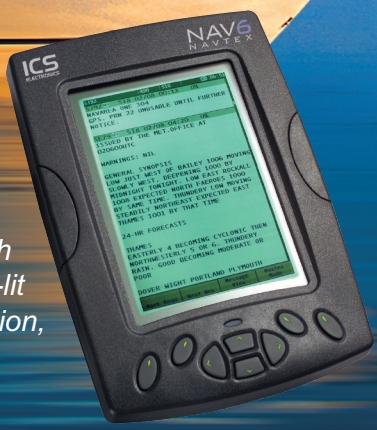
LEISURE

ICS ELECTRONICS

NAV6
NAV6*plus*
NAV6*repeater*

Intelligent Dual Channel NAVTEX Receiver System with Optional Instrument Data display



High quality and reliable instrumentation with a single clear back-lit display for information, safety and security

WEATHER • NAVIGATION WARNINGS
GPS INFORMATION • INSTRUMENT DATA
LOG BOOK

The NAV6 Series NAVTEX Receivers

High Quality Dual Channel NAVTEX Receivers

The ICS NAV6 series of NAVTEX receivers have long been synonymous with high quality manufacture and reliability throughout the product range.

The NAV6 was the world's first LCD NAVTEX system to offer dual channel (518kHz and 490kHz) reception as standard. Information is presented on a large and easy-to-read LCD display, rivalling paper print-out for legibility.

NAVTEX is part of the Global Maritime Distress and Safety System (GMDSS). It broadcasts weather and navigation warnings in English on 518kHz every four hours from transmitters around the world. Increasingly, local language and small craft information is also transmitted on 490kHz. Urgent messages such as gale warnings can also be transmitted in between scheduled transmissions when necessary.

ICS has a long term commitment to marine electronics and safety at sea, supplying many of the world's shore-based transmission messaging systems and helping to set the NAVTEX standards via the IMO. Our SOLAS tri-band NAVTEX receivers are in widespread use by the world's commercial fleet, including merchant and naval vessels.

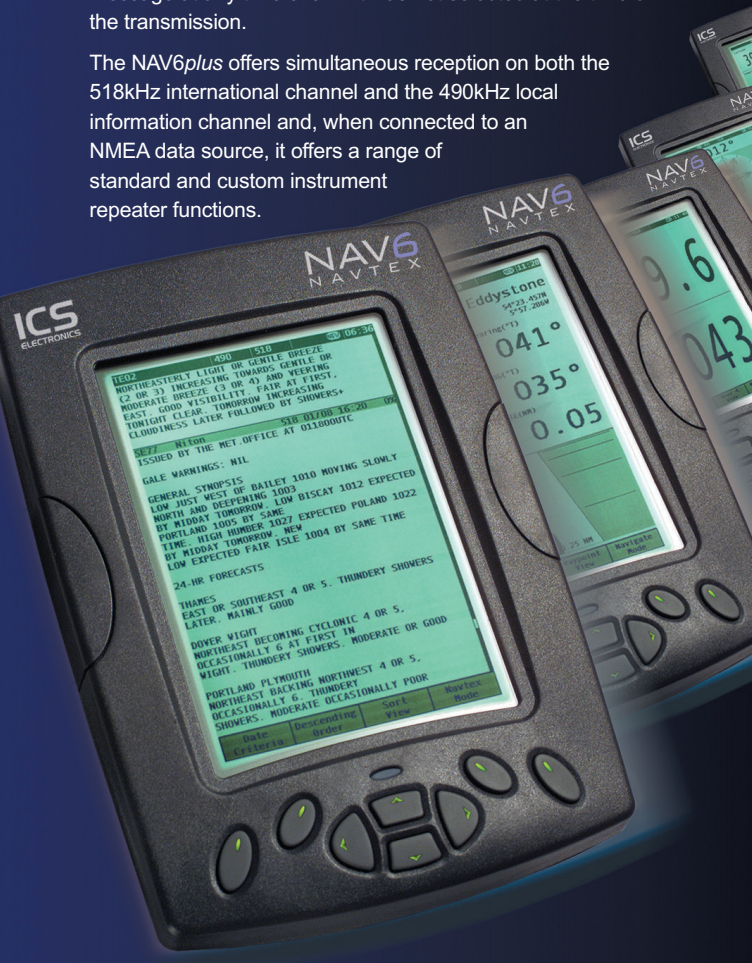
Antenna and NAVTEX Receiver Module

NAV6 Model Range Features Comparison

FEATURE	NAV6	NAV6*plus*	NAV6*repeater*
Dual Receiver	✓	✓	
NMEA Auto Station		✓	✓
NMEA GPS Display		✓	✓
NMEA Instrument Data		✓	✓
NMEA Logging		✓	✓
Display Backlight	✓	✓	✓
Data Output		✓	✓
Printer Output		✓	✓
NAVTEX Display	✓	✓	✓

The NAV6 adds a new dimension in NAVTEX functionality. Unlike other NAVTEX receivers that discard unselected messages, the large flash memory in the NAV6 means it has the capacity to store all of the messages from transmitting stations within its range. This allows you to recall, display and review any message at any time even if it was not selected at the time of the transmission.

The NAV6*plus* offers simultaneous reception on both the 518kHz international channel and the 490kHz local information channel and, when connected to an NMEA data source, it offers a range of standard and custom instrument repeater functions.



The NAV6*plus* includes a database of all NAVTEX stations around the world and when connected to a GPS can be set to automatically display messages from all stations within range or just the closest station, helping to provide a much clearer picture of the conditions in your area.

