MaxSea

User Guide

MAXSEA
MARINE SOFTWARE

Version 12.5

Table of Contents

Getting Started

Before attempting installation, you should be familiar with using Microsoft Windows and Windows programs. If this is your first time using a Windows-based program, it is recommended that you familiarize yourself with the Windows environment by reviewing the Windows Basics topic in your Windows help system.

The Getting Started chapter will familiarize you with the most common functions of MaxSea.

Congratulations on purchasing MaxSea

These "Getting Started" instructions are designed to help you become familiar with MaxSea and answer frequently asked questions. Although this guide includes a sizable amount of information, MaxSea is designed to have you up and running within a short time.

This user guide is here to get you started, and do not replace the extensive product documentation found under the HELP menu in MaxSea.

To Ensure Successful Software Installation

If you are installing Maxsea for the first time, you should have the following items:

   - **Installation CD**
   - **Hardware Dongle (Or serial number from order sheet)**
   - **If you purchased MapMedia data (charts, tidal currents or 3D data) you need to obtain an additional code (file) called .mxconfig. This can be provided by your MaxSea dealer, or automatically downloaded if you have an internet connection on the PC running Maxsea.**

DO NOT LOSE DONGLE NUMBER (OR SERIAL NUMBER) WHICH HAS BEEN PROVIDED TO YOU WHEN PURCHASING MAXSEA. MAKE A COPY OF THESE NUMBERS AS WELL AS ALL CONFIGURATION NUMBERS, AND PUT THEM IN A SAFE PLACE.

Technical Support

There are many technical assistance resources available:

> 1 - This Getting Started Guide
>
> 2 - The complete User Guide found under the HELP menu in MaxSea
>
> 3 - Visit **www.maxsea.com** for more information on these products and more. Our web site is a complete independent source of information and companion products for MaxSea. Subscribe to the MaxSea Services under the Register section and you can directly access your own MaxSea Data (My MaxSea), our Knowledge Base and the latest Training Quiz.
>
> 4 - Our technical support team is available if you require additional help installing or using MaxSea.
>
>> For boaters inside North AMERICA:
>>
>> You may visit the FURUNO USA website (www.furuno.com) and click on "**Support**", then "**Ask Furuno a question.**"
>>
>> For boaters outside North AMERICA:
>>
>> You may visit the MaxSea International website (www.maxsea.com)
>>
>> Ask MaxSea Support (**support@maxsea.fr**) a question.

Registration

In order to access free weather data, you need to register your MaxSea software. Just visit **www.maxsea.com** and click on the Register section. You will need your dongle number (or serial number) and the code configuration 1 (Code 1). This information can be found in the MaxSea info screen (go to Help menu and choose "About") or on the printed paper sheet that came with your original MaxSea software package.

Foreword

The software, or the Hardware Key or the Software Key (virtual Dongle) and the following License Agreement are your proof of license.

> **MaxSea** is a powerful electronic chart display software. Except for some countries (as it is the case in FRANCE), an electronic chart is **NOT** intended to be used as a substitute for paper navigational charts issued by official authorities and required by international maritime laws.
>
> Only official government charts and Notices to Mariners contain all information needed for the safe navigation, and as always, the captain is responsible for their prudent use.

> **MaxSea International** does not guarantee the availability and/or the accuracy of the updated daily FORECAST files issued by MaxSea Chopper. Weather forecast files are NOT intended to be used as a substitute for weather information issued by official weather offices.

> In addition, Tides and Tidal current data come from a variety of sources. MaxSea International does not guarantee the accuracy of values. Tidal values derived and displayed on the screen are predictions only and are NOT intended to be used as a substitute for observed data by International Oceanography Centers and the mariner.

> Usage of **MaxSea** implies knowledge and acceptance of this warning by the user.

This is a legal agreement between you (either as individual or entity), the end user, and MaxSea International. If you do not agree to the terms of this Agreement, promptly return the CD ROM package and the accompanying items (including written materials and binders or other containers) to the place you obtained them for a full refund.

What You Should Already Know

Before using MaxSea, you should be familiar with using Microsoft Windows and Windows programs. These instructions will not explain basic Windows operations such as the use of a mouse, the selection of icons, or the use of pull-down menus. If you do not feel comfortable with these operations, please familiarize yourself with these functions before installing MaxSea. We also recommend that you review the Windows Basics section under your Windows Help menu.

MaxSea® SOFTWARE LICENCE AGREEMENT

Upon opening the package or initially installing the MaxSea® software disk, a legal agreement between you (either an individual or entity, hereinafter, the End User), and MaxSea International S.A.S. is in effect. If you do not agree to the terms of this Agreement, promptly return the disk package and the accompanying items (including written materials and binders or other containers) to the place of purchase for a full refund.

1. GRANT OF LICENSE.
(a) Dedicated Use. MaxSea International grants to the End User the nontransferable, nonexclusive, right to use one copy of the purchased MaxSea® software (hereinafter the "Software") on a single computer ("Dedicated Computer"). The End User may transfer the Software to another Dedicated Computer owned by the End User; PROVIDED that the End User does not do so more often than once every (30) days and no copies of the Software purchased herein are retained for use on the original Dedicated Computer or any other computer. However, if the End User has selected a hardware dongle key, then that individual may also temporarily use the Software on an additional portable or home computer owned by the End User.
(b) Transitory Use. Notwithstanding the above (a), End User may transfer the right to use the Software to another End User, if the new End User of the Software agrees to have physical possession and abide by the terms of an original MaxSea® Software License Agreement at all times during the use of the Software.

For the purposes of this section, "use" means loading the Software into RAM, as well as installation on a hard disk or other storage device (other than a network server).

2. COPYRIGHT.

The entire right, title, and interest to the Software, disk, manual, and all updates, enhancements and maintenance modifications are owned by MaxSea International, shall remain with MaxSea International, and are protected by United States copyright laws and international treaty provisions. Therefore, the End User must treat the Software like any other copyright material (e.g., a book or musical recording) except that you may either:

(a) make a single copy only of the Software solely for backup or archival purposes; or

(b) transfer the Software to a single hard disk, provided you keep the original solely for backup or archival purposes.

You may not copy the written materials accompanying the Software.

3. OTHER RESTRICTIONS.

This MaxSea® Software License Agreement is proof of license to exercise the rights granted herein and must be retained by the End User. You may not rent or lease the Software, but you may transfer your rights under this License Agreement on a permanent basis, provided you transfer this License Agreement, the Software, and all accompanying written material; retain no copies; and the recipient agrees to the terms of this License Agreement. You may not reverse engineer, decompile, or disassemble the Software. If the Software has been updated, any transfer must include the update and all prior versions.

LIMITED WARRANTY

MaxSea International warrants that:

(a) upon opening the package or initially installing the disk with the Software purchased, the Software will perform substantially in accordance with the accompanying written documentation for a period of ninety (90) days from the date of receipt; and

(b) Any MaxSea International hardware accompanying the Software will be free from defects in materials and workmanship under normal use and service for a period of one (1) year from the date of receipt. Any implied warranties on the Software and MaxSea International hardware are limited to ninety (90) days and one (1) year, respectively, with time of the essence. Some states do not allow

limitations on duration of an implied warranty, so the above limitation may not apply.

END USER REMEDIES.

MaxSea International's entire liability and the End User's exclusive remedy shall be, at MaxSea International's option, either:

(a) return to the End User of the price paid; or

(b) repair or replacement of the Software or MaxSea International hardware that does not meet MaxSea International's Limited Warranty and that is returned to MaxSea International with a copy of the End User receipt. This Limited Warranty is void if failure of the Software or MaxSea International hardware has resulted from accident, abuse, or misapplication. Any replacement Software will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. These remedies are not available outside of the United States of America.

DISCLAIMER

Except as expressly set forth herein, MaxSea International makes no warranties, express or implied, regarding or related to the licensed Software or material furnished.

LIABILITIES

MaxSea International shall not be liable under any claim, demand, or action under this Agreement for any special, indirect, incidental, exemplary, punitive, or consequential damages.

RELIEF

End User acknowledges that any unauthorized use or disclosure of the Licensed Software is in violation of this Agreement may cause MaxSea International irreparable damage, and End User agrees not to contest MaxSea International seeking of injunctive or equitable relief.

TRADEMARK

MaxSea® is a registered trademark of MaxSea International. No license, right, or interest is granted to End User in such trademark.

LAW

The validity, construction, and performance of this Agreement shall be governed exclusively under law of The State of Washington.

AGREEMENT

This Agreement represents the entire Agreement between MaxSea International and the End User and can not be changed except in writing and signed by both parties.

The information in the Software documentation and the specifications included therein are subject to change without notice.

Should you have any questions concerning this Agreement, or if you desire to contact MaxSea International for any reason, please write: MaxSea International, Technopole Izarbel, 64210 BIDART, FRANCE.

Installing MaxSea

Hardware and System Requirements

A PC must meet the following system requirements to work with MaxSea. Please verify these requirements before installation.

	Minimum	Recommended	MaxSea's Choice
Computer Processor	Processor 800 Mhz	Intel® Pentium® M , Intel® Pentium® IV or equivalent, greater than 1GHz	Intel® Pentium® M greater than 1.5GHz Intel® Pentium® IV or equivalent, greater than 3GHz
Motherboards	-	Chipset 800MHz	Intel® 915 + chipset 800/533 MHz FSD
USB OR Parallel Port(s)	Serial or USB port(s) - for connecting navigation equipment (NMEA interfacing): an adapter must be used for USB connections - see the section on connecting equipment for more information. If a DONGLE is being used to license MaxSea, a dedicated parallel or USB port is necessary.		
RAM Memory	256 MB SDRAM	**DDR 512 MB**	2 X 512 MB DDR-SDRAM PC3200
Video card	directX9 compatible video card (64MB)	**directX9 compatible video card (128MB)**	DirectX9 compatible 256 MB PCIExpress
Hard Disk	20 GB	40 GB	120 GB ATA133
Network	Ethernet 10 bits	Ethernet 100 Mbits	Giga-bit LAN
Screen color	**Screen color, 32-bit color display**		
Optical drive	24X **CD ROM** for installing MaxSea, **DVD** for installing US NOAA Raster charts		

Operating System	Windows® 2000 with SP4	Windows® XP HOME VERSION	Windows® XP PRO

MaxSea Software Licensing

There are three different methods of licensing a copy of MaxSea: a Software Key (no Dongle), a parallel Dongle, or a USB Dongle.

Using Software key (Virtual Dongle)

If you have decided to license MaxSea with a software-based key, the software registration routine is started when MaxSea is first installed.

There are a number of ways to register your software and get the Site Key:

- You can access the Internet; this is the fastest way to activate your software.
- You can use email activation first time by sending your request, after receiving your Site Key, you will have to enter it with using the Manual Activation system.
- You can ask for a Site Key to your dealer or to our services providing both your Serial Number and Site Code (if you choose the Manual Activation, the Site Code appears in the Manual Activation dialog and you can copy it to clipboard).

IMPORTANT – The Site Key registration only has to be done one time per installation. If you have to install your program again on the same or another computer, MaxSea International allows you to store your license on our servers to retrieve it later.

Please refer to Installation Help chapter to learn more on how to obtain a Site Key to register your MaxSea software.

Using a Hardware key (Dongle)

Advantages of Hardware Dongle - A Dongle allows MaxSea to be installed on any number of computers for back-up and planning purposes. MaxSea can be run on a home/office computer, then on the boat's computer, by simply plugging the dongle into the computer being used.

