

Pressure Transmitter

Quick Start Guide

This guide covers only
the most basic operations.
For other features and
more details, see
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WARNING: - LITHIUM BATTERIES

If batteries are exposed - do not short circuit, re-charge, puncture, incinerate, crush, immerse, force discharge or expose to temperatures above the declared operating temperature range of the product. **Risk of fire or explosion.** These batteries are sealed units which are not hazardous when used according to the recommendations of the manufacturer.

1. INTRODUCTION

The Pressure transmitter is a low cost, easy to install, durable pressure and/or flow transmitter that count pulses from meter-head or reed switch type output utility meters. The transmitter is designed to provide consumption data for billing, monitoring and targeting.

HWM reserves the right to change any product specification without prior notice.

2. CONNECTIONS

It is recommended when connecting to a pulse-head output the red wire be connected to the pulse (positive) and the black wire to the common (negative).

If calibration is required for pressure input, the yellow is logic high (positive) and the blue is calibration common (negative).

Connections
Red – Flow +ve (if fitted)
Black – Flow –ve (if fitted)
Yellow – Calibration +ve
Blue – Calibration –ve

3. INSTALLATION

This product must be used only where the it will experience temperatures between -10°C and $+40^{\circ}\text{C}$. Failure to do this will put the product outside of its operating parameters and is potentially unsafe.

If monitoring hot water systems it is not advisable to mount the transmitter directly on the pipe without intervening insulation.

For maximum transmission range the antenna of the transmitter should point upward (vertical polarization) and should be kept clear of obstructions, particularly metallic surfaces. Mounting brackets are available, to fit the cavity at the rear of the transmitter.

Operating in extreme environmental conditions will degrade the life-time of the battery.

If further support or assistance is required, please contact HWM
Technical Support on 01633 489479 (option 5)
or e-mail cservice@HWM-Water.com

4. OPERATION

The reed switch is located on the front right of the unit (to left of main product label). The unit will normally be transmitting out of the box. If a restart is required or the unit doesn't appear to transmit use the reed switch to initiate transmission. Hold a magnet close to the reed switch to cause the firmware to reset. A click from the reed switch may be heard followed by a transmission burst.

Reed switch operation can be verified using an RF scanner tuned to the transmission frequency, when transmitting a burst or blip can be heard.

5. CALIBRATION

Zero Calibration:

- The unit should flash once after a swipe of the magnet, then approximately 2secs later the LED should stay on for 2secs. Whilst the LED is on hold the magnet in place until several rapid flashes occur. Zero calibration is now complete!

High Pressure Calibration:

- Hold a magnet over the front of the transmitter case for 8-12sec. This will put the unit into high calibration mode with the red LED flashing briefly every 2secs.
- Setup a pressure calibrator (not provided) to supply a pressure of 10Bar (147psi) to the pressure input of the transmitter.
- Apply 3-5Vdc supply to the yellow (+ve) and blue (-ve) wires for 3seconds (this can be supplied via a PC's USB port using a suitable accessory lead available from HWM—CABA9200). After calibration has finished there will be two long flashes.
- Apply a magnet swipe to the transmitter to return to normal mode.
- Remove the supply wires. High pressure calibration is complete!

6. COMMISSIONING

The transmitter ID/serial number should be noted along with the corresponding meter number, the meters current reading and the initial transmitter pulse count and/or site location.

The current count value held in the transmitter should be used as an offset for future readings. The offset value will need adjusting if the pulse count value exceeds 16777215 (24-bit number) as the pulse count value will return back to zero. This offset will be dependent on the customers data collection system.

This value will vary from unit to unit. Note for reasons of fraud prevention it is intentionally not possible to reset transmitter pulse counter to zero.

WARRANTY

All equipment is warranted by HWM-Water Ltd to be free from defect in materials and workmanship under normal use for a period of one year from the date shipped to the original customer. This warranty is only valid if the equipment is:

1. Properly installed and operated under conditions of normal use in accordance with HWM's published instructions set out in the manual;
2. Operated in compliance with federal, state, county and local codes and,
3. Operated in accordance with standard industry practices.

As the exclusive remedy for any breach of warranty, HWM will repair or replace (at HWM's option) the non-conforming equipment. HWM shall have no liability for incidental, special, punitive or consequential damages arising from any defect in, or malfunction of, the equipment to any party. This warranty does not cover any costs incurred for the removal or installation of equipment.

If any problems occur, you should notify HWM or its authorised representative, giving full details of the problem, the model and serial numbers of the equipment and the HWM invoice number the equipment was shipped against. You will receive technical advice and / or shipping instructions depending on the nature of the problem. If the problem cannot be resolved you will be issued with an RMA number and a return address label so that the products can be shipped back to HWM for inspection. Once we have reviewed and confirmed that the product is in warranty, we will contact you to confirm what action we will be taking to resolve the issue.

All warranty and service activity must be undertaken by an authorised representative of HWM.

The express warranty is in-lieu of all other representations or warranties, express, implied or statutory and specifically excludes and warranty of merchantability or fitness for a particular purpose. There are no warranties that extend beyond the description on the face hereof. No parties or affiliates can make any warranty, promises or representations either written or oral to the quality of products other than what is set out herein.