HERSEY METERS PRODUCT GUIDE FOR THE AMR TRANSMITTER

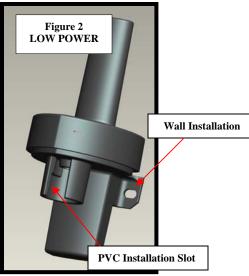
OVERVIEW

This document is intended to assist professional installers with Hersey Meters' AMR transmitters. It provides instructions on how to successfully connect, operate, and troubleshoot the transmitters. Hersey's remote meter reading transmitters were designed with an "easy to install approach" for utilities. The **SSDHOTRODMETALV1** or **SSDHOTRODPLASTCV1** allow the utility to receive data from any Hersey water meter equipped with a Translator register. The transmitter collects data from the register and transmits it via radio frequency (RF) to be collected by a mobile receiver.

PRODUCT FEATURES

- The thermoplastic housing design reduces material and helps eliminate air space within the transmitter. (Figures 1 and 2)
- Mounting features include two holes for wall installation and a 1/2 inch female PVC pipe fitting for easy pit installation. (Figure 2)
- The transmitter units are molded from yellow or gray plastic so that the high power and low power units are easily distinguishable. The high power unit should only be used within a metal meter box. (Figures 1 and 2)
- A quarter wavelength whip antennae is utilized due to the small amount of power it consumes.
- Two AA Lithium batteries are utilized that will transmit readings every 4 seconds for a calculated battery life of over 10 years.
- The electronic design utilizes the latest in RF microchip technology which reduces cost and increases reliability when compared to older RF designs.

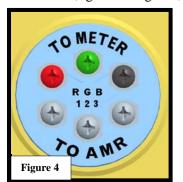




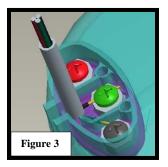
• In order to protect the AMR transmitter from moisture ingress, the design incorporates the use of thermoplastic injection molded housings, rubber seals, a potting compound that completely incases the internal electronics and a coated circuit board which provides the final barrier of protection. Internal wire strain relief has been built into the housing to protect the wire connections against damage. Please note that this does not mean meters or registers can be carried while supported only by the AMR transmitter or wiring.

CONNECTING AND OPERATING THE HERSEY AMR TRANSMITTER

The AMR transmitter is preprogrammed prior to being attached to the meter. All pit set units come with either 5' or 25' of wire attached and potted at the factory as specified. If a retro fit is required, the wires should be spliced to the existing wires coming from the register. Wire the red to red, green to green, and black to black wires using 3M UY2



Scotchlok splices with the E-9Y application tool. (Figure 3) If a new wall unit is being installed it can be directly mounted to any surface by using the holes shown in Figure 2 and the appropriate screws. New pit



installations can use the mounting method described above or a ½" PVC pipe can be used in conjunction with the PVC Installation Slot shown in Figure 2. This feature allows for quick easy installation without the use of zip ties, wraps, tape, or adhesives. Two solid stops were included in the PVC Installation Slot in order to prevent the wire from being pinched when the PVC pipe is installed. For best performance the top of the transmitter

should be placed approximately 6 inches below the pit lid. Please note that the AMR transmitter will only support the Hersey Translator register and will not work with Hersey's ER, pulse registers. A TRU-Read remote display can be used in conjunction with the Translator register and AMR transmitter for visual remote readings if desired. Refer to TRU-Read installation instructions below to attach both devices. When wiring the TRU-Read to the Translator you must connect the red wire to the red terminal, the green to green, and the black to black. (Figure 4) To attach the AMR transmitter, wire the red wire to terminal #1, the green wire to #2, and the black wire to terminal #3 on the TRU-Read. (Figure 4) Once the transmitter is attached it will begin sending out data automatically. Please note that Hersey Meters' AMR transmitter and TRU-Read should never be disassembled or user serviced.

AMR TRANSMITTER TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE
POOR RANGE	CHECK ORIENTATION OF THE HOT ROD ANTENNAE CHECK THE RECEIVER ANTENNAE CHECK FOR INTERFERENCE
NOT TRANSMITTING CORRECT DATA	CHECK WIRING CONNECTIONS CHECK WIRES FOR SHORT CHECK FOR INTERFERENCE CHECK DISTANCE TO RECEIVER CHECK TRANSLATOR STATUS
NOT TRANSMITTING	CHECK POWER ON AMR TRANSMITTER

FCC INFORMATION

The AMR transmitters operate in the license exempt 902 MHz to 928 MHz ISM band and are certified for operation in the US under FCC Part 15. The FCC ID numbers for the high power and low power versions are **SSDHOTRODMETALV1** and **SSDHOTRODPLASTCV1**. Information pertaining to their certification can be found on the web at <u>WWW.FCC.GOV</u>.