- If You Have a Parallel Dongle (25-Pin printer Connector)
With the computer turned off, plug the parallel dongle you received with MaxSea into the parallel port on the computer. (This is often where a printer cable is plugged in.) The dongle is a "pass-through" connector which allows simultaneous connection of a printer. Simply plug the dongle in first, and then plug the printer cable into the Dongle.

IMPORTANT - Make sure the computer is turned OFF when plugging or unplugging a parallel Dongle.

- If You Have a USB Dongle (Blue or Purple),
Do not plug the USB dongle into the computer until after MaxSea has been installed. Once MaxSea is installed, the USB dongle may be plugged and unplugged with the PC power on.

Tip – The USB dongle which is shipped out with MaxSea will work with USB hubs (small boxes that add more USB ports to a computer). Note, however, that many USB-to-serial adapters will not work properly when connected to a hub. Also, some USB to serial connectors do not transmit NMEA data: make sure your connector is NMEA compliant. Test your hardware configuration before you leave the dock. More information about serial adapters can be found in the "Connecting a GPS" section p16.

Upgrading Your Existing MaxSea

IMPORTANT - If it is the first time you are installing MaxSea, please proceed to "Installing MaxSea" on the next page.

If you are already running a version of MaxSea, follow these instructions to upgrade your software.

1. **Backup MaxSea data stored in the computer's MY DOCUMENTS folder:**
It is strongly recommended that you backup the MY DOCUMENTS folder on a regular basis - and especially before upgrading. PC's often include a built-in CD-burner (CDR drive). This is probably the most convenient way to backup your data.
Files which store any tracks and marks as well as logbook data are found in the "MY DOCUMENTS" folder. You do not need to back up your charts. Charts typically take up a lot of space, and can be restored if necessary from their installation CD.

2. **Uninstall the previous MaxSea Version to free space on your hard disk**

- MaxSea version earlier than V.10

Select ADD/REMOVE programs from the Windows Control Panel found under "START | SETTINGS" menu. Select the MaxSea entry and click on the CHANGE/REMOVE button. Follow the instructions on the screen to remove the software.

-Other MaxSea versions

IMPORTANT - If your previous version worked with a **software license** (no dongle), you must install the new version in the same folder. Never manually delete the **"MaxSea"** folder.

- Insert the MaxSea CD-ROM. If the installation screen does not appear, open up "My Computer" double click on your CD-ROM drive, then open (double-click) on "Setup.exe".
- Click on Installation, choose your language, and follow the instructions on the screen.
- Three options are displayed: Modify, Repair, Remove. Select Remove and click Next and follow the instructions on screen.

3. **Restart your computer.**

Installing MaxSea

IMPORTANT - If there are any devices connected to a serial port (power management device, Palm Pilot synch, etc.), disconnect them. (These can be reconnected after MaxSea is run for the first time.) Ensure the computer's CD ROM is clean - the main reason that installations fail is that the CD ROM is dirty.

- Insert the MaxSea installation CD. If the installation screen does not appear, open up "My Computer" double click on your CD-ROM drive, then open (double-click) on "Setup.exe".
- Choose your Language and click on Install.
- Keep clicking "Next" and answering questions when prompted until the installation routine is complete. In most cases, all of the defaults may be accepted. The software, some basic charts, and the User Guide will be installed.
- Restart your computer if prompted to do so.
- If you have a USB dongle (hardware key), now is the time to plug it into your computer. Windows will find it, and ask for drivers. Accept the prompts and the drivers will automatically be loaded.

MaxSea is ready to run. There are several ways to start MaxSea: You can run MaxSea by double clicking on the **MaxSea icon** on the computer's desktop, or click **Start | All Programs | MaxSea** menu.
When you start the program for the first time, the Software Key Activation Manager main screen appears if you have forgotten to plug the Dongle into your computer, or if you are using a Software Key licensing.

Updating Configuration Codes

If your Dealer has not preconfigured your dongle, or if you use a software key (virtual dongle), the "**ConfigurationCodes Internet"** tool will start automatically the first time your run MaxSea. A dialog box will alert you that the Internet connection is beginning to search for updating codes on our server. One of the following processes will need to take place:

If your computer is connected to the internet, the configuration codes will be automatically downloaded and installed using the "**ConfigurationCodes Internet"** process.

If your computer is not connected to the Internet, "Error 203" appears and warns you that Internet connection has failed. Message asks for searching the (*.mxconfig) file that was given by your dealer or sent by email.

Note: On rare occasions, MaxSea could detect that the Hardware key and software do not match. In this case, you must launch the DongleUpdate program via the following procedure:

- Make sure you don't have any programs running.
- Go to the Windows "**Start**" menu.
- Click on "**Programs**".
- Click on "**MaxSea Utilities**" then "**ConfigurationCodes Internet**"
- If your computer is connected to the Internet, codes will be automatically installed.
- However if your computer is not connected to the Internet, "Error 203" appears and warns you that Internet connection has failed. Message asks for searching the (*.mxconfig) file that was given by your dealer or sent by email.

Software User Guide

> **OVERVIEW**
> The Help Viewer provides an integrated table of contents, an index, and a full-text search feature so information can be found easily. Book icons open to reveal topic entries and sub-books. The Help Viewer has the added benefit of showing the Table of Contents, Index, or search results at the same time a Help topic is being viewed. This maintains focus on the Help system and allows view of all other applicable Help topics at a glance.
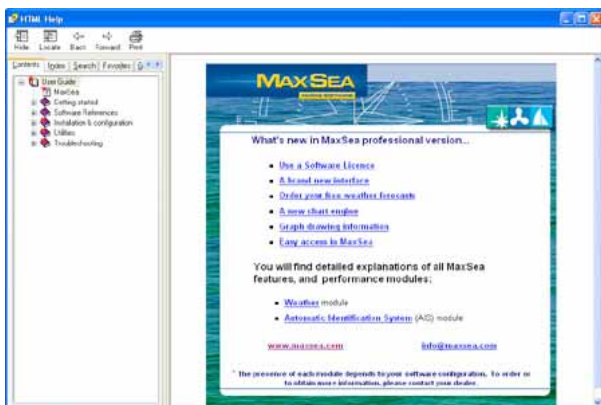
Two ways to open the Help software

With **MaxSea open,** select **[User Guide]** from the **[Help]** menu or just press the **F1 key**.
From the **[Start]** windows menu, select **[Programs] > [MaxSea Utilities] > [User Guide]**.

To Find a Help topic

In the Help Viewer, click one of the following tabs:

Contents tab
To browse through the Table of Contents, click the Contents tab. Double-click the book icons to reveal topic entries and sub-books.
Click a table of contents entry to display the corresponding topic.
Index tab
To see a list of index entries, click the Index tab, and then either type a word or scroll through the list. Topics are often indexed under more than one entry.
Double-click an index entry to display the corresponding topic.
Search tab
To locate every occurrence of a word or phrase, click the Search tab, type a word or phrase that you want to search for, and then click "List Topics." See "Find it fast" for more information about refining and narrowing the search.
Double-click the search results to display the corresponding topic.
There are three options for searching: Search previous results, Match similar words (checked by default) and Search titles only.
Favorites tab
To bookmark a topic, use the Contents, Index, or Search tabs to locate and then display a topic. Click the Favorites tab, and then click Add to save the topic title to the Topics list.
Double-click a bookmark in the Topics list to quickly display the topic.
Glossary tab
To find a term in the glossary, click on the term. The definition appears in the frame bellow.

Print Help Software:

To print a help topic, on the **Contents tab** select it and click **Print** on the Help toolbar.

To print all topics **within a book**, on the **Contents tab**, select the book. On the Help toolbar, click **Print**, and check **Print the selected heading and all subtopics** and click **OK**.

To print all the Help manual references, Acrobat Reader is required. You will find two manuals (*OperatorManual.pdf* and *InstallationManual.pdf*) under **[Windows], [Programs], [Maxsea Utilities]**.

Connecting a GPS receiver

In most cases, connecting a GPS to a computer is very simple, and is accomplished by connecting a serial cable (normally supplied by the GPS manufacturer) to the serial port on the PC.

The serial port is usually a nine-pin male port on the back of the computer, and is often identified by an "IO" or "COM" symbol.

If you want to connect MaxSea to NavNet, please refer to the appendix at the end of this manual (p. 74)

Serial to USB Cables

Newer computers (purchased after 2005) – especially notebooks or tablet PCs – may not include a serial port. One can be added by using a serial-to-USB adapter, which can be obtained from most MaxSea distributors, computer stores, or on-line computer stores. Adapters manufactured by KeySpan or Fitstream are preferred.

Connection Details

The PC's serial port (**RS 232** type input/output port on COM) is used for serial data input. Connect the GPS to this port using the appropriate cable. This serial port must comply with **RS 232** type serial data protocol standards.

The connection of a GPS to the computer is usually a 2-wire connection with **NMEA 0183** output from the GPS connected to the input (RxD, pin 2) and ground (Gnd pin 5) pins of the computer's serial port.

IMPORTANT - If your GPS has a **RS 422** type connection, this process cannot be used (you will need a RS422 to RS232 converter). Please contact your MaxSea dealer to obtain one.

Connection diagram for computer serial port (9 Pin Type D Connector)

Pin	Signal	Information
2	Data reception **R**x	Connection to GPS NMEA output
3	Data transmission **T**x	Connection to automatic pilot or other listener
5	Ground **GND**	
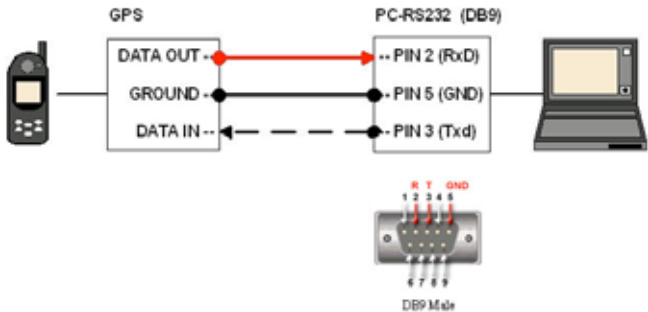
Installing Charts

- When using Maptech, NDI, or Softchart brand charts, we recommend that you create a folder called "CHARTS" under the My Documents folder in your PC, and then copy the charts from the CD into this new folder. Maptech BSB4 charts need to be activated using the Setup program found on each chart CD. This is easiest to do with an Internet connection. If you do not have an Internet connection, contact Maptech at the telephone number located on the chart request code found in the Maptech box.
- Mapmedia MM2 charts use an installer program that will automatically create a folder called "Mapmedia .mm2" in your PC's "My Documents" folder.
- NOAA USA raster charts DVD uses an installer that automatically creates a folder called "BSB_ROOT" in My Documents.
- ARCS charts are installed utilizing MaxSea Utilities.
- C-Map CM/93 charts are installed utilizing the Manage CM93ed3 & S57 Charts… option under File on the MaxSea menu.
- C-Map NT charts are installed using the tools on the C-Map CD "NTPC Selector" installation program. To install these charts, open (at least one time) the C-Map planning charts in MaxSea. To do this, choose "Open Charts" in the File menu and select CMAP NT. Quit MaxSea, and then launch the NTPC selector software from the C-Map CD. Be sure to have the MaxSea dongle plugged in the computer. Unlock the charts using the NTPC selector. When charts are unlocked, they will be available in MaxSea. You may need to reopen them.

To open any Charts in MaxSea, simply choose "Open Charts" in the File menu and then select the charts you want to open.

