DESIGNED AND MANUFACTURED IN ENGLAND

CLIPPER EASY NAVTEX

INSTALLATION AND USER INSTRUCTIONS

NASA MARINE INSTRUMENTS

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2002/95/EC

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INTRODUCTION

The Clipper Easy-Navtex is a dual frequency navtex receiver allowing reception of either the navtex national (490kHz) service or the international (518kHz) service. Facilities are provided to program the receiver for both stations and messages on each of the two frequencies.

The receiver is simple to use with all instructions clearly displayed on the screen.

A compact stubby antenna is supplied with the receiver.

Whilst the receiver is designed to operate from the vessel's 12 volt system, it can be powered by domestic mains using a regulated 12 volt power supply (not a battery charger). A custom power supply is available from Nasa Marine spares department. When used in a domestic environment it is important that the negative supply wire is connected to a good ground (e.g. mains ground or a suitable water pipe) to avoid interference.

INSTALLING THE ANTENNA

Owing to the low frequency nature of the signal, it is not necessary to mount the antenna at a great height. However many types of electrical apparatus emit interference and it is important that the antenna is well clear of such interference. Troublesome items are alternators, ignition coils, motors, strip lights, inverters etc. Select a position as far from likely sources of interference as is practical and mount the aerial using the flange on the base. Ensure that the antenna is at least 30cms from other metal structures that are parallel to it.

A pushpit mounting bracket is available from Nasa Marine spares department. The bracket permits the antenna to be mounted to any 25mm diameter horizontal rail.

Run the antenna lead back to the receiver. The cable can be shortened or lengthened using standard 75 ohm coaxial cable. Take great care when making connections. Power for the active antenna is supplied by the coax so all joints should be soldered and properly insulated. Alternatively a 7 metre extension cable is available from your chandler, or Nasa Marine spares department.

Pressing LATEST takes you back to the most recent recorded message. The signal spectrum can be displayed by pressing SIGNAL. This is useful for checking signal quality and can be used whilst messages are being received. From the spectrum screen you can select VIEW, which takes you back to the last message recorded, or INTRO (Pressing INTRO takes the receiver offline and allows you to alter operational parameters. To prevent data loss INTRO is temporarily unavailable when a message is being recorded.) where you can either:-

(1) Press RECEIVE which turns on the receiver and takes you back to the most recent recorded message.

(2) Press SETUP to allow you to set the real time clock, select the operating channel (or timed switching between channels) or set the contrast.

(3) Press RESETS to restore factory defaults with option to clear the message memory.

(4) Press CHOICES to program the STATIONS and MESSAGES you want to record.

TO SET THE CLOCK.

Press SETUP then CLOCK. Use the HOURS and MINUTES keys to set the time on the 24 hour UTC (GMT) clock. (Note: if power is removed, even for a brief period, the clock will need to be reset.)

TO SET THE OPERATING CHANNELS.

Press SETUP followed by CHANNELS, then press NAT'L to receive permanently on the national (490 Khz.) channel or press INT'L to receive permanently on the international (518 Khz.) channel or press TIMED if you want preset timed switching between channels. For preset switching use the SET key to select the desired switching point and use the EARLIER and LATER keys to set the time that switching occurs. During the white periods on the display your navtex will receive on the national channel and during the black periods on the international channel. Press DONE to exit this screen.

TO SET THE CONTRAST .

Press SETUP then DISPLAY. Use the LIGHTER and DARKER keys to set the contrast. Press DONE to exit this screen.

INSTALLING THE DISPLAY

The Clipper Easy navtex is not waterproof and should only be cabin mounted. Select a convenient position for the display on a panel or bulkhead. The site must be flat and the cavity behind the panel must remain dry at all times. Cut a hole in the panel 103mm high by 143mm wide. (The cut out in the cardboard packaging can be used as a template).

Alternatively the display can be mounted on a cradle bracket available from Nasa Marine spares department.

Unscrew the wing nut from the rear of the receiver and take off the mounting clamp. Fit the “O” ring in the groove on the rear and place the unit in the hole in the panel. Refit the mounting clamp, replace, and finger tighten the wing nut.

Plug the power cable into the socket on the rear of the receiver and connect to 12 volts. (The red wire to positive and the wire with the black strip to negative. The unit is protected against reverse polarity). Push the moulded antenna plug into its socket on the rear of the receiver.

