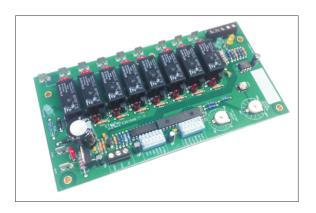
# Vernier Step Controller NWVS-4 / NWVS-8





- Utilizes Latest Microcontroller Technology
- RoHS Compliant
- Adjustable Stage Delay
- Pulsed or Analog Vernier output
- Adjustable Vemier ratio
- Expandable to 16 stages
- LIFO/FIFO selection
- Test Button
- Brown Out Protection
- Available in 4 or 8 Stages

#### **Product Description**

The NWVS is a microcontroller-based step controller that provides precise modulation in multi-stage heater applications such as duct heaters. The built-in Vernier stage allows for smooth, precision control of the load without increasing switching wear.

Ordering Codes	NWVS
Vernier Stepper Outputs/Stages: -4 (4 relay outputs)	
-8 (8 relay outputs)	

#### Input Specifications

Power Supply	24VAC -15/+15%50/60Hz < 4VA.	
Brown Out Protection	Stages restart from zero upon loss of power	
Command Input	0-5V, 0-10V, 1-5V, 2-10V, 0-20mA, 4-20mA, 0-135Ohm. Selectable via dipswitch.	

#### **Output Specifications**

Output Specifications		
Stage Relay Output Ratings	30 VAC @ 1.0A SPST Mechanical Relays w/MOV protection, up to max of 5A total for all of the stages. Up to 8 stages per board.	
Stage Outputs	Selectable from 1 to 16 stages via dipswitch. More than 8 stages requires an additional unit setup for slave operation.	
Vernier Output	Current limited 24VDC Time Proportioned SSR drive or 0-10V Analog output for driving SSRMAN-1P. Selectable via dipswitch # S1-6	



### **Output Specifications (Continued)**

Slave Output	0-5V output for expanding beyond 8 stages.
Stage Output Modes	LIFO or FIFO Selectable via dipswitch.
Stage Delay	Adjustable from 0-180 seconds via potentiometer.
Vernier Ratio	Adjustable via potentiometer from 100 to 200%.
Stage Output Indication	Each Stage has a Red LED that is energized when the normally open relay output is closed.
Vernier Output Indication	Green LED that varies in intensity when analog mode is selected or blinks when time proportioning is selected.
Slave Output Indication	Yellow LED that varies in intensity when a slave output signal is present.
Test Button	Forces the command signal to 100% while pressed, thereby allowing test of all the stages at the selected stage delay rate.
Mechanical Specification	ons
	0.250" Factor lung for name and stone outputs, consultanning

I/O Connections	0.250" Faston lugs for power and stage outputs, screw terminal blocks for low voltage I/O and command.
Board Specifications	7.075" x 2.700", RoHS compliant.
Shipping Weight	Approximately 1 lb.

## **Thermal Specifications**

bient Temperature Range 0 to 80C.