



MEMBER
ABYC[®]
 Setting Standards for Safer Boating

Model 257, 257B, 257-24 Dual System Bilge Control



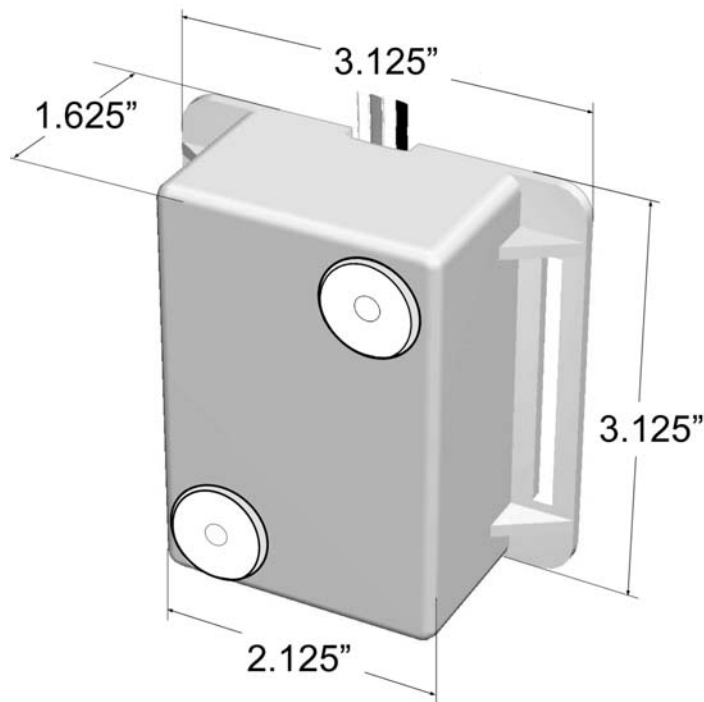
The **Dual System 257** from Water Witch, Inc. offers boat owners and manufacturers two systems in one product; primary protection, to activate a bilge pump when it senses the presence of water and a secondary system for added protection or a backup against primary system failure. The 257's monitoring system is constantly on guard and will activate the primary bilge pump when it detects water for 8 continuous seconds. The 257's secondary system will activate only when the pump runs for 2 continuous minutes. The monitoring and secondary systems work hand-in-hand to provide previously unavailable protection in one electronic control. The 257 can be connected to any auxiliary system such as a second bilge pump, audio alarm or visual alarm. Meets or exceeds the Canadian & U.S. Coast Guard standards and comes with an unmatched 7 year limited warranty.

FEATURES & BENEFITS

- Works in an oily bilge
- No moving parts and no electrolysis
- Easy to install and mounts at any angle
- Waterproof - Impermeable to all bilge substances
- 7 year unbeatable limited warranty
- Will not pump a bilge full of pure gas, diesel or oil
- Will not interfere with other electronics
- Exceeds both the United States Coast Guard and U.L. Standards

SPECIFICATIONS

Power Required:	12 Vdc (257) 24Vdc (257-24)
Power used at rest:	.008 Amps.
Maximum Main Load:	20 Amps. (24Vdc-15A)
Maximum Aux. Load:	10 Amps. (24Vdc-7A)
Maximum Total Load:	25 Amps. (24Vdc-20A)
Delay on:	8 seconds
Delay off:	15 seconds
Aux. System Delay:	2 Minutes
Size:	2 1/8"W x 3 1/8"H x 1 5/8"D



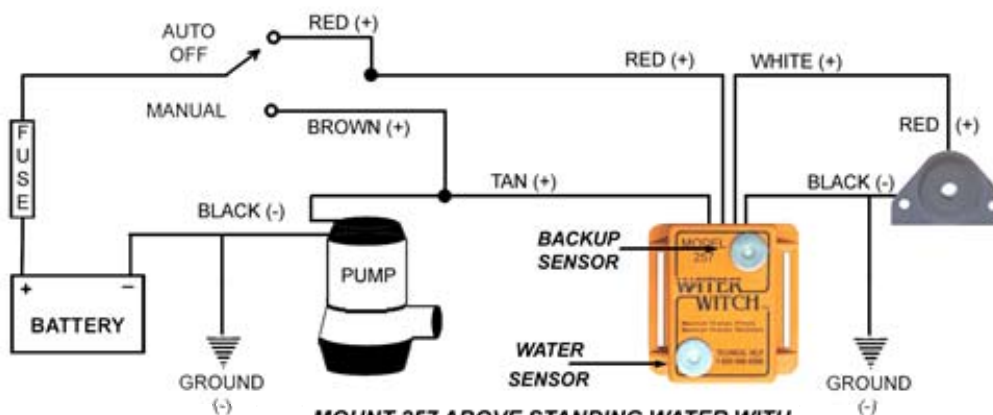
Installation Instructions

A fuse and manual override switch are recommended with the installation of a Dual System 257.

1. Run bilge pump until all possible water is pumped out. The amount of water left in the bilge is the standing water level.
2. Disconnect the battery.
3. Mount the 257 at any angle above the standing water level. The bottom of the water sensor should be at the desired high water level to be detected.
4. Follow the wiring schematic for the 257 as illustrated in the diagram below.
5. Connect the 257's tan wire to the positive wire from bilge pump.
6. Connect the 257's black wire to the negative side of battery or to ground.
7. Connect the 257's red wire to the positive side of the battery through a fuse.
8. Connect the 257's white wire to the positive side of the auxiliary system (secondary pump, audible alarm, buzzer, etc...).



Model 257



MOUNT 257 ABOVE STANDING WATER WITH WATER SENSOR AT DESIRED LEVEL TO BE DETECTED

wiring diagram shown with optional buzzer



Model 257B
with optional buzzer

Maintenance

The Water Witch requires little maintenance other than periodic cleaning of the sensors. Ordinarily this consists of hosing it down with fresh water and wiping it off with a clean rag or towel. Some high foaming detergents or high concentration of fish "slime" can delay or prolong cycle times and require more frequent cleaning of the sensors. Periodically check electrical connections for corrosion.

NOTE:

If large amounts of rain water can enter the bilge, it may dilute the normal, fresh or salt, water outside our sensitivity window. Corrective action can be to switch pump on manually to remove diluted water or to add minerals such as salt, baking soda, bilge cleaners, etc... **NORMAL FRESH WATER HAS AMPLE MINERAL CONTENT FOR PROPER OPERATION.**

PURCHASE INFORMATION

Model #	Voltage	Max. Load	Category	Warranty
257	12Vdc	25A	Dual System (high water with aux. system)	7 years
257B	12Vdc	25A	Dual System (high water with aux. system)	7 years
257-24	24Vdc	20A	Dual System (high water with aux. system)	7 years