



## **BO-A-O-VRS/P Outdoor Alarm Installation Instructions**

This alarm system monitors two liquid levels in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, and other non-potable water applications.

The BO-A-O-VRS/P indoor/outdoor alarm monitors two alarm conditions. The alarm horn and red beacon activate in "flashing" mode when a high water condition occurs. The alarm horn and red beacon activate in "constant on" mode for alarm 2.

### **BO-A-O-VRS**

- Voltage: 120 VAC, 50/60 Hz, 6 watts maximum (alarm condition)
- Enclosure meets Type 3R water-tight standard.
- Enclosure specifications: 6.5 x 4.5 x 3.0 inch (16.51 x 11.43 x 7.62 cm), indoor/outdoor, weatherproof, thermoplastic
- Manual alarm reset, horn silence switch, and alarm test switch.
- Alarm horn sounds at 82 decibels at 10 feet (3 meters).
- High water alarm (flashes) float included.
- Alarm 2 input (constant on) float optional.
- Complete package includes standard Vertical Reed Switch with 15 feet (4.57 meters) of cable.
- Three-year limited warranty.

#### **PREVENTATIVE MAINTENANCE**

- Periodically inspect the product. Check that the cable has not become worn or that the housing has not been damaged as as to impair the protection of the product. Replace the product immediately if any damage is found or suspected.
- Periodically check to see that the float is free to move and operate the switch.
- Use only SJE-Rhombus® replacement parts.

**⚠ WARNING****ELECTRICAL SHOCK HAZARD**

Disconnect power before installing or servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.

**⚠ WARNING****EXPLOSION OR FIRE HAZARD**

Do not use this product with flammable liquids. Do not install in hazardous locations as defined by National Electrical Code, ANSI/NFPA 70.

Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSINFPA 70 so as to prevent moisture from entering or accumulating within boxes, conduit bodies, fittings, float housing, or cable.

**INSTALLING THE VRS SWITCH**

1. Place the VRS into the filter as shown in Figure A and twist lock into place.

**INSTALL ALARM AND CONTROL SWITCH**

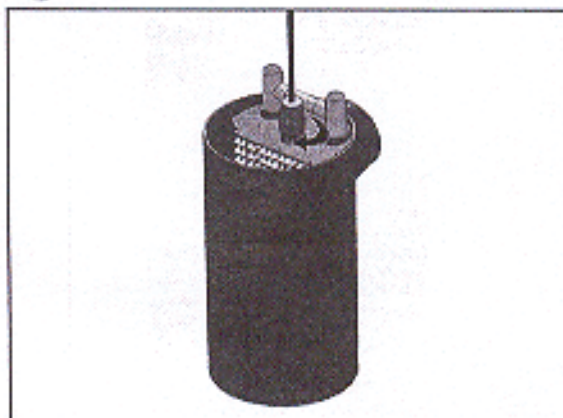
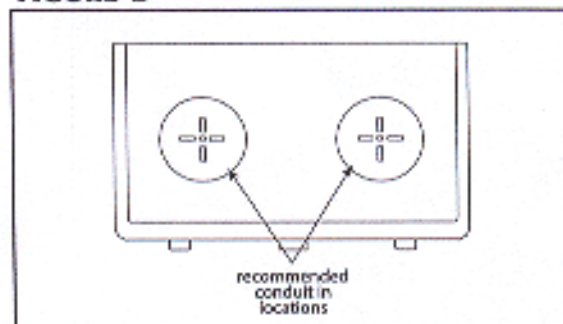
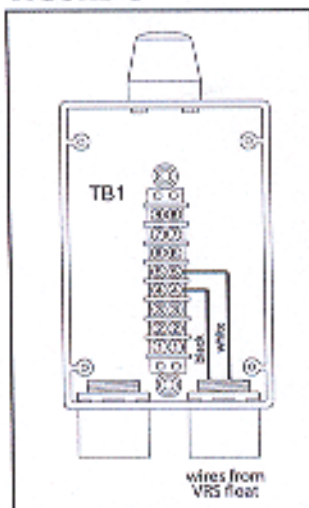
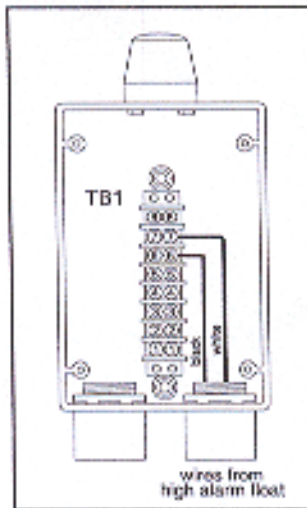
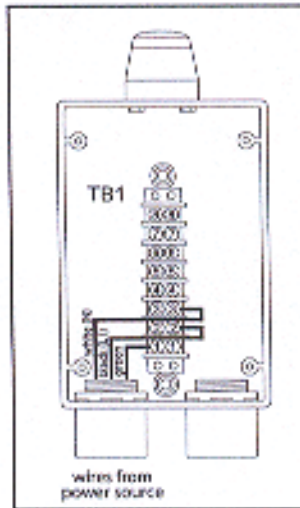
1. Determine mounting location for alarm panel.
2. Mount alarm box using existing holes in back of box. To ensure a watertight seal, use screws and sealing washers included with alarm.
3. Determine "conduit-in" locations on alarm (see Figure B).
4. Drill holes for conduit entry, taking care not to damage bosses inside alarm box.
5. Attach conduit. Use liquid-tight connectors if installing outdoors.
6. Bring alarm 2 VRS wires through conduit and attach to terminal positions TB1-4 and TB1-5 as shown in Figure C.
7. Bring high water alarm float wires through conduit and attach to terminal positions TB1-6 and TB1-7 as shown in Figure D.

**Note:** If using VRS switch, do not connect to Alarm 1. Connect VRS to Alarm 2 input only.

8. Bring alarm power wires through conduit and attach to terminal positions TB1-2 and TB1-3 as shown in Figure E. Attach ground to terminal position TB1-1 as shown in Figure E.
9. Turn on power.

**TEST SYSTEM**

1. Check installation by moving high alarm float upward. The system should indicate a flashing alarm condition.
2. Push test/normal/silence switch to "silence" horn (beacon should remain illuminated).
3. Lower high alarm float.
4. Place test/normal/silence switch to "normal" position.
5. Raise VRS switch. The system should indicate an alarm (solid) condition.
6. Lower VRS switch, the alarm should turn off.

**Figure A****FIGURE B****FIGURE C****FIGURE D****FIGURE E**

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