



*Quiet  
vibration-free  
performance from  
today's high-revving  
diesels*



## HMI EXHAUST ALERT SYSTEM

Sensing overheating in marine exhaust systems

# HMI EXHAUST ALERT SYSTEM

The HMI Exhaust Alert is designed and manufactured in Britain

## Why fit an HMI Exhaust Alert?

Marine diesel exhaust systems are designed to take temperatures of only 120°C. The exhaust gasses, however, may reach more than 500°C. To cool the gasses, the exhaust depends on a free flow of cooling water from the engine. This flow can be cut off, by a plastic bag or seaweed being sucked into the intake, or by a problem with the water pump. The exhaust temperature will rise immediately to around 450°C, the exhaust will overheat and may be seriously damaged. In most situations Exhaust Alert will warn you before serious damage occurs.

## How does it work?

The HMI Exhaust Alert works with a 12volt or 24 volt supply. It has three main components:



A stainless sensor which screws through a 10mm hole in the exhaust hose, placing a temperature sensor right in the gas flow about 100mm (4") behind the engine. Up to three sensors can be used, covering twin engined craft and generators.



**The helm display.** This neat display (70mm x 35mm) fits near the helm and has a ready light, with warning lights for each engine and a small buzzer. A 120dB siren can be connected. The display self-tests when the engine is turned on, flashing the lights and sounding the buzzer. If the sensor overheats the relevant light will flash and the buzzer will sound. A tiny button allows you to shut down the buzzer.

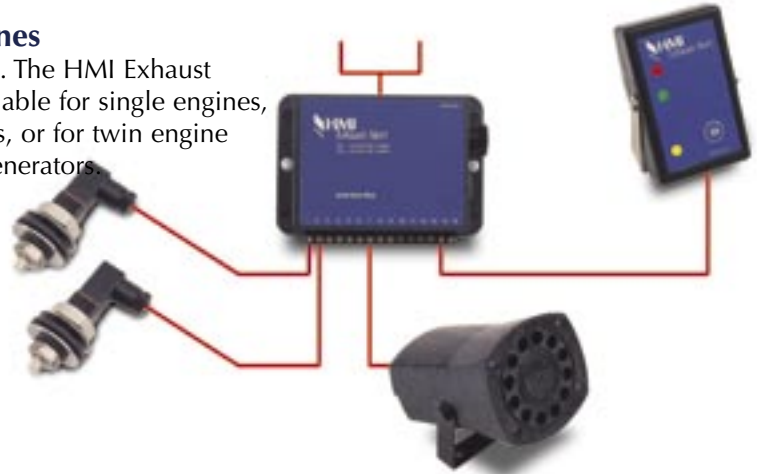
A special system is also available without a helm display – a neat OEM kit which experts can wire into their own systems.



**The junction box** mounts in the engine space. This compact unit (75mm x 105mm) fits on a bulkhead in the engine space. Wires from the sensors and the helm display connect to it. It connects to the power supply (which must be live only when the ignition is turned on). A fuse is fitted for protection, and so that the system can be disarmed.

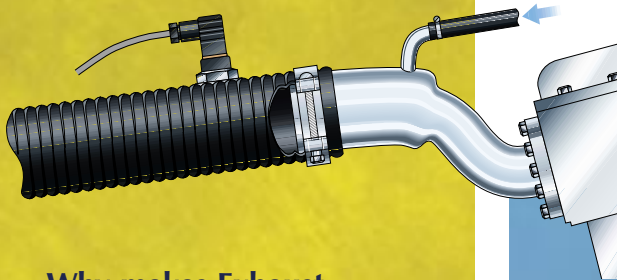
### Twin Engines

No problem. The HMI Exhaust Alert is available for single engines, twin engines, or for twin engine craft with generators.



### Two helm positions?

No problem. Just order the unit with an extra helm display and wire this in.



### Why makes Exhaust Alert so different?

An exhaust temperature alarm system must measure temperature inside the exhaust system to be effective. Sensors fitted on the outside of the exhaust cannot respond quickly as they must wait for the heat to work through the hose to reach the sensor.

### How loud is the buzzer?

The buzzer is designed only to alert someone at the helm position. An optional 120 dB siren can be fitted to give a really loud alarm, or if you wish to position the helm display out of sight.



### Can I replace the sensor?

Yes. Spare sensors are readily available if the overheat was so serious that it burnt out the sensor.

### Will the system go off without the engine?

The HMI Exhaust Alert self-tests continuously and will detect voltage changes. It is important that it is live only when the engine is turned on.

### When won't it work?

An engine ticking over, or running at very low revs under load, may not generate enough heat in the exhaust to cause the HMI Exhaust Alert to sound, or to damage the exhaust. Under load, the temperature will triple and the system will more readily alarm.



### Will it protect the whole exhaust?

Exhaust Alert will normally spot trouble before serious damage occurs to quality exhaust hose or other components in the system. Plastic or polypropylene components will not be protected as their melt point is too low.

### Will it protect my engine?

The HMI Exhaust Alert is designed to protect only the exhaust. The system should not be regarded as an engine protection device, although it may beat the engine temperature sensors when the engine is cold.

### Can it be used with any engine?

The HMI Exhaust Alert is designed for use with diesel inboard engines between 5hp at 1200hp, with rubber hose exhaust systems. It cannot normally be used with inboard/outboard engines or with petrol engines.

### Can I fit it myself?

More than half the Exhaust Alerts sold are fitted by the owner – often with help. You will need to remove the exhaust hose from the engine to fit the sensor, but once this is done the rest of the work is fairly simple to someone with wiring skills.

**Phone and ask us if you'd like more help. We're happy to talk through the details of any installation.**



Halyard holds ISO9001 Quality Assurance.



All products in this brochure meet the requirements of the Recreational Craft Directive at 1st January 2000.

## HMI EXHAUST ALERT SYSTEM

One of a series of brochures on products from Halyard

We must reserve the right to change specifications without prior notice. Halyard and Aquadrive are trade marks.



**ООО «КВАРТЕТ»**

Россия, 197110, С.-Петербург, Петровский пр., д.9  
 тел.: (812) 323-8922 · факс: (812) 323-8934  
 e-mail: [inbox@kvartet.biz](mailto:inbox@kvartet.biz) · [www.kvartet.biz](http://www.kvartet.biz)

**HALYARD (MARINE & INDUSTRIAL) LIMITED**

Whaddon Business Park, Southampton Road, Whaddon,  
 Salisbury SP5 3HF, United Kingdom.  
 Telephone: +44 (0)1722 710922 Fax: +44 (0) 1722 710975  
<http://www.halyard.co.uk> e-mail: [techhelp@halyard.co.uk](mailto:techhelp@halyard.co.uk)

Every HMI product in this brochure is designed and manufactured in Britain