

# Uponor

## RADIANT HEATING SYSTEMS

### ZONE CONTROL MODULE

#### TECHNICAL BULLETIN



#### Application

The Uponor Zone Control Module is a printed circuit control and diagnostic device designed for use with Uponor Thermostats, Motorized Valve Actuators (MVAs), Thermal Actuators or Zone Valves. The module provides connection to the power supply transformer; interconnections between the individual thermostats and their respective MVAs; thermal actuators or zone valves; and the connection between the end switches and the pump or boiler relay. The modules are internally fused for protection from over current or direct shorts from the power supply transformer.



**Caution:** Because the end switch circuit is not protected from over current, install a 1-amp fuse. For proper operation, ensure there is a separate transformer load on the end switch. Do not connect the SB, R, C terminal to the ES terminal with the same transformer.

#### Part Numbers

A3030003  
(Three-zone Control Module)  
(2" x 6")

A3030004  
(Four-zone Control Module)  
(2" x 8")

#### Zone Configurations

Available in both three- and four-zone configurations

May be ganged together

#### Display

Light emitting diodes (LEDs) indicate various functions of control (see **Table 1**).

#### Specifications

Power input 24VAC

End switch circuit —  
dry contact equivalent nominal  
24VAC, 2A maximum

For the maximum number of zones on a transformer, see **Table 2**.

Control is setback compatible.

Uponor recommends 18GA thermostat wire size.

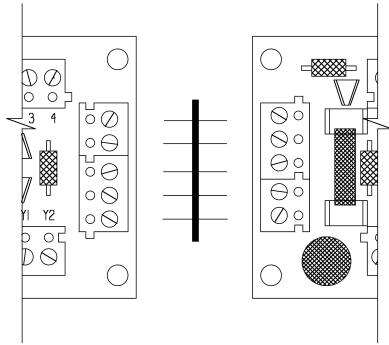


LED	Definition
Green	Indicates power to the module
Yellow	Indicates which zones are calling for heat
Red	Indicates which end switches are closed and completing the circuit for the pump or boiler relay

Table 1: LED Definitions

Part No.	Part Description	50VA	75VA	100VA
A3020522	MVA	6	9	12
A3070526	1" Zone Valve	6	9	12
A3010522	Thermal Actuator	12	19	25

Table 2: Maximum Number of Zones on a Transformer  
(Calculated to include 10% line loss)



**Figure 1: Module Jumper**

## Connecting

Connect modules in series using a module jumper (provided). Fasten this jumper securely within the input and output blocks of the corresponding modules (see **Figure 1**).

## Mounting Instructions

For best results, mount the control module in a convenient location above the MVAs or zone valves using either double-stick tape (provided) or mounting holes and suitable hardware. Ensure the location does not expose the module to moisture or physical damage.

## Wiring Instructions

1. Strip the insulation from the wire to a length of  $\frac{3}{8}$ ".
2. Ensure the wire is fully seated in the terminal and does not short to adjacent wires.
3. Twist loose stranded wire tightly and ensure no loose strands are present.
4. Tighten the terminal nut.
5. Each terminal is equipped with a jamb plate for accommodating stranded wire. If reconnecting the terminal, push the jamb plate back into place with a suitable round punch prior to re-inserting the stranded wires. The maximum number of connections per terminal is four. If more than four wires are required at the terminal, bundle or wire nut the wires together, and run one wire to the terminal.

