



TANK ALERT® ABW (Wireless) Alarm Installation Instructions

The Tank Alert® ABW alarm system features a battery operated wireless transmitter that is placed in a tank (up to 150 feet away from the indoor alarm). When the high water alarm float switch activates, the transmitter sends a signal and sounds the indoor alarm warning of a potentially threatening liquid level condition. The horn can be silenced, but the alarm light remains on until the condition is remedied. Once the condition is cleared, the alarm will automatically reset.

The Tank Alert® ABW alarm system monitors liquid levels in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, effluent filters, and other water applications.

TANK ALERT® ABW ALARM FEATURES



- **120 VAC Voltage - Primary:** 120 VAC, 60 Hz, 2.4 watts maximum (alarm condition); Operating Voltage: 9 VDC.
- NEMA 1 enclosure rated for indoor use.
- Automatic alarm reset.
- Red "alarm" light and green "power on" light, alarm "test" switch, and horn "silence" switch.
- 6 foot (1.8 meter) power cord.
- Alarm horn sounds at 87 decibels at 10 feet (3 meters).
- If primary power fails, the alarm system continues to work due to battery backup feature. Battery Backup Power: 9 VDC (Battery not included.)
- Package includes standard internally weighted Sensor Float® control switch with 10 feet (3.04 meters) of cable with transmitter.
- Switching mechanism operates on low voltage and is isolated from the power line to reduce the possibility of shock.
- Low battery chirp.
- Loss of signal alarm - after 24 hours without a signal, the red LED will flash. After 7 days without a signal the alarm will sound.
- External terminal block for an optional local alarm float.

Shown with optional mounting bracket.

TANK ALERT® ABW TRANSMITTER FEATURES

- Wireless transmitter with up to 150 foot range
- Long life 3.6V lithium battery (recommended replacement 2 years)
- Meets all FCC requirements
- Transmitter transmits once per hour or when the float position is changed

OPTIONS

- Mounting bracket
 - UL Listed component model available
- Alternate float switch models:
- Sensor Float® control switch (N.C.)
 - SJE MilliAmpMaster™ control switch (N.C.)
 - SJE MilliAmpMaster™ control switch (N.O.)

PREVENTATIVE MAINTENANCE

- Periodically inspect the product. Check that the cable has not become worn or that the housing has not been damaged so as to impair the performance 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.
- Replace batteries as specified in instructions.
- Use only SJE-Rhombus® replacement parts.

SJE-RHOMBUS® THREE-YEAR LIMITED WARRANTY

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 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.

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

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.sjrhombus.com.

INSTALLATION REQUIREMENTS

- Please note the following requirements when determining a location for installation:
 - Do not mount the transmitter more than **2" below ground**. The further below ground the unit is installed, the shorter the range becomes.
 - Do not use a metal riser cover. It will severely limit the range of the unit.**
 - Note what is between the receiver and transmitter. An RV, pole shed, or any large metal object may cause transmission problems. Individual vehicles such as cars and SUV's will not be a concern.
 - The transmitter and receiver operate on a line-of-sight basis; where the signal goes straight to the receiver. Steep inclines may cause there to be no clear line of site between the receiver and the transmitter. (See Figure G on back page.)
 - Metal buildings and buildings with aluminum siding may cause the unit to have a shorter range. In some cases, it may be better to mount the receiver unit on a wall perpendicular to the transmitter.
 - AC equipment used continuously in excess of 3 hours may cause loss of transmission alarm.

INSTALLING THE RECEIVER (ALARM)

