



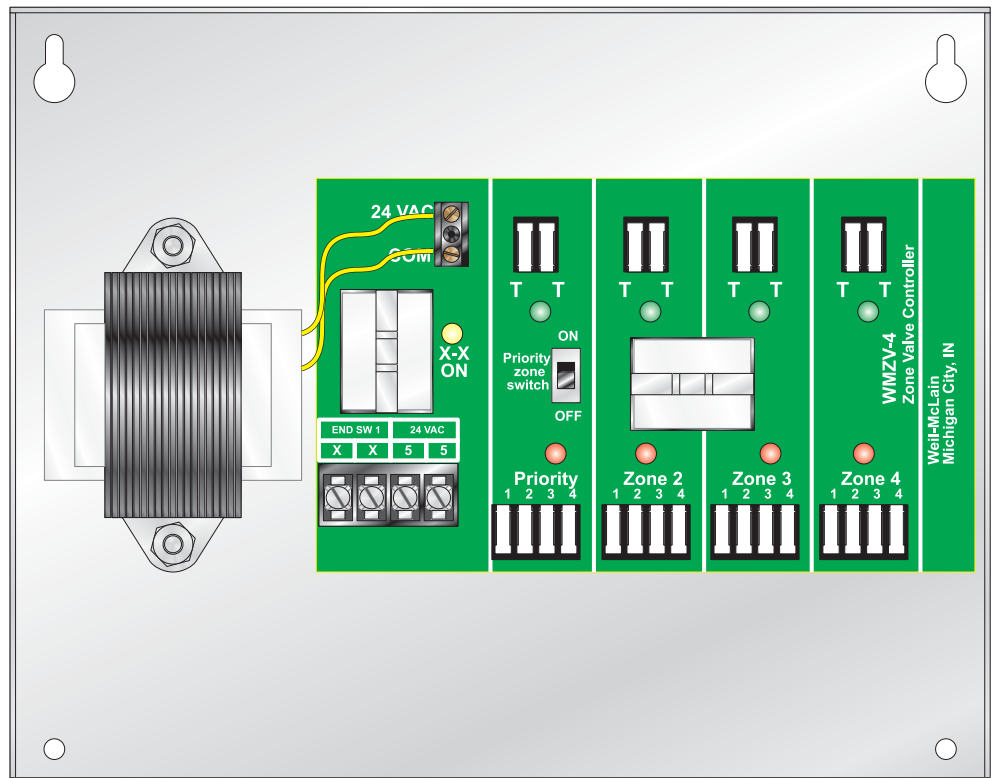
# WMZV

## Zone Valve Controllers

# Instruction manual

**WMZV-4** Four-zone controller

**WMZV-6** Six-zone controller



**WARNING**

This manual must only be used by a **qualified heating installer/service technician**. Failure to comply could result in severe personal injury, death or substantial property damage.




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## Hazard definitions

The following defined terms are used throughout this manual to bring attention to the presence of hazards of various risk levels or to important information concerning the life of the product.

**DANGER**

Indicates presence of hazards that **will cause** severe personal injury, death or substantial property damage.

**WARNING**

Indicates presence of hazards that **can cause** severe personal injury, death or substantial property damage.

**CAUTION**

Indicates presence of hazards that **will or can cause** minor personal injury or property damage.

**NOTICE**

Indicates special instructions on installation, operation or maintenance that are important but not related to personal injury or property damage.

**Please note:**

**WARNING**

Electrical shock hazard — Disconnect power before installing or servicing. Can cause severe personal injury, death or substantial property damage if ignored.

All wiring must be installed in accordance with:

**U.S.A.** — National Electrical Code and any other national, state or local code requirements. Wiring must be N.E.C. Class 1.

**Canada** — C.S.A. C22.1 Canadian Electrical Code Part 1 and any other national, provincial or local code requirements. Wiring must be C.S.A. C22.1 C.E.C. Part 1.

