

## The first dual channel NAVTEX

The NAV6 is the world's first NAVTEX system to offer dual channel (518 kHz and 490 kHz) reception as standard. Information is presented on a large and easy to read LCD display, rivalling paper print-out for legibility. The 'plus' version offers simultaneous reception on both channels. When connected to an NMEA data source, it offers all the instrument repeater functions shown opposite.

The NAV6 adds a new dimension in NAVTEX functionality. All messages are received into a large non-volatile memory for selective display by the user. Decide what messages you want to view after they have been received. Unique iNEC message processing decreases errors in received messages.

NAVTEX is part of the Global Maritime Distress and Safety System (GMDSS). It broadcasts weather and navigation warnings, in English on 518 kHz every 4 hours from transmitters around the world. Increasingly, local language and small craft information is also transmitted on 490 kHz. The NAV6 and NAV6plus can monitor both channels.

ICS NAVTEX receivers are in widespread use by the world's merchant ships and navies. Many shore-based NAVTEX messaging systems have also been supplied by ICS.

Choose from the NAV6 or NAV6plus according to your requirements and budget.

Separate outputs are provided for connection to an optional printer or computer.



NAV6 NAVTEX Sensor

FEATURE	NAV6	NAV6plus	NAV6repeater
Switchable Receiver	✓		
Dual Receiver		✓	
NMEA Auto Station		✓	✓
NMEA GPS Display		✓	✓
NMEA Instrument Display		✓	✓
NMEA Logging		✓	✓
Display Backlight	✓	✓	✓
Data Output		✓	✓



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 NAV6plus display concentrates all the data you need, where you need it. It takes critical NMEA data from your GPS or instrument system and displays it in a highly innovative manner. An electronic log book is updated at regular intervals and can be printed out later (via an optional printer).

These powerful Instrument/GPS repeater functions are included as standard in the NAV6plus. The NAV6repeater can be purchased separately without NAVTEX sensor for use as a stand-alone NMEA repeater.

When connected to an existing system, NAVTEX data is also repeated. The NAV6Hub is available to aid wiring of larger systems. Any combination of up to four sensors and displays may be connected together. See our website or NAV6 Technical Bulletin for details.

- FEATURES**
- Splash proof construction
  - Panel or (optional) bracket mount
  - Dual channel NAVTEX sensor fits standard antenna mount
  - Sun cover available
  - Never needs to be out of date. Software and database are user upgradeable
- See price list for available options



• Instrument display



• Steering display



• Log display



• Conning display





## Who are ICS?

Founded in 1982, the core technology of ICS is marine data communication. We are a leading GMDSS equipment manufacturer for both commercial and leisure applications. In addition we have installed NAVTEX and DSC coast radio station infrastructures in a growing list of countries worldwide. ICS equipment is relied upon by commercial ships, navies and coastguards worldwide.



NAV6plus has a wide range of user selectable instrument and navigation screen options

## Technical Specifications – NAV6, NAV6plus and NAV6repeater

### Product Code

- 916.01 **NAV6plus**  
High Legibility LCD NAVTEX, simultaneous 518 and 490 kHz operation. NMEA input/GPS repeater facility. Automatic NAVTEX station selection and NMEA data logging. Supplied complete with remote NAVTEX sensor and 15m cable.
- 916.00 **NAV6**  
High Legibility LCD NAVTEX, user switchable 518 or 490 kHz single channel operation. Supplied complete with remote NAVTEX sensor and 15m cable.
- 6003.00 **NAV6repeater**  
Additional NAV6 display or NMEA instrument repeater.
- Options NAV6, NAV6plus and NAV6repeater**  
6020.00 U-bracket, on surface 3 way mounting kit.  
6020.17 NAV4/NAV6 conversion mounting kit.  
6020.03 Display unit suncover.  
919.00 NAV6Hub, interface box for use with additional displays and sensors.  
6020.16 Cable deck gland.  
6020.19 5m NAVTEX sensor cable extension kit.  
6020.18 30m NAVTEX sensor cable extension kit.  
903.03 Plastic Rail Mount for NAVTEX sensor – suitable for 25mm S/S rails.
- Options NAV6plus and NAV6repeater**  
918.00 NAV6 paper roll printer.  
6020.09 NAV6 PC serial interface cable.

