



WARNINGS

ENSURE YOU READ THE INFORMATION MANUAL ENTIRELY PRIOR TO FIRST USE TO AVOID THE RISK OF ELECTRICAL SHOCK/FIRE/INJURY.

Do not immerse this AC-EC Controller in any liquid and protect the mains connections from liquids and sprays. The controller is designed for indoor use only.

Check the controller for damage before you plug it in. If it is damaged then DO NOT USE. Contact the manufacturer for advice on repair.

Protect the controller from heat and do not place it on a hot surface as the enclosure may be damaged and therefore make it unsafe.

Always ensure the controller is switched off at the mains before unplugging.

Ensure the power supply used is 230VAC \pm 10% and the frequency is 50Hz. Use of incorrect voltage or frequency will void the warranty.

The maximum load this product has been designed for is 2.3kW and this should not be exceeded.

The controller can be cleaned by disconnecting it from the mains electricity and wiping it with a soft cloth.

No ventilation is needed for normal operation of the controller.

DO NOT MODIFY this controller as this will void your warranty.

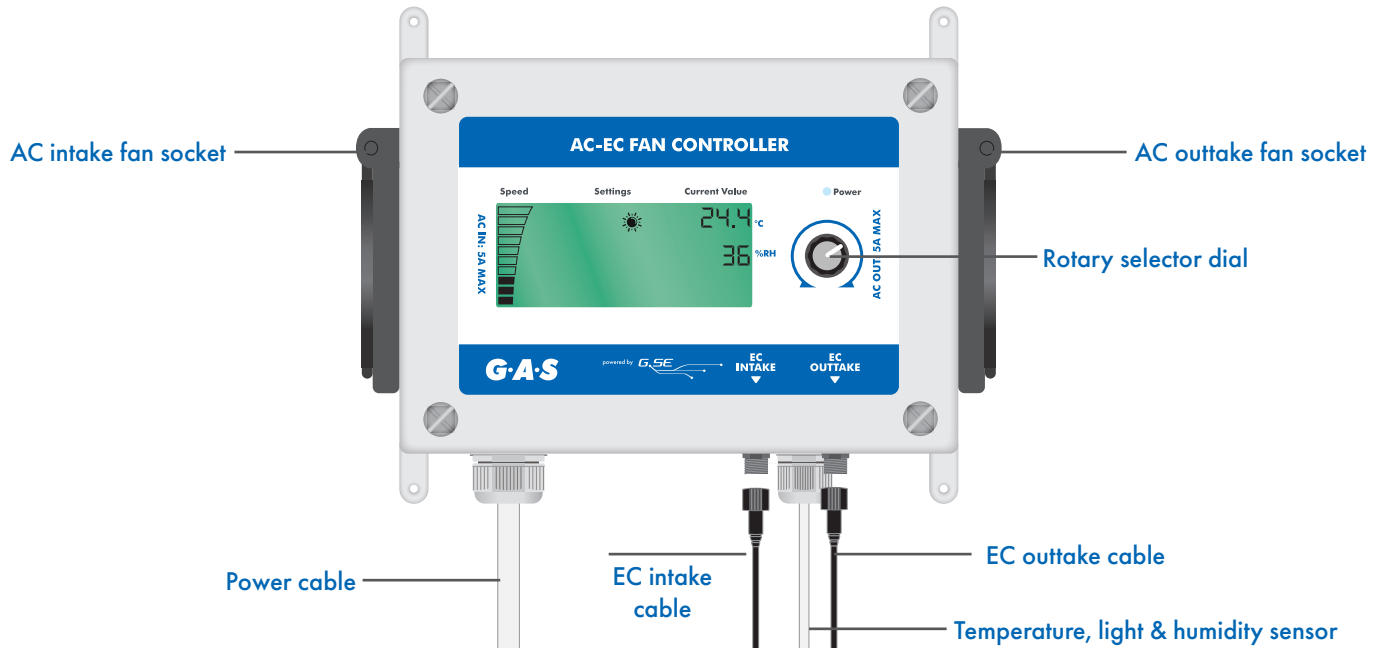
The mains plug is not replaceable, and changes to the plug will void the warranty. The plug has a replaceable fuse, in the event of failure, remove the plug from the electrical supply. Using a small screwdriver prise the fuse carrier from the plug, replace the 13 Amp fuse in the carrier and push back into the plug.

