

## Staged STEP Automation Controls

*Wadsworth introduced staged control to the greenhouse industry in the 1960's. This simple concept of using a centralized temperature sensor for all heating and cooling equipment saves energy and improves the climate. Heating and cooling equipment is assigned to a stage. The equipment assigned to the stage turns on when the temperature for that stage is reached.*

*We trademarked our pioneering series of staged controls with the acronym, "STEP":*

**S**IMPLE **T**OTAL **E**NVIRONMENTAL **P**ROGRAM

*Today, Wadsworth offers more advanced, integrated STEP controls in addition to our staged STEP controls.*



*Our newest staged STEP control, the STEP Up, adds some of the features from the integrated line of STEP controls for more power and flexibility.*

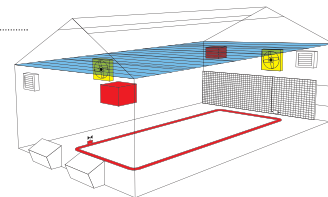
*"STEP Up is a great control. It's super easy to use and packed full of features. The name STEP Up speaks volumes, growers need this control!"*

— William Wendt  
University of Florida  
Jay, FL

64°
66°
70°
72°
74°
76°
78°

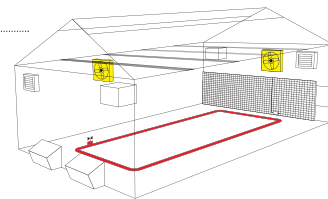
### HT2 (64°)

- HAF Fans ON
- Unit Heaters ON
- Under Bench Heat ON
- Curtain Covers at night for heat retention



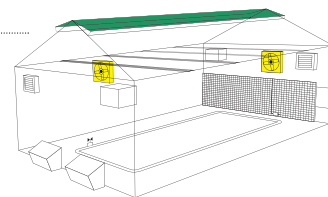
### HT1 (66°)

- HAF Fans ON
- Under Bench Heat ON



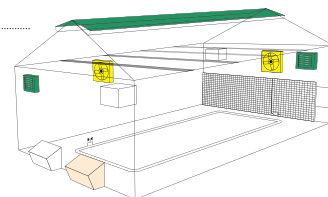
### Set Point (70°)

- Ideal Temperature
- HAF Fans ON to circulate air
- Roof Vents modulate
- Shade Uncovered



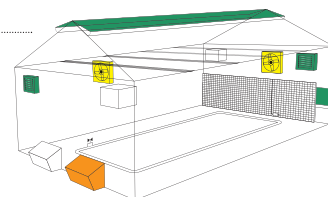
### AC1 (72°)

- HAF Fans ON
- Motorized Louvers OPEN
- 2-Speed Fan ON-low
- Roof Vents Modulate



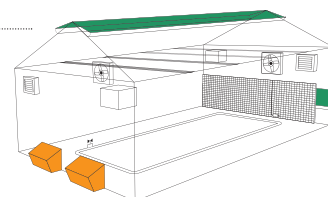
### AC2 (74°)

- HAF Fans ON
- Motorized Louvers OPEN
- 2-Speed Fan ON-high
- Roof Vents Modulate
- Pad Vent 1/4 Open



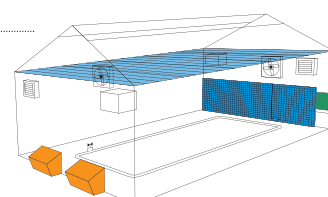
### AC3 (76°)

- HAF Fans OFF
- Motorized Louvers CLOSED
- 2-Speed Fan ON-high
- 1-Speed Fan ON
- Roof Vents Modulate
- Pad Vent 1/2 Open



### AC4 (78°)




- HAF Fans OFF
- Motorized Louvers CLOSED
- 2-Speed Fan ON-high
- 1-Speed Fan ON
- Roof Vents Closed
- Pad Vent Full Open
- Pad Pump ON
- Shade Covers



## STEP Up Control™

**STEP Up to improved control and increased profits. Wadsworth is proud to introduce our newest staged control. Like our traditional staged controls, it is very easy to use and we've added numerous features to provide even better control over the environment. STEP Up is an approved energy saving device. STEP Up and start saving!**



OPTIONAL EQUIPMENT		
<p><b>Weather Guard</b></p> <p>Protects your structure by monitoring outdoor conditions. It will close the vents in extreme weather conditions.</p> <p></p> <p>See page 23 for more information.</p>	<p><b>STEPsaver Software</b></p> <p>Connects your STEP Up control to your PC for advanced data storage and remote access to your greenhouse.</p> <p></p> <p>See page 14 for more information.</p>	<p><b>Alarm Manager</b></p> <p>Protects your crop by calling up to four phone numbers if the conditions get too hot or too cold.</p> <p></p> <p>See page 22 for more information.</p>

### Features:

- 6 stages: 2 stages of heating and 4 stages of cooling  
*Easily adjust the temperature for each stage*
- 3 set point temperature periods — day, night and DIF; auto adjusts based on sunrise and sunset
- Modulates vents and curtains
- 1 analog output (0 to 10VDC or 4-20 milliamps) to control variable-speed fans and modulating valves
- Cycle timer
- Alarm output
- Password protection
- Easy to use knob and button interface
- Large menu-driven screen displays current temperature, time, date, grow weeks, equipment status, etc.
- Records the temperature in 15-minute increments and stores it for 7 days
- Logs and graphs data
- High, low and average temperatures
- Timed override switches in addition to the manual override toggle switches
- Stores settings in the event of a power failure
- Optional humidity sensor
- Durable corrosion-resistant cabinet: 9.5" x 6.25" x 3.75"  
(241 x 159 x 95 mm)

### Includes:

- Solar-guarded aspirated temperature sensor and 100' of cable
- Cable to connect STEP Up to the contactor panel

### Advantages:

#### Easy to Use

- It's as simple as turning a knob and pressing a button
- Wadsworth programs your control to operate your heating and cooling equipment

#### Improves Crop Quality

- 3 set point temperature periods — day, night and DIF
- Reduced night temperature mimics nature
- Use DIF to reduce stretch growing
- Accurate temperature improves crop quality and consistency
- Timed overrides allow you to fumigate

#### Reduces Fuel Costs

- Lowering the greenhouse temperature at night when 80% of the heating occurs reduces energy consumption
- Ramping allows for gentle transition between set point periods and saves fuel
- Using one central temperature sensor prevents heating and cooling from running simultaneously
- Solar-guarded, aspirated digital temperature sensor provides a more accurate temperature reading than unshielded sensors. For every 1° of improved accuracy you reduce energy consumption by 3%



Requires custom contactor panel. Visit us at [www.WadsworthControls.com](http://www.WadsworthControls.com).