

Digital Selective Calling

The Coast Guard offers a VHF radiotelephone service to boaters as part of the Global Maritime Distress and Safety System called Digital Selective Calling (DSC). DSC allows mariners to instantly send an automatically formatted distress alert to the Coast Guard and to initiate or receive distress, urgency, safety and routine radiotelephone calls to or from any similarly equipped vessel or station, without requiring either party to be near a radio loudspeaker. DSC acts like the dial and bell of a telephone, allowing you to "direct dial" and "ring" other radios, or allow others to "ring" you, without having to listen to a speaker. All new VHF and HF marine radiotelephones must have DSC capability. On VHF, DSC is Channel 70. After connecting by DSC, voice communications are held on other channels.

But there is a major problem: 90% of VHF DSC distress alerts received by the Coast Guard do not contain position information, and 60% do not contain a registered identity. The Coast Guard cannot effectively respond to a DSC distress alert sent from radio not registered or connected to GPS. As a result, search and rescue efforts would be suspended when no communications with the distressed vessel can be established, no further information or means of contacting the vessel can be obtained from other sources, or no position information is known. Auxiliary Vessel Examiners have an opportunity to educate mariners on DSC when doing vessel safety exams to help avoid these problems.

Identity Registration:

Maritime Mobile Service Identities (MMSIs) are nine digit numbers used by maritime digital selective calling (DSC) and certain other equipment to uniquely identify a ship or a coast radio station. Mariners who are not required to carry a marine radio--recreational boaters-- who remain in U.S. waters can obtain an MMSI through organizations such as BOATUS, (<http://www.boatus.com/mmsi>), Sea Tow (<http://www.seatow.com/mmsi>), or the U.S. Power Squadrons (<http://www.usps.org/php/mmsi>). Most of these organizations provide MMSIs at no charge even to nonmembers from their web sites. VHF handhelds used in the United States should use the MMSI assigned to the ship to which the handheld is primarily associated, even if another radio on that ship uses the same MMSI. There are special cases for transferring an MMSI number or cancelling one. Details can be found on these same web sites.

Connection:

Connecting to the GPS can be done using a simple water-resistant trailer hitch connector, available from most auto parts stores, may provide a means for disconnecting and removing the radio when frequent removal is necessary. A wiring guide is available from the Coast Guard Navigation Center at http://www.navcen.uscg.gov/pdf/marcomms/dsc/DSC_VHF_GPS_Install_Final.pdf describing how popular GPS receivers and plotters can be properly interconnected to a VHF marine radio. This tells exactly which colored wires need to be connected to each other.

Testing the DSC:

DSC-equipped radios purchased after March 2011 must have a test calling capability. Transmitting a test call (not a routine DSC call) to the identity 003669999 will trigger a reply from any USCG Rescue 21 station within range. If the radio does not have a test call capability, you can test it by sending a DSC call to another DSC-equipped radio. The radio's display will indicate if the GPS receiver has been properly connected.