

# SENTRY

## WALL MOUNT TANK MONITOR

### Installation Instructions

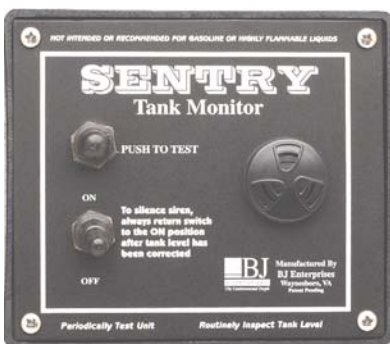
**The Sentry Tank Monitor should never be used to monitor gasoline or highly flammable or combustible liquids.**



The tank contents are the sole responsibility of the tank owner.  
There is no substitute for human supervision; never solely rely on this product. Routinely inspect tank level and test unit.

## STEP 1

### MOUNTING SENTRY CONTROL PANEL



Choose a location where the Sentry Control Panel will be most visible, i.e., office, parts room, main entrance, etc., and mount on wall.

NOTE: The Sentry Control Panel is not weather tight and must be shielded from the elements.

## **STEP 2**

### **CONNECTING THE REMOTE TANK SENSOR**

The remote tank sensors are designed to be used for waste product application or for bulk product application. Choose either high or low tank for you application.

**If more than one Remote Sensor is to be used, refer to Multi-Sensor Connections on Page 7, Figure 2.**



#### **High Tank Setup For Use With Waste Product Applications**

Use appropriate sealer for this application.

1. Thread sensor wires through the 1/2" to 1/8" NPT PVC adaptor.  
Screw sensor into adaptor.
2. Thread sensor wire through 1/2"x 6" NPT PVC pipe and screw pipe into adaptor.
3. Thread sensor wires and screw 1/2" x 6" NPT PVC pipe onto sensor housing base.
4. Connect sensor leads to an ohmmeter and assure circuit is **closed** when float is raised.
5. Screw sensor housing into a 2" tank bung.
6. Feed wire from circuit board through the hole in the side of the sensor housing and secure wire as outlined in **Wiring Connections** section.
7. Solder or wire nut to float leads; tape connections.
8. Seal hole with silicone or appropriate sealer to keep out moisture.
9. Connect wire to Sentry printed circuit board terminals marked "**FLOAT**".  
See Page 6, Figure 1.

## Low Tank Setup For Use With Bulk Product Applications

Use appropriate sealer for this application.



1. Discard factory supplied ½” x 6” pipe and replace with desired pipe length up to 10 ft.
2. Thread sensor wires through the ½” to 1/8” NPT PVC adaptor. Screw sensor into adaptor.
3. Thread sensor wires through the custom depth pipe and screw pipe into adaptor.
4. Thread sensor wires and screw custom length pipe onto sensor housing base.
5. Remove retaining clip from float and reverse float so that the line on float is closest to the clip, or the stamped lettering “N” & “O” is closest to the clip, depending on the float type.
6. Connect sensor leads to an ohmmeter and assure circuit is **closed** when float is lowered.
7. Screw sensor housing into a 2” tank bung.
8. Feed wire from circuit board through the hole in the side of the sensor housing and secure wire as outlined in **Wiring Connections** section.
9. Solder or wire nut to float leads; tape connections.
10. Seal hole with silicone or appropriate sealer to keep out moisture.
11. Connect wire to Sentry printed circuit board terminals marked “FLOAT ”.  
See Page 6, Figure 1.



## Using a Remote Sight Gauge Sensor

### **(SENTRY JARHEAD)**

NOTE: Assure proper depth gauge has been ordered for tank.  
Assemble gauge, but Do Not install gauge in tank at this point.

Fig. A

### ADJUSTMENT PROCEDURE

1. Loosen thumbscrews on sensor and slide sensor to desired depth (high or low).
1. Connect an ohmmeter to sensor leads and slowly move float arm up and down to assure circuit closes at desired level.
2. Once proper setting is achieved, lock sensor in place using thumbscrews.  
**CAUTION: Nylon—finger tighten only—do not overtighten.**

### INSTALLATION PROCEDURE

3. Remove glass jar and linkage assembly from bung adaptor, taking care not to disturb sensor setting.
4. Use appropriate sealer on threads and screw bung adaptor into tank bung opening.
5. Install linkage assembly into bung adaptor using groove on top assembly as a guide, assuring float arm will travel freely and not contact any baffles or sides of tank.
6. Reinstall glass jar.
7. Solder or wire nut sensor leads as outlined in Wire Connections section; tape connections.
8. Seal hole with silicone or appropriate sealer to keep out moisture.
9. Connect wire to Sentry printed circuit board terminals marked “FLOAT”.  
See Page 6, Figure 1.

