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INNOVATIVE TECHNOLOGY FOR INDUSTRY AND MARINE

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FA 4 FOUR CIRCUIT FIRE ALARM & CONTROL PANEL.

The FA 4 is a compact, flush mounted, fully monitored, four circuit, Fire Alarm & Control Module, developed to protect the larger Catamaran and Mono-Hull vessels.

Good looking, compact, flush mount, modules with sealed Touch Switch Controls for greater reliability. Easy to use, with LED backlit, full System Status Display. Simple to install with two 12 way plug-in terminals on the rear for connection of ships wiring.

Compact Flush Mount Module

The FA4 Fire Alarm Control Module is very compact. The panel facia measures only 100x100 mm (4 inches square).

The FA4 is flush mounted with a dash cut-out size of 91 x 91 mm, and is secured by two adjustable mounting brackets off the rear of the module.

Overall panel depth =125 mm. All wiring terminates on two 12 way plug in terminals on the rear of the FA4 module.

Sealed Touch Switches.

The FA4 panel facia incorporates seven sealed touch switches to provide individual Zone Alarm Isolate and Alarm Reset functions, Common Alarm Test and Fault Test Controls, plus a dimmer for control of green normal indications for night time use.

LED Backlit System Status Display

The easy to read System Status Display is backlit by colour coded LED light-bars for

Alarm Test Switch

Pressing the **ALARM TEST** Switch simulates a FIRE Alarm Condition on all four Detector circuits, to test local audible & visual alarm warnings & remote alarm outputs. The red **ALARM TEST** indication illuminates. Pressing any Isolate/Reset switch will reset the Alarm Test function. After testing, press each **ISOL/RESET** switch twice to return all zones to the green NORMAL condition.

Fault Test Switch

Pressing the **FAULT TEST** Switch simulates a FAULT Condition on all four detector circuits and tests local audible and visual fault warnings. The amber FAULT TEST indication also illuminates. Pressing any Isolate/Reset switch will reset the Fault Test function. After testing, press each **ISOL/RESET** switch twice to return all zones to the green NORMAL condition.

Isolate/reset Switches

The four zone **ISOL/RESET** Switches each perform an isolate then reset functions. When pressed once, it isolates the local audible alarms and remote alarm outputs for that zone. It resets internal alarm and fault latches and resets remote fire detector latches for that zone. The amber zone ISOLATE indication also illuminates.

The visual alarm & fault warning latches are also reset, but remain active. This serves to verify detector operation, as it will flash the red FIRE visual alarm immediately a detector operates, even when isolated. Similarly, visual FAULT warnings are reset but remain active when isolated.

When pressed a second time, The **ISOL/RESET** switch again resets internal Alarm and Fault latches and remote fire detector latches. It re-enables the local audible alarms and remote alarm outputs and returns that zone to the green NORMAL condition.

Dim Switch

Pressing the **DIM** Switch dims the Green NORMAL LED indications for night time use to assist in reducing wheelhouse light levels as an aid to navigation.
A **FIRE,** FAULT or ISOLATE Status condition other than NORMAL, is indicated at full brightness even when the Dim Switch is active.

Led Backlit System Status Display

The four green NORMAL status indications indicate all zones in the Normal ready to operate condition. The red FIRE status indications flash a red FIRE warning when a detector on that zone operates. The Red FIRE warning latches on internally and remains on until isolated or reset.

The amber FAULT status indications illuminates if a fault develops in that detector zone. A typical Fault condition would include a break or high resistance joint in the detector zone wiring, a detector out of circuit or a low power supply voltage that could inhibit the Fire Detector operation.

The amber ISOLATE indication, indicates that the Audible Alarms and Remote Alarms are isolated for that Zone. The red **ALARM TEST** indication illuminates when the **ALARM TEST** Switch is operated. The amber FAULT TEST indication illuminates when the **FAULT TEST** Switch is operated.

