



## User Guide

# Viega Zone Control



This document is subject to updates. For the most current Viega technical literature please visit [www.viega.us](http://www.viega.us).



Viega products are designed to be installed by licensed and trained plumbing, mechanical, and electrical professionals who are familiar with Viega products and their installation. **Installation by non-professionals may void Viega LLC's warranty.**

## Operation/External Diagnostics

When a thermostat calls for heat, the appropriate zone is energized and the yellow light goes on. When the zone is fully open, the red light goes on and energizes the end switch relay. The green light should always be on, indicating that power is connected.

## Priority Operation

When zone 4 or 6 is switched to the priority setting and is actuated, all other zones will stop operation until zone 4 or 6 is satisfied. When zone 4 or 6 is not switched to priority, all zones will operate independently.

## Priority Protection Operation

When the priority zone calls continuously for more than one hour, power is returned to all the other zones, allowing each zone to function independently. Once the priority zone is satisfied, the control's auto-reset is activated and the priority zone is again allowed to have priority for up to one hour starting from when it calls next.

## Wiring Viega Thermostats

### Digital thermostat (18050)

- 1 Connect the R terminal of the thermostat to the R terminal of the zone control. R supplies power to the thermostat.
- 2 Connect the W terminal of the thermostat to the W terminal of the zone control. W is the switching signal.
- 3 Connect the C terminal of the thermostat to the C terminal of the zone control. C is common.

### Newer Digital Thermostats (15116, 15117, 15118)

- 1 Connect the RC terminal from the thermostat to R terminal on the zone control.
- 2 Connect the W terminal from the thermostat to W terminal on the zone control, for part number 15118 connect W/E terminal from the thermostat to the W terminal on the zone control.
- 3 Connect the C terminal from the thermostat to the C terminal on the zone control.



#### WARNING!

Wiring connections must be made in accordance with all applicable electrical codes. Use copper wire only with a minimum temperature rating of 75°C. Failure to follow this instruction can result in personal injury or death and / or property damage. A 12 - 18 gauge wire is recommended for 120 VAC connections, 14 - 22 gauge wire for 240 VAC connections.

## Wiring Viega Powerheads

### 2 Wire Powerheads

- 1 Connect the black wire of the powerhead to the 1 terminal of the zone control.
- 2 Connect the white wire of the powerhead to the 2 terminal of the zone control.
- 3 Connect a jumper from the 3 terminal to 4 terminal of the zone control if not already in place.

### 4 Wire Powerheads

- 1 Connect a yellow wire of the powerhead to terminal 1 of the zone control.
- 2 Connect the other yellow wire of the powerhead to terminal 2 of the zone control.
- 3 Remove the jumper between terminal 3 & 4 of the zone control.
- 4 Connect a red wire of the powerhead to terminal 3 of the zone control.
- 5 Connect the other red wire of the powerhead to terminal 4 of the zone control.



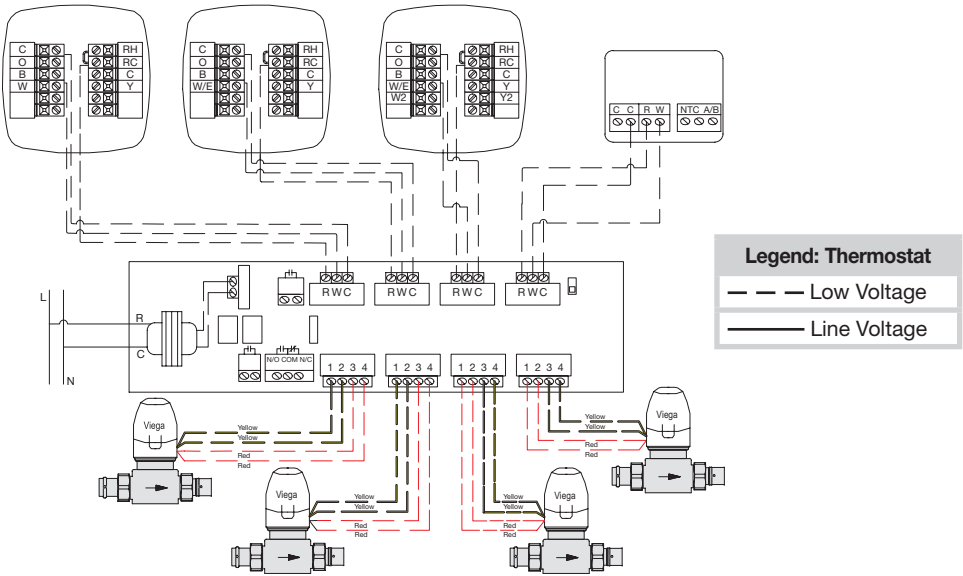
Factory jumper between 3 and 4 must remain in place for use with 2-wire powerhead. Factory jumper between 3 and 4 must be removed for use with 4-wire powerhead and zone valves.

