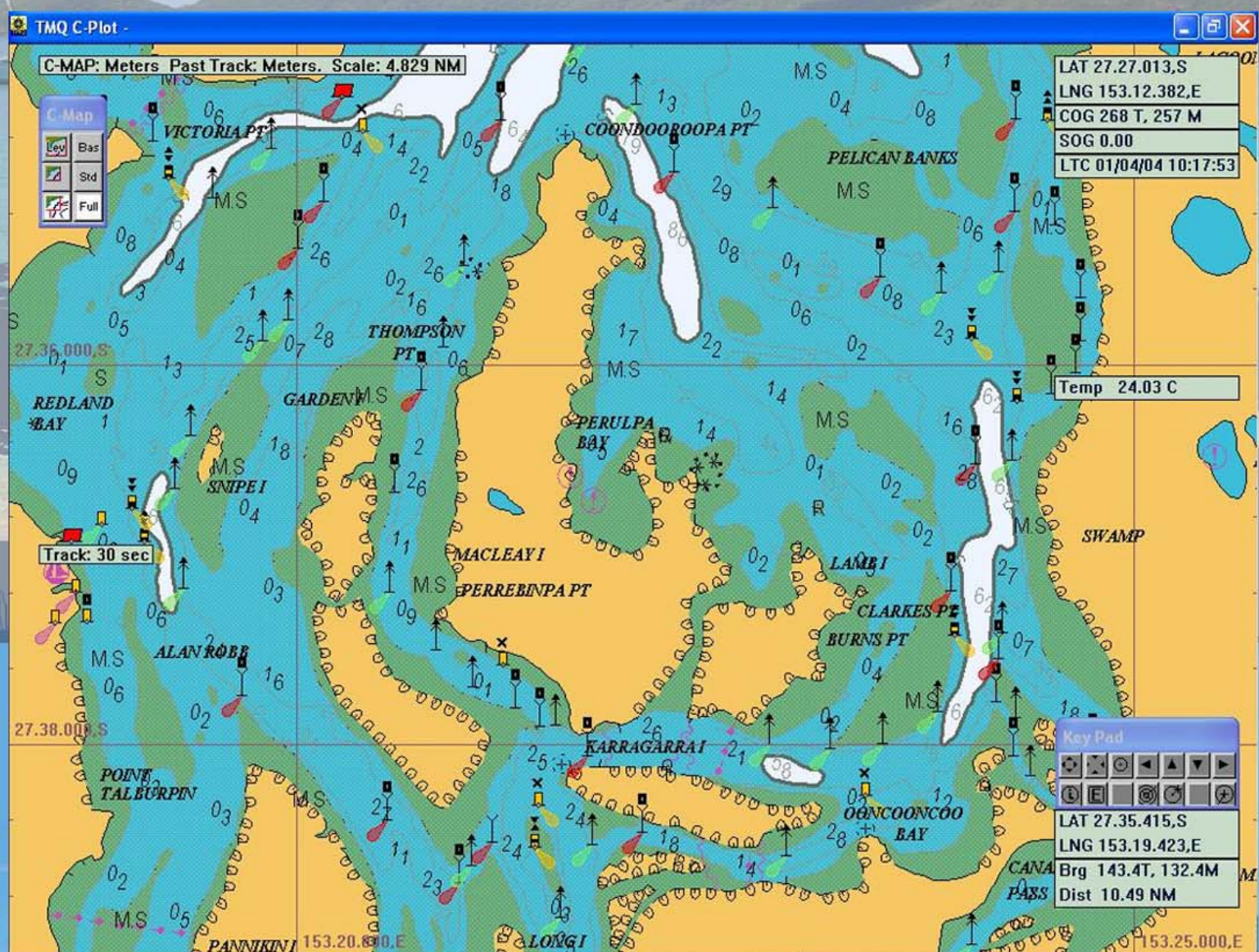




# C-Plot<sup>TM</sup>

## Chart Plotting Software

# Version 8



## Installation Guide

C-Plot Pro Supports C-Map CM-93/3, ARCS and Seafarer Charts  
C-Plot SF/Voyager supports ARCS and Seafarer Charts

# WARNING

**THIS DEVICE IS ONLY AN AID TO NAVIGATION. ITS ACCURACY CAN BE AFFECTED BY MANY FACTORS SUCH AS EQUIPMENT FAILURE OR DEFECTS, ENVIRONMENTAL CONDITIONS AND INCORRECT USE.**

**IT IS THE RESPONSIBILITY OF THE USER TO USE COMMON SENSE AND NAVIGATION JUDGEMENT. THIS DEVICE SHOULD NOT BE RELIED ON AS A SUBSTITUTE FOR SUCH COMMON SENSE AND JUDGEMENT.**

**CHARTS DISPLAYED USING C-PLOT SF/PRO ARE FOR REFERENCE ONLY AND ARE NOT INTENDED TO REPLACE PAPER CHARTS. OFFICIAL PAPER CHARTS ARE THE MOST RELIABLE SOURCE OF NAVIGATIONAL INFORMATION.**



---

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*The Australian Hydrographic Office  
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**TMQ CHARTS ARE NOT SUITABLE FOR NAVIGATION**

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## ***C-Plot Installation***

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## Hardware Requirements




C-Plot Pro/SF/Voyager operates using **Microsoft Windows 2000™ and Windows XP™** on IBM™ or compatible Personal Computers (PCs).

**It is recommended to use Windows XP™ as the operating system.**

The Minimum system requirements for C-Plot SF/Pro are:

- CPU: Intel™ Pentium III Processor, 450MHz or higher
- RAM: 256 Mb (minimum)
- Mouse or Trackball pointing device.
- True Colour (24 bit minimum) Windows compatible graphics system (800x600 screen resolution, minimum)
- At least 1 serial communications port
- 2 USB Ports (required for up to 2 security dongles, 1-TMQ Dongle and 1 C-Map eToken CM93-3 charts are protected)
- HDD: at least 3Gb of free space dedicated to C-Plot Pro.
- CD-ROM Drive for installing C-Plot & assorted charts.
- Floppy Disc Drive

 *It is advisable to install a high impact hard disc drive (HDD) as most disc drives are designed to sit on a desktop, not a boat with constant motion.*

*You should leave sufficient disc space for the electronic chart database (Seafarer and TMQ charts, User marks and track files). The more available*

---

space on your HDD for the electronic chart databases, the more charts your C-Plot Pro/SF/Voyager can use and store.

## Item Checklist

The following list details the items that you should have received as a part of the C-Plot Pro/SF/Voyager product pack.

- ✓ 1 x CD-ROM Containing all the necessary files to install C-Plot Pro/SF/Voyager
- ✓ 1 x Parallel Port (LPT) or Universal Serial Bus (USB) Security Key (Dongle)
- ✓ 1 x Authorisation Codes Document
- ✓ 1 x Table of Shortcut Keys
- ✓ 1 x Installation Guide
- ✓ 1 x Users Guide



 *The TMQ Dongle must be plugged in at all times while using C-Plot Pro/SF/Voyager.*

## Security Key Identification (Dongles)

Identification of the two types of USB security keys (Dongles) can be made by looking at the text moulded into the key itself.

### **TMQ Dongle (HASP)**



The TMQ HASP security key is required for any version of C-Plot V8 installed.

### **C-Map CM-93/3 eToken**



The C-Map CM-93/3 eToken is only required and supplied if C-Map CM-93/3 charts are to be installed.

**Note:- Be sure to insert the correct key at the correct time during software installation.**



---

## ***Installing C-Plot – Important!***

Detailed explanation of the C-Plot installation process is contained within this section.

Installation procedures are very different for C-Plot Pro compared to either C-Plot SF or C-Plot Voyager. The correct installation procedure must be followed for the version of C-Plot purchased.

If the correct procedure for the version of C-Plot purchased is not followed it may be necessary to reinstall C-Plot. Discard all previous settings for C-Plot and following the correct installation procedure for the version of C-Plot purchased.

**Refer to Section ‘Installing C-Plot Pro’.**

**Refer to Section ‘Installing C-Plot SF or C-Plot Voyager’.**

**Refer to Sections ‘1.5 Manual Style Conventions’ and ‘2.0 C-Plot Pro/SF/Voyager’ in the C-Plot Users Guide for information relating to the operation of C-Plot.**

**Chart installation is carried out after C-Plot has been installed. C-Plot should be running prior to the commencement of chart installation.**

### **Very Important!**

**Disable Hibernation**, this function is often used on Laptops & Notebooks to save battery power. It also disables drivers for USB ports during hibernation, resulting in the ‘Security Key is lost’ error message.

**Disable** (set to ‘Never’) the ‘Turn off Hard Disks’ option in Windows ‘Power Option Properties’ from the Control Panel.

---

## Installing C-Plot Pro




This section briefly outlines the installation procedure for the **C-Plot Pro** application. More detailed installation procedures regarding charts and hardware devices can be found in the appendices. The items you will need to perform the installation of C-Plot Pro using C-Map CM 93 Edition 3 Charts on a PC are:

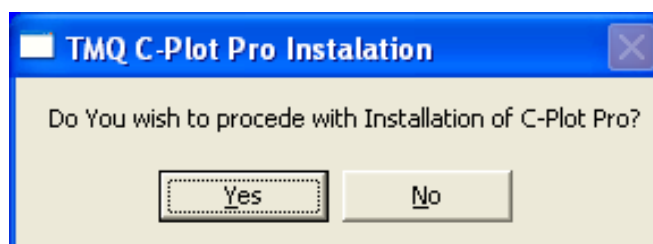
- ✓ C-Plot Pro installation CD-ROM & Authorisation Key
- ✓ TMQ LPT or USB Security Key for C-Plot Pro (Dongle)
- ✓ eToken USB Security Key for C-Map CM-93 Ed. 3 Charts

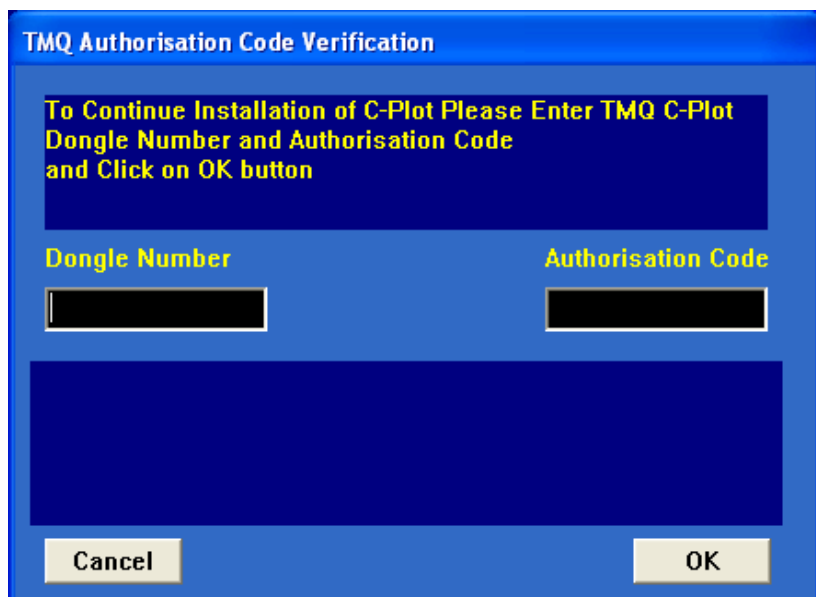
The following procedure outlines the steps required to successfully install C-Plot Pro on a PC.

\*\*\* **Do Not insert the TMQ LPT or USB Security Key** \*\*\*  
\*\*\* **(Dongle) until C-Plot has been installed** \*\*\*

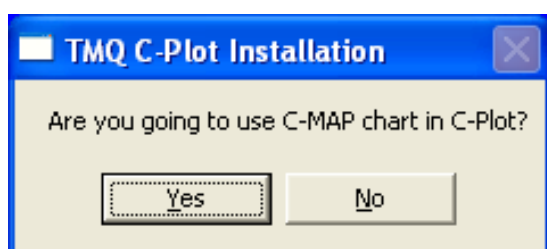
1. Turn the computer on and allow the Windows operating system to load. This should occur automatically. In case of any difficulties consult the Windows operating system user manual.
2. Place the C-Plot Pro CD into the CD-ROM drive of the computer and press close. The C-Plot Pro installation menu will be displayed automatically.  
 *You may have to wait up to 20 seconds for the Installation menu to be displayed.*
3. To commence installation of **C-Plot Pro** click the C-Plot Pro button and wait for the installation box to appear.
4. C-Plot Pro will begin to automatically install all necessary components. The following sequence of options is displayed.

Select Yes



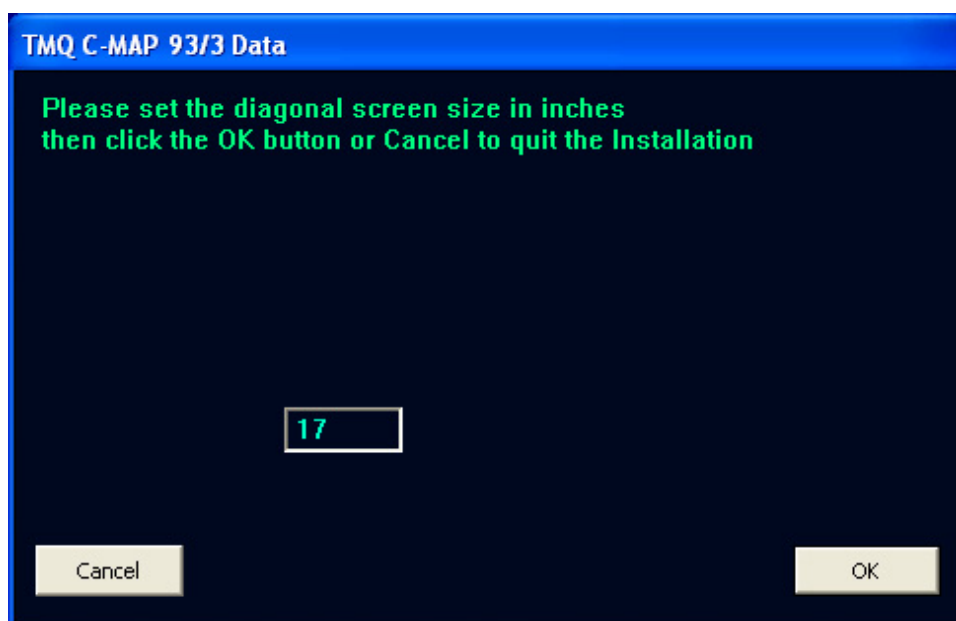


To prevent installation errors it is only possible to install the correct version of C-Plot for the supplied Dongle number. Enter your Dongle and Authorisation Numbers, then click OK



Select Yes if you are going to install C-Map CM-93 Edition 3 Charts.

Enter the size of monitor the charts will be displayed on.



---

Select Next to continue with installation of eToken.

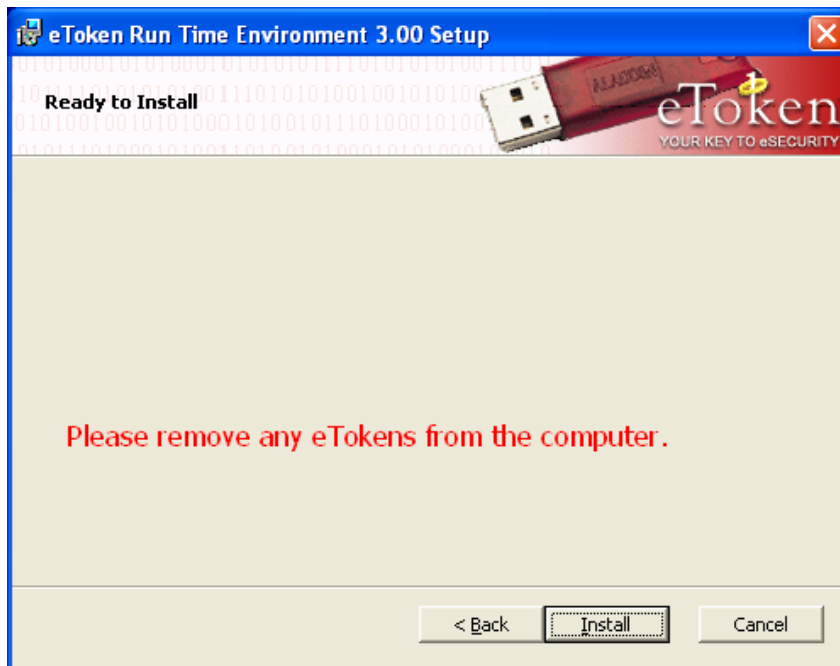


Read the Licence Agreement and then select ‘ I accept the terms of the licence agreement’, click Next to continue installation.



