NAV6 eNAVTEX App User Manual

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Important Information

This equipment is not approved for use by SOLAS convention vessels within the Global Maritime Distress and Safety System (GMDSS).
It is intended for use by leisure craft and other non-SOLAS vessels wishing to participate within GMDSS.

Safety Warnings

This application is for use as an aid to sailors and should not lead to a reduction in the level of good seamanship required at all times.

Minimum System Requirements

The eNAVTEX App is designed to run on PCs running the following operating systems:

- Windows 7
- Windows 8 (desktop mode)
- Windows 10

The minimum system requires are:

1 GHz processor and 1 GB of RAM (32-bit) or 2 GB of RAM (64-bit).

Contents

Foreword

Congratulations on purchasing this high quality ICS Electronics Ltd product. Please take the time to read this manual carefully as it contains some essential information regarding the operation of the product.

We recommend that you regularly visit the ICS website www.icselectronics.co.uk for information on updates, the availability of software upgrades, further options and support. The support pages contain frequently asked questions about the eNAVTEX App that you may find useful. There is also a NAVTEX database providing a list of NAVTEX schedules and their details.

The IMO and various national coastguards also operate informative websites that you may wish to visit; see www.icselectronics.co.uk/links.

This User Guide

This user guide is intended for use in conjunction with the ICS NAV6 eNAVTEX App. Should you require any information about operation of your NAV6 eNAVTEX system then please contact ICS Electronics or visit our web site www.icselectronics.co.uk.

Glossary

hPa	Hectopascal, unit of pressure, equivalent to one millibar of pressure.
IEC	International Electrotechnical Commission
IHO	International Hydrographic Office.
IMO	International Maritime Organisation.
NAVAREA	Geographic area in which a NAVTEX coordinator is responsible for coordinating the transmission of navigation and weather warnings using NAVTEX.
NAVTEX	NAVTEX is an international automated direct printing service for promulgation of navigational and meteorological warnings and urgent information to vessels.
NAVTEX coordinator	The governmental or international body responsible for coordinating the transmission of navigation and weather warnings using NAVTEX in a NAVAREA.
NAVTEX panel	The international body that liaises between the NAVAREA coordinators to prevent mutual interference between NAVTEX services.
NMEA	National Marine Electronics Association.
MSI	Maritime Safety Information.
SOLAS	International Convention for the Safety of Life at Sea (SOLAS), 1974.
UKHO	United Kingdom Hydrographic Office
WWNWS	World-Wide Navigational Warning Service Sub-Committee.

Installing the eNAVTEX App

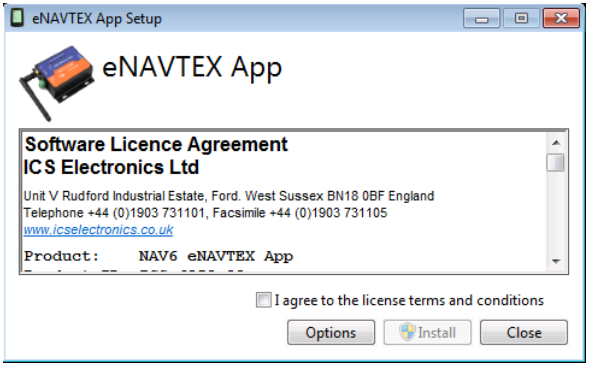
To install the eNAVTEX App:

- Make sure you have the administrative access permissions for installing apps on your PC/Laptop.
- Place the eNAVTEX app CD in your PC or laptop CD drive.
- The installer should auto-run, follow the on-screen instructions for installation.
- The CD includes a quick start manual to help get the eNAVTEX App installed and working with a NAV6 eNAVTEX Receiver.

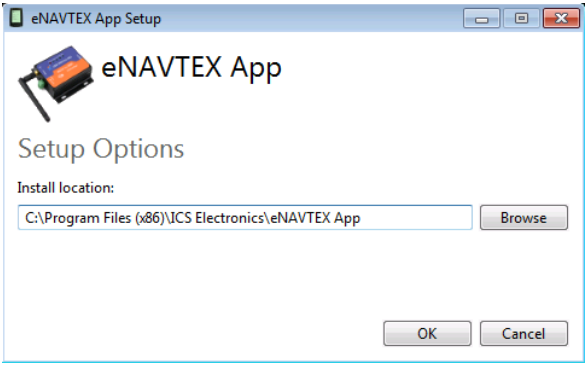
If the installer does not auto-run:

- From the Start menu, click on "Computer" and find your CD/DVD drive.
- Right mouse click and select "open.
- Double click on the "eNavtexSetup.exe" file
- Follow the on-screen instructions for installation.

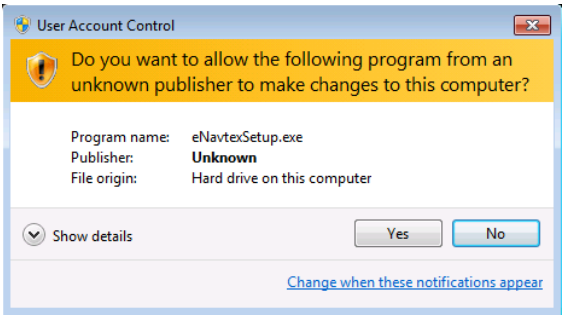
Initially you will see the software licence agreement page of the setup program. You will need to accept the terms of the licence agreement by ticking the box "I agree to the terms of the License Agreement" in order to proceed with the installation. There is also a PDF copy of the software licence agreement on the installation CD.



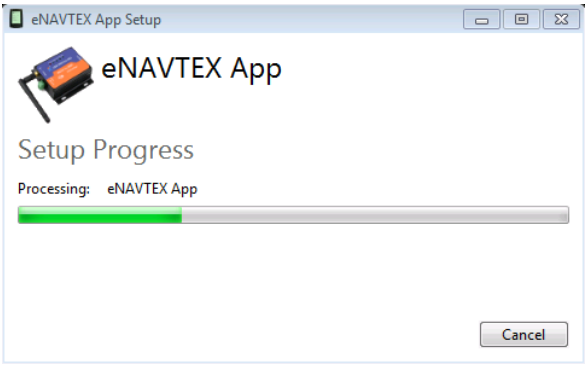
The eNAVTEX App program files will be copied in the installation folder. It is best to use the default folder unless there is good reason not to; e.g. the C: hard drive partition is nearly full. To use the default folder skip to the next paragraph. If you want to change the install folder, click the Options button to display the folder selection window. Now click the browse button to select an alternative folder or just edit the displayed path. Click OK when finished.



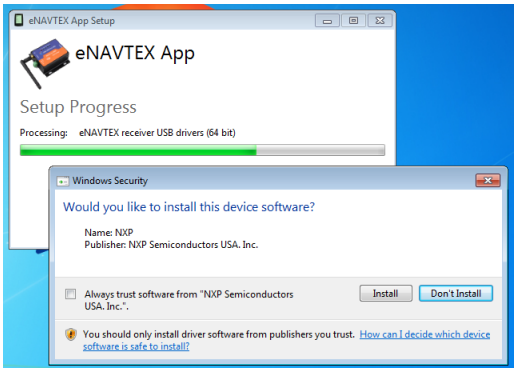
The setup program is now ready to install the files on your machine. Click install to start copying the files. At this point your Windows security settings may display a User Account Control pop up window.



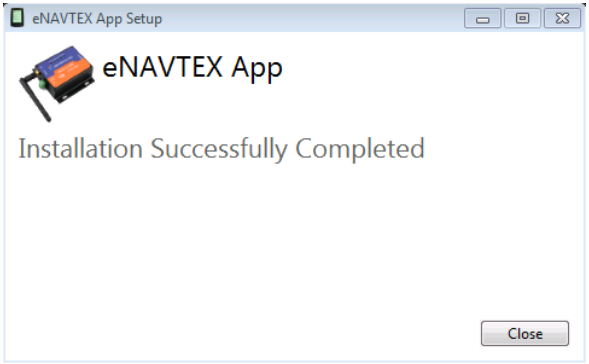
The setup program requires permission to install the eNAVTEX App on your computer, you must answer yes to continue the installation. The setup program will show a progress bar while installing the eNAVTEX App.



You may be prompted a couple of times to install device drivers from NXP Semiconductors USA. To allow the eNAVTEX receiver to communicate with the eNAVTEX App, you must click the Install button.



The final page appears when the installation is complete. Click the Close button to close the installer. The eNAVTEX App is now ready to run.



Before running the eNAVTEX App, it is a good idea to install your receiver and connect it to the PC/Laptop.

The following two sections describe how to connect either an eNAVTEX receiver or an NMEA NAVTEX receiver.

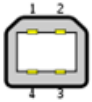
Connecting an eNAVTEX Receiver to your PC/Laptop

If you are going to use the eNAVTEX App with an eNAVTEX Receiver, you need to connect the eNAVTEX receiver to the PC/laptop; otherwise you should skip this section.

IMPORTANT: Install the eNAVTEX App before connecting the eNAVTEX receiver to your PC/laptop to ensure that the correct Plug and Play USB drivers are present.

First follow the installation instructions supplied with your eNAVTEX Receiver to get your receiver powered up and connected to an antenna and optionally to a NAV6 display.

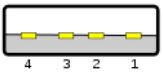
Then, connect the supplied 1m USB lead to the NAV6 eNAVTEX Receiver. The NAV6 eNAVTEX V2 receiver uses a USB Type B socket. The NAV6 eNAVTEX V3 receiver uses a Micro USB Type B socket.



USB Type B

Micro USB Type B

Connect the other end (Type A) into a spare USB slot on your PC/Laptop.



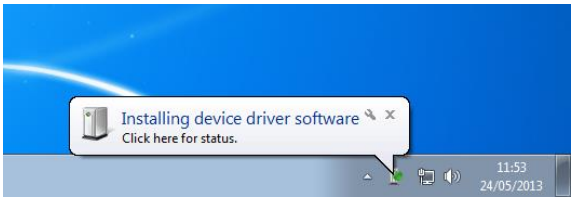
Type A

HELPFUL ADVICE: If the enclosed USB cable is too long or too short then a standard USB type A to type B lead can be used to replace the supplied lead. ICS stock a range of bulk head/flush mount USB sockets that may prove useful as an alternative to a fixed connection lead.

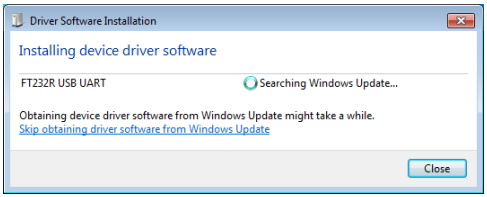
Note: The eNAVTEX App will not work with a NAV6 Receiver V2 as that receiver firmware does not support eNAVTEX operation. Fortunately you can update a NAV6 Receiver V2 to a NAV6 eNAVTEX Receiver with a firmware upgrade; contact your supplier or ICS for more information.

Device driver installation

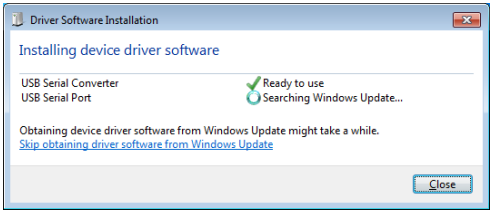
The PC will automatically detect when the eNAVTEX receiver is connected and will attempt if necessary to install drivers for the device. Note: the eNAVTEX App setup program has already cached the required Plug and Play (PnP) device drivers ready for both eNAVTEX V2 and V3 receivers.



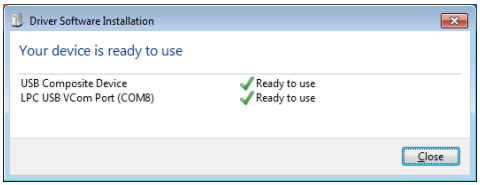
A notification will appear on the toolbar if driver software needs installing. If you click on the notification message you can see the driver installation progress.
On Windows 10 the device drivers will install from the hard drive, on earlier OS versions, Windows update will attempt to load the latest drivers from the internet.



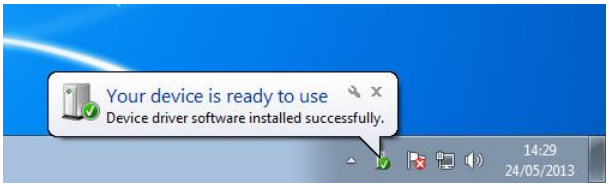
Searching the internet for the latest device drivers may take several minutes.



Windows update will install two device drivers: a USB serial converter and a USB serial port.



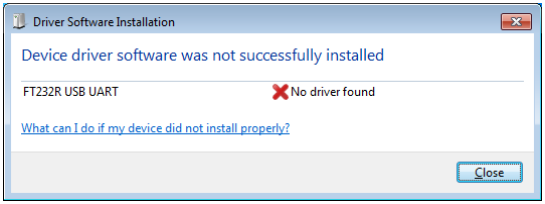
If the driver installation is successful you should get the message "Your device is ready to use" and a new USB COM port for the eNAVTEX receiver will have been created.



The installed COM port is the serial port for the eNAVTEX receiver; you may want to make a note of this COM port number for use later when configuring the eNAVTEX App.

