



The World's most advanced Marine Monitoring and Control Technologies.



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### **BSW-1000** Bilge Pump Switch

INSTALLATION MANUAL

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## INTRODUCTION

Thank you for purchasing the BSW-1000 Bilge Pump Switch. **Smartswitch Technologies** are proud of the quality and innovation that goes into all of our industry leading products.

Our Research and Development team has spent considerable time and effort designing a quality range of monitors and controllers that allow our customers to keep their eye on all the important onboard operations - *accurately, reliably and simply.*

It's this kind of thinking that makes **Smartswitch** the provider of the Worlds most advanced Marine Monitoring and Control Technologies.

**Smartswitch** recommends installation of this product be carried out by a suitably qualified Marine or Auto-Electrician. This document contains information to ensure accuracy and safety in the operation of your vessels equipment. For further information or queries please contact your Smartswitch distributor or visit [www.smartswitch.co.nz](http://www.smartswitch.co.nz)

## OPERATION: BSW-1000 BILGE PUMP SWITCH

**NOTE: The High Float switch DOES NOT need to be fitted for the system to operate.**

### OPERATION WITHOUT AUTO / MANUAL SWITCH FITTED:

If the low float switch turns on and the programmable delay ON time has been reached (factory setting is 5 sec's) the pump will turn ON. When the low float switch turns off the pump will stay ON for the programmable delay OFF time (factory setting is 5 sec's).

### OPERATION WITH AUTO / MANUAL SWITCH FITTED:

**NOTE 1:** If fitting an Auto/Manual/Off switch remove and discard the jumper between the terminals 'Auto' and 'Common' and connect the switch as per the diagram below. If NOT, ensure the jumper is fitted between the terminals 'Auto' and 'Common'.

Auto / Manual switch in the **AUTO** position: If the low float switch turns on and the programmable delay ON time has been reached the pump will turn ON. When the low float switch turns off the pump will stay ON for the programmable delay OFF time.

Auto / Manual switch in the **MANUAL** position: The pump will turn ON and stay ON until the switch is placed in either the Auto or the Off position.

Auto / Manual switch in the **OFF** position: The pump will NOT turn ON even if both the low and high floats switches are activated.

### ALARM OUTPUT:

This alarm output will turn ON if the pump has been ON for more than one minute or the alarm output will turn ON and OFF (flashing) if the high float switch is activated.

### PROGRAMMING THE DELAY ON & OFF TIME:

**This product is factory set for a 5 second delay ON & OFF time and unless a different time is required the product does NOT require programming, but can be changed as follows:**

Place two jumper wires one from 'Common' to 'Auto' and one from 'Common' to 'Manual', the LED between the Pump connections will blink three times indicating the unit is now in Program mode.

Activate the Low float switch (**Tip!** You can activate the float switch by turning it upside down) for the ON delay time required, the Pump LED will blink every second, when the required time is reached deactivate the Low float switch. You have now set the Delay ON time. (max time = 3 minutes)

Activate the High float switch (**Tip!** You can activate the float switch by turning it upside down) for the OFF delay time required, the Pump LED will blink every second, when the required time is reached deactivate the High float switch. You have now set the Delay OFF time. (max time = 3 minutes)

**Remove the jumper wires, see NOTE 1.**

This device should be fuse protected (40 Amp maximum) and mounted in a dry area.

BSW-1000 Bilge Pump Switch - WIRING DIAGRAM

