

## Twin Controller PRO 4.5A / 7A / 14A – With Motion Flow

### What it does:

By dynamically controlling the running speed of an input and exhaust fan, the Twin Controller PRO creates the perfect climate by accurately maintaining temperature whilst keeping airflow under control at all times.

Once you have set your desired temperature level, the Twin Controller will constantly monitor the rooms temperature and make the necessary adjustments to fan speed to ensure the temperature is always maintained.

The Twin Controller PRO also has a secondary function, that when activated will safeguard against high humidity during the **dark cycle**. Humidity function can be switched on or off at any time.

### How it works:

The Twin Controller PRO uses our 'Motion Flow' software system; therefore it reacts completely differently to the usual types of controllers that typically only operate at 2 speeds.

**The Twin Controller PRO automatically adjusts the fans speed over 60 different settings for the smoothest fan speed control and the most accurate temperature maintenance out of any type of controller. This new technology also ensures less fan noise and a longer life for your fan.**

Negative air pressure is guaranteed through the perfect synchronization of both fans, creating a 'vacuum' inside the room. Unlike systems that allow independent control of both fans, the Twin Controller PRO is superior as it is impossible for the user to misjudge the balance of airflow.

Fine tuning of this is possible using the 'Extra Fan Speed' dial which increases the speed of the exhaust fan only.

The Twin Controller PRO is Plug & Play, so no wiring is needed. Just plug in your fans, set the desired temperature and minimum fan speed and the Twin Controller PRO will take care of the rest.

**When you first install the Twin Controller PRO, it requires 5-10 minutes to scan your room to make an evaluation for the correct running speed for your fan. After this time, the controller knows the exact speed your fans need to run to maintain the temperature.** From then on, the Twin Controller will make automatic adjustments to the fans' speed to always maintain the set temperature. There is no need to touch the controller again!

### How it works at night:

#### ***With Humidity Function Deactivated:***

During the dark cycle as temperature drops, the speed of both fans will reduce to the minimum fan speed set by the user. Airflow is always maintained to keep the room under constant negative pressure at all times.

#### ***With Humidity Function Activated:***

As temperature drops, the speed of both fans will reduce to the minimum speed set by the user. Then, once every hour, for a period of 10 minutes, the fans will increase and decrease their speed by 5 steps at a time. This allows the room to 'breathe' giving just enough air changes to prevent humidity from being able to climb. When the lights come back on, the controller switches back to its normal daytime function.

Setting the Twin Controller:

1. Position the controller in a convenient location and put the **Temperature Sensor** in the centre of the growing area. **Avoid putting the Temperature Sensor somewhere where it will take a false temperature reading, like in direct sunlight or in the cool incoming air from the ventilation system.**
2. Connect your fans to the Twin Controller
3. Plug the Twin Controller into an electrical outlet
4. Set your desired minimum fan speed\*\*
5. Set your desired temperature
6. Set the 'Extra Fan Speed' to its lowest setting

Now the Twin Controller will perform the scan of your room. **BE PATIENT! This can take up to 5-10 minutes!!** During the scan, the Twin Controller will run for a few seconds at 100% and then at its lowest fan speed setting. **After 5 -10 minutes the controller will assume the correct speed and will require no more manual adjustment. The Twin Controller will automatically make adjustments as necessary to maintain the temperature. At this point you can adjust the 'Extra Fan Speed' dial if necessary to create negative air pressure. In most circumstances it will not be necessary to make any adjustments.**

Activating and deactivating the Humidity Function.

To activate the night time humidity function, remove the cover from the light sensor and position in direct light. Now when the lights switch off, the humidity function is activated. The LED light on the face of the controller indicates that the humidity function is active.

To deactivate you must first unplug the controller from the mains socket. Then replace the cover over the light sensor. When the controller is reconnected it will operate the standard day time and night time function.

**\*\*Minimum Fan Speed: When you set the minimum fan speed on a Twin Controller PRO, you are setting the range the controller can operate between. You are not turning the fans to that speed immediately. For example, if you set the minimum speed to 20%, the controller will automatically adjust the fans speed anywhere between 20-100% in order to keep the temperature constant. We recommend setting the minimum fan speed to 20% to give the controller the greatest range of operation. Adjustments to the lowest speed can be made to suit your fan type if necessary.**

For more information on this product call us or visit [www.smscombv.nl](http://www.smscombv.nl)

Max Load:

Twin Controller PRO 4.5A: 2.25A or 500W Per Socket