Manual device driver installation

If for some reason the device drivers are not installed, the eNAVTEX App CD contains the required device driver files.



You will need to install the drivers manually from the eNAVTEX App installation CD.

- On the Start menu, click on "Computer" to open an explorer window.
- Locate your CD drive and open it to view the folders on the CD.
- For eNAVTEX V2 receivers (they have a USB type B socket), open the "FTDI Drivers" folder and right click on the "ftdiport.inf" file and select the install option. Then repeat the process for the "ftdibus.inf" file.
- For eNAVTEX V3 receivers (they have a Micro USB type B socket), open the "eNAVTEX.RX.Drivers" folder and right click on the "lpc-vcom.inf" file and select the install option. Then repeat the process for the "LpcDevice.inf" file.
- Unplug the eNAVTEX receiver USB lead and reconnect it to the PC/laptop. The device drivers should now load correctly.

Connecting an NMEA NAVTEX receiver to your PC/Laptop

If you are going to use the eNAVTEX App with an NMEA NAVTEX Receiver, you need to connect the receiver to the PC/laptop. The eNAVTEX App is usually shipped as part of an eNAVTEX system with an eNAVTEX receiver and in that case you should skip this section.

An NMEA NAVTEX receiver is a NAVTEX receiver that outputs NMEA NAVTEX sentences in accordance with the IEC61097-6 and IEC61162 standards. The eNAVTEX App can be configured to operate with this type of receiver.

To use the eNAVTEX App with an NMEA NAVTEX receiver, you will need to connect the receiver's NMEA output to your PC/laptop. For this, you will need to obtain and connect either:

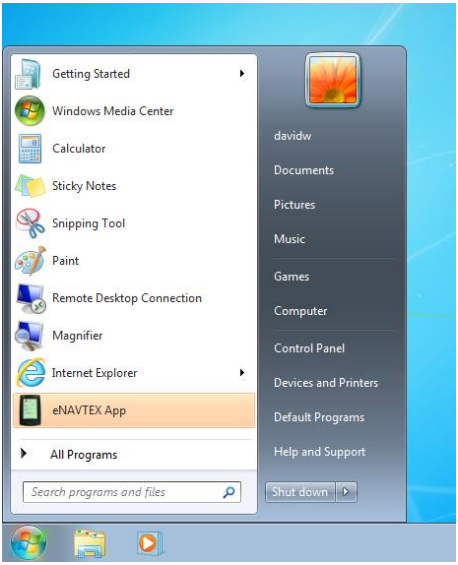
- An NMEA to serial converter connected to an RS232 port on the PC or
- An NMEA to USB converter connected to a USB port on the PC.

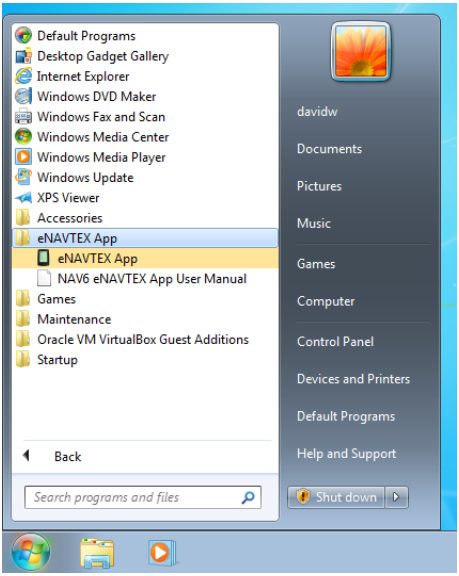
The eNAVTEX App expects the NMEA data to be transmitted at 4800 baud, 8 data bits, 1 stop bit and no parity.

Once connected, you will need to configure the eNAVTEX App for use with an NMEA receiver via the setup page.

Starting the eNAVTEX App

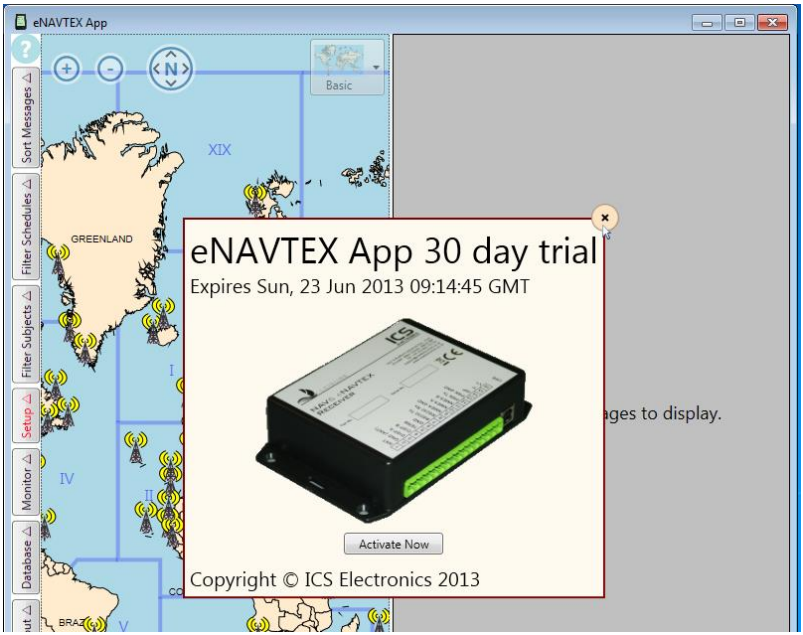
The installation will create an eNAVTEX App icon on the Windows Start Menu in the eNAVTEX App folder under All Programs and also in the start menu quick launch list. Using the Windows Start menu, locate the eNAVTEX App and click to launch it.





When starting, the eNAVTEX App displays a splash screen.

Once the application is loaded, the splash screen will disappear and you will see the main program window and a popup message to tell you that the application is running under a thirty day trial licence.



From the trial window you can activate the eNAVTEX App straight away by pressing the "Activate Now" button. Alternatively close the trail window and activate the application later.

To close the trial window:

- move the mouse to the top right corner of the trial window and click the X button
- or simply click or touch outside the trial window
- or hit the escape key

Activating the eNAVTEX App

The eNAVTEX App will run in trial mode for thirty days from installation. During this period, the application is fully functional, except that the trial window will appear periodically to remind you that the application is running in trial mode.

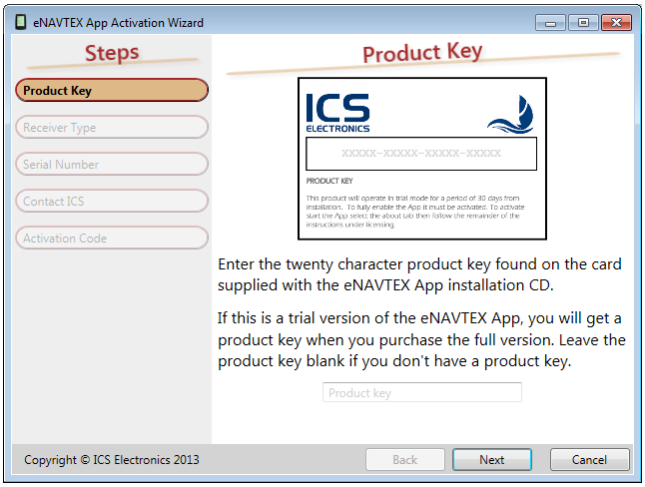
After the thirty day trial period expires, the eNAVTEX App will no longer connect to a receiver. It will still be possible to activate the eNAVTEX App after the trial period has expired.

To activate the eNAVTEX App, you can click the Activate Now button in the trial popup window or open the About page and click the Activate Now button found there.

This will launch the activation wizard to guide you through the activation process.

Product key page

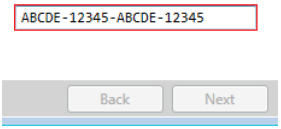
The first page of the activation wizard requests that you enter the twenty character product key found on the card supplied with the eNAVTEX App installation CD. If you downloaded a trial version without a product key; see the "I don't have a product key" section below.



I have a product key

Enter the twenty character product key including the dashes between the groups of five characters from the card.

Tip: Take care when entering the characters '0' zero and 'O' letter and '1' and 'I'. Note that a zero is displayed with a diagonal line.



If the product key box is outlined in red then the product key is either incomplete or you have made a mistake. You cannot press Next to continue until a correct product key has been entered. The product key is used later by ICS as proof that you have purchased this copy of the eNAVTEX App.

I don't have a product key

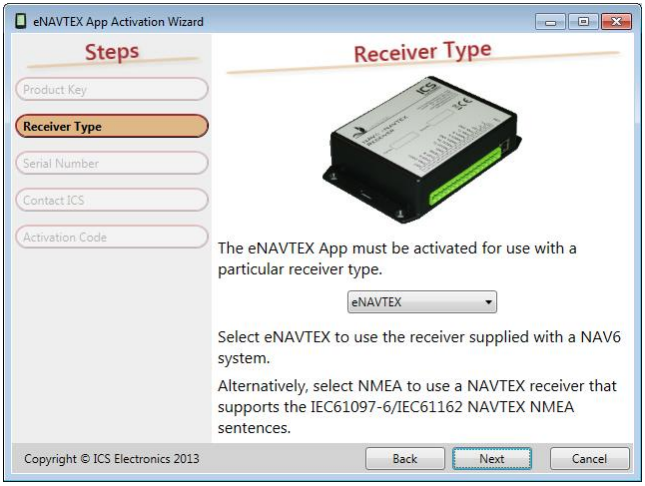
If you downloaded a trial version without a product key, you will need to purchase a full version to obtain a product key. This you can do later on in the activation wizard process. For now you can leave the product key field blank and press Next to continue.

Receiver type page

The next page of the activation wizard requests that select the receiver type that you wish to use with the eNAVTEX App. The eNAVTEX App will be activated for use with the selected receiver type.

eNAVTEX	Activate for use with a NAV6 eNAVTEX receiver.
NMEA	Activate for use with an NMEA NAVTEX receiver that supports IEC61097-6/IEC61162 NAVTEX NMEA sentences.

Note: The eNAVTEX App will not work with a NAV6 Receiver V2 as this receiver type is a replacement for the old white box NAV6 receiver and the fin shape integrated NAV6 antenna and does not support eNAVTEX operation. Fortunately you can update a NAV6 Receiver V2 to a NAV6 eNAVTEX Receiver with a firmware upgrade; contact your supplier or ICS for more information.

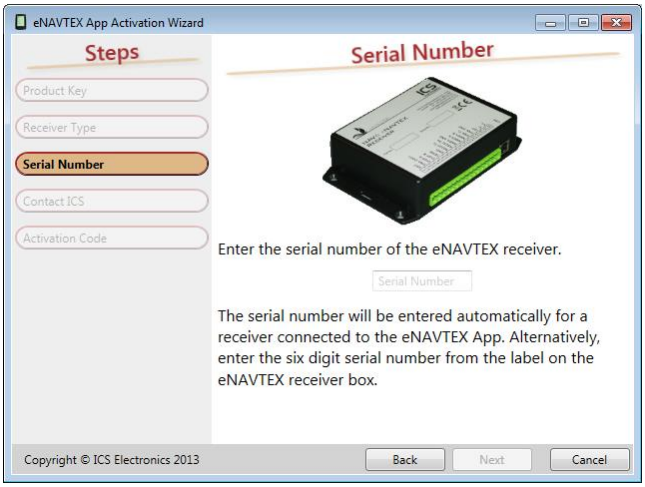


To activate the eNAVTEX App for multiple receivers you will need to repeat the activation process for each receiver.

Click the Next button to continue.

Serial number page

The next page of the activation wizard requests that you enter the serial number of the eNAVTEX receiver that you will be using with the eNAVTEX App. The wizard will skip this page when activating for use with an NMEA NAVTEX receiver.



During installation, the eNAVTEX App is configured to automatically connect to an eNAVTEX receiver. The activation wizard will fill in the serial number of the connected eNAVTEX receiver if it is powered up and communicating with the eNAVTEX App. Otherwise you will need to enter the six digit serial number from the white label on the eNAVTEX receiver box.

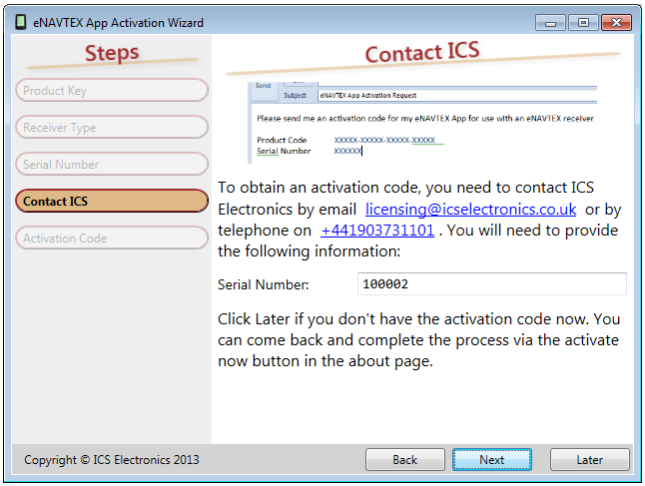
Once activated, the eNAVTEX App will connect only to the eNAVTEX receiver with the serial number for which it was activated.

