



**UNITED STATES COAST GUARD**  
U.S. Department of Homeland Security

## **MARINE SAFETY ALERT**

Assistant Commandant for Marine Safety, Security and Stewardship

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Alert 10-08

### **NEW AUTOMATIC IDENTIFICATION SYSTEM (AIS) DEVICES MAY NOT BE DISCERNIBLE WITH OLDER AIS SOFTWARE**

The U.S. Coast Guard is pleased to announce the availability of type-approved Automatic Identification System (AIS) Class B devices. These lower cost AIS devices are interoperable with AIS Class A devices and make use of expanded AIS messaging capabilities. Unfortunately, not all existing Class A devices are able to take full advantage of these new messaging capabilities. All existing AIS stations will be able to receive and process these new messages from a Class B device. However, they may not be able to display all Class B information on their Minimum Keyboard & Display (MKD) or other onboard navigation systems. In most cases, a software update or patch will be required to do so. Therefore, the **U.S. Coast Guard cautions new AIS Class B users to not assume that they are being 'seen' by all other AIS users** or that all their information is available to all AIS users. Further, the **U.S. Coast Guard strongly recommends that all users of out-dated AIS software update their systems as soon as practicable.**

The new Class B devices have the same ability to acquire and display targets not visible to radar (around the bend, in sea clutter, or during foul weather). They differ slightly in their features and nature of design, which reduces their cost and affects their performance. They report at a fixed rate (30 seconds) vice the Class A's variable rate (between 2-10 seconds dependent on speed and course change). They consume less power, thus broadcast at lower strength (2 watts versus 12 watts), which impacts their broadcast range; but, they broadcast and receive virtually the same vessel identification and other information as Class A devices, however, do so via different AIS messages.

Class A devices by design will receive the newer Class B AIS messages and their MKDs should display a Class B vessel's dynamic data (i.e. MMSI, position, course and speed), unfortunately, there are a few older models that do not. Although these older devices might not display the new AIS messages, they are designed—and tested—to receive and process these messages and make them available to external devices (e.g. electronic chart systems, chart plotters, radar) via a Class A output port. These external devices may also require updating in order to discern Class B equipped vessels.

AIS automatically broadcasts dynamic, static, and voyage-related vessel information that is received by other AIS-equipped stations. In ship-to-ship mode, AIS provides essential information that is not otherwise readily available to other vessels, such as name, position, course, and speed. In the ship-to-shore mode, AIS allows for the efficient exchange of information that previously was only available via voice communications with Vessel Traffic Services. In either mode, AIS enhances a user's situational awareness, makes possible the accurate exchange of navigational information, mitigates the risk of collision through reliable passing arrangements, facilitates vessel traffic management while simultaneously reducing voice radiotelephone transmissions, and enhances maritime domain awareness. The U.S. Coast Guard encourages its widest use.

The **U.S. Coast Guard** advises mandated **AIS** users that **Class B** devices do not meet current **AIS carriage requirements**—either the International Convention for the Safety of Life at Sea (SOLAS V/19.2.4) or U.S. regulations (33 CFR 164.46). The Coast Guard is in the process of expanding the current carriage requirements to include most self-propelled commercial vessels which navigate U.S. waters, and the use of Class B devices will be permissible on some of these commercial vessels. Prospective buyers, particularly those operating commercial vessels that are highly maneuverable, travel at high speed, or routinely transit congested waters or in close-quarter situations with other AIS equipped vessels should consider, albeit more expensive, AIS Class A devices in order to meet forthcoming requirements.

**All users are reminded to maintain their AIS in effective operating condition at all times**, including the information the AIS device broadcasts. Improper operation of AIS or inaccurate information could subject a person to civil penalties not to exceed \$25,000 (46 USC §70119). For general information on AIS, carriage requirements, future AIS rulemakings and a listing of Coast Guard type-approved AIS Class A devices which require a software update in order to display AIS Class B information, visit <http://www.navcen.uscg.gov/enav/ais> .

This safety alert is provided for informational purposes only and does not relieve any domestic or international safety, operational or material requirement. Developed by the Office of Waterways Management, United States Coast Guard Headquarters, Washington, DC, [cgnav@uscg.mil](mailto:cgnav@uscg.mil).