---

Remove any eToken from computer and then click Install.



The eToken will be installed, it may take a few minutes.  
Click Finish when prompted.



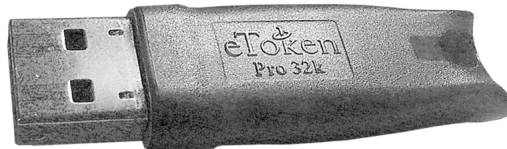
Insert the eToken when prompted and then click OK



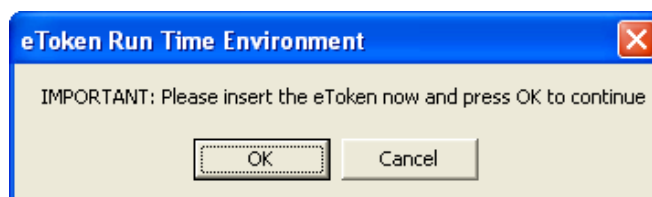
---

Note:- The eToken is the C-Map USB Security Key, **NOT** the TMQ USB Security Key (Dongle). The TMQ USB Security Key (Dongle) has your C-Plot system number written on it.  
**Be sure to insert the correct one.**

### C-Map CM-93/3 eToken

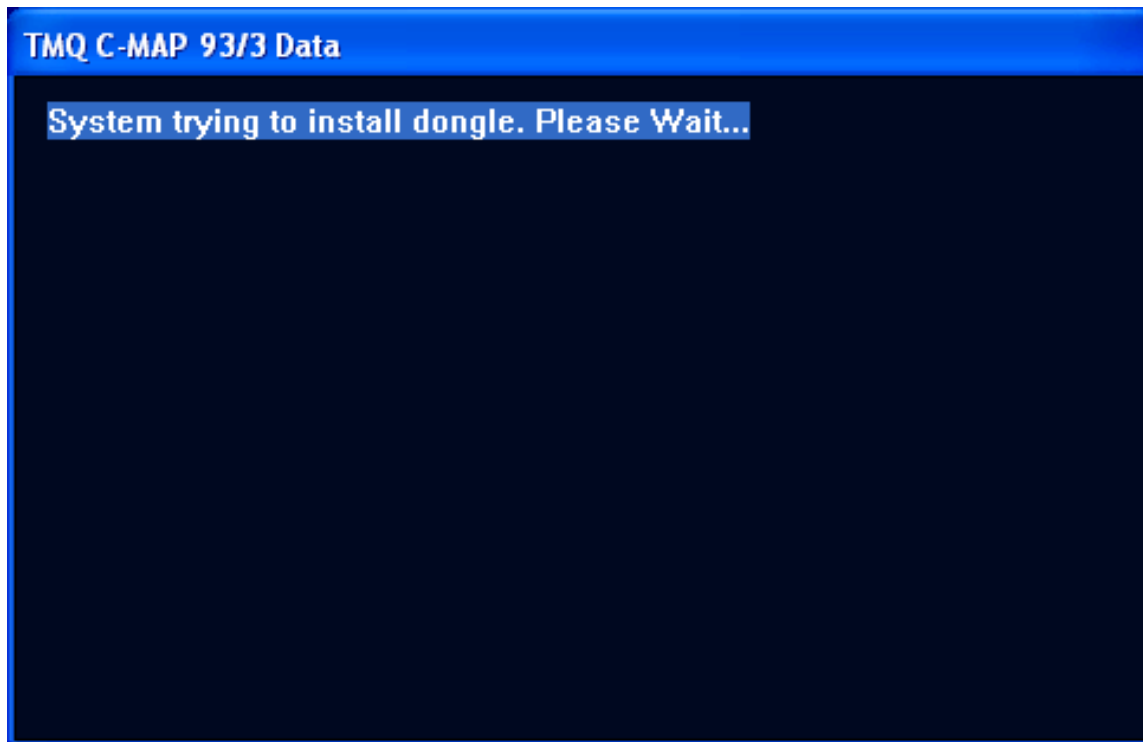


You will be prompted to ensure that the eToken has been inserted in to the USB Port. Click OK to continue.



---

The eToken will be detected and installed automatically




After completion of the C-Map eToken procedure, C-Plot Pro will be automatically installed.

This may take a few minutes depending on PC speed.



5. Insert the security Key (Dongle) into the USB port at the rear of the computer, see section The Electronic Security Key (Dongle)
6. Run C-Plot Pro by selecting the C-Plot Pro icon from your Desktop.
7. Enter the TMQ Authorisation Key when prompted, see sections TMQ C-Plot Pro/SF/Voyager Authorisation Codes, Entering Authorisation Codes.
8. Setup Com Ports configuration, refer to Appendix C.

 *C-Plot Pro will not function correctly without the dongle inserted into the LPT1/USB port. Always ensure that the dongle is plugged into this port. C-Map CM-93/3 requires the eToken to be installed at all times.*

---

## Installing C-Plot SF/Voyager


This section briefly outlines the installation procedure for the **C-Plot SF/Voyager** application. More detailed installation procedures regarding charts and hardware devices can be found in the appendices. The items you will need to perform the installation of C-Plot SF/Voyager on a PC are:

- ✓ C-Plot SF/Voyager installation CD-ROM & Auth. Key
- ✓ LPT or USB Security Key (Dongle)


The following procedure outlines the steps required to successfully install C-Plot SF/Voyager on a PC.

### **\*\*\* Do Not insert the Dongle until C-Plot has been installed \*\*\***

1. Turn the computer on and allow the Windows operating system to load. This should occur automatically. In case of any difficulties consult the Windows operating system user manual.
2. Place the C-Plot SF/Voyager CD into the CD-ROM drive of the computer and press close. The C-Plot SF/Voyager installation menu will be displayed automatically.

 *You may have to wait up to 20 seconds for the Installation menu to be displayed.*

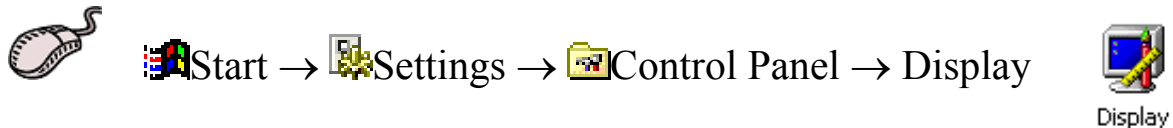
3. To commence installation of the required version of C-Plot click on the appropriate **C-Plot** button (Either C-Plot SF or C-Plot Voyager) and wait for the installation box to appear.
4. C-Plot SF/Voyager will automatically install all necessary components, when completed select Exit.
5. Insert the security Key (Dongle) into the LPT/USB port at the rear of the computer, see section The Electronic Security Key (Dongle)
6. Run C-Plot by selecting the C-Plot icon from your Desktop.
7. Enter the TMQ Authorisation Key when prompted, see sections TMQ C-Plot SF/Voyager Authorisation Codes, Entering Authorisation Codes.
8. Setup Com Ports configuration, refer to Appendix C.

 *C-Plot SF/Voyager will not function correctly without the dongle inserted into the LPT1/USB port. Always ensure that the dongle is plugged into this port.*

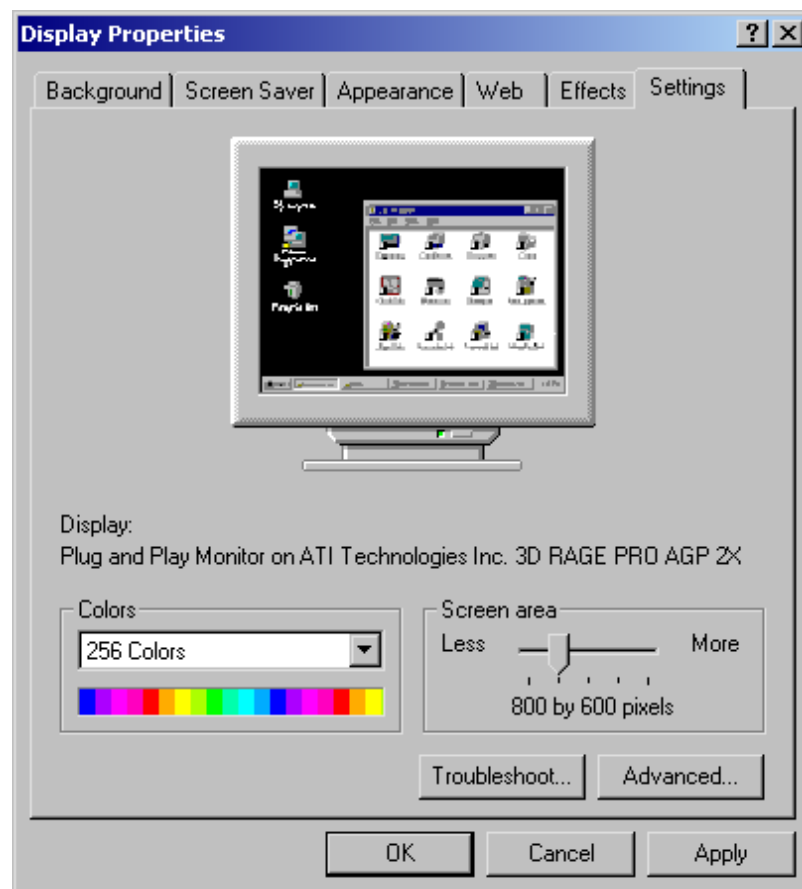
---

## Configuring the Windows Display Settings

Once C-Plot Pro/SF/Voyager has been installed on a PC, you should check the display properties to ensure that the properties are configured for optimum C-Plot performance. To access the display properties in Windows simply use the following sequence:



Once the Display Properties window appears, choose the Settings tab (See Figure A). We recommend that the colours option is set to the highest possible number of colours available, by clicking on the drop down list. The 'Screen Area' setting should be at least '800 by 600 pixels'. To modify this setting, simply click-and-drag the sliding indicator until the screen area is '800 by 600 pixels' or larger.



**Figure A**

Restart your system as prompted after display properties altered.

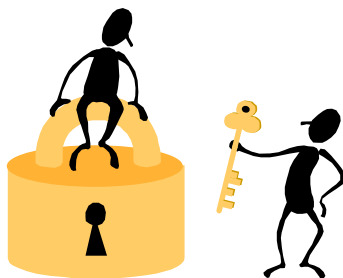


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## Security Codes

The C-Plot Pro/SF/Voyager system is for the use of registered owners of TMQ software and Chart products. For this reason there are several security measures employed to prevent illegal copying (Pirating), theft, and unauthorised use of the system. These measures include:

🔒	Dongle	An electronic security key plugged into the computer
🔒	TMQ Chart PIN Code	This number allows TMQ Charts to be used with C-Plot
🔒	Seafarer PIN Code	This allows Seafarer Charts to be used with C-Plot
🔒	Seafarer User Permits	This allows access to specific Seafarer Charts. Each chart requires a unique permit in order to be used with C-Plot
🔒	ARCS PIN Code	This allows ARCS Charts to be used with C-plot
🔒	ARCS User Permits	This allows access to specific ARCS Charts. Each chart requires a unique permit in order to be used with C-Plot
🔒	Authorisation Key	TMQ Electronics system lock code
🔒	C-Map Order	Generated when C-Map charts are ordered, it is required to get the C-Map password. (password.usr file)
🔒	C-Map Password	Supplied by C-Map. This allows the ordered C-Map CM-93/3 charts to be used with C-Plot Pro (password.usr file)



---

## The Electronic Security Key (Dongle)


The electronic security key is available in two styles, the LPT (Parallel Port) type and the USB Port type.



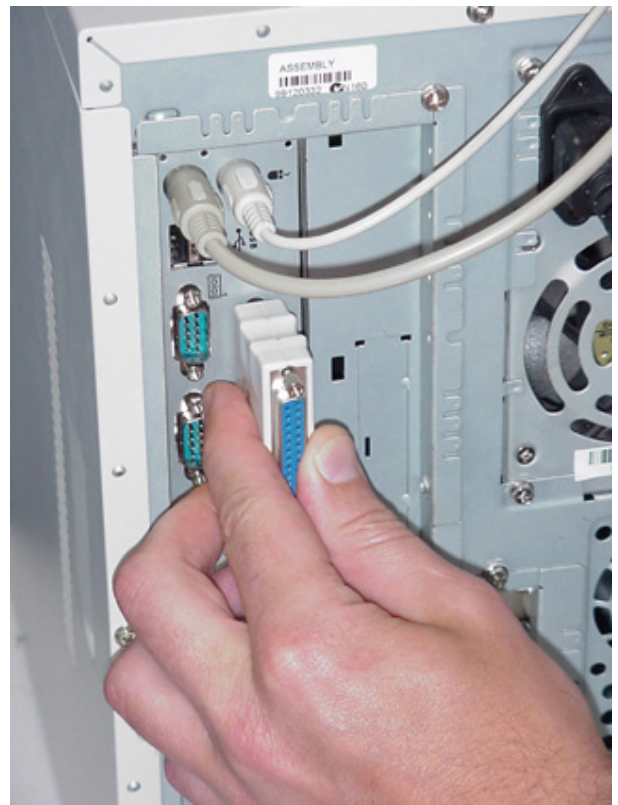
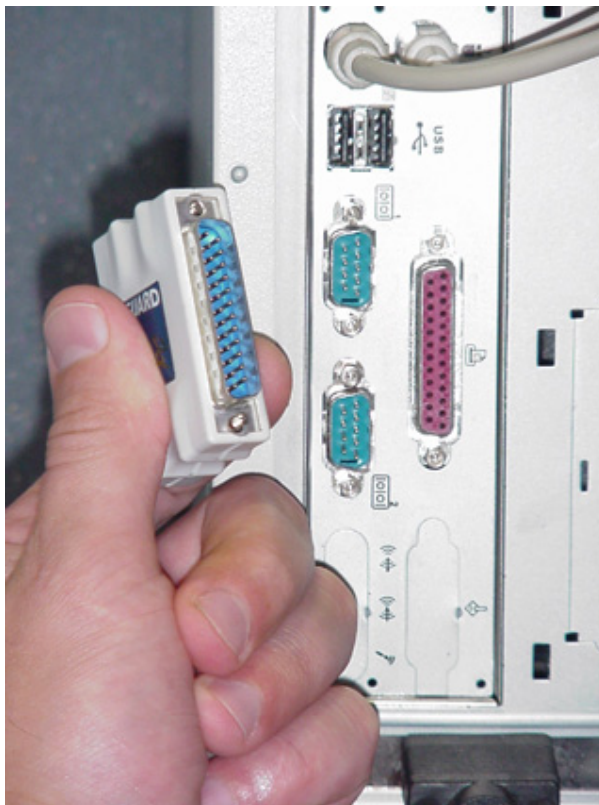
LPT (Parallel) Dongle



USB Dongle

 *C-Plot Pro/SF/Voyager will not function correctly without the dongle inserted into the LPT1/USB port. Always ensure that the dongle is plugged into this port. USB Dongle supplied as standard, LTP Dongle by request only.*

### **Inserting the LPT (Parallel) Dongle**



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## Inserting the USB Dongle



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## TMQ C-Plot Pro/SF/Voyager Authorisation Codes

Included in the product pack is a laminated A5 sheet that contains all the codes necessary to use C-Plot. Please store the Authorisation codes document in a secure place.

### TMQ C-PLOT SF Authorisation Codes

**Please store this document in a safe place.**

**The numbers are essential for the operation of the C-Plot system**

TMQ C-Plot SF v3.01 Authorisation Key

#### PIN and User Permit for Seafarer/ARCS Charts

Your Seafarer/ARCS PIN and User Permit are:

Dongle ID

PIN


User Permit


**Sample Only**

The PIN and User Permit are part of the Seafarer/ARCS chart security system. These identifiers are used in conjunction with your dongle and the chart permits to give you access to the charts you have ordered.

