

Your SEN-1 / Sentry controller can control 2 separate EC type fans when using the WFAN-1 module. The WFAN-1 module connects to the Universal Sensor / Device RJ12 port on the SEN-1. Multiple EC fans can be “daisy-chained” together and controlled by one of the two PWM or 0-10v control signals on the WFAN-1 module. You can use 2-wire #24AWG or larger low-voltage multi-conductor cable to connect your EC fans to the screw terminals on the bottom of the WFAN-1 module.

***NOTE: Try placing the WFAN-1 module within 100ft / 30meters of the fan being connected with the low-voltage cable. If running longer distances between the WFAN-1 module, using shielded cable is recommended.**

The example shown below has a single EC fan connected to each of the 2-channels on the WFAN-1 module. This allows the user to use one fan for Intake, another fan for Exhaust. Each fan can be set for different speeds so that a negative pressure within the growing space is ensured at all times. This is just one example.

Optionally, multiple fans can be connected together. Each of the two control channels on the WFAN-1 module can control from 1-15 EC Fans. When multiple fans are connected together, all of the fans on each channel will run at the same speed.

***NOTE: Before connecting your fans, ensure that the EC fans you want to use have a standard PWM or 0-10v signal for speed control.**

1) Position the WFAN-1 module close to the fan being controlled, but also in an area that will remain dry... or you can use the optional ENC-1 sealed enclosure.

2) Once the WFAN-1 has been positioned, you can now connect the EC fan(s) to the WFAN-1 module. Use 2-wire / minimum 24AWG, low-voltage cable to connect the 2-wires from the EC fan, to the 2-screw terminals on the WFAN-1 for each channel you will be using.

3) Refer to the diagram printed on the lower right corner of the WFAN-1 module which shows the pin-out connections for the WFAN-1 module. There is a + and – terminal. Connect the correct 2 wires from your EC fan to these terminals. **Wires shown in Red and Blue for reference.*

4) If more than one fan will be connected to a single channel, run additional 2-wire low-voltage cable from the 1st fan, to the next fan. DO NOT EXCEED 15 FANS.

5) Once the fans are connected to the WFAN-1 module, you can connect a RJ12 cable from the WFAN-1 to the SEN-1 controller Universal Sensor & Devices ports.

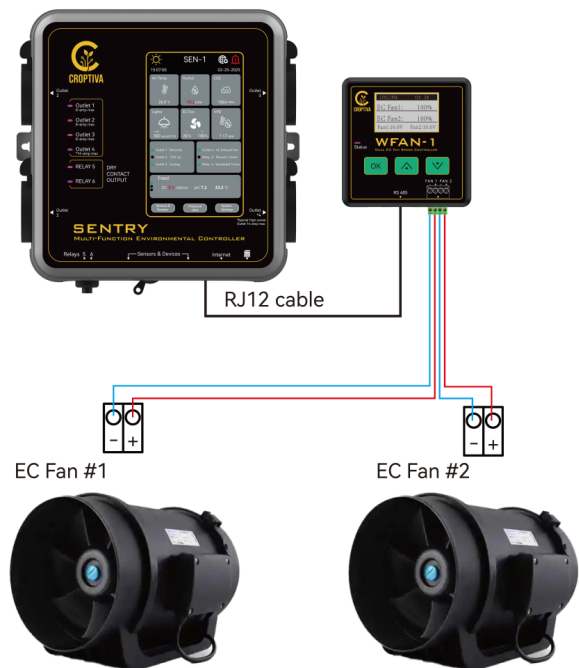
6) You must select to use PWM or 0-10v control mode on the WFAN-1 based on your type of EC fan. Press the OK button and then use the Up/Down arrows to select and then OK to confirm.

7) Go to the WFAN-1 settings on the SEN-1 controller by touching the Devices & Sensors button. There you will be able to select the desired mode you want each fan channel to operate.

8) The easiest way to test the fans are responding correctly is to select Fixed Speed mode. There you can select a fixed speed for the fans to be tested at to confirm they are responding to the SEN-1 controller. The LCD screen on the WFAN-1 module will confirm the current power % setting the SEN-1 controller is sending to each of the 2 fan channels.

9) After you have manually tested the fans to make sure they are being controlled correctly, you can select the desired control mode(s) with Day and Night settings within the SEN-1 controller.

EC Fan connections



PWM or 0-10v type EC fans can be used

**If the fans do not respond to changes, check the 2-wires connecting the fans to the WFAN-1, make sure they are connected correctly, and that you have selected the correct PWM or 0-10v mode for the fans you are connecting.*