IMPORTANT - If you install Mapmedia charts v1, Mapmedia MM2, Mapmedia 3D bathy data or Mapmedia Tidal Currents data, you have to license the corresponding data. To register data, close MaxSea, go to the Windows "**Start**" menu. Click on "**Programs**". Click on "**MaxSea Utilities**" and choose "**ConfigurationCodes Internet**". Codes are automatically installed if you computer is connected to Internet. If no connection is available, "Error 203" appears and warns you that Internet connection has failed. Message asks for searching the (*.mxconfig) file that was given by your dealer or sent by email.

Running MaxSea for the First Time

IMPORTANT - MaxSea will not run if protection is not activated (Hardware protection with the "Dongle" or software protection with the "Software License").

There are two ways to launch Maxsea:
Double click **MaxSea icon** on the Windows desktop. Or, go to the **[Start]** Windows menu, point to **[Programs]** and then click the MaxSea entry.

Electronic Chart Notice
When starting MaxSea for the first time, a warning will be displayed, showing a reminder that the electronic chart display capabilities are not in most cases a substitute for paper charts. To acknowledge this warning, click on the I AGREE button. The DON'T SHOW AGAIN box may be checked to not show this warning upon the start of MaxSea.

MaxSea Registration
If you are connected to the Internet, you register MaxSea at this time. Free registration is necessary to access weather data. Click on "**REGISTER HERE AND GET ACCESS TO OUR VARIOUS SERVICES.**" You can also mail or fax your registration to MaxSea International. Check the DON'T SHOW AGAIN checkbox to suppress the Help screen at future startups. To activate this screen again, select USER GUIDE from the HELP menu. Or, select DISPLAY USER GUIDE AT STARTUP.

Opening Charts
When Maxsea is started, a large scale low resolution planning chart "Planisphere" is opened by default. Depending on your MaxSea software, (C-Map or Mapmedia,) you can open either C-Map or Mapmedia planning charts. Click on "Open Charts" located under the "File" menu, then choose either "C-Map NT" or "Chart:Mapmedia2", which are 1:10 million scale World Charts. Note - More detailed charts, like free USA NOAA charts, will be necessary for actual details planning and navigation. To open USA NOAA raster charts, first install them with the DVD installer, then click FILE, then "Open Charts." Then select "Maptech&NDI.".
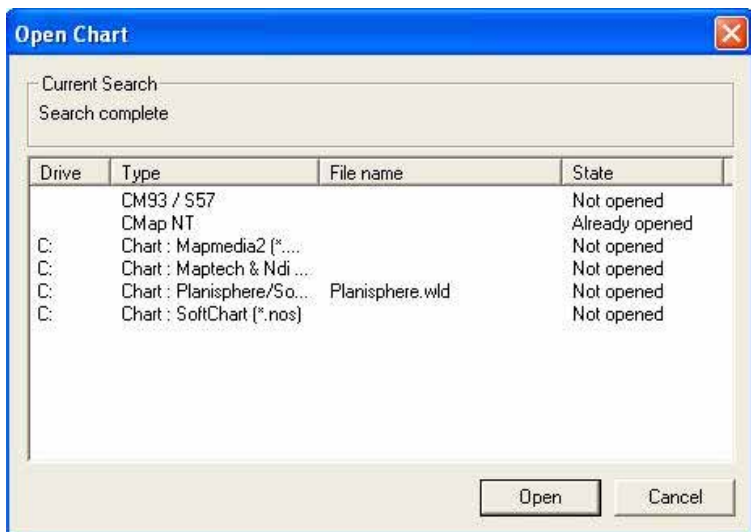
In MaxSea, you will be able to switch between Raster or Vector charts - press the Vector Charts [icon] or Raster charts [icon] buttons to switch.

Looking at the Chart Desktop

MaxSea opens into a familiar charting environment (Figure below). MaxSea will display many different types of charts simultaneously. The charts are arranged according to their geographical location and their scale of representation. Let's take a brief tour around the MaxSea **Chart Desktop:**
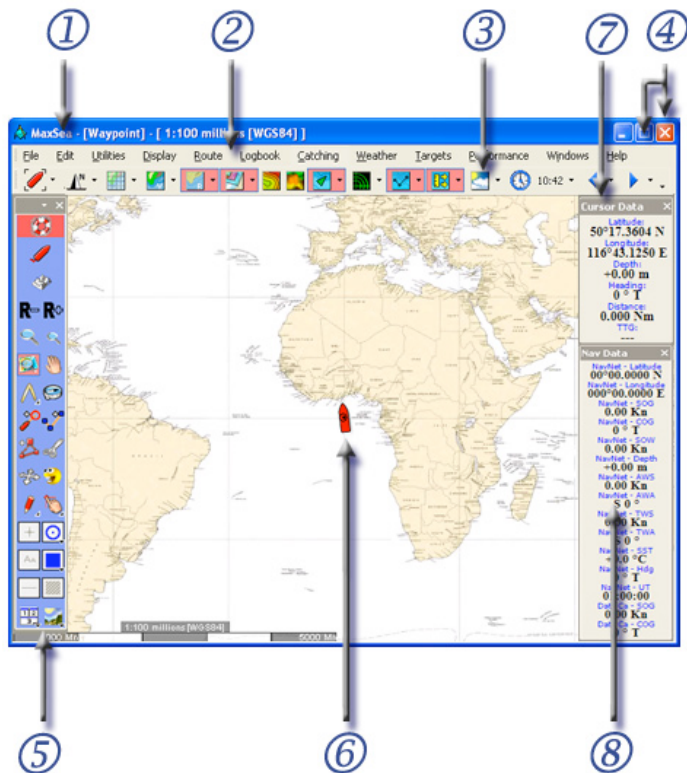
The Chart Desktop (1) is the open window and consists of six parts:

The **Chart Window** is docked at the top of the opened window by default. The datum, type of chart and scale are displayed in the MaxSea/Chart title bar (ex: [WGS84], [Raster 1:25 million]). Several chart windows can be opened at the same time. The **GPS/vessel symbol (6)** is shown in each

opened chart window. It shows the boat position derived from the GPS data connected to the PC.

The **Menu bar (2)** organizes a number of drop-down menus which allow you to configure and manage MaxSea data, setup and presentation.

The **Chart Toolbar (3)** contains a series of buttons which toggle on/off different layers. If a button is surrounded with red, it means that the button is active and the corresponding layer will be shown on the chart. When there are multiple chart windows in use, the Chart Palette applies to the active window. If a button is not present, the corresponding module has not been purchased.

The **Toolbar (5)** is the tools control center. Each tool does a specific job and can be selected with a left click of the mouse. When a Tool is selected, the cursor changes accordingly and the active Tool icon is surrounded with red.

The **Cursor Data Box (7)** displays cursor position. By default, this data is displayed on the right, or it is docked to the edge of the window. Available data includes latitude, longitude, Depth (if 3D data is available), Distance and Bearing between the cursor and the vessel and the Time to Go (TTG) based on the current vessel speed.

The **Nav Data Box (8)** displays GPS data and any other instrument(s) input you have chosen to show. This data box is displayed on the right by default, or is docked to the edge of the software window.

Tool tips are temporarily shown when the cursor is placed on a Tool Palette item or button for a few seconds. Use these tool tips when you want to see a brief description of Tools and Buttons.

Notes:
(1) - All the palettes in the chart desktop window can be displayed in two different modes; "Floating Palette" or "Docked". Refer to "Setting your work area" paragraph.
(2) - If raster chart data is not available for a selected scale, MaxSea will enlarge or "over-zoom" the available raster data of the larger scale chart. In this case, the text [Over Zoom] appears in the Chart window title bar.

Chart Toolbar

The standard **Chart Toolbar** contains buttons which toggle display data on/off, according to the installed modules. The presence of a button indicates that the specific module is installed.
By default, the chart palette appears along the top of the MaxSea screen.
To move it, click and drag the ▤ symbol (on the left) to detach it from the menu bar.

There are two types of buttons in the Chart Palette:

- **Simple Buttons** which allow direct access to a specific function.
- **Pull-down Menu Buttons** allow you to choose between items according to the selected function.

If a button is shaded red, it means that the button is active and its corresponding layer will be shown on the chart.

The buttons shown on your Maxsea software depends on your software configuration. The omission of a button means that the corresponding module is not available in the software. To get more information, please contact your Maxsea dealer.

Use the corresponding button from the charts palette to turn on/off different functions:

 - **Auto Center** activation button toggles on/off chart auto-centering, placing the vessel in the center of the chart screen (related topic: center mode).

 - **Chart orientation** button chooses the display orientation, of which three modes are available: "North Up," "Head Up," and "Course Up." (The North up mode is selected by default).

 - **Grid information** toggles the grid display over the chart ON/OFF.

 - **Vector Charts Information** opens vector charts and displays a drop-down list of opened vector chart types (CMap NT /CM93)

 - **Raster Charts Information** displays a drop-down list of active chart types (the Planisphere.wld is displayed by default).

 - **Layer Information,** shows a drop-down list of available user data layers (PTF File) and shows/hides user data on the chart.

 - **2D Activation Button** activates the 2D control palette for setting and displaying 2D data on the chart (shading)

 - **3D Activation Button** toggles the 3D window on/off.

 - **Target Information** shows a drop-down list of available Target data layers and shows/hides targets on the chart.

- Radar Overlay Information toggles radar display on/off. The down arrow to its right is a drop down list of available Radar display control such as the Radar rings, etc…

- Waypoints and Routes Information is a drop-down list of available Waypoint and Route Layers.

- The **Tides and Tidal Currents Button** toggles on/off tides for main ports of the world and allows you to turn on/off Tidal Currents vectors from available Tidal Current layers list.

- **Weather Information,** once a weather file is loaded, click on this button to display it on the chart. If you click on the arrow to the right of the weather button, you will be able to choose which weather types you want to display.

- **Time Information -** When displaying weather or tides/currents information, this control allows you to view future or historical data. The clock turns red when the selected date/time is different from the current time.

- Time Period Information allows viewing Weather and Tides/Currents data for time periods earlier or later than current time. Click on the down arrow (on the right) to change time step interval.

Chart Toolbar Options, click on the small down arrow at the end / right of the chart toolbar to access the toolbar's properties menu. From the properties menu, you can add or remove tools, display or hide labels on standard buttons or large buttons, and change the transparency of the palette. Note that this option is only available when the palette is shown in a floating palette configuration layout (undocked.)

Toolbar

MaxSea utilizes tools and buttons to make operation simple and easy. The "Tools Bar" displayed on the left side of the screen will be used frequently.

The toolbar is displayed vertically on the left-hand side of the screen by default. It includes both tools and buttons that allow you to work on an electronic chart as you would on a paper chart.

Select any tool or activate any button on the palette by clicking on it.

The Toolbar consists of six parts:

1. Title Bar (small arrow and "X") with access to the display configuration parameters.
2. Activation Buttons (More Activation buttons might appear in the Toolbar according to the software configuration),
3. Navigation Tools
4. Capture and Modification tools
5. Marks / objects styles setup
6. Additional Display options

TIPS – Understanding the difference between a tool and a button will make using MaxSea much easier. When selecting a tool from the tools palette, the mouse cursor will change accordingly and its function. For example, when the chart panning tool is selected, (hand) the cursor changes to an open hand. Left mouse click (and hold) on the chart with the panning tool (hand) to drag the chart around. To enter a waypoint on the chart, change to the Waypoint tool by clicking on the Pencil. Then when the mouse is left clicked on the chart, a waypoint will be recorded. Some icons on the tools palette are buttons (Zoom+ and Zoom-, for example.) When a button is clicked, MaxSea responds immediately. For example, click on the Zoom In button, MaxSea

---

will magnify the chart immediately. Any tool that was previously selected (such as the panning or waypoint tool) will stay enabled and the function will not change when clicking on a button.