The PIN is provided to you for your own protection. You should not keep this sheet with your system. The PIN number given to you cannot be changed.

This PIN and User Permit can be used with TMQ C-Plot and the dongle supplied with this system. They will not work with any other systems. When you order charts you must provide both the PIN and User Permit.

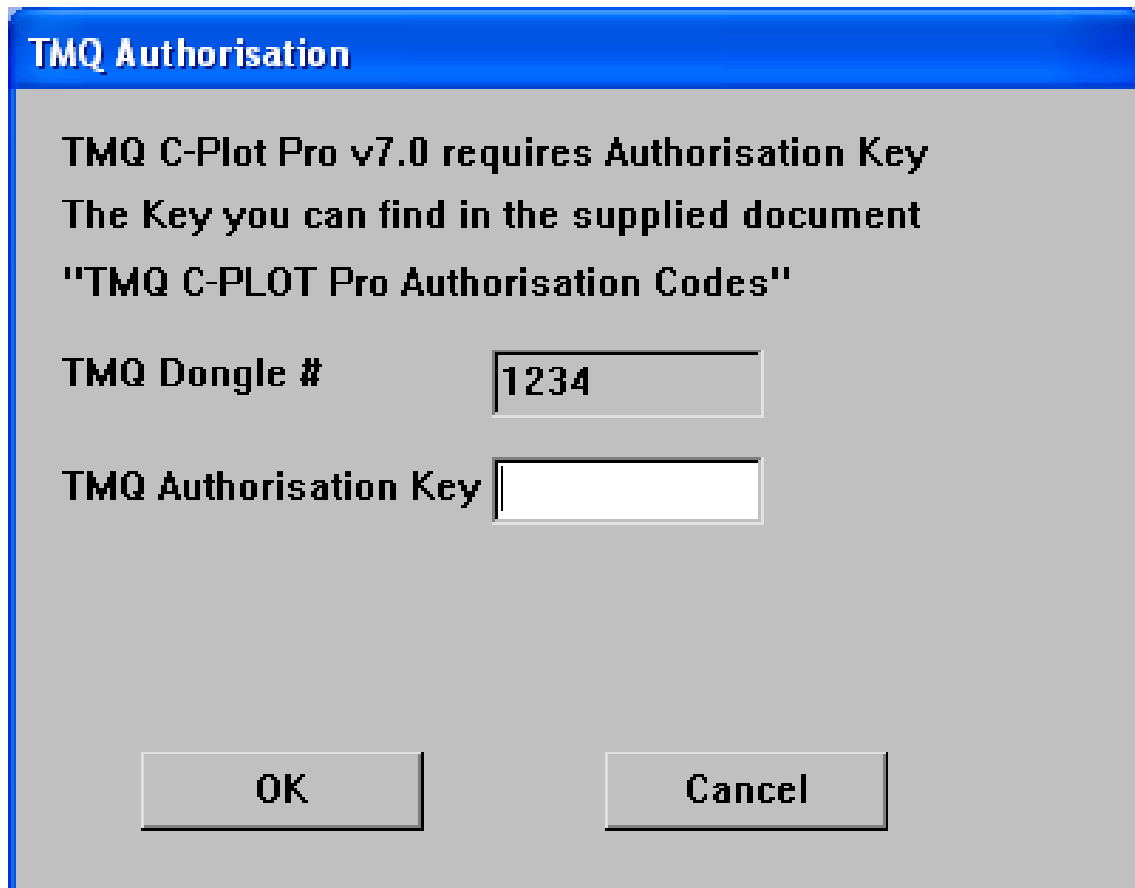
 *The page depicted here is only a **sample!!** The actual Authorisation Codes document is a laminated A5 sheet.*

 *These numbers are essential for the operation of the C-Plot system and this document cannot be replaced.*

---

## Entering the Authorisation Code

The first time C-Plot Pro/SF/Voyager is run a 'TMQ Authorisation' dialogue box will appear. The 'TMQ Authorisation Key' is supplied in the product pack. Simply type the number you've been given in the 'TMQ Authorisation Key' field and click the 'OK' button.


A screenshot of a Windows-style dialog box titled "TMQ Authorisation". The dialog has a blue title bar. Inside, the text reads: "TMQ C-Plot Pro v7.0 requires Authorisation Key", "The Key you can find in the supplied document", and "\"TMQ C-PLOT Pro Authorisation Codes\"". Below this, there are two input fields. The first is labeled "TMQ Dongle #" and contains the text "1234". The second is labeled "TMQ Authorisation Key" and is currently empty. At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

**TMQ Authorisation**

TMQ C-Plot Pro v7.0 requires Authorisation Key  
The Key you can find in the supplied document  
"TMQ C-PLOT Pro Authorisation Codes"

TMQ Dongle #

TMQ Authorisation Key

 *If an authorised TMQ dealer installed C-Plot, the 'Authorisation Key' will have already been entered. In such cases the 'TMQ Authorisation' dialogue box will not appear.*



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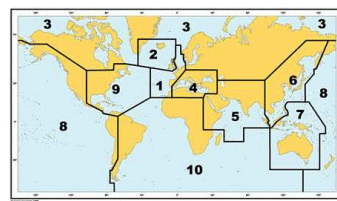
## ***Chart Installation***

---


## HCRF Chart Installation

HCRF or Raster charts are available in two types, Seafarer and ARCS. This appendix deals with installing these charts for use by C-Plot. There are a number of sections in the Database configuration dialogue box for HCRF charts, these are:


- Charts
- Data Permits
- ‘Store Chart Access PIN Code’ box

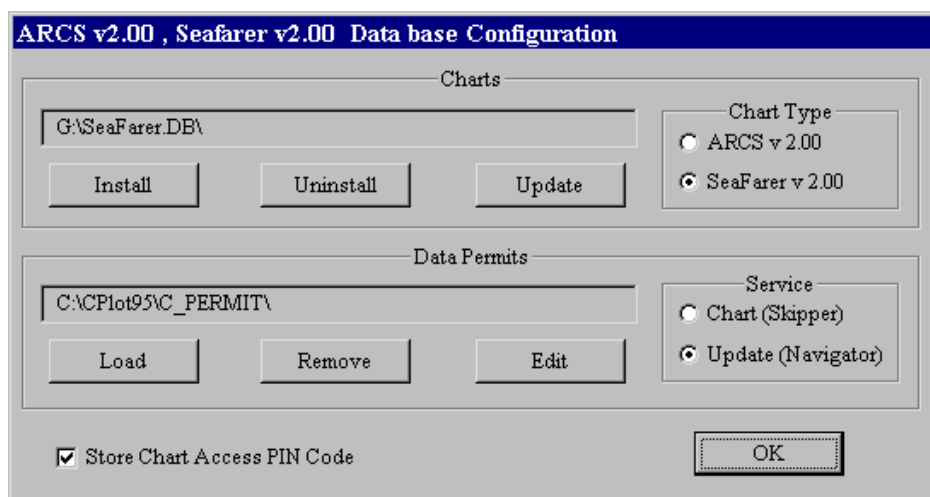


### Access Sequences:

 →  →  ‘Charts’ →  ‘Config’ →  ‘HCRF’

 Press ‘Menu’ → 0 → 6 → 1

 Press Alt+M → 0 → 6 → 1



The ‘Charts’ section contains information and functions pertaining to charts. The ‘Chart Type’ section enables the selection of the type of chart that is being configured. The ‘Install’, ‘Uninstall’ and ‘Update’ buttons represent functions that can be performed on the selected type of chart.

---

The 'Data Permits' section contains information and functions pertaining to chart permits. For a chart to be viewed in C-Plot both the chart itself and the permit for that chart must be present. The 'Service' section enables the selection of the type of service that is being configured. Seafarer has two types of services 'Chart' and 'Update', while ARCS has 'Skipper' and 'Navigator'. Both services offered by each organisations are similar. Seafarer-Chart is comparable to ARCS-Skipper and Seafarer-Update is comparable to ARCS-Navigator.

The 'Store Chart Access PIN Code' box allows this PIN to be saved by C-Plot. This can make using this charts more efficient. If this box is not ticked (☐) each time one of these charts is loaded in C-Plot a dialogue box will appear asking that the Access PIN is entered. In order to avoid this situation, simply tick this box (☒) and enter the Access PIN. Now the Access PIN will automatically be entered each time a chart is loaded.

In order to use these charts effectively there are two security codes that must be known:

1. The permits for all the purchased charts
2. The Seafarer/ARCS Pin number

### **Loading Seafarer/ARCS Permits**

Before installing charts on the computer the appropriate permits should be installed. Permits are issued on a 3.5" floppy disc. To install Seafarer or ARCS permits use the following sequence:

1. Choose the 'Chart Type' (Seafarer or ARCS) and 'Service Type' (Chart and Update)
2. Insert the 3.5" Seafarer/ARCS permit disc into the disc drive
3. On the Database Configuration dialogue box click the 'Load' button in the 'Data Permits' section
4. Click the 'Browse' button then choose the 3.5" floppy drive (usually A:)

- 
5. Choose the file from the disc with a '.LCN' extension and click 'Open'
  6. All permits can be loaded by clicking the 'All' button. Individual permits can be selected by clicking on the desired permits. Clicking the 'Selected' button will only load the highlighted permits.
  7. After the permits have finished loading click 'OK'



*A flowchart outlining this sequence is also included in this appendix*

### **Removing Seafarer/ARCS Permits**

The 'Remove' button in the 'Data Permits' section of the Database Configuration dialogue box enables chart permits to be removed from the system. To remove permits use the following sequence.

1. Choose the desired 'Chart Type' and 'Service Type' of the permits to be removed
2. Click the 'Remove' button in the 'Data Permits' section
3. All permits can be removed by clicking the 'All' button. Individual permits can be selected by clicking on the desired permits. Clicking the 'Selected' button will only remove the highlighted permits.
4. After the permits have finished being removed click 'OK'

### **Editing Seafarer/ARCS Permits**

It may be necessary to change or add chart permits manually instead of loading them from a floppy disc. There are two methods for editing Seafarer/ARCS permits; both methods will be explained in the following sequence.


1. Choose the desired 'Chart Type' and 'Service Type' of the permits to be edited.
2. Click the 'Edit' button in the 'Data Permits' section

- 
3. Permit Edit Method 1: Simply enter the new permit number into the 'Chart Permit for Editing' section and click 'ADD'. Permit Edit Method 2: Choose an existing permit from the 'List of Chart Permits' section and click 'Edit'. Now edit the chosen permit in the 'Chart Permit for Editing' section and click 'ADD'.
  4. Once all the desired chart permits have been Edited/Added click 'OK'

### Storing the Chart Access PIN Code

Storing the Access PIN allows for carefree loading of Seafarer/ARCS charts. If the access PIN is stored in C-Plot it can be removed again simply by un-ticking (☐) this box. To store the access PIN in C-Plot use the following sequence.

1. Tick the 'Store Chart Access PIN Code' box (☒)
2. Enter the PIN in the data field directly above the 'OK' button
3. Click 'OK'

 *The Chart Access PIN Code allows access to all installed charts with permits.*

### Installing Seafarer/ARCS Charts

Before attempting to install charts for use with C-Plot, ensure that the permits for these charts have previously been loaded (See 'Loading Seafarer/ARCS Permits'). Installing charts on the computer requires a sizable amount of disc space. Please ensure that there is enough space on the disc drive where the charts will be installed.

1. Choose the 'Chart Type' (Seafarer or ARCS) and 'Service Type' (Chart and Update)
2. Insert the Seafarer/ARCS Chart CD-ROM into the CD drive



- 
3. On the Database Configuration dialogue box click the 'Install' button in the 'Charts' section
  4. Click the 'Browse' button then choose the CD-ROM drive (usually D:)
  5. Choose the file from the disc named 'README.CDV' extension and click 'Open'
  6. All charts can be loaded by clicking the 'All' button. Individual charts can be selected by clicking on the desired charts. Clicking the 'Selected' button will only load the highlighted charts. The 'With Permits' button will only select and install those charts for which the permit is present.
  7. After the charts have finished being installed click 'OK'



*A flowchart outlining this sequence is also included in this appendix.*

## **Uninstalling Seafarer/ARCS Charts**

The 'Uninstall' button allows installed charts to be removed from the C-Plot database. To uninstall Seafarer/ARCS charts simply use the following sequence.

1. Choose the 'Chart Type' (Seafarer or ARCS) and 'Service Type' (Chart and Update)
2. On the Database Configuration dialogue box click the 'Uninstall' button in the 'Charts' section
3. All charts can be removed by clicking the 'All' button. Individual charts can be selected by clicking on the desired charts. Clicking the 'Selected' button will only load the highlighted charts. The 'Without Permits' button will only select and uninstall those charts for which the permit is not present.
4. After the charts have finished being uninstalled click 'OK'

---

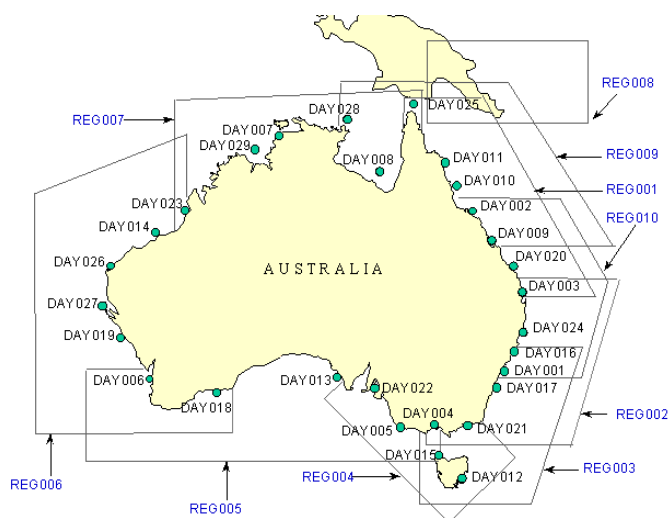
## Updating Seafarer/ARCS Charts

It is possible to update HCRF Charts by acquiring an 'Update' disc, usually in the form of a CD. The following sequence describes how to update Seafarer/ARCS charts in C-Plot.

1. Choose the 'Chart Type' (Seafarer or ARCS) and 'Service Type' (Chart and Update)
2. Insert the Seafarer/ARCS Update CD-ROM into the CD drive
3. On the Database Configuration dialogue box click the 'Update' button in the 'Charts' section
4. Click the 'Browse' button then choose the CD-ROM drive (usually D:)
5. Choose the file from the disc with a '.CDV' extension and click 'Open'
6. All updates can be loaded by clicking the 'All' button. Individual updates can be selected by clicking on the desired updates. Clicking the 'Selected' button will only load the highlighted updates.
7. After the updates have finished being installed click 'OK'

## Seafarer Chart Coverage

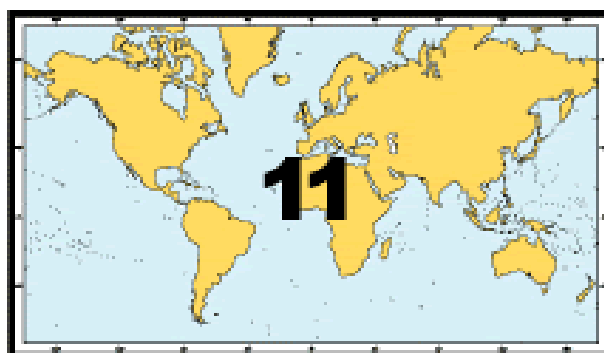
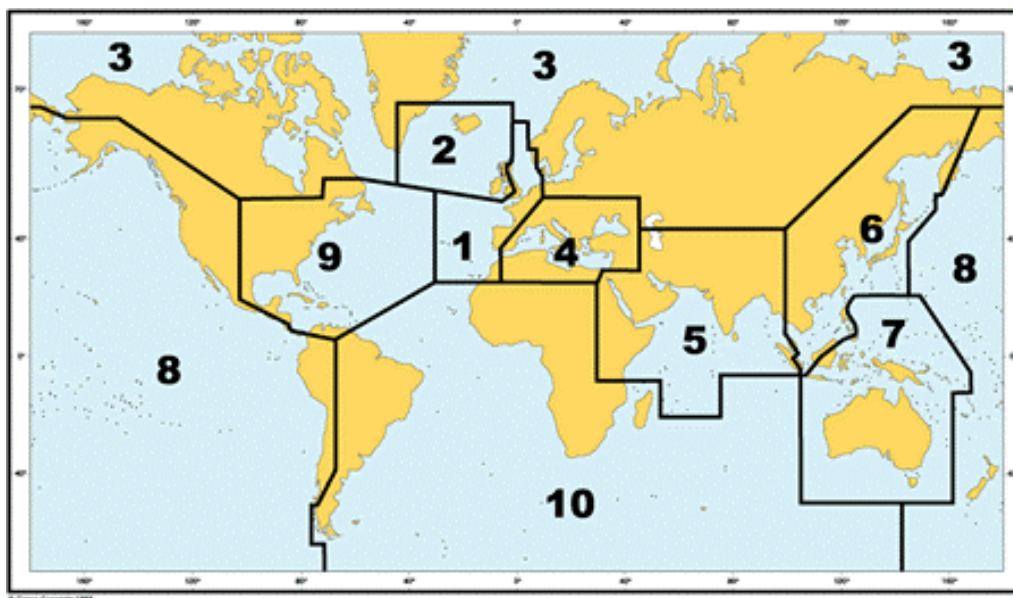
The Australian Hydrographic Office supplies seafarer charts. These charts only cover Australia.