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## Replacement parts

Part description	Weil-McLain part number
Plug-in relay (24 VAC coil)	510-311-021
Field-mounted 40 VA transformer (used on WMZV-4 only)	511-842-370
Field-mounted 75 VA transformer (used on WMZV-6 only)	511-842-364

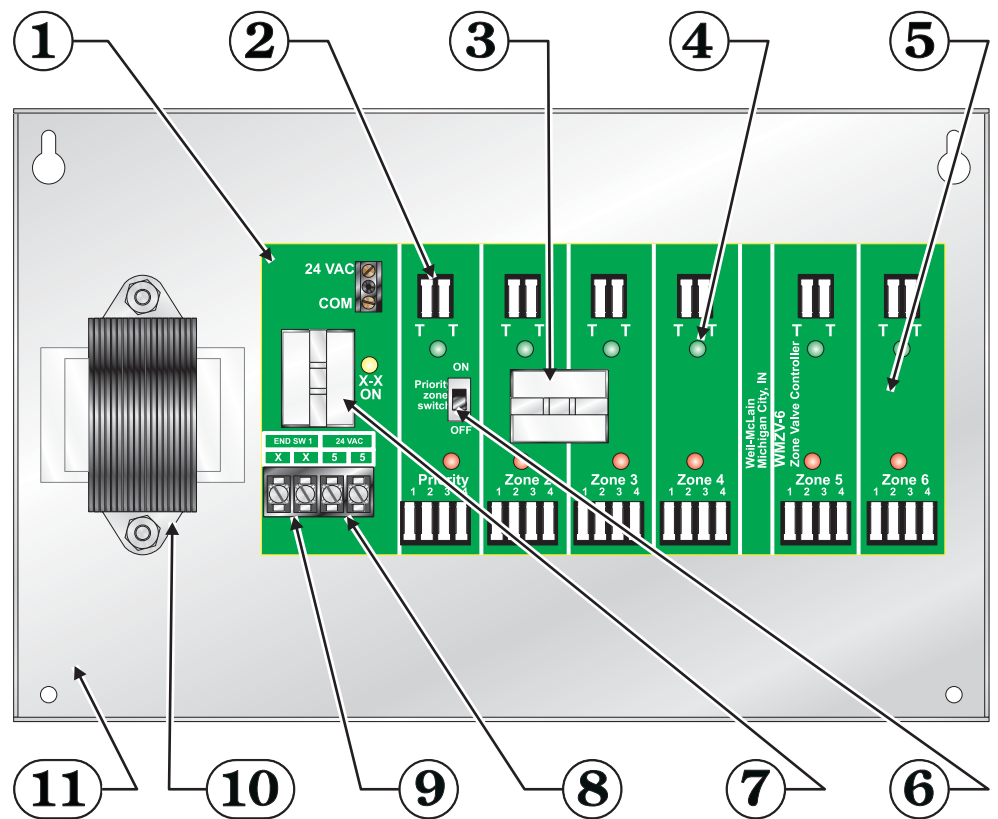


## WMZV features

1. Double-sided printed circuit board construction is 100% factory tested.
2. Clearly marked terminals with quick-connect screwless clamps.
3. Plug-in replacement priority relay.
4. LED diagnostic lights for easy troubleshooting.
5. Will operate four or six 24-volt (powered open, or powered closed) zone valves including: Taco, Superior, Erie, Honeywell, B&G, SPARCO and most other motorized and heat motor type valves.
6. Switchable priority improves versatility.
7. Plug-in replaceable isolated-contact relay.
8. 24 VAC constant power for 5-wire zone valves (such as Honeywell VC Series 40 and 80 valves).
9. Isolated end switch terminals, X-X.
10. Powerful transformer (40 VA on WMZV-4, 75 VA on WMZV-6).
11. Galvanized steel enclosure with enamel-painted cover.

The printed circuit design of these controllers eliminates most field wiring needed for zone valves, making their installation **easier** and **quicker**.

Built-in priority zone means **no other controllers are needed** to provide priority heating for indirect water heaters including **Weil-McLain Plus Indirect-Fired Water Heaters**.



## Specifications

Weil-McLain model number	Number of zones (see Note)	Transformer output at 24VAC	End switch contact rating	Enclosure dimensions (L x H x D)
WMZV-4	3 + 1	40 VA	1/3 HP @ 120 VAC	9" x 7" x 2¾"
WMZV-6	5 + 1	75 VA	1/3 HP @ 120 VAC	11¼" x 7" x 2¾"

Note: Check zone valve specifications for required VA per valve.  
Do not use digital thermostats unless recommended by zone valve manufacturer.  
Thermostat current set from zone valve manufacturer.