Up to 4 powerheads may be used per zone. A total of 8 powerheads may be used with the 4 zone control (18060) and up to a total of 16 powerheads may be used with the 6 zone control (18062).

## Wiring Viega Zone Valves

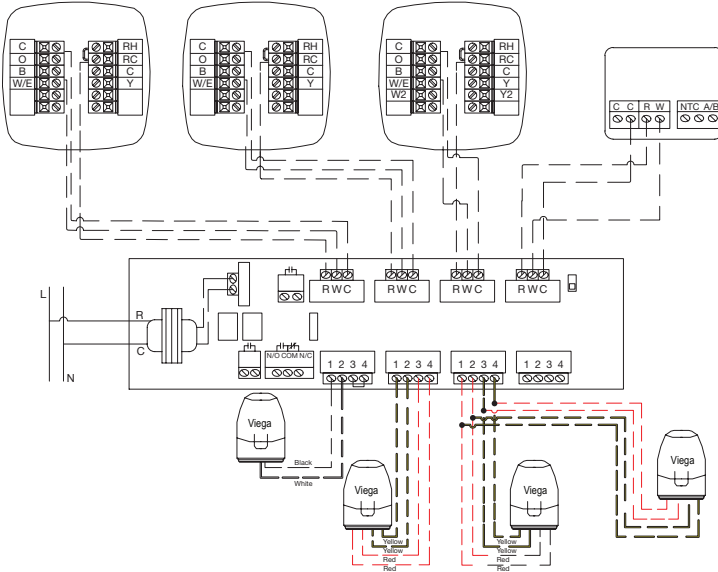
- 1 Connect a yellow wire from the zone valve powerhead to terminal 1 on the zone control.
- 2 Connect the other yellow wire from the zone valve powerhead to terminal 2 on the zone control.
- 3 Remove and discard the jumper installed between terminal 3 and 4 on the zone control.
- 4 Connect a red wire from the zone valve powerhead to terminal 3 on the zone control.
- 5 Connect the other red wire from the zone valve powerhead to terminal 4 on the zone control.

## Viega Zone Control With Thermostats and Zone Valves

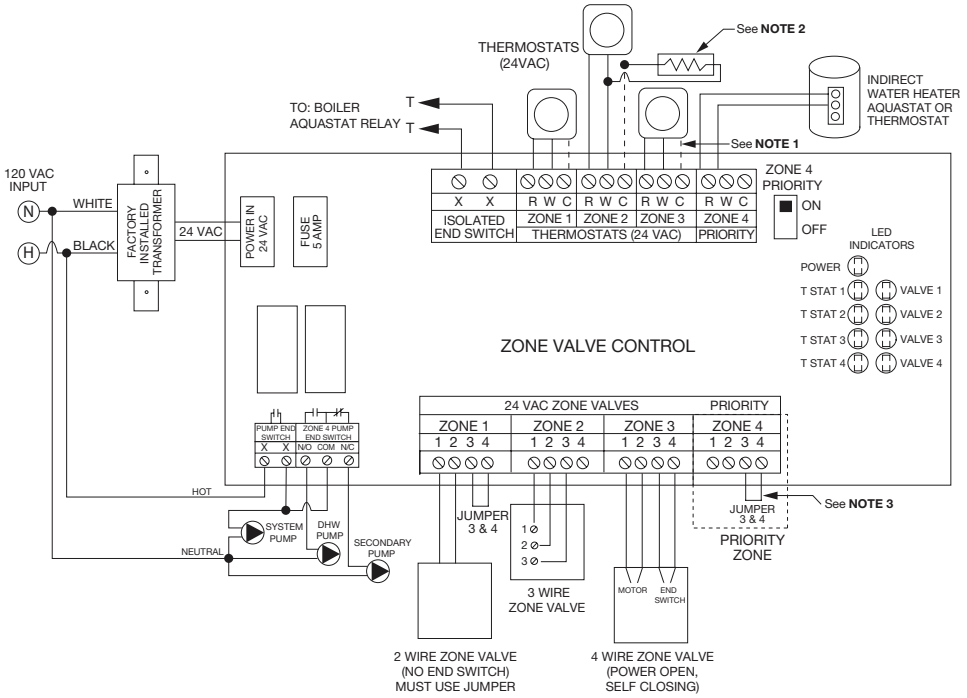


## Viega Zone Control with Thermostats and Powerheads

Up to 4 powerheads may be used per zone. A total of 8 powerheads may be used with the 4 zone control (18060) and up to a total of 16 powerheads may be used with the 6 zone control (18062).



