



INTEGRATED MARINE FIRE CONTROL PANEL

FIRE DETECTION
FIRE EXTINGUISHER SUPERVISION
ENGINE AND MACHINERY SHUTDOWN

FIRESTOP
Integrated Fire Systems

System Overview

- **12/24 VOLT DC**

Designed specifically as a marine integrated fire system to work with vessels DC batteries.

Standby re-chargeable 24v battery back up available as an option.

- **MODULAR EXPANSION**

Designed as a modular system, that can be expanded from 2 to 16 zones.

- **EARLY WARNING FIRE DETECTION**

Marine approved Heat and Smoke detectors and Manual Call Points.

- **INTEGRATION WITH FIRE EXTINGUISHER**

Fully integrates with Sea-Fire pre-engineered and 'H' Series extinguishers to provide low pressure and discharge alarms.

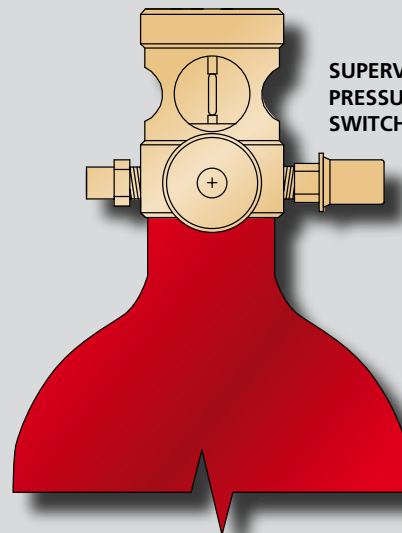
- **MACHINERY SHUTDOWN MANAGEMENT**

Integrated relays to shutdown Engines, Generators, Ventilation and associated machinery in the event of fire extinguisher discharge.

- **INTUITIVE USER INTERFACE**

Multiple Display Panels can be located in key locations throughout the vessel.

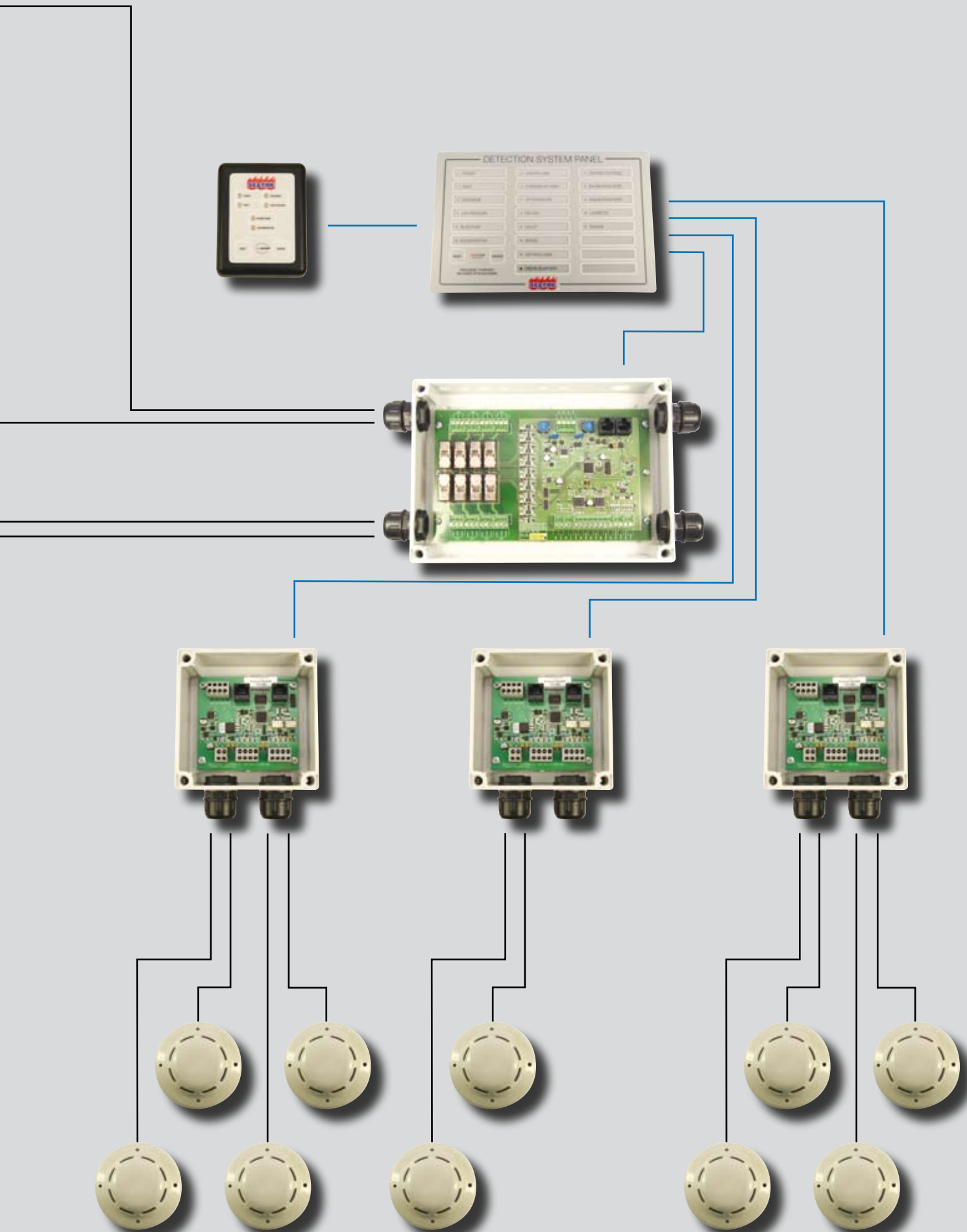
Stylish interface compliments modern yacht design.