What if I purchase more than one eNAVTEX receiver?
You can activate the eNAVTEX App to work with more than one eNAVTEX receiver by repeating the activation process with each unit's serial number.

When the serial number is entered correctly, click the next button to continue.

Contact ICS page

The next page of the activation wizard requests that you contact ICS Electronics Ltd to obtain an activation code.



If you have the activation code already, you can click Next to proceed to the activation page.

If you need an activation code, you should contact ICS by email licensing@icselectronics.co.uk or by telephone on +441903731101 with the information shown on the wizard page.

If you don't have the activation code at this time, you can click the later button to come back and complete the process later.

Activate by email

Clicking the email link will open a new mail message window in your default email application. The email will be pre-filled with the activation information required by ICS. You can check the information that will be sent and add any further text as you wish before sending the email.

ICS answers emails during UK working hours: Monday to Friday 09:00 to 17:30; excluding public holidays.

If your PC is not connected to the internet, and you want to send the email from another email device, you will need to include the details shown on the wizard page.

If you need to purchase a product key, ICS will reply to your email with a link to a secure website where you can pay by PayPal using a debit/credit card or your PayPal account.

Once ICS has received payment or has confirmed your product key and has all the information required for activation, we will reply by email with your activation code.

When you receive the activation code email, you can complete the process by clicking the Activate Now button on the about page again.

Activate by telephone

Before you call ICS, you may want to get ready a pen and paper to record the activation code.

If your PC is VOIP enabled, you may be able to click on the telephone number link to dial ICS.

Alternatively call the ICS telephone number to talk to our sales/licensing operators who will be able to take your activation information and provide you with an activation code.

If at this stage you need to purchase a product key, ICS will require payment by debit or credit card. This can be done during the telephone call.

ICS answers telephone calls during UK working hours: Monday to Friday 09:00 to 17:30; excluding public holidays.

When communicating the activation code and product key, you may find it useful to use the phonetic alphabet:

A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whiskey
K	Kilo	X	X-ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

Activation code page

The final page of the activation wizard requests that you enter the activation code and the product key that you obtained from ICS.

Enter the twenty five character activation code obtained from ICS including the dashes between the groups of five characters in the activation code box.

If required, enter the twenty character product key obtained from ICS including the dashes between the groups of five characters.

Tip: You can cut and paste this information if it was received by email.

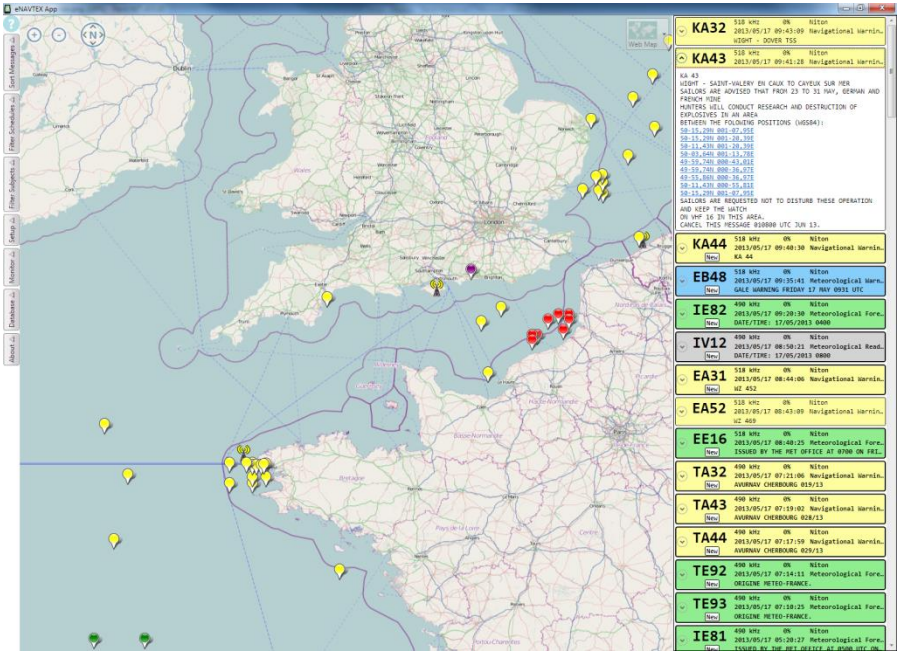
If the activation code or product key box is outlined in red then the value entered is either incomplete or you have made a mistake. You cannot press Activate to complete the activation until the correct information has been entered.

When you have entered the information, click the activate button to complete the activation. The activation wizard will close and the eNAVTEX App will no longer be running as a trial copy.

You can check your activation details at any time by opening the about page and looking at the Activation Information section.

If you do not have the activation information required, click the later button to come back and complete the process at a later time.

Using the eNAVTEX App



Viewing NAVTEX messages

The right hand panel shows a list of the NAVTEX messages received within the last 72 hours (default configuration). Initially the list displays a summary for each message with colour coding for quick identification of the message subject.

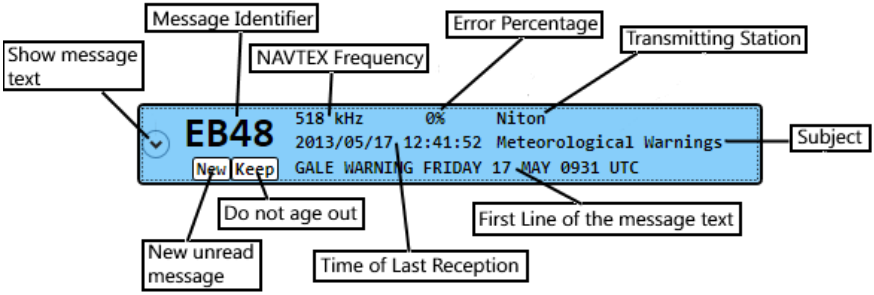
Navigational Warnings (A & L)

Meteorological Forecasts (E)

Meteorological Warnings (B)

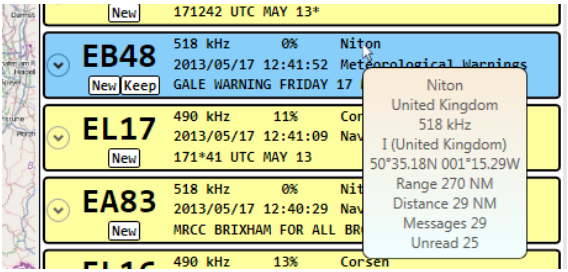
Search and Rescue (D)

Other (none of the above subject letters)



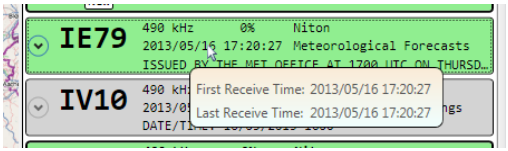
Moving the mouse pointer over parts of the message summary will display a tooltip that reveals truncated and/or extra information. Move the mouse pointer over the station name to show additional information about the transmitting station including:

- The transmitter station name.
- The country responsible for NAVTEX transmissions from the station.
- The NAVTEX frequency
- The NAVAREA for the transmission schedule.
- The position of the transmitting station
- The transmission range of the station in nautical miles.
- The distance of the station from your current position.
- The total number of messages received with this schedule letter.
- The number of unread messages received with this schedule letter.



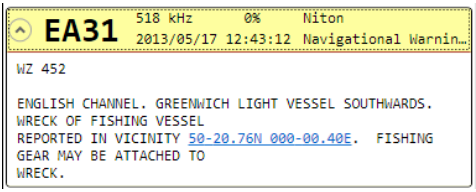
Move the mouse pointer over the transmission time to show additional information about the message transmissions:

- The time and date when the message was first received.
- The time and date when the message was last received.

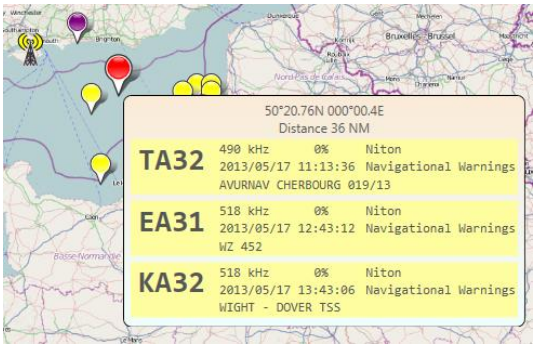


Message text

Click on a message summary to show the text of the message. Click again to hide the message text.



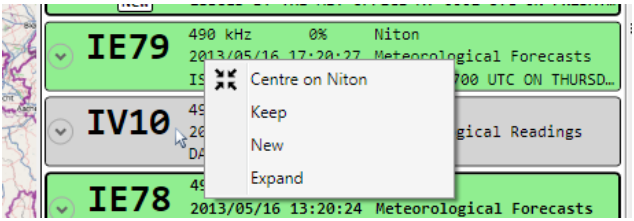
When the message text contains latitude and longitude position information, the position will be highlighted in the text as a hypertext link (blue text with an underline). Each position highlighted in the text will appear on the chart as a message pushpin with the same subject letter colour.



When a message is opened in the message list, the corresponding message pushpins on the chart will flash red to show the location of any positions found within the message text. Clicking on a hypertext link within the message text will centre the chart on the message pushpin at that position.

Message context menu

Right click on the message summary or press the menu key to display the message context menu.



Centre on …	Centre the chart on the station that transmitted the message.
Keep	Toggles the state of the Keep indicator. Normally a message is deleted from the message list 72 hours after its last reception. By marking the message as “Keep”, the message will be kept in the message list until “Keep” is turned off.
New	Toggles the state of the New indicator. When a message is first received, the New indicator is active to show that the message has not been read. The new indicator is turned off as soon as the message text is opened. It may be useful to turn the new indicator back on as a reminder to come back later and read the message again.
Expand	Toggles the display of the message text. Select to open and close the message text.

Using the Chart

The chart displays the position of NAVTEX transmitter stations, positions found in NAVTEX messages and your current position on a chart display.

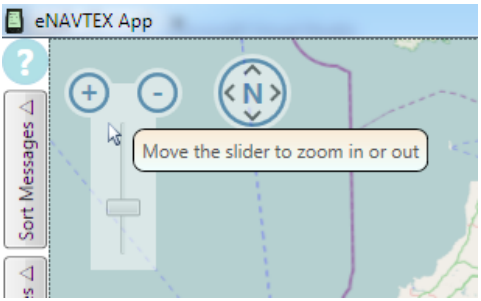
Zooming

To change the zoom level of the chart, click the chart to select it and rotate the mouse wheel to away from you zoom in or towards you to zoom out. The zoom operation is relative to the current mouse position.

On a touch screen you can use a pinch gesture to zoom relative to the touch points. Use a pinch-in gesture to zoom out and pinch-out gesture to zoom in.

From the keyboard you can use the plus key to zoom in and the minus key to zoom out. Each key press will change the zoom level by 0.5.

The zoom control in the top left corner of the chart can be used to change the zoom level of the chart by using either the plus and minus buttons or the zoom slider. The zoom slider appears only when the mouse is moved over the zoom control.



The zoom level can be adjusted with the range 1 to 18 where 18 is the maximum zoom level.

Panning

To pan the chart view (i.e. shift the centre of the chart view), click and drag the chart. In drag mode, the mouse pointer will appear as a hand icon. Alternatively, position the mouse pointer relative to the chart centre and click the mouse centre button (or mouse wheel button) to pan in that direction.

On a touch screen, you can use the drag gesture to pan the chart.

From the keyboard you can use the arrow keys and also home, end, page-up and page-down keys to pan the chart.

Up	Pan the chart northwards.
Down	Pan the chart southwards.
Left	Pan the chart westwards.
Right	Pan the chart eastwards.
End	Pan the chart south west.
Home	Pan the chart north west.
Page Up	Pan the chart north east.
Page Down	Pan the chart south east.

The compass control in the top left corner of the chart also pans the chart. Click around the edge of the compass control to pan in the required direction.

Centring the chart

To centre the chart view, double click at the desired location.

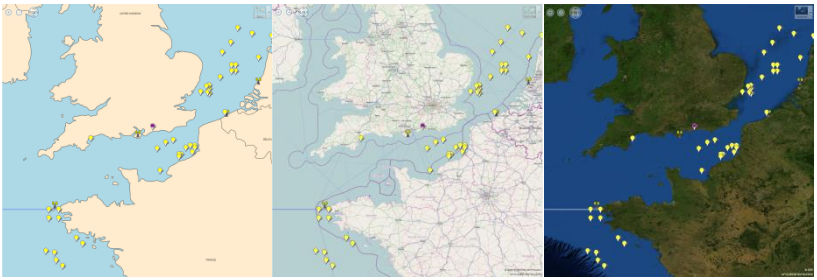
Using the keyboard, you will need to use the Centre Here option on the chart context menu. First select a NAVTEX station or NAVTEX message pushpin using the Tab key. Use the Menu key to display the chart context menu and then select the Centre Here option.

Using a touch screen, you can touch and hold at the desired location to display the chart context menu and then select the Centre Here option.