ONLY OPEN this controller to replace the sensor (as described in the replacement sensor instructions). There are no other user serviceable parts within the controller.

DO NOT use an extension cord with this product.

THANK YOU FOR PURCHASING THE AC-EC FAN CONTROLLER.

Please take a moment to read the instruction manual before using the device.



UNDERSTANDING THE ROTARY SELECTOR DIAL SETTINGS

The AC-EC controller has 15 settings.

You can select the settings menu by turning the dial and pressing once when the desired screen is reached. Turn the dial to change the values, press the dial again to store the value.

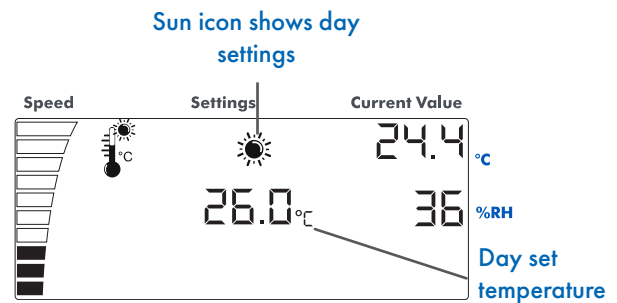
STEP 1

SET DAY TEMPERATURE

Press the dial once, the sun icon and the temperature icon will be displayed:  



To change the temperature, turn the dial until the desired temperature is displayed.

Press the dial again to save.



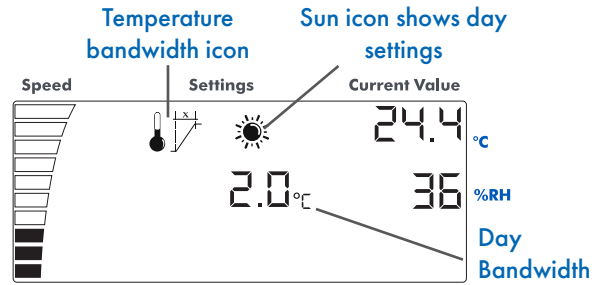
STEP 2

SET DAY TEMPERATURE BANDWIDTH

Turn the dial until you reach the sun icon with the temperature bandwidth icon displayed.  



Press the dial once, turn the dial until the desired bandwidth is displayed. Press the dial again to save

This value sets the number of °C from minimum to maximum fan speed. If the temperature is set to 26°C and the bandwidth is set at 2°C, then the fans will increase their speed from minimum speed at 26°C to maximum speed at 28°C.



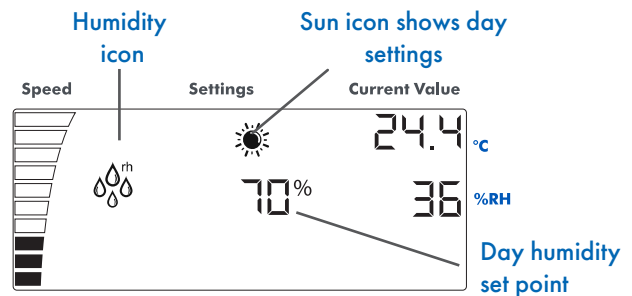
STEP 3

SET DAY MAXIMUM HUMIDITY

Turn the dial until you reach the sun icon with the humidity icon displayed.  



Press the dial once, turn the dial until the desired humidity is displayed. Press the dial again to save:

This value sets the maximum humidity you want to reach in your grow room before the fan speed increases to remove humidity past this set point.



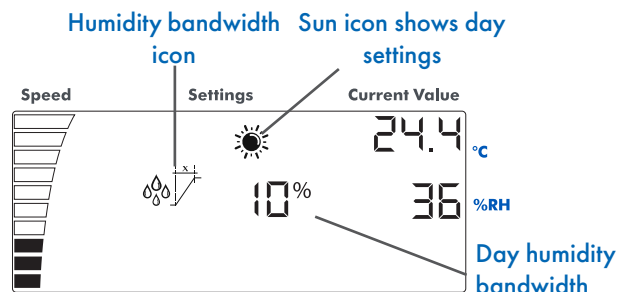
STEP 4

SET DAY HUMIDITY BANDWIDTH



Turn the dial until you reach the sun icon with the humidity bandwidth icon displayed.  

