

PURPOSE - The ZVI-1 is an interface between the 24VAC thermostat loop and an electromechanical counter that records usage. Usage is measured per second. Once 60 seconds have incremented, the counter receives a pulse signal to increment its count by 1. In this manner, the counter displays the number of minutes that its respective Zone Valve has been on.

MOUNTING - The ZVI-1 is a form, fit and functional replacement for the FareShare or MasterTek Intenational zone valve board.

POWER SOURCE - The ZVI-1 is self-powered, deriving its power from one or more thermostat circuits which may be energized. No external power is necessary to power the unit.

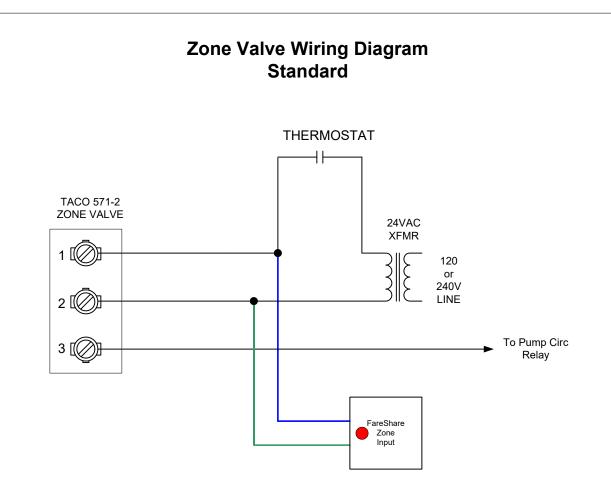
INPUT CONNECTIONS - The thermostat's switched or active side should connect to one of the "IN" input terminals. Connect the other input terminal to the 24VAC common return as shown in the diagram above. The input of the ZVI-1 board is in parallel with the Zone Valve coil. See wiring diagrams to determine preferred wiring configuration.

<u>COUNTER RESET</u> - The original ZDC FareShare or MasterTek counters did not have a count reset mechanism. A reset may be accomplished by disassembling the counter and moving all counter wheels to zero.



SOLID STATE INSTRUMENTS

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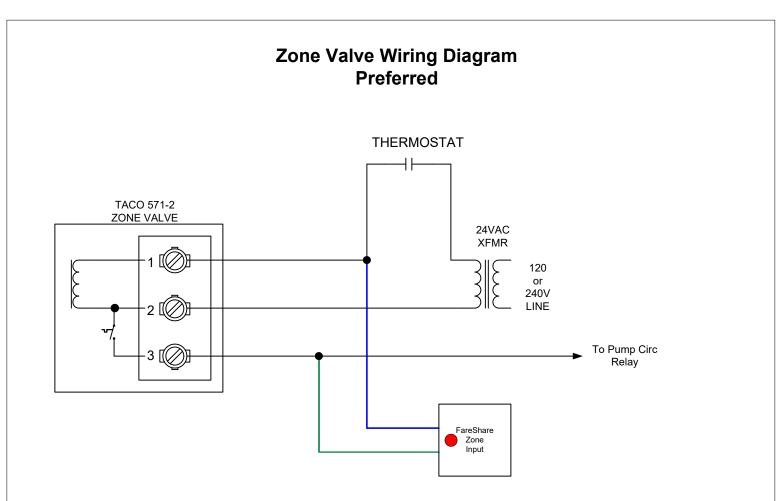


In this configuration the ZVI-1 Counter is wired in parallel with the Zone Valve's coil. When the thermostat closes, the count starts on the ZVI-1 counter although the valve does not actually open for approximately 45 seconds to 1 minute. The Red Zone LED lights when thermostat closes indicating that the counter is active and the count is proceeding.



Fare Share System Zone Valve - Standard Connections		RE	V# xx	xxxx		
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In this configuration the ZVI-1 is wired to the Zone Valve's Auxiliary Contacts. When thermostat closes, there is an approximate 45 second to 1 minute delay while the zone valve heats up and opens. Once open, the auxiliary contact closes, lighting the Red Zone LED and activating the counter on each minute of usage. This method is more accurate in recording the actual time the zone valve is open and hot water flowing.



	Fare Share System Zone Valve Connections-Alternate		REV# xxxxx				
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