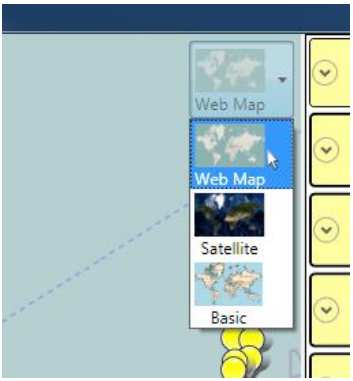
Selecting chart type

The chart type can be selected from one of three choices:

Basic	A basic vector chart from a data file on the host PC. This is the only chart type that can be used without an internet connection.
Web	A tile based chart from Open Street Map www.openstreetmap.org. An internet connection is required to use this chart type.
Satellite	A satellite imagery chart from ESRI. An internet connection is required to use this chart type.



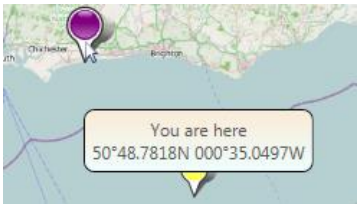
To change the chart type, select the chart type using the chart type control in the top right corner of the chart.



The Web and Satellite charts types will cache up to 10Mb each of chart information on the local computer hard drive.

Current position

Your current position is displayed on the chart using a purple pushpin. To see a tooltip with your current latitude and longitude, move the mouse pointer over the pushpin.



Your current position is automatically updated when the eNAVTEX App is connected via an eNAVTEX Receiver to a NAV6 plus display with a NMEA GPS input.

To manually update your current position, drag the pushpin to the correct position on the chart. Alternatively, use the keyboard to enter your current latitude and longitude in the My Position field on the setup tab.

Press the F8 key to centre the chart at your current position or select the Centre On Me option from the chart context menu.

Latitude and longitude readout

The latitude and longitude at the mouse pointer is displayed in the bottom right corner of the chart.

The latitude and longitude text can be copied to the clipboard by holding down the shift key while clicking the left mouse button at a location on the chart. The clipboard contents will be a text string with the latitude and longitude in degrees and decimal minutes; e.g. `49-42.9367N 001-57.0851W`.

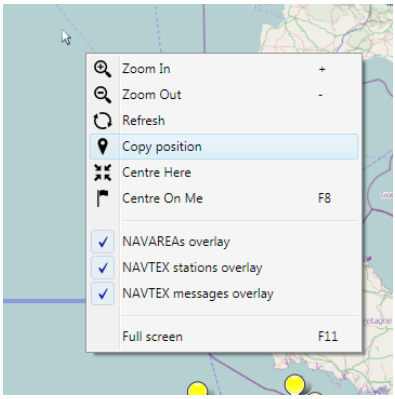
Tip: This facility can be useful to get an accurate position for a NAVTEX station using satellite imagery (you can often spot the mast by their shadows) and then pasting this position into NAVTEX database station entry.

A series of latitude and longitude points can be added to the clipboard by holding down the control key while clicking the left mouse button at a location on the chart. Add the first position by shift-click and then add the remaining positions using ctrl-click. The clipboard will contain the positions separated by spaces; e.g.

```
50-48.7882N 000-35.0664W 48-28.56N 005-03.18W 54-00.1388N 006-20.2934W
```

Context menu

The chart context menu is displayed by a right mouse click within the chart or by pressing the menu key when the chart is selected.



Zoom In	Increase the chart zoom level by 0.5 centred at the right click position or at the selected item on chart when activated using the menu key.
Zoom Out	Decrease the chart zoom level by 0.5 centred at the right click position or at the selected item on chart when activated using the menu key.
Refresh	Refresh the chart image from the data source discarding any cached information. Use the refresh option to redraw the chart if it has been drawn with missing or corrupt tiles due to a network error or timeout.
Copy position	Copy the position under the mouse pointer to the clipboard as a latitude and longitude pair. Pressing the control key while selecting "Copy position" will append the position to the clipboard. Using the control key allows a set of points delineating an area to be added to the clipboard. When "Copy position" option is activated using the menu key, the position of the selected item on chart is added to the clipboard.
Centre Here	Centre the chart at the right click position or at the selected item on chart when activated using the menu key.
Centre On Me	Centre the chart at your current position.
NAVAREAs overlay	Enable or disable display of the NAVAREA overlay on the chart.
NAVTEX stations overlay	Enable or disable display of the NAVTEX stations on the chart.
NAVTEX messages overlay	Enable or disable display of the NAVTEX message positions on the chart.
Full screen	Switch the eNAVTEX App between full screen and window mode.

NAVTEX transmitter stations

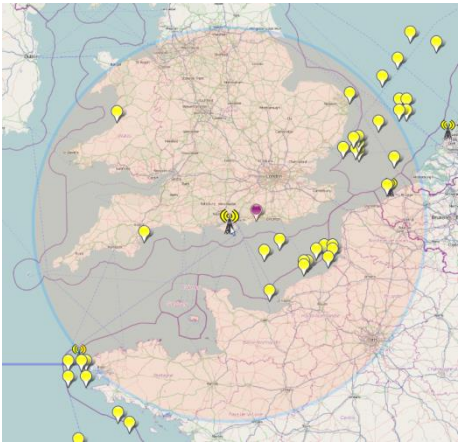
The chart displays NAVTEX transmitter stations using pushpins represented by an antenna symbol.

The positions of the NAVTEX transmitters are defined in stations page of the eNAVTEX database. This can be accessed from the database tab on the left hand side of the application window.

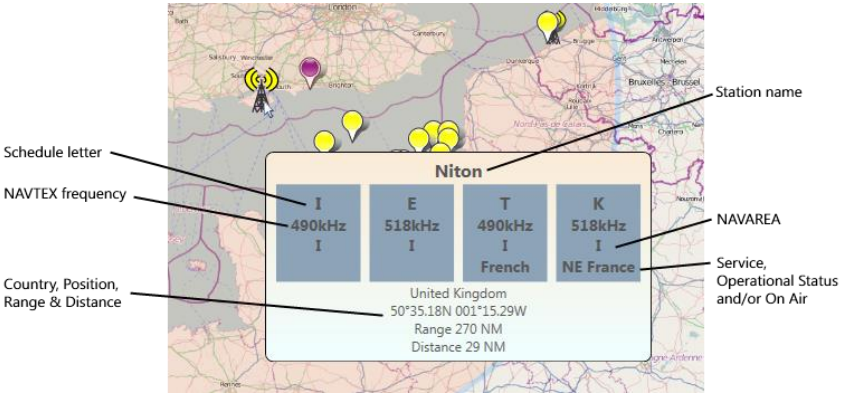
When a NAVTEX station is transmitting a schedule, an expanding circle will emerge from the antenna symbol and expand to the station's transmission range every few seconds. The active schedule letter and NAVTEX frequency will appear below the antenna symbol.

Displaying station information

Moving the mouse pointer over a NAVTEX station pushpin will show a range ring indicating the transmission range of the station declared by the operating authority. Leaving the mouse pointer over a station for few seconds will display a tooltip containing additional information.



Tip: The NAVTEX station tooltip can be displayed using the Tab key to cycle through the NAVTEX stations and NAVTEX message tooltips on the chart until you find the required NAVTEX station.



The NAVTEX station tooltip shows information about the NAVTEX station and its transmission schedules:

Station name — The NAVTEX station name.

Schedule list — A list of NAVTEX schedules that are transmitted by this station. A NAVTEX station may have zero or more schedule letters. These are allocated by the NAVTEX coordinator for the NAVAREA containing the station.

Schedule letter	The B_1 schedule letter (A-X) transmitted in the NAVTEX message preamble. The NAVTEX message preamble consists of the sequence: ZCZC $B_1B_2B_3B_4$.
NAVTEX Frequency	The NAVTEX transmission frequency: 490 kHz, 518 kHz, 4209.5 kHz, 424 kHz or 486 kHz.
NAVAREA	The NAVAREA for which the schedule is transmitted.
Service	The local language or geographical region for which the schedule is transmitted. The service is shown only where a schedule is transmitted in a local language (not English) or is transmitted only for vessels in a specific geographical region.
Operation status	The operational status of the schedule. The operation status is shown only when the schedule is not in the Operational state:

Operational	The schedule transmission is fully operational.

	Planned	The schedule letter has been allocated by the NAVTEX coordinator but transmissions have not yet started. The transmission system is being installed or scheduled to be installed.
	Under Trial	The transmitting system is being commissioned. Schedule transmissions may be received but may be intermittent and should not be relied upon.
	Off Air	The schedule transmission is temporarily off air due to transmission system failure.
	Non-operational	The schedule transmission is off air indefinitely.
On Air	This indication is shown only when the schedule is currently being transmitted.	
Country	The country responsible for the NAVTEX station.	
Position	The latitude and longitude of the NAVTEX station.	
Range	The declared transmission range of the NAVTEX station in nautical miles.	
Distance	The distance of the NAVTEX station from your current position in nautical miles.	

Filtering NAVTEX messages

The chart provides a quick way to filter the display of NAVTEX messages in the NAVTEX message list. A mouse click on a NAVTEX station will filter the NAVTEX message list to display only messages received for schedules from that station. A second click will undo the filter and update the NAVTEX message list to show NAVTEX messages received from all stations.

When the filter settings change, the chart will update to show only NAVTEX message pushpins for the messages displayed in the NAVTEX message list.

Tip: Pressing the Ctrl key while clicking on a NAVTEX station on the chart will add the messages received for schedules from that station to those already displayed in the NAVTEX message list there by filtering the list for a group of stations.

Tip: NAVTEX message list filtering from the chart can also be performed using the keyboard by selecting the NAVTEX station using the Tab key and pressing the Space or Ctrl-Space key to filter the displayed messages.

NAVTEX messages

The chart can display an overlay with pushpins for NAVTEX messages that contain MSI position information.

All NAVTEX messages in the NAVTEX message list that contain MSI position information will display pushpins for those positions on the chart. The NAVTEX message pushpins are colour coded by subject using the same colours as the NAVTEX message list.

Navigational Warnings (A & L)

Meteorological Forecasts €

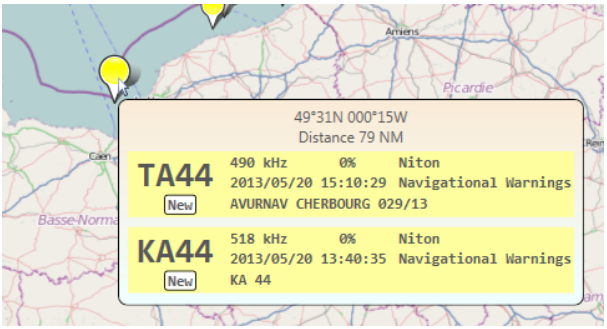
Meteorological Warnings (B)

Search and Rescue (D)

Other (none of the above subject letters)

Displaying message information

Moving the mouse pointer over NAVTEX message pushpins for a short period will show a tooltip containing a list of the NAVTEX messages that refer to that MSI position.



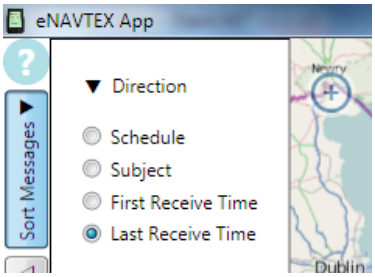
The tooltip shows the MSI position from the message as latitude and longitude and the distance between the MSI position and your current position in nautical miles.

Click on the NAVTEX message pushpin to display the message body of the first message that refers to this MSI position in the NAVTEX message list. Repeat the mouse click to display the message body of the other messages shown in the tooltip.

Tip: The message tooltip can be displayed from the chart using the keyboard by selecting the NAVTEX message pushpin using the Tab key. Pressing the Space key will display the message body of the first message that refers to this position in the NAVTEX message list. Press the space key again to display the message body of the other messages shown in the tooltip.

Sorting messages

Use the "Sort Message" tab on the left hand side of the application to sort the messages NAVTEX message list. Choose the sort criteria and direction from the options.



Direction	Sort the message list in ascending or descending order.
Schedule	Sort the message list by schedule letter; i.e. the first letter (B_1 character) of the message ID.
Subject	Sort the message list by subject letter; i.e. the second letter (B_2 character) of the message ID.
First Receive Time	Sort the message list by the time that the message was first received. This will order the messages with the newest messages at the top of the list when sort direction is descending.
Last Receive Time	Sort the message list by the time the message was last received. This will sort the messages in the order that they were last transmitted on air.

Filtering messages by schedule

Use the "Filter Schedules" tab on the left hand side of the application to filter the messages displayed in the NAVTEX message list by schedule. Select the schedules in the table for which you want messages displayed in the NAVTEX message list.

The table shows a set of buttons containing the name of the nearest station to your current position for each NAVTEX frequency and schedule letter. Each button shows the name of the station, the number of messages received, the number of messages unread (in brackets) and the distance of the station from your current position in nautical miles.

A blank button indicates that there are no stations transmitting on that frequency and schedule letter in the database that have a distance from your current position of less than the radius of interest (default 1000 NM selected via the setup tab).

Click on a filter button to display only messages with that frequency and schedule letter in the NAVTEX message list.