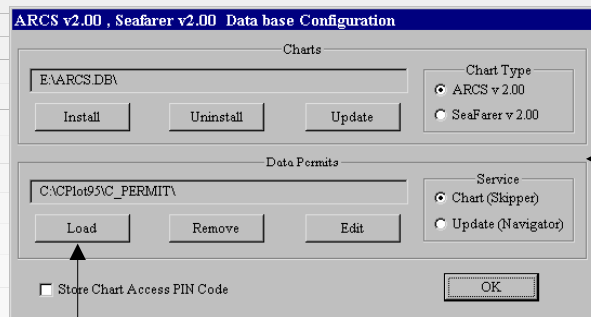
---

## ARCS Charts Coverage

United Kingdom Hydrographic Office distributes ARCS (Admiralty) charts. The coverage for these charts is shown below.



## Loading Seafarer/ARCS User Permits

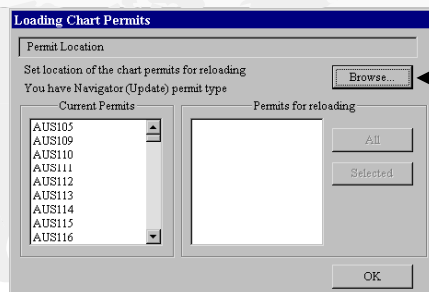


Start Loading Seafarer/ARCS Permits

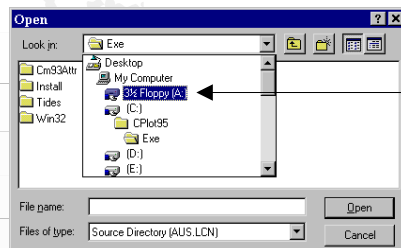
Choose the 'Chart Type' and 'Service Type'

Insert the 3.5" Seafarer/ARCS permit disk into the disk drive

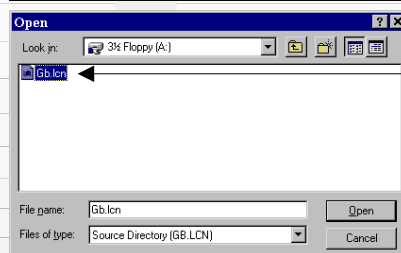
On the Database Configuration dialog box click the 'Load' button in the 'Data Permits' section



Click the 'Browse' button then choose the 3.5" floppy drive (usually A:)

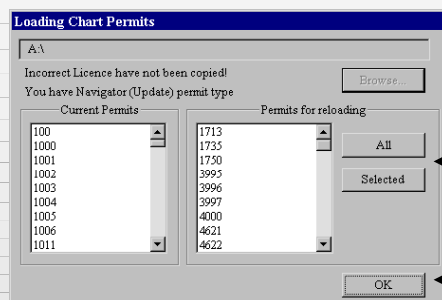


Choose the file from the disk with a '.LCN' extension and click 'Open'



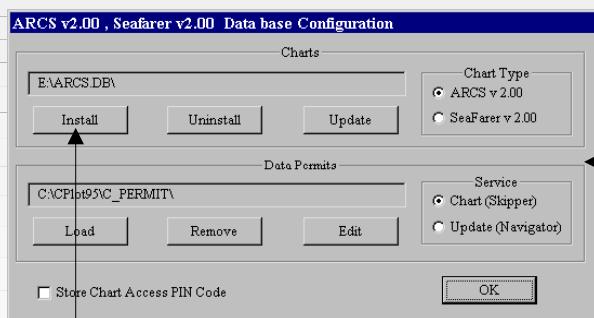
All permits can be loaded by clicking the 'All' button. Individual permits can be selected by clicking on the desired permits. Clicking the 'Selected' button will only load the highlighted permits.

After the permits have finished loading click 'OK'



Loading Seafarer/ARCS permits is complete

## Installing Seafarer/ARCS Charts



Start Installing Seafarer/ARCS Charts

Choose the 'Chart Type' and 'Service Type'

Insert the Seafarer/ARCS chart CD into the CD-ROM drive

On the Database Configuration dialog box click the 'Install' button in the 'Charts' section

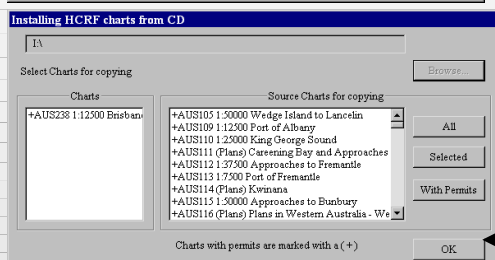
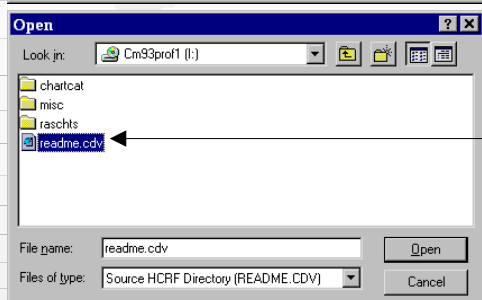
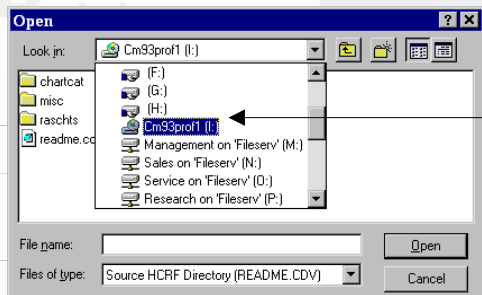
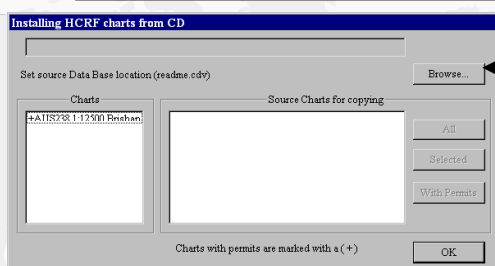
Click the 'Browse' button then choose the CD-ROM drive (usually D:)

Choose the file from the disk named 'README.CDV' and click 'Open'

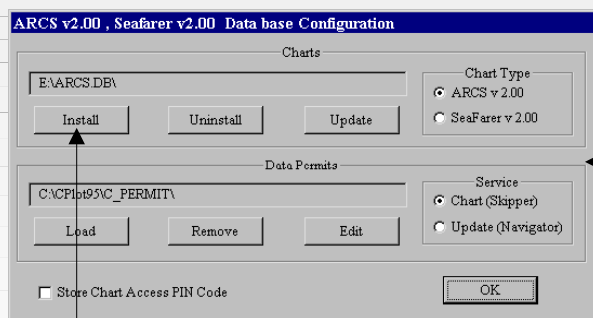
All charts can be installed by clicking the 'All' button. Individual charts can be selected by clicking on the desired charts. Clicking the 'Selected' button will only load the highlighted charts. The 'With Permits' button will only install those charts for which the permit is present.

After the charts have finished installing click 'OK'

Installing Seafarer/ARCS charts is complete



## Updating Seafarer/ARCS Charts



Start updating Seafarer/ARCS Charts

Choose the 'Chart Type' and 'Service Type'

Insert the Seafarer/ARCS update CD into the CD-ROM drive

On the Database Configuration dialog box click the 'Update' button in the 'Charts' section

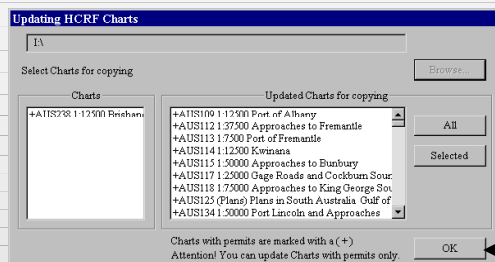
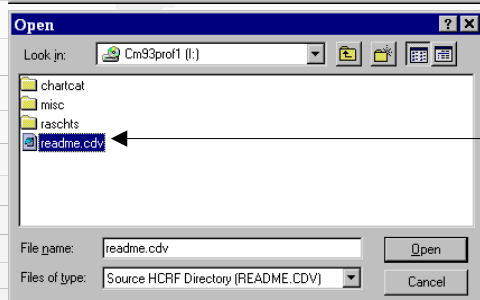
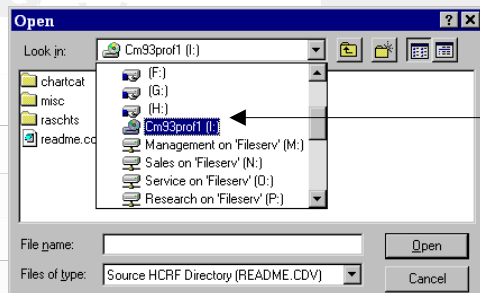
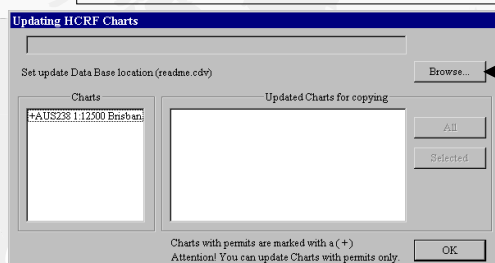
Click the 'Browse' button then choose the CD-ROM drive (usually D:)

Choose the file from the disk named 'README.CDV' and click 'Open'

All updates can be installed by clicking the 'All' button. Individual updates can be selected by clicking on the desired updates. Clicking the 'Selected' button will only load the highlighted updates.

After the updates have finished installing click 'OK'

Updating Seafarer/ARCS charts is complete



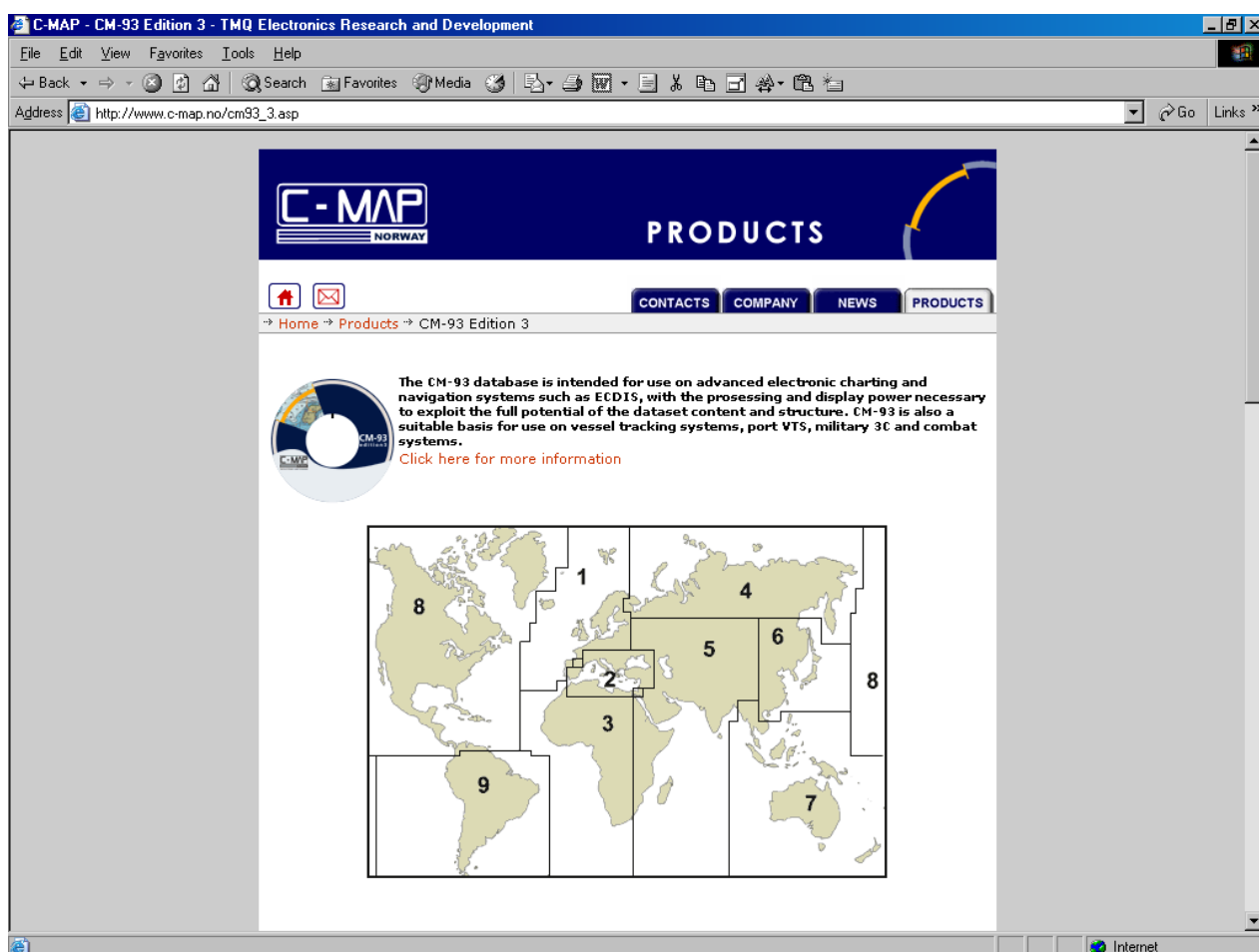


## C-Map CM-93 Edition 3 Chart Installation

This appendix deals with installing C-Map CM-93/3 charts for use by C-Plot Pro. Additional information regarding the CM-93/3 format can be found on the C-Map website please refer to this if required.