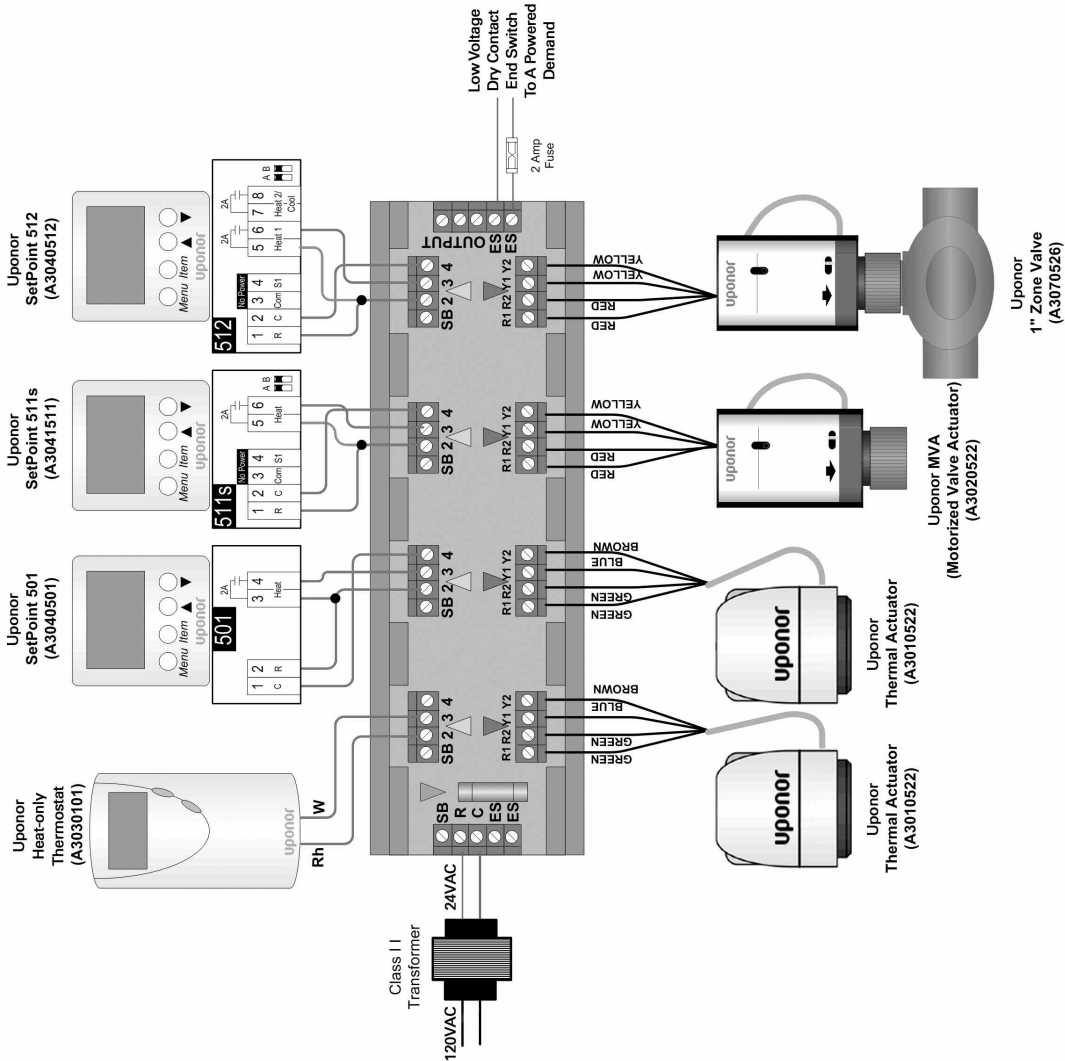
**Note:** If using the 500 Series, you will need a minimum of three-wire thermostat wire for the thermostat to function properly. (Uponor recommends five wire.)

## Fuse Replacement

Replace the fuse on the board as necessary.

- 2A fuse for 50VA transformer
- 3A fuse for 75VA transformer
- 4A fuse for 100VA transformer





<b>NOTE:</b> This drawing is conceptual only, not an engineered drawing. It is up to the system designer to determine the necessary components for and the configuration of the particular system designed, including additional components, wiring, and any safety devices which in the judgment of the designer are appropriate. Certain components may have been left out on this drawing for clarity. The system designer is responsible for the proper selection, control, pipe sizing and pump selection, is the responsibility of the installing contractor. Local codes and trade practices must be followed.	<b>SYMBOLS</b>		<b>Project:</b>	
	= Pump	= Air Separator & Expansion Tank w/ fill	= 4-Way Mixing Valve	= Ball Valve
= Floating Action Valve	= Tempering Valve	= Pressure By-Pass Valve	= Drain Valve	= Flow Check
Rep: _____		Drawn by: _____		Checked by: _____
DATE: _____		UPONOR, INC. 8225 Main Street W. Apple Valley, MN 55124 Phone: 1-800-321-4739 Fax: 1-800-891-1409 www.uponor-usa.com		Rep: _____

**Uponor, Inc.**  
5925 148th Street West  
Apple Valley, MN 55124  
Tel: (800) 321-4739  
Fax: (952) 891-1409  
Web: [www.uponor-usa.com](http://www.uponor-usa.com)  
E-mail: [learnmore@uponor-usa.com](mailto:learnmore@uponor-usa.com)

**Uponor Ltd.**  
655 Park Street  
Regina, SK S4N 5N1  
Tel: (888) 994-7726  
Fax: (800) 638-9517  
Web: [www.uponor.ca](http://www.uponor.ca)  
E-mail: [info@uponor.ca](mailto:info@uponor.ca)