A control-click on a filter button will add the messages with that frequency and schedule letter to those displayed in the NAVTEX message list.

The orange buttons show the schedules that are displayed in the NAVTEX message list.

Filtering by frequency

Use the blue frequency buttons in the column headers to display all messages on that frequency in the NAVTEX message list. A second click will deselect the messages for that frequency. A control-click on a frequency button will add the messages with that frequency to those displayed in the NAVTEX message list.

Filtering by schedule letter

Use the blue schedule letter buttons at the row start to display all messages with that schedule letter (all frequencies) in the NAVTEX message list. A second click will deselect the messages for that schedule letter. A control-click on a schedule letter button will add the messages with that schedule letter to those displayed in the NAVTEX message list.

Special filtering options

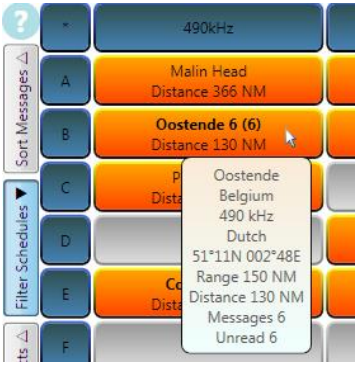
Use the blue asterisk button at the top left, to set the schedule filter to from one of three options.

Each button press will cycle to the next filter option:

- Display messages from all schedules on all frequencies in the NAVTEX message list.
- Display messages from the nearest station to your current position in the NAVTEX message list.
- Display messages from all stations that are at a distance of less than the radius of interest (default 1000 NM selected via the setup tab) nautical miles from your current position in the NAVTEX message list.

Tooltip

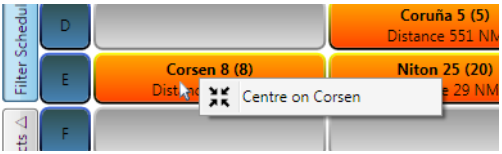
Move the mouse over a schedule filter button for a short period to view a tooltip showing additional information about the schedule:



- The name of the NAVTEX station.
- The country responsible for the NAVTEX station.
- The NAVTEX frequency.
- The NAVTEX service provided by this schedule.
- The position of the NAVTEX station.
- The transmission range of the NAVTEX station in nautical miles.
- The distance of the NAVTEX station from your current position.
- The total number of messages displayed in the message list for this schedule letter and frequency.
- The number of unread messages displayed in the message list for this schedule letter and frequency.

Context menu

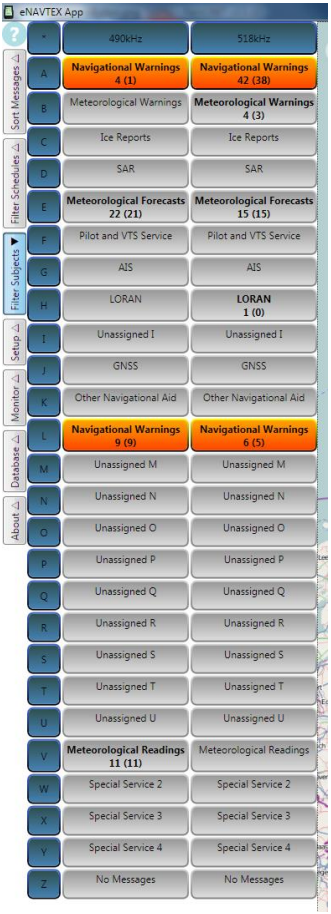
The context menu for a schedule filter button is displayed by a right mouse click on the button or by pressing the menu key when the button is selected.



The only option centres the chart on the NAVTEX station.

Filtering messages by subject

Use the "Filter Subjects" tab on the left hand side of the application to filter the messages displayed in the NAVTEX message list by subject. Select the subjects in the table for which you want messages displayed in the NAVTEX message list.



The table shows a set of subject buttons for messages received on each NAVTEX frequency. Each button shows the subject description, the number of messages received and the number of messages unread (in brackets) for that subject letter and frequency.

Click on a subject filter button to display only messages with that frequency and subject letter in the NAVTEX message list.

A control-click on a subject filter button will add the messages with that frequency and subject letter to those displayed in the NAVTEX message list.

The orange buttons show the subjects that are displayed in the NAVTEX message list.

Filtering by frequency

Use the blue frequency buttons in the column headers to display all subjects on that frequency in the NAVTEX message list. A second click will deselect the subjects for that frequency. A control-click on a frequency button will add the subjects on that frequency to those displayed in the NAVTEX message list.

Filtering by subject letter

Use the blue subject letter buttons at the start of row to select messages for all subjects with that subject letter (any frequency) for display in the NAVTEX message list. A second click will deselect the messages for that subject letter. A control-click on a subject letter button will add the messages with that subject letter to those displayed in the NAVTEX message list.

Special filtering options

Use the blue asterisk button at the top left to set the subject filter to display messages in the NAVTEX message list from one of six options.

Each button press will cycle to the next filter option:

- Messages for all subjects on all frequencies are displayed in the NAVTEX message list.
- Navigation warning messages (A & L) are displayed in the NAVTEX message list.
- Meteorological warning messages (B) are displayed in the NAVTEX message list.
- Search and rescue messages (D) are displayed in the NAVTEX message list.
- Meteorological forecast messages (E) are displayed in the NAVTEX message list.
- All messages with subject letters (C, F-K and M-Z) that are not one of the above special cases are displayed in the NAVTEX message list.

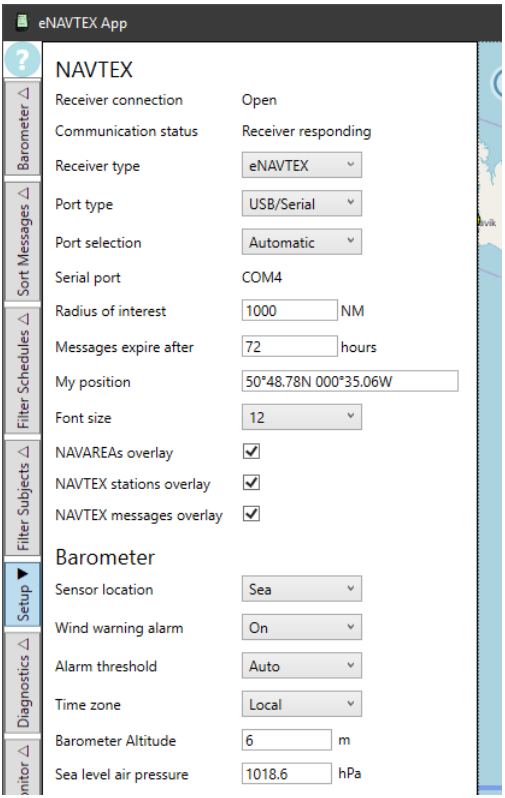
Setup

Use the "Setup" tab on the left hand side of the application to configure the eNAVTEX App. The setup panel only displays options relevant to the current mode of operation.

NAVTEX Options

The NAVTEX receiver setup options at the top of the setup panel are probably the most important configuration options. To make life easy, the default options on installation should automatically detect an eNAVTEX receiver connected via USB to the host machine. The default options are:

- Receiver Type: eNAVTEX
- Port Type: USB/Serial
- Port Selection: Automatic



The NAVTEX options in detail are:

Receiver connection — The status of the receiver connection:

- **Open** — The communications connection is open. In the case of a serial port, the serial port has been opened for exclusive access by the application. In the case of a network port, the TCP/IP connection has been established.
- **Closed** — The communications connection is closed. In the case of a serial port, the serial port was already open for exclusive use by another application. In the case of a network port, the network address could not be resolved or is not accepting connections.
- **Connecting** — This option appears only for network connections and indicates that the network address is being resolved or that the connection is being established.

Communication status — The status of the communications with the receiver:

- **Receiver responding** — The connection is working correctly.
- **Unknown** — The communications link is not yet established so the status is unknown.
- **Communication timeout** — The communications link is established but the receiver is not responding. This may indicate that the receiver is not powered up or of the wrong type or that the port selection parameters are incorrect.
- **Application not licensed for this receiver** — The communications link is established but the eNAVTEX App is not licensed for use with the connected receiver. For an eNAVTEX receiver, its serial number does not correspond to any installed eNAVTEX receiver activation code. For an NMEA receiver, there is no activation code installed for this type of receiver.

Receiver type — The type of receiver connected to the eNAVTEX App:

- **eNAVTEX** — A NAV6 eNAVTEX receiver.
- **NMEA** — A NAVTEX receiver that supports the IEC61097-6/IEC61162 NAVTEX NMEA sentences.

Port type — The type of communications link used for communications with the receiver:

- **USB/Serial** — The receiver is connected to the host machine via a USB cable or a serial (RS232) cable.
- **Network** — The receiver is connected to the host machine via

a serial cable to a wireless serial converter or via a serial to wired network (LAN) converter. The serial converter must be configured as a network server; i.e. to accept TCP/IP socket connections from the host machine.

Port selection — The method used by the eNAVTEX App to select the serial port. This option appears only when port type is set to USB/Serial.

- Automatic — The eNAVTEX App scans all serial ports registered on the host machine for a receiver. Each serial port is opened in sequence until a receiver is detected. The serial port field below shows the port currently being scanned.
- Manual — The eNAVTEX App uses the serial port selected in the serial port field.

Serial port — The name of the serial port used by the eNAVTEX App for communications with the receiver; e.g. COM4.

Host name — The host name of wireless serial converter or wired serial converter connected via serial cable to the receiver. This option appears only when the port type is set to network. The host name can be either an IP address or a name registered with the network DNS.

Network port — The TCP/IP network port number assigned by the serial converter to the serial connection to the receiver. This usually will be a configuration option in the settings of serial converter. This is often accessible by typing the serial converter host name in the address bar of a web browser. The network port option appears only when the port type is set to network.

Other NAVTEX Options

The remaining NAVTEX setup options are used to configure the appearance of the eNAVTEX App.

NAVTEX character set — The character set used to display the body of NAVTEX messages in the NAVTEX message list.

- Latin — The NAVTEX message text contains only Latin characters 0-9, A-Z and punctuation. This is the normal setting for displaying NAVTEX messages.
- Cyrillic — The NAVTEX message text contains both Latin and Cyrillic characters and punctuation. Use this setting where you want to correctly display messages transmitted with Cyrillic characters (using FEC third shift); e.g. Russian language transmissions.

Radius of interest — The radius of an imaginary circle from your current position within which stations transmitting NAVTEX messages are considered to be of interest. Only the names of these stations will appear in the NAVTEX messages displayed in the NAVTEX message list and on

	the Filter Schedules panel.
Messages expire after	When this time period has elapsed from last repeat reception of a NAVTEX message, the message will be deleted from the NAVTEX message list. This is defined in the NAVTEX standards IEC 61097-6 and IMO MSC.1/Circ.1403 as a period of between sixty to seventy two hours. A message that has not been repeated within this period is deemed to be no longer of interest.
My position	Your current position in latitude and longitude coordinates. Your current position is automatically updated when the eNAVTEX App is connected via an eNAVTEX Receiver to a NAV6 plus with a NMEA GPS input. This field may be used to manually enter your position when a GPS input is unavailable.
Font size	The font size used to display NAVTEX messages in the NAVTEX message list. Choose the font size from: 12, 14, 16 or 18 point.
NAVAREAs overlay	Enables or disables the display of the NAVAREA overlay on the chart.
NAVTEX stations overlay	Enables or disables the display of the NAVTEX stations on the chart.
NAVTEX messages overlay	Enables or disables the display of the NAVTEX message positions on the chart.

Barometer Options

The barometer setup options are used to configure the barometric sensor on the eNAVTEX V3 receiver. NOTE: the barometer options are available only when the eNAVTEX App is connected with a NAV6 eNAVTEX V3 receiver.