USING THE CLIPPER EASY-NAVTEX

When power is first connected, your Clipper EASY-NAVTEX displays the last message it has received. Pressing any key will turn on the backlight which will stay on for four minutes after the last key press.

The keys will then allow you to view the previous message by pressing OLDER or go to the signal spectrum screen by pressing SIGNAL. Each time OLDER is pressed the display moves to the message recorded prior to the one displayed (Keeping your finger on the key will continuously scroll back through messages.) whilst pressing NEWER moves to the next message recorded. If the message is longer than can be viewed on a single screen then the keys DOWN and UP are available to scroll the message while TOP returns to the beginning of that message.

Note:- The keys will be momentarily inactive whilst the screen is being updated.

TO SELECT THE STATIONS YOU WANT TO STORE.

Each Navtex station has an `ident`letter. To select the station you want to store follow the instruction below.

Press **Stations** and a list of international (518KHZ) and national (490KHZ) stations will be displayed.

Use the **NEXT** and **PREVIOUS** keys to move the cursor through the list. Use the **FLIP** key to change the highlighted character between UPPER and lower case. The Easy Navtex will store Messages where the station ident letter is in UPPER case and ignore stations when in lower case.

TO SELECT THE MESSAGES YOU WANT TO STORE.

Press MESSAGES then use the PREVIOUS and NEXT keys to scroll through the list of messages available. Use the FLIP key to flip between STORED and IGNORED for each message in the list.

MESSAGE FORMAT.

All messages start with a four character header. The first character in the header is the station identification letter. The second character identifies the message type and characters three and four the message number. After the header the word "national" or "international", written in lower case characters , indicates which channel the message was received.

Then comes the body of the message followed by a number in parenthesis. This number is a measure of reception quality being the total number of errors received during the message. Most of these errors will not be apparent in the message as they will have been corrected by the Forward Error Correction system. The final character confirming a message has been properly terminated is a hash symbol. If a message is not correctly terminated an error message will be printed in lower case characters.

KEY FUNCTION SUMMARY.

OLDER Go to previous message.

NEWER Go to next message.

LATEST Go to last message received.

DOWN Scroll down a message.

UP Scroll up a message.

TOP Go to the top of a message.

INTRO Allows you to select RECEIVE, SETUP, RESETS and CHOICES.

RECEIVE Turns on the receiver and displays the last message received.

SETUP Allows you to select DONE, CLOCK, CHANNELS and DISPLAY.

RESETS Allows you to reset factory defaults or to clear the display.

CHOICES Allows you to program the stations and message types you want

to record.

CLOCK Allows you to set the clock.

CHANNELS Allows you to set the receiver channel.

DISPLAY Allows you to set the contrast.

DONE Exits the above.

"*" In the body of a message indicates a corrupted character.

NOTES.

In the unlikely event of a supply transient causing your navtex to malfunction a system reboot is available. To re-boot:- First switch off the supply, then restore the supply and then press all four keys simultaneously.

The spectrum screen displays the frequency components of the received signal.When no navtex signal is being received (Which is for most of the time.) then the spectrum displays a bell shaped curve centred about the middle of the screen. A navtex signal is made up of components that are 85Hz at each side of the centre frequency so will produce peaks on the spectrum at +85Hz and -85Hz.

The height of these peaks represents the strength and quality of the signal.

The station and message indent letters together with the transmission times are available on several web sites. A excellent site run by Frank Singleton can be found at:- http://weather.mailasail.com/Franks-Weather/Home

QUESTIONS AND ANSWERS.

Q My navtex screen is totally blank.

A Check the inline fuse. Check that there is 12 volts on the power plug with the centre positive. Try re-booting the navtex.

Q When I come to my navtex the spectrum screen says "SET CLOCK".

A The power has been interrupted and reset the clock to 00:00. You will need to enter the current time if you want to use the timed channel selection.

Q I cannot receive certain stations or messages.

A Check that these stations are in range and not programmed out. Remember the same station has a different indent letter when transmitting on National or International.

Q I cannot receive any signals.

