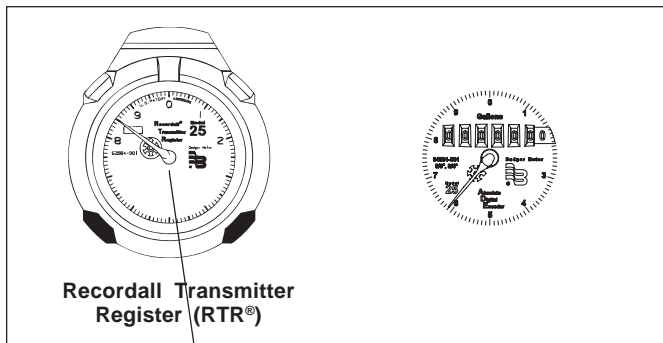


IDENTIFICATION

Badger Meter Remote ORION Data Profile Transmitters are available in a single transmitter configuration for easy adaptation to the complete Badger® Recordall® Disc, Turbo, Compound Series, and Mag meter lines. The single design offers a factory prewired ORION module to either of Badger Meter's encoders, including the Recordall Transmitter Register (RTR®) or the Absolute Digital Encoder (ADE™).

Each remote ORION Data Profile transmitter can be identified using the unique eight-digit serial number located on a tag attached to the wire harness. Transmitters manufactured for remote application will be labeled with "remote." Each Badger Meter encoder is clearly identified on the face of the register with an assembly number, unit of measure and meter model (see figure 1). It is essential that the correct transmitter is used for remote applications. Failure to do so will result in a violation of FCC regulations.



Recordall Transmitter Register (RTR®)

ORION Remote Installation Kits

Remote Clamp Installation Kit 64394-013

INSTALLATION**UNPACKING**

Carefully remove the prewired Remote ORION Data Profile transmitter and encoder from the shipping carton and inspect the assembly for damage. Retain the contents of the installation kit for use in mounting the pit transmitter in the field. Prior to installing any Remote ORION transmitter, it is important to determine if it is labeled for remote application. To determine the type of ORION transmitter, look at the serial number tag attached to the wire harness. Besides the serial number, the product must be labeled "Remote" prior to installing in a non-pit application.

After determining the proper application, the ORION transmitter can be easily installed using the Remote Clamp Installation Kit. An installation kit is provided with each transmitter.

REMOTE CLAMP INSTALLATION

The Remote ORION Transmitter (see Figure 2) is shipped prewired to the Badger Meter encoder for single remote configurations. Due to the factory prewired shipment, there is no splicing required and only the mounting of the register with tightening of the Torx seal screw is necessary. Excess wire should be secured to the water pipe or coiled up and cable tied to avoid any damage.

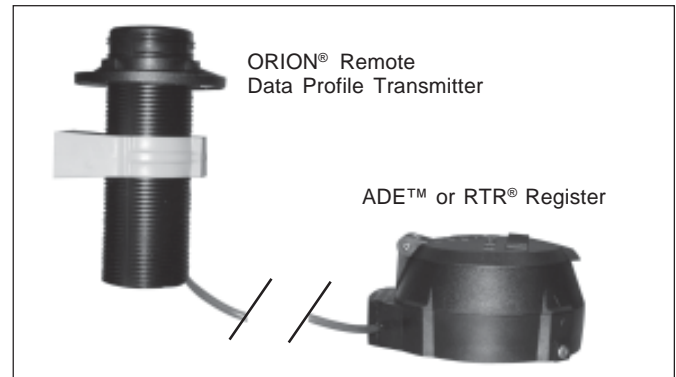


Figure 2 Identification - Pit ORION Transmitter

To install, mount 'C' clamp in a secure location on a wall or joist that is away from metal objects and faced insulation that typically reduce the performance of the radio. The transmitter must be installed in an upright vertical position with the bottom of the transmitter (end with wire) pointing toward the ground (see Figure 2). Place the tape supplied in the installation kit around the transmitter approximately 3/4" from the top of the unit. Next, thread the locking ring onto the top of the transmitter. The locking ring should be located right above the tape placed on the transmitter. Insert the transmitter into the 'C' clamp and lock into place so that the clamp closes over the tape and securely holds the transmitter (see Figures 3 and 4).



Figure 3



Figure 4

NOTE: ORION radio transmitters perform best with a clear line of site and performance will vary by installation.

BADGER METER ENCODER INSTALLATION

Install the Badger Meter encoder on the water meter and secure it using either the Torx® screw or standard seal screw provided.

TESTING

Once the Remote ORION® Data Profile transmitter is securely installed and the Badger® Encoder has been mounted on the water meter, the ORION system is ready for operation. Run water through the meter or turn on the transmitter using the Badger-Radix® Data Collector Programming Software. The ORION RTR® Transmitter automatically begins its radio broadcasts after receiving the first digital signal from the RTR. The ORION ADE™ transmitter automatically begins its radio broadcast after the ADE test circle makes one complete revolution and the transmitter attempts its regularly scheduled communication with the ADE. No specific testing of the wiring or programming of the transmitter is required. Reading each remote transmitter installed immediately after installation will verify proper operation and reading performance. ORION reading equipment only can be used to read installed ORION transmitters.

LICENSE REQUIREMENTS

This device complies with Part 15 of the FCC Rules. Operation of this device 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. Any changes made by the user not approved by Badger Meter can void the user's authority to operate the equipment. No license is required by the utility to operate an ORION meter reading system.

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