

## VOYAGE DATA RECORDER

AMI's new X-Series VDR and interfaces have been developed using our expertise in VDR design, spanning more than a decade, along with 20+ years' experience in marine electronic re-transmission and interfacing. The result is a system that is designed and built in the UK from the "ground up". A system that not only meets the new VDR regulations but also offers more flexibility, functionality and features to the operator than other systems.

### High Resolution Touch Screen Console

- 8.4" Panel Mount Full Colour Resistive Touch Screen
- Traffic Light System for Simple Fault Diagnosis
- Ethernet Interface for Data Download



Touch Screen Console

### Built in Redundancy

Backup image of Operating System, and real-time backup of Long Term Recording Medium (LTRM), to ensure maximum operational reliability. All configuration files backed up to LTRM, Float Free and Fixed Capsules for fast and effective service calls.

### Health Check

Real-time continuous health check which continuously monitors the VDR to raise an alert in the case of any event. A full manual health check can be activated on demand.

### Playback software

The X-VDR operates on newly developed playback software that enables full voyage analysis and data replay functions. This AMI software has been designed with the user in mind, making it fast, simple and effective in operation.

### Cable Entry System

The system includes a compact and innovative cable gland design, making it easy to run all cables into the MEU with specialised cable entries customisable to vessel needs for installing varying sized cables for VGA, video, power and capsules.

### Float free and Fixed capsules

AMI supply a fully approved VDR system with float free and fixed capsules. Both capsules will record VDR data for a minimum of 48 hours, meeting MSC.333(90) and IEC61996-1 Ed 2.0 requirements.



Float free Capsule

### Fast track installation

Simplicity is key to the XVDR, with a single cable required between the MEU and the X Series interfaces, along with the ability to daisy chain multiple interfaces to further reduce installation costs.

This allows flexibility for the addition of equipment that may require connection to the VDR to meet future IMO requirements. As always with AMI's single cable solution it caters for both data and power.

**PLEASE NOTE!** There are NO specialised tools required for the termination of any of our cables.



MEU and Fixed Capsule

### Cost effective service

The use of simple connectors allows for easy and quick maintenance. For example, changing of a peripheral interface takes just 10 minutes to replace the PCB, which reduces down time and unnecessary costs.

### System Features:

- Compact and easy to use cable entry system
- Bridge Control Panel for efficient system monitoring
- 10 individual audio channels allowing up to 8 microphones & 2 VHF or a combination of both.
- Easy swap OS Drive - No reconfiguration required if the OS Drive is replaced.

### Benefits:

- High quality and reliable hardware and software
- Purpose built for the revised 2014 regulations
- Compliant with MSC.333(90) and IEC61996-1 Ed 2.0
- 2 Year warranty as standard
- Global after sales and service support network

## SPECIFICATIONS

### MAIN ELECTRONIC UNIT - X-VDRMEU

10x Audio Channels  
 20x NMEA Data Inputs  
 2x DVI-D/DVI-A/VGA Inputs for Radar Capture  
 with option for additional 2 Inputs  
 2x 1TB Drives - LTRM (30 Days) and RT Backup  
 2x Ethernet interface for Ship's Network (ECDIS)

**POWER:** 24vDC

**DIMENSIONS:** 550 x 493 x 145mm

### TOUCH SCREEN CONSOLE - X-VDRTSM

High Resolution Touch Screen Display  
 "On Demand" System Performance Test  
 Ethernet Interface for Data Collection

**POWER:** 24vDC supplied from the MEU

**DIMENSIONS:** 200 x 266 x 55mm

### UNINTERRUPTED POWER SUPPLY - X-VDRUPS

110 to 230vAC 50,60Hz  
 Battery Backed  
 AC Monitoring  
 Battery Health Monitoring  
 24vDC Output

**DIMENSIONS:** 400 x 300 x 210mm

### INTERNAL MICROPHONE - X-VDRMICINT

Built in Self-Test  
**POWER:** 12vDC supplied from the MEU

**DIMENSIONS:** 25 x 125 x 52mm

### EXTERNAL MICROPHONE - X-VDRMICEXT

IP66 Waterproof  
 Built in Self-Test

**POWER:** 12vDC supplied from the MEU

**DIMENSIONS:** 46 x 116 x 46mm

### FIXED HARDENED CAPSULE - X-VDRHC

48 Hours Recording  
 Ethernet Interface

**POWER:** 24vDC supplied from the MEU

**DIMENSIONS:** 347 x 180 x 218mm

### FLOAT FREE CAPSULE - X-VDRFF-AMI

48 Hours Recording  
 Ethernet Interface

**POWER:** Supplied from the MEU

**DIMENSIONS:** 280 x 190 x 140mm

**New Regulations:** - in compliance with MSC.333(90), enforced on 1 July 2014, if installed on or after 1 July 2014, conform to performance standards not inferior to those specified in the annex to the present resolution: and if installed before 1 July 2014, conform to performance standards not inferior to those specified in the annex to resolution A.861(20), as amended by resolution MSC.214(81)

DATA ITEMS TO BE RECORDED	S-VDRs	Current VDRs	New VDRs
Date and time	✓	✓	✓
Ship's position	✓	✓	✓
Speed	✓	✓	✓
Heading	✓	✓	✓
Bridge audio	✓	✓	✓
Communication audio	✓	✓	✓
Radar data	*	✓	✓
AIS	*	x	✓
Echo sounder	**	✓	✓
Engine order and response	**	✓	✓
Rudder order and response	**	✓	✓
Hull opening (doors) status	**	✓	✓
Watertight and fire door status	**	✓	✓
Main Alarms	**	✓	✓
Acceleration and hull stresses	**	**	**
Wind speed and direction	**	**	**
Second radar	x	x	✓
ECDIS	x	x	***
Data from inclinometer	x	x	✓

\* Radar must be recorded if possible using COTS equipment else AIS data must be recorded.  
 \*\* If suitable equipment is fitted i.e. equipment which transmits data using the IEC61162 format.  
 \*\*\*If system transmits data using IEC61162-450 format