Press the dial once, turn the dial until the desired bandwidth is displayed. Press the dial again to save

This value sets the % humidity from minimum to maximum fan speed. If the maximum humidity is set at 60% and the bandwidth is set to 10%. Then the fans will increase from minimum speed at 60%, to maximum speed at 70%

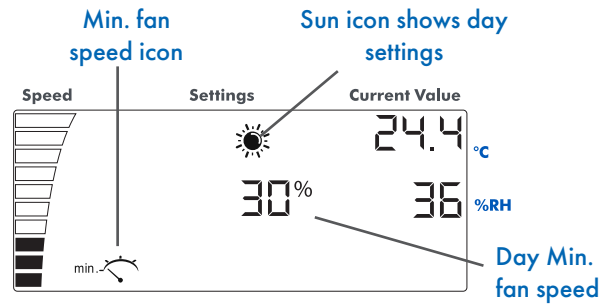


STEP 5 SET DAY MINIMUM FAN SPEED



Turn the dial until you reach the sun icon with the minimum fan speed icon displayed.  

Press the dial once, turn the dial until the desired speed is displayed. Press the dial again to save

You can select the minimum day speed you want your exhaust fan to run at. Once set, the fans will not operate below this set point.

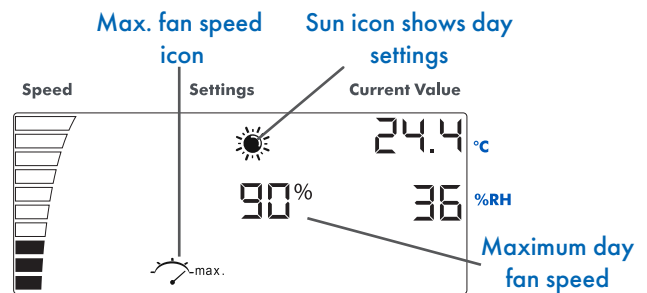


STEP 6 SET DAY MAXIMUM FAN SPEED



Turn the dial until you reach the sun icon with the maximum fan speed icon displayed.  

Press the dial once, turn the dial until the desired speed is displayed. Press the dial again to save.

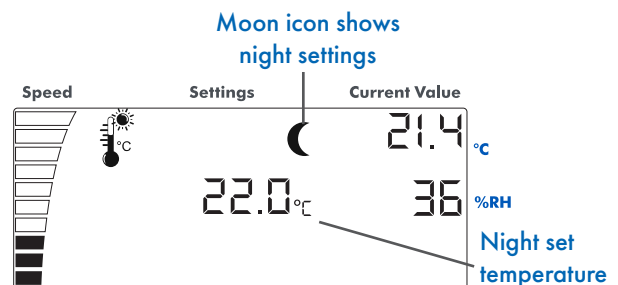
You can select the maximum speed you want your exhaust fan to run at. Once set, the fans will not operate above this set point.





STEP 7 SET NIGHT TEMPERATURE

Turn the dial until you reach the moon icon with the temperature icon displayed.  

Press the dial once, turn the dial until the desired night temperature is displayed. Press the dial again to save.

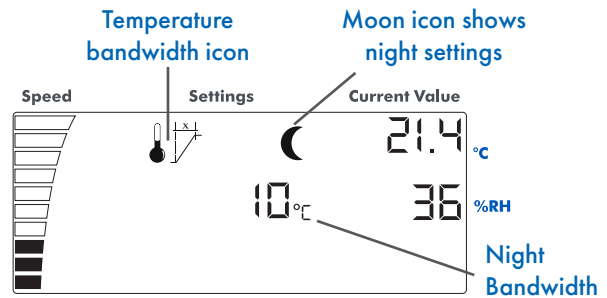


STEP 8 SET NIGHT TEMPERATURE BANDWIDTH

Turn the dial until you reach the moon icon with the temperature bandwidth icon displayed.  

Press the dial once, turn the dial until the bandwidth is displayed. Press the dial again to save.

