

WS4-V3

Four Compartment Bilge Pump & Bilge Alarm Controller

This compact, sealed, flush mount, four compartment bilge pump and bilge alarm controller module is designed for maximum reliability and ease of use. It incorporates sealed touch switch controls for greater reliability and longer life. The full bilge system, status display, from each of the four bilge compartments is backlit by multi LED's for easy to read, instant status recognition.



- * Central, manual bilge pump controls. Push & hold the appropriate Bilge # Select switch, and press the Pump Manual switch, to manually turn the bilge pump on in that bilge compartment. **Manual & Pump # On** will illuminate accompanied by audible pump run warning and remote pump run warning. Repeat to turn the pump off again.
- * Audible and visual bilge Pump Run warnings also operate to warn of automatic pump operation. **Pump # On** will illuminate, accompanied by audible Pump Run warnings. The common remote pump run warning also operates.
- * Four independent bilge high level alarms are incorporated, **Bilge # High** flashes red, if a bilge high level alarm is detected. This is accompanied by audible bilge alarm sounding and remote bilge alarm operating.

The bilge alarm is acknowledged by press & hold the bilge#select switch then

simultaneously press the Isol Zone switch. This will change the Flashing red **Bilge # High** alarm to steady, Isolate (silence) the audible alarms for that zone and turn off the remote bilge alarm output plus illuminate the **Isol#** indication for that zone.

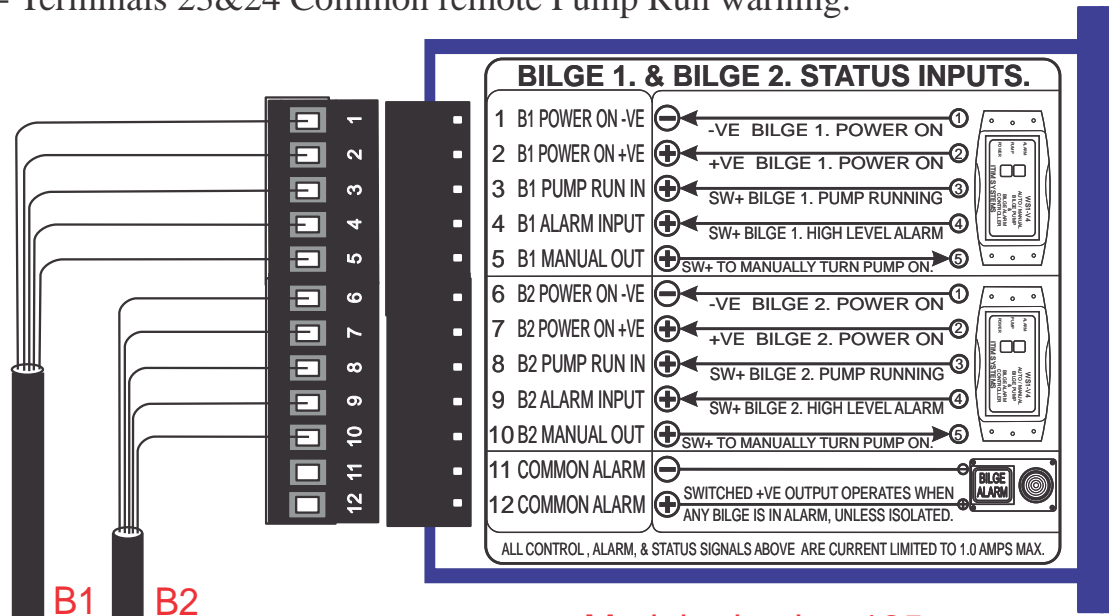
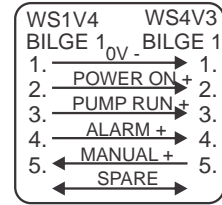
The Dim/Test switch when pressed will dim the green **Pwr On** indications for night time use, . If the Dim/Test switch is held on for three seconds it starts a testing sequence to simulate each Pump and Alarm condition, starting with **Pump Test**, it first tests the **Pump # On** warnings for each pump, It then sends out the **Manual** pump run signal to each remote pump controller (WS.1or WS.96) and receives the remote **Pump # Run** feedback indication testing the audible and visual pump run warnings and remote pump run signals. It then activates the alarm isolate function for each bilge, isolating the audible warnings and illuminating the amber **Isol#** indications. **Alarm Test** is next, it simulates an alarm condition on the status inputs and operates the audible bilge alarms and red flashing **Bilge # High** visual alarms 1&2 and 3&4. The test sequence then ends and returns the panel to green Power On ready condition.

