

# MR1 PULSER

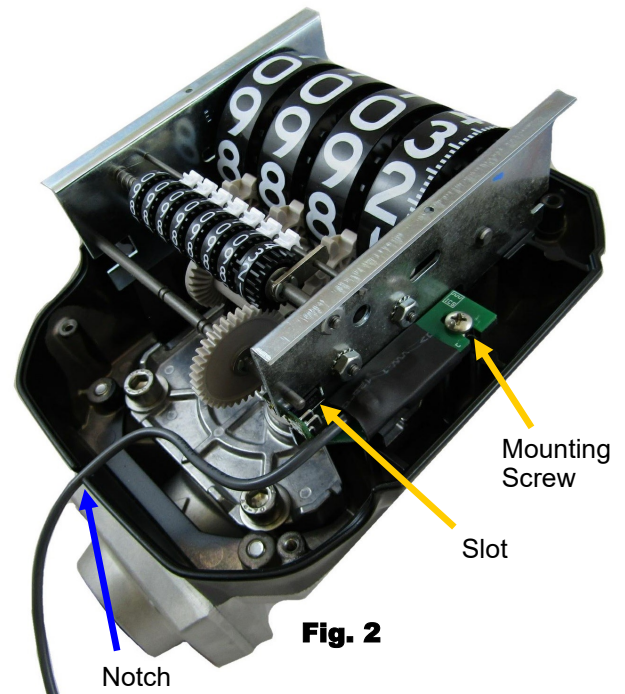
**12 VDC INSTALLATION INSTRUCTIONS**  
**For GPI model QM40, QM150 or QM240 registers**  
**For MR1 Models MR1-12-SO-A and MR1-12-DO-A**

The MR1 Pulser was designed to operate with the GPI QM150/240 series meter-registers. It will generate an output of 10 pulses per gallon. No switch or jumper settings are required.

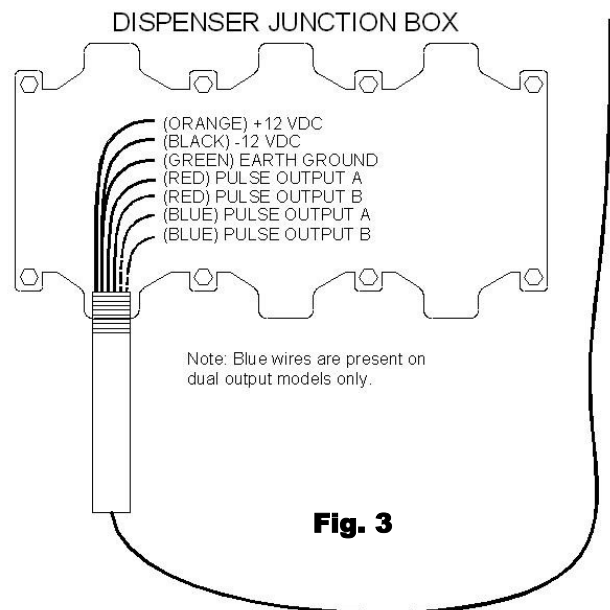
1. Remove the register faceplate. 2 allen head screws are at the faceplate bottom, and 2 are at the top rear.
2. The 4 wheel register assembly is secured to the aluminum base with one slotted screw on each side. Remove the mounting screw on the right side.
3. On the 4 wheel register assembly, note the square slot at the bottom right of the metal frame and the gear which is just inside the slot. The black plastic sensor of the MR1 pulser head fits into this slot and around the gear. Carefully position the MR1 pulser head so that the sensor fits into the slot and around the gear. The mounting slot of the MR1 head will align with the register mounting hole. See Fig. 2 at right.
4. Holding the pulser head in position, install one of the included longer screws into the threaded hole and tighten. Make sure that the gear is able to rotate freely and does not touch the black sensor. If necessary, loosen the mounting screw and adjust the position of the pulser head. See Fig. 2.
5. Route the grey head wire through the notch at the bottom of the register housing.
6. Mount the pulser 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 the register cover is on and sunlight is not shining directly on the pulser's optical sensor.



**Fig. 1**



**Fig. 2**



**Fig. 3**

**Specifications:**

Operating Temperature Range: -40 to 150 degrees F.  
 Input Voltage Range: 10 to 15 Volts DC  
 Pulser Output Voltage Range: 5 to 350 Volts AC or DC  
 Maximum Speed 50 GPM

**Integrated Control Systems Inc.**  
 1425 American Way, Cedar Hill, TX. 75104  
 (972) 291-6064  
 (972) 291-5975  
[WWW.INTCONSYS.COM](http://WWW.INTCONSYS.COM)

# 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.

