What is NAVTEX?

NAVTEX is a system for the broadcast and automatic reception of maritime safety and weather information. NAVTEX provides ships with navigational and meteorological warnings and urgent information through either on-screen display or automatic printouts from a dedicated receiver, the SMARTFIND GMDSS NAVTEX Receiver. NAVTEX is a component of the IMO/IHO Worldwide Navigational Warning Service (WWNWS) defined by the IMO. It is also included as an element of the Global Maritime Distress and Safety System (GMDSS).

How does NAVTEX work?

NAVTEX transmissions are sent from localised transmitting stations situated worldwide. The power of each transmission is regulated so as to avoid the possibility of interference between transmitters. Users can set their SMARTFIND GMDSS NAVTEX Receiver to pick up specific message types and reject others. Messages such as navigational and meteorological warnings and search and rescue information are non-rejectable, to ensure that ships equipped with the SMARTFIND GMDSS NAVTEX Receiver are always updated with the most vital information. Users can choose to receive information from the single transmitter that serves the sea area around their position, or from a number of different transmitters.

NAVTEX service coverage

NAVTEX messages are transmitted worldwide from local stations that provide services targeted at local users and passing ships. A full listing of all Worldwide NAVTEX services is published in the Admiralty List of Radio Signals Volume 5 and regularly updated through the notice to mariners update service.



Technical Specification SMARTFIND GMDSS NAVTEX Receiver

Display:	6 inch, ½ VGA (480 x 320 pixels) Daylight viewable colour STN with adjustable backlight and screensaver
Controls:	Backlight/contrast key, Enter key, four soft menu keys, Tracker pad
Receivers:	Receiver A, Frequency 518kHz Receiver B, Frequency 490kHz Receiver C, Frequency 4209.5kHz Sensitivity <2 microvolts Frequency stability +/- 10Hz
Connectors:	15 way D-type, Power, Alarm & COM 1 data (2m cable supplied with connector pre-wired) 9 way D-type, Printer/COM 2 Antenna connector, 50 ohm TNC Ground connector, 1/8" Spade terminal
Data interface:	COM 1, RS422 (NMEA 0183) IEC 61162-2 serial port COM 2, RS422 (NMEA 0183) IEC 61162-1 serial/printer Baud rate, 4800, 38400, 115200 NMEA sentences supported (in priority order) RMC, GLL, ZDA for UTC and NRX, NRQ, NMK, ACK, ALR for NAVTEX functions
Alarms:	Vital/SAR message receipt (internal buzzer) Alarm state NMEA message data output COM1/COM2 Remote alarm relay contact 1A @ 120VAC/ 24VDC
Antenna voltage output:	12 V DC @ 100mA (selectable)
Antenna type (option):	50 ohm, dual band 490 -4209.5KHz active or passive
NAVTEX message memory:	300 x 500 character messages per receiver (minimum)
Dimensions:	219W x 151H x 76D mm (excluding connectors) Weight 1100g (including bracket)
Environmental:	Operating Temperature Range -15° to +55°c Storage Temperature Range -20° to +55°c Humidity 0 to 95%, non-condensing Compass safe distance 0.87m
Mounting:	Desk-top or bulkhead (flush panel fixing kit included)
Power:	Voltage range 12/24 V DC nominal (10.8 V to 31.2 V) Consumption, with backlight on 8.6 W @ 24 V DC Internal auto resettable fuse @ 1.8 A DC
Technical Standards:	IMO Resolutions, MSC.148(77) A.2.1 (17), SOLAS Regulation IV/7.1.4, ITU-R M.540-2, ITU-R M.625-3, IEC 60945-4, IEC 61162-1, -2, IEC 61162-2, IEC 61097-6
Additional Sales Options:	ANA1 light duty active NAVTEX antenna with 20m cable and stand-off bracket ANA2 heavy duty active NAVTEX antenna with PL socket Type A stand-off mounting bracket for ANA2 Type B long reach stand-off mounting bracket for ANA2 Type C deck mount bracket for ANA2 Antenna Cable kit for ANA2, 20m

Dealer:

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SMARTFIND GMDSS NAVTEX Receiver

Including ESM[®] for reliable message recovery and a reduction in message text errors

SMARTFIND GMDSS NAVTEX Tri Channel Professional Colour NAVTEX Receiver

The SMARTFIND Global Maritime Distress and Safety System (GMDSS) NAVTEX is suitable for use on all types of commercial vessel. It can either be operated as a stand-alone unit or as part of an integrated navigation or bridge system.

The SMARTFIND GMDSS NAVTEX provides clear and up-todate NAVTEX maritime safety information automatically delivered in bright colour-delineated text on a large 6 inch screen. Three parallel digital receivers simultaneously provide tri-channel monitoring of the international 518 KHz English language service, 490 KHz national language and the 4209.5 KHz long range NAVTEX services. McMurdo's unique ESM® (Enhanced Signal Monitoring) feature means highly reliable message recovery and a reduction in message text errors.

Easy to read in all light conditions, the large daylight viewable 4-colour LCD screen has an adjustable back light and three user-selectable font sizes: medium, large or extra-large for ease of use. Different message categories are coloured according to the NAVTEX message type (Navigation Warning, Meteorological Forecast or urgent Search and Rescue message), making each message type instantly recognisable at a glance. NAVTEX messages can be quickly reviewed in a short message listing and then opened in full to read the complete message text. Powerful automatic sorting features allow messages to be viewed pre-sorted by reception channel, station ID, message category type or age. A quick index message listing page is provided, one for each channel. This enables the user to quickly locate new or unread messages. Messages are automatically deleted after 72 hours, but there is also an option for the user to lock individual messages to prevent automatic deletion.

The McMurdo SMARTFIND GMDSS NAVTEX supports interface connection to Integrated Navigation System (INS) or Electronic Chart Display and Information Systems (ECDIS) via an RS422 data port, and can also be connected to a separate printer. A wide range of antenna options include a heavy duty professional two band active antenna that is optimised to provide high quality reception of all recognised NAVTEX channels.

- Large 6" colour display
- Simple and intuitive to use
- Easy to read extra large font
- Tri-channel simultaneous reception
- ESM® Enhanced Signal Monitoring
- Printer output
- GPS interface capability
- INS and ECDIS interface capability
- Range of antennas available