This value sets the number of °C from minimum to maximum fan speed. If the temperature is set to 22°C and the bandwidth is set at 2°C, then the fans will increase their speed from minimum speed at 22°C to maximum speed at 24°C.

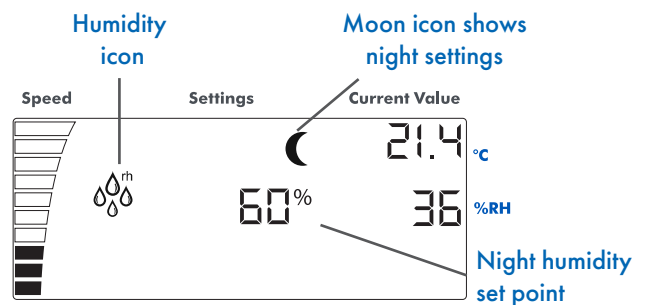


STEP 9 SET NIGHT MAXIMUM HUMIDITY



Turn the dial until you reach the moon icon with the humidity icon displayed.  

Press the dial once, turn the dial until the desired night humidity is displayed. Press the dial again to save.

This value sets the maximum humidity you want to reach in your grow room before the fan speed increases to remove humidity past this set point.



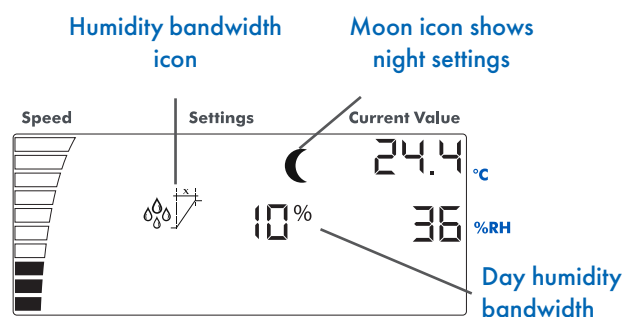
STEP 10 SET NIGHT HUMIDITY BANDWIDTH

Turn the dial until you reach the moon icon with the humidity bandwidth icon displayed.  



Press the dial once, turn the dial until the desired night humidity bandwidth is displayed.

Press the dial again to save.

This value sets the % humidity from minimum to maximum fan speed. If the maximum humidity is set at 60% and the bandwidth is set to 10% then the fans will increase from minimum speed at 60%, to maximum speed at 70%.

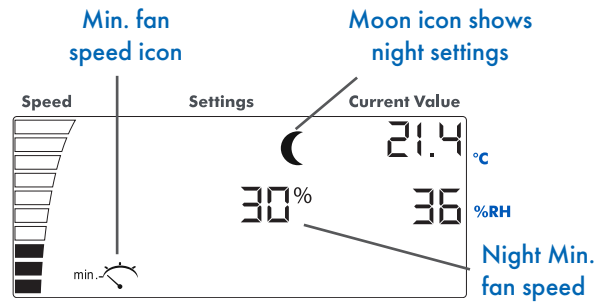


STEP 11 SET NIGHT MINIMUM FAN SPEED



Turn the dial until you reach the moon icon with the minimum fan speed icon displayed.  

Press the dial once, turn the dial until the desired minimum fan speed is displayed. Press the dial again to save.

You can select the minimum speed you want your exhaust fan to run at. Once set, the fans will not operate below this set point.

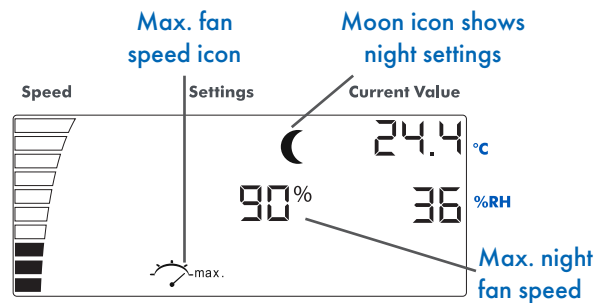


STEP 12 SET NIGHT MAXIMUM FAN SPEED


Turn the dial until you reach the moon icon with the maximum fan speed icon displayed.  

Press the dial once, turn the dial until the desired maximum fan speed is displayed. Press the dial again to save.