Accessing Display Configuration Parameters

The title bar allows you to access and edit toolbar properties:

1. Left-clicking on the arrow in the upper right-hand corner of the tool palette will display a tool checklist. Check the tools that you want to appear in the tool palette.

2. To return to the default display, choose **Reset Toolbar.**
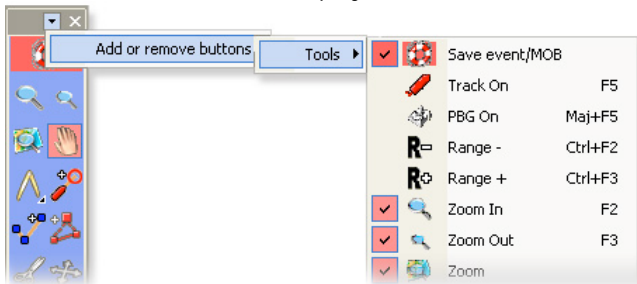
3. Left-clicking on the "X" in the upper right hand corner will close the Toolbar. To re-open the Toolbar, go to [**Display]** on the menu bar and choose **[Toolbar]**.

4. Right-click on the title bar to call up the contextual menu, which allows changing the appearance of the Toolbar (buttons small/large, six levels of transparency).

Activation Buttons

 Man Over Board function

Single click on **MOB** button to drop a waypoint at current vessel position. Double click to activate the "Man Over Board" function.

(For more information, see related topic under the Help: **Man over board function.**)

 Track On/Off function

Click on the **Track** button to activate or stop track recording.
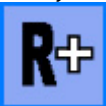
(See p.66 for more information)

 & **Zoom in or out functions**

The zoom function magnifies or reduces the chart scale.

(See p.50 for other methods of chart scaling)

 PBG On/Off function

Click on the **PBG** button to activate or stop the Personal Bathymetry Generator

(For more information, see related topic under the Help: **Import & PBG)**
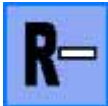
 & **Range plus and Range minus functions**

The **[R-]** button decreases the radar range; the **[R+]** increases it. When the Range function is operated in MaxSea, note that the Range will be simultaneously applied to the radar range on the NavNet display.

Note (*): the omission of a button means that the corresponding module is not available in the software. Specific buttons will appear only if your software is configured with corresponding modules such as PBG module or Radar Overlay module.

Navigation Tools

Magnifying tool

Click the Magnifying tool to change chart scale. Simply click/drag an area on the chart with this tool to zoom into it. Make a simple click on the chart to zoom out, see related topic under the Help: Scale choice. (See p.50 for other methods of chart scaling)
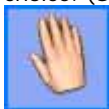
Hand tool

Click the Hand tool to pan charts and access chart data. Single click and press the left mouse button to grab the chart and pull it to expose a new area. Double click the left mouse button to access the Chart Properties box. (See p.53 for other methods of chart scaling)
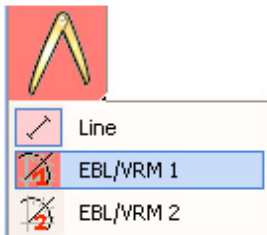
Divider tool

Draw bearings and ranges in two different modes:

If the "**Line**" option is selected, you can measure distances and true headings to and from any point to another on the chart. Click once on a point on the chart, then left click on another point, and MaxSea will give you the distance between the two points. To measure

29

distance between your vessel and any point on the chart, simply double click on the chart.

If the "**EBL/VRM**" option is selected, you may measure distance and bearing of up to two targets. Choose EBL / VRM 1 for the first target and EBL / VRM 2 for a second target.

To **erase** the divider line, **double-click** on the Divider Tool

(For more information, see related topic under the Help: Using EBL and VRM calculations.)

Bearing tool

The Bearing tool is a powerful navigational tool, useful in confirming position and checking a location on the chart. To **erase** the bearing line, **double-click** on the Bearing Tool

(For more information see related topic under the Help: Bearings)

GOTO tool

This tool provides a simple method to place a QuickWaypoint at the cursor position, then actively navigate to that point. Double-click on this tool to Cancel any Active Route. (See p.59 for more information)
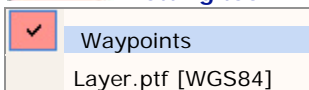

Route tool

This tool provides a simple method of creating a series of connected QuickWaypoints. When completed, this is a called a route. Make sure to Double-click on this tool before creating a new route to ensure that there are no routes that are currently "selected".

(See p.55 for more information)

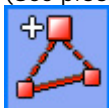**Capture and modification tools**

 Plotting tool

This tool allows you to create Waypoints, marks, lines and areas. These items are stored and displayed in "layers" on your Maxsea display. When you click and hold your mouse down on this tool, you will be able to choose an active layer, of which there are two different types:

- Waypoints layer: Using the pencil tool while this layer is active will allow you to record waypoints (points that will be navigated to or used in a route) on the chart
- PTF layer file: Using the pencil tool while this layer is active will allow you to draw marks, circles, lines or areas (according to user preferences) to a file. Although these marks will appear on Maxsea, they can not be set as destinations or used in a route.

Waypoints and marks may be saved, named and categorized, which will allow you to save and call up different display scenarios and show only the marks you want to see. For example, you might want to only show marks and lines related to fishing a particular area by saving and creating marks and lines in a layer file named "fishing." To make a new layer, click on the "File" menu of MaxSea, select "New" and choose the type of layer you want to create.

(See p.63 for more information)

 Insertion tool

Used to insert a waypoint or a point in a route leg or line.

(For more information, see related topics under the Help: Modifying marks and Modifying a route)

Position Modification tool

Click the tool, then select and move any object, point, or waypoint.
(For more information, see related topics under the Help: Modifying
Marks & Modifying a Route & Dead Reckoning function)

Delete tool

Used to remove unwanted objects. Select the tool, then click on the
object you want to delete.
(For more information, see related topics under the Help: Modifying
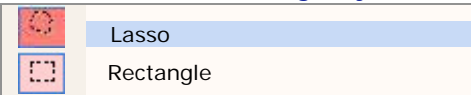Marks & Modifying a Route)

Split tool

The split tool is used to cut a line, track or route into two parts.
(For more information, see related topics under the Help: Cutting a
line in two parts or Cutting a track in a half)

Select tool (Finger symbol)

	Lasso
	Rectangle

The finger tool allows you to get detailed information on an object.
Double click on any object (Waypoint or Tide icon, for example.) You
may also select multiple objects by utilizing these two methods:
1. Draw a "Rectangle" around objects
2. Using the "Lasso," you can draw freehand selection areas.
  (For more information, see related topics under the Help: How to
select Marks & How to get Information on a Mark)

Marks / Objects Style Set Up
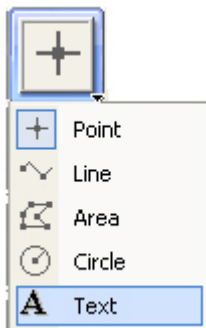
Object type

Click on this button to pull down the plotting object type menu, which will determine the type of mark drawn by the Pencil tool. You can then easily select a plotting object, which can be a point, line, area, circle, text or drift buoy. Once selected, the object type you selected will appear on the button. This menu is only available when a PTF layer file (Mark Layer) is selected with the Pencil Tool.
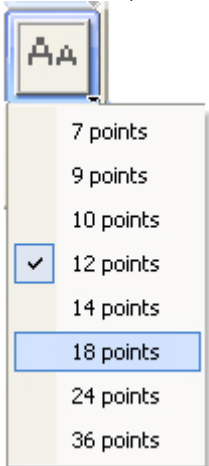(For more information, see related topic under the Help: Adding personal marks)

Plotting Icons

Use this button to choose plotting Icons / symbols for Waypoints and Marks. The active icon / symbol will appear on the button once it is selected.

(For more information, see related topic under the Help: Adding personal marks)

Text Font Size

Use this menu to choose text font size when you are applying text onto your user chart layer. This menu is only available when a PTF layer file (Mark Layer) is selected with the Pencil Tool.
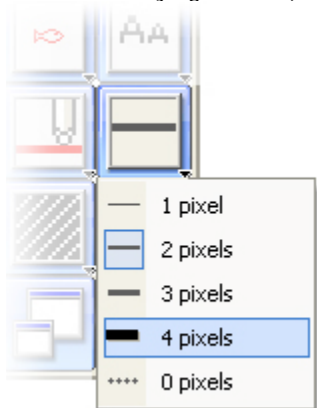
(For more information, see related topic under the Help: Adding personal marks)


Plotting Color

Click this button to select the color for your Marks and Waypoints.

(For more information, see related topics under the Help: Modifying Marks & Modifying a Route)

Plotting / Drawing Line Width

Click this button to choose a line width. Once selected, all lines drawn onto your user chart layer will use this line thickness. This menu is only available when a PTF layer file (Mark Layer) is selected with the Pencil Tool. (For more information, see related topic under the Help: Adding personal marks)
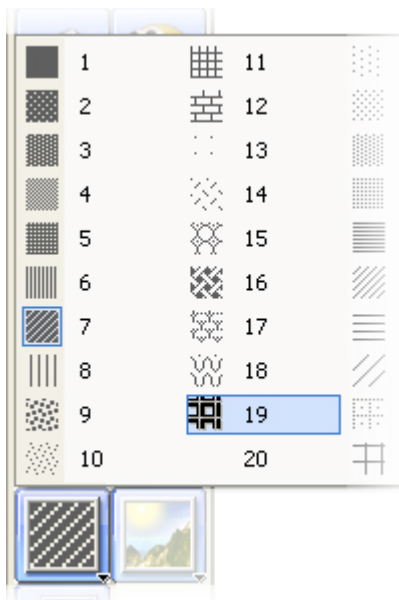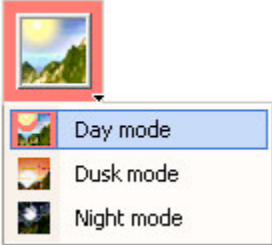
Plotting / Drawing Fill Type

Use this button to select the type of drawing fill. Once selected, all areas drawn onto your user chart layer will have this fill applied. This menu is only available when a PTF layer file (Mark Layer) is selected with the Pencil Tool. (For more information, see related topic under the Help: Adding personal marks)

Additional Display Options

Lighting Level display options

Use this button to select a lighting mode. Day brightens, Dusk grays and Night darkens the desktop for most effective illumination. (For more information, see related topic under the Help: Customize the display)


Chart Desktop Mode

	1 Chart
	1 Chart, 1 Profile
	1 Chart, 1 Profile
	2 Charts
	2 Charts, 1 Profile
	3 Charts
	3 Charts, 1 Profile
	4 Charts

Use this button to select a Chart window layout. Toggle between only one window or several windows, either of which may be shown with or without the Depth Profile window.

Chart and Profile Modes depend on your software configuration. The omission of Profile Modes means that the software doesn't have the Profile module.

Cursor Data Box

The **Cursor Data Box** is displayed at the upper right-hand corner of the Chart window. It contains data pertaining to cursor location and shows real-time information as the cursor moves over the screen.
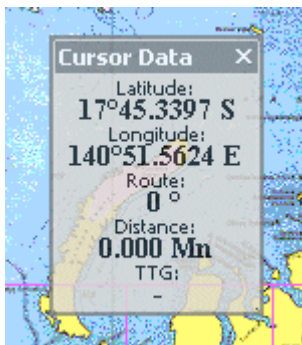
- To move the Cursor Data palette, left-click on its title bar, hold the mouse button down, drag to the new position and release the mouse button.
- Left-clicking on the "X" in the upper right hand corner will close the cursor data box.
- To reopen the closed Cursor Data box, go to **[Display]** on the menu bar and choose **[Cursor Data]**.

