



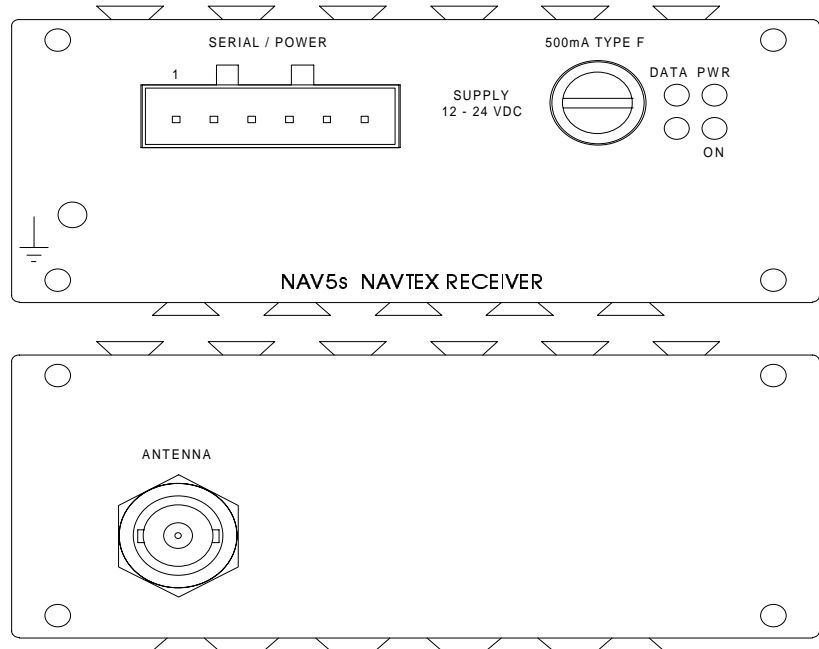
# NAV5s – NAV5sm

## NAV5s – NAV5sm Serial Interface NAVTEX Receivers

*ICS Electronics Ltd have a world-wide reputation for the design and manufacture of GMDSS DSC and NAVTEX systems, supplying coast stations, commercial ships and navies throughout the world.*

*NAV5s operation is compatible with the operational features of shipborne NAVTEX receivers.*

*NAV5sm is suitable for monitoring the output of NAVTEX transmission systems and will provide system operators with useful diagnostic information.*



NAV5s  
NAV5sm  
front view

NAV5s  
NAV5sm  
rear view

NAVTEX is an important element of the Global Maritime Distress and Safety System (GMDSS). The NAV5s and NAV5sm can provide NAVTEX message monitoring facilities for maritime and coast radio station applications when used in conjunction with a serial printer or computer terminal.

518kHz NAVTEX transmission reception is offered as standard, versions for 490kHz national language and 4209.5kHz operation are also available.

### FEATURES

#### NAV5s

The NAV5s offers similar operational features to that of a shipborne NAVTEX receiver. Messages repeated within a 72 hour period are suppressed. The de-selection of unwanted NAVTEX station identifier characters and message categories is supported.

NAV5s is suitable for providing Navigation, Weather and Search and Rescue information for maritime applications.

#### NAV5sm

The NAV5sm NAVTEX monitor allows the reception of all NAVTEX messages including repeated messages.

NAV5sm can be used to monitor the output of NAVTEX transmission systems, providing system operators with useful diagnostic information.

#### NAV5sm message monitoring capabilities

##### *Detection of invalid message headers*

Incorrectly formatted NAVTEX message headers are detected by the NAV5sm. An additional character, space or control character within the message header may cause standard NAVTEX receivers to reject messages. This problem can arise from stations using manual message preparation.

##### *Rejection of messages*

The NAV5sm will indicate if a message has been rejected because the error rate has exceeded 33%.

##### *Error rate warning*

The NAV5sm will output a warning message if a NAVTEX message has an error rate of greater than 4%.

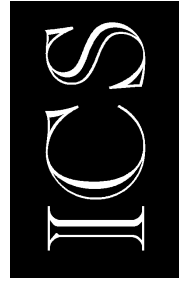
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# NAV5SM – NAV5SM TECHNICAL SPECIFICATIONS



## Performance specification

Receiver: compliant with ETS 300 065  
Decoding: compliant with ITU-R M.540-2

Receive frequency 518kHz or 490kHz or 4209.5kHz (one only)

## Dimensions

Length: 235 mm (not including connectors, fixing screws or earth stud)  
Width: 109 mm  
Height: 48 mm  
Weight 1Kg

## Operating Characteristics

Voltage: 12-24V DC +30%, -10%  
Power: 1.5 W typical

Temperature range: -0C to +40°C

## Indicators & Fuses

PWR **On** when power connected and fuse OK.  
ON **On** when main 5V internal supply is OK.  
DATA **Off** for correct operation.

FUSE Type F, 20x5 cartridge, 500 mA

## Connections

### SERIAL/POWER connector

- 1 RS232 Receive
- 2 RS232 Transmit
- 3 RS232 GND
- 4 Not used
- 5 Supply negative
- 6 Supply positive

### ANTENNA connector

BNC 50Ω  
Input impedance 50Ω  
Antenna power (optional) 12V nominal @ 100 mA max,  
Protected by auto-resetting thermal fuse.

## Serial Interface Specification

RS232, 4800 baud Duplex : 1 Start Bit, 1 Stop Bit 8 Bits data, No Parity  
No Software or Hardware flow control.

Available from: