

Frequently Asked Questions: Controller Programming

1. What are “Run Time” and “Idle Time” in vent settings?

When automatically opening or closing a vent, such as a roll-up curtain, it is beneficial to do it in stages. For example, if the vent is set to open at 75 degrees and the outside temperature is 45 degrees, the vent will open, only to close again quickly. It will continue opening and closing often as the temperature changes. However, if “Run Time” is set to 15 seconds and “Idle Time” to 4 minutes, the vent will open for 15 seconds, and the controller will monitor the resulting temperature for four minutes. This will repeat until the desired temperature is reached. This provides a tighter control on conditions while avoiding needless wear of equipment. The “Run Time” and “Idle Time” that work best will depend upon local climate and the characteristics of the greenhouse and can be adjusted at any time.

2. Is a louver programmed as a fan or as a vent?

It depends. If the louver is operated by a low voltage DC motor, it is programmed as a vent and uses two output terminals. If it is operated by a 110 V AC motor, however, it is programmed as a fan and uses one output terminal. This terminal sends a 24 V DC signal to operate a contactor box, switching the AC voltage to the motor.

3. How are output terminals assigned and how do I find the assignments?

Using the Aegis TEC+ as an example, vents are assigned first, fans are next, and heaters are last, with respect to the output terminal numbers. When configuring, the controller will ask for the terminal where a given function starts. For example, if for “First Vent Output” the user selects “1”, the first vent will use terminals 1-2, the second vent will use terminals 3-4, etc. The same pattern is followed by fans and heaters. When in the main operation screen, pressing a key for any function will show the output terminal designation for that function.

4. Why am I getting error codes on the screen?

Error codes usually indicate that programming is out of order or that two functions have been assigned to one output. See question #3.

5. What is an override?

An override is when one function takes priority over another function. For example, if a vent is open because of the temperature, and a rain sensor is programmed to close the vent if it rains, the rain requirement “overrides” the temperature requirement and the vent is closed. The same applies to wind and humidity sensors.

6. Where should I start when programming and setting up my controller?

Start by writing a list of everything you will connect to your controller. Then, go through the configuration menu, where you assign each accessory to its function and terminal connection. Finally, use the settings menu to set the parameters that will control each function.

7. What are “Dep” and “Diff”?

“Dep” is short for light deprivation, using shade curtains to block light. If you are not using light deprivation curtains set “Dep” to zero. “Diff” is short for time differential, which allows different settings at specified times of the day. It is best and easiest to not program a “Diff” period on initial programming. After everything else is working you can return to the config menu and add differential periods.