The default location of the Cursor Data window is in the right upper corner of the screen. Cursor Data shows the **Latitude** and **Longitude**, bearing/course and distance between the cursor and the vessel, and the time to go (TTG) at the present boat speed.

Configure the Cursor Data window box by right clicking in its title bar:

1. Change its transparency,
2. Choose a specific font size
3. Choose between a full display mode (all data are shown) or reduced display mode (only data position are shown)

For more information see related topic under the HELP: "Customizing the Cursor Data display" to find out more about Cursor Data display.

Nav Data Box

The Instrument Data Display Box (Nav Data) lets you see the information being received from electronic equipment (GPS, central navigation equipment) connected to the computer.
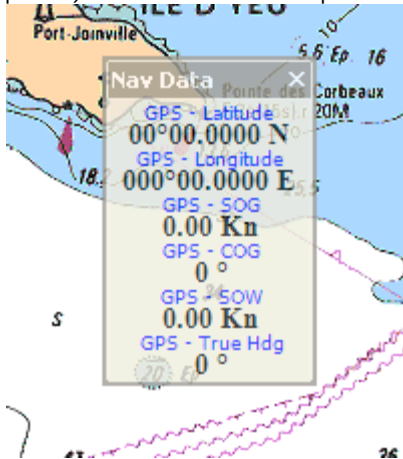
- To move the **Nav Data** box, left-click on its title bar, hold the mouse button down, drag it to the new position and release the mouse button.

- Left-clicking on the "X" in the upper right hand corner will close the **Nav Data** palette.
- To reopen closed the **Nav Data** palette go to **[Display]** on the menu bar and choose **[Nav data]**.

For more information see related topic under the HELP: "**Equipment Connection"** to obtain more information regarding instrument displays.

Notes:

(1) - You can select the data that you want to display in the data box. Just right-click on the panel and choose "Choose displayed data…"
(2) - You can also customize the title/name of the data shown in the data box.
For more information see related topic under the Help: Selecting data for the display.

Chart Desktop Window Settings

There are many ways to customize your Maxsea window environment. You can easily choose how many chart windows you want by clicking the Chart Desktop button on the Toolbar. This menu allows you to set up your windows to view the same chart in different windows and at different scales, and also lets you utilize different layers in any of these windows - For example, the left window could be raster with your navigation route overlayed, and the right window could be radar overlaying you vector chart.

MaxSea allows you to customize the display of data, Toolbars and Palettes on screen.

1 — Setting and Docking Palette / Data Box Location

a) - **"Docking"** layout display mode:
This mode helps you organize your Maxsea environment when multiple tools, data boxes and palettes are in use. MaxSea allows docking different   menus to any edge of the chart window. Left-click   on the   , then drag and drop the group menu at   t h e   d o c k e d destination.

b) - **"Floating Palette"** layout display mode: This mode allows you to position the data independently.

To move any palette, data box or tool bar, left-click on its title bar, hold the mouse button down, then drag it to the new position and release.

To resize any palette or tool bar, click on its border, hold down the left mouse button until a double-headed arrow cursor appears, then move the mouse in the desired direction. When the desired shape is shown, release the mouse button.

2 - Setting the Palette Display

a) - Left-clicking on the "X" in a palette's upper right hand corner will close it. To reopen a closed palette, go to **[Display]** on the menu bar and choose the palette to reactivate.

b) - To change the size or to display titles in each palette which contains buttons, right-click on its title bar, hold the mouse button down, choose either **"Large Buttons"** or **"Show text labels"** under the menu and release the mouse button.

c) - To change the font size or the transparency of a data box, right-click on its title bar, hold down the mouse button and choose an option. (For more information see related topic under the HELP: "Setting the Cursor data box display", "Setting the Nav Data Box display" and "Setting the Steering Data Box display").

d) - To select tools shown in the tool bar, click the down arrow in the title bar, then select "**Add or remove buttons**" and then select the tools to be displayed.

3 - Setting Chart Orientation

MaxSea displays the chart in one of three orientations: **North Up**, **Course Up**, or **Head Up**.

To choose your chart orientation click the "**Chart Orientation**" button in the chart palette at the top of the screen. Select your preference as desired.

Notes:
(1) - To return to the default palettes positions, go to the **[Display]** menu on the menu bar and choose **[Arrange Display]**.

(2) - All setting configurations are saved when exiting the software.

Context Menus and Chart Control Short-cuts

You can access some commonly used commands and Context-sensitive menus by right clicking on an object or item in the chart area.

To display Mouse (Right-Click) short-cut and context menus:

> 1 - Position the pointer over an object or a group of objects.
> 2 - Right-Click anywhere on the chart or on objects to view the menu.

  The Right-Mouse Menu consists of the following:

> - Display commands (**Scale** choices, **Zoom in, Zoom out**)
> - Properties, information, commands related to the selected object
> - Capture and modify commands related to the selected object
> - List of tools choices

Quick Links menus (tooltips) are also available on waypoints, routes, c-map objects and AIS targets. To use these tooltips, position the pointer over an object for a moment until a Quick Object Links (Tooltip) appears. This allows you to quickly open selected object's properties dialog box.

Keyboard shortcuts

Press on Keyboard	Action:
Ctrl + O	Open File in MaxSea
Ctrl + N	Create a New File
Ctrl + S	Save the Current File
Ctrl + W	Close a File active in MaxSea
Ctrl + P	Print
Ctrl + A	Select all objects from the current file
Ctrl + X	Delete a selected object from the current file
Ctrl + C	Copy a selected object from the current file
Ctrl + V	Paste a selected object from the current file
Ctrl + F	Activate On/Off Full Screen mode
Ctrl + D	Unselect all objects from the current file

MaxSea Keyboard Shortcuts

Press on Keyboard:	Action:
Ctrl + M	Activate AIS MKD
Ctrl + T	Activate AIS TX message
F1	Access the User Guide

F2	Zoom In
F3	Zoom Out
F4	Center On/Off
F5	Track On/Off
F6	Create a logbook entry
F7	Activate Next Leg
F8	Activate Previous Leg
F10	Tides and Currents display On/Off
F11	Weather display On/Off
F12	Activate Man Overboard function
Shift +F1	Select Tool (switch between tools)
Shift +F2	Switch between Day/Dusk/Night
Shift +F4	Switch NorthUp/CourseUp/HeadUp
Shift +F5	Activate the PBG On/Off function
Shift +F6	Save Event
Shift +F7	Show/Hide Vector Chart
Shift +F8	Show/Hide Raster Chart
Shift +F9	Show/Hide Depth Profile Window (*)

Shift +F10	Show/Hide 2D Display (*)
Shift +F11	Show/Hide 3D Display (*)
Shift +F12	Radar Overlay On/Off (*)
Ctrl + F2	Radar Range -.(*)
Ctrl + F3	Radar Range +.(*)
Ctrl + F4	Radar Gain + (increase the Gain with jumps of 10% on integer values).(*)
Ctrl + F5	Radar Gain - (decrease the Gain with jumps of 10% on integer values).(*)
Ctrl + F6	Radar Sea Clutter + (*)
Ctrl + F7	Radar Sea Clutter –(*)
Ctrl + F8	Radar Rain Clutter + (*)
Ctrl + F9	Radar Rain Clutter – (*)
ALT + F1	Switch between Sounder HF and LF (*)
ALT + F2	Sounder Range – (*)
ALT + F3	Sounder Range + (*)
ALT + F4	Sounder Gain – (*)
ALT + F5	Sounder Gain + (*)
ALT + F6	Sounder Shift – (*)

ALT + F7	Sounder Shift + (*)
Right/Left/Up/Down Arrows	Scroll Chart function (only available if the active window is the Chart window)
The **+** and **-**	Zoom in or zoom out (only available if the active window is the Chart window)

(*)The inactive shortcut means that the corresponding module is not available in the software.

Accessibility Windows Options Keyboard Shortcuts

Press on Keyboard	Action:
Alt	Activate the MaxSea menu bar without using the mouse (then use keyboard Arrows)
RIGHT ARROW	Open the next menu to the right, or open a submenu * or move to the next right cell.
LEFT ARROW	Open the next menu to the left, or close a submenu * or move to the next left cell.
UP ARROW	Move up in the menu * or move to the next upper cell.
DOWN ARROW	Move down in the menu * or move to the next down cell.

(*) When **Alt** key is pressed

TIPS - Palettes are accessed with the right and the left buttons of your mouse.
To select a tool, place the cursor over the tool, click the left mouse button once. The tool is selected and the cursor shows the appropriate icon.
Double-left-clicking over a given tool will erase that tool's last action, even if a different tool is active.
Double-left-clicking in each Palettes and windows title bar will

dock them around the Chart Window.
Right-clicking on a palette tool brings up the context menu with options to change transparency, button size, or toggle text labels on/off.

Charts Overview

MaxSea is compatible with electronic charts from a number of publishers. Some require that their charts be installed with a setup program included on their chart disk, and other charts can be opened directly from the CD or from the hard disk when copied. License codes are used in most cases to 'unlock' charts for use with MaxSea (see p18 for installation information).

There are two chart format types; raster and vector.

Raster Charts use bitmapped (scanned) data to reproduce paper charts. Essentially a raster chart is a digital picture of a paper chart. MaxSea geographically references these scanned images, ensuring accurate display of the vessels position within the limitations of the chart's accuracy.

Advantages:

- Appearance is exactly the same as paper charts
- Easy to install and view

Disadvantages:

- Raster chart appearance depends on proper scaling. If the proper scale chart is not available, the chart must be "over zoomed."
- Detailed embedded information is not available
- Labels and units information cannot be changed (as changing depth units)

Vector Charts use "intelligent" data to build the chart display. It is stored in layers and records all chart features, such as coastlines, buoys, lights, etc. These features and their attributes (position, color, size, shape, etc.) are stored in a database that allows them to be selectively displayed. Vector charts are very accurate at their reference scales (as long as they are not "over-zoomed"), but can appear quite different from traditional paper charts.

Advantages:

- Chart display does not degrade with zooming
- Depth units and appearance can be changed
- Details on the chart can be hidden, making the display less cluttered
- Specific Objects on a chart (i.e. buoys) can be clicked for more information

Disadvantages:

- Appearance is different from paper charts
- If a vector chart is magnified beyond its reference scale, it does not appear less detailed than a normal scale, but it is less accurate.
- Vector charts are not considered as reliable as raster charts

Please refer to the HELP menu in MaxSea for complete details on working with charts.

Chart Types

The following table provides a quick reference of chart format, coverage and installation procedures. Specific details about each chart type can be found in the on-line help system.

Chart	Type	Installation	License Code	Coverage	Web Site
C-MAP NT CD	Vector	Setup Program	C-MAP	World	www.c-map.com
C-MAP NT Card	Vector	N/A	N/A	World	www.c-map.com
C-MAP CM-93	Vector	Setup Program	C-MAP	World	www.c-map.com
Mapmedia v1	Raster	File Copy	MaxSea	Europe, Africa, South America, South Pacific	www.mapmedia.com
Mapmedia mm2	Raster	Setup Program	MaxSea	Caribbean, Channel Bay of Biscay, Great Britain - North Sea, Mediterranean Sea, South Pacific - Polynesia.	www.mapmedia.com
Maptech	Raster	File Copy	N/A	North/South America, Europe	www.maptech.com
Maptech BSB4 format	Raster	File Copy	Maptech codes	North/South America, Europe	www.maptech.com
Softchart	Raster	File Copy	N/A	North/South America	www.softcharts.com

Opening Charts

The software is compatible with cartographic data from several publishers. This data may be in **vector** or **raster** format, and saved on your hard disk. Note that either C-Map or Mapmedia charts will be available depending on your configuration.