Power Supplies

The FA4 has provision for connection of two independent DC power supplies.
System will operate when either supply is active. Power supply inputs are protected internally from reverse polarity, over voltage, excess current draw and induced power spikes etc. All individual detector circuits, voltage regulators and zone alarm outputs are protected by PCL solid state current limiters. The system will operate from 12 volt (when 5k ohms EOL resistors fitted or 24 volt (with 10k ohms EOL resistor fitted). Both DC power supplies must be the same nominal voltage.

Detector Circuits

The four detector circuit inputs are each two wire circuits. They will power remote detectors up to 250 mA per circuit and are protected against excess current draw. These are compatible with a wide range of detector types including smoke, thermal, and flame detectors and manual switches.

An isolate/reset relay on each detector circuit removes power to reset remote detectors each time an isolate switch is operated.

An audible alarm is incorporated to provide local fire alarm, fault warnings & switch operation verification.

Alarm Outputs

The FA4 provides a change over, Common Alarm Relay Output with the change over terminals accessible to allow for various switching options.

The standard factory option provides a 1 Amp protected +ve switched common alarm output from terminal 13 on activation of any fire alarm.

Note if a clean switched common alarm relay is required please notify factory at time of your order.

Four individual zone, remote alarm relay's are provided. These each provide a protected switched + ve zone alarm output at maximum 500mA.

An audible alarm is incorporated to provide local fire alarm, fault warnings & switch operation verification.

Weekly Testing

On a regular basis, test the FA4 Fire Alarm & Control System.
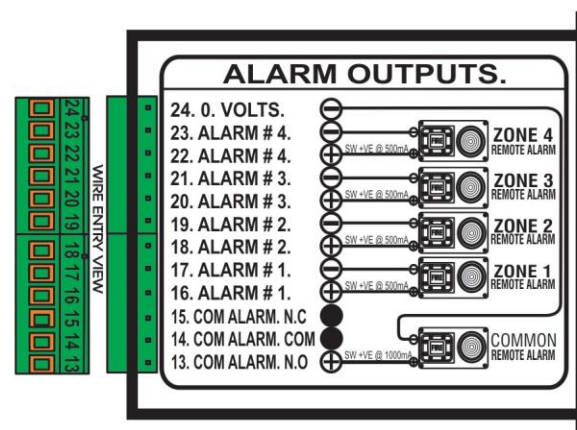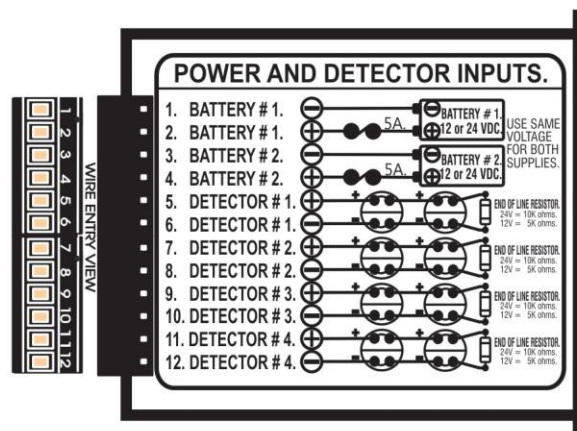Press the **ALARM TEST** switch to simulate an alarm condition on all four detector zones.
Check that all four red visual **FIRE** indications illuminate and flash, and that the common audible FIRE Alarm operates. The red **ALARM TEST** visual status also illuminates.

Isolate the audible alarms for each zone by pressing each **ISOL/RESET** Switch in turn, each amber zone **ISOLATE** Status will illuminate. Press ea **ISOL/RESET** switch again to return all zones to the green **NORMAL** condition.

Press the **FAULT TEST** Switch to simulate a fault condition on all four detector Zones. Check that all four amber visual **FAULT** indications illuminate accompanied by a steady audible fault warning tone. The amber **FAULT TEST** visual status also illuminates.

Isolate the audible fault warnings for each zone by pressing each **ISOL/RESET** Switch in turn, the amber zone **ISOLATE** indications will illuminate. Press each **ISOL/RESET** switch again to return all zones to the green **NORMAL** condition.

