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› Hon&Guan 4 Inch 212 CFM Air Filtration PRO Kit User Manual

Hon&Guan HG-US-ZH340

Hon&Guan 4 Inch 212 CFM Air Filtration PRO Kit User Manual

MODEL: HG-US-ZH340

1. Introduction

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of your Hon&Guan 4 Inch 212 CFM Air Filtration PRO Kit. This system is designed to optimize air circulation and filtration in various environments, including grow tents, hydroponic rooms, and other spaces requiring controlled ventilation. Please read this manual thoroughly before using the product to ensure proper function and safety.

2. Package Contents

Verify that all components listed below are present in your package:

- 4-Inch Inline Duct Fan with EC Motor
- Smart Temperature Humidity Controller with Environmental Probe
- 4-Inch Carbon Filter
- 8 Ft Ducting Hose (3-layer tough construction)
- Rubber Coupling
- Hose Clamps (2 pairs)
- Pair of Ratchet Ropes
- Power Cord



Image 2.1: All components included in the Hon&Guan 4 Inch Air Filtration PRO Kit. This image displays the inline duct fan, smart controller, carbon filter, ducting hose, rubber coupling, hose clamps, and ratchet ropes.

3. Setup and Installation

Follow these steps to correctly set up your ventilation system. Ensure all connections are secure to prevent air leaks and optimize performance.

1. **Prepare the Components:** Unpack all items and inspect them for any damage.
2. **Connect the Carbon Filter:** Attach the carbon filter to one end of the inline duct fan. Use a hose clamp to secure the connection tightly.
3. **Attach the Ducting Hose:** Connect the 8 ft ducting hose to the other end of the inline duct fan. Secure it with another hose clamp. The 3-layer tough ducting is designed for durability and flexibility.
4. **Integrate the Rubber Coupling:** If needed, use the rubber coupling to connect different diameter ducts or to provide a more secure, noise-reducing connection between components. The recess design on the coupling helps secure clamps more tightly.
5. **Mount the System:** Use the provided ratchet ropes to hang the inline fan and carbon filter within your grow tent or desired ventilation area. Ensure the system is securely suspended and balanced.

6. **Install the Smart Controller:** Mount the smart controller in an accessible location. Connect the fan to the controller using the provided cord, and plug in the environmental probe.
7. **Power Connection:** Plug the power cord into the inline duct fan and then into a standard electrical outlet.

Grow Tent Ventilation System



Image 3.1: Example installation of the ventilation system within a grow tent, showing the inline fan and carbon filter connected via ducting.

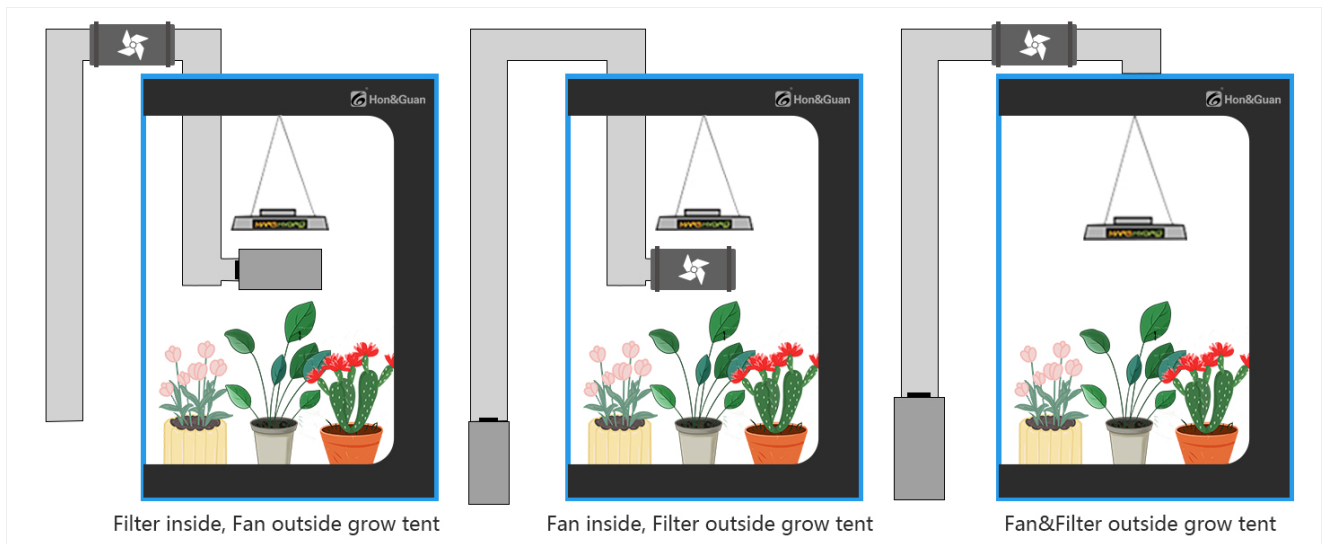


Image 3.2: Various configuration options for installing the ventilation system, including filter inside/fan outside, fan inside/filter outside, and both fan and filter outside the grow tent.