Web address: [http://www.c-map.no/cm93\\_3.asp](http://www.c-map.no/cm93_3.asp)





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## C-Map Chart Coverage

The world is split into 9 separate zones:

ZONE 1: Northern Europe

ZONE 2: Mediterranean Sea

ZONE 3: Coast of Western and Southern Africa

ZONE 4: Arctic coast of Europe and Asia, Sea of Okhotsk and Kamchatka

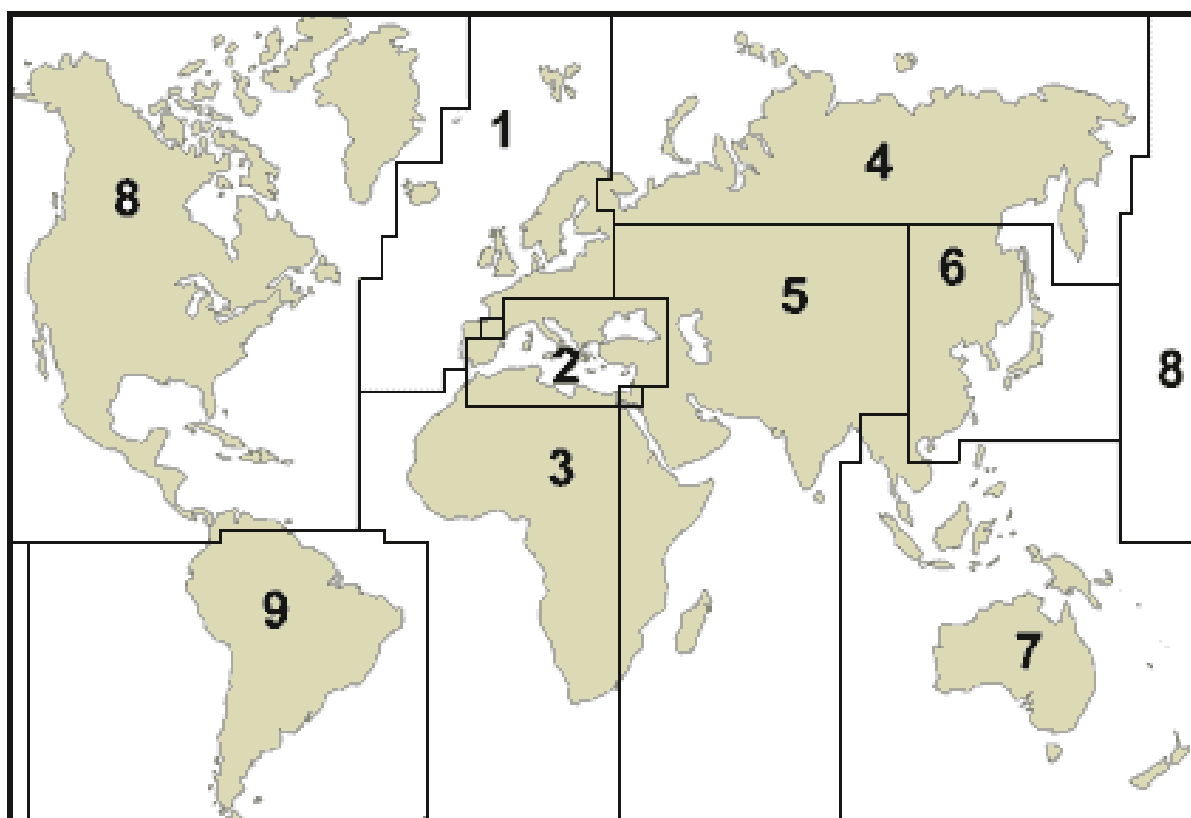
ZONE 5: Western Indian Ocean, Suez Channel, Red Sea, Arabian Sea and The Gulf

ZONE 6: Coast of China, Korea and Japan

ZONE 7: Indonesia, Australia, New Zealand and Oceania

ZONE 8: Coast of North and Central America, Gulf of Mexico and Caribbean Sea

ZONE 9: South American coast

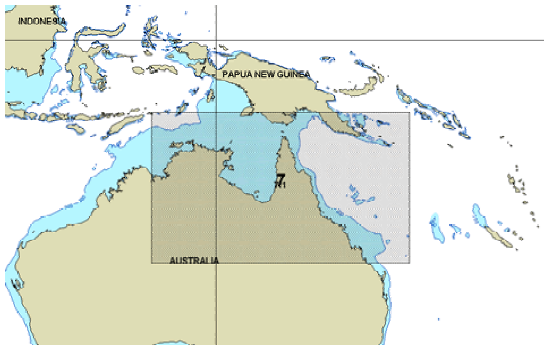


Within each zone there are individual areas. Charts are supplied either per area, per zone or the whole World.

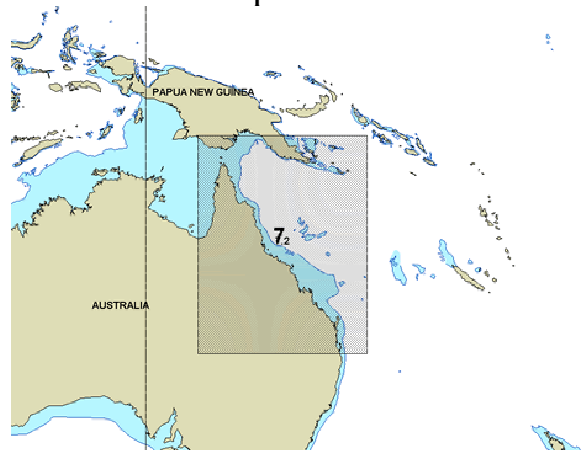
As an example **ZONE 7: Indonesia, Australia, New Zealand and Oceania** has 13 areas. Some of which are shown below.

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Area 1: Townsville to Wyndam



Area 2: Southport to Karumba



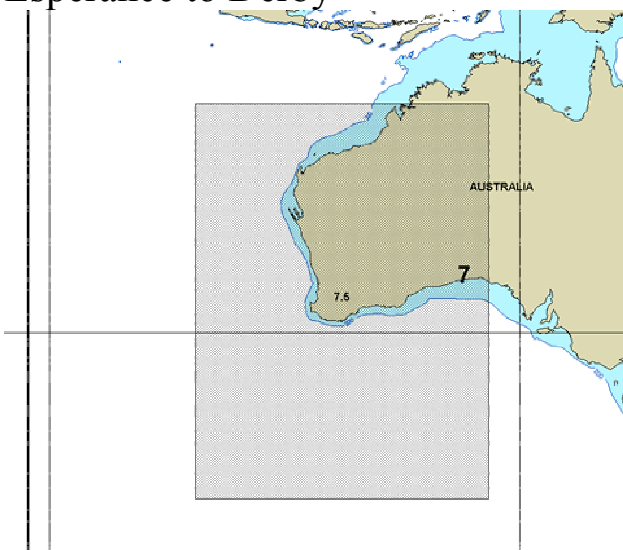
Area 3:  
Batemans Bay to Port Douglas



Area 4: South Australia,  
Victoria and Tasmania



Area 5:  
Esperance to Derby

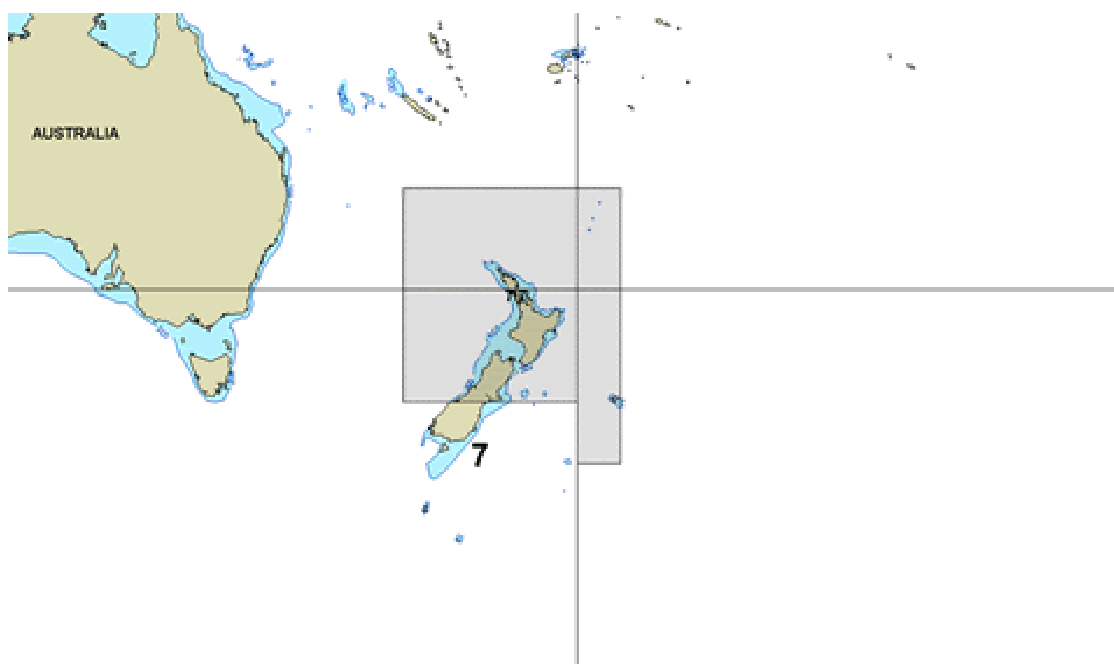


Area 6: Howard Island to  
Port Cloates

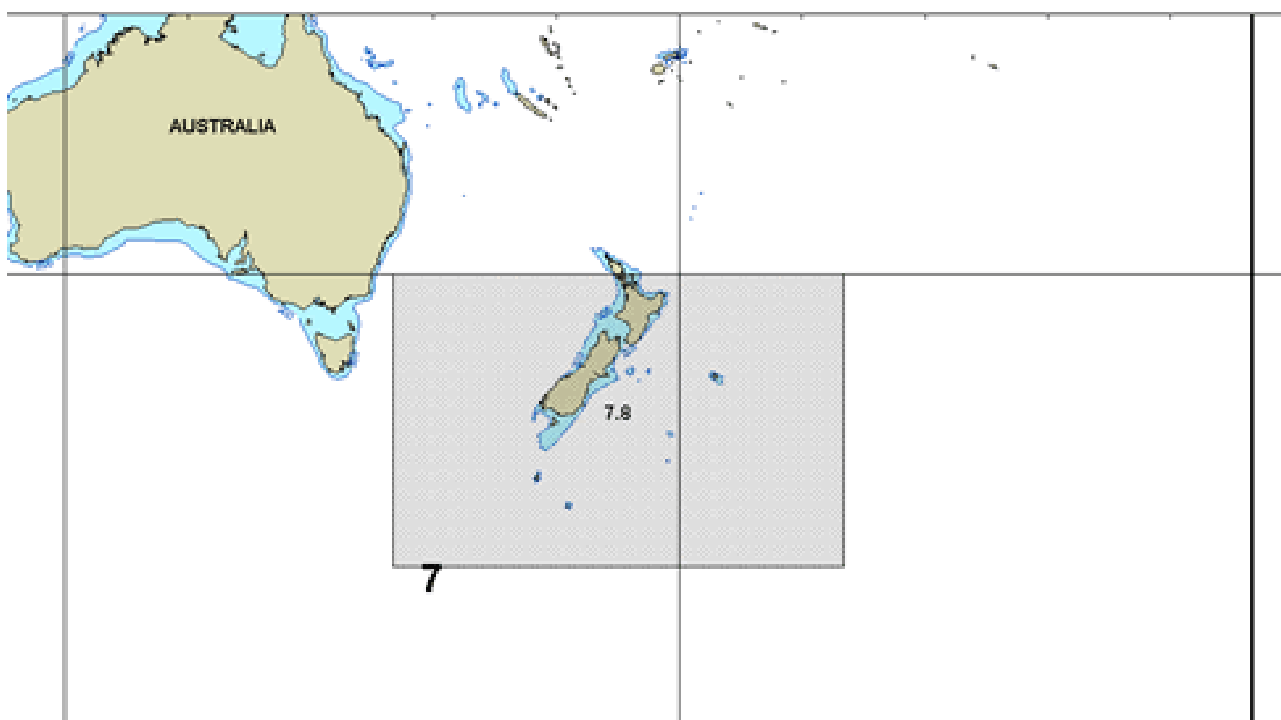


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## Area 7: New Zealand North Island



## Area 8: New Zealand South Island









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## Installing C-Map CM-93 Edition 3 Charts (CM-93/3)

Installation of the C-Map CM-93 Edition 3 chart database is a once off procedure. The database may be required to be modified at a later date during the chart update procedure or if different Zones/Areas are purchased.

### Copying the CM-93/3 Database to PC Hard Drive

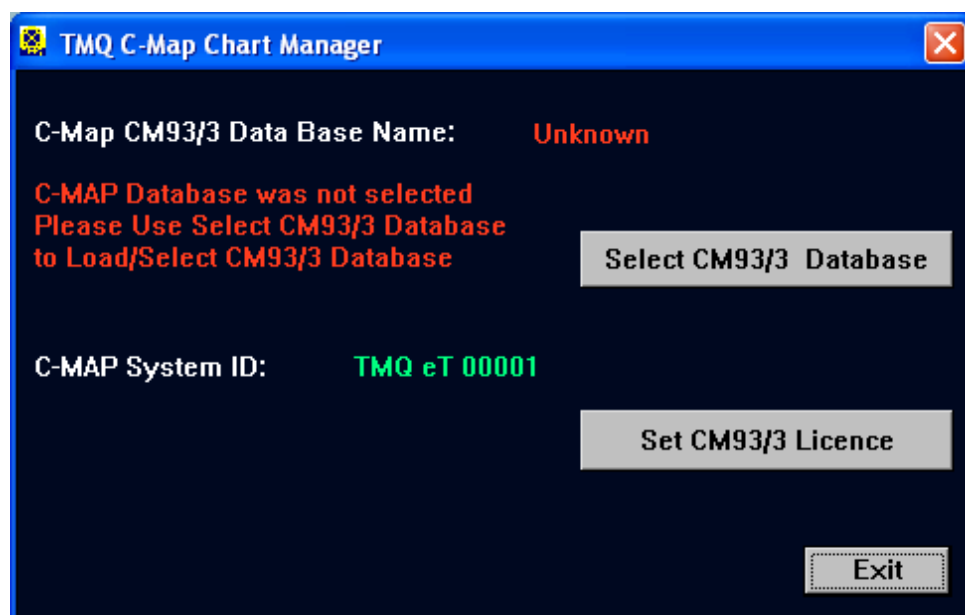
#### Access Sequences:

  →  →  'Charts' →  'Config' →  'C-MAP'

 Press 'Menu' → 0 → 6 → 2

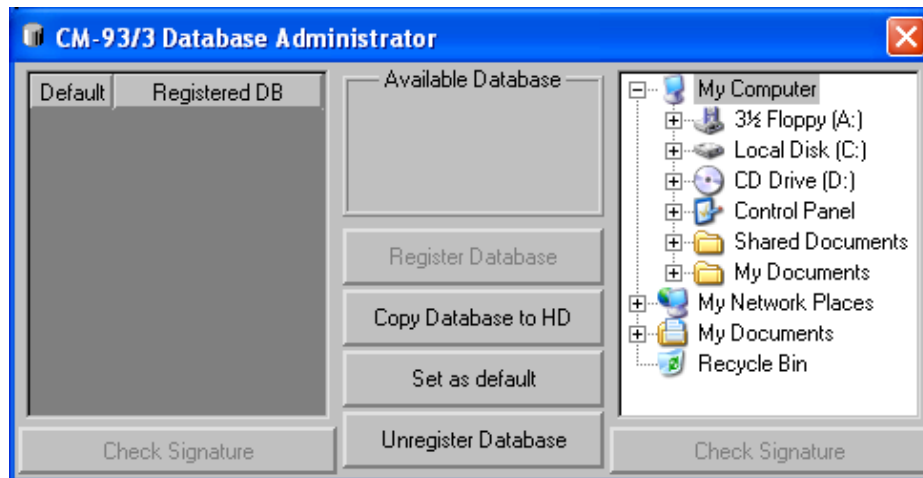
 Press Alt+M → 0 → 6 → 2

1. Click 'Select CM93/3 Database' button

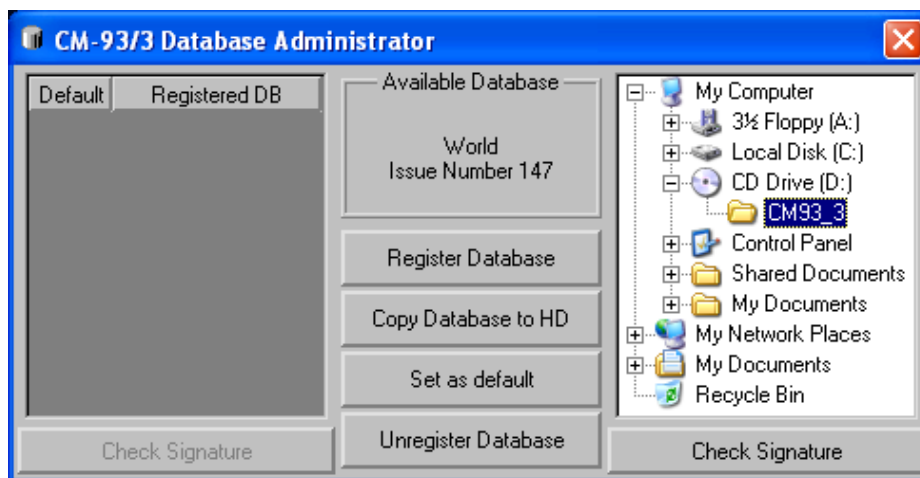


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The CM-93/3 Database Administrator window is displayed.

