Centeron® Digital Cellular Level Monitor
Installation Guide

Provided Equipment:
DR Series: DR Series Radar Monitor, 2" Mounting O-ring (036240N0229), 1.5" Mounting O-ring (036240N0225), Anchor (040066Axxxx), and Float (086653Axxxx).
PD Series: PD Series Pressure Monitor, 036240N0229 2" Mounting O-ring, 036240N0225 1.5" Mounting O-ring.

Additional Tools:
Pipe wrench to remove existing tank cap (if necessary), Pipe adapter for bung (if necessary), Active cell phone with text messaging e-mail service (optional).

⚠ *Warning: Do not install on tanks that are located in Classified Hazardous Locations or contain flammable vapors (I.E. Gasoline Tanks).*
Avertissement: N'installez pas sur les réservoirs qui sont situés dans des endroits dangereux classifies ou ne contenez pas les vapeurs inflammables (I.E. Réservoirs D'essence).

Notice: This level measurement system is designed for use in non-pressurized (vented tank) applications. For operation in pressurized tanks special order configuration is required. DR Series Monitors can be used in tanks without free venting.

Step 1. Centeron® Web Site Setup – To Be Done BEFORE Going to Install Monitor
Important note: Skipping this setup will delay configuration of your Monitor and disable all associated email alerts.
- Log into the Centeron® Web Site (www.centeron.net) and add a Controller using the serial number on the device label.
- To receive installation confirmation, enter your email or cell phone text message address at the Controller setup menu.
- Use the tank wizard to setup tank data.

Step 2. Prepare Tank For Monitor.
DR Series:
- Select a bung on top of the tank that will allow the Monitor's probe to hang down vertically inside the tank.
- Verify that there is at least **2 inches** clearance between the float, cable, or anchor and any obstructions such as walls, baffles, reinforcements, and other measurement equipment inside the tank.
- Remove all material from the desired bung.
- Verify that there is adequate clearance for the probe and anchor to reach within 2 inches of the bottom of the tank.
- Check the size of the bung pipe thread. If different than 1.5" NPT or 2" NPT a pipe thread adapter is needed.

PD Series:
- Select a mounting bung on top of the tank that will allow the Monitor's pressure cable to hang down vertically inside the tank with the sensor and weight laying flat on the bottom.
- Verify that there is adequate clearance for the sensor/weight and cable to reach the bottom of the tank. The Monitor may be installed in a vertical standpipe if necessary. In this case, the standpipe must still allow the pressure sensor to reach and lay flat on the bottom. If the only access to the tank is where the vent is currently mounted, then a T-couple pipe adapter may be used to mount the device with the vent connected to the perpendicular inlet.
- Check the size of the bung pipe thread. If different than 1.5" NPT or 2" NPT a pipe thread adapter is needed.

Step 3. Measure Tank Dimensions.
Measure from the top of the tank bung (or standpipe/adapter) to the inside bottom surface of the tank.
DR Series:
- The maximum installation height must not be greater than the probe length indicated for the DR model number to monitor the entire tank. The Monitor can only measure liquid level above the installed anchor position.

PD Series:
- Verify that the pressure sensor/weight will lay flat on the bottom of the tank when the Monitor is installed. Monitor will only be able to measure liquid level above the installed pressure sensor position.

Step 4. Unpack Monitor.
- Lay out the Monitor on a flat surface while stretching the sensor cable out in order to work out any cable set, twists, or kinks.
- Slip the appropriate size O-ring over the sensor cable, and Monitor mounting threads.
- Slide the O-ring backward past the lip at the base of the Monitor threads pressing along the O-ring circumference until it is snug.

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DR Series:

- Install the float and then anchor on the cable.
- Carefully slide the anchor up the cable so that it will be positioned approximately 2 inches above the inside bottom surface of the tank (as measured in Step 3) when the Monitor is installed.
- Tighten the cable anchor screws to approximately 10 in-lb torque and cut off any excess cable flush with the bottom of the anchor. The cable and anchor must **not** touch the bottom of the tank when the Monitor is installed.

Step 5. Install Monitor In Tank.

- Lower the sensor and cable into the tank bung while being extremely careful not to nick the cable insulation on the tank threads.
- Verify that no twists or kinks are allowed to remain in the cable. Imperfections in the cable such as these must be straightened by hand as the cable is lowered into the tank.
- Carefully thread the Monitor into the tank bung (or standpipe/adapter) by hand tightening it 1/8 turn clockwise past engaging the O-ring. Assembly requires only a snug fit.

Important Note: Over-tightening may cause damage to the Monitor threads and O-ring. For maximum Monitor reception, avoid mounting inside a fully closed metal building, metal enclosure, or in close proximity to large electrical equipment.

Step 6. Activate Monitor.

Once the Monitor has been mounted into the tank the device can be activated.

- To activate the Monitor, pull the external slide magnet completely out of the top of the Monitor housing. This will activate the Monitor to make measurements and cellular transmissions on a programmed interval (per customer configured schedule via the Centeron® Web Site).

Note: Do not discard the magnet completely—keep it accessible for future use if needed. Do not store the magnet in the Monitor upper housing slot since this will de-activate the Monitor.

- If the installer's cell phone is available and active with the phone number set up on the Centeron® Web Site as an Email address, then an installation text message should be received within 5 minutes. If the installer's cell phone is not available, the installer can contact someone at their home office with access to the Centeron® Web Site for installation verification.

FCC Notice

These products generate and use radio frequency energy. If not installed and used in accordance with the manufacturer's instructions, they may cause interference to radio and television reception. These products have been tested and found to comply with the specifications in Part 15 of the FCC rules for Class B Devices.

Caution: Robertshaw Industrial Products Division does not support field changes or modifications to any Centeron® Level Monitoring System Equipment unless they are specifically covered in the instruction manual. All adjustments must be made at the factory under the specific guidelines set forth in our manufacturing processes. Any modifications to the equipment will void the manufacturers' warranty and could void the user's authority to operate the equipment and render the equipment in violation of FCC Part 15, Subpart C, 15.247.

These devices comply 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.

Safety Information

Centeron® Cellular Level Monitors are designed to comply with UL Standards for measurement equipment. They are **not designed** to be installed into classified hazardous locations.

Warning: Substitution of components may impair safety.
Avertissement: La substititution de composants peut alterer la surete.

Caution: Use only battery pack supplied by manufacturer.

See Instruction Manual for Additional Information

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