You can select the maximum speed you want your exhaust fan to run at. Once set, the fans will not operate above this set point.

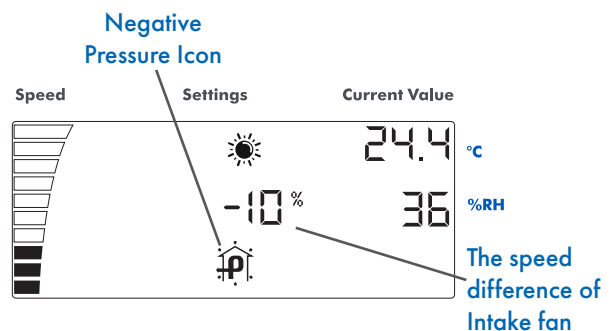


STEP 13 SET NEGATIVE PRESSURE

Turn the dial until you reach the negative pressure icon. 

Press the dial once, turn the dial until the desired negative pressure is displayed. Press the dial again to save.

Once day and night settings have been set, you can set the negative pressure, this is the % speed the intake fan runs below the outtake fan.

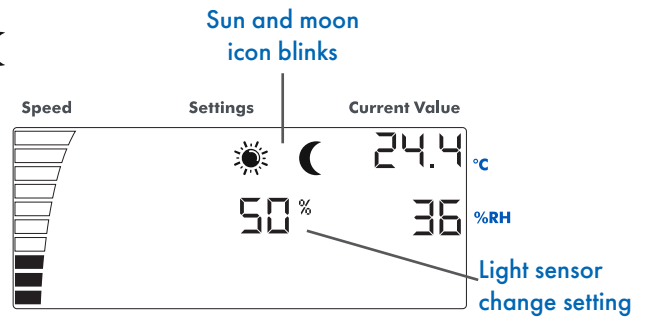


STEP 14 SET LIGHT SENSOR

Turn the dial until you reach the sun and moon icons. ☀️ 🌙

Press the dial once (the sun and moon icons will blink), turn the dial until the desired light sensitivity is displayed. Press the dial again to save.

You can change the sensitivity of the light sensor. This may be required if you have a sunrise/sunset feature on your lights. The lower the set value the less light is required to switch between day and night settings.

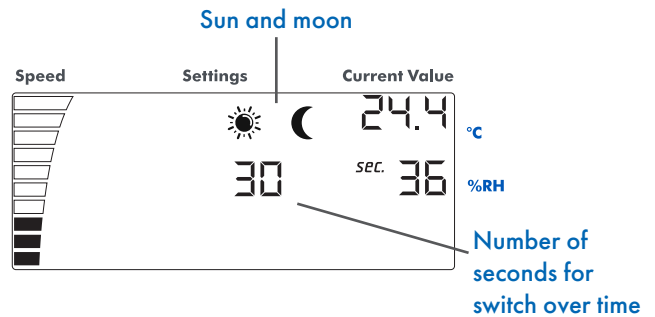


STEP 15 SET SWITCH OVER TIME

Turn the dial until you reach the sun and moon icons with the sec icon displayed. *SEC.* ☀️ 🌙

Press the dial once, turn the dial until the desired time is displayed. Press the dial again to save.

You can change the amount of time in seconds it takes to switch from day to night settings.



SUB SETTINGS INTRODUCTION

The AC-EC controller comes with a number of settings, which are pre-configured to the most commonly used value. These settings are:

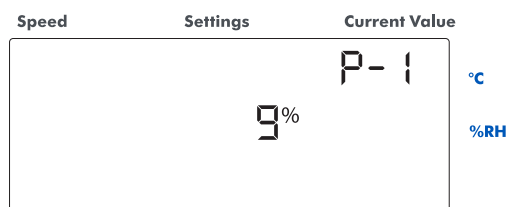
- | | | | |
|----|-----------------------|----|---|
| 1) | Minimum fan speed | 4) | Intake fan on/off when idling |
| 2) | Back light operation | 5) | Units °C/°F & Reset to factory defaults |
| 3) | EC output signal type | | |

As these settings do not need to be adjusted in normal use, they are not accessible from the main menu. However, if they do not meet your personal preferences, they can be changed using the sub settings menu as described below.