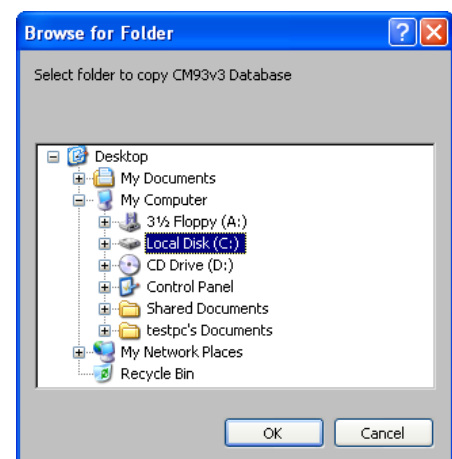


2. Select CD Rom and then the CM93/3 Folder, when correctly selected it will be visible in the Available database section.  
World Issue Number 147 in this example below.

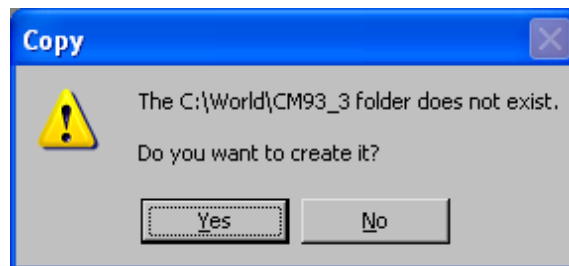


3. Click the 'Copy Database to HD' button. The 'Browse for Folder' window will be displayed.
4. Select the location to copy the Database to. Recommended to Select Local Disc (C:)

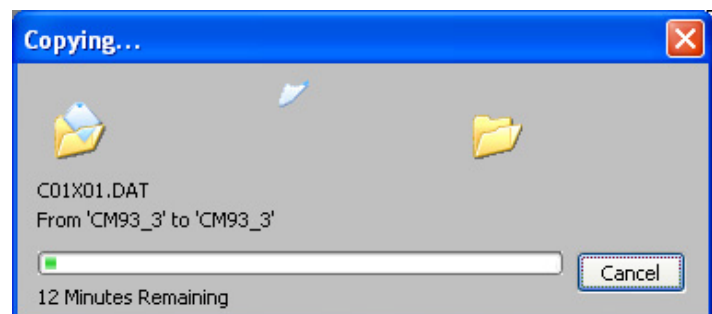
Click OK to continue.



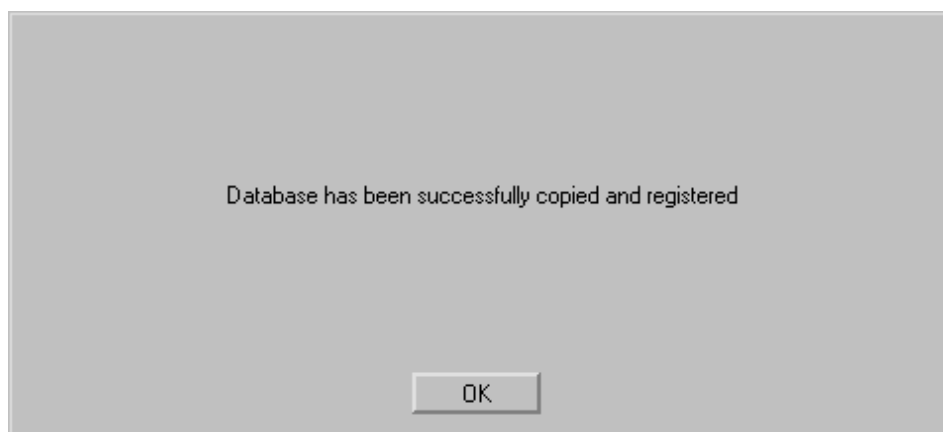
- 
5. The folder does not exist; select YES to have it generated automatically.



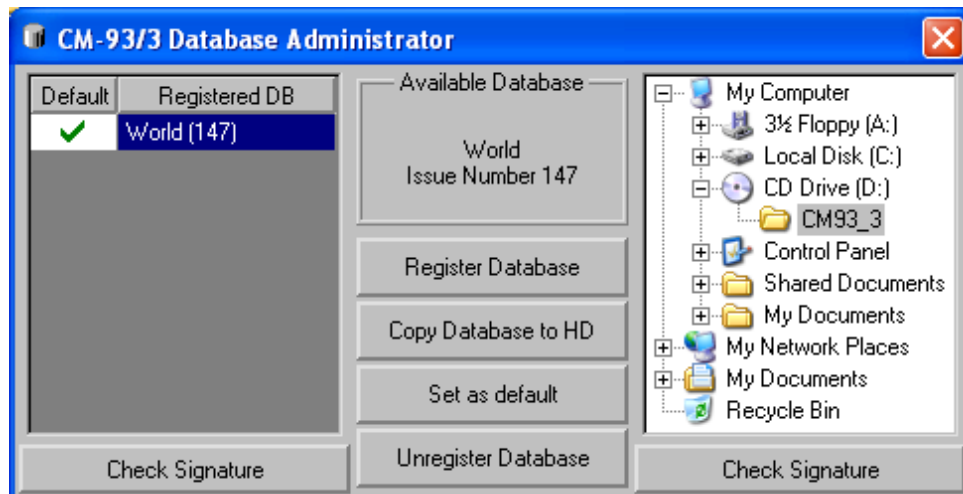
Copying of the Database will start; it may take up to 30 min to copy



6. After the Database has been copied the following confirmation will be displayed, click OK



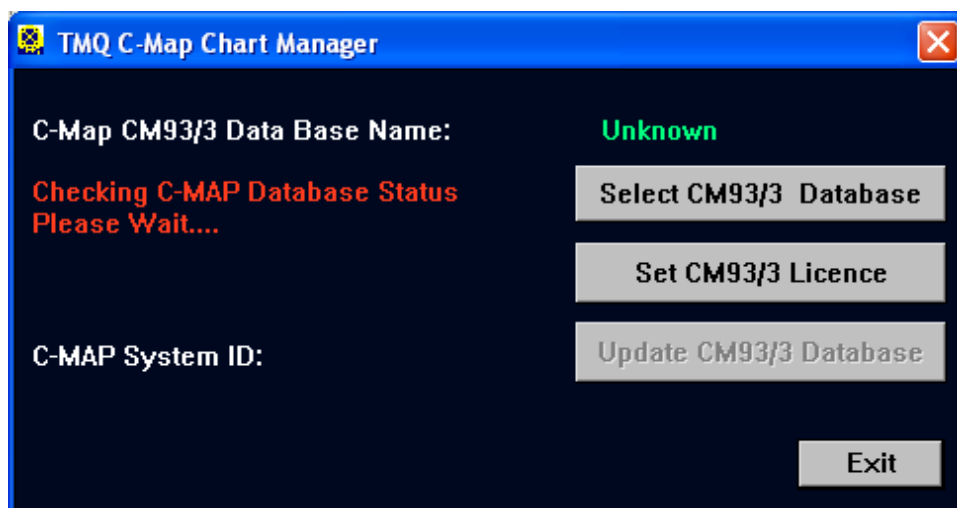
7. Check that the Database is now visible in the left pane of the CM-93/3 Database Administrator window, as shown below. This completes the Copying of the database procedure.



8. Close the CM-93/3 Database Administrator window.

## Setting Licence for Database

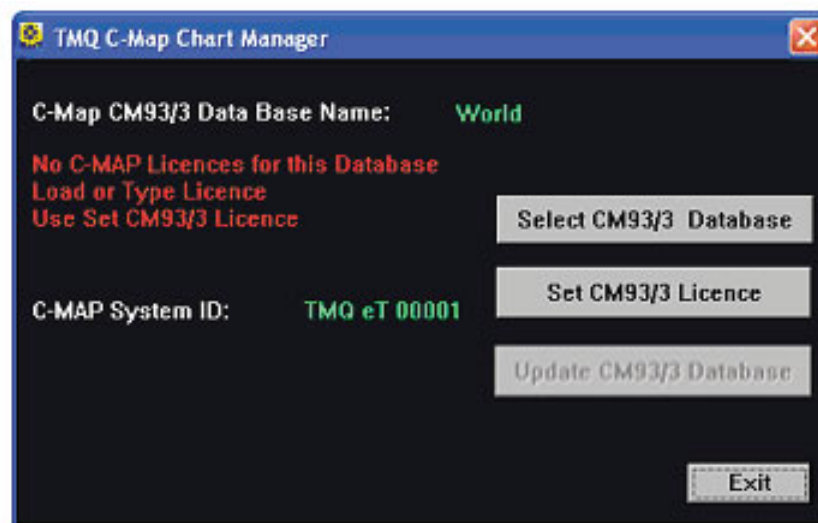
1. Ensure the C-Map eToken is inserted into the USB Port.
2. Enter the TMQ C-Map CM93/3 Chart Manager, wait while it detects database, this may take a few minutes.



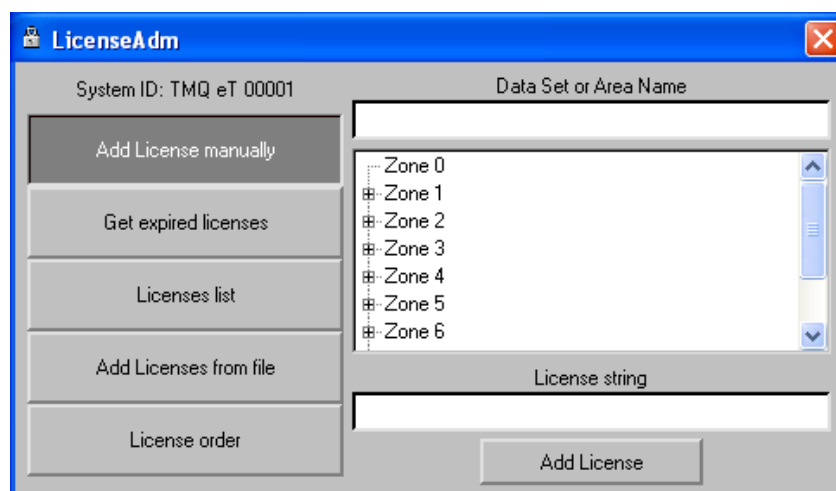
3. Once it is detected it is required to be licensed, click the 'Set CM93/3 Licence' button



The LicenseAdm window is displayed

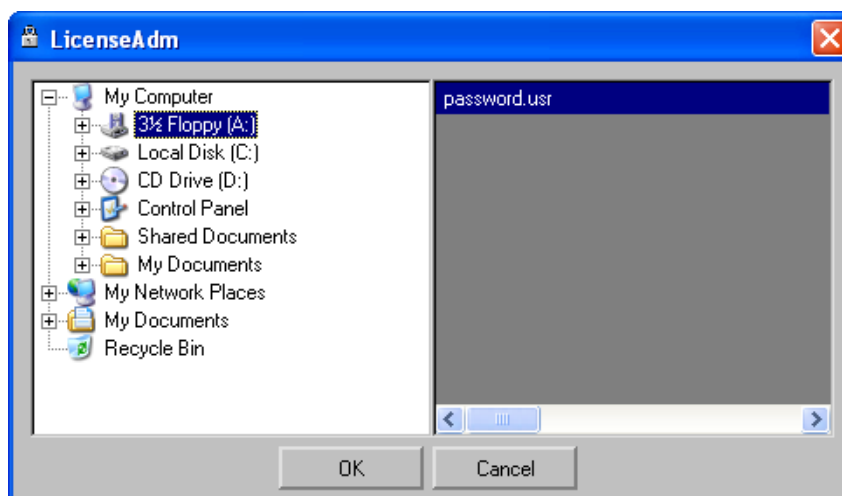


4. Click the 'Add Licenses from File' button, the computer explore tree is displayed.



5. Select the location of your licence (password.usr), usually it is on the (A:) drive as shown below.

Then Click the OK button

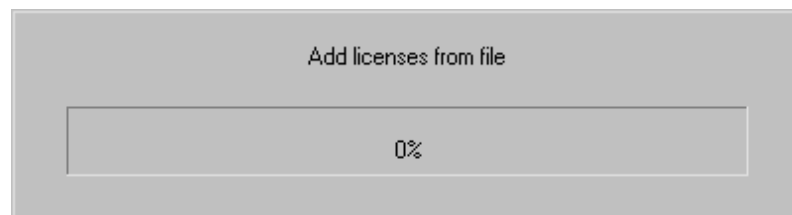


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6. Click YES to add the Licence



Licence will be added

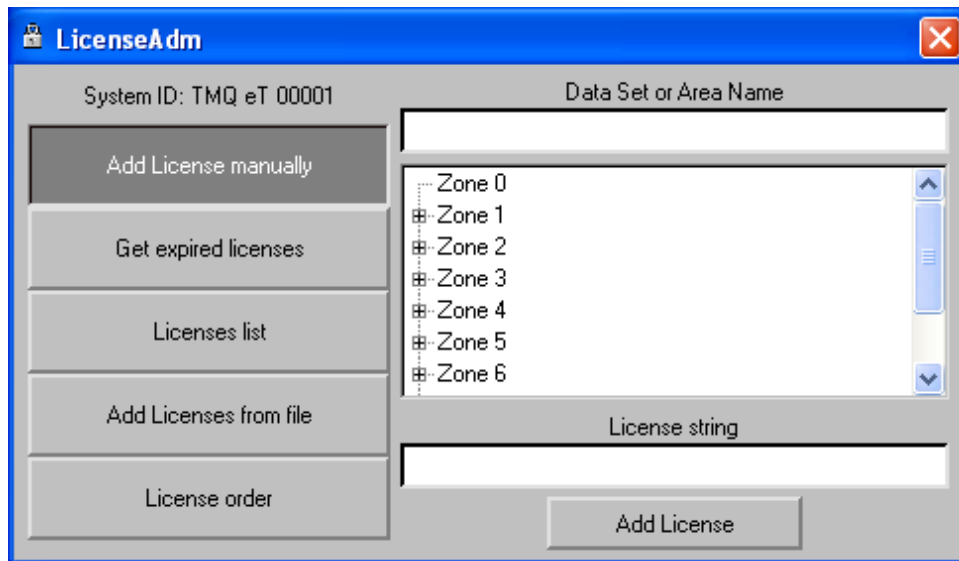


7. Click Close when the licence has been added.



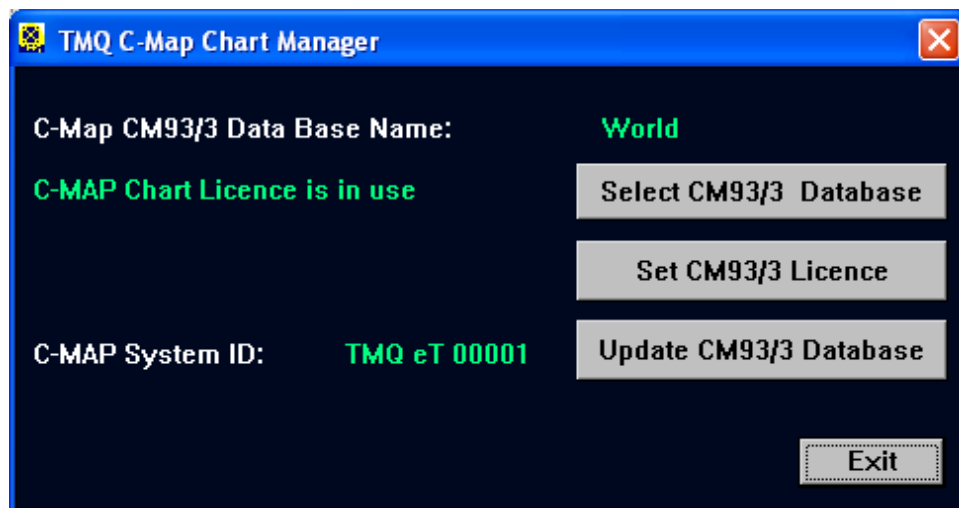
---

8. Close the LicenseAdm window using the X top right of the window



The TMQ C-Map Chart Manager will now check the Licence and Database, this may take a few minutes.

