

490 kHz NAVTEX transmission services

The 490 kHz NAVTEX frequency has been designated worldwide as a 'local language' frequency and is already in use for French language transmissions from France. The International Maritime Organisation has asked all other countries to commence transmissions by 2005.

In the UK, the availability of 490 kHz has given the opportunity to provide dedicated Forecasts for waters up to 12 miles offshore. Regular transmissions covering the UK coastal waters are now made from three transmitters twice per day and include a very useful 3 day outlook.

490 kHz NAVTEX transmissions.

Times shown are in UTC.

UK Inshore Waters service

Niton Station letter (I)	Portpatrick Station Letter (C)	Cullercoats Station letter (U)
0120	0020	0320
0520 *	0420	0720*
0920	0820*	1120
1320	1220	1520
1720*	1620	1920*
2120	2020*	2320

French language service, Atlantic & Mediterranean coast

Corsen Station letter (E)	La Garde (Toulon) Station letter (S)
0040	0300
0440	0700*
0840*	1100
1240	1500
1640	1900*
2040*	2300

* Weather Bulletins, information correct at date of issue

490kHz NAVTEX CONVERTER

NAV-490

User Guide

NAV-490 NAVTEX converter (913.18)



The NAV-490 converter is designed for use with ICS NAV4 and NAV4 PLUS NAVTEX receivers.

490 or 518kHz NAVTEX services may be selected using the selection switch. A second, remotely mounted switch (not supplied) may also be installed.

If you intend to use the NAV-490 with non ICS NAVTEX receivers that normally supply a DC voltage to an active antenna take care that **NODC VOLTAGE** is allowed on either the NAV-490 antenna or receiver connections or permanent damage will result.

Dual Frequency NAVTEX antenna

ICS recommends the 'ANT4/w' dual frequency passive antenna. Existing users of single frequency ICS passive antenna should upgrade to ANT4/w or NAVTEX reception range may be reduced.

Correct operation can not be guaranteed if other antennas are used, however most wide band 'active' (with in-built PSU), long wire or whip antenna (with a 50 ohm matching transformer) may be suitable.

▶ 490 kHz operation **always** requires the NAV4 to be set for 'Manual NAVTEX station selection' mode, refer to NAV4 Plus user guide for further details



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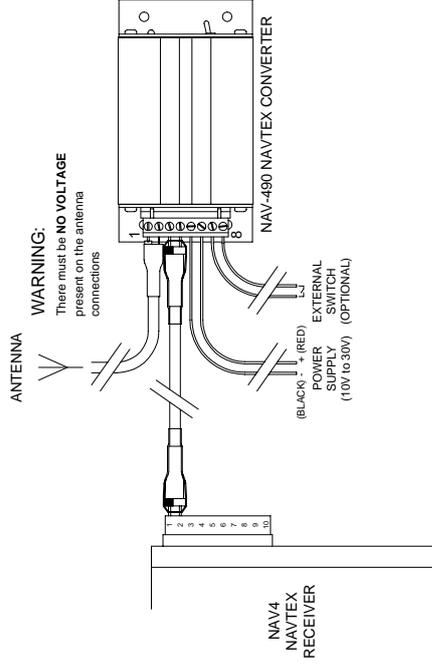
Installation

Mounting:

Locate the NAV-490 in a 'dry' location close to the NAVTEX receiver. Two x 4.5 mm diameter fixing holes are provided at each end. To gain access to the rear holes you may need to unplug the orange connector.

Connections:

- Connect the ANT4/w (904.02) dual frequency' NAVTEX antenna to the orange connector. Pin 1 - antenna signal, pin 2 - antenna ground.
- Connect the coaxial 'link' cable to the NAVTEX receiver antenna input (NAV4 pins 1 & 2, remove the existing antenna first). The 'red spot' on the connector identifies the antenna signal pin which must be connected to NAV4 pin 1.
- Connect the power wires to a 'SWITCHED' 10 -30 VDC supply or via a 1 Amp circuit breaker. RED wire to POSITIVE, BLACK wire to NEGATIVE.



A remotely mounted NAVTEX frequency selection switch (not supplied) may be fitted to allow remote frequency switching. To use this feature, connect a 'single pole' switch across connection pins 7 & 8. The remote switch cable should not exceed 2M in length.

- The remote switch 'contact closure' selects 518kHz

To enable the remote switch, **always** leave the in-built switch in the 490 position.

Operation

Confirm that the NAV-490 power LED is ON.

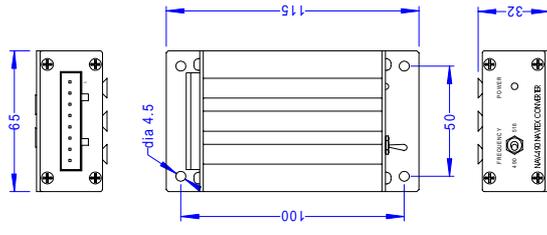
Use the frequency selection switch to select the required NAVTEX service.

Confirm that the NAVTEX receiver is turned on and the appropriate NAVTEX station and message categories are selected.

Note that NAV4 PLUS users must set the NAV4 to 'Manual NAVTEX station selection' mode when attempting 490kHz reception.

Dimensions (mm)

65W x 115D x 32H
Weight: 0.2kg



Operating Characteristics

Voltage: 10 - 30VDC
Power: 60mA @ 12VDC
Temperature range: 0 - 40°C

Controls

Toggle switch allows either 490kHz or 518kHz transmissions to be selected.

Mounting

Designed for flush mounting on a flat panel with plug in connector strip protruding from the rear.

Connections

Eight way, two part screw terminal connector.

Connection pin assignments

PIN	Description
1	490 / 518kHz antenna
2	Antenna ground
3	518kHz output to NAVTEX receiver
4	Output ground
5	Power supply ground
6	Power supply input + 10-30VDC
7	Remote switch ground
8	Remote switch contact, OPEN = 490 kHz reception

913.18 NAV-490 Packing list:

- NAV-490 NAVTEX converter
- Cable harness with 2 metres of cable and orange connector
- This instruction sheet

Note:

- ▶ The NAV-490 should not be used by GMDSS - NAVTEX mandatory fit vessels.