MULTI-LAYER PROTECTION FOR DUCTING HOSE



PET PROTECTIVE FILM
Reduces air friction and protects foil layer



STEEL SPRING STRUCTURED
Flexibility while supporting round shape





PVC FILM COVERED
Prevents light leaks and puncture holes



ALUMINUM FOIL
Reflects heat and cold; Provides fire resistance

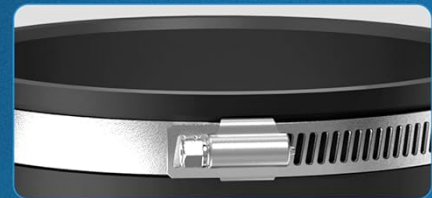
Image 3.3: Diagram illustrating the multi-layer construction of the ducting hose, featuring PET protective film, steel spring structure, PVC film, and aluminum foil for durability and performance.

EFFECTIVE NOISE REDUCTION & VERSATILITY



RUBBER MATERIAL

Effectively reduces the noise generated by air movement.



RECESS DESIGN

Easy to install clips on the recess, connect more tightly

Image 3.4: Close-up of the rubber coupling, highlighting its material for noise reduction and recess design for secure clamp installation.

4. Operating Instructions

The intelligent controller allows for precise environmental management. Familiarize yourself with its functions for optimal system performance.

4.1 Smart Controller Functions

- **Auto Mode:** Automatically adjusts fan speed based on set temperature and humidity parameters.
- **High Temp / Low Temp:** Sets thresholds for temperature control.
- **High Humid / Low Humid:** Sets thresholds for humidity control.
- **Timer:** Allows for scheduled operation.
- **Alarm:** Notifies users when environmental conditions exceed set limits.
- **10 Fan Speeds:** Manually adjust the fan speed from 1 to 10 for precise airflow control.
- **Environmental Probe:** Continuously monitors temperature and humidity, feeding data to the controller for automatic adjustments.

Intelligent Programming



Image 4.1: Detailed diagram of the smart controller interface, indicating buttons for mode, up/down adjustments, brightness, and display areas for probe temperature, probe humidity, fan speed, and set constant temperature/humidity.

4.2 EC Motor Benefits

The inline fan features a high-quality EC motor, offering significant advantages:

- **Energy Efficiency:** Saves up to 50% on energy consumption compared to traditional AC motors.
- **Low Noise:** Operates at a low noise level of 32dB, minimizing disruption.
- **Powerful Airflow:** Delivers up to 212 CFM, ensuring effective ventilation.
- **Extended Lifespan:** Designed for durability and long-term operation.

5. Maintenance

Regular maintenance ensures the longevity and optimal performance of your ventilation system.

5.1 Carbon Filter Maintenance

- The carbon filter utilizes RC 48 lightweight activated carbon with 1200+ IAV and a 38mm thick charcoal bed for effective odor absorption.

- Periodically check the carbon filter for signs of reduced odor absorption. The lifespan of the filter depends on usage and environmental conditions.
- Replace the carbon filter when odor control diminishes. Refer to the product specifications for compatible replacement filters.

LARGE ADSORPTION & STRONG DEODORIZING

RC 48 Lightweight Activated Carbon
38mm Thick High Absorption Charcoal Bed



1200+ IAV

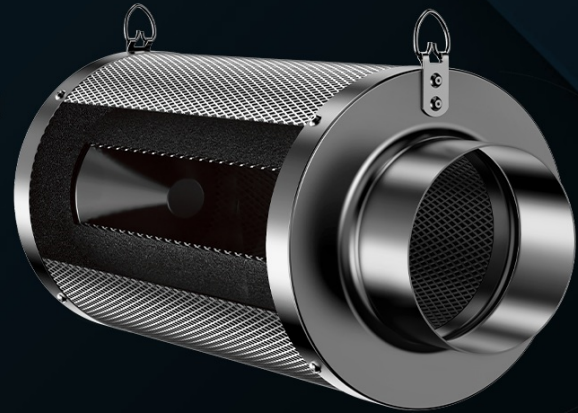


Image 5.1: Cross-section view of the carbon filter, illustrating the activated carbon bed and its role in odor adsorption.