When complete the window below will be displayed confirming correct licensing.



The Database installation and Licensing is now complete.

9. Click the 'Exit' button

10. Close C-Plot and Reboot your PC.

---

## Displaying the C-Map Charts

Some PCs may not function correctly if the system has not been rebooted after the Database installation

### Access Sequences:



→ → → 'Charts' → → 'Load' → → 'C-MAP'



Press 'Menu' → 0 → 0 → 2



Press Alt+M → 0 → 0 → 2

Configure the C-Map Loading Attributes as required.  
Click the OK button to complete.

The dialog box titled "C-Map Loading Attributes" contains the following settings:

- Display Contents:**
  - ☐ Base Display
  - ☐ Standard Display
  - ☒ Full Display
- Loading Type:**
  - ☐ By Level
  - ☐ By Scale
  - ☒ Multi Level [Slow]
  - ☐ One Level
- Safety Contours:**

Safety Contour	2	M
Shallow Water	1	M
Deep Water	10	M
Safety depth	3	M

  - ☐ Two Shades
  - ☐ Shallow Pattern
- Depth:**
  - ☒ Meters
  - ☐ Fathoms
  - ☐ feet
- ☒ Show C-Map Box

Buttons: OK (Accept selection), Cancel (Leave without Changing)

---

## Updating C-Map CM-93/3 Charts

### Automatic Updating

C-Map CM-93/3 charts can be updated at any time through the TMQ C-Map Chart Manager interface. Using an Internet connection the available updates can be downloaded directly to the C-Map CM-93/3 database.



**Note:- Ensure that your Internet connection and account is fully operational without C-Plot running.**

#### Access Sequences:



→ → → 'Charts' → → 'Config' → → 'C-MAP'

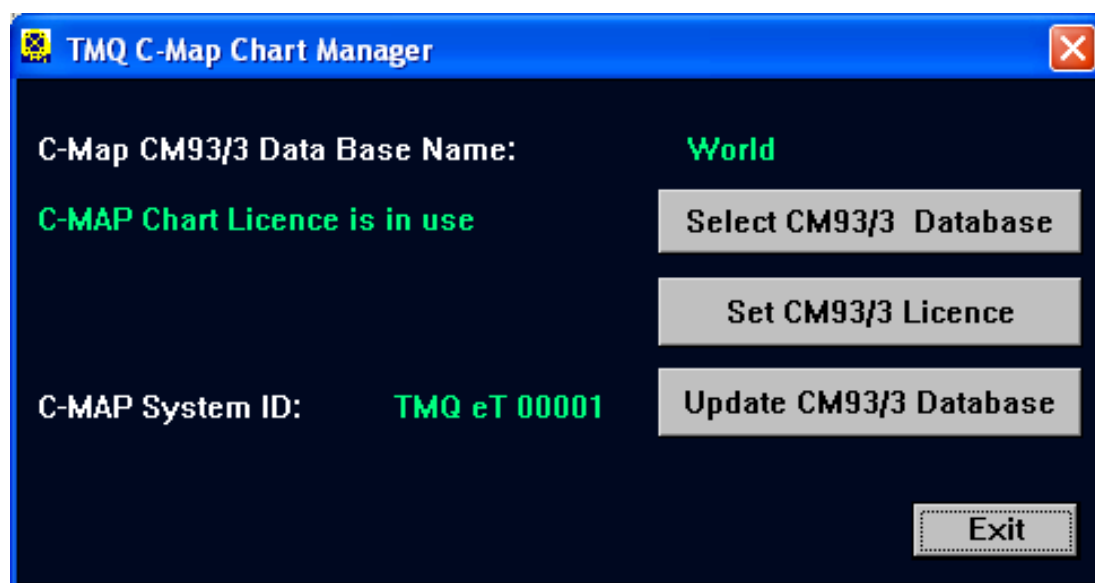


Press 'Menu' → 0 → 6 → 2



Press Alt+M → 0 → 6 → 2

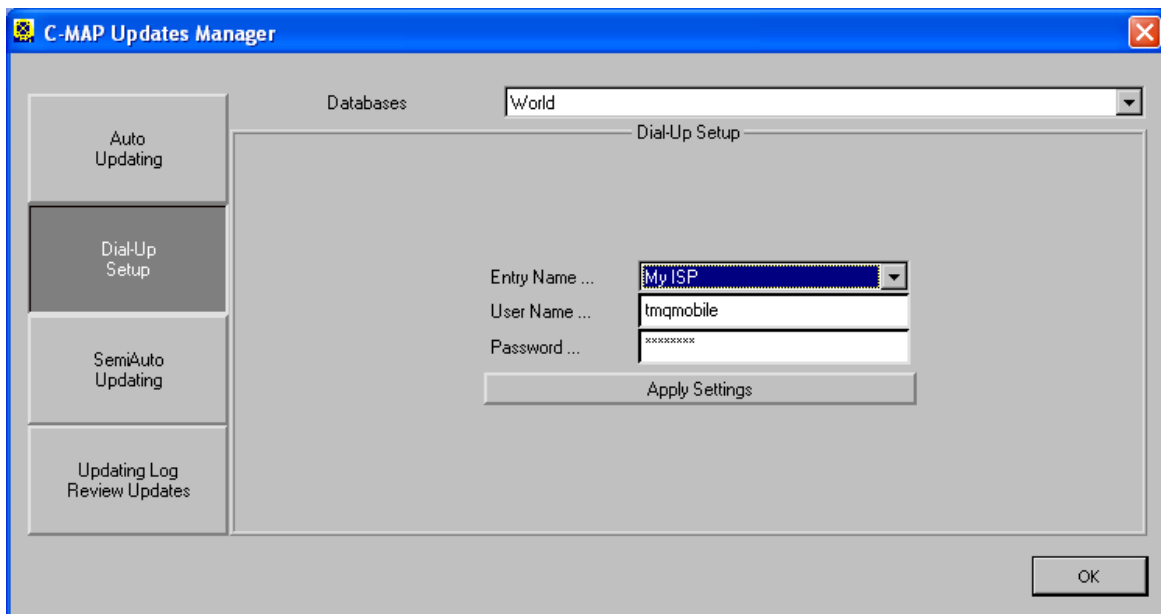
1. Wait until the database and licence has been checked then Select 'Update CM93/3 Database'



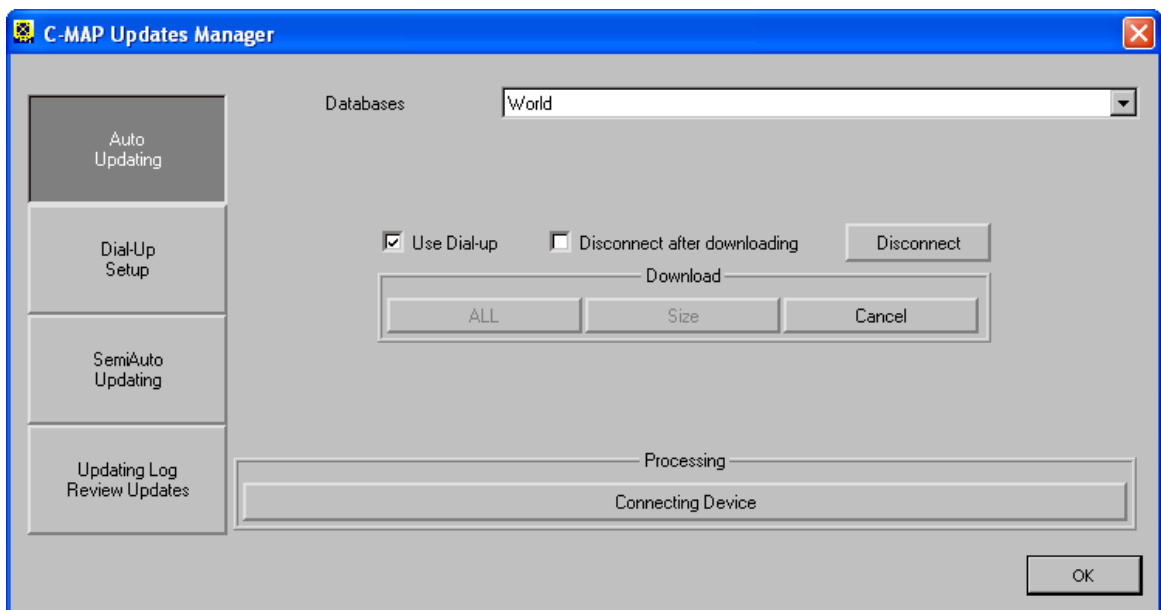
2. Select 'Dial-Up Setup'
3. Enter the account details for your Internet Service Provider (ISP) for an

existing fully operational Internet account.

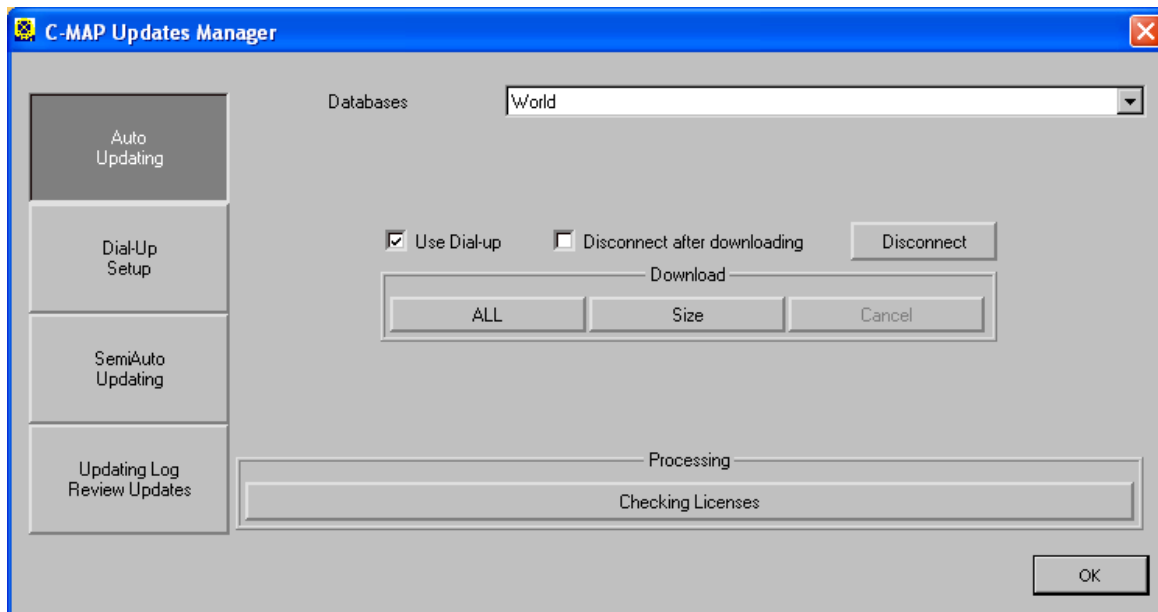
4. Click 'Apply Settings' to save the account information



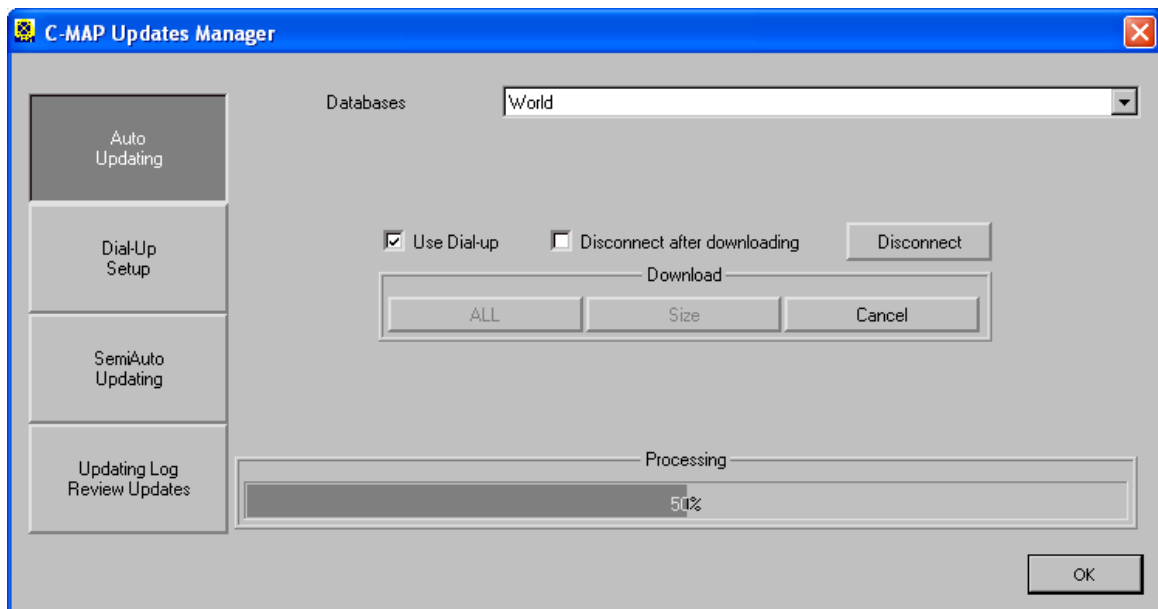
5. Select 'Auto Updating'
6. Check that the correct database name is selected in the 'Databases' box.
7. Select 'Use Dial-Up' and if required 'Disconnect after downloading' this will disconnect the computer from the Internet after completion of chart updating.
8. Select the 'ALL' button to start downloading all available updates. The modem will now connect to your Internet Service Provider (ISP), this process may take a few minutes.



