

## Addendum



**The following sections and figures in this user manual have been updated since this manual was printed.**

It is strongly recommended that the latest downloadable version of the manual is reviewed before installing or operating this product.

To obtain the latest version of this manual in electronic format (PDF file) please contact your dealer.

*Due to integration with Bridge Alert Management standards, references to "Alarm" should be read as "Alert".*

*To bring this manual in line with IEC 61993-2 (ed3.0) the following changes have been made.*

### Alert Icons

*The Alarms icons on the screen top bar have been changed to new Alerts icons. See section 4.6.7 below for more information on the Alert icons.*

#### 4.6.7 Alarms

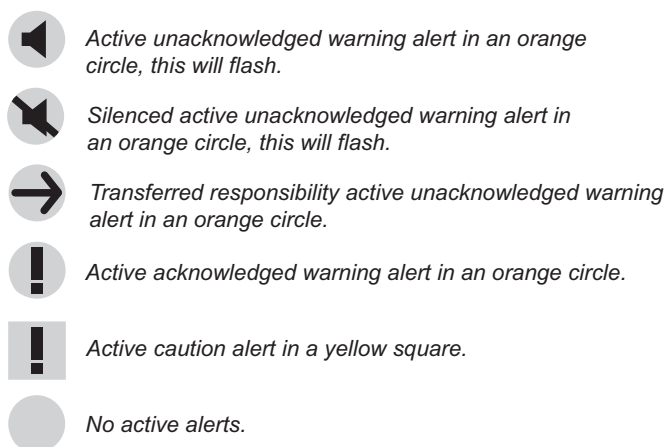
*Section revised and renamed as:*

#### 4.6.7 Alerts

The AIS transceiver performs self checking functions continuously. If a self check fails a display will appear on the screen notifying the operator of this. If the feature is enabled via the 'Sound Settings' menu, the occurrence of an Alert will be accompanied by a notification sound. The alert can be acknowledged via the on-screen message. The list of currently active AIS alerts can be displayed by accessing the 'Alerts' menu. If an alert occurs please try restarting the transceiver or checking the relevant connections in the first instance.

If any alert condition persists, contact your dealer or installer.

The Alerts icon indicates the alert status. When there are no active alerts the blank icon is displayed, see Figure 22. If a warning alert occurs, the display changes to show the unacknowledged warning alert icon. Once the warning alert has been acknowledged, the acknowledged warning alert icon is displayed. If the only active alerts are caution alerts, the caution alert icon is displayed.



**Figure 22** Alert Icons

When the transceiver is used with a Central Alert Management (CAM) system, other equipment in the system is able to take responsibility for the transceiver's warning alerts (caution alerts are unaffected). The transferred responsibility active unacknowledged warning alert icon is used to indicate when this has occurred. A CAM system also allows other equipment to silence alerts produced by the transceiver. This is indicated by the silenced active unacknowledged warning alert icon.

All supported alerts are Category B (as per IEC 62923-1 - Bridge Alert Management) and are listed in Table 6 and Table 7. This product supports Escalation of a Warning as a Warning only. This product supports the silencing and responsibility transfer of warning alerts by external CAM equipment via the IEC 61162 (NMEA 0183) serial ports only.

Alert	Alert Additional Information	Alert Identifier (Instance ID)	Description
Locating device	Check AIS targets	3108 (1)	An active locating (AIS SART, MOB or PLB) message has been received. The device will be displayed as the top item in the target list. Select this item to see the location of the device.
Transceiver fail	Not transmitting, check AIS	3008 (1)	<b>This alert will occur if the MMSI has not been configured.</b> This alert can occur if the radio hardware has failed. Please restart the transceiver. The alert will be cleared if the transmitter recovers normal operation.
Transceiver fail	Not receiving, check AIS	3008 (2)	This alert occurs should the receiver hardware malfunction. Please restart the transceiver. If the receiver returns to normal operation this alert will be cleared.
Lost position	Own ship position not transmitted	3015 (1)	This alert occurs if the AIS transceiver has no valid position information from any connected sensor. Please check the connections to the sensor.

Table 6 Warnings in priority order

Alert	Alert Additional Information	Alert Identifier (Instance ID)	Description
Impaired radio	Reduced coverage (antenna VSWR)	3116 (1)	This alert occurs if there is a problem with your antenna or antenna connection. Please check the antenna and cable to ensure it is fully connected
Impaired radio	Ch1 inoperative, check AIS Ch2 inoperative, check AIS DSC inoperative	3116 (2)	This alert occurs should the receiver hardware malfunction. Please restart the transceiver. If the receiver returns to normal operation this alert will be cleared.
		3116 (3)	
		3116 (4)	
Sync in fallback	Check AIS for UTC time synchronisation	3113 (1)	This alert indicates that the transmitter is no longer directly synchronized with the GNSS receiver. This may be because the GNSS receiver cannot receive sufficient satellites. Please check the supplied GNSS antenna is installed correctly.
Lost ext EPFS	Check external position sensor	3003 (1)	This alert occurs if the position from the external Electronic Position Fixing System (i.e. GNSS) is invalid or lost. Please check the connections to the sensor.
Missing COG	Not transmitting COG	3119 (1)	This alert occurs if the AIS transceiver has no valid Course Over Ground information from any connected sensor. Please check the connections to the sensor.
Missing SOG	Not transmitting SOG	3119 (2)	This alert occurs if the AIS transceiver has no valid Speed Over Ground information from any connected sensor. Please check the connections to the sensor.