# Industry Wiring Schematics



- System pump and boiler turn on when any zone valve opens.
- DHW pump turns on only when priority zone calls.
- Secondary pump turns on when any zone calls except priority zones.

**Note 1:** Terminals C are for optional 24 V Common Connections.

**Note 2:** Resistor (1ΩK 1/2W) may be needed between W and C terminals.

**Note 3:** When a circulator is used on the priority zone instead of a zone valve, jumper 3 and 4 of the priority zone.

## Troubleshooting

### Problem

- Some industry thermostats (non-Viega) do not work correctly when connected to a zone valve control.

### Solution

- Some thermostats are a “Power Stealing” type which means they are powered by the zone control with just 2 wires (R & W). A resistor may be needed in order to have the thermostat work properly. This resistor should be placed between the W & C (common) terminals of the zone control. If the thermostat manufacturer does not supply a resistor, the included resistor should be used (1000 ohm ½ watt). If the thermostat is battery powered, then check that the batteries are fresh and installed correctly.

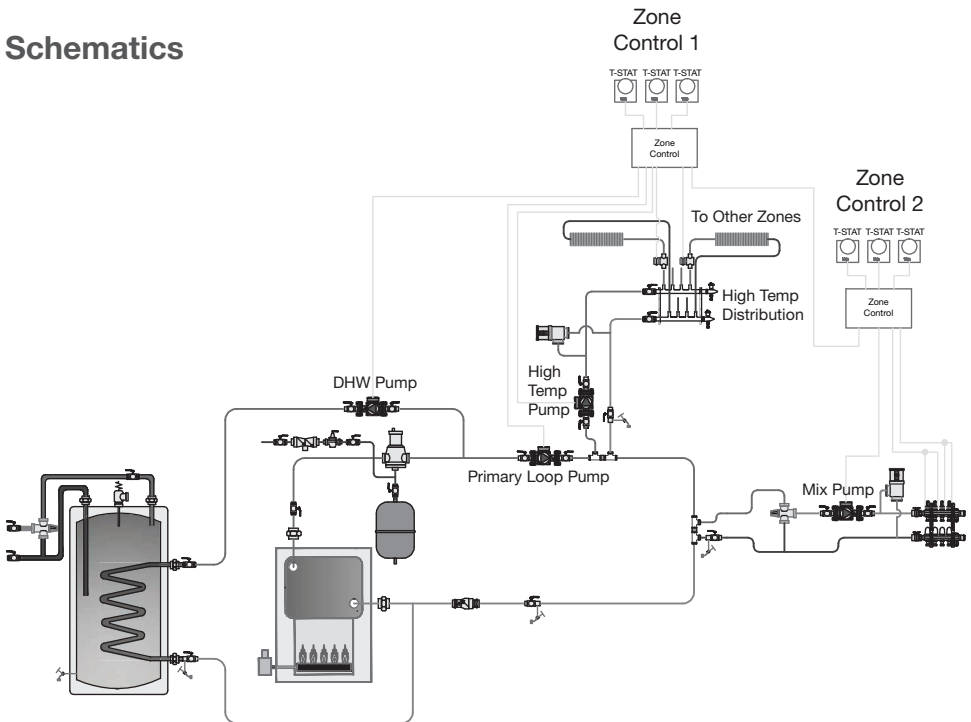
### Problem

- No heat in a zone or room of building.

### Solution

- LED diagnostic lights will help find a component that is not working properly. The green LED should always be on, indicating that power is connected and the fuse is good. When there is a call for heat, the yellow LED will come on indicating power to the zone valve. This indicates the thermostat is working correctly. When the zone valve fully opens and its end switch makes contact, the red LED will come on, the boiler turns on and a circulator will start if connected to the zone control.