A unique message processing (iNEC) feature benefits you by decreasing errors in received messages in noisy or weak signal areas. Choose from the NAV6 or NAV6*plus* according to your requirements and budget. Outputs are also included for connection to a serial printer or computer.

NAV6*plus* and NAV6*repeater* Instrument Display

All the information you really need at your navigation position on one large, easy-to-use display.

The NAV6*plus* and NAV6*repeater* include additional instrument repeater functions. All the information you really need at your navigation position on one large, easy to use display. With navigation space becoming more and more restricted in modern boats, the NAV6*plus* concentrates all the data you need, where you need it. It takes critical NMEA data from your GPS or instrument systems and displays it in a highly innovative manner. An electronic log book is updated at regular intervals and can be sent to a serial printer. These powerful Instrument and GPS repeater functions are included as standard in the NAV6*plus*.

The NAV6*repeater* can also be purchased separately without a NAVTEX receiver for use as a stand-alone NMEA repeater. When added to an existing system, NMEA data and NAVTEX data can also be repeated at another position such as the helm or fly bridge.

- ***Instrument display***

- ***Steering display***

- ***Log display***

- ***Conning display***

NAV6 NAVTEX Receiver Features

- Splash proof construction
- Improved antenna system as standard (complete system)
- Panel or (optional) bracket mount
- Antenna fits standard antenna mount
- User upgradable NAVTEX database
- Wide range of accessories: suncover, PC cable, extension cables, etc.
- Software updates available from ICS

Product Descriptions and Order Codes NAV6, NAV6*plus* and NAV6*repeater*

916.04 **NAV6**
High Legibility LCD NAVTEX, simultaneous 518 or 490 kHz operation. Automatic NAVTEX station selection. Supplied complete with NAVTEX receiver module and antenna with 10m cable.

916.05 **NAV6*plus***
High Legibility LCD NAVTEX, simultaneous 518 and 490 kHz operation. NMEA input/GPS repeater facility and NMEA data logging. Supplied complete with NAVTEX receiver module and antenna with 10m cable.

916.03 **NAV6*repeater***
Additional NAV6 display or NMEA instrument repeater.

Options NAV6, NAV6*plus* and NAV6*repeater*

916.08 Replacement NAV6 Display Unit.

920.00 NAV6 Receiver Module.

6020.00 U-bracket, on surface 3 way mounting kit.

6020.03 Display unit suncover.

6020.19 10m NAVTEX antenna coax cable extension kit.

6020.18 30m NAVTEX antenna coax cable extension kit.

903.03 Plastic Rail Mount for NAVTEX antenna – suitable for 25mm S/S rails.

Options NAV6*plus* and NAV6*repeater*

6020.09 NAV6 PC serial interface cable.

918.01 Thermal Printer.

6020.10 NAV6 Printer Lead.

919.00 NAV6 Hub.

Dealer Stamp

Technical Specifications
NAV6, NAV6*plus* and NAV6*repeater*

NAV6 and NAV6*plus* Display Unit:

Power Requirements: Voltage range 10.8V to 15.6V.
Consumption (Typical)**:** Backlight full 310 mA (3.8 W at 12V). Backlight off 165 mA (2.0 W at 12V). Sleep mode 115 mA (1.4 W at 12V).
Display Unit: Operating Temperature Range 0 to +50degC. Humidity 0 to 95%. Weight (without cable) 445 g.
Display Type: 1/2VGA (480 x 320 pixels) 6"monochrome LCD with 4 grey levels and CFL backlight.
Controls: 4 x function keys, 4 x navigation keys. With LED backlight.
Alarm: Vital message reception acoustic alarm.
Message Storage: Sufficient non-volatile storage for more than 3 days of NAVTEX transmissions under normal operating conditions.
Physical: Height 198mm, width 136mm, depth 40mm.
Mounting: Panel 'instrument' mounting (standard). 'U' bracket on surface mount (option).
Connection: 1.5m metre cable with screw terminal block. Expanded system connection with NAV6hub.
Environmental: Inside/outside mounting. Splash proof construction. IEC 945 (EMC).

NAV6*plus* and NAV6*repeater* Display Unit (in addition to the above)

Data Input: NMEA input port, meets the electrical requirements of NMEA 0183. NMEA GPS/Instrument system interface supports NMEA 0183 V2.0 or higher.
Input/Output Interface Specification: Preferred NMEA sentences: RMC, HDT, HDG, VBW, MWV, VLW, DPT, ROT, VDR, RMB and BWC. Minimum recommended NMEA sentences: RMC and RMB.
Data Output: RS232 serial data, supports the printing of vessel 'Log reports' and NAVTEX message text to NAV6 Printer or a computer system running compatible software.
NMEA Logging Interval: off, 15, 20, 30 mins, 1, 2, 3, 4, 5, 6,12 hours. Capacity for 256 log entries.

NAVTEX Receiver Module

Power Requirements: 70mA at 12V (supplied by NAV6 display or NAV6hub).
Antenna Input: 1. 50ohm, range 490 - 518 kHz, 12Vdc to feed to power an active antenna is selectable at installation. 2. Hi impedance wide range, supports connection of longer than 2m of insulated wire or unmatched whip antenna.
Weight: 300g.
Physical Dimensions: Height 180mm, Width 122mm, Depth 36mm.
Mounting: Bulkhead mounting via two self-tapping screws (supplied).
Connection: All connections made by 2-part screw terminal.
Environmental: Not for outside use. Unit must be mounted below decks in a suitable dry location.
Receive Frequency: 490kHz and 518kHz.

Antenna (Passive)

Length: 0.5m (1.5ft).
Weight: 1kg.
Bottom Diameter: 28mm.
Receive Frequency: 490kHz and 518kHz.

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