- Determine the location of the receiver (alarm) unit. Please note the following requirements when determining a location for mounting the receiver:
 - Do not install receiver (alarm) in a basement.
 - Do not install receiver (alarm) near a computer or radio. These items may limit receiver's ability to pick up a signal.
 - Mount receiver (alarm) as close to transmitter (float) as possible. (Do not exceed **150 feet**.)
 - Mount receiver and plug it into a 120 VAC wall outlet.
- Insert screw (supplied) at desired wall location. **Note:** Screw is to be located over wall stud or used with a wall anchor sized for a #8 x 1.25" self tapping screw.
- Hang alarm using keyhole on back of enclosure. Install second screw in mounting flange located on bottom of alarm.
- Make sure power to alarm is disconnected.
- Bring optional alarm float cable leads back to receiver unit and wire according to Figure A. **Note:** When used with a pump application, install optional 9 VDC battery. This allows the receiver to operate if the pump circuit fails.
- To install backup alarm battery (optional), open battery door and install 9 VDC alkaline battery (not included). **Do not use heavy duty/non-alkaline batteries. Battery must be installed for backup alarm to function. Note:** The green power on light does not illuminate when unit is on battery power.
- Plug the alarm in to apply primary power. Verify the green "power on" light illuminates.
- Install 3.6 VDC lithium battery pack into the transmitter.
- Check operation by manually tipping float up. After a 10 second delay, the horn will sound and the "alarm" light will come on.
- Press "silence" button to silence the horn. The horn will silence while the red "alarm" light stays on.
- Tip float back down. After a 10 second delay the alarm light will turn off. Press "test" button. The "alarm" light and horn will activate.
- Reset the alarm by removing all 120V and 9 VDC power. Remove the 3.6 VDC battery from transmitter. Reapply power to the receiver unit. **Do not insert transmitter battery at this time.**
- Replace 9 VDC battery every 12 months and after each alarm condition** to ensure proper operation. If battery is low, the low battery chirp feature will cause the horn to chirp approximately once per minute. Replace battery if this occurs. **Note:** Non-alkaline batteries may cause a low battery chirp even when they are new.
- Using the provided cable clasp, secure cord to outlet as shown in Figure B. Use existing receptacle faceplate screw and supplied washer.
- Test unit once per week to insure proper operation.

Figure A

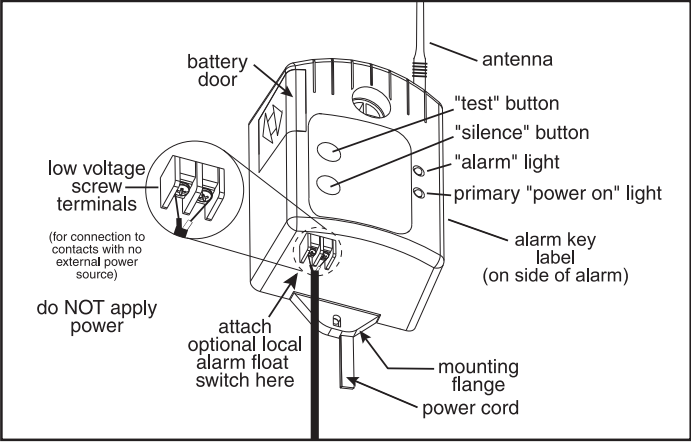
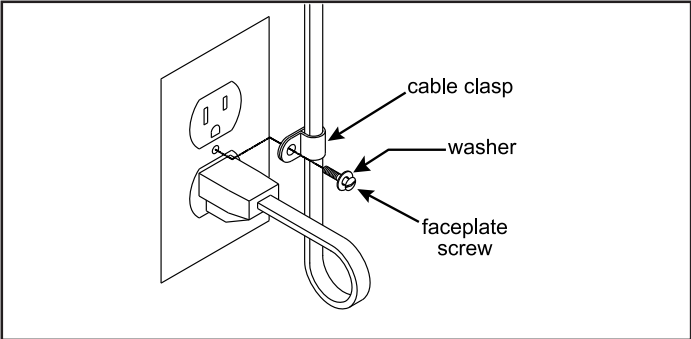


Figure B



INSTALLING THE TRANSMITTER (FLOAT)

NOTE: DO NOT CUT FLOAT CABLE.

1. To monitor high level conditions determine the correct activation level for the float.
2. Suspend switch at desired activation level as shown in Figures C & D. **Note:** Switch remains partially submerged during "on" tipping action.
3. Set float height and coil any excess cord. Secure with zip tie provided.
4. When using optional mounting bracket, line up the arrows on top of transmitter with those on mounting bracket and receiver. If mounting bracket is not used, arrow alignment is not needed. This bracket can be used when mounting the transmitter in a standard riser as shown in Figure E. If the unit is being mounted in a 4 or 6 inch PVC pipe, drill a 1 3/8 inch hole in the top of the PVC cap and mount transmitter through the cap as shown in Figure F.
5. Reinstall battery and place back inside unit.
6. Apply thread compound that is suitable for PVC to threads of holder. **Do not use teflon tape.**
7. Replace grey cap. Wait at least three minutes. Once battery is installed, the transmitter will wait three minutes to transmit a signal. During the 3 minute wait, drop the float into place and replace all tank covers.
8. After three minutes have elapsed, press and hold "test" and "silence" buttons on receiver. A flashing green light signifies a good installation. A flashing red light signifies either the unit did not receive any signal or the signal was not strong enough for reliable operation. Move receiver to a different location. **Note:** A change in location as minor as moving it up vertical one foot could allow it to operate reliably.
9. **Replace battery every 2 years.**

ALARM LIGHT KEY

Solid Red: Remote Alarm

Remote (wireless) alarm has been triggered. Check location of transmitter unit to determine if an alarm condition is occurring.