A Ensure that correct local stations are programmed in. Check any joints in the antenna cable and remake if necessary. Set the navtex to receive all stations and all messages on the international channel. Leave the navtex on overnight with all other equipment switched off and no connection with shore supply. If your navtex then receives messages, try switching other equipment back on to discover which device is causing the problem.

Q Why do I get poor results when in harbour ?

A This is almost certainly caused by interference caused by other electrical equipment. Shore power connections can conduct interference on board. Charging systems and engine electrical systems can also create a large amount of interference if not properly suppressed.

Q Can I run my navtex from the mains at home ?

A Yes you can. You will need a 12 Volt regulated power supply.Do not use an unregulated supply or battery charger as this could cause damage. It is often necessary to connect the negative supply of the navtex down to earth. The mains earth or a copper water pipe will suffice.

NAVAREA 1 NAVTEX STATION LIST

518 kHz = English language
490kHz = Local language (English in United Kingdom)

G	518 kHz	Cullercoats	United Kingdom
O	518 kHz	Portpatrick	United Kingdom
E	518 kHz	Niton	United Kingdom
K	518 kHz	Niton	United Kingdom
Q	518 kHz	Malin Head	Ireland
I	490 kHz	Niton	United Kingdom
U	490 kHz	Cullercoats	United Kingdom
C	490 kHz	Portpatrick	United Kingdom
A	490 kHz	Malin Head	Ireland
T	490 kHz	Niton(French language)	United Kingdom
L	518 kHz	Rogaland	Norway
M	518 kHz	Jeløya	Norway
N	518 kHz	Ørlandet	Norway
D	518 kHz	Tórshavn	Føroyar (Denmark)
P	518 kHz	Den Helder	Netherlands
R	518 kHz	Sauđanes	Iceland
S	518 kHz	Pinneberg	Germany
T	518 kHz	Oostende	Belgium
U	518 kHz	Tallinn	Estonia
V	518 kHz	Oostende	Belgium
W	518 kHz	Valentia	Ireland
X	518 kHz	Grindavik	Iceland
H	518 kHz	Stockholm(Bjuröklubb)	Sweden
J	518 kHz	Stockholm (Gislovshammar)	Sweden
I	518 kHz	Stockholm (Grimeton)	Sweden
B	490 kHz	Oostende	Belgium
E	490 kHz	Sauđanes	Iceland
K	490 kHz	Grindavik	Iceland
L	490 kHz	Pinneberg	Germany

IMPORTANT READ THIS BEFORE UNPACKING INSTRUMENT

Prior to unpacking this instrument read and fully understand the installation instructions. Only proceed with the installation if you are competent to do so. Nasa Marine Ltd. will not accept any responsibility for injury or damage caused by, during or as a result of the installation of this product. Any piece of equipment can fail due to a number of causes. Do not install this equipment if it is the only source of information and its failure could result in injury or death. Instead return the instrument to your retailer for full credit. Remember this equipment is an aid to navigation and not a substitute for proper seamanship. This instrument is used at your own risk, use it prudently and check its operation from time to time against other data. Inspect the installation from time to time and seek advice if any part thereof is not fully seaworthy.

LIMITED WARRANTY

Nasa Marine Ltd. warrants this instrument to be substantially free of defects in both materials and workmanship for a period of one year from the date of purchase. Nasa Marine Ltd. will at its discretion repair or replace any components which fail in normal use within the warranty period. Such repairs or replacements will be made at no charge to the customer for parts and labour. The customer is however responsible for transport costs. This warranty excludes failures resulting from abuse, misuse, accident or unauthorised modifications or repairs. In no event shall Nasa Marine Ltd. be liable for incidental, special, indirect or consequential damages, whether resulting from the use, misuse, the inability to correctly use the instrument or from defects in the instrument. If any of the above terms are unacceptable to you then return the instrument unopened and unused to your retailer for full credit.

Name _____

Address _____

_____

Dealer Name _____

Address _____

_____

Date of Purchase _____

Proof of purchase may be required for warranty claims.

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Declaration of Conformity
NASA Marine Ltd declare this product is in compliance with the essential requirements of R&TTE directive 1995/5/EC.
The original Declaration of Conformity certificate can be requested at info@nasamarine.com
THIS PRODUCT IS INTENDED FOR USE ONLY ON NON SOLAS VESSELS

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