

Wheelmark Type Approved

# Nauticast X-Pack DS – AIS Transponder

## Introduction and Special Features

The X-Pack DS was developed and designed by Nauticast and is manufactured exclusively by our outsourced assembling partner – Siemens AG Austria according to highest ISO standards.

Nauticast considered the standards of associations such as the IMO, IALA, ITU, IHO, and IEC as minimal requirements for the X-Pack DS product development and decided to go beyond these standard requirements and develop their product further, thereby ensuring successful market entry by manufacturing a product which was designed to anticipate not only today's, but also tomorrow's requirements of an AIS in the maritime industry.

- The functional advantage for the operator of the X-Pack DS over other similar devices is its integrated, fully alphanumeric keyboard, allowing simple message transmission and editing.
- Very simple usability in operation and installation (self-explanatory menu navigation).
- Nauticast has further transcended the applicable regulations by undertaking the necessary hardware and software preparation to allow customized DGPS and other interface options in the future.
- Existing customer applications can be adopted for remote control operation of the X-Pack DS by means of the supported Interfaces. This feature enhances existing customers systems with the AIS functionality.
- The AIS-Transponder can be used as a stand-alone unit, or for enhanced navigational and communication operation, in conjunction with an ENC and/or ECDIS for traffic image display. It also interfaces with existing NMEA compatible equipment and sensors thereby ensuring problem free retrofitting and also allows connection to PCs, notebooks, radar systems, ECDIS and Voyage Data Recorders.

### 1. X-Pack DS – Technical Features and Benefits:

- |   |  |
|---|--|
| ■ All functions integrated into one single unit | ■ Lightweight, single unit (2,5 KG)            |
| ■ Integrated VHF transmitter and receiver       | ■ Compact, all in one design                   |
| ■ Integrated GPS receiver                       | ■ Easy installation - Plug and Play Technology |
| ■ Integrated power supply                       | ■ Multifunctional applications:                |
| ■ Integrated alphanumeric display               | - SOLAS High Sea Class A Transponder           |
| ■ Water resistant cabinet                       | - Inland Navigation Unit                       |

## 2. X-Pack DS – Standard Interface Options

The X-Pack is fitted with numerous standard interface connections to external devices:

- VHF Antenna
- GPS Antenna
- IEC 61162-2 Interface for Voyage Related Data and Static Data receipt
- 3 x IEC 61162-1/2 Interfaces for Dynamic Data receipt



## 3. Optional Interface Options (upon request)

The X-Pack DS was designed to anticipate future interface requirements and can be fitted with interfaces for the following modules upon demand:

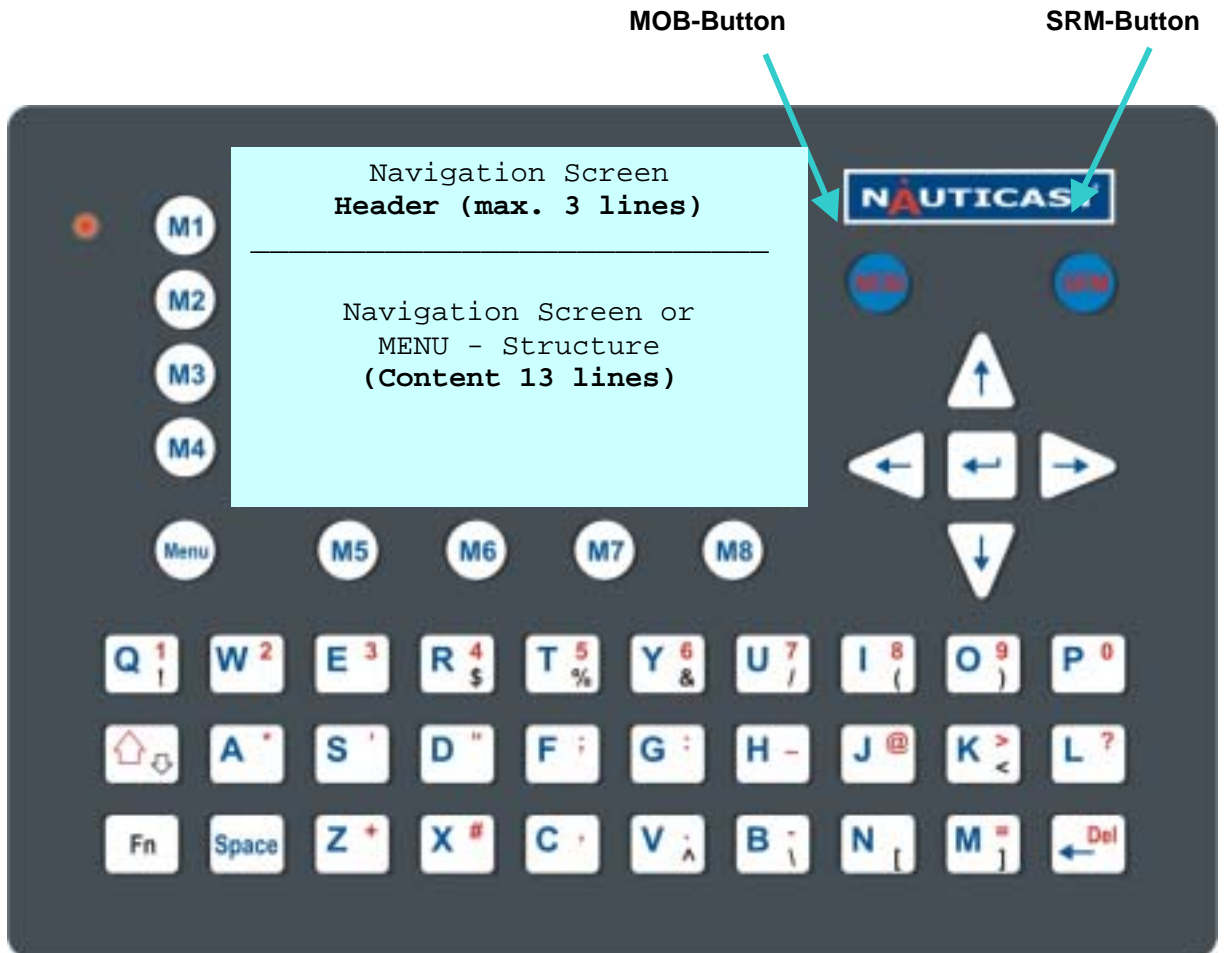
- DGPS Module
- GSM Module
- ISDN Modem
- Analogue Modem
  
- One Antenna Solution

**Integratable into the X-Pack DS cabinet !**

#### 4. Safety Functions

The X-Pack DS is fitted with Safety Keys, which allow the user to automatically send urgent messages without the necessity of navigating the Transponder Menus.

The SRM Button sends out Broadcast Safety Related Messages to all ships within receiving range. The MOB Button automatically saves the precise position coordinates of where the incident occurred, and creates a message, which can be sent to the vessel closest to accident location.



## 5. Easy and versatile Installation Options

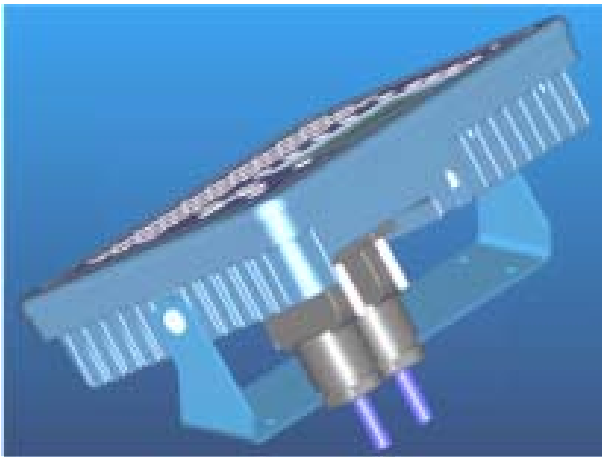
Nauticast are ensuring a competitive edge by tailoring their trim, all in one unit with integrated alphanumeric keyboard to the limited space available in ships bridges today. The X- Pack DS not only promises to spare precious space once installed, it's plug and play design ensures that installation times are kept down to a minimum.

The X-Pack DS unit is designed to support a number of mounting possibilities. A wide variety of installation material (brackets etc.) and diagrams showing dimensions and drilling plans for each type are supplied.

According to user preference, one of the following installation methods may be applied:

- Guide plates mounting (standard option)
- Multi-purpose mounting bracket for tables, walls etc.
- Console mounting frame for bridgeboard
- Console mounting frame for 19" shelf

Bracket Mounting Option



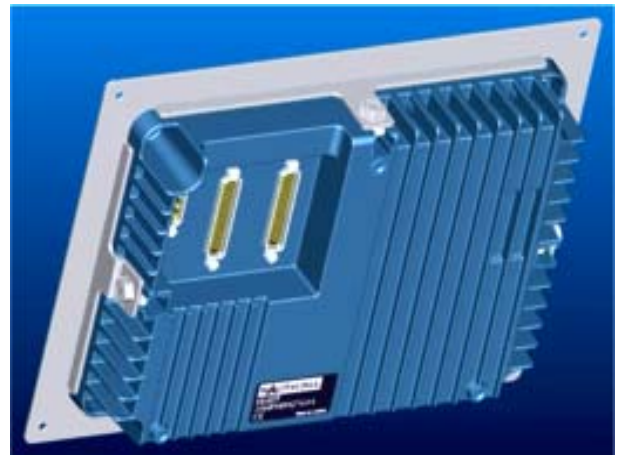
Bridge Mounting with Guide Plates



Bracket Mounting



Bridge Mounting with a Frame



## 6. “Plug and Play” Assembly



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### Human - Machine Interface

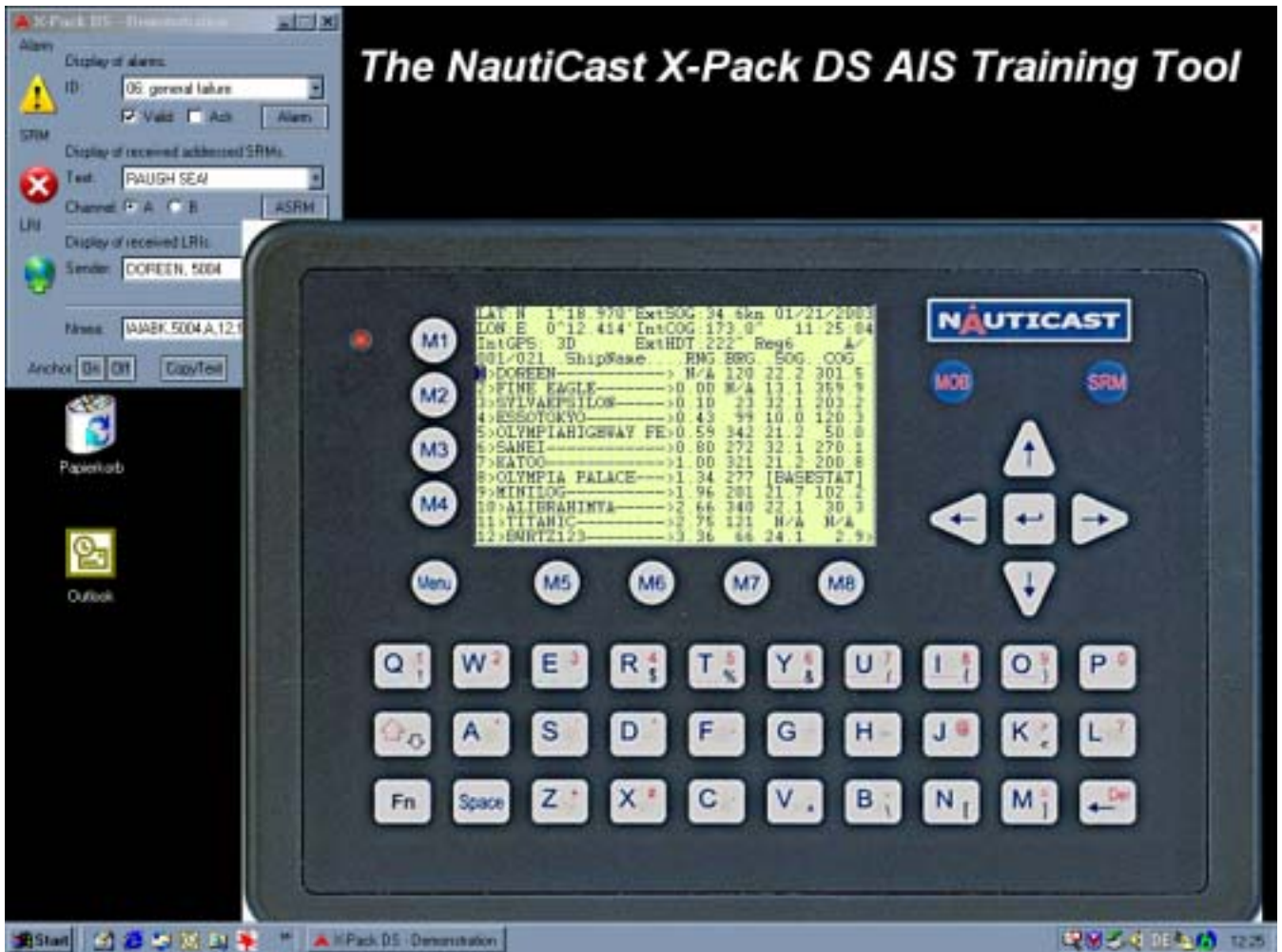
The X-Pack DS facilitates communication!

The fully alphanumerical keyboard is combined with simple, easy to operate menu navigation. The self-explanatory menu ensures that the user quickly becomes accustomed to the system.

**Additional Customer Benefits:**

In readiness for the X-Pack product launch, extensive product literature including a user manual and installation guide, as well as a software tool, which simulates transponder operation, were developed. This X-Pack DS Demonstrator was especially designed for training purposes with an aim to allow the future user to gain experience in Transponder operation from the comfort of a PC. It simulates all the functions, which are available on the live system – and is especially useful for generating situations offline, that rarely occur in real-life situations (e.g. alarms, long range interface requests, SRM or MOB messages).

**Screen Shot:  
The X-Pack DS Demonstrator**



## 7. Product Testing and Total Quality Assurance

### - **Wheelmark Approval from BSH**

The X-Pack DS received Type Approval from the German Testing Institution, BSH in 7<sup>th</sup> March 2003.

### - **IEC 60945**

The X-Pack DS has passed special testing procedures (higher level than standard IEC 60945) from accredited external testing centres (i.e.: special shock tests, additional chemical tests EN 60721)

### - **Total Quality Assurance**

The Quality Assurance Programme within the production process determines that each device undergoes a number of special tests (extracts from the BSH certification test routines), before leaving the factory. This process ensures highest availability of the X-Pack DS during operation.

The X-Pack DS is approved against the Module B & D of the EC Conformity Assessment.

## 8. Nauticast and X-Pack DS: Overview of Special Features

- Wheelmark Approved
- One single unit
- Ease of installation and operation
- Worldwide Service
- 24 month manufacturers guarantee
- Upgrade compatibility for future applications (hard- and software)
- Availability of built in DGPS
- AIS focused manufacturer
- Quality control in manufacturing and customer support

### **Product Photo: Nauticast X-Pack DS**

