

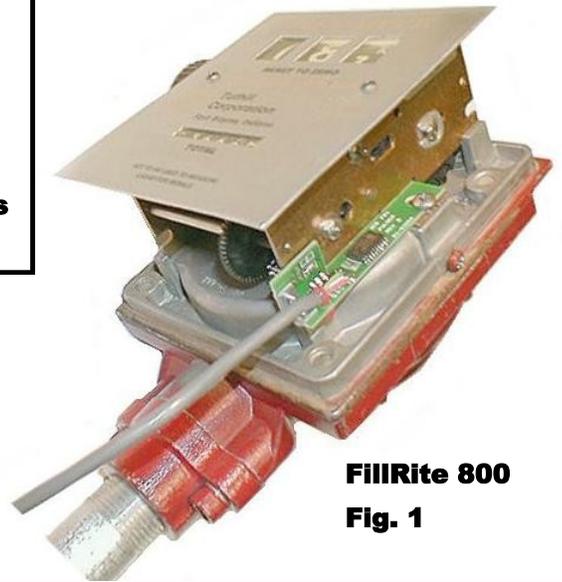
Integrated Control Systems

# MR1 PULSER

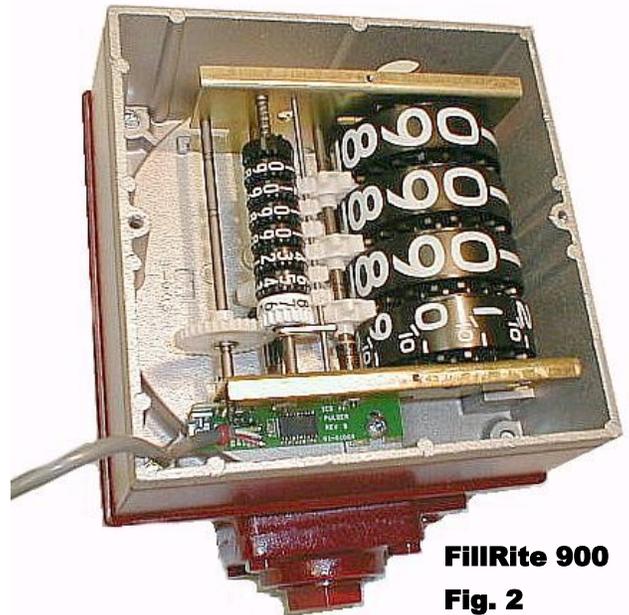
**110 VAC INSTALLATION INSTRUCTIONS**  
**MR1 Models MR1-110-SO and MR1-110-DO**  
**For FillRite model 800 and 900 registers**  
**For Dresser Wayne model 700R registers**  
**For GPI models QM40, QM150, QM240 or MR5-30 registers**  
**For Piusi models K33, K44, K150 with silver face**

The MR1 Pulser will generate an output of 10 pulses per gallon. No switch or jumper settings are required.

1. Remove the cover of the register.
2. Remove the register from the housing by unscrewing the Phillips screws at either side of the register.
3. Starting from the bottom of the register, slide the pulser head along the right side until the slot in the pulser head is aligned with the register mounting screw. The optical sensor should fit into the slot on the register's right side and over the black plastic gear. **Make sure the sensor is not touching the gear.** See Fig. 1 and Fig. 2 for 800 and 900 series registers respectively. See the back of this page for Dresser Wayne, GPI, or Piusi registers. Note that the MR1 pulser will not fit Piusi registers with the red face.
4. Holding the pulser head and register in position, attach the Phillips screws into the casting and tighten. On the MR1 pulser side of the register, replace the original screw with the longer one included with the pulser.
5. Use a drill or a round file to make a notch in the register housing for the pulser head wire. Make sure that the head wire will not be pinched when reinstalling the cover. If the register has a drain hole, do not plug it with the wire, drill a new hole for the head wire so that water will drain.
6. Mount the barrier and connect the wires as shown in Fig. 3. The pulser should be wired so that power is applied only when the handle switch is on. Note that the pulse output is a contact closure type, and the red wires (and blue wires for dual output models) are not polarity sensitive.
7. Installation of the pulser is now complete. Run a test transaction and make sure that the pulser output is correct. If there is no output, make sure that sunlight is not shining directly on the pulser's optical sensor.