Alert	Alert Additional Information	Alert Identifier (Instance ID)	Description
Missing Heading	Not transmitting Heading	3119 (3)	This alert occurs if the AIS transceiver has no valid heading information from any connected sensor, or if the heading is undefined. Please check the connections to the sensor.
Missing ROT	Not transmitting Rate of Turn	3119 (4)	This alert occurs if the AIS transceiver has no Rate Of Turn information from connected sensors or via internal calculation. Please check the connections to the sensor.
Doubtful GNSS	Int/Ext GNSS position mismatch	3013 (1)	This alert occurs if the difference in position reported by the internal and external GNSS receivers is too large. Check the vessel dimensions and GNSS antenna locations have been entered correctly.
Doubtful heading	Difference with COG exceeds limit	3013 (2)	This alert occurs if the difference between the course over ground and heading data is greater than 45° for more than 5 minutes. This alert only occurs if the vessel speed over ground is greater than 5 knots. Please check the connections to the sensor.
Wrong NavStatus	Check NavStatus setting	3019 (1)	This alert will occur if the navigation status is in conflict with the current speed of the vessel. For example the alert will activate if the Navigation status is set to moored, but the vessel speed is greater than 3 knots. Correct the navigation status to clear this alert.
Lost MKD	Cannot display safety related messages	3009 (1)	This alert occurs should the MKD hardware malfunction. Please restart the transceiver. If the MKD returns to normal operation this alert will be cleared.

Table 7 Cautions

## 6.7 Transmission intervals

These rows have been added or updated.

Output sentence type	Transmission interval	Comments
VDO	Once a second	Own vessel VDL reports. A 'dummy' VDO is generated every second. A transmission VDO is generated whenever the transceiver transmits a message.
ALC	Once every thirty seconds	The cycle alert list (ALC) sentence provides a list of all alerts that are not in alert state normal. When all alerts are in alert state normal, the number of alert entries will be zero.
ABK, ACA, ALF, LR1, LR2, LR3, LRF, LRI, TXT, VDM	Only transmitted when specifically initiated by an external event	

Table 8 IEC 61162 Transmission interval for periodic sentences

## 6.8 Interface sentences

These rows have been updated.

Data port	Input sentences	Output sentences
External display External Display 2 Pilot	ABM, ACA, ACK, ACN, AIR, BBM, DTM, EPV, GBS, GGA, GLL, GNS, HDT, RMC, ROT, SPW, SSA, SSD, THS, VBW, VSD, VTG	ABK, ACA, ACS,ALC, ALF, ALR, ARC, EPV, NAK, SSD, TRL, TXT, VDM, VDO, VER, VSDL:
Long Range	LRF, LRI	LR1, LR2, LR3,LRF, LRI

\* External Display 2 / Long Range / DGNS interfaces use the same port. Please select the required interface in the Interface menu.

Table 9 IEC 61162 Sentences input and output

The default SSA key is ABCDZX. Please contact your dealer if you wish to change it.

## 8.1 Applicable equipment standards

These rows in the table have been added or revised.

IEC 60945:2002 + Corr.1:2008	Maritime navigation and radio communication equipment and systems – General requirements – Methods of testing and required test results
IEC 61162-1 2016	Maritime navigation and radio communication equipment and systems – Digital interfaces - Single talker and multiple listeners
IEC 61162-3:2008 + A1:2010 + A2:2014	Maritime navigation and radio communication equipment and systems - Digital interfaces - Part 3: Serial data instrument network
IEC 61993-2: 2018	Class A shipborne equipment of the universal automatic identification system (AIS) – Operational and performance requirements, methods of test and required test results
IEC 62288 Ed. 2.0 2014-07	Maritime navigation and radiocommunication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results
IEC 62923-1 2018	Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 1: Operational and performance requirements, methods of testing and required test results
IEC 62923-2 2018	Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 2: Alert and cluster identifiers and other additional features
CESNI Test Standard Inland AIS Ed. 2021/3.0	Inland AIS Shipborne Equipment according to the Vessel Tracking and Tracing Standard for Inland Navigation. Operational and performance requirements, methods of test and required test results