Fast Blink Red: Local Alarm

Local alarm (float connected to terminal block) has been triggered. Check chamber in which local alarm float is used.

Slow Blink Red: No Signal

The receiver is not communicating with the transmitter. Check transmitter battery voltage (3.6V) and/or the area between transmitter and receiver for obstructions such as large vehicles or RV.

Slow-Fast Blink Red: Multiple Alarms

Several alarms are triggered.

1. Check local alarm float (if used).
2. Check level in the tank with a remote alarm.
3. Check transmitter battery.

Solid Green: Primary Power

120 VAC power present.

Green Light Off:

Unit is no longer operating off of 120 VAC power and is operating off of 9 VDC battery backup (if battery is installed).

Horn Chirp:

Low battery or non-alkaline battery was used. Replace 9 VDC backup battery with a new alkaline battery.

Figure C - Internally weighted float

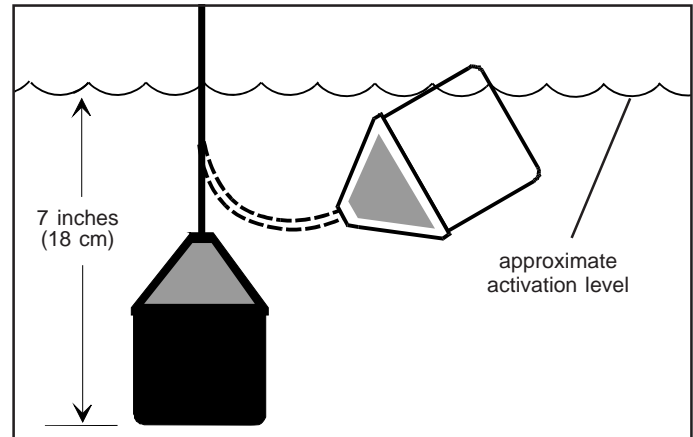


Figure D - Tethered float

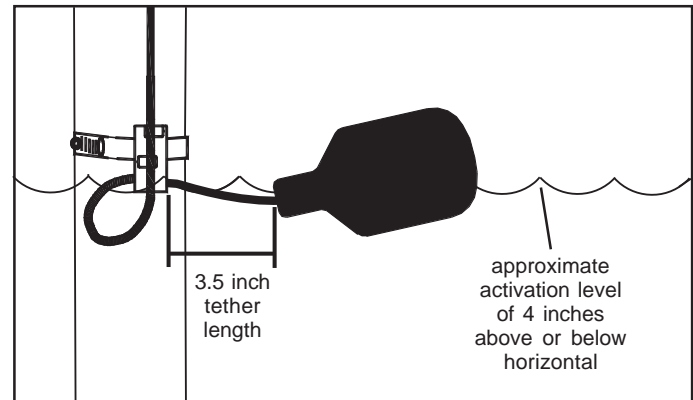


Figure E - Standard Riser Installation

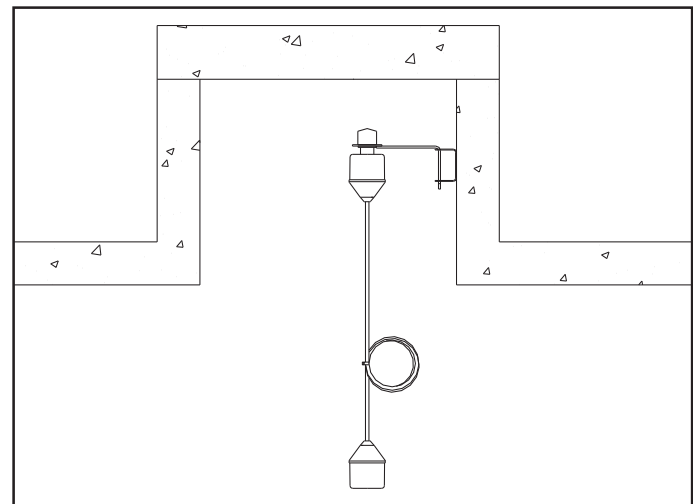
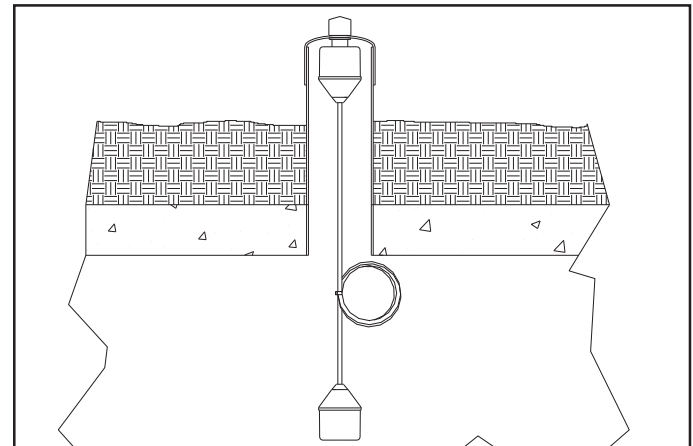