The compact 100 x100mm WS4-v3 bilge controller module depicted above, is designed for central dash mounting in the wheelhouse and to connect directly with our WS1-v4 or WS.96 local bilge controller modules in each bilge compartment. These are generally installed on the bulkhead of the bilge compartment being protected and connected via a 6 core data cable to relay the status from each bilge compartment to the WS4-v3 module in the wheelhouse. It is also possible to connect standard float switch inputs plus remote pump switching relays to achieve similar basic functions and status feedback.

WS-4v3 EXTERNAL CONNECTIONS

WIRING: Ship's wiring consists a protected supply from your switch board to each pump, and a 6 core 16/020 data cable, incorporating remote manual pump controls, and bilge status feed back indications, that power is available to pump, when the pump is running, and bilge high level alarm. from each WS1v4 local bilge controller, These connect to two 12way plug-in terminals on the rear of the WS.4v3 bilge controller module as follows.

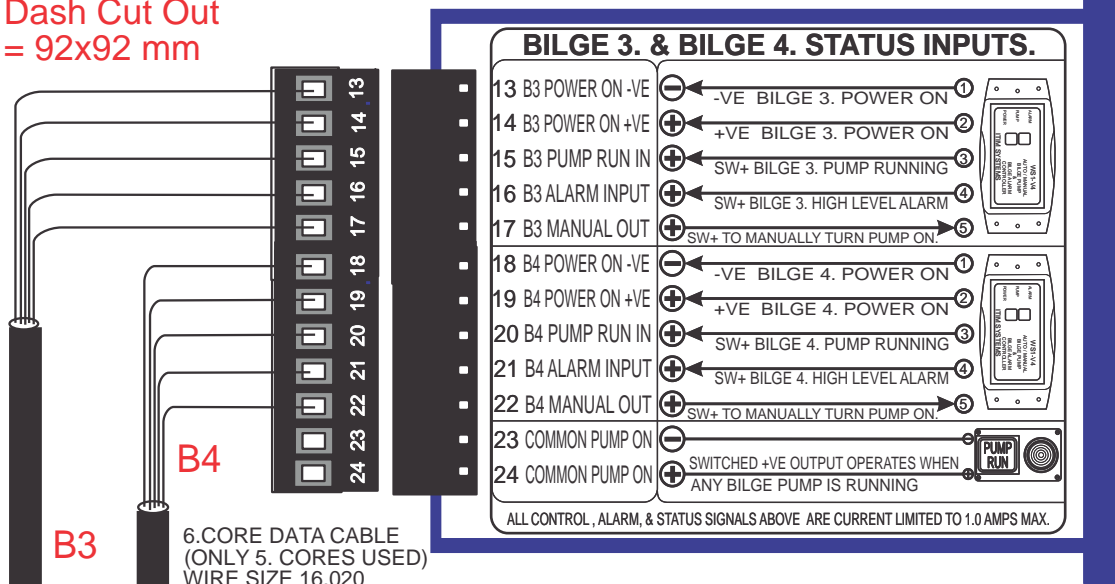
- Terminals 1-5 Bilge compartment 1.
- Terminals 6-10 Bilge compartment 2.
- Terminals 11&12 Common remote Bilge High Alarm
- Terminals 13-17 Bilge compartment 3.
- Terminals 18-22 Bilge compartment 4.
- Terminals 23&24 Common remote Pump Run warning.