## STEP 3

1. Install 9-volt battery.
2. Installation is now complete. Refer to Testing and Operating Instructions.
3. **Test system.**

### CONNECTING (OPTIONAL) TRANSFORMER



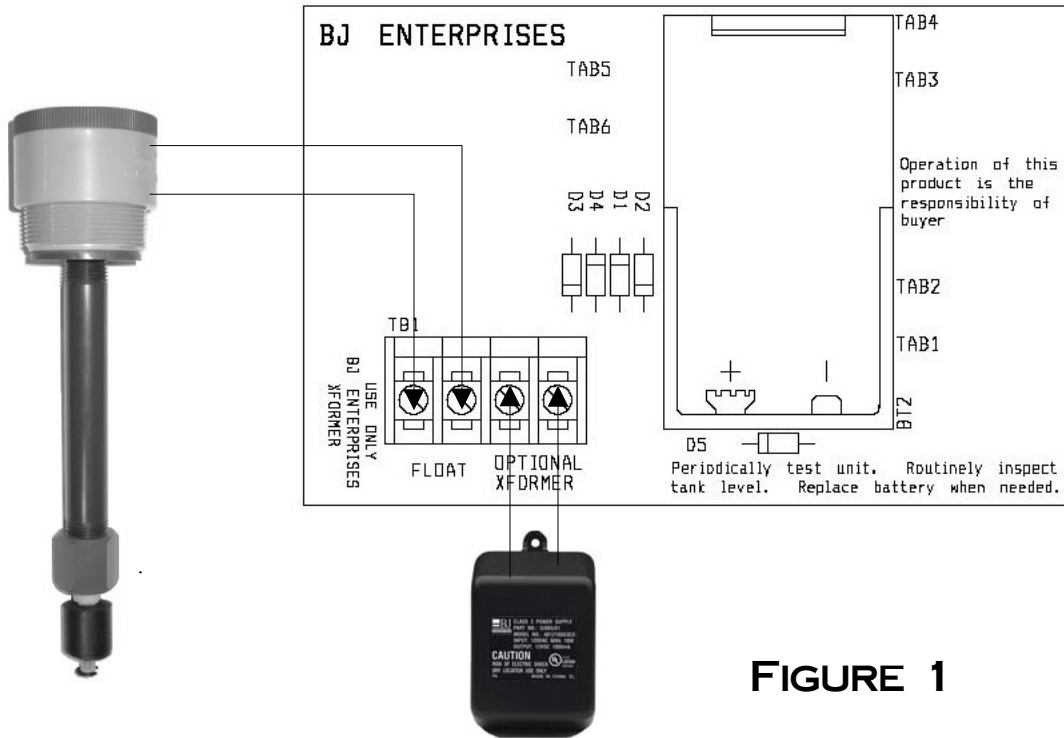
Never substitute the transformer with any brand other than BJ Enterprises.

#### NOTE:

Connection of the transformer should always be the last connection to the Sentry, and plugging the transformer into the outlet should be the final step.

1. Select a non-switched 24-hour hot 115v outlet, preferably dedicated solely for use with the Sentry.
2. Connect transformer to Sentry printed circuit board terminals marked “**OPTIONAL XFORMER**” as outlined in **Wire Connections** section. Observation of polarity is not necessary. See Page5, Figure 1.
3. Secure transformer to outlet using outlet plate screw to prevent accidental unplugging.

# WIRING CONNECTIONS



**FIGURE 1**

Use 18-gauge/2 conductor wire up to 150 ft. or 14-gauge/2 conductor wire up to 350 ft. to connect all components.

## Factory Recommendations

Loosely knot wires inside all component housings to act as wire strain relief. For additional security, or in some cases, compliance with local codes, run wiring inside conduit piping to protect from damage.

# TESTING AND OPERATING INSTRUCTIONS

## Testing System

1. Move toggle switch to “ON” position, push and hold Test button, assuring audible siren sounds.

NOTE: If optional transformer is used, temporarily remove 9-volt battery and test unit.

2. Reinstall 9-volt battery, unplug transformer and test unit.
3. Plug transformer back in.

## Operating Instructions

**The SENTRY Tank Monitor should never be used to monitor gasoline or highly flammable or combustible liquids.**



The tank contents are the sole responsibility of the tank owner.

There is no substitute for human supervision; never solely rely on this product. Routinely inspect tank level and test unit.

1. Always assure that the toggle switch remains in the “ON” position.
2. When a tank condition occurs, the Sentry may be silenced by moving the toggle switch to the “OFF” position.
3. **WARNING:** The sentry is now disabled and the toggle switch must be returned to the “ON” position after tank condition has been corrected.