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CG Approval Number	Manufacturer Weblink	Model *	Will require updating for AIS messages		
			18	19	24
165.155/D0000007/0	ACR ELECTRONICS, INC.	NautiCast X-Pack DS Automatic Identification System (AIS) labeled as Global Watch UAIS2.		o	o
165.155/C0000007/0	ACR ELECTRONICS, INC.	NautiCast X-Pack DS Automatic Identification System (AIS) Trade name ACR Global Watch UAIS		o	o
165.155/F0000007/0	ACR ELECTRONICS, INC.	NautiCast X-Pack DS Automatic Identification System (AIS) labeled as: NAUTICAST		o	o
165.155/G0000007/0	ACR ELECTRONICS, INC.	NautiCast X-Pack DS Automatic Identification System (AIS) labeled as: NAUTICAST2		o	o
165.155/a0000003/0	EUROCOM INDUSTRIES A/S	STN Atlas Marine Electronics GmbH UAIS DEBEG 3400 Trade Name: SAILOR UAIS 1900/ SAILOR KDU 1905			o
165.155/B0000003/0	EUROCOM INDUSTRIES A/S	STN Atlas Marine Electronics GmbH UAIS DEBEG 3400 Trade Name: SKANTI UAIS 2100/ SKANTI KDU 2105			o
165.155/0000002/1	FURUNO USA	Furuno USA FA-100 AIS	x	x	x
165.155/0000005/1	JAPAN RADIO COMPANY	Japan Radio Company JHS-180 AIS			x
165.155/0000011/0	JAPAN RADIO COMPANY	Japan Radio Company, JHS-182 Automatic Identification System (AIS).			o
165.155/0000012/0	JOTRON ELECTRONICS AS	Jotron Electronics AS, Tron UAIS TR-2500 Automatic Identification System (AIS).			o
165.155/0000006/0	KONGSBERG SEATEX	Kongsberg Seatex AS - Seatex AIS 100 Automatic Ship Identification System (AIS).			x
165.155/0000009/0	L3 COMMUNICATIONS	L-3 Communications, ProTec AIS Automatic Identification System (AIS).			
165.155/B0000007/0	MARINE TECHNOLOGIES	NautiCast X-Pack DS Automatic Identification System (AIS) Trade name Marine Technologies Bridgemate AIS		o	o
165.155/0000010/0	MCMURDO	McMurdo Ltd., McMurdo/Transas MT-1 Automatic Identification System (AIS).			
165.155/0000004/0	MX MARINE	MXMarine Automatic Identification System MX531 with the MX420 display unit.			x
165.155/E0000007/0	NAUTICAST	NautiCast X-Pack DS Automatic Identification System (AIS) labeled as X-Pack US		o	o
165.155/0000007/0	NAUTICAST SCHIFFSNAVIGATIONSSYSTEME	NautiCast X-Pack DS Automatic Identification System (AIS)		o	o
165.155/A0000007/0	Raytheon Anschuetz GmbH	NautiCast X-Pack DS Automatic Identification System (AIS) Trade Name: Raytheon Marine - RM 808 AIS		o	o
165.155/0000008/0	SAAB TRANSPONDERTECH AB	Saab R4 Automatic Identification System (AIS) Class A Transponder System			
165.155/A0000006/0	SIMRAD EGRSUND AS	Kongsberg Seatex AS - Seatex AIS 100 Automatic Ship Identification System (AIS). Trade Name: Simrad AI 70			
165.155/0000003/1	STN ATLAS MARINE ELECTRONICS GMBH	STN Atlas Marine Electronics GmbH UAIS DEBEG 3400			
165.155/0000001/2	TIDELAND SIGNAL CORPORATION	Tideland Signal Corporation - AIMS MIV Automatic Ship Identification System (AIS).	*	*	*
<p>x = Yes; o = Older units only (predominately those pre-2005); * = Update unavailable</p> <p>AIS Message 18: Class B/SO - Position Report (e.g. MMSI, position, course, speed, etc.)  AIS Message 19: Class B/SO - Extended Report (e.g. MMSI, vessel name, dimensions, etc.)  AIS Message 24: Class B/CS - Static Data (e.g. MMSI, vessel name, type, dimensions, etc.)</p> <p>* This is a listing of Coast Guard Type-Approved AIS devices only. Note, there are many other AIS devices in use today which will also most likely require updating to discern some or all AIS Class B messages--we suggest you contact the respective manufacturers of this equipment to determine whether or not in requires updating.</p>					