



# AIR-3 Temperature, Humidity & CO<sub>2</sub> Control

Custom Automated Products offers a full range of equipment for the growing enthusiasts. The AIR-3 controls the temperature, humidity and CO<sub>2</sub> within the growing area. A thermostat and humistat are combined to activate the exhaust fan(s) when the temperature or humidity rises to the set point, disabling the CO<sub>2</sub> outlet. The photocell insures that the CO<sub>2</sub> outlet is only active during the day.

## OVERVIEW

*The AIR-3 integrates temperature, humidity & CO<sub>2</sub>. When the fans are running, the CO<sub>2</sub> is disabled.*

*The AIR-3 controls (lowers) temperature and humidity by turning on an exhaust fan or AC unit. External remote temperature probe is very reliable and it can be placed up to 30" from the unit.*

*The AIR-3 has two standard receptacles to connect your cooling devices.*

*The AIR-3 is a solid & reliable unit with a 3-year warranty!*

## CONNECTIONS & OPERATION

*There are certain steps which should be taken to ensure a successful installation of your AIR-3.*

- 1) Determine the desired location for the AIR-3. It should be at plant height and near a 120 volt power supply.
- 2) The external remote temperature probe can be uncoiled to place the probe up to 30" from the unit.

**\* NOTE: DO NOT BEND TIGHTLY OR KINK THE SILVER CAPILLARY TUBE.**

- 3) Mount the AIR-3 to a wall or other vertical surface. The ventilation slots must be positioned on the top and bottom of the unit.
- 4) Plug the exhaust fan or air conditioner into the top receptacle on the right side. **(Maximum 15 amps @ 120 volts)**
- 5) Plug your CO<sub>2</sub> valve or generator into the outlets on the left side.
- 6) Keep the AIR-3 far from any CO<sub>2</sub> generator or other sources of high heat to eliminate faulty temperature readings.
- 7) Adjust the thermostat and humistat to the desired highest level you want to maintain.
- 8) Connect the power cord to a source of 120 volt power. **\* Maximum COMBINED load 15 amps.**
- 9) Once connected and powered up, the photocell may take up to 2 minutes to detect daytime light levels and activate the CO<sub>2</sub> outlets

**\* NOTE: The AIR-3 requires "free air movement" to maintain temperature and humidity accuracy. The top and bottom of the enclosure has ventilation slots to provide air-flow for the internal humistat. We recommend using an oscillating fan or similar air movement device to provide fresh air for the plants, and the sensors.**

## PRECAUTIONS

**Do not expose the AIR-3 to water. Electrical shock may occur.**

**Do not disable the fuse or put in a fuse that is not rated for 15 amps at 120 volts.**

**Do not kink the capillary tubing! Your temperature will not read correctly.**



## TROUBLESHOOTING

If you are having problems with this unit, refer to these troubleshooting hints.

<i>Problem</i>	<i>Suggested Action</i>
<b><i>There are no lights and no function at all.</i></b>	Check fuse or main power. Check the main power plug and replace the fuse if required with a 15 amp rated fuse.  If the fuse blows repeatedly, verify that the devices connected to the unit are working properly and that they do not exceed a combined 15 amps.
<b><i>The CO<sub>2</sub> outlet never comes on.</i></b>	If the exhaust outlet is on, the CO <sub>2</sub> will not be allowed to run. Turn up the temperature and humidity to a higher setting.  Make sure the photocell is receiving enough light to activate the CO <sub>2</sub> function. You can test the photocell by shining a small flashlight on the lens.
<b><i>The exhaust fans are running so often, the CO<sub>2</sub> is hardly ever on.</i></b>	You may have too much heat building up in your area or too small of an exhaust fan. Reduce the heat sources or increase your fan size.  Air Cooled lighting may solve the problem. Heat from lighting is the number one problem with indoor growing.
<b><i>My CO<sub>2</sub> consumption seems to be quite high.</i></b>	Make sure your area is sealed. You may want to install a motorized damper to seal your exhaust fans when they are off. Consider connecting a cycle timer to the CO <sub>2</sub> outlet to cycle the CO <sub>2</sub> on and off.

## WARRANTY

***The AIR-3 is warranted against defects in workmanship and parts for Three Years.***

## SPECIFICATIONS

Main power voltage:	120 volts	Maximum amperage:	15 amps
Temperature control range:	50-115° F	Temperature operating range:	32-120° F
Humidity control range:	20 - 80% with a 5% differential	Humidity operating range:	0-99%
Relay operating life:	100,000 electrical	Photocell operation:	Activate CO <sub>2</sub> during day

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