To open a chart, select **[Open chart...]** from the **[File]** menu.

MaxSea automatically searches your "My Documents" folder for charts, then displays a dialog box which lists all available charts., etc… (See p18 to install charts)

The first time, a warning box will appear about the use of digitized charts and documents. Click **Accept** if you agree.

Choosing Chart Scale

MaxSea will display all of your raster charts – even if they are from different chart publishers – seamlessly in the same window. This allows you to navigate without having to worry about opening up individual charts. When you zoom in or out using raster charts, MaxSea will automatically display the best chart available at that scale.

When zoomed-out, MaxSea will show you available detailed charts with a pink border.

The scale of a chart can be changed in several ways:

### 1 - Using the Magnifying tool
Near the top of the Toolbar is a Magnifying glass tool**.** Select the Magnifying tool to change chart scale. Simply drag an area on the chart with this tool to zoom into it. Make a simple click on the chart to zoom out.

2 - Using the "Zoom In" and "Zoom Out" buttons
Click the "Zoom Out" button on the Toolbar (Magnifying glass on the right) to zoom out. Click the "Zoom In" button on the Toolbar (Magnifying glass on the left) to zoom out.

3 - Use the mouse wheel (if available) to zoom in and zoom out

4 - Using the Scale Drop Down menu from the Right-Click Menu
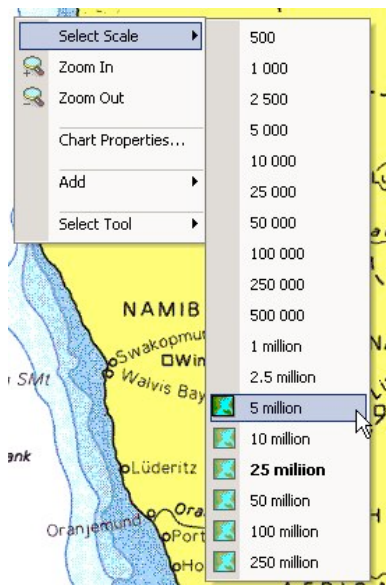
Right-click with any tool in the chart window to bring up the Scale drop down menu.
The available scales are indicated by a drawing symbol next to their numbers. The current chart scale in the "Scale Pop Up" is shown in **Bold**.
Left-click the mouse button on the desired scale. The chart will be drawn at this scale and centered on the point clicked.

5 – Use the + or – key of your Keyboard.

Notes:

(1) - the symbol next to available scales indicates the type of data available:
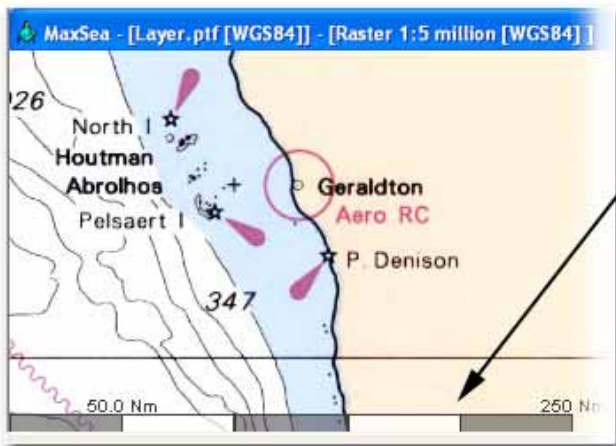
[icon] Chart Data,

[icon] Depth Data,

[icon] Chart and Depth Data.

(2) - Chart Scale information is always displayed in the lower left of the Chart Window as it is shown in the following picture. You can hide this information by accessing the Display Options dialog box and unchecking the "Scale display" option box.

Moving the chart

1 - Hand tool

Left click on the hand tool and move the cursor over the chart to the center of the screen.

- Single left-click and press to grab and move the chart.
- Double-click to access the chart data screen. Here you will find data on the chart source, its official number, origin country, scale, datum, and the depth units (feet, meters, or fathoms).
- As with other tools, right-clicking brings up the context menu allowing changing the chart scale accessing the chart data screen, etc.

2 - With Other Tools

You can use the mouse buttons to move the chart.

- Move the mouse near a window border. When the cursor changes to an arrow, click on the left button to move the chart in the direction of the arrow.

Upper Middle   Upper right corner

Upper Left

Lower Left   Lower Middle   Lower right corner

- Press the wheel (if you have wheel mouse) to activate free mode panning, and then release to exit.

Waypoints & Routes

There are two types of routes that can be displayed on the chart; the Planning Route and the Active Route. The difference between the two is simple - an Active Route is one that MaxSea is following / navigating while you are underway. A Planning Route is not currently being navigated, and you can make corrections or additions at any time. This chapter and the "Planning Route" and "Active Route" chapters explain how to create a route (using the Route tool or the Waypoint tool). In the Active Route paragraph you will learn how to activate a route and follow it on the chart.
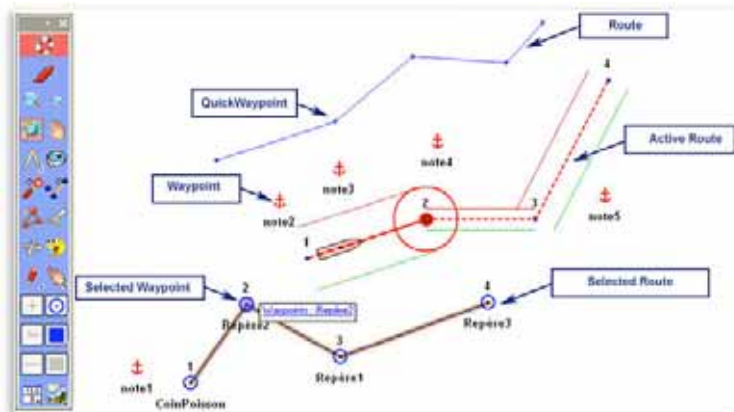

Use the **Plotting** (Pencil) Tool to plot as many Waypoints as you wish. A waypoint layer must be selected / active.

Use "**Go To** " tool to create a Quick Point and activate it.

Use the **Route** tool to build a Planning Route. Make sure to Double-click on this tool before creating a new route to ensure that there are no other routes that are "selected."

You can work on a Planning Route while following an Active Route.

Planning Route

MaxSea enables you to create a Planning Route by placing and linking together several Waypoints on the chart. A Planning Route is not in use until it is activated, so you can work with a Planning Route while actively navigating another Active Route.

IMPORTANT - When starting to create a new Planning Route, be sure that no other Planning Route is shown on the chart. If a Planning Route is already displayed, double-click upon the Route tool in the Toolbar to unselect the existing Planning Route, then start to plot new Planning Route.

Note: Routes are automatically stored in the Routes Centers. To call up the Routes Center select **[Centers]** from the [**Route**] menu and choose [**Routes**]
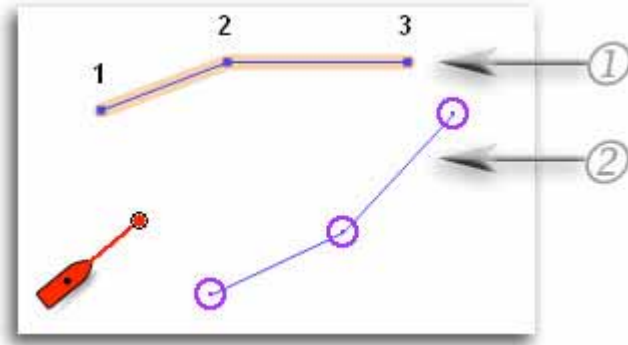
Fig.1

You can easily plot a route on the chart using the Route tool. The Planning Route is drawn on the chart with series of **QuickWaypoints** (or Waypoints) linked with orange dotted lines. When you make a route with the Route Tool, you can either use existing waypoints (2) or make new ones (1). If you don't use (click on) existing Waypoints, QuickWaypoints will be automatically created (1). These QuickWaypoints are not added to the Waypoint database and are automatically deleted when the route is erased.

Selected Route (Planning Route) is surrounded in orange as shown in *Fig1.* Unselected route are display in blue. To select a route, simply choose the Finger Tool and click on a blue route. The route will become selected (orange) and characteristic of each leg (route plan) will be displayed in the **Selected Route Center**. To call up the Selected Routes Center select **[Centers]** from the [**Route**] menu and choose [Selected **Routes**]

Several methods can be used to create a Planning Route:

Using **Route** tool for drawing it on the chart.
Using **Routes Center** list for editing a Planning Route.
Using **Waypoints Center** lists for entering a planning Route.

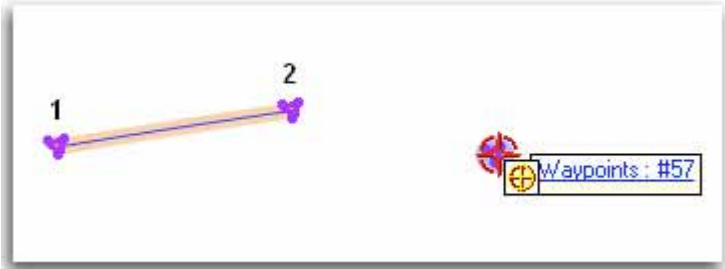## Use the Route tool to draw a Planning Route on the chart

This method allows you to directly create a planning route on the chart with new position.

1. Select the Route Tool and move the cursor to the desired starting point.
2. Click directly on the chart. A blue square (QuickWaypoint) is displayed at the point clicked and is named number (1).
3. Create additional QuickWaypoints by clicking points further along the route. These QuickWaypoints will be successively numbered (2), (3), etc.
4. The route is automatically and simultaneously added to the Routes Center list. (The orange line in the Routes Center corresponds to the present planning route.)

Place Waypoints on the chart and build a Planning Route.

This method allows you to create a Planning Route from known positions. These positions are listed in the Waypoints Center and can be displayed on the chart with a blue circle.

1. Select the Pencil tool (and make sure that a Waypoint layer is selected),
2. Choose a shape (icon) and color for your Waypoints
3. Move the Plotting Tool on the chart and click to record Waypoints (each Waypoint will be automatically saved in the Waypoints Database).
4. When you have plotted enough Waypoints, you may change the tool and select the Route tool to create the Route by selecting and connecting any combination of these waypoints, or new QuickWaypoints.
5. As above, the route is automatically chosen as the actual Planning Route. It is drawn on the chart with orange dotted lines and characteristic of each leg (route plan) will be displayed in the **Selected Route Center**. To call up the Selected Routes Center select **[Centers]** from the [**Route**] menu and choose **[Selected Routes]**

Left-click a Waypoint with the Route tool and it will be added further in the Planning Route.

TIPS - Right click a Waypoint symbol or a Leg Route on the chart and it will call up their appropriate contextual menu. It allows access at any time to the "Properties" dialog selection and other tools appropriate to a Waypoint and/or a Planning Route.

To quickly unselect a planning route, double click the Route tool.

