BRIDGE NAVIGATION WATCH ALARM SYSTEM

BNWAS is designed to ensure that a vessel is under the control of the Officer of the Watch (OOW) at all times. 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 is solely reliant 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

In addition to the standard “push to reset” controls the X810 has the option of the X810-P Motion Sensor. When the sensor detects movement of the OOW it will automatically reset the BNWAS counter, leaving the OOW free to carry out his normal duties without the concern of resetting the BNWAS manually every 3-12 minutes.

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 July 2011</td>
<td>Cargo ships of 150 gross tonnage and greater and all passenger ships, irrespective of size constructed after this date;</td>
</tr>
<tr>
<td>1 July 2012</td>
<td>Passenger ships irrespective of size constructed before 1 July 2011, not later than 1st survey* after 1 July 2012;</td>
</tr>
<tr>
<td>1 July 2012</td>
<td>Cargo ships of 3000 gross tonnage and upwards constructed before 1 July 2011, not later than first survey* after 1 July 2012;</td>
</tr>
<tr>
<td>1 July 2013</td>
<td>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;</td>
</tr>
<tr>
<td>1 July 2014</td>
<td>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.</td>
</tr>
</tbody>
</table>

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)
SPECIFICATIONS

**MAIN ELECTRONIC UNIT (X810-MEU)** (supplied with X810-M)
- **POWER:** 110/220v AC standard, 24v DC available on special order.
- **INPUT:** 8 x NMEA0183 4800Bd for Autopilot, GPS, Unacknowledged Alarms.
- **OUTPUT:** 1 x Dry Contact (NO) for Autopilot Engaged & 1 x Dry Contact (NO) Unacknowledged Alarms.
- **DIMENSIONS:** 300 x 300 x 160mm 7kg
- **INPUT:** NMEA0183 4800Bd for VDR/s-VDR recording

**MONITOR AND ALERT PANEL (X810-M)**
- **POWER:** 12v DC from main unit.
- **INPUT:** All Alert stages and Audible Alarm
- **DIMENSIONS:** 190 x 140 x 90mm 500g

**REMOTE ALERT PANEL (X810-R)**
- **POWER:** 12v DC from main unit.
- **INPUT:** Bridge Alert and Audible Alarm
- **DIMENSIONS:** 120 x 90 x 50mm 200g

**PASSIVE INFRARED DETECTOR (X810-P)**
- **POWER:** 12v DC from main unit.
- **INPUT:** Infrared
- **OUTPUT:** Motion Detected
- **DIMENSIONS:** 100 x 60 x 50mm 50g

**WATCH ALERT PANEL (X810-W)**
- **POWER:** 12v DC from main unit.
- **INPUT:** Bridge Alert and Audible Alarm
- **DIMENSIONS:** 120 x 90 x 50mm 200g

**DUTY OFFICER SELECTOR (X810-DOS with X810-OASI)**
- **POWER:** 12v DC from main unit.
- **X810-DOS DIMS:** 120 x 90 x 50mm 200g
- **X810-OASI DIMIS:** 230 x 120 x 60mm 400g

**SOUNDER ALARM BEACON (X810-SAB)**
- **POWER:** 12v DC from main unit.
- **OUTPUT:** Visual Alarm (0.7j) and Audio Alarm (101dB (A))
- **DIMENSIONS:** 100 x 90 x 110mm 300g

**APPROVALS:** MSC128(75), IEC62616, IEC60945