SUB SETTINGS ENTER SUB SETTINGS

Unplug the controller for 10 seconds, then press the selector dial and hold it down as you plug the unit back in. Continue to hold down the dial until the sub menu appears on screen, as shown.

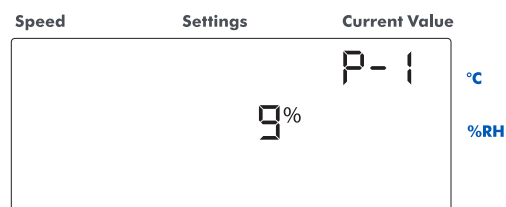
There are 5 sub settings that can be changed. You can scroll through the 5 options by turning the selector dial.



LOWEST MAXIMUM FAN SPEED P-1

The lowest maximum fan speed is the lowest speed you can select for maximum fan speed, the default is 9%.

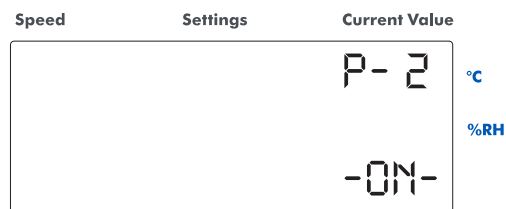
Press the selector dial to select the speed, turn the selector dial to increase or decrease the value. Press the selector dial again when you have the desired speed to save the value.



BACK LIGHT SETTING P-2

The screen back light can be set to 'On' or 'Auto'. 'Auto' is set as default, this turns the back light on when you press the selector dial and goes off after 5 seconds. Setting the back light to 'On' will turn it on permanently.

Press the selector dial to select the back light setting, turn the selector dial to scroll through 'On' or 'Auto'. Press the selector dial again when you have the desired value to save.



EC OUTPUT SIGNAL

P-3

The EC output signal can be changed between 0-10V or PWM (Pulse Wave Modulation). Refer to your fan to find the type of EC signal required, the default is 0-10V which works on all G.A.S EC fans.

Press the selector dial to select the EC output signal, turn the selector dial to scroll through 0-10V & PWM which will show on the screen as 'PULS'. Press the selector dial again when you have the desired value to save.

Speed	Settings	Current Value
		P- 3 °C
		0-10 %RH

INTAKE FAN SETTING

P-4

By default the intake fan is turned off at minimum speed. This setting can be changed in the menu shown below. 'ON' will keep the intake fan on at minimum speed.

Press the selector dial to select the setting, turn the selector dial to change between 'ON' and 'OFF'. Press the selector dial again when you have the desired value to save.

Speed	Settings	Current Value
		P- 4 °C
		OFF %RH

UNITS & RESET TO FACTORY SETTINGS

P-5

The temperature units can be changed from °C to °F.

Press the selector dial to select the setting, turn the selector dial to change between '°C' and '°F'. Press the selector dial again when you have the desired value to save.

Speed	Settings	Current Value
	°C	P- 5 °C
		%RH

P-5 RESET TO FACTORY SETTINGS













You can reset to factory settings in the sub menu. This can be useful if you want to set up the controller for a new environment.

Press the selector dial to select the setting, once the 'rSt' value is flashing press the selector dial down for 4 seconds, the reset will be complete.

Speed	Settings	Current Value
		P- 5 °C
		rSt %RH

SCREEN ICONS

This is intended to be a quick overview of the icons on the screen and what they mean.

1. Day		7. Max fan speed	
2. Temperature		8. Night	
3. Temperature bandwidth		9. Negative pressure	
4. Relative humidity		10. Light sensor sensitivity (blinking)	
5. Humidity bandwidth		11. Switch over time	
6. Min fan speed		12. Fan speed indicator	

For electrical products sold within the UK and the European Community. This symbol means that this product must not be placed into general waste at the end of the electrical product's useful life. It should be sent to a separate recycling facility. Check with your Local Authority for recycling advice in your country.

By recycling responsibly, it will help protect the environment and human health.





01226 748613

INFO@GLOBALAIRSUPPLIES.CO.UK

WWW.GLOBALAIRSUPPLIES.CO.UK