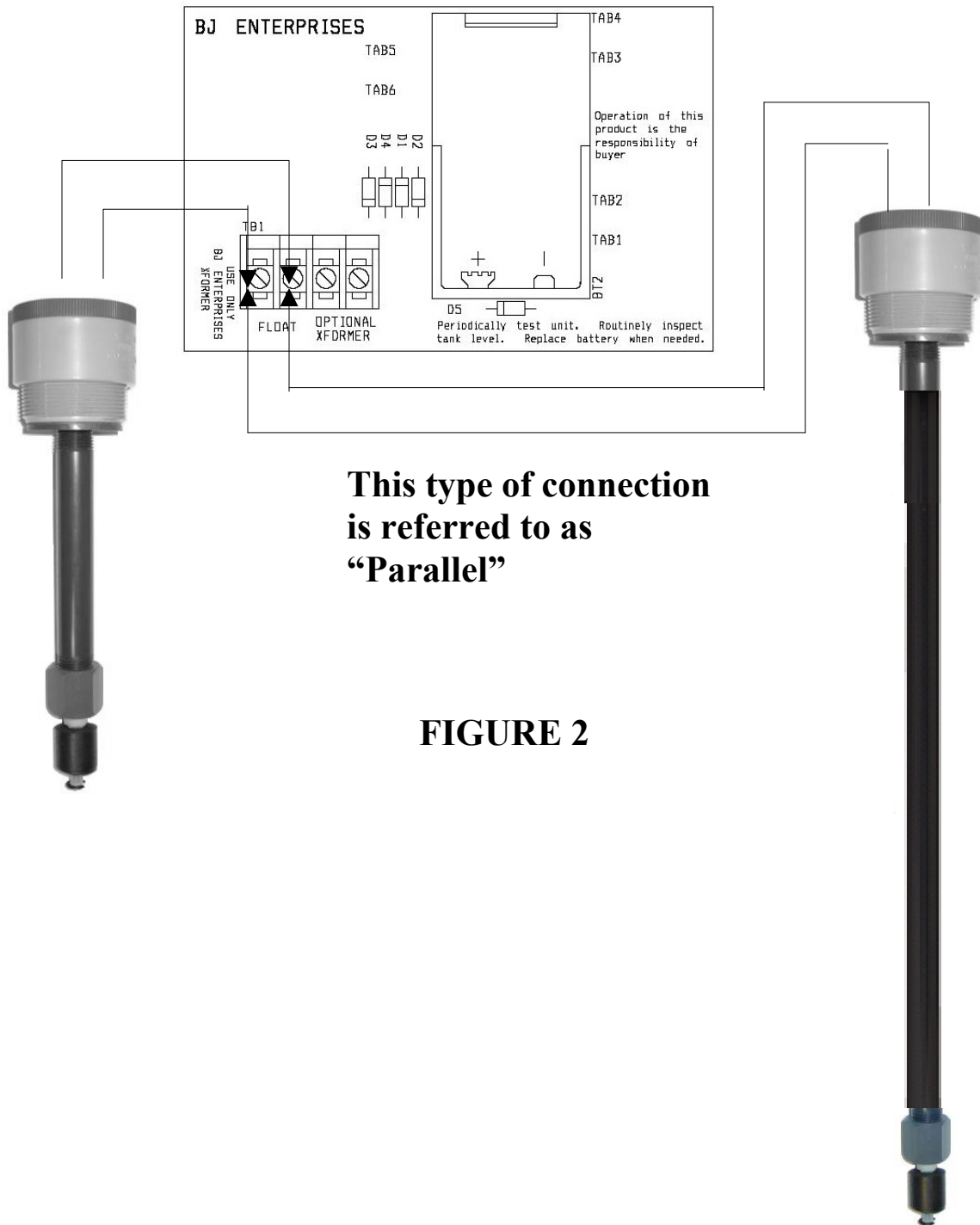
## Maintenance

1. Test unit daily.
2. Replace battery bi-annually.
3. Replace battery if a tank alarm occurs.
4. Depending on environment and location, it is advisable to periodically remove tank sensor(s) from tank and inspect. Manually raise and lower float assuring Sentry is functioning properly.

**SAVE THESE INSTRUCTIONS**

# Multi-Sensor Connections

**This example shows 2 remote sensors or Main sensor and 1 interstitial sensor.**



**This type of connection is referred to as "Parallel"**

**FIGURE 2**

# WARRANTY

- ⚡ Every item is warranted to be in good working order for the original purchaser. The warranty covers all electronic components for one year.
- ⚡ All freight charges to and from the factory are the responsibility of the user.
- ⚡ The warranty does not cover: Damages due to malfunctions of equipment; Failure to follow manufacturer's installation, operation or maintenance instructions and guidelines; Unauthorized adjustments, modifications or alterations of the equipment; Replacement of factory parts with parts other than original equipment; Abuse, misuse or negligent acts; Acts of God and or third parties.
- ⚡ The warranty shall begin on the day the equipment is shipped to the customer. Customers requiring warranty assistance must contact manufacturer for a returned goods authorization number. Manufacturer will determine the method of satisfying the warranty requirements. If it is determined that the product must be returned, proof of purchase and a clear description of the problem must accompany the equipment. The product must be returned freight prepaid. The manufacturer shall not be responsible for any losses (including loss of profits or revenues) incurred by the purchaser during the time necessary to repair the equipment. The manufacturer's sole responsibility shall be to repair or replace the product and not the cost of removal or reinstallation. No other warranty except as stated above is implied or expressed.
- ⚡ BJ Enterprises will not assume any responsibilities for spills, cleanup, shortages or any other damages resulting from malfunction of this product.



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