SUPERVISORY
PRESSURE
SWITCH



DISCHARGE
PRESSURE
SWITCH



131-500 - Control Unit

The microprocessor Control Unit is the heart of the integrated system. 7 relays (rated at 16 amps each) provide for machinery shutdown when the Control Unit detects that the Sea-Fire extinguisher has discharged.

For security, the Control Unit is powered from two independent battery banks. Each power input is monitored for failure.

There are two inputs for monitoring the Sea-Fire extinguisher. When used in conjunction with an 'H' series extinguisher, the unit can monitor Discharge as well as Low Pressure. A discharge event will trigger the machinery shutdown.

All primary inputs are monitored for open and short circuit.

TECHNICAL SPECIFICATION

Mechanical:

Dimensions (mm): 255(W) x 180(H) x 61(D)
Weight: 1kg
Enclosure material: ABS plastic
Cable entries: 4 x 20mm Kopex cable glands
Max wire size: 2.5mm sq.

Electrical:

Supply voltage: 2 x 15 to 28 Vdc
Recommended fuse: 5 amp

Inputs:

Detection circuits x 2
Discharge pressure input x 1
Low pressure input x 2

Outputs:

Alarm Output: 1 amp max
Vent solenoid: 2 amps for 5 seconds on system discharge
Machinery Shutdown Relays: 7 rated @16 amps
Adapter Panel Reset Relays: 1 rated @16 amps



131-520 - Adapter Unit

The Adapter Unit is used to expand the number of Detection Zones. Each adapter unit expands the system by a further 4 zones. Up to 4 of these units can be connected to increase the number of Zones to 16. RJ45 sockets output the detector status to the Zone Identification Panel.

TECHNICAL SPECIFICATION

Mechanical:

Dimensions (mm): 130(W) x 130(H) x 61(D)
Weight: 330g
Enclosure material: ABS plastic
Cable entries: 2 x 20mm Kopex cable glands
Max wire size: 2.5mm sq.

Electrical:

Supply voltage: 1 x 15 to 28 Vdc
Recommended fuse: 3 amp

Inputs:

Detection circuits x 5
(4 if connected to ZIP)

Outputs:

Alarm Status Output: 2 x RJ45 sockets for connection to ZIP



131-529 - Zone Identification Panel

The Zone Identification Panel (ZIP) provides the user with system status and has two tactile buttons for system control.

In the event of an alarm, a Zone LED will light and the internal buzzer will sound.

The ZIP is customisable to be able to accommodate user defined Zone legends.

The ZIP's are connected to the Adapter panels and the Control Panel via CAT5 cable. Two ZIP's can be fitted to each system.

