## The three best reasons to upgrade to an

# Enviro STEP:

Your crops, your utility bill and your peace of mind.

The EnviroSTEP control transforms the way your greenhouse functions. With better intelligence, more sophisticated control options and powerful accessories like the Weather Station, Alarm Manager, Lightning Protector and STEPsaver software, it gives you the support you need to be successful. The best news of all - it's simple to install and easy to use.

When we introduced the STEP 50A 40-years ago it revolutionized the greenhouse industry. Since that time we have continued to create innovative solutions for growing environments, keeping pace with advancements in plant sciences and computer engineering. Today we know that intricate shifts in temperature, watering, CO2, light and humidity levels create a better crop. Rising energy costs have driven the need to reduce overhead using better equipment responses and energy curtains.



### WHAT'S THE DIFFERENCE?

Wadsworth designs and builds two types of environmental controllers: staged and integrated. Staged controls react to temperature changes by activating groups of heating and cooling equipment as the temperature rises or falls. Integrated controllers set parameters for each piece of equipment, allowing it to respond independently and with greater efficiency.

The EnviroSTEP integrates all facets of the greenhouse environment by managing temperature, humidity, light level, CO2 and watering.

Many customers switch from staged to integrated controls as they improve and refine the greenhouse climate.

## BENEFITS AND COMPARISONS

#### Ramping

- The EnviroSTEP has precise control, which allows a slow transition between temperature periods so no heat is wasted. This is known as ramping.
- The STEP 50A transitions between the day and night periods using a photocell. The result can be a rapid and costly shift from the day to night period as the control works to reach cooler night temperatures by dumping the heated air from the daytime period.

#### Three separate temperature setpoint periods

- Day, Night and DIF setpoints offer three separate temperature periods.
- Why separate heating and cooling setpoints? The EnviroSTEP offers a variable interval when neither cooling nor heating equipment is running. It's possible to set extremes such as a heating setpoint at 45°, to prevent frost, and cooling at 75°, offering, in this example, an acceptable span for the crop, when no heating and cooling costs are incurred.

#### Design

- The EnviroSTEP has a bright, easy-to-read screen with a home screen that displays current conditions. The STEP 50A has no screen.
- You can use STEP Saver software to review crop settings and track your greenhouse remotely.

#### **Increased Performance**

- The STEP 50A operates heating and cooling equipment only.
- The EnviroSTEP operates virtually any greenhouse equipment and offers the option of using additional sensors like a weather station or soil temperature probes.

#### How do I switch the controls?

• The EnviroSTEP cabinet is identical in size to the STEP 50A, so they are easily exchanged. Generally, wiring remains in place. Simply disconnect the equipment wiring, trade out controls and reconnect. If the equipment being operated remains the same, the contactor panel will work with either control.



## **Comparison of** WADSWORTH environmental controls

## Staged STEP Control

**Integrated STEP Control** 

STEP 50A

**EnviroSTEP** 

### **FEATURES**

Number of outputs or stages	5 stages; 2 heat & 3 cool	12 outputs
Setpoint periods	Day, night	Day, night, DIF
Ramping	No	Yes
Includes sensors & cables	Aspirated temp sensor; Optional RH sensor	Aspirated & RH sensors; Additional sensors available
Manual override	Yes	Yes
Display	No display	New bright screen; full menu & LED lights
Logs & graphs	No	Yes
Equipment it controls	Heating & cooling	Virtually any equipment
Variable speed & modulating equipment	Limited	Yes
Light control	No	Yes
Mist control	No	Yes
Irrigation control	No	Yes
CO2 control	No	Yes
Increments vents	Via vent control	Yes
Optional equipment	Weather Guard;     RH Sensor	<ul> <li>Weather Station;</li> <li>STEPsaver software;</li> <li>Wireless or Wired Alarm Manager;</li> <li>Sensors (soil temp, light, hot water, CO2);</li> <li>Lightning Protector</li> </ul>
Complete package	Aspirated temp sensor & 100' of cable	Aspirated temp & RH sensor, 100' of cable