

**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.

# Encoder Transmitter Quick Start Guide

**This guide covers only the most basic operations. For other features and more details, see [www.fluidconservation.com](http://www.fluidconservation.com)**

485-035-V2  
485-039-V2  
485-036-V3  
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FCC ID: RUZ-485

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**[www.fluidconservation.com](http://www.fluidconservation.com)**

**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.

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

If further support or assistance is required, please contact FCS  
Technical Support on 1-800-531-5465  
or e-mail support@fluidconservation.com

### 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 Peralog+ number, and the site location.

When the water meter or Peralog+ 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.

#### DATA GATE CONFIGURATION

If the transmitter is to be used with DataGate then it must be configured with the water meter's or Peralog+'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 **4420829XXXXXXX** where

**XXXXXXXXXX** 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.

**Peralog+:** Select **Peralog** for the logger type.

The mobile number must be of the format **4406400XXXXXXX** where

**XXXXXXXXXX** is the Peralog+'s serial number. The total length must be 15 digits.

### FCC WARNING STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment