

The Next Wave in Navigation

MX 531

Type Approved AIS Transponder System

The MX 531 / MX420 AIS System is upgradeable with D/GPS navigation functionality

The MX531 works autonomously and allows the nautical officer to:

- Identify other AIS enabled ships by its' correlated UAIS identification
- Contact other ships using the Call Signs presented by the AIS Screen
- Receive an instant overview of traffic situations and the maneuvers of other ships
- Determine dangerous targets up to four times faster than ARPA
- Able to get detailed information on AIS enabled ships in radar blind zones



A Surprisingly Simple Solution to an Incredibly Complex Problem

As we move further into the Information Age we need to be aware of an increasing number of new mandatory requirements that are coming into effect for a great part of the Commercial Shipping industry.

The new AIS (Automatic Identification System) Standard, as well as new requirements for DGPS will lead the industry to new levels of safety and efficiency. Meeting these requirements may prove quite expensive to many users and still not produce the desired results. To address this problem in a cost effective manner, MX Marine has developed a complete solution to GPS, DGPS and AIS. With only one combined Control and Display unit, you can now access all related information and still command full control of all GPS, DGPS and AIS functions. The system connects directly to the ship's navigation sensors as well as ECDIS, ARPA and your other shipboard information systems. The introduction of the new MX420 Navigation System is without a doubt, the most profound implementation of GPS technology yet. Building on over 20 years of experience in GPS and DGPS, and now adding AIS as a key function, we have created the world's first integrated DGPS/AIS system. Adding AIS to navigation for spontaneous 'ship to ship' or

'ship to shore' recognition will greatly enhance safety at sea and provide mariners with new levels of real-time information. Designed with the deep sea commercial mariner in mind, we have created multiple configurations to suit the size and complexity of any vessel. Our MX420 Navigation System has the industry's brightest displays and, of course, has the legendary 'World's Most Accurate' Leica precision.

Automatic Identification System-AIS

With the addition of the new AIS functions, we have created a fully realized, type-approved, DGPS/AIS system. The new transponder, is a fully IMO-compliant STDMA unit remotely controlled by the MX420 Control and Display unit. All system set-ups and controls are configured on the MX420, which also gathers the ship's sensor data and organizes the information for transmission via AIS. The ship's ECDIS, ARPA and Pilot's PC all have access to both the GPS and the AIS information via the high-speed serial ports on the MX531/420. Password protected menus allow you to safely and simply enter all Static and Voyage related AIS information. AIS Situation Displays give you immediate and continuous graphic and/or text information about AIS-equipped ships and shore stations as they come into radio range.

MX531 General specifications

The MX531 system consists of an electronic unit including the AIS GPS antenna, and the MX420 display unit. The compact design is suitable for console installation or wall mounting.

The MX531 electronic unit includes:

- VHF Receiver channel 87 (AIS 1)
- VHF Receiver channel 88 (AIS 2)
- Integrated DSC Receiver channel 70
- VHF Transmitter
- GPS antenna (for AIS timing)
- 12 channel GPS module for time synchronisation
- Internal clock
- 3 x IEC 61162-2 sensor interfaces
- 1 x IEC 61162 Long Range Interface
- 2 x IEC 61162-2 Input / Output ports (main and auxiliary)
- Ethernet card

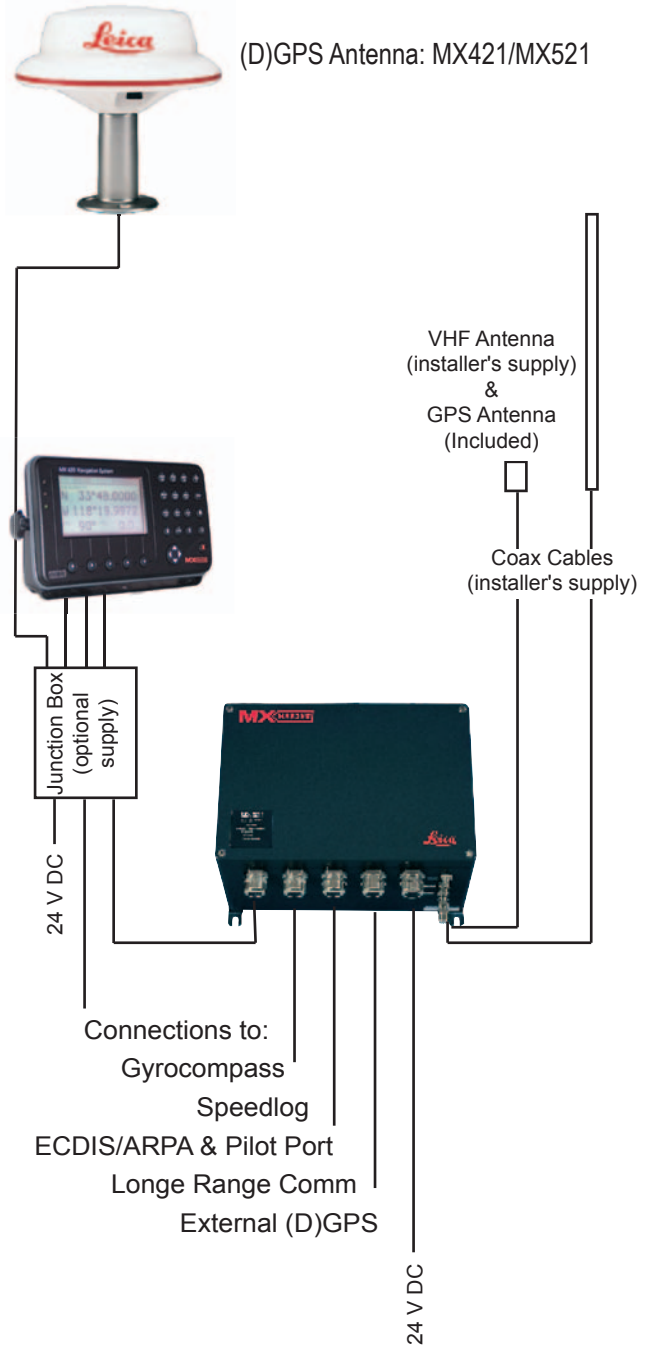
The MX420 Control & Display Unit includes:

- Black & White super contrast LCD
- "Traffic Light" indication of navigation status
- Keypad, touchpad and "soft keys"
- 8 bidirectional IEC 61162-1 interfaces (NMEA-0183)
- 2 I/O ports for DGPS and Beacon (MX421B/MX575)

Normative Requirements

The MX531 AIS fulfils the requirements for AIS Class A transponder, USCG, CCS and FCC:

- MSC.74(69) Annex 3
- IEC 61993 (2), IEC 61162-1&2
- IEC 60945
- ITU-R M.1371 (A), ITU-R M. 825(3)
- ITU-R M. 1084(3)



MX Marine reserves the right to make changes in its products and specifications without notice.

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