



## BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM

The X160 BNWAS is designed to ensure that a vessel is always under the control of the Officer of the Watch (OOW). The OOW must reset the BNWAS within a set time period.

It is a key item of equipment for companies running a “one-man bridge” operation, where the vessel solely relies on the OOW to ensure its safety. Should the OOW become unable to interact with the BNWAS, the system will enter a sequence of alarm stages.

Stage 1 - Audible and visual alarm local to the wheelhouse only.

Stage 2 - Additional audible and visual alarm in chosen officer's quarters.

Stage 3 - Additional audible alarm in further officer and crew areas.



## SYSTEM FEATURES

- Everything that is needed according to IMO 128(75) in one single housing.
- Communication interface to VDR & ECDIS (NMEA).
- Extendable by means of extra reset buttons.
- Reports to the officer's cabins.
- Cost effective installation.
- Dimming function.
- Switches on automatically with the auto pilot.
- Type Approved according to IMO legislation for Bridge Navigation Watch Alarm Systems,
  - IMO 128(75). IMO Res. A.694(17), IMO Res. MSC.128(75), IMO MSC/Circ.982, IMO Res. MSC.191(79), IMO Res. MSC.282(86), IEC 61162 Series, IEC 62288 Ed.1.0 (2008), IEC 60945 (2002), IEC 62616 (2010).
  - Lloyds Register and Bureau Veritas Type approved.

The IMO resolution MSC.282 (86) (adopted June 2009) states that BNWAS is a mandatory carriage requirement on vessels as follows.

1 July 2011 -	Cargo ships of 150 gross tonnage and greater and all passenger ships, irrespective of size constructed after this date;
1 July 2012 -	Passenger ships irrespective of size constructed before 1 July 2011, not later than 1st survey* after 1 July 2012;
1 July 2012 -	Cargo ships of 3000 gross tonnage and upwards constructed before 1 July 2011, not later than first survey* after 1 July 2012;
1 July 2013 -	Cargo ships of 500 gross tonnage and upwards but less than 3000 gross tonnage constructed before 1 July 2011, not later than the first survey* after 1 July 2013;
1 July 2014 -	Cargo ships of 150 gross tonnage and upwards but less than 500 gross tonnage constructed before 1 July 2011, not later than the first survey* after 1 July 2014.

BNWAS is now a requirement for all vessels mentioned within the above stated IMO dates, this is not exclusive to vessels on international voyages.

\*Refer to the Unified interpretation of the term “first survey” referred to in SOLAS regulations (MSC.1/Circ.1290)

# BRIDGE NAVIGATION WATCH ALARM SYSTEM

## X160 BNWAS

## DATASHEET

### SPECIFICATIONS



#### System Main Unit

**MAR-0001 / MS421B**

- Audible and Visual Alarm
- Reset Function
- Three positions, ON, Auto, OFF
- 24 VDC

**Dimensions:** 72x144x75mm

**Cut Out:** 138x68mm.



#### BNWAS Main Unit Extender Board

**MAR-0011 / MS431**

- Connection to the System Main Unit for easy installation.
- Din Rail Mounting

**Dimensions:** 145x105x30mm



#### NMEA Activation Unit

**MAR-0008 / MS425B**

- Automatic Switch when either:
  - Auto pilot engaged.
  - Speed higher than 3 knots
  - Speed higher than 0,5 knots

Din Rail Mounted, 55x60x90mm.



#### BNWAS 5 Alarm & 2 Reset Expansion Board

**MAR-0012 / MS432**

- Adds Five buzzer units and Two reset unit connections.
- Din Rail Mounting

**Dimensions:** 145x105x30mm

### RESET UNIT OPTIONS



#### BNWAS Remote Reset Button

**MAR-0014 / MS411**

- Audible and Visual Alarm
- Reset Function
- 24 VDC

**Dimensions:** 72x96x75mm

**Cut Out:** 68x92mm.

Wall Mount Option (MAR-0005)



#### BNWAS PIR Sensor 24V

**MAR-0009 / MSPIR**

- 110° angle and 360° overview.
- Ceiling Mount

**Dimensions:** 100x40mm



#### BNWAS Remote Reset Watertight

**MAR-0006 / MS415**

- Audible and Visual Alarm
- Reset Function
- 24 VDC

**Dimensions:** 110x75x75 mm, IP67

### ALARM BUZZERS AND SOUNDERS OPTIONS



#### BNWAS Alarm Buzzer

**MAR-0015 / MS410**

- Audible and Visual Alarm
- 24 VDC

**Dimensions:** 72x96x75mm

**Cut Out:** 68x92mm.

Wall Mount Option (MAR-0004)



#### BNWAS Sounder Beacon

**SND-0002**

- Adjustable Volume (85-102dB)
- 12-24 VDC

**Dimensions:** 100x90x110mm, IP65



#### BNWAS Sounder

**SND-0003**

- Adjustable Volume (85-102dB)
- 12-24 VDC

**Dimensions:** 100x90x90mm, IP65

### CABIN SELECTOR OPTIONS



#### BNWAS Cabin Selector Switch

**MAR-0007 / MS422**

- Selection for six officers of watch
- Easy rotary switch controlled.
- 24 VDC

**Dimensions:** 72x144x75mm

**Cut Out:** 138x68mm



#### BNWAS Cabin Selector Board

**MAR-0013 / MS433**

- Enables connection to the selector switch.
- Din Rail Mounting

**Dimensions:** 145x105x30mm