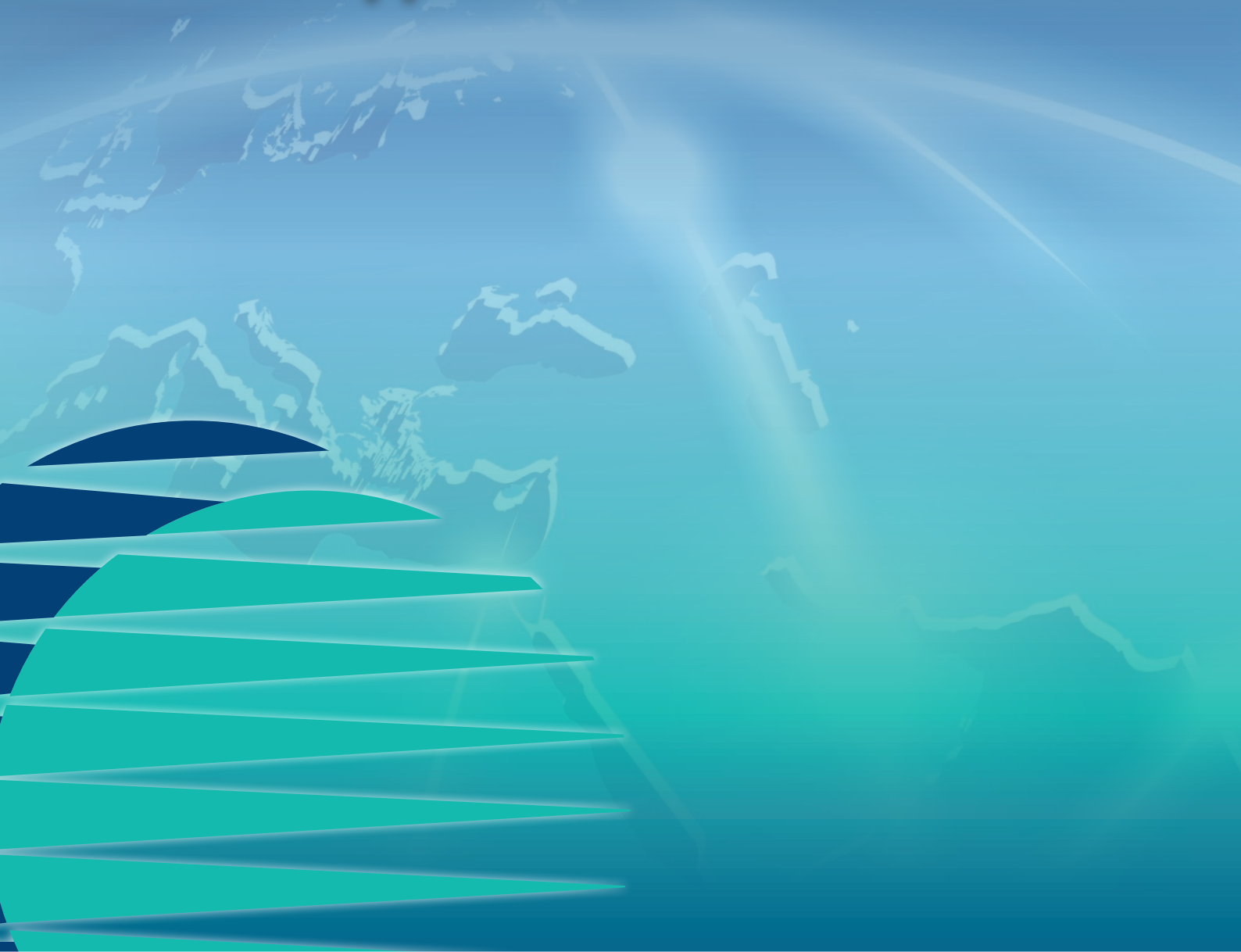


# ESENTO

MARINE

## Marine Approved Fire Control Panels





Supplying and manufacturing fire alarm products since 1973



## About Haes

Haes is one of the UK's leading companies for the supply and manufacture of fire detection and alarm products. We offer our customers an integrated end-to-end solution tailored to your specific fire detection and alarm system requirements. Not only do we manufacture our own range of control and indicating equipment, power supplies, relays and other system peripherals but we are a major distributor for other leading fire detection equipment manufacturers.