SIDE VIEW

Module depth = 125mm

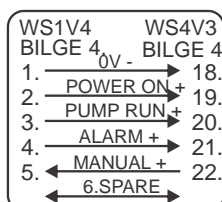
Dash Cut Out = 92x92 mm



6.CORE DATA CABLE
(ONLY 5. CORES USED)
WIRE SIZE 16.020

MADE WITH PRIDE IN AUSTRALIA

AVAILABLE FROM



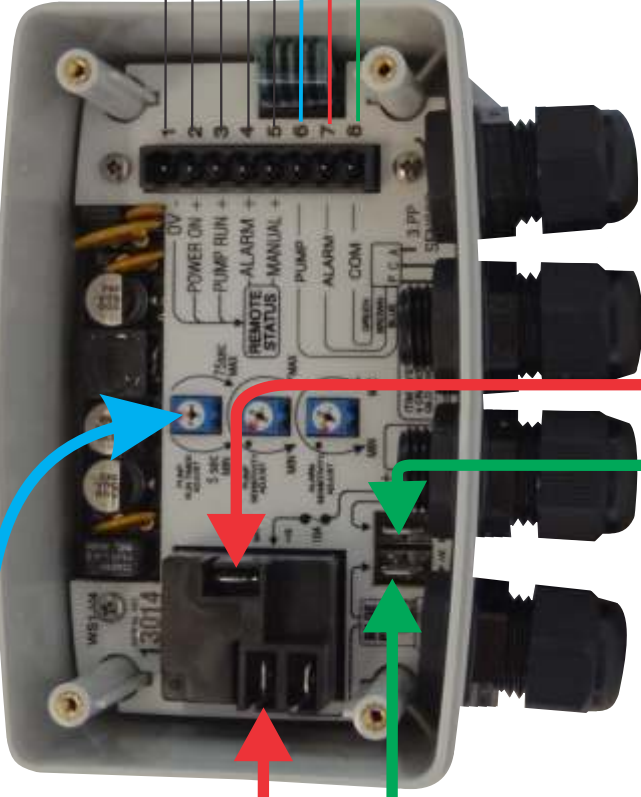
WS4V3DS.CDR P2

The pump run timer is preset to run for 30 seconds but can be adjusted down to 5 seconds or up to 75 seconds of pump run time. Required pump run time could vary according to the size and shape of your bilge.

TO CENTRAL WS.2 OR WS.4 - BILGE STATUS

6 CORE DATA CABLE (5 CORES USED)
CONDUCTOR SIZE 16x .020 TINNED

- | | |
|-------------------------------|------------|
| WS1V4 | WS4V3 |
| BILGE 1 _{OV} BILGE 1 | |
| 1. | POWER ON + |
| 2. | PUMP RUN + |
| 3. | ALARM + |
| 4. | MANUAL + |
| 5. | SPARE |

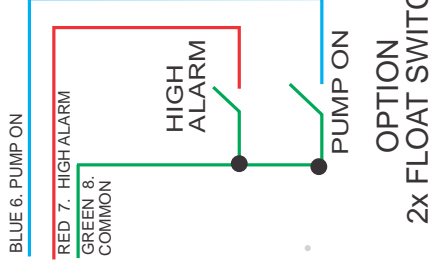


BILGE PUMP

The WS.1v4 local bilge controller module includes four ip68 rated cable glands for the entry of Power, Pump, 3PP bilge level sensor and remote status display wiring. Power and Pump wires terminate with crimped spade terminals (included) on to PCB and Relay terminals, while the 3PP bilge level sensor and the remote status 6c wire terminate with screw down terminals on the eight way plug in terminal.

When mounting note; The lid with PCB and terminated wiring is fixed to the mounting base by four screws through the mounting base from behind before mounting the base to the wall.

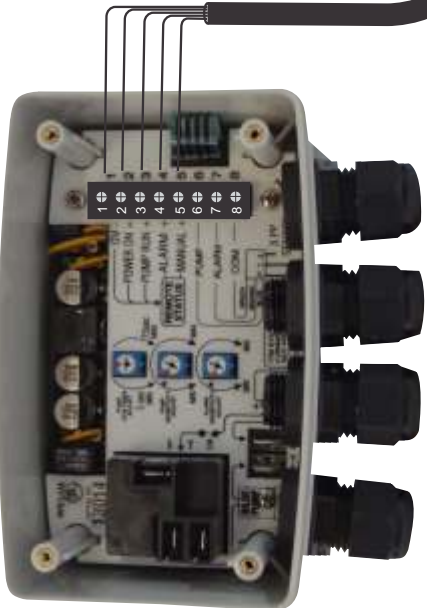
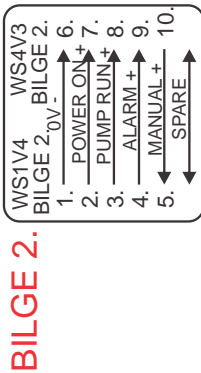
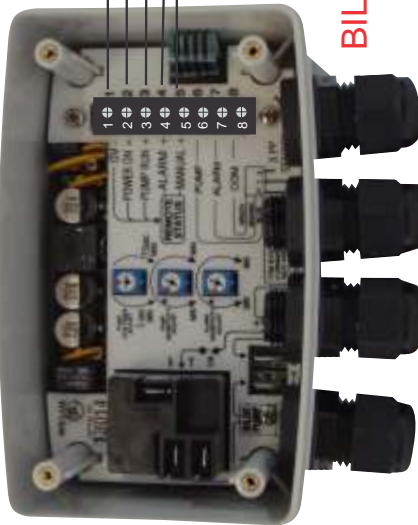
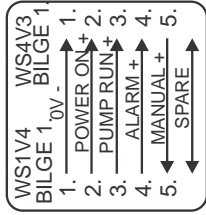
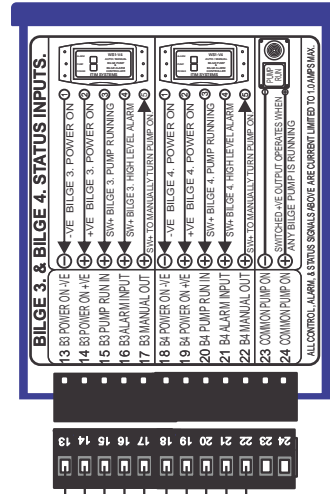
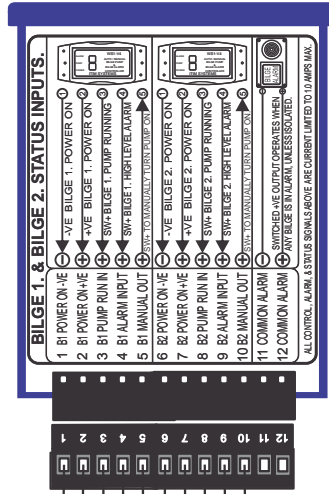
3PP BILGE LEVEL SENSING PROBE
Pump on signal when the water level reaches the bottom of the two longer probes and high level alarm if water level reaches the short probe. Both incorporate an anti splash delay to prevent nuisance alarms.