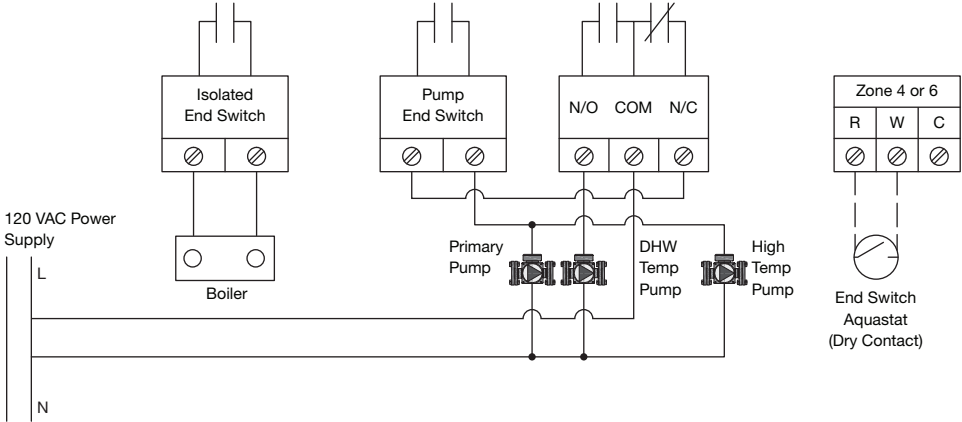
## Schematics



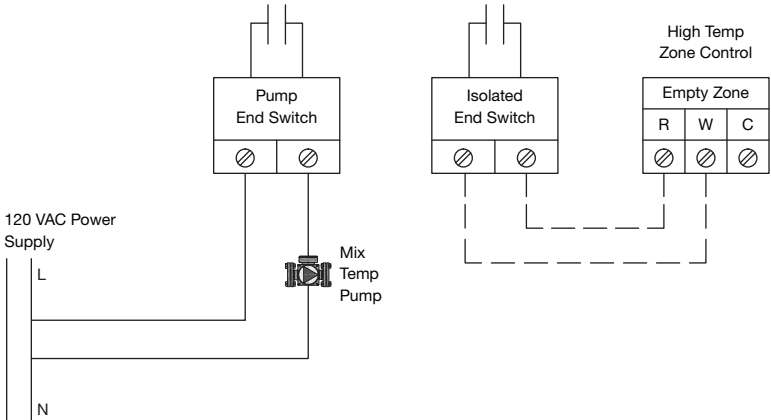
# Electrical Priority Detail 1

## Zone Control 1

Wiring would turn off the primary and high temperature circulators.



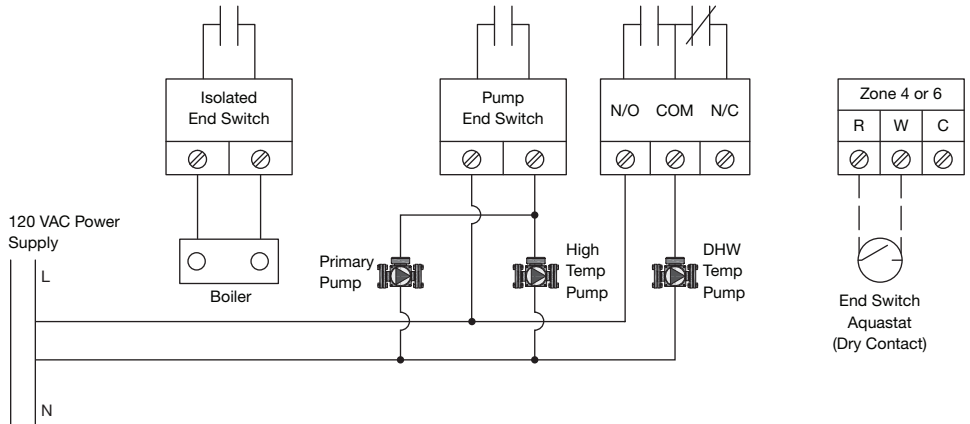
## Zone Control 2



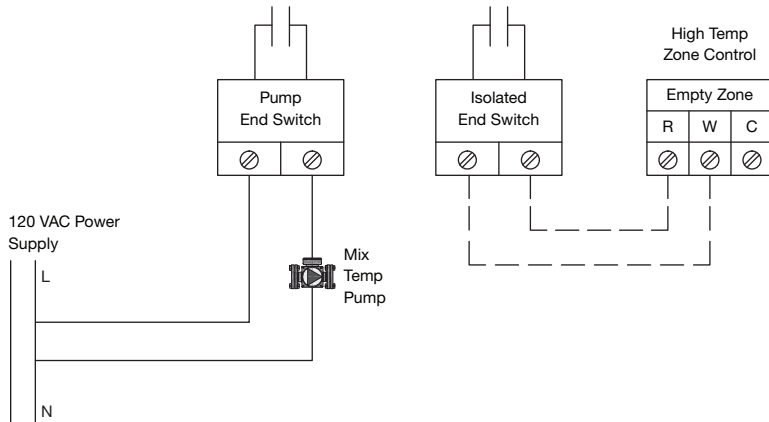
## Electrical No Priority Detail 1

### Zone Control 1

Wiring would not turn off the primary and high temperature circulators.



### Zone Control 2





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UG-HC 560622 1219 Zone Control (EN)