We stock and can source a wide range of products.

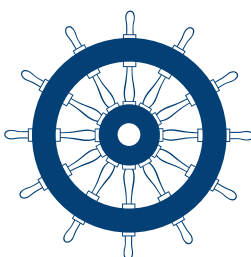
All Haes brands are designed and manufactured in the UK and, as they are put through a rigorous triple testing process during production, carry a 3 year warranty as standard.

With over 40 years in the industry, the team at Haes have a wealth of experience, helping our customers to choose, install and manage fire alarm systems. We have a large in-house team of designers,

engineers and production operatives working on the latest in fire detection technology, supported by a group of customer advisers ready to answer any of your questions. We are sure that you will be happy with the service you get from us as 97% of our customers say they are happy with our service levels.

Haes are ISO9001 Certified and we hold a number of accreditations from industry governing bodies including LPCB and BSI.

When you work with Haes you can be sure that you have a partner who will tailor their approach to your specific requirements.



Assessed to ISO 9001  
LPCB Ref. No. 810



# Product Overview



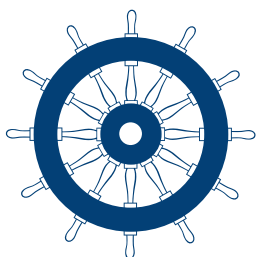
Quality, reliability, ease of use and feature rich are attributes that are consistent across the entire range of Haes panels. Esento Marine panels encompass all of these attributes to provide the engineer's panel of choice.

The panels have been designed to minimise labour costs by providing ample space for tasks such as wiring and changing batteries. Simple colour coded buttons gives the end user the confidence to correctly manage their fire alarm system and the one man walk tests will help reduce the cost of maintaining the system.

A host of configuration & programming options are provided, including; programmable inputs & outputs, false alarm management, muster alarm and programmable output delays.



## Marine Approved Fire Control Panels



- Available from 2 - 12 zones
- Simple colour coded buttons
- False alarm management modes
- Muster alarm zone(s)
- Programmable output delays (8-12 zone only)
- Programmable inputs & outputs
- Modular expansion zone cards (8-12 zone only)
- One man walks tests
- Fully functional repeater panels (8-12 zone only)
- Sounder circuit extension cards
- Output cards



**Simple colour coded buttons gives the end user the confidence to correctly manage their fire alarm system**



# Panels

## Esento Marine 2 - 4 zone



- 2 or 4 zones
- Inputs for sounder ringing & pulsing
- Fire & fault relays
- 2 monitored sounder circuits
- Earth fault monitoring
- One man walk test
- Integral 1.25 Amp switch mode PSU
- Space for up to 3.2Ah batteries
- False alarm management mode
- Muster alarm
- 12 month warranty

## Esento Marine 8 - 12 zone



- 8 - 12 zones
- Integral 2.5 Amp switch mode PSU
- Space for up to 7Ah batteries
- Programmable inputs
- Programmable relays & outputs
- Up to 6 monitored sounder circuits
- Earth fault monitoring
- Test mode (with or without sounders)
- Modular expansion zone cards available
- 3 false alarm management modes
- Muster alarm
- Zonal programming
- Programmable output delays
- Supports up to 8 repeater panels
- 12 month warranty

## Repeater Panel



- Same easy-to-use controls and indications as panel
- Can be fully functional or passive
- 12 zonal fire & fault indications
- Integral 1.25 Amp PSU
- Class change & alert inputs
- Test mode and disablement functions
- 6 programmable switch -ve outputs
- Fault tolerant loop or legacy radial wiring options
- 12 month warranty

Repeater panels do not hold marine approvals



# False Alarm Management

Esento Marine false alarm management functions to one of three different modes as described in EN54-2.

The 2-4 zone supports mode A while the 8-12 zone supports all three modes. False alarm management can be selected for individual zones on both panels.

## Mode A:

The first alarm is not indicated and the sounders do not activate. The panel resets and rechecks the zone within 15-30 seconds, if an alarm is detected the panel activates a full fire condition. Any new alarm from the same or a different zone within 30 minutes also activates a full fire condition.