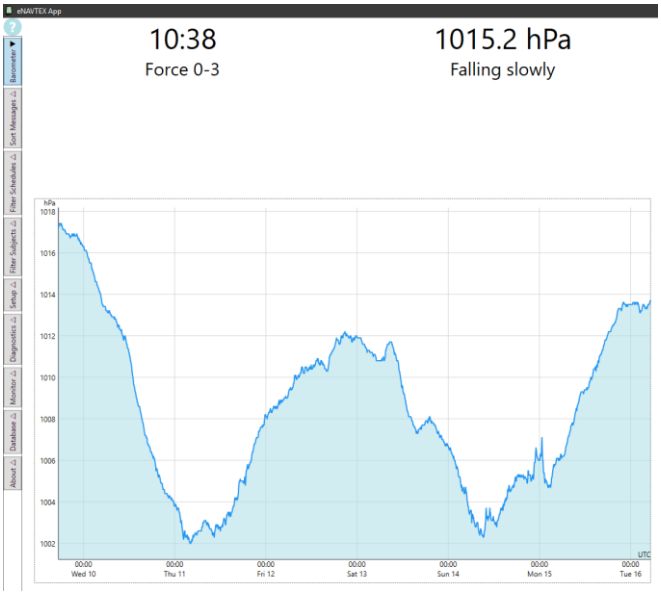
Sensor location	Indicates whether the eNAVTEX V3 receiver is installed on land or sea. This setting is used to adjust the wind forecast calculated from the rate of pressure change. Typically forecast wind speeds are lower over land by one or two increments on the Beaufort scale.
Wind warning alarm	The eNAVTEX App can generate an audible warning alarm when the rate of air pressure change exceeds the Alarm threshold value. Set On to enable the audible alarm.
Alarm threshold	An audible warning alarm when enabled will be generated when the rate of air pressure change in hPa/h exceeds this threshold. The auto setting selects the default threshold of 1 hPa/h; i.e. the rate of pressure change that typically predicts a wind speed at sea above force 5. Local conditions may mean that the auto setting is too sensitive or over sensitive causing excessive or missed alarms. In this case, set the threshold to the appropriate level by experience or trial and error. The threshold can be set in 0.1 hPa/h units

	between 0.5 and 4.0 hPa/h.
Time zone	The barometer tab can display time and date of barometer readings as UTC or the local time. Choose the appropriate setting: UTC or Local. The local time is displayed using the settings in the Windows time zone configuration.
Barometer altitude	The height in metres of the eNAVTEX V3 receiver box above sea level. Air pressure reduces by approximately 1 hPa for every 8.8m increase in altitude. This setting is used to display the barometric readings on the barometer tab as pressure at sea level. Meteorological pressure readings are nearly always quoted as pressure at sea level.
Sea level air pressure	The current air pressure reading in hPa at sea level. Normally you do not need to change this setting as the eNAVTEX V3 receiver barometric sensor is calibrated at the factory. To recalibrate the sensor, enter the air pressure at sea level at your location from a calibrated source. NOTE: always set the barometer altitude before recalibrating the sensor.

Barometer chart

Use the "Barometer" tab on the left hand side of the application to display the current air pressure, wind forecast and pressure chart.

NOTE: the barometer tab appears only when the eNAVTEX App is connected with a NAV6 eNAVTEX V3 receiver.



Current air pressure

The top line on the barometer tab shows the current time and air pressure at sea level in hPa.

Wind forecast

The second line on the barometer tab shows the wind forecast in Beaufort units on the left hand side. Note that the rate of change of air pressure is only an indicator of possible wind conditions; other meteorological factors may cause high winds or no wind when the rate of air pressure change may indicate otherwise. Use the wind forecast only as an advance warning of possible changes in local wind conditions.

The wind forecast is determined by the rate of air pressure change during the last hour and whether the barometer sensor is situated on land or sea. Typically forecast wind speeds over land are one to two Beaufort forces lower than for the same rate air pressure change at sea; we reduce the displayed wind speed forecast by one force level for land based instruments; use the Sensor Location setting on the Setup tab to select a land or sea installation.

Pressure change	Land forecast	Sea forecast
≥3 hPa/h	8+	9+
≥2 hPa/h	6-7	7-8
≥1 hPa/h	5	6
< 1 hPa/h	0-4	0-5

Source: The Weather Handbook (Third Edition) by Alan Watts.

Pressure tendency

The second line on the barometer tab shows the pressure tendency on the right hand side. The pressure tendency gives a textual description of the rate of air pressure change.

The pressure tendency is calculated from the rate of air pressure change over the last hour; see below.

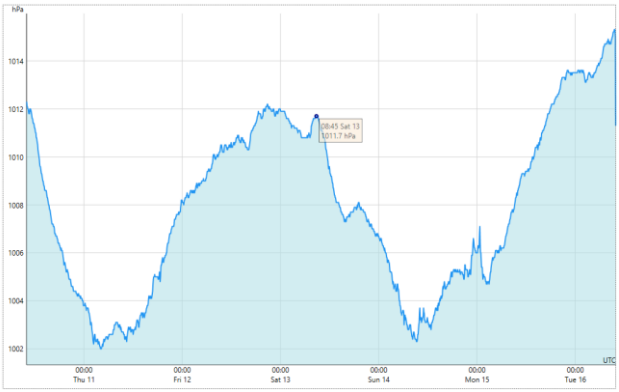
You can use this measurement to forecast likely wind conditions; anything greater than rising or falling slowly is an indicator of windy conditions (see the highlighted values). The faster the pressure is changing, the greater the likely wind speed.

Falling very rapidly	< -2.0 hPa/h
Falling quickly	< -1.2 and ≥-2.0 hPa/h
Falling	< -0.5 and ≥ -1.2 hPa/h
Falling slowly	< -0.03 and ≥ -0.5 hPa/h
Steady	between ±0.03 hPa/h
Rising slowly	> 0.03 and ≤ 0.5 hPa/h
Rising	> 0.5 and ≤ 1.2 hPa/h
Rising quickly	> 1.2 and ≤ 2.0 hPa/h
Rising very rapidly	> 2.0 hPa/h

Source: The Weather Handbook (Third Edition) by Alan Watts.

Pressure chart

The pressure chart shows how air pressure in hPa varies over a time range of between 12 hours and 7 days. The time scale displays either in UTC or local time depending upon the time scale setting on the Setup Tab.



To change the time scale range use the:

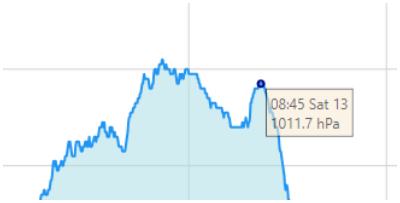
- pinch touch gesture
- mouse wheel
- plus or minus keys
- or context menu zoom in or out

The time scale range can be changed to: 12 hours, 1, 2, 3, 4, 5, 6 and 7 days.

To view the air pressure forward or backwards in time, use the:

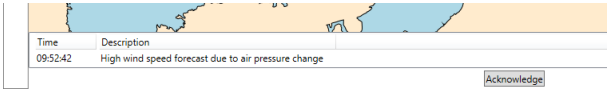
- drag left or right touch gesture
- left mouse button and drag left or right
- left or right keys

To view a specific reading, move the mouse over the point on the chart to display the reading in the tooltip.



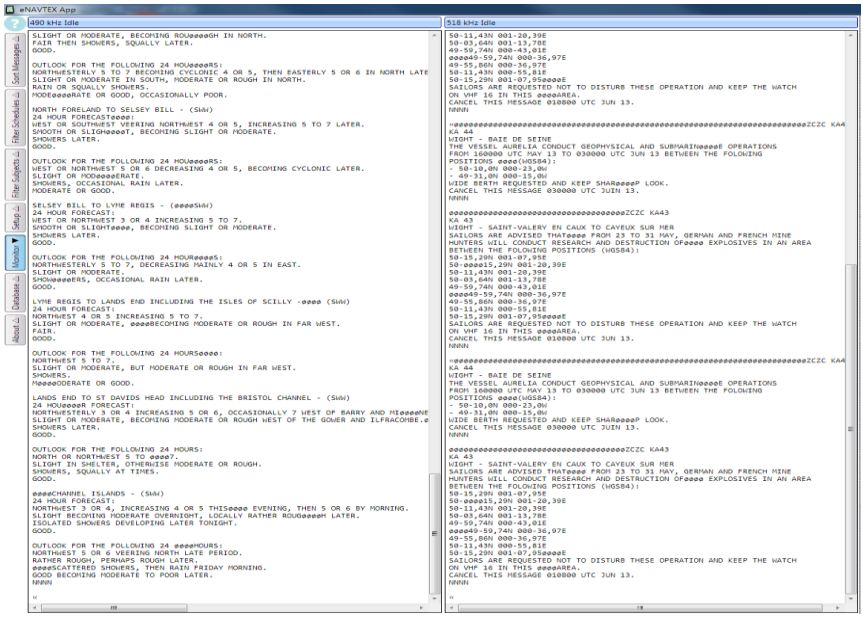
Alarm Panel

The alarm panel appears at the bottom of the application window when a wind forecast alarm is active. Press the acknowledge button to mute the alarm.



Monitoring live transmissions

Use the "Monitor" tab on the left hand side of the application to monitor the raw live NAVTEX message transmissions. This option is available only when the eNAVTEX App is connected to an eNAVTEX receiver.



The monitor page is divided into two panels: 490 kHz and 518 kHz; one for each NAVTEX frequency supported by the eNAVTEX receiver. The panel header shows the NAVTEX frequency and the current receiver state:

Idle	There is no NAVTEX transmission detected on this frequency.
Receive	The receiver is receiving a NAVTEX transmission on this frequency.
RF Fault	The receiver has been decoding a constant mark or space signal on the NAVTEX frequency for more than one minute. This could be due to interference from some local noisy electrical equipment or a malfunctioning NAVTEX transmitter. Try to eliminate any local sources of interference. If there are no local sources of interference, the problem could be due to a faulty eNAVTEX receiver or the NAVTEX antenna.
Communications Fault	There is no communications link between the eNAVTEX App and the eNAVTEX receiver. You may want to check the setup parameters and that the eNAVTEX receiver is powered and connected to the host machine.

Cannot open communication port	The USB/serial port configured for the eNAVTEX receiver on the setup page cannot be opened. This may be due to a configuration problem or that the assigned serial port is in use by another application.
Unknown	The serial port with the receiver is open but communications has not yet been established.
Application not licensed	The communications link is established but the eNAVTEX App is not licensed for use with the connected receiver; i.e., its serial number does not correspond to any installed eNAVTEX receiver activation code.

The main part of each monitor panel displays the raw NAVTEX message information decoded by the eNAVTEX receiver. If decoding is in progress you will see live update of the decoded raw data at the bottom of the panel. The raw data display includes special characters for phasing and errors:

ø An FEC phasing character was decoded. These are transmitted before each NAVTEX message and as a block of four or five characters inserted between every 100 NAVTEX message characters.

« An FEC end of transmission sequence was decoded. This shows the end of each NAVTEX transmission session.

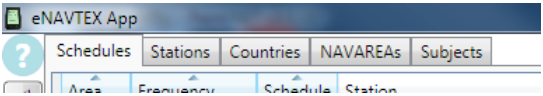
* A FEC decoding error was detected. Both the RX and DX symbols for the FEC character had parity errors or both the RX and DX symbols were valid but were different.

Database configuration

Use the "Database" tab on the left hand side of the application to configure the NAVTEX database.

The database is used for:

- Associating NAVTEX schedules with the NAVTEX messages displayed in the NAVTEX message list.
- Showing the nearest station for each schedule letter and frequency in the Filter Schedule panel.
- Displaying the NAVTEX stations on the chart.



The database panel has five tabs:

Schedules	A table of NAVTEX schedules transmitted for each NAVAREA, frequency and schedule letter (B_1).
Stations	A table of worldwide NAVTEX transmitter stations.
Countries	A table of all countries or coastal regions within countries that have NAVTEX transmitter stations.
NAVAREAs	A table of all NAVAREAs.
Subjects	A table of descriptions for each NAVTEX subject letter (B_2).

The tabs are ordered with the most viewed information at the left; i.e. the schedules table is probably the most viewed table and the subject table the least viewed.

Sourcing NAVTEX database information

The information in the eNAVTEX App database is correct (allowing for typos and errors in the source data) at the time that the installation media was created by ICS. By the time the application is installed, this information may be out of date.

Please visit the ICS website http://www.icselectronics.co.uk/support/kb/navtex-db where you can view the NAVTEX database online. We regularly update this online database from the UKHO weekly notice to mariners. In the near future we hope to provide a link to download the up to date NAVTEX database information for import into the eNAVTEX App.

The data for the NAVTEX database comes from several sources. Unfortunately the sources often do not agree and it often comes down to a matter of judgement as to which source is correct or most precise. Most of the sources are updated once a year with the exception of weekly notices to mariners. Luckily, we do the hard work for you and publish the information on our website.

The data sources for the NAVTEX database are:

- Master Plan of Shore-Based Facilities for the Global Maritime Distress and Safety System (GMDSS Master Plan, GMDSS.1-Circ.nn where nn is 14 as of Dec.2012). This source contains both operational and planned NAVTEX schedules and generally has the most accurate position information. The document is published yearly by the International Maritime Organization (IMO).
- Admiralty List of Radio Signals - Global Maritime Distress and Safety System (GMDSS) ALRS Volume 5. This source contains only operational NAVTEX schedules and tends to have less precise position information. The book is published yearly by the United Kingdom Hydrographic Office (UKHO) and is kept up to date via the UKHO weekly notices to mariners.
- NAVAREA coordinator reports published by the World-Wide Navigational Warning Service Sub-Committee (WWNWS) of the International Hydrographic Office (IHO). The NAVAREA coordinators for each NAVAREA publish an annual report that contain the details of changes to the operational and planned NAVTEX schedules within the NAVAREA. Some coordinators produce more useful reports than others.

Adding a new schedule

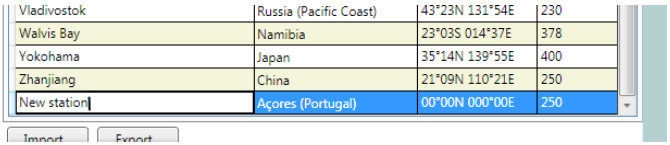
Perform these steps in sequence, to add a new NAVTEX schedule to the database:

- Add the country or region if necessary to the countries table.
- Add the NAVTEX transmitter station if necessary to the stations table.
- Add the NAVTEX schedule to the schedules table.

