

# Observer 400 - Alarm System

The Observer 400 alarm system is designed to monitor liquid levels in sump basins, holding tanks, lift station tanks and many other non-potable water and wastewater applications.

This alarm comes standard with a Normally Open, 15 foot float switch to monitor for High Water levels. An optional Normally Closed float switch can be supplied for monitoring Low Water level.

The Observer 400 is designed to sound an audible horn and illuminate a visible red beacon light to notify of an alarm situation. There is a silence switch to turn horn off while fixing the alarm situation which will automatically reset itself when the the situation is remedied. (the red alarm light will remain on until the alarm conditions are remedied) There is also a Test Button for convenient testing of the units alarm light and horn.



**OPTIONS:** Alternate float switches with variable cord lengths are available.

## Indoor / Outdoor High Water Alarm

### Benefits / Features

- Nema 3R water-tight enclosure rated for indoor and outdoor use
- Automatic alarm re-set, horn silence button, and alarm test button
- 360 degree visible alarm light
- Alarm horn sounds to 85 decibels at 10'
- Mechanical alarm float switch included (15'cord)
- Auxiliary dry contacts are standard
- SST mounting screws included
- UL listed alarm system
- Two-year limited warranty

### Specifications

- Dimensions	6.5" X 4.5" X 3" (external mounting feet)
- Enclosure	Nema 3R weatherproof thermoplastic (water-light)
- Horn	85 db at 10'
- Weight	3.5 lbs.
- Alarm Voltage	Primary: 120 volt, 12 VAC secondary, 60 HZ (alarm condition 2.5 watts max)
- Float Switch	15' mechanical float
-Float switch	Quick connect float connection. Do not apply power. Class Two Output, 12 VAC
- Power cord	6 feet power cord option
- Alarm light	360 degree visible
- Auxiliary contacts	120 VAC, 5 amps max / 60 HZ



# ALARM SYSTEM INSTALLATION INSTRUCTIONS

Be sure to follow National Electric Code, ANSI/NFPA 70, when installing this unit to prevent moisture from entering or building up inside equipment.

## ALARM & FLOAT INSTALLATION:

1. Decide flat indoor or outdoor vertical mounting location.
2. Make sure power from the breaker to the site location is turned off.
3. Drill holes in the pre-marked spaces in the bottom of the alarm box and run  $\frac{1}{2}$ " PVC conduit to this location. Now attach the  $\frac{1}{2}$ " PVC conduit to one of the holes and run the 120 VAC power supply into the bottom of the box.
4. Run another  $\frac{1}{2}$ " PVC conduit to the other hole in the bottom of the box from the desired tank you wish to monitor.
5. Use the external mounting feet and provided screws to securely mount the alarm unit to the surface.
6. Use the tie strap supplied in the box to secure the float switch (figure 1) at the desired warning level in the tank. Cut off excess material left from the tie strap and discard.
7. Bring float wire up through the conduit and strip the end of the float wire (figure 2) and connect the wires to the labeled terminal strip position.
8. Next, wire the 120 VAC power conductors to the labeled terminal strip position and hook the ground wire to the ground terminal post on the base of the alarm box. Make sure the power supply is separate from the one used for the pump to ensure proper notification.
9. Connect the two wires going from the light beacon to the circuit board.
10. Attach the alarm box cover to the base using the four screws in the cover making sure the seal fits properly.
9. Turn the power on
10. Now manually test the alarm by tilting the float switch up until you hear the alarm notification and you see the alarm light turn on.
11. Periodically test unit by pushing the Test button on the cover to make sure unit is working properly.

Figure 1

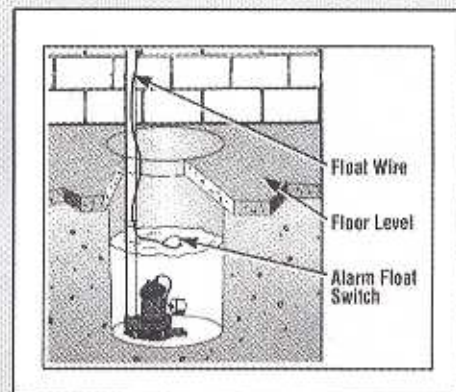
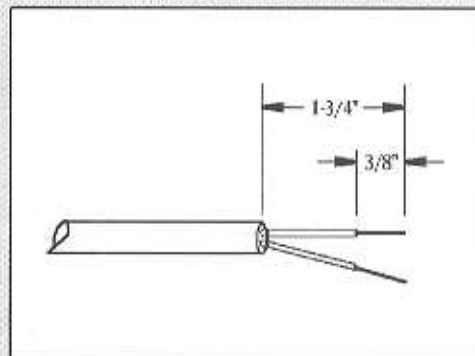


Figure 2



**WARNING: FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH. REFER TO THESE INSTRUCTIONS ANY TIME UNIT IS DISCONNECTED FOR ANY REASON.**

### ⚠ 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

### ⚠ 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.