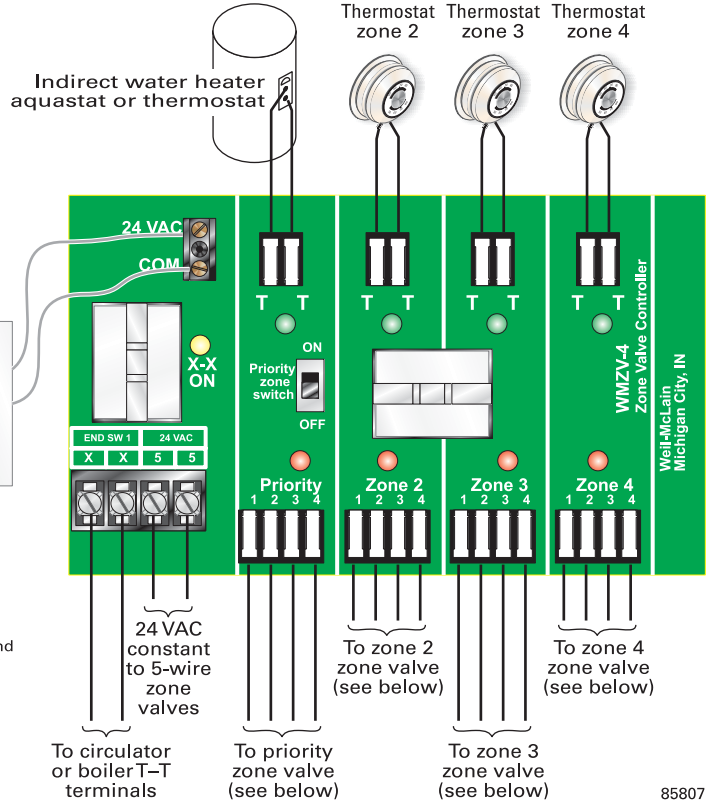
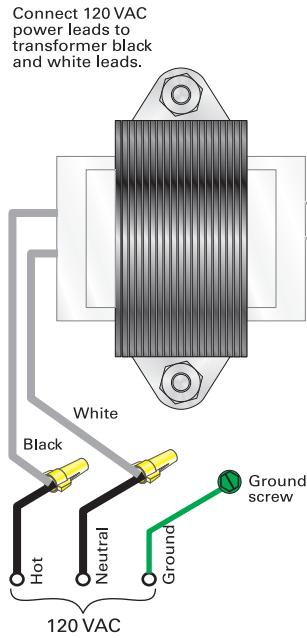
# Wiring

**Diagram 1**  
Typical WMZV-4

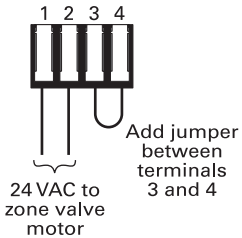
If PRIORITY ZONE SWITCH is in **ON** position, zones 2 to 4 will not operate when priority zone is actuated.

**Sequence of operation:**

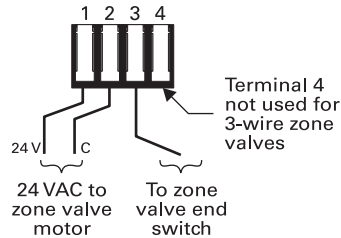
- When a zone thermostat closes, the WMZV-4 activates its zone valve. The green light for the zone comes on.
- When the zone valve end switch closes, it causes the red light to come on, indicating the zone valve is fully open.
- The WMZV-4 then activates the end switch relay and turns on the yellow light to indicate the isolated contacts are now closed. This allows the boiler or circulator to operate device(s) wired to X-X.
- If the **PRIORITY ZONE SWITCH** is in the **ON** position, the WMZV-4 will not activate zones 2, 3 or 4 while the priority zone calls for heat.



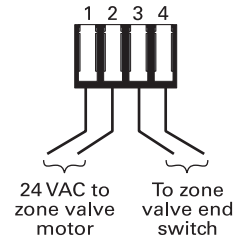
**Connecting 2-wire zone valve**



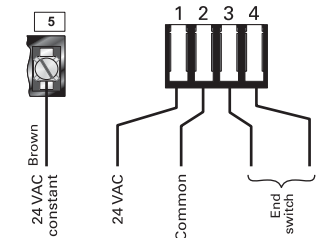
**Connecting 3-wire zone valve**



**Connecting 4-wire zone valve**



**Connecting 5-wire VC Series 40 & 80 valves**



- Legend**
- 120 VAC field wiring
  - 24 VAC field wiring
  - 120 VAC factory wiring
  - 24 VAC factory wiring
  - 120 VAC ground lead

**NOTICE**

This controller will **NOT** function with White-Rodgers 1311 and 1361 zone valves.

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**Canada** — C.S.A. C22.1 Canadian Electrical Code Part 1 and any other national, provincial or local code requirements. Wiring must be C.S.A. C22.1 C.E.C. Part 1.



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