TECHNICAL SPECIFICATION

Mechanical:

Dimensions (mm): 205(W) x 135(H) x 3(D)

Weight: 183g

Material: F4 PCB and Polyester overlay

Electrical:

Connects to Adapter Panels via CAT5 cable

Connects to Control Panel via CAT5 cable

Inputs:

2 x RJ45 sockets for connection to Control Panel

4 x RJ45 sockets for connection to Adapter Panels

Outputs:

Buzzer: 85db @10cm



131-510 - Display Panel

This display is used if there are only two Detection Zones on the system, Engine and Accommodation Zone, or if there is a requirement for multiple displays throughout the vessel. For example, Fly Bridge, Crew Cabin, Machinery Space etc.

This weatherproof display gives status indication of all alarms and allows for system control.

These displays are connected to the Control Unit via CAT5 cable, and up to 4 displays can be fitted to each system.

TECHNICAL SPECIFICATION

Mechanical:

Dimensions (mm): 72(W) x 92(H) x 13(D)

Weight: 129g

Material: ABS plastic with Polyester Overlay

Max wire size: 2.5mm sq.

Electrical:

Connects to Control Panel via CAT5 cable

Outputs:

Alarm Output: 1 amp max



Hochiki Detectors

The FCP has been designed to operate with the Hochiki range of CDX conventional detectors. This range of detectors have been Marine approved by GL and LR.

The primary detectors are a Photoelectric smoke detector and a combined ROR and fixed 90 deg heat detector.

These detectors have been chosen for their accuracy and reliability and also because of aesthetic considerations.

Heat detector
130-310



Smoke detector
130-309



Ancillary Equipment

An Interface unit (Part No. 131-499) can be used to connect any Normally Closed equipment to on of the detection zones. For example, the FCP can be used to monitor bilge alarms, Carbon Monoxide detectors (with NC relay) or security zones.



Operation Overview

Fire Detection:

The FireStop FCP uses the Marine Approved Hochiki range of CDX conventional detectors. The FCP can be expanded to detect fire from 2 to 16 zones. Each zone can support two detectors.

In the event of a fire, the fire location will be identified on the Zone Identification Panel via a lit LED and an alarm sounding. Multiple displays can be used throughout the vessel.

Machinery shutdown:

In the event of a cylinder discharge, the microprocessor Control Unit will initiate a machinery shutdown via the integrated relays. The machinery can be restarted by pressing the reset button on any one of the control panels.

Fire Extinguisher Monitoring:

The FCP has the ability to monitor both Discharge and Low Pressure states. Both circuits are monitored for line faults by the use of end of line resistors.

Fault Monitoring:

All detection zones are monitored for both open and short circuit faults. In the event of a fault, a fault alarm will sound and the fault location LED will flash.

Display Panels:

There are two display panels that are used with the FCP. Both of these provide the user with system control and status on all alarm conditions. Multiple displays can be fitted throughout the vessel. The 131-510 display can be used in exposed locations.

Assessed for Immunity and Emissions to: EN 60945: 2002 - Maritime Navigation and Radio communication equipment and systems.



Ordering Information

131-500	Control Unit
131-510	Display Panel
131-520	Adapter Unit
131-529	Zone Identification Panel
131-499	Interface Unit
130-309	SLR-E/3M Smoke Detector
130-310	DCD-CE3/M Heat Detector 90C fixed rate of rise
130-357	DCD-AE3/M Heat Detector 60C fixed rate of rise
130-311	YBN-R/6M Smoke Detector Base with remote indicator input
130-312	YBN-UA Ceiling Recess Adapter w/YYA-A installation fixing kit
130-313	MBB-1 Marine Back Box for mounting for engine room detection
131-417	YYA-A Installation fixing kit
131-296	Visual audible alarm (Horn/ Strobe) 12 to 24vdc
131-297	Remote Bell 12 volt w/ waterproof case
131-298	Remote Bell 24 volt w/ waterproof case
123-208	Installation manual - custom
123-209	Owners Manual
138-010	Cat 5 Cable Assembly 10ft (3.28m)
138-014	Cat 5 Cable Assembly 14ft (4.27m)
138-025	Cat 5 Cable Assembly 25ft (7.62m)
138-039	Cat 5 Cable Assembly 39ft (15.25m)

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