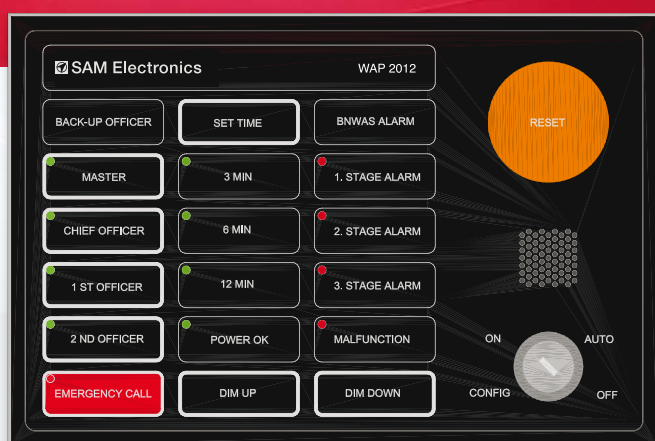




BNWAS Basic

Bridge Navigational Watch Alarm System



BNWAS Basic is a full featured Bridge Navigational Watch Alarm System as required by IMO Carriage requirements. The BNWAS Basic was designed with the aim to fulfill the requirements at minimum cost level. It is optimised for retrofit installations and can be installed by the crew providing basic electrical experience. The system is suitable for vessels of all sizes.

BNWAS Basic complies with the performance standard „IEC 62616 Ed.1: Maritime navigation and radiocommunication equipment and systems - Bridge navigational watch alarm system (BNWAS)“ and MSC.128(75). Type approval certificates for ABS, BV, DNV GL, LR and RINA are pending.

Features

- Watch Alarm Panel with dimming
- Cabin Alarm Panels
- Motion sensor (option)
- Reset box or push buttons
- Activate switch with key lock
- Reset timer inputs from RADAR or ECDIS
- Force activate by Autopilot / Trackplot etc.
- User-friendly
- Easy installation by crew
- Stand-alone system optimised for retrofits



**SAM
Electronics**

an  communications company

BNWAS Basic

Technical Data

The **BNWAS Basic** is a low cost monitoring system of "Navigator Fitness" fulfilling the latest IMO requirements.

By monitoring bridge activity by means of user interaction and physical movement in the bridge area (optional motion sensor), the system can detect operator disability and alert backup Navigators to the Bridge area, thus participating in the safe operation of the vessel to help avoiding accidents.

Backup Navigators can be alerted (following rules and regulations), i.e. Captain's cabin can be alerted and different Officers cabins can be selected to be on duty for 2nd stage back-up call alarms. All control and handling of alarm system, backup call functions and timer settings are performed at the Watch Alarm Panel WAP 2012 located centrally in the Bridge console.

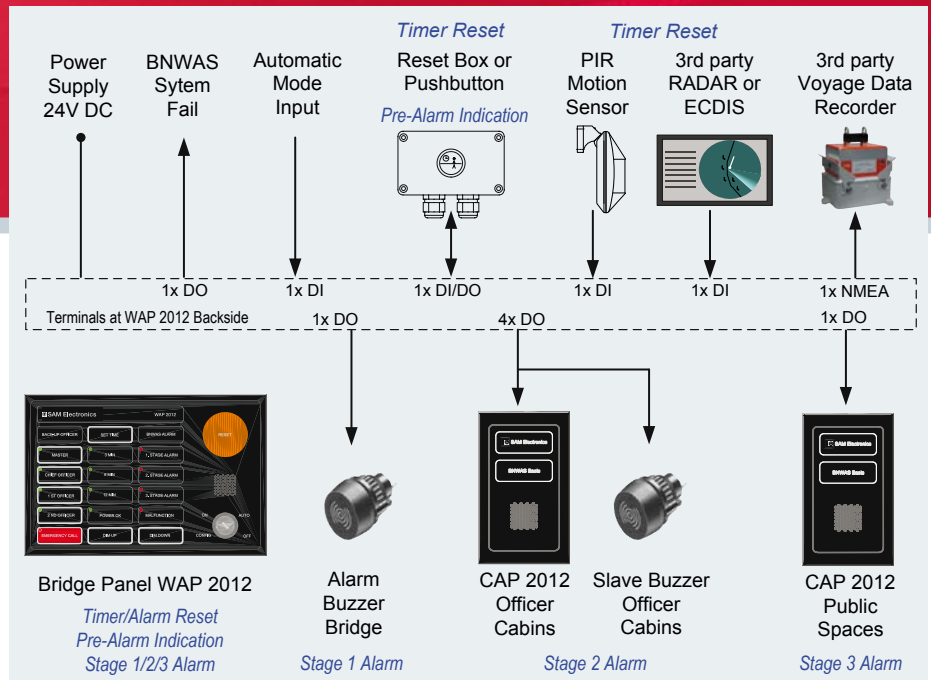
IMO Carriage Requirements

New Ships

- All ships constructed on or after the 1st July 2011 of 150 gross tonnage and upwards and passenger ships irrespective of size

Existing Ships

- Passenger ships not later than the first survey on or after 1st July 2012
- Ships of 3.000 gross tonnage and above not later than the first survey on or after 1st July 2012
- Ships of 500 gross tonnage and above but less than 3.000 gross tonnage not later than the first survey on or after 1st July 2013
- Ships of 150 gross tonnage and above but less than 500 gross tonnage not later than the first survey on or after 1st July 2014



BNWAS Basic - schematic system layout and interfaces

BNWAS Basic - Components



WAP 2012

The Watch Alarm Panel WAP 2012 is the main control station for backup officer selection, timer activation and timer period selection, alarm stage indication and acknowledgement. The WAP 2012 houses the main controller and terminals for all relevant inputs/outputs to the BNWAS system (see interface overview for details). The WAP 2012 is available for console flush mounting or bracket mounting.



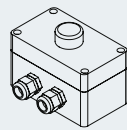
CAP 2012

The Cabin Alarm Panel CAP 2012 is used for acoustic announcement of the stage 2 alarm in the backup officer(s) accommodation cabin(s) and stage 3 alarms in public rooms. The CAP 2012 allows selection of up to 4 locations with CAP 2012 panels for stage 2 alarms, also parallel selection is possible.



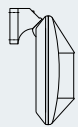
Extension Alarm Buzzer

Both WAP 2012 and CAP 2012 panels can be extended with additional alarm buzzers to allow a wider range of acoustic alarm announcement. Buzzers are available for mounting inside the bridge console, wall mounting in cabin area or integrated into a reset box (indoor / outdoor).



Reset push button / reset box

The BNWAS timer and alarm stages can be reset / acknowledged at the WAP 2012 panel. In parallel this is possible via reset push buttons. These include a lamp which is flashing for indication of the pre-alarm stage. Push buttons are available for installation in the bridge console (indoor) as well as integrated into boxes for wall-mounting in the bridge area or on the bridge wings (outdoor).



PIR Motion Sensor

A PIR motion sensor is available to enable a convenient timer reset by detection of movements in the bridge area. For large wheelhouse areas multiple motion sensors can be connected (indoor use only). Note: The use of motion sensor(s) is mandatory for DNV NAUT classed vessels, whereas it is not allowed to be used on LR Nav1 and LR IBS classed vessels.

BNWAS Basic complies with following standards: IMO A.694(17), IMO A.830(19), IMO MSC. 128(75), IEC 62616, IEC 60945, IEC 62288, IEC 61162. And it is type approved by major classification societies.

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