Route Center

All your Routes are displayed in the Routes Center, and they are automatically saved in a database. You can create or import as many routes as you wish. To call up the Routes Center select **[Centers]** from the [**Route**] menu and choose [**Routes**]

The Routes Center window appears at the bottom of the screen and lists all previously created routes. Click on the box to the left of any route to select the route you want to work with. Once a route is selected, the box to the left of that route will turn blue. Simultaneously the route is selected and colored in orange in the Center and on the Chart. When a Route is selected, all details about the trip are reported in the Selected Route Center.

Check the **HELP** menu in MaxSea for complete details for editing and entering a Planning Route from the Centers list, customizing a Planning Route such as the ETA and also measuring Headings, Distances and Bearings.

Active Route

An **Active Route** is one that MaxSea will actively navigate. MaxSea will display the distance, bearing and time to go to the next Waypoint on the route based upon data coming in from the instruments.
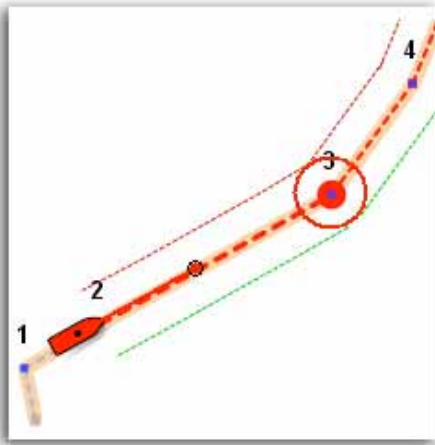

An active Route can be created by activating a planning route. Only one Route can be active at a time. The Active Route is displayed in red (while the Selected planning route is displayed in orange), and its active Waypoint is filed in with red. When **Display XTE** option is ON (selected by default), the Security XTE area is delimited with two dotted lines, green and red, on each side of the active route. To set up the default XTE length, select **[Options: Route]** from the [**Route**] menu and change the "Default Leg XTE". The Passed Legs are drawn with grey dotted lines as it is shown in the picture.

When the route is activated and the computer's data output is connected to an **autopilot**, MaxSea will send the appropriate data to the autopilot so that it can control the steering of the vessel.

Creating a Quick Route with the "Go To" Tool

1. Click the "**Go to**" tool on Toolbar
2. Click any where on the chart or on an existing waypoint.
3. If an Active Route is already on, a message will ask you to cancel it, click **Yes** to confirm
4. Then the Quick Route is activated.

Note that a "**Quick Route**" is temporary and when the active route is cancelled or ended, it will be deleted.
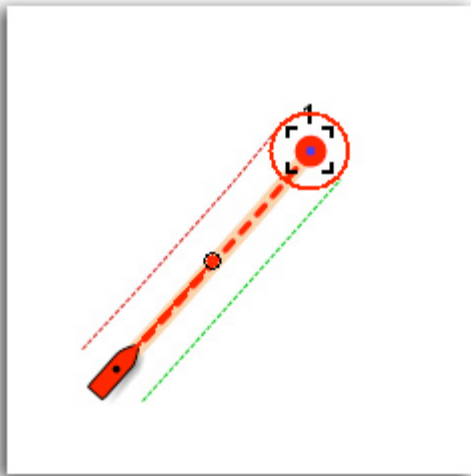

Quick Route representation

Activating a Planning Route

You can activate an existing Planning Route by:

1. Click with the "Go to" Tool upon the leg of the Planning Route from which you want to start following the route (usually the first leg)
2. Right click anywhere along the route to display a contextual (pop-up) menu. Either choose "Activate Planning Route" or "Activate Route at selected Leg" (see following pictures).
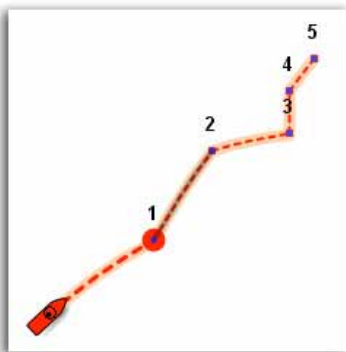
When "Activate Planning Route" option is chosen
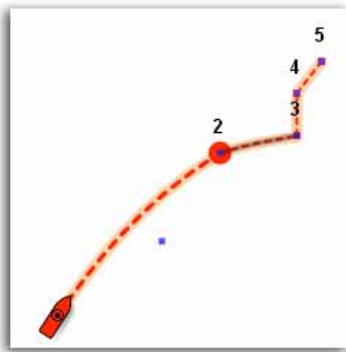
When "Activate Route at selected Leg option" is chosen

Note: When the chart scale value is chosen and **Auto Scale** mode is selected, the software will automatically change the chart scale as the ship approaches Waypoint.

See the **HELP** menu in MaxSea for complete details on the Auto-Scale Function. This can be done under the Route properties dialog.

When approaching a waypoint during an Active Route, the waypoint is switched by one of two methods:

1. The boat passes an imaginary perpendicular line passing through the center of the destination waypoint.
2. The boat comes within the Arrival Alarm Range.

You can track your actual active route by clicking the Track button from the Toolbar (see following chapter "Tracking").

See the HELP menu in MaxSea for complete details about route, Steering Data and Steering Display.

Cancelling Active Route

When you reach the last waypoint of the Active Route, the Active Route is cancelled; if you want to cancel the Active Route before reaching the last waypoint, select Cancel Active Route from the Route menu, or right click on the Active Route and choose Cancel Active Route.

TIPS - To quickly cancel an active route, double click on the "Go To" tool.

See the **HELP** menu in MaxSea for complete details for following easily the navigation from the Steering Data and Graph windows, and with more details from the Active Route Center.
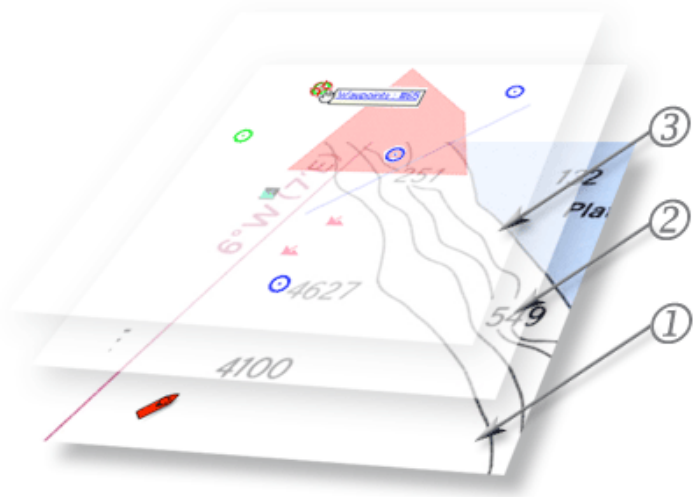
Waypoints and Marks

Waypoints and personal marks can be saved onto **layer(s)**. When MaxSea is started, an empty waypoint layer (named "Waypoint") and an empty PTF file layer (named **"Layer.ptf"**) are created.

When a personal user mark is drawn in MaxSea, the information is actually being displayed in its own transparent 'layer' over the chart.

While it may appear that there is new visual information on the chart itself, MaxSea stores this information separately. Therefore, this information can be displayed or hidden independently of the chart information.

*For example as shown in Fig. 1, begin with a chart Layer **(1)**, add marks and MaxSea stores them on a PTF layer **(2)** which lies over the chart , then add waypoints and MaxSea stores them on a waypoint layer **(3)** and in database.*

The resulting image appears as if the marks and waypoints are drawn directly on the chart.

There are two categories of data layers:

1. Waypoint and Routes layers
2. User data layers (PTF File)

Waypoint Layer:

By default, all your waypoints are created on the "Waypoint" layer. To create a new Waypoint Layer

1. Go to the **[File]** menu, point **[New]** and choose **[WP layer...]**
2. Enter new layer name
3. Click **OK**

All the Waypoints you will create will be saved on this new layer (known as active layer). You may change icon and color of Waypoint using the plotting icon and color button. To switch active layers, just click and hold down the mouse on the Plotting Tool. This will show a drop-down menu where you can select the active layer. You can also change the Waypoint layer attached to a waypoint in the Waypoint Center or in the Waypoint Properties box. To show or hide each waypoints layers, use the Waypoint & Route button on the Chart toolbar and choose which one you want to show or hide. All the Waypoints are stored in the Waypoints Center. To call up the Waypoints Center select **[Centers]** from the [**Route**] menu and choose [**Waypoints**].

Notes

When a waypoint layer becomes empty, it is automatically deleted. The number of waypoint is unlimited

User data Layer (PTF File):

PTF layers are used to draw personal marks, area, circle etc…. A User data layer can be treated like any other file used in a Windows program, like documents in a word processing program. To create a new PTF layer:

1. Go to the **[File]** menu, point **[New]** and choose **[PTF layer…]**
2. To open an existing layer, either select **[Open…]** or press on the keyboard "**Ctrl + O**".
3. To close the active layer either select **[Close]** or press on the keyboard "**Ctrl + W**", then choose the file to close.
4. To save the active layer either select **[Save…]** or press on the keyboard **"Ctrl + S**".
5. To save on to a new layer, select **[Save As…]**, then choose a path and a name.

There can be more than one layer opened at the same time. The layer button in the chart palette can be used to show/hide the opened layers. With many layers open, only one can be

active. The active layer is the one that new marks will be written to, and is set from the plotting tool drop-down menu.

When a PTF file layer is selected, you can choose the type (line, area, circle, text) using Mark type selection boxes located in the lower half of the Toolbar.

1. Choose the drawing type and select style parameters. Use the Plotting Setup tools to change the color, line, width, drawing, texture and font size.
2. Select the Plotting pen tool from the Toolbar, place the cursor on screen; and then click. A mark (point, line, area, circle or text) will be displayed at the position clicked.

Notes

The number of user data layer (PTF file) is unlimited. New user data files are stored by default at first level of "My Documents | My MaxSea" repertory. To change the default repertory, go to the [File] menu and choose [Option: File].

Track your actual course

This chapter describes details about how to display and save the track of your ship.

Click on the "Track on/off" button in the Toolbar. The **Track off** button changes to **Track on** (red background).
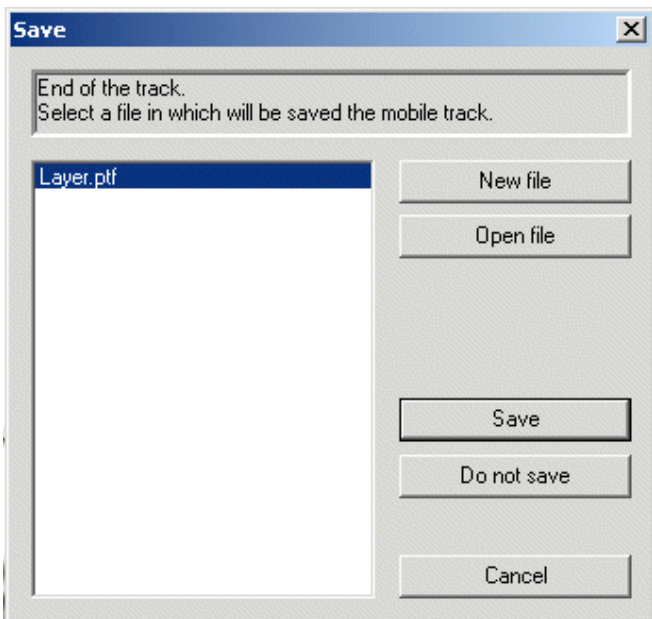

The track is then displayed on the chart and automatically saved onto the PTF file **Layer[WGS84]** by default.

Click on the **Track on/off** button again in the Toolbar to deactivate the track saving function.
The program gives you the option to save the track permanently in a "**PTF**" layer file on the hard drive.