Adding a new entry to a table

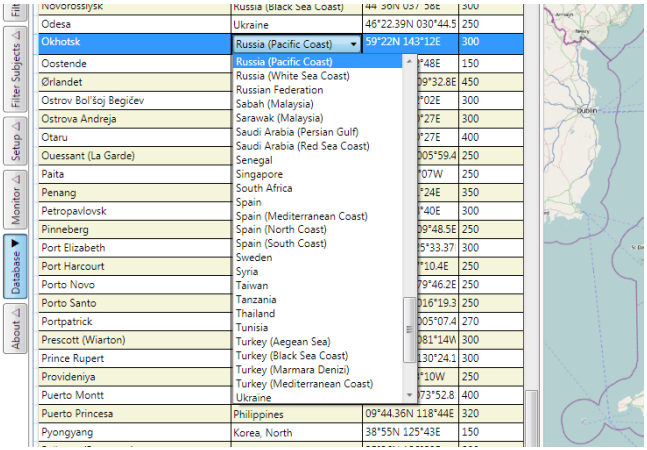
To add a new entry to a database table, scroll to the last row of the table; this is the empty row at the bottom.

- Double click in the first column of the blank row. This will create a new row with default values for most columns. Enter the required value for the first column. If the column allows only selection from a predefined set of values, you will be presented with a dropdown list from which to make a selection. Other column types require text entry from the keyboard.
- Tab to the next column or click in the next column of the new row. Enter the required value.
- Repeat for the remaining columns of the new row.
- Press enter or escape or click in a different row to finish editing and add the new row to the table.



Editing an entry in a table

To edit an existing entry in a table, double click on the row to enter editing mode. Alternatively select the row and column using the keyboard and press the Enter or F2 key to start editing. Make the changes as per adding a new entry.



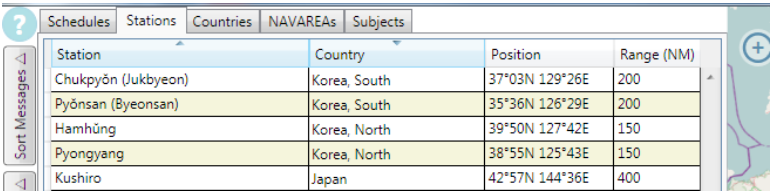
Deleting an entry from a table

To delete an entry from a table, select the row with a mouse click or via the keyboard and press the delete key.

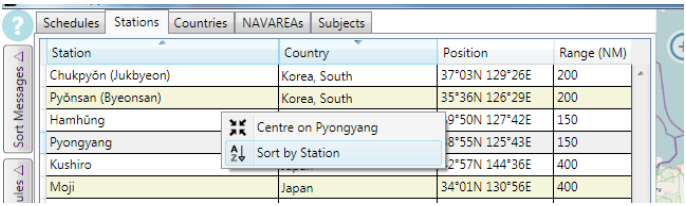
Note: if you cannot delete a row then there is probably another table that references the row.

Sorting the data in a table

To sort the information in a database table, click on the column header. The first click will sort the data in ascending order and a second click will reverse the direction. To add additional sort criteria, click on another column header while pressing the shift key (and again to reverse the direction).



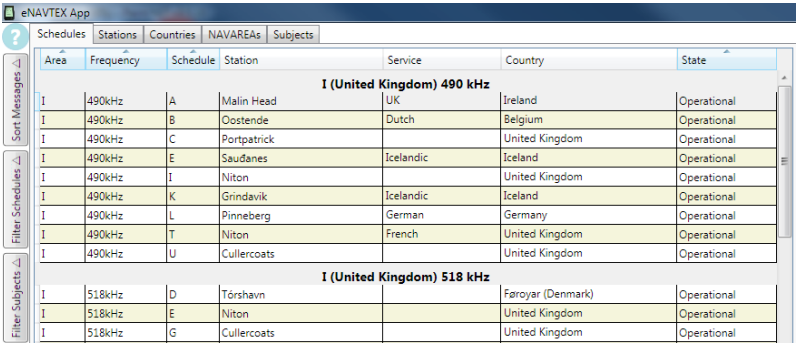
The sort columns and the sort direction are indicated by highlighting and an arrow in the column header.



To sort a table using the keyboard, use the arrow keys to highlight a cell in the sort column and select the "Sort by [column-name]" option in the context menu displayed by pressing the Menu key. Repeat this to reverse the sort direction. To add additional sort criteria, use the arrow keys to move to another column and while pressing the control key, select the "Sort by" option from the context menu (repeat to reverse the direction).

Schedule table

The schedule table is the first tab in the database panel. The table data is grouped by NAVAREA and frequency for quick identification of schedules transmitted within a geographic area.



The schedule table has seven columns:

Area — The NAVAREA for the NAVTEX schedule. Choose the NAVAREA from the dropdown list. The NAVAREA information comes from the NAVAREA table. For a new NAVAREA you will need to add the NAVAREA to the NAVAREAs table first.

Frequency — The NAVTEX frequency for the NAVTEX schedule. Choose the frequency from one of the predefined options: 490, 518, 4209.5, 424 and 486 kHz.

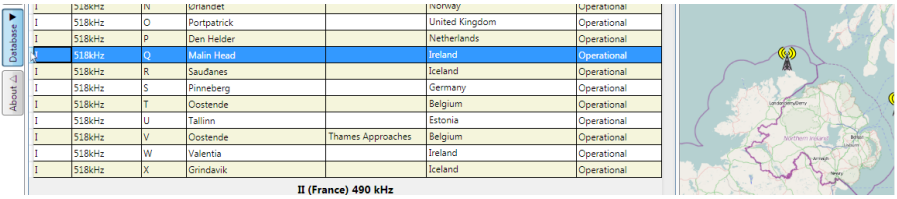
Note that the 424 and 486 kHz schedule information is for information only and the eNAVTEX App does not yet have the ability to receive messages broadcast on these frequencies.

Schedule — The NAVTEX schedule letter (B_1). Choose from the predefined schedule letters A-X.

Station	The NAVTEX station that transmits the schedule. Choose the station from the dropdown list of stations. The NAVTEX station information comes from the stations table. For a new station you will need to add the station to the stations table first.
Service	The local language or geographical region for which the schedule is transmitted. A service should be entered only where a schedule is transmitted in a particular local language or is transmitted only for vessels in a specific geographical region. NAVTEX messages are assumed to be transmitted using English language (service left blank) unless a local language service is specified.
Country	The country responsible for NAVTEX transmissions from the NAVTEX station. This column is automatically populated from the station table information and is for information only.
State	The operational state of the NAVTEX schedule. Choose from one of the predefined options in the dropdown list:

Operational	The schedule transmission is fully operational.
Planned	The schedule letter has been allocated by the NAVTEX coordinator but transmissions have not yet started. The transmission system is being installed or scheduled to be installed.
Under Trial	The transmitting system is being commissioned. Schedule transmissions may be received but may be intermittent and should not be relied upon.
Off Air	The schedule transmission is temporarily off air due to transmission system failure.
Non-operational	The schedule transmission is off air indefinitely.

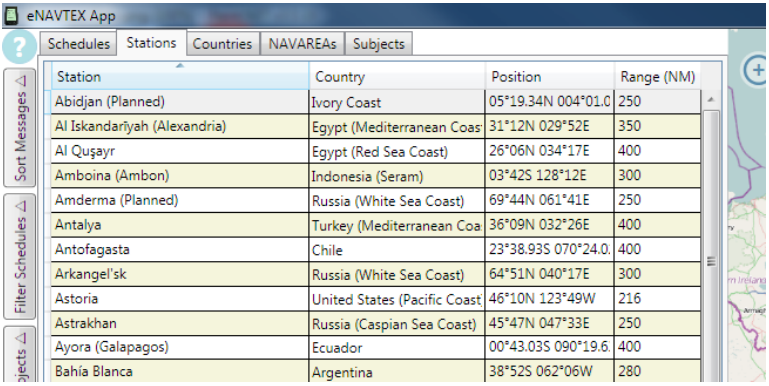
To centre the chart on the NAVTEX station that transmits a schedule, click on the small box at the start of the row.



Alternatively highlight the schedule row and select “Centre on [station]” from the context menu.

Station table

Use the station table to define the NAVTEX transmitter stations.



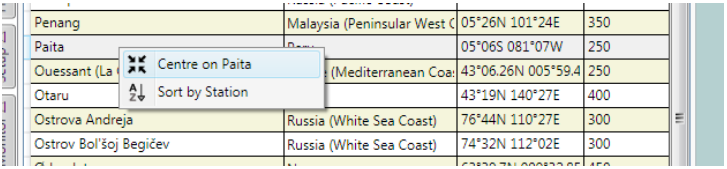
Station	Country	Position	Range (NM)
Abidjan (Planned)	Ivory Coast	05°19.34N 004°01.0	250
Al Iskandarīyah (Alexandria)	Egypt (Mediterranean Coas	31°12N 029°52E	350
Al Quşayr	Egypt (Red Sea Coast)	26°06N 034°17E	400
Amboina (Ambon)	Indonesia (Seram)	03°42S 128°12E	300
Amderma (Planned)	Russia (White Sea Coast)	69°44N 061°41E	250
Antalya	Turkey (Mediterranean Coa	36°09N 032°26E	400
Antofagasta	Chile	23°38.93S 070°24.0	400
Arkangel'sk	Russia (White Sea Coast)	64°51N 040°17E	300
Astoria	United States (Pacific Coast	46°10N 123°49W	216
Astrakhan	Russia (Caspian Sea Coast)	45°47N 047°33E	250
Ayora (Galapagos)	Ecuador	00°43.03S 090°19.6	400
Bahía Blanca	Argentina	38°52S 062°06W	280

The station table has four columns:

Station	The NAVTEX station name.
Country	The country or part of a country responsible for NAVTEX transmissions from the NAVTEX station. Choose the country from the dropdown list of countries. The country information comes from the countries table. For a new country you will need to add the country to the countries table first.
Position	The latitude and longitude of the NAVTEX station. Enter the value in degrees and decimal minutes; e.g. 40 56.987S 014 06.0123W.
Range (NM)	The transmission range of the NAVTEX station in nautical miles as declared by the NAVTEX authority for the station.

To centre the chart on a NAVTEX station, click on the small box at the start of the row. Alternatively highlight the station row and select “Centre on [station]” from the context menu.

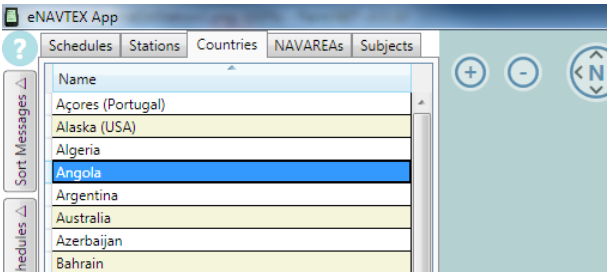
Tip: Viewing the station on the chart provides a visual cross check that the position of a station has been entered correctly.



Penang	Malaysia (Peninsular West C	05°26N 101°24E	350
Paita		05°06S 081°07W	250
Ouessant (La	(Mediterranean Coa	43°06.26N 005°59.4	250
Otaru		43°19N 140°27E	400
Ostrova Andreja	Russia (White Sea Coast)	76°44N 110°27E	300
Ostrov Bol'šoj Begičev	Russia (White Sea Coast)	74°32N 112°02E	300

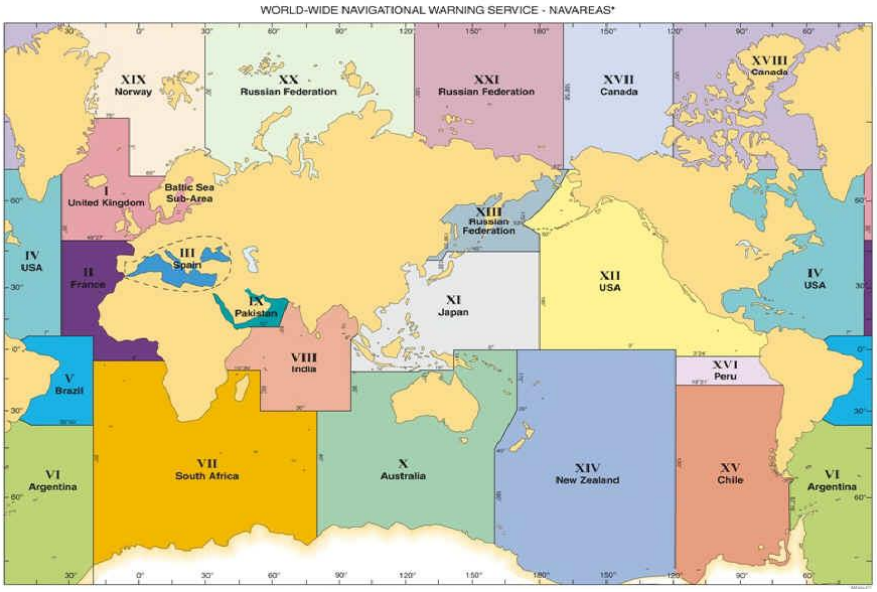
Countries table

Use the countries table to define the countries or coastal areas within a country that contain NAVTEX transmitter stations. This information is presented when viewing NAVTEX messages and NAVTEX schedules and provides a useful indication of the NAVTEX authority in charge of the transmissions.



