ram AIR-PRO II

RAPID AIR MOVEMENT®

Intelligent temperature and fan speed controller

Operating instructions

Product Description

1. IEC socket, power in (IEC plug to regional power supply)
2. Circuit breaker
3. Power socket for intake fan
4. Extractor fan
5. Mode button
6. Set button
7. Up button
8. Down button
9. Temperature probe
10. LCD screen

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Overview

The AIR-PRO II is a temperature controlled variable speed fan controller for horticultural use. All of the relevant parameters are user adjustable in order to maintain a suitable growing environment.

The AIR-PRO II has two power outlets, one specifically for intake fans and one specifically for exhaust fans. Each power outlet can control a fan with a maximum power of 7 amps (maximum load per unit 13 amps). Both the under temperature idle speed and the differential speed between the intake and exhaust fans are adjustable by the user in order to obtain and maintain the ideal growing environment temperature.

The AIR-PRO II will endeavour to maintain a stable temperature within the growing environment and will, by means of its unique software, work within the user settings to ensure that both the temperature and through flow of air are kept stable.

Key features

Because of the way in which the AIR-PRO II operates it will, once it has found an equilibrium, keep the fan's speeds as constant as possible, this will often be below the fan's maximum operating speed. Which means that the fans will be operating at the maximum efficiency in reference to power vs. performance and only using the minimum of electricity required.

Because of the consistent fan speeds, the AIR-PRO II will help to maximise the lifespan of the fan motors and minimise the noise created due to excessive air flow.

Functions

Mode button
This scrolls through all the user adjustable settings.
Press once for temperature settings.
Press twice for idle speed settings.
Press three times for differential settings.
Press four times to return to normal operation.

Set button
Not used on this model.

∧ Up button
This is used for adjusting settings higher.

∨ Down button
This is used for adjusting settings lower.

Temperature setting

This adjusts the trigger point at which the fans will change speed. If the measured environment temperature is higher than this set point, the fans will run at full speed to cool the area.

If the measured environment temperature is below this set point the fans will slow to the idle speed in order to maintain the required environment temperature.

Press the mode button once and the temperature display in the centre of the LCD screen will blink. The desired environment temperature can now be adjusted using the up and down buttons on the right side of the unit. Once the required temperature is displayed, either press the mode button again to move on to the idle speed setting or wait approximately 20 seconds and the unit will return to the normal operating screen. Your desired environment temperature is now set.

Idle speed setting

This sets the minimum operating speed that the intake and the extraction fans will run at when the environment temperature is below the required pre-set.

Press the mode button twice from the main screen display or once from the temperature setting display. There will now be a percentage symbol (%) showing in the upper right of the LCD screen, the central numeric display will be flashing, and the word **IDLE** will appear and flash in the dial graphic on the bottom left of the LCD screen.

The minimum speed (as a percentage) can now be adjusted using the up and down buttons on the right hand side of the unit.

A setting of 0 (zero) will slow the fans to a stop, a setting of 99 will keep the fans running at full speed regardless of the measured temperature. It may take a few attempts and some careful monitoring to get this setting exactly right for your requirements. This setting may also need to be adjusted as conditions within the growing area change.

Balance control setting

This sets a difference between the two fans in order to create a negative pressure within the growing area when required. When using filtration for air quality control on an exhaust fan, it is essential that all of the extracted air passes through the filter. Being able to set a speed/flow difference between the fans is key to this.

Press the mode button three times from the main screen display or once from the idle speed settings. There will now be a percentage symbol (%) showing in the upper right of the LCD screen, the central numeric display will be flashing, and the word **BALA** will appear and flash in the dial graphic on the bottom right of the LCD screen.

The balance or differential between the two fans can now be set using the up and down buttons on the right side of the unit. A setting of 0 (zero) means there will be no difference and both fans will run at full speed when cooling. For the user set idle when maintaining the environment temperature, a setting of 95 will have the maximum difference between the two fans. The unit will now either increase the exhaust fan speed or decrease the input fan speed to maintain this differential in both cooling mode and idle mode to ensure a negative pressure within the growing area.

Service and warranty

If the unit malfunctions or has been dropped or damaged, turn off the power and check for damage to the power lead or plug. Do not operate if damage has occurred. Do not take the unit apart or alter the unit in any way as this will void your warranty and may cause further damage to the unit or cause personal injury.

If returning a faulty product, please make sure the complete unit is returned to your retailer complete with proof of purchase - warranty will be void without proof of purchase. For your convenience, please make sure you make a record of your purchase date, retailer name, model number and date of manufacture.

IP30 RoHS WEEE ✓ C€ ♻

This product has been manufactured to comply with EEC directives 2006/95/EC and 89/336/EEC.

Help the environment by disposing of your product responsibly. The wheelie bin symbol indicates the product must not be disposed of in the domestic waste as it contains substances which can be damaging to the environment and health. Check your local authority for recycling points and advice.

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