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This guide covers only
the most basic operations.
For other features and
more details, see
www.hwm-water.com

Analogue Transmitter

Quick Start Guide

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.

If further support or assistance is required, please contact HWM
Technical Support on 01633 489479 (option 2)
or e-mail cservice@HWM-Water.com

Part number : MAN-485-0036-A

1. Introduction

This guide covers only the most basic operations including connections and commissioning.

The Analogue transmitter is a low cost, easy to install, durable transmitter used to transmit the output state of any sensor with a 0-10V voltage output. The market leading transmitter is designed to provide real-time monitoring information. There are a selection of variations e.g. single and dual inputs available.

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

2. Connections

It is recommended when connecting to a sensor output channel 1 connected the red wire (positive) and the black wire to the common (negative).

Dual channel analogue transmitters will be labelled Ch1 & Ch2 with red and black wires for channel 1. For channel 2, Blue is used for negative and yellow for positive.

Single Channel Analogue Tx	Dual Channel Analogue Tx
Red – Analogue Ch1 +ve	Red – Analogue Ch1 +ve
Black – Analogue Ch1 –ve	Black – Analogue Ch1 –ve
Yellow – No Function	Yellow – Analogue Ch2 +ve
Blue – No Function	Blue – Analogue Ch2 –ve

3. Installation

Optimum operating temperature is between –10°C and +40°C. It is recommended to keep within the optimum operation temperature range for maximum battery performance. Operating in extreme environmental conditions will degrade the life-time of the battery.

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.

The output data is a 10-bit raw ADC value in a 16-bit word. This will require calibrating with whatever sensor is being used with the transmitter.

4. Operation

The analogue transmitter ‘Chirps’ at periodic times sending both channel data bytes and status byte. The analogue transmitter will send the status of any sensor with a 0-10V output providing fine steps with a 10-bit resolution on each channel.

The reed switch is located on the front right of the unit. 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 to close the reed switch to causing the firmware 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. COMMISSIONING

The transmitter ID/serial number should be noted along with the corresponding connected equipment reference.

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:

1. is properly installed and operated under conditions of normal use in accordance with HWM’s published instructions set out in the manual;
2. is operated in compliance with federal, state, county and local codes and,
3. is 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.