**FillRite 800**  
**Fig. 1**



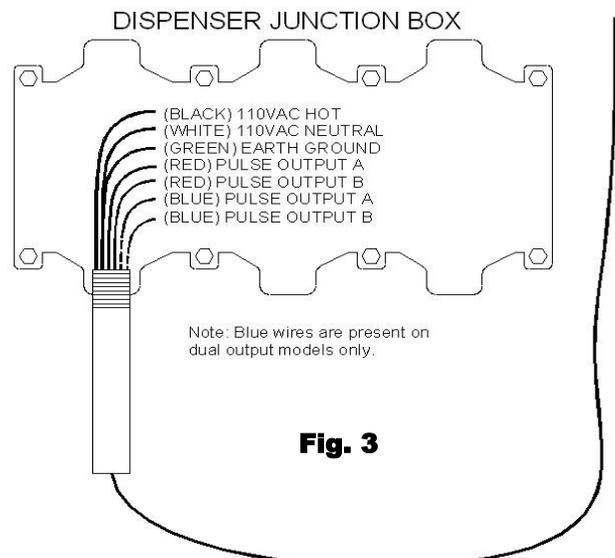
**FillRite 900**  
**Fig. 2**

## Specifications:

Operating Temperature Range: -40 to 150 degrees F.  
Input Voltage Range: 70 to 150 Volts AC  
Pulser Output Voltage Range: 5 to 350 Volts AC or DC  
Maximum Speed: 50 GPM

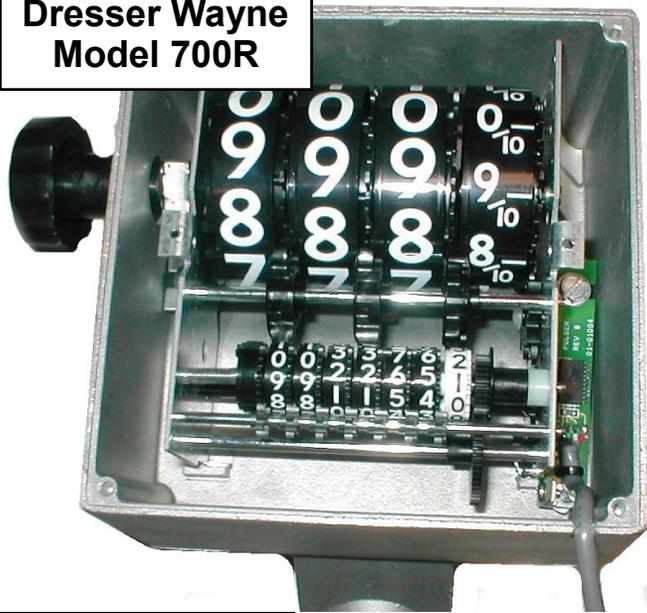
## Integrated Control Systems

1425 American Way  
Cedar Hill, TX 75104  
Phone: (972) 291-6064  
Fax: (972) 291-5975  
[WWW.INTCONSYS.COM](http://WWW.INTCONSYS.COM)

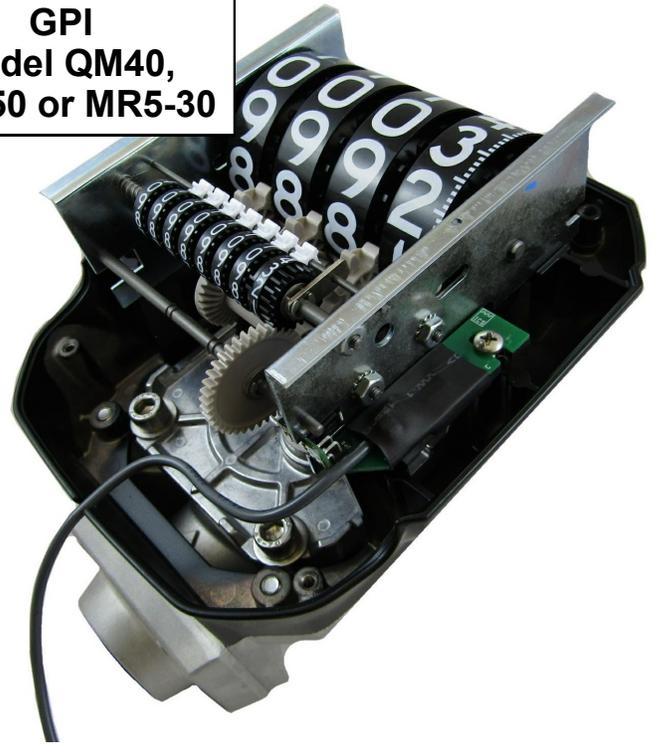


**Fig. 3**

Dresser Wayne  
Model 700R



GPI  
Model QM40,  
QM150 or MR5-30



PIUSI  
K33, K44, K150



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## **PULSER INSTALLATION IMPORTANT NOTICE**

When installing the pulser barrier in the open (outside of a pump or dispenser cabinet), be sure to mount the barrier with the head wire facing downward as shown in the diagram at right.

Make a small loop in the head wire as shown, and tie-wrap the head wire to the barrier.

This configuration will prevent water from running down the head wire and collecting on the barrier seal.

