



UNITED STATES COAST GUARD
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MARINE SAFETY ALERT

Assistant Commandant for Marine Safety, Security and Stewardship

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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> .

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