- Left-clicking on **"Save"** will save the track in the **layer.ptf** and clicking on **"Do not save"** will not save the track.
- Left-clicking on "**New file**" will save the track in a user selected file.
- Left-clicking on "**Open file**" has two effects: It will open an existing file and then save the track in it.

Don't forget to turn ON the Layer Information button in the ChartPalette to display the PTF file over the chart.

Notes:
(1) - save the track onto a new layer for later use.
(2) - convert the recorded track as a new active route using the context (right click) menu.

Using Weather Data

Forecasts and weather data are obtained through MaxSea's exclusive **Chopper** interface, which allows you to receive data via e-mail that you can overlay onto your charts.

Chopper's built-in compression algorithm is optimized for binary data (GRIB format), making downloading over satellite phones and single side band (SSB) quicker. File sizes are between 30-200KB depending on the area and amount of data you request. MaxSea Chopper can be used with any Internet connection as long as it allows you to receive data and attachments through email (mandatory for GRIB reception). Consequently, that includes all connections such as RTC lines, ADSL, Cable, but also GSM cellular phones in the coverage area, Inmarsat, Irridium, BLUE, Mini-M, etc.

MaxSea Chopper simply activates the default email client which is associated to your internet browser when you click "**Get it by email**". *With MS Internet Explorer, check TOOLS / INTERNET OPTIONS / PROGRAMS for settings.*

Please note that the email reception is out of the Maxsea support field. Please contact your Telecom / Internet Service Provider if you encounter difficulties in setting up your connection

To request your weather file, select **[Chopper: Navcenter Forecast...]** from the **[Weather]** menu. First choose a region / model to access the request page will appear. You can then select the region with your mouse, amount and type of forecast data, and click on the "Get it by e-mail" button at the top of the screen. (The first time you access Chopper, you will have to register your e-mail address.)

Chopper will launch your default e-mail program (typically Outlook), allowing you to send the weather request to the Navcenter weather server.

You will receive an e-mail within 5-10 minutes with an attachment. Double-clicking the attachment will open the weather file in MaxSea.

Note: We suggest using "MaxSea compression" which creates the smallest possible weather file to speed up your download time.

The following example shows sea surface temperature (colors), current (yellow arrows), and wind (feathers) as you would see it in MaxSea.
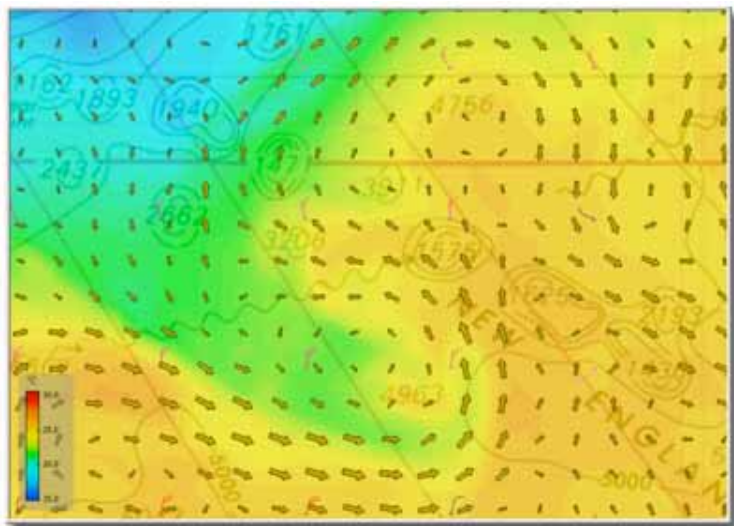
Clicking anywhere on the chart with the finger selection tool will give you full weather details for that point.

Use the Date/Time tools in the chart palette to advance the weather forecast period.

Use the Weather Button in the Chart Palette to Turn ON or OFF the weather layer. If you click on the down arrow at the right of the button, a drop-down menu will appear where you will be able to choose each weather data layer independently. In this example, only the Wind, Surface Pressure and SST are shown on the chart.

Note that if an icon is grey, this means that the data has not been selected when the request was proceed.
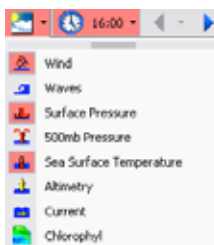
Dead Reckoning function

The Dead Reckoning function is used for testing, planning, or if the vessel's GPS system fail.
Dead Reckoning calculates the ship's position using a starting position, the course and the speed.
Dead Reckoning also simulates vessel movement on a home computer without a GPS connection.

Notes:
   (1) Dead Reckoning calculations begin at the last position simulated or acquired by the GPS.
   (2) **MaxSea** starts in acquisition mode (Dead Reckoning turned off) by default.

Switch to **Dead Reckoning** mode under **[Utilities]** on the menu bar.

Acknowledge the warning concerning loss of real-time data, and the warning which appears, "click **OK**" to confirm **Dead Reckoning mode**, GPS input is turned off.

The first time dead reckoning is used, the vessel will be placed off the coast of Africa at 0 Lat. and 0 Lon. Drag the boat symbol by selecting the Position Modification tool from the Tool Palette:

By default the Dead Reckoning palette appears docked on the upper right-hand corner of the layers toolbar, as it's shown below, and the **Nav Data** palette becomes the Dead Reckoning control center.

To modify the boat position use the Dead Reckoning symbols. The Dead Reckoning symbols can be displayed in a floating palette as shown below.

D.Reck

You can also move the boat by clicking on the boat position button in the dead reckoning toolbar which centers the boat in the middle of the screen.

The other buttons in the dead reckoning toolbar allow you to simulate boat speed and heading:

The and symbols are used to change the boat's speed.

The two symbols and are used to change the COG boat clockwise or counter clockwise. The modified values are displayed in the Nav data box.

Exiting the software

To Exit the software:

1. Choose **[Exit]** from the **[File]** menu or click the "X" located in the upper right-hand corner of the window.
2. A second dialog box warns that any open layer files should be saved.
   - Click **Yes** to close and save the file.
   - Click **No** to close the file without saving it.

Note: If marks have been plotted and a new file has not been created, MaxSea saves them automatically in the activated layer.

IMPORTANT - DO NOT TURN THE COMPUTER OFF BEFORE CLOSING MAXSEA SOFTWARE. Doing so may cause damage to the software, and can corrupt active data! Close the software as indicated above; then turn the computer off.

Appendix: Connect MaxSea to NavNet

Introduction: To connect MaxSea to the NavNet network, simply connect your PC to the network hub using a regular RJ45 Ethernet cable. MaxSea will exist on the network like a regular NavNet Display, so you will have to set up the IP of the computer and give MaxSea a Hostname, just like you would do with another NavNet display.

Note: In order to connect MaxSea to the NavNet network, you need to have a MaxSea NavNet compatible product (such as MaxSea NavNet Commander or MaxSea NavNet Explorer).

Configure the Navnet Radar and NAV information

On the NavNet display with BBWGPS or other GPS connected to it, press "Menu," then "System Configuration" then "System Setup" then "Port Setup" then "Output Through Network". Turn the following sentences to ON to get the proper information into MaxSea: DPT, GGA, MTW, VHW, VTG, ZDA, HDT, MWV. If using two or more Navnet displays, make sure to only enable these outputs on one display (the one that is connected directly to position source.) Press "Return" when done. Press "DISP" on the NavNet Radar to show the display selection screen, and then press any Soft-Key. This will show the network information screen. Write down the hostname of the Radar Source (this information is displayed in brackets)

Ex: "1" corresponds to the hostname "NAVNET1" (in NavNetVX2)

If you have a BBFF1 or BBFF3 network sounder, write down the name of the Sounder Source (usually "ETR0" in NavNetVX2 or "SOUNDER" in Navnet1).

Configure the PC

You will have to give a hostname to MaxSea (ex: NAVNET4). This hostname must be unique and not already taken by another NavNet display. You will have to set up the IP of the computer according to the hostname that you will give to MaxSea. If you choose NAVNET4 for MaxSea (recommended), the IP of the computer must be 172.31.3.4 (if you choose NAVNET1 the IP must be 172.31.3.1)

<u>To set up the computer's IP:</u>

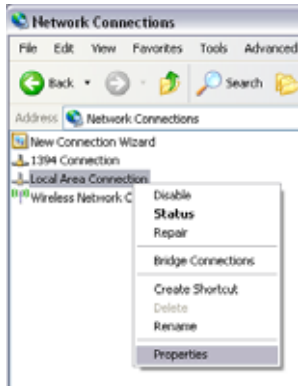Go to "Start" and select "Control Panel"

Open "Network Connections"

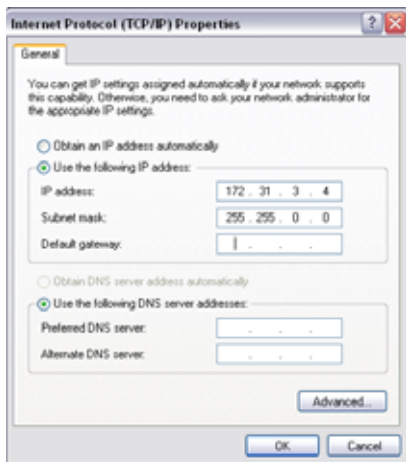Right Click on "Local Area Connection" and select "Properties"

Select "Internet Protocol (TCP/IP)" and click on "Properties"

Fill the IP fields as shown below (enter the IP corresponding to the Hostname chosen for MaxSea)

Click on OK to confirm and close the 2 windows.

Note that the new IP can take up to 20 seconds to be recognized. A pop-up in the lower right corner should show when the IP is correctly set. Turn OFF any Firewall that could prevent data to be exchanged between NavNet and the PC. You may also have to restart your computer.
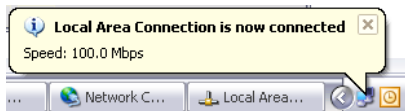
Configure MaxSea

Launch MaxSea and select "Options : Navnet" in the "Utilities" menu. Choose the NavNet version in the drop-down menu
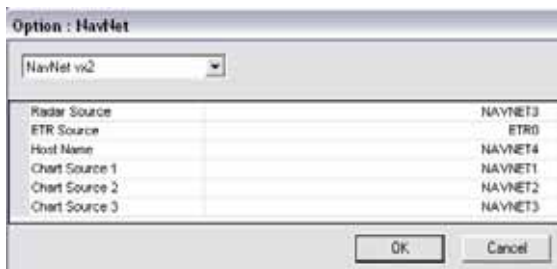
- In the "Radar Source" option, put the hostname of your Navnet that has the Radar connected.
- In the "ETR Source" option, put the name of your Sounder
- In the "Host Name" option, put "NAVNET4" (or whatever hostname you have chosen for MaxSea)
- Put the hostname of all your Navnet displays in the Chart Source (MaxSea will search for chart data). Note that MaxSea will only show C-Map charts.

ARPA/AIS Option:

If you have the mobile module for MaxSea and the ARPA board for your NavNet and/or have AIS connected to NavNet, you have to add an instrument in MaxSea to display the Targets. Select "Data Input-Output" in the "Utilities" menu of MaxSea. Click on the "Radar & AIS" tab. Click on "Add Instrument…". Select NavNet and press "Next>". Select NavNet ARPA data and click "Next>". Click on "Finish" then "Okay" to confirm.
You may have to repeat this procedure if you want to add AIS and select "NavNet AIS Data" in the last selection box.

Dongle or Serial Number

Dongle Update Codes
Code 1

Code 2

Code 3

Charts, Data, and Other Codes