DIAMOND-SHAPED OPENING DESIGN

The inner and outer galvanized steel mesh features a diamond-shaped design, significantly increasing the opening area to ensure maximum airflow.

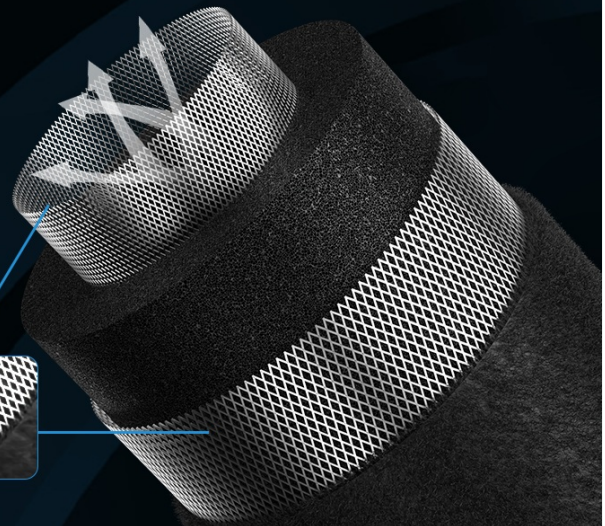


Image 5.2: Close-up of the carbon filter's inner and outer galvanized steel mesh, featuring a diamond-shaped design for maximum airflow.

5.2 Fan and Ducting Inspection

- Periodically check the inline fan blades for dust buildup. Disconnect power before cleaning. Use a soft brush or compressed air to remove debris.
- Inspect the ducting hose for any rips, pinholes, or blockages that could reduce airflow efficiency.
- Ensure all hose clamps and connections remain tight and secure.

6. Troubleshooting

This section addresses common issues you might encounter with your Hon&Guan Air Filtration PRO Kit.

• No Power to Fan/Controller:

- Check if the power cord is securely plugged into both the fan and the electrical outlet.
- Verify that the outlet is functional by plugging in another device.

- Ensure the fan-to-controller cord is properly connected.

- **Low Airflow:**

- Check for blockages in the ducting or carbon filter.
- Ensure the fan speed setting on the controller is appropriate for your needs.
- Inspect ducting for kinks, tears, or loose connections that could cause air leaks.
- Clean fan blades if dust buildup is present.

- **Excessive Noise:**

- Ensure the fan is securely mounted and not vibrating against surfaces.
- Check for loose components or debris inside the fan housing.
- Verify that the rubber coupling is correctly installed to reduce vibration noise.

- **Inaccurate Temperature/Humidity Readings:**

- Ensure the environmental probe is correctly connected to the controller.
- Verify the probe is placed in an area representative of the environment you wish to monitor, away from direct heat or moisture sources.

- **Odor Not Being Controlled:**

- The carbon filter may be saturated and require replacement.
- Check for air leaks in the system, especially around the carbon filter and ducting connections.

7. Specifications

Detailed technical specifications for the Hon&Guan 4 Inch Air Filtration PRO Kit.

Feature	Specification
Model	HG-US-ZH340
Duct Diameter	4 Inch
Motor Type	EC-Motor
Air Flow	212 CFM
Speed	5700 RPM
Noise Level	32dB
Product Dimensions	6.3 x 5.6 x 5.5 inches
Item Weight	9.72 pounds
Protection Rating	IP42 (Dust and liquid resistance)
Carbon Filter Type	RC 48 Lightweight Activated Carbon (1200+ IAV, 38mm thick bed)
Ducting Hose Length	8 Ft

SPECIFICATIONS

Model: HI-100PE

Duct Diameter: 4 Inch

Motor: EC-Motor

Speed: 5700 RPM

Air Flow: 212 CFM

Noise: 32dB



Image 7.1: Visual representation of key specifications and dimensions for the inline duct fan, smart controller, rubber coupling, carbon filter, and ducting hose.

8. Warranty and Support

For warranty information or technical support, please refer to the manufacturer's official website or contact their customer service department. Additional protection plans may be available for purchase to extend coverage beyond the standard warranty period.

- **2-Year Protection Plan:** Available for purchase.
- **3-Year Protection Plan:** Available for purchase.
- **Complete Protect:** Monthly plan covering eligible past and future purchases.