On a Regular Basis, check that the four green **NORMAL** indications are illuminated and that the FA4 is in the green **NORMAL** ready to operate condition.
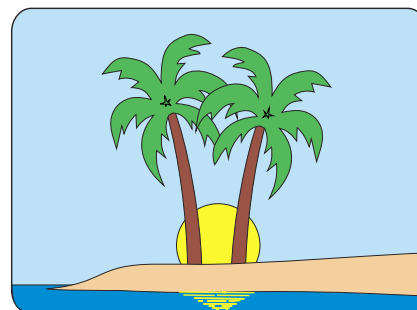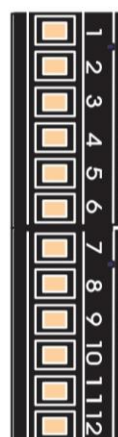
FA4V6 DS.CDR

FA 4 - Wiring

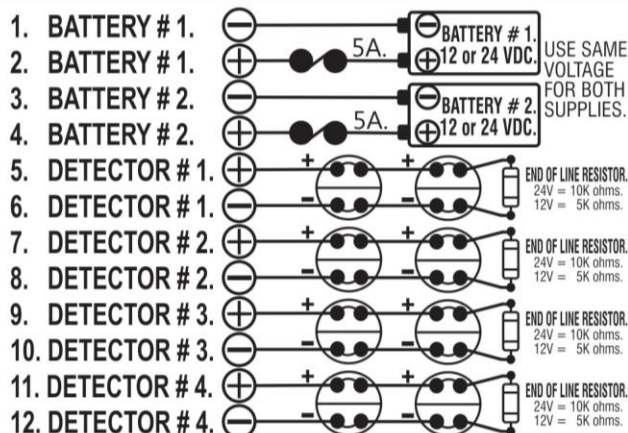All wiring terminates on two plug in, 12 way terminals, on the rear of the FA 4 Fire Alarm Control Module.

Terminal A.

Is a 12 way input terminal for two independent power supplies (12 or 24 Volt DC) and four Fire Detector monitoring circuits.

POWER AND DETECTOR INPUTS.

1.	BATTERY # 1.
2.	BATTERY # 1.
3.	BATTERY # 2.
4.	BATTERY # 2.
5.	DETECTOR # 1.
6.	DETECTOR # 1.
7.	DETECTOR # 2.
8.	DETECTOR # 2.
9.	DETECTOR # 3.
10.	DETECTOR # 3.
11.	DETECTOR # 4.
12.	DETECTOR # 4.

BATTERY # 1. 12 or 24 VDC. — 5A.
BATTERY # 2. 12 or 24 VDC. — 5A.
USE SAME VOLTAGE FOR BOTH SUPPLIES.

END OF LINE RESISTOR. 24V = 10K ohms. 12V = 5K ohms.

WIRE ENTRY VIEW

SIDE VIEW

Module depth = 100mm
Including Terminal & wire = 125mm
Dash Cut Out = 91x91 mm

Terminal B.

Is a 12 way output terminal with common alarm relay output and four individual zone alarm outputs.

Available from

ALARM OUTPUTS.

24.	0. VOLTS.
23.	ALARM # 4.
22.	ALARM # 4.
21.	ALARM # 3.
20.	ALARM # 3.
19.	ALARM # 2.
18.	ALARM # 2.
17.	ALARM # 1.
16.	ALARM # 1.
15.	COM ALARM. N.C
14.	COM ALARM. COM
13.	COM ALARM. N.O

SW +VE @ 500mA — ZONE 4 REMOTE ALARM
SW +VE @ 500mA — ZONE 3 REMOTE ALARM
SW +VE @ 500mA — ZONE 2 REMOTE ALARM
SW +VE @ 500mA — ZONE 1 REMOTE ALARM
SW +VE @ 1000mA — COMMON REMOTE ALARM

WIRE ENTRY VIEW

Made with Pride in Australia

FA4V6 DS.CDR