## Mode B:

The first alarm will indicate at the panel but the sounders do not activate. The panel resets and rechecks the zone within a programmable time period (1 – 4 minutes). If an alarm is detected the panel activates a full fire condition. Any new alarm from the same or a different zone within a second programmable time period of 5 to 30 minutes will also activate a full fire condition unless the reset button is pressed.

## Mode C:

The first alarm will indicate at the panel but the sounders do not activate. The panel will not activate a full fire condition unless a second device is activated in the same or a different zone.

# Programmable Output Delays

Apply delay to zones to allow for investigation before full alarm condition.

The 8-12 zone panel has an in built delay timer which can be applied to any or all zones to allow for an investigation before invoking a full evacuation or muster alarm.

In addition, individual outputs or sounder circuits can be set to be operational during the delay. These can then be used to indicate the alarm condition in staff areas or as required.

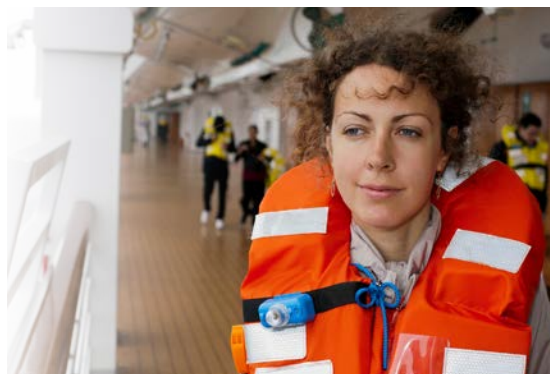
# Muster Alarm

Program zone(s) for muster alarm activation.

Muster alarm is a feature whereby the sounders emit a sequence of alerts defined as seven short activations of the alarms followed by a longer activation.

The muster alarm zone(s) are set in the Level 3 programming options. Activation of these zones via a muster alarm call point will cause the alarms to sound in the sequence as described above.

The muster alarm zone(s) can also be programmed to be non aux operating.



# Programming Features

Esento Marine panels provide a host of programmable features for all zones, sounder circuits, inputs, outputs and relays.

## Individual Zone Function programming:

- Set as latching or non-latching
- Short circuit = Fire for monitoring
- Specified for MTL5061 I.S. barrier compatibility
- Compatible with schottky or zener diode bases
- False alarm management modes
- Set muster alarm zone(s)
- Set delays to outputs
- Silent mode for indication purposes - visual and audible alarm at panel but no sounder operation
- Detector removal monitoring can be turned off for older non-compliant to EN54).



## Inputs:

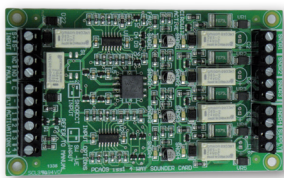
- Two independent programmable inputs
- Either or both inputs can be programmed for remote evacuation, remote silence alarm, remote reset.
- Inputs programmable for indication purposes so the zone 12 LED or fault LED will illuminate.

## Outputs:

- Can be set to latching
- Fault outputs can be inverted
- Aux relays and all outputs, including sounders, are independently programmable:
  - On, off or pulsing
  - Programmed to a dedicated zone
  - Programmed with a custom response to silence alarm, evacuate, class change input, alert input or during zone delay.
- Other sounders can be switched off, pulsing or continuous
- Output delays can be applied to aux outputs and sounders (for example investigation delay for false alarm management).

# Accessories

## Sounder Circuit Extension Card



- 4 x monitored sounder circuits, fused @ 0.75A
- Switched -ve input for common sounder circuit operation
- Switched -ve inputs for individual sounder circuits 1 - 4
- Switched -ve common fault output
- Fault relay, NO/NC changeover (failsafe)
- Sounder circuit fault LED indicators, open or short circuit
- Sounder circuit active LED indicators

## Output Card



- 8 x switched -ve voltage outputs
- 8 x volt free changeover relays
- 28v output
- Can be configured to provide up to 16 common or zonal outputs
- Configure outputs to cancel on Reset or Silence Alarms

Accessories do not hold marine approvals



Fire Industry Association