### NAV6 – NAV6plus SPECIFICATION:

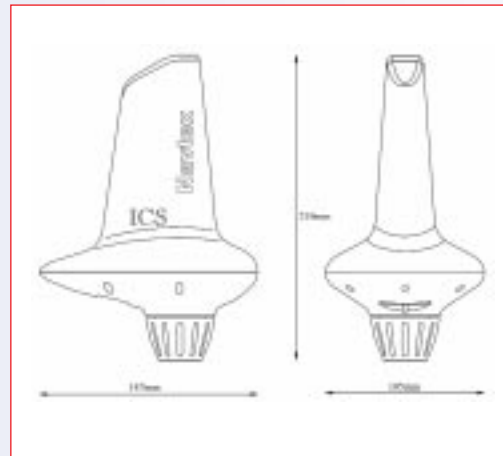
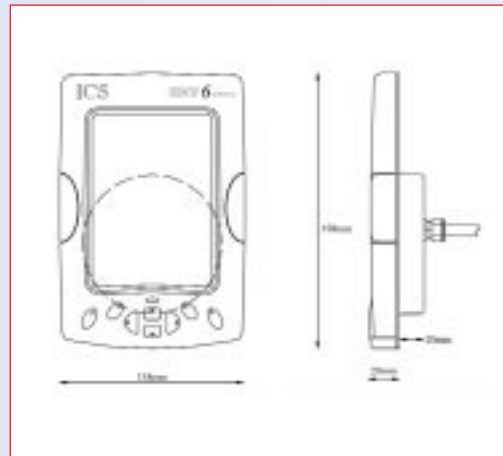
- Power requirements**  
Voltage range 10.8V to 15.6V.
- Consumption** (Typical)  
Backlight full 310 mA (3.8 W at 12V).  
Backlight off 165 mA (2.0 W at 12V).  
Sleep mode 115 mA (1.4 W at 12V).
- Display Unit**  
Operating Temperature Range 0 to +50degC.  
Humidity 0 to 95%.  
Weight (without cable) 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**  
2 metre cable with screw terminal block.  
Expanded system connection with NAV6Hub.
- Environmental**  
Inside/outside mounting.  
Splash proof construction.  
IEC 945 (EMC).

### NAVTEX SENSOR

- NAV6 NAVTEX Sensor**  
Switchable dual channel receiver  
518kHz or 490kHz.  
Channel controlled by display unit.
- NAV6plus NAVTEX Sensor**  
Dual channel receiver  
518kHz and 490kHz simultaneously.
- NAVTEX Sensor (general)**  
Waterproof to IEC 60945.  
Frequency Stability: +/-10 Hz.  
RS485 serial data I/O port.  
Data decoding in accordance with ITU-R 540-2.
- Power**  
Supplied by display unit.
- Physical**  
Height 200mm.  
Width (base) 110mm.  
Depth (max) 155mm.  
Operating Temperature Range -10 to +50degC.  
Humidity 0 to 95% non-condensing.  
Weight (without cable) 420 g (approx.).  
Industry standard 1" 14tpi threaded base.  
15m Sensor cable.  
Extension Whip, length 45 cm/ 3/8" x 24 tpi thread.

### NAV6plus and NAV6repeater

- 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  
256. log entries.



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ICS Electronics has a policy of continuous product improvement and reserves the right to vary in detail from the specifications contained in this brochure.  
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# ICS



## NAV6

## NAV6plus

## NAV6repeater

Dual channel NAVTEX system with optional instrument/NAVTEX repeater functions



Front cover photo courtesy of Rinker Boats. Designed and produced by Surgey Marketing Communications. 01273 856900 Printed in England.



One clear back-lit display gives all the information you need at your navigation position

WEATHER • NAVIGATION WARNINGS • GPS INFORMATION • INSTRUMENT DATA • LOG BOOK