Encoder Transmitter

Quick Start Guide

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

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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.

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

Part number : MAN-485-0022-C

ENCODER TRANSMITTER QUICK START GUIDE

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

1. INTRODUCTION

The Encoder Transmitter can read the data and identification information from water meters using the Sensus or Neptune protocols, or from a Permalog+ leak detector.

The reading interval is factory set to 1, 5, 10 or 15 minutes. Every time the data is read the meter reading or leak information is transmitted via the VHF radio.

After every 96 readings (24 hours at 15 mins) two supplementary messages are transmitted with identification information, including the meter's serial number. These supplementary messages can also be triggered via a magnet during commissioning or servicing.

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

2. CONNECTIONS

The Encoder Transmitter has a 4-core cable for connecting a water meter or Permalog+. The table below shows the connections for some common meters.

Encoder Transmitter		Sensus	Badger	Hersey-Meters	Hersey/ Muller	Neptune	Permalog+
Wire Colour	**Function**						
Black	Ground	Black	Screen	Screen	Black	Green	Black
Yellow	Power/Clock	Red	Black	Black	Red	Black	Red
Red	Data	Green	Red	Red	Green	Red	Green
Blue	Not used						

3. INSTALLATION

The optimum operating temperature is between –10°C and +40°C. We cannot guarantee the maximum life; therefore 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.

V2 CASE (GREY WEDGE)

For maximum transmission range the transmitter should be mounted upright so that the antenna is vertical, and should be kept clear of obstructions, particularly metallic surfaces. Mounting brackets are available to fit the cavity in the rear of the transmitter.

PIT CASE (BLUE WITH MAGNETIC MOUNT)

The transmitter is intended to be fitted to the underside of a pit lid using the magnet on the top of the case. Plastic lids will require a metal plate to be fitted to the lid.

4. OPERATION

The reading interval of the Encoder Transmitter is factory set to 1, 5, 10 or 15 minutes. Every time the data is read the meter reading or leak information is transmitted via the VHF radio.

After every 96 readings (24 hours at 15 mins) two supplementary messages are transmitted with identification information, including the meter's serial number. These supplementary messages can also be triggered via a reed switch during commissioning or servicing.

The reed switch is located under the bar code of the label and can be triggered by swiping a magnet across this area. This will cause three messages to be transmitted approximately 2 seconds apart. This 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 serial number should be noted along with the corresponding water meter or Permalog+ number, and the site location.

When the water meter or Permalog+ is first connected or changed during servicing, the transmitter's reed switch should be triggered to initiate a data read and transmission of the data and supplementary messages, which include important identification information.

DATAGATE CONFIGURATION

If the transmitter is to be used with DataGate then it must be configured with the water meter's or Permalog+'s serial number rather than that of the transmitter.

Water Meter: Select **RTL Encoder Transmitter** for the logger type.
The mobile number must be of the format **4420829XXXXXXXX** where **XXXXXXXX** is the meter's serial number. If the serial number is shorter than 8 digits then left pad it with 0's so that the total length is 15 digits.

Permalog+: Select **Permalog** for the logger type.
The mobile number must be of the format **4406400XXXXXXXX** where **XXXXXXXX** is the Permalog+'s serial number. The total length must be 15 digits.

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 data shipped to the original customer. This warranty in 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 advise 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.