x 48"W x 80"H
Chamber Volume	1536 Cubic Feet
Frame Material	Alloy Steel
Inner Material	Mylar
Outer Material	Polyester
Light Source Wattage	500 Watts
Item Weight	126.7 pounds
UPC	819137024335

9. WARRANTY INFORMATION

AC Infinity products are covered by a manufacturer's warranty. For specific details regarding your product's warranty period and terms, please refer to the warranty card included with your purchase or visit the official AC Infinity website. Keep your proof of purchase for warranty claims.
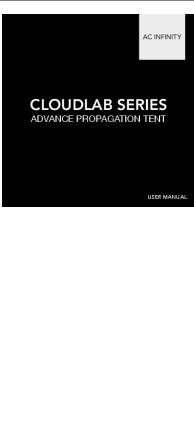
10. SUPPORT
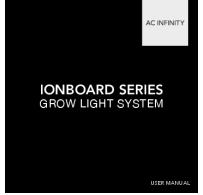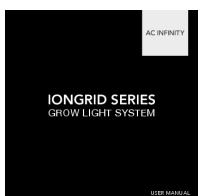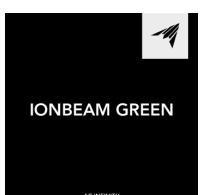
For technical assistance, product inquiries, or warranty support, please contact AC Infinity customer service:

- **Website:** Visit the official AC Infinity website for FAQs, support articles, and contact forms.
- **Email:** Refer to your product packaging or the AC Infinity website for the customer support email address.
- **Phone:** Refer to the AC Infinity website for available phone support options.

When contacting support, please have your product model number (AC-PK-parent) and purchase information readily available.

Related Documents - AC-PK-parent

[AC Infinity Cloudlab Series Advance Propagation Tent User Manual](#)
User manual for the AC Infinity Cloudlab Series Advance Propagation Tent, detailing features, product contents, installation steps, various configurations, controller setup, mounting options, and warranty information.

	[AC Infinity IONBOARD Series Grow Light System User Manual](#) Comprehensive user manual for the AC Infinity IONBOARD Series LED Grow Light System. Covers product features, installation, setup, starter guide, UIS™ platform integration, adding more lights, programming, other AC Infinity products, and warranty information.
	[AC Infinity IONBEAM Grow Light Bar System User Manual](#) User manual for the AC Infinity IONBEAM Grow Light Bar System, covering installation, setup, features, programming, and warranty information for models like IONBEAM S11, S16, U2, and U4.
	[AC Infinity IONBEAM Grow Light Bar System User Manual](#) Comprehensive user manual for the AC Infinity IONBEAM Grow Light Bar System, covering installation, features, product contents, setup, programming, and warranty information.
	[AC Infinity IONGRID SERIES Grow Light System User Manual](#) Comprehensive user manual for the AC Infinity IONGRID SERIES Grow Light System, covering installation, setup, programming, features, and troubleshooting for S-Series and T-Series models.
	[AC Infinity IONBEAM GREEN LED Grow Light Manual and Features](#) Comprehensive guide to the AC Infinity IONBEAM GREEN LED grow light, covering features, installation, programming, UIS platform integration, and warranty information. Includes product details and safety warnings.