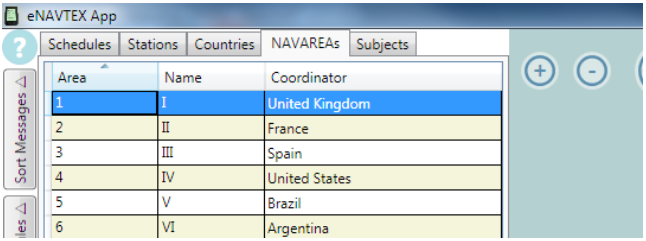
NAVAREAs table

Use the NAVAREAs table to define the geographical area controlled by each NAVTEX coordinator. It is unlikely that you will need to modify the information in this table.



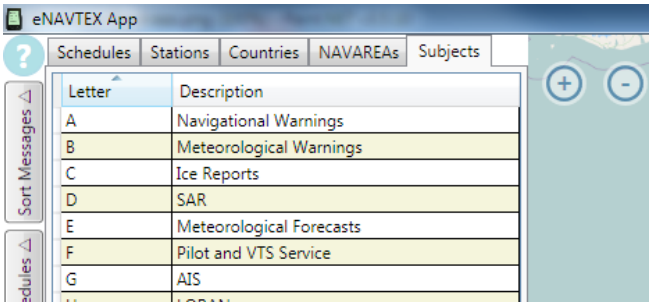
The NAVAREAs table has three columns:

Area	The NAVAREA number in decimal notation.
Name	The NAVAREA name (this is normally the NAVAREA number in Roman numerals).
Coordinator	The country that acts as the NAVTEX coordinator for the NAVAREA.



Subjects table

Use the Subjects table to set the descriptions used for each NAVTEX subject letter (B_2). It is not possible to add or remove entries from this table. It is rare that you will need to modify the information in this table; it may be necessary if one of the unassigned subject letters (M-U) or special service letters (V-Y) is assigned a specific use.

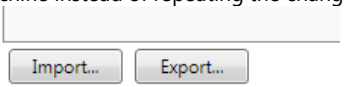


The special service subject letters (V-Y) may be allocated special use by the NAVTEX panel and the description text can be modified to reflect this: e.g. the UK NAVTEX services use subject letter V for the transmission of meteorological readings.

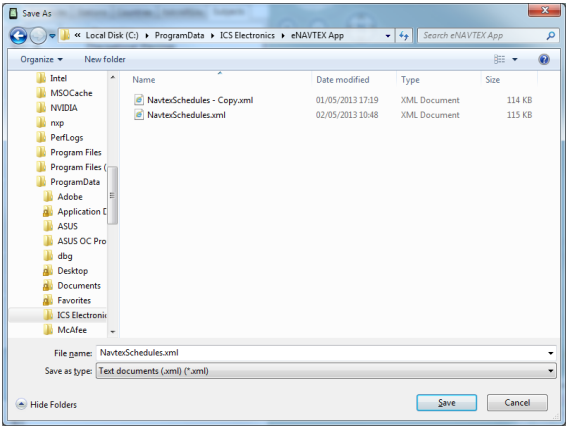
The subject letter T is used by some NAVTEX stations for the transmission of test messages. In this case you may want to change the description to “Test”.

Exporting the NAVTEX database

Use the export button at the bottom of the database page to save the NAVTEX database to a file. After making changes to the NAVTEX database, you may want to back up the database or transfer the data to another machine instead of repeating the changes.



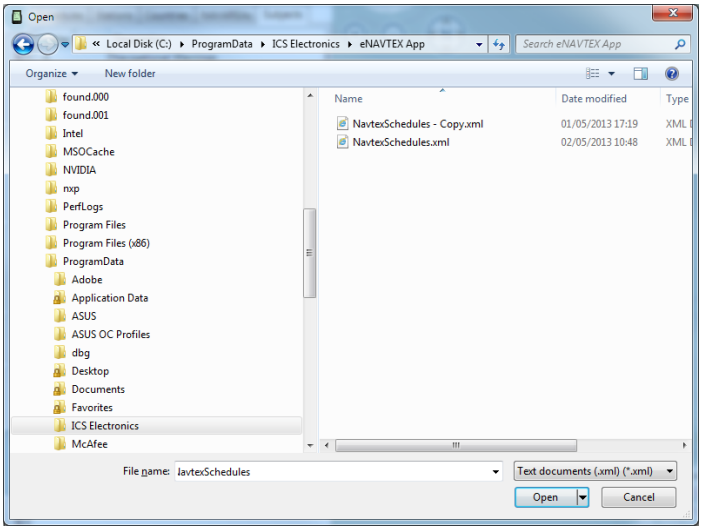
Click the export button and select a filename and folder in which to store the database backup.



Importing an updated NAVTEX database

Use the import button at the bottom of the database page to load the NAVTEX database from a backup file. The NAVTEX messages stored by the eNAVTEX App will remain unaffected. You may want to import a NAVTEX database if you have downloaded an updated NAVTEX database from the ICS website or from another machine where you have made changes.

Note: The contents of the NAVTEX database will be replaced by the data from the imported file. Any changes you have made will be lost. The import operation may take several seconds to complete; please be patient.



About

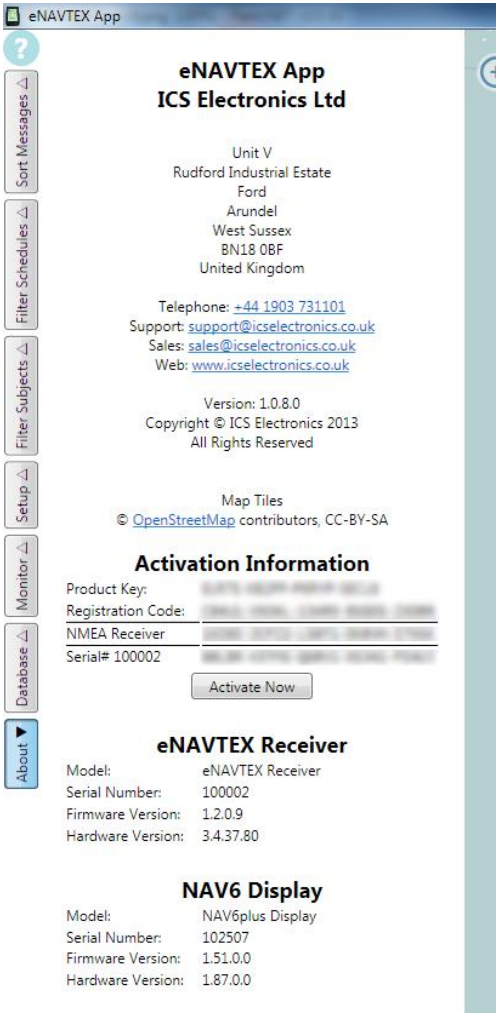
The about panel displays useful information about the eNAVTEX App:

- Useful contact information and links for ICS Electronics Ltd.
- eNAVTEX App copyright and version information
- Chart data copyright information and links.
- Activation information showing the product key and any activation code entered during the activation process.
- Version information for the eNAVTEX receiver connected to the eNAVTEX App.
- Version information for the NAV6plus display connected to the eNAVTEX receiver.

The information on this page may be useful when contacting ICS with a question or when reporting a problem.

The information may be pasted in an email using the clipboard; select the text on the page (Ctrl-A to select all text) and copy to the clipboard using Ctrl-C.

The "Activate Now" button launches the activation wizard to collect the information required to activate the eNAVTEX App.

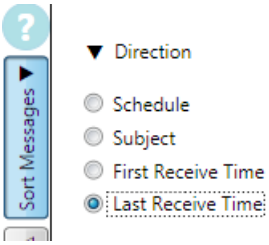


Keyboard Operation

The eNAVTEX App can be operated using the keyboard. The application window is divided into five panels for keyboard operation:

- The configuration and status tabs panel on the left.
- The slide out configuration and status panels displayed via by the tabs.
- The chart panel in the centre.
- The sizing bar between the chart and the NAVTEX message list panel.
- The NAVTEX message list panel on the right.

Use the Ctrl-Tab and Ctrl-Shift-Tab keys to navigate between the application's main panels.
Within a panel use the Tab, Shift-Tab and direction (arrow) keys to navigate to an item.
The currently selected item for keyboard operation is indicated by a change in its appearance; usually this is indicated by a dashed border enclosing the selected item.



Navigation keys

Ctrl-Tab	Navigate to the next panel.
Ctrl-Shift-Tab	Navigate to the previous panel.
Tab	Navigate to the next item within a panel.
Shift-Tab	Navigate to the previous item within a panel.

Special keys

Menu	 Press the menu key to display the context menu for the selected item or panel.
F1	Launches your PDF viewer application with the eNAVTEX user manual.
F8	Centre the chart at your current (GPS) position.
F11	Switch between full screen and window mode. In full screen mode, the eNAVTEX App occupies the whole of the display with no title bar.
Alt-F4	Closes the eNAVTEX App.

Configuration and status tabs

Use the Tab and Shift-Tab keys to select a tab button and press the space bar to open or close the associated slide out panel. When you have opened a slide out panel, use the Ctrl-Tab key to navigate to the panel.

Pressing the space bar on the help button at the top of the panel will launch your PDF viewer application with the eNAVTEX user manual.

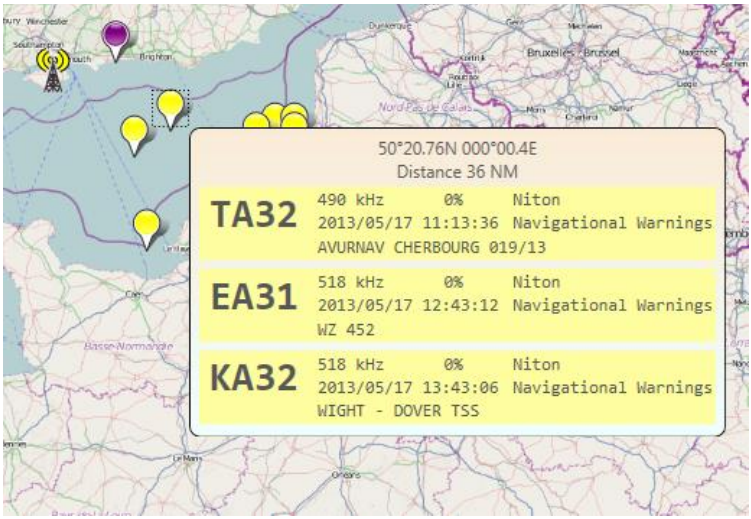
Slide out panels

Use the Tab and Shift-Tab keys to navigate to an item on the slide out panel. Use the Ctrl-Shift-Tab key to return to the configuration and status tabs panel and press space to close the slide out panel.

Space	Toggle the state of a toggle button, make a selection in an option list or follow a hyperlink on the about panel.
Up/Right	Select the previous value in dropdown list without displaying the list.
Down/Left	Select the next value in dropdown list without displaying the list.
Shift-F4	Show a dropdown list.
Escape	Close a dropdown list or context menu.
Ctrl-A	Select all text in an edit box or the about panel.
Ctrl-C	Copy selected text in an edit box or the about panel to the clipboard.
Ctrl-V	Paste the clipboard contents to an edit box.
F2	Edit a row in the eNAVTEX database.

Chart panel

Use the Tab and Shift-Tab keys to navigate to a NAVTEX station or NAVTEX message pushpin on the chart. The current pushpin will display a tooltip with details of the associated station or message.



Space	When a NAVTEX message pushpin is selected, the space key will display the NAVTEX message body in the NAVTEX message list. When the NAVTEX message pushpin is associated with multiple NAVTEX messages, each space key press will display the body of the next NAVTEX message associated with the pushpin. When a NAVTEX station pushpin is selected, the space key will filter the NAVTEX message list to show messages transmitted by the station. A second space key press will filter the NAVTEX message list to show messages from all stations.
Ctrl-Space	When a NAVTEX station pushpin is selected, the Ctrl-Space key will add the selected station to the filtered stations and update the NAVTEX message list.
Escape	Hide the tooltip displayed for a station or NAVTEX message pushpin.
Up	Pan the chart northwards.
Down	Pan the chart southwards.
Left	Pan the chart westwards.
Right	Pan the chart eastwards.
End	Pan the chart south west.
Home	Pan the chart north west.
Page Up	Pan the chart north east.
Page Down	Pan the chart south east.
+	Increase the chart zoom level by 0.5 relative to the chart centre.
-	Decrease the chart zoom level by 0.5 relative to the chart centre.

The sizing bar

Use the left and right arrow keys to increase or decrease the width of the NAVTEX message list.

NAVTEX message list panel

Use the Tab and Shift-Tab keys to navigate to a message in the list. Use the space key to display or hide the message body.

Technical Support

Should you have any question or require technical support, please contact ICS on:

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Note: The information on the about page may be helpful to ICS in assisting with your query and can be pasted into an email.