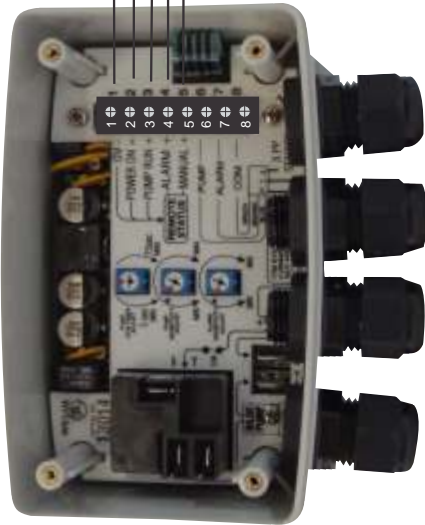
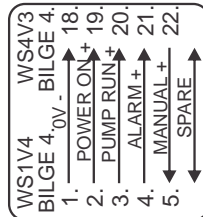
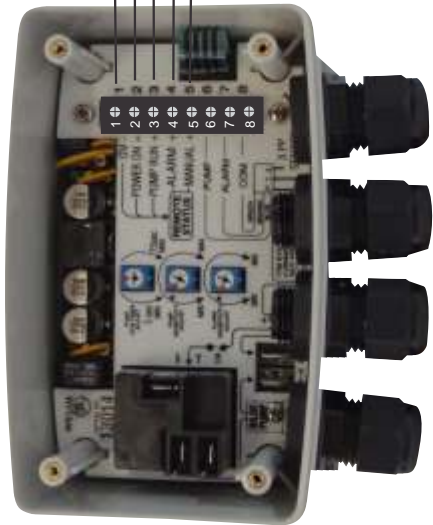
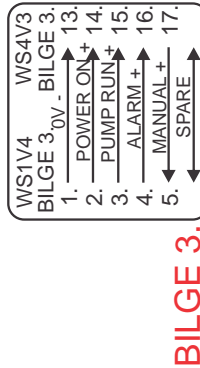
ITIM SYSTEMS PTY LTD Unit 9 45 Collins Street, Spring Hill, Brisbane, Queensland, Australia OLD: 4128 AUSTRALIA ISD + 61 7 PHONE (07) 3356 1276 FAX (07) 3806 4504	
CLIENT	
SUBJECT	WS1-v4 WIRING SCHEMATIC (24 VDC)
DRAWN	G.S.COTT
DATE	15-07-2013
VERSION	01
DRAWING NO	
REVISION	NIL
	WS1-v4 WIRE 1.CDR



**WS.4 DISPLAY CONTROLLER
MOUNTED IN WHEELHOUSE**



6. CORE DATA CABLE (5 CORES USED)
1x 6C TO EACH BILGE COMPARTMENT
CONDUCTOR SIZE 16x .020 TINNED



The bilge status from four bilge compartments along with remote manual pump controls connect to the two 12way terminals on the rear of the WS4-v3 bilge control module.