TANK ALERT® Duo 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 Tank Alert® Duo 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.

**TANK ALERT® DUO ALARM**

- Voltage: 120 VAC, 50/60 Hz, 7 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 SJE SignalMaster® control switch with 15 feet (4.57 meters) of cable and mounting clamp (high water alarm float).
- Three-year limited warranty.

**WARNING**

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.

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, ANSI/NFPA 70 so as to prevent moisture from entering or accumulating within boxes, conduit bodies, fittings, float housing, or cable.

**ELECTRICAL SHOCK HAZARD**

For detailed specifications on this product, or for the complete line of SJE-Rhombus® panel, alarm, and switch products, visit our web-site at www.sjerhombus.com.

**WARNING**

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

**EXPLOSION OR FIRE HAZARD**

**WARNING**

SJE-RHOMBUS® warrants to the original consumer that this product shall be free of manufacturing defects for three years after the date of consumer purchase. During that time period and subject to the conditions set forth below, SJE-RHOMBUS® will repair or replace, for the original consumer, any component which proves to be defective due to defective materials or workmanship of SJE-RHOMBUS®.

THIS EXPRESS WARRANTY DOES NOT APPLY TO THE MOTOR START KIT COMPONENT. SJE-RHOMBUS® MAKES NO WARRANTIES OF ANY TYPE WITH RESPECT TO THE MOTOR START KIT.

ELECTRICAL WIRING AND SERVICING OF THIS PRODUCT MUST BE PERFORMED BY A LICENSED ELECTRICIAN.

THIS WARRANTY DOES NOT APPLY: (A) to damage due to lightning or conditions beyond the control of SJE-RHOMBUS®; (B) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with printed instructions provided; (C) to failures resulting from abuse, misuse, accident, or negligence; (D) to units which are not installed in accordance with applicable local codes, ordinances, or accepted trade practices, and (E) to units repaired and/or modified without prior authorization from SJE-RHOMBUS®.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

TO OBTAIN WARRANTY SERVICE: The consumer shall assume all responsibility and expense for removal, reinstallation, and freight. Any item to be repaired or replaced under this warranty must be returned to SJE-RHOMBUS®, or such place as designated by SJE-RHOMBUS®.

ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. SJE-RHOMBUS® SHALL NOT, IN ANY MANNER, BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES AS A RESULT OF A BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.
INSTALLING THE FLOAT SWITCH

1. Determine desired activation level as shown in Figure A. Position float to activate prior to a threatening liquid level condition. To adjust activation level, move mounting clamp up or down on discharge pipe.
2. Place the cord into the clamp as shown in Figure B.
3. Secure the clamp to the discharge pipe as shown in see Figure B.
   **Note:** Do not install cord under hose clamp.
4. Tighten the hose clamp using a screwdriver. Over tightening may result in damage to the plastic clamp. Make sure the float cable is not allowed to touch the excess hose clamp band during operation.
   **Note:** All hose clamp components are made of 18-8 stainless steel material. See your SJE-Rhombus® supplier for replacements.

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 C).
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 float wires through conduit and attach to terminal positions TB1-4 and TB1-5 as shown in Figure D.
7. Bring high water alarm float wires through conduit and attach to terminal positions TB1-6 and TB1-7 as shown in Figure E.
   **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 F. Attach ground to terminal position TB1-1 as shown in Figure F.
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 alarm 2 float switch. The system should indicate an alarm (solid) condition.
6. Lower alarm 2 float switch, the alarm should turn off.