9. The system Licence will then be checked.

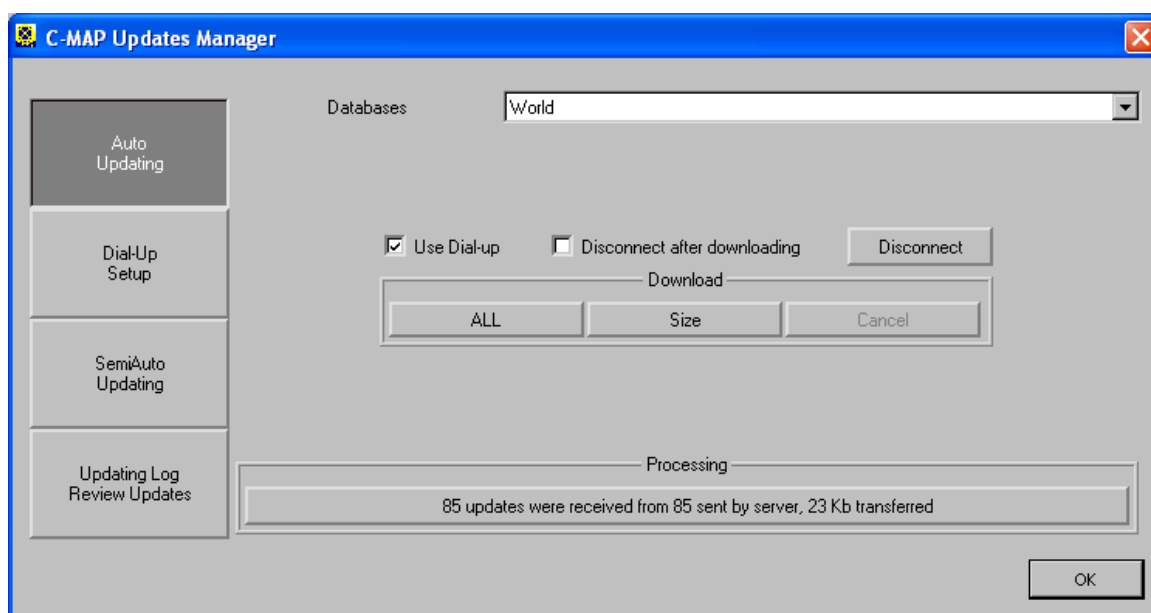


10. Downloading of all available updates will then commence. Time to complete this stage depends on the number of updates to be downloaded and the speed of your Internet connection

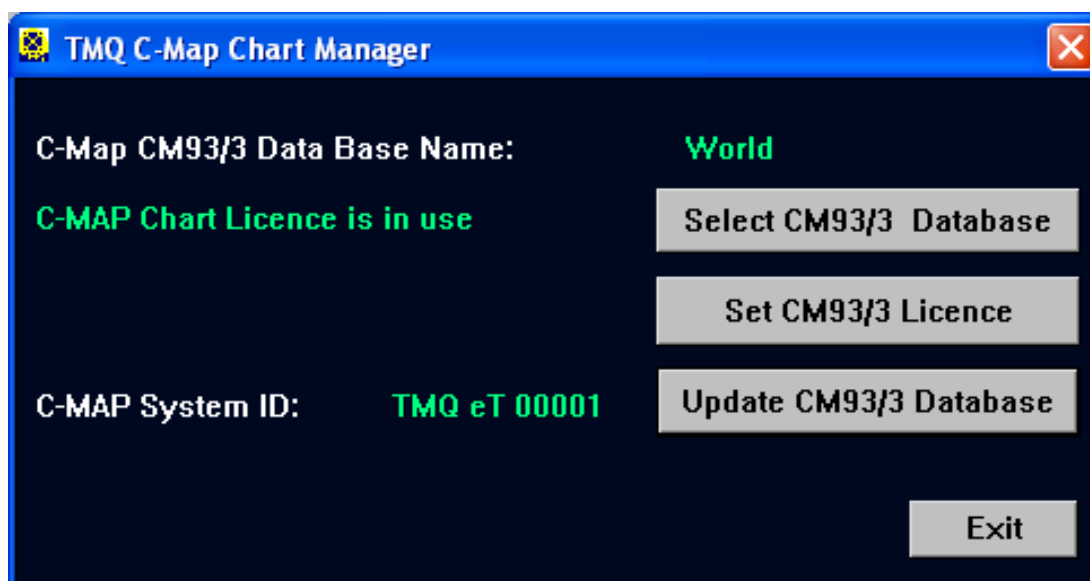




- 
11. Confirmation will be provided for the number of updates received and sent by the C-MAP Server.



12. Be sure to disconnect from the Internet if the connection is no longer required. Note:- The 'Disconnect after downloading' option can be selected for future chart updates if automatic disconnection is required.
13. To exit from the C-Map Updates Manager click the 'OK' button.



14. To exit from the TMQ C-Map Chart Manager click the 'Exit' button.

---







## Semi-Automatic Updating – Creating Order File

Updates Email address:- [updates@c-map.no](mailto:updates@c-map.no)

C-Map CM-93/3 charts can be updated at any time through the TMQ C-Map Chart Manager interface. The 'SemiAuto Updating' provides an alternative method of updating for those computers not connected to the Internet. The CM-93/3 chart update order is generated, saved to a specified location and can then be sent to C-Map via email from another PC with an Internet connection.

The chart update order file must be created and saved to removable media (usually Floppy Disc). The C-Map Updates Manager is used to do this.

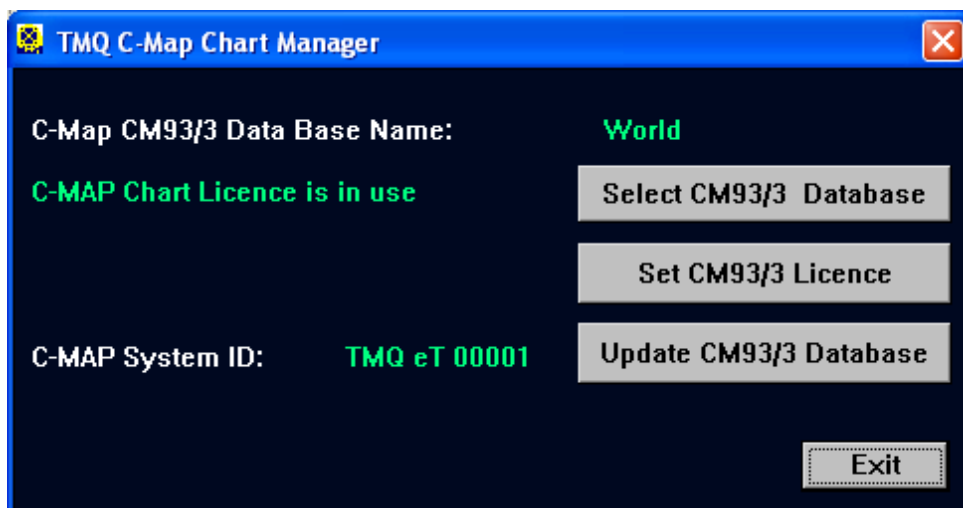
### Access Sequences:

  →  →  'Charts' →  'Config' →  'C-MAP'

 Press 'Menu' → 0 → 6 → 2

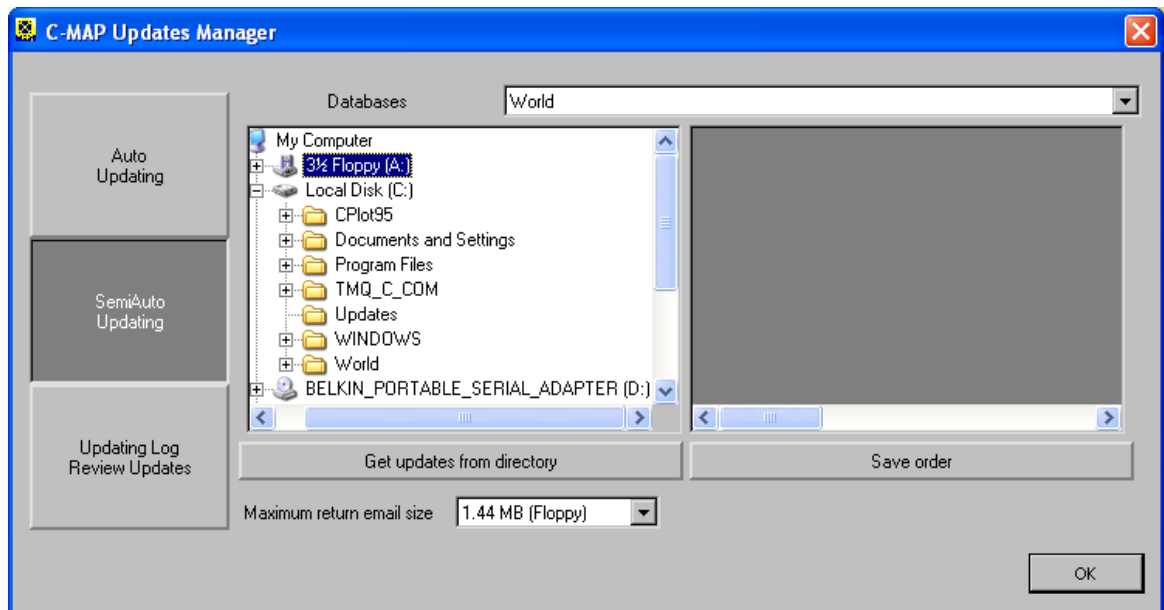
 Press Alt+M → 0 → 6 → 2

1. Wait until the database and licence has been checked then Select 'Update CM93/3 Database'

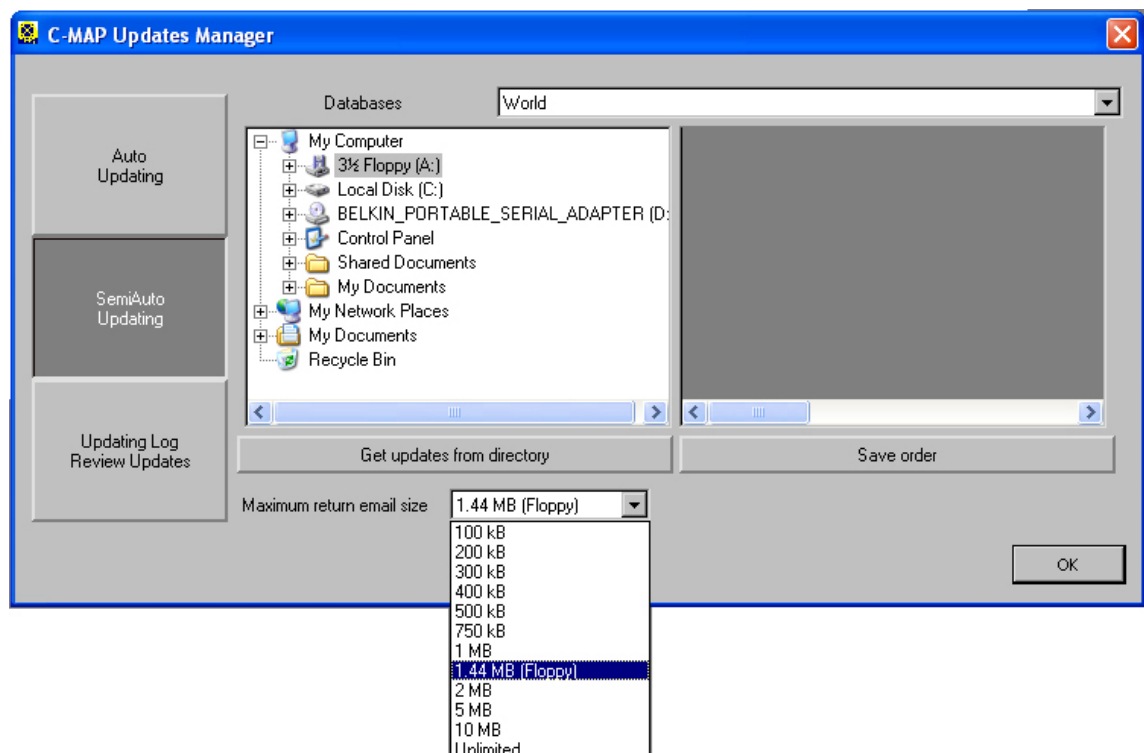


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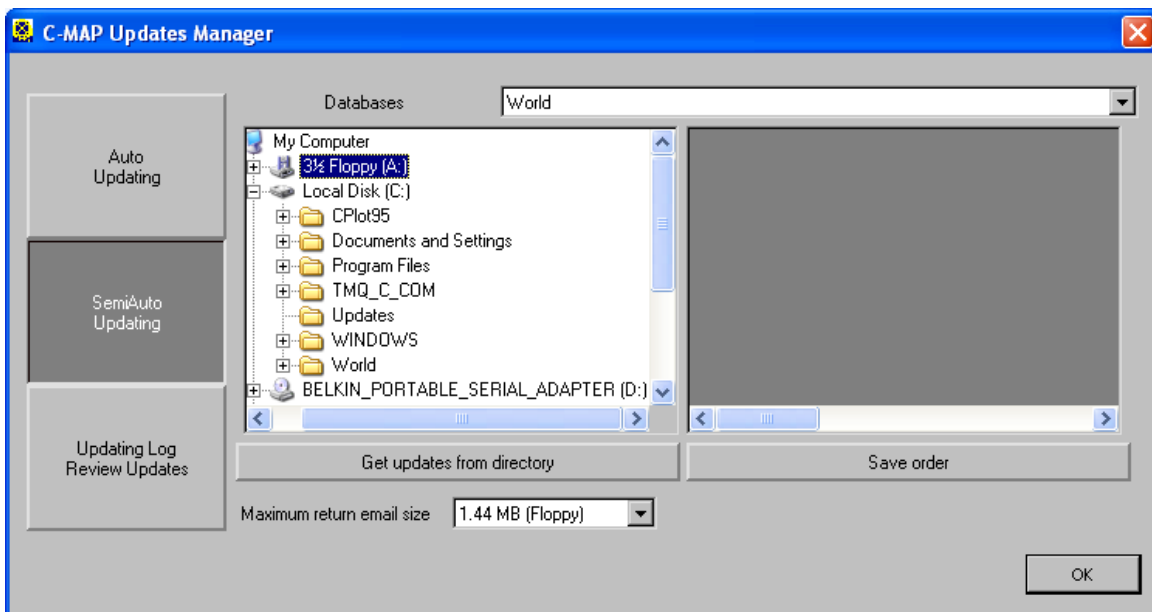
2. Select 'SemiAuto Updating'.



3. Select from the drop down list the maximum return email size if your Internet Service Provider (ISP) imposes restrictions. The 1.44MB (Floppy) size is recommended as the file can be saved to a blank formatted 1.44MB Floppy Disc ready for transfer to the PC with the C-Map CM-93/3 chart database installed on it.



- 
4. Select the required location for the C-Map order file to be saved. This is usually the (A:) Drive, as shown below.



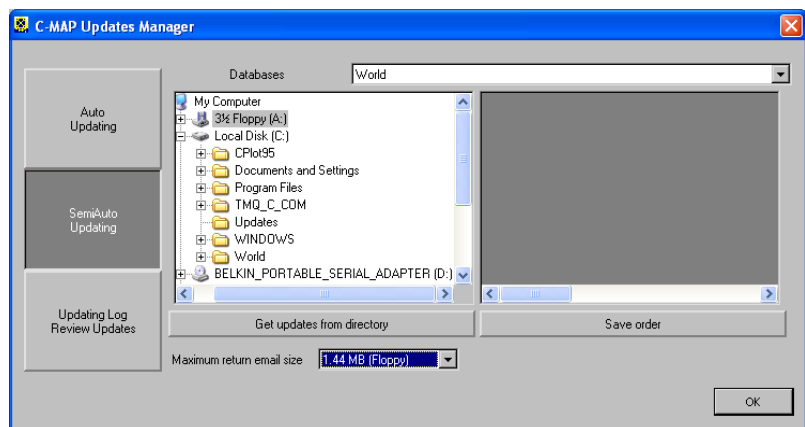
5. Click the 'Save order' button, be sure to check that the file is being saved to the correct location (here A:\) click 'YES' to save the file.



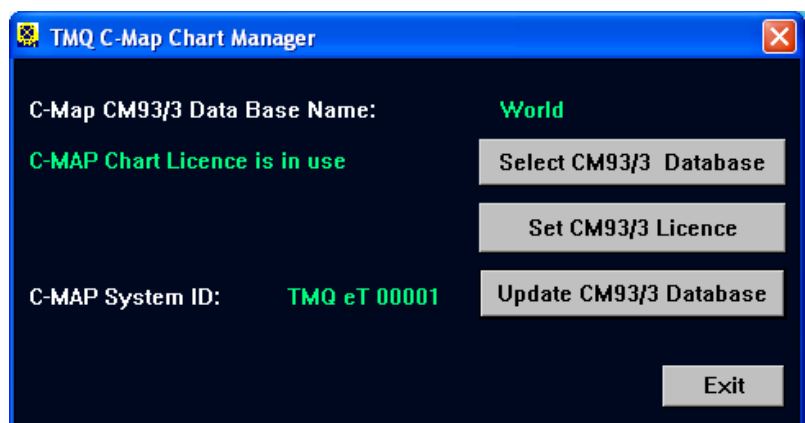
- 
6. Confirmation is provided that the file saved correctly, Click 'OK'



7. Click 'OK' to exit from the C-Map Updates Manager



8. Click 'Exit' to close the TMQ C-Map Chart Manager



9. Remove the Floppy Disc and transfer it to a PC with email capability. Send the order file (\*.ord) to C-Map at **updates@c-map.no**. Reply is automated and can be within minutes it contains an attached file (\*.ans). Transfer this file to the PC with the C-Map database installed on it using the floppy disc. Refer to:- Semi-Automatic Updating – Loading Updates From Email







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## Semi-Automatic Updating – Loading Updates From Email


To complete the 'Semi Auto' update procedure the C-Map update file must be installed, the file is in the \*.ans format and will be sent by email from C-Map. Refer to:- Semi-Automatic Updating – Creating Order File

Installation of the updates is through the 'TMQ C-Map Chart Manager'

