ModMAG®
M-Series® | Electromagnetic Flow Meters

Electromagnetic Flow Meters

M7600 PCB Replacement

OPENING THE COVER

The M7600 amplifier's design lets you open the cover without completely removing it.

Follow these steps:

1. Completely remove the top two screws from the amplifier using a blade/slotted screwdriver.
2. Loosen both of the bottom screws so that the round head of each screw clears the top face of the cover.
3. Pull down the cover to the open position.

- For the 2 × M20 cable inlets, use only flexible electric cables.
- Use separate cable inlets to separate power from signal and input/output cables.

Figure 1: Remove two screws

Figure 2: Open the cover

REPLACING METER ELECTRONICS

⚠ WARNING

DISCONNECT AUXILIARY POWER BEFORE OPENING BODY COVER.

1. Unplug all connectors. Loosen screws S1…S4 and remove circuit board.
2. Insert new circuit board and fasten in place by replacing screws S1…S4. Insert plugs that were previously removed.
3. Program the new circuit board to work with the meter (sensor, size).

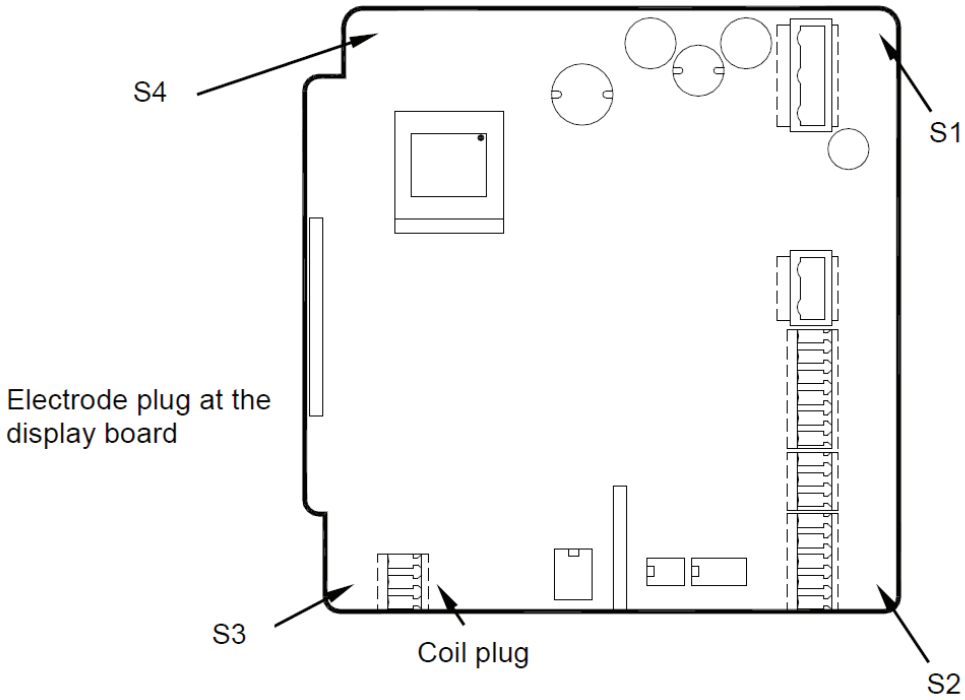

Figure 3: Screw locations

Badger Meter

MAG-UM-04900-EN-01 (February 2025)

User Manual

PROGRAMMING THE M7600 REPLACEMENT BOARD

- Main Menu > Calibration > Pipe Diameter (confirm size) > Detector Factor (confirm and make sure numbers are exact)
- Measurements > (confirm flow unit, totalizer unit, full scale flow, flow direction) > Unidirectional
- Inputs / Outputs > Digital Outputs > Pulse Width 50 ms > 1 Pulse* / Unit > Out #2 > function change to forward pulse > Type N.O.
- This parameter lets you set the output switch to **normally open or normally closed**. If normally open is selected, the output switch is open (no current) when the output is inactive and closed (current flows) when the output is active. If normally closed is selected, the output switch id closed (current flows) when the output in inactive and open (no current) when the output is active.

*Set pulse/unit to the desired value.

Pulses/unit	The pulses/unit parameter lets you set the number of pulses per unit of measure that will be transmitted. The maximum output frequency of 10,000 pulses/sec. (10 kHz) must not be exceeded. For example, assuming the unit of measure is gallons: • Setting the pulses/unit to 1 will transmit 1 pulse every gallon • Setting the pulses/unit to 0.01 will transmit 1 pulse every 100 gallons You must configure pulses/unit if the function of the selected output is to be forward, reverse or AMR pulse.

Connecting the M7600 Meter to 110V AC from Batch Control Panel Power Supply

Typical concrete batch panel.

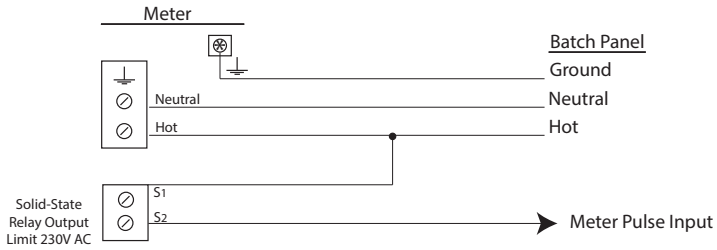

Figure 4: Batch panel power connections

The connection shown in *Figure 4 is for batch panels that require a 115V AC hot pulse for meter signals.*

ModMAG is a registered trademark of Badger Meter, Inc. Other trademarks appearing in this document are the property of their respective entities. Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists. ©2025 Badger Meter, Inc. All rights reserved.