RSS Plug-and-Play Monitor Installation Mini-Instructions

Note: Refer to the Installation Manual for detailed instructions.

Adding a New Customer to the your Database

On the Internet, go to www.RemoteSense.com, the customer records tab and click on "**+**" to add a customer. Fill out the form and "Save" under the Action menu tab. Next fill out the tank record form and also "Save" the record.

Tank Transmitter Installation

Drill a ½" hole in the top of the tank cover. Install the transmitter with the ½" nut. Rotate the transmitter so the solar cell faces south.

Drill 3/16" holes for the wire manager hanger and install as required routing the wire around the inside circumference of the tank cover and to the cover hinge to prevent entanglement with the tank hardware.

Plug the sensor cable into the Remote Ready dial and transmitter cable. Note the last two digits of the five-digit transmitter ID number laser engraved on the transmitter cover.

Plug in the RSS Battery Pack and interface cable to initiate the 6-second RF transmission rate.

Receiver/Controller Installation

Listening Test

Install the phone line in the "IN" receptacle; reference the backside of the unit. Plug in the power adapter. Upon boot-up the unit will flash the software version 5 times. With the battery pack powering the transmitter, every 6 seconds the controller will display the last two ID digits followed by the tank percent of the transmitter. This test will last 60 seconds.

Upload Records

After the listening test you will hear the phone relay click indicating the unit is calling the RSS server to upload this new customer record from the database. The unit will direct dial and if that fails, it will automatically try and display a "9" prefix. Upon successful upload, the "UP-P" will be displayed and the unit will automatically start RF Tests. A "PH-F" or "UP-F" means the unit failed to "PHone" connect or "UPload" records successfully, reference troubleshooting below.

Radio Frequency (RF) Tests

The display will start counting down from 30 seconds to determine the exact period between RF transmissions. If an "F" is displayed the unit did not determine the transmission rate. Otherwise the unit will automatically conduct a 20-count RF transmission test. This will take between 120 and 140 seconds. The unit will start counting up and display the cumulative test time during the duration of this test. Whenever a RF transmission is received, the unit will immediately display the last two digit ID followed by the total number of transmissions received during the test. When 15 transmissions are received, the unit will pass but do not stop the test or it will be repeated. Wait for "P" to be displayed.

Congratulations, the unit is now successfully installed. It will now start displaying the emergency settings it uploaded. It cycles through these 3 times and makes 2 more phone calls to the server before

normal LED display operations commence. Don't forget to remove the battery pack at the tank and install the sealing plug in the connector opening.

LED Display Operations

The unit displays liquid level, temperature and the RF transmission. Under normal solar operations, the display cycle is 10 seconds for the liquid level and 2 seconds for the temperature. On solar power, every 10 minutes the last two digit ID RF transmission will pop up signaling a transmission was received. The interval is every 10 minutes on solar power, every 6 seconds on battery power. When the tank level drops below the alarm threshold, the tank number will flash on the display until the tank is filled.

Troubleshooting

Unit fails to phone connect to the server. Display reads "PH-F".

1. Verify dial tone with a phone set.
2. Verify analog, not digital phone. Typically install the unit on a fax or other modem phone line.
3. Prefix other than "9" required. This will require the handheld unit.

Unit fails to upload records from the server

1. Verify both the "Customer" and "Tank" serial number records were loaded correctly and saved to the database.

Unit fails to determine the RF Transmission Rate test.

1. The battery in the battery pack is low and needs to be replaced.
2. The battery pack connector is not properly seated.
3. The unit is out of RF range. This can be verified with the unit in the listening mode (first 60 seconds of operation, recycle the power for more time). Using the accessory 9V remote battery cable to power the Receiver walk the unit towards windows and/or closer to the tank. When the unit starts to receive the signal you are back within the RF range of the system.

Unit passes the RF Transmission Rate test but fails the RF test.

1. Determine the number of transmissions received. Often the controller can be moved to a different closer location to the tank within the building, on a windowsill or second story to improve the RF signal strength.

After two hours the unit displays "CP".

1. The customer and/or tank record is not loaded to the database. Load the customer to the database and have them cycle the power (CP).

If you require further assistance please call RSS at 719-488-1528.

Report Comments/Errors and Diagnostics

- *Emergency*: The unit tripped the Fuel, High or Low Temperature setting and you should have already received a computer voice activated phone call.
- *Refill Detected*: Unit detected a refill by you or a other propane supplier.
- *Power Failure*: Loss of power and the unit called in for initialization.
- *No RF 36 Hours*: No RF transmissions between the transmitter and receiver for 36 hours. On the older transmitter, check for voltage across the solar cell terminals. Power loss; plug in transmitter battery pack and check RF transmissions. Out of Range; Plug in receiver walkabout power cable and check for transmission shortening the distance between the receiver and transmitter.
- *Missed Call*: The unit did not call in as scheduled. The unit's power was unplugged. The phone or Internet cable was unplugged. The phone cable is plugged into the wrong receiver receptacle.