AISentinel

Congratulations with your AISentinel device. It provides you with the added security of sounding an alarm when an AIS SART beacon is activated in the vicinity of your vessel.

The AISentinel monitors the output from you AIS receiver for the presence of AIS SART messages. These may appear in two varieties: Test messages from when activating the test mode of your AIS SART device, and security broadcast messages from normal activation of the AIS SART device.

The user interface of the AISentinel comprises the following:

- A beeper that provides an audible alarm
- A relay for activating an external horn if applicable. Constant ON, Iso-phase and SOS patterns are configurable via jumpers.
- A pushbutton for acknowledging the alarm and silencing the beeper
- A green activity LED that shows activity on the output from your AIS receiver.
- A red alarm LED that blinks whenever an alarm is active

AIS SART Test mode

When a test message is received the alarm LED will give 3 short blinks and the beeper will sound shortly

AIS SART Activation

When an AIS SART security message is received, the beeper will emit a two tone alarm sound, the relay is activated and the alarm LED starts blinking. Pressing the pushbutton will silence the beeper and deactivate the relay, but the alarm LED will keep blinking to indicate that alarm mode is active. The alarm mode is terminated when no SART security messages are seen for ten minutes, or if the pushbutton is kept pressed for ten seconds.

Pushbutton functions

Some additional functions are available with various pushbutton presses as summarized below:

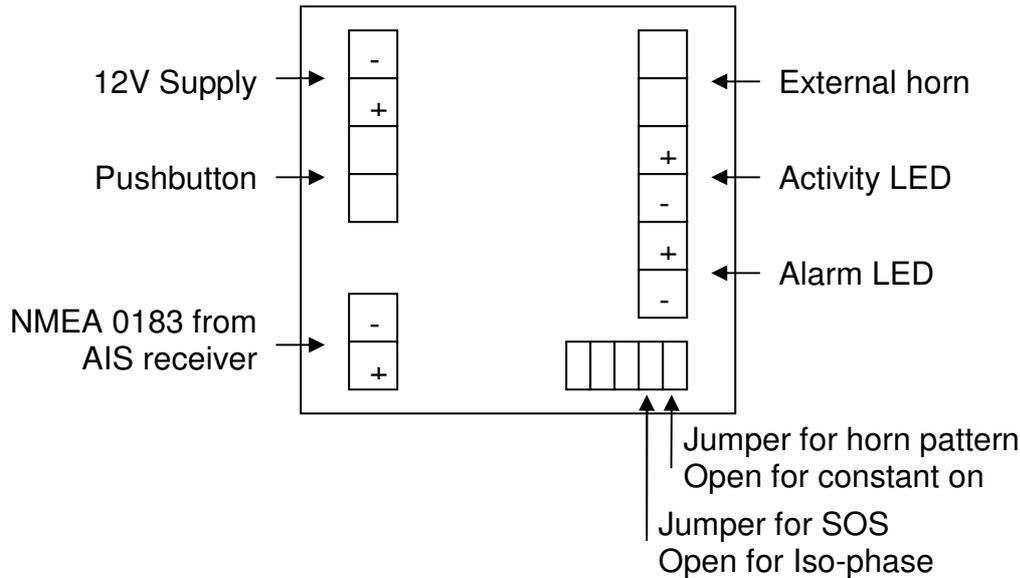| Monitoring mode	Alarm mode
Short press. Activates a test mode where reception of test messages triggers an ordinary alarm mode.	**Short press.** Acknowledge alarm by turning off beeper. The alarm LED will keep blinking.
Test mode lasts for 5 minutes and is signified by short flashes of the alarm LED.	**2 second press.** Turn relay / external horn off as well as the beeper.
Another short press turns the test mode off again.	**10 second press.** Normally alarm mode terminates when no SART messages are seen for ten minutes. Holding the button for ten seconds will terminate alarm mode and re-enter the monitoring mode.
1 second press. Test beeper and alarm LED while button is held.	
2 second press. In addition the relay and thus any attached external horn is activated while button is held.	A short beep is heard when alarm mode terminates.

Installation

Attach the device to 12V and the output from your AIS receiver as shown on the diagram below. You will probably have to connect it in parallel with your chart plotter at the AIS receivers output, which is perfectly OK.

The pushbutton and alarm LED's are attached to the units main PCB with screw terminals. This enables you to mount the device behind a deck plate and route these to the front.

In addition an external alarm device may be attached to the relay switch. If applicable, solder jumpers for configuring the relay for SOS, or Iso-phase patterns.

The beeper and LED's are activated briefly when supply voltage is connected to ensure correct operation.

Specifications

Supply voltage	12V.
Current	< 10mA at normal operation. < 80mA in alarm mode
Input	NMEA 0183, Hi speed. 470Ω impedance. Optically isolated up to 5 kV
Beeper	90 dB sound pressure
Operating temperature	-20 to +70 degrees Celsius
Product page	http://madsensoft.dk/aisentinel

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