Figure F - PVC Pipe Installation



FCC INFORMATION

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate receiving antenna.
- Increase separation between equipment and receiver.
- Connect equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult dealer or an experienced radio/TV technician for help.

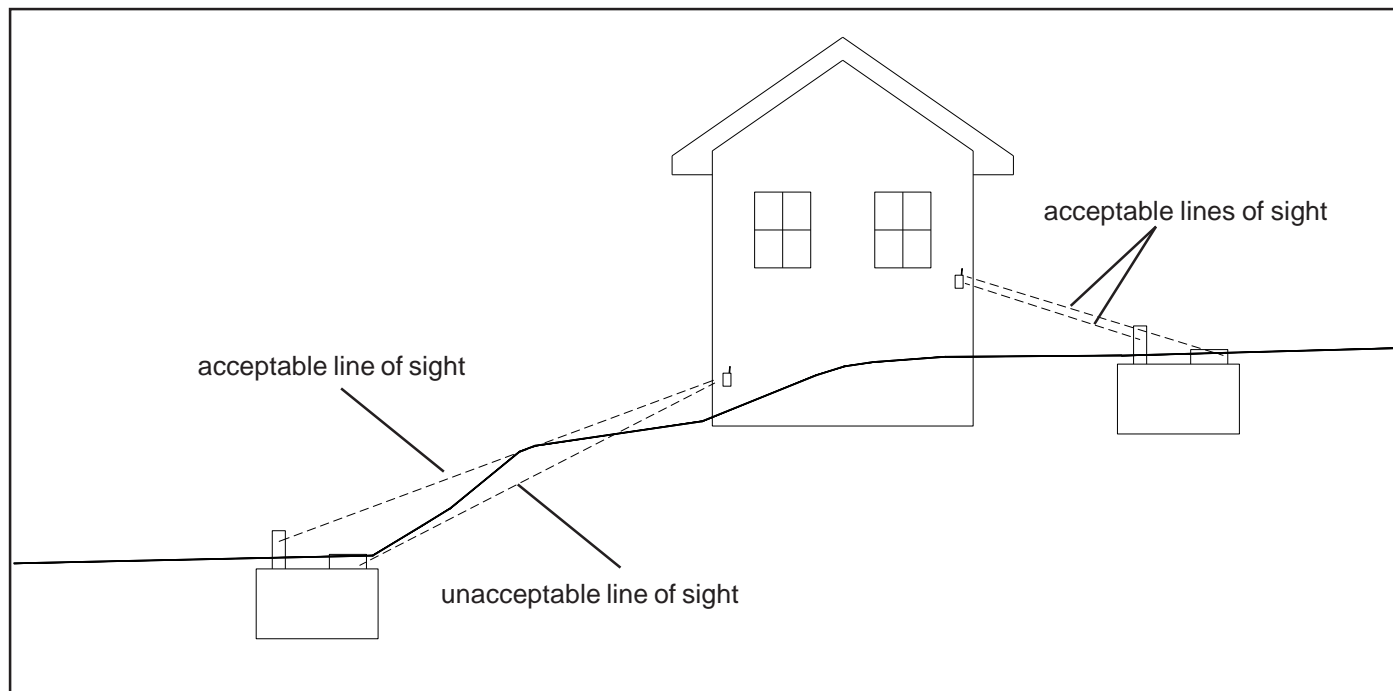
This equipment has been certified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

FCC ID#: SCP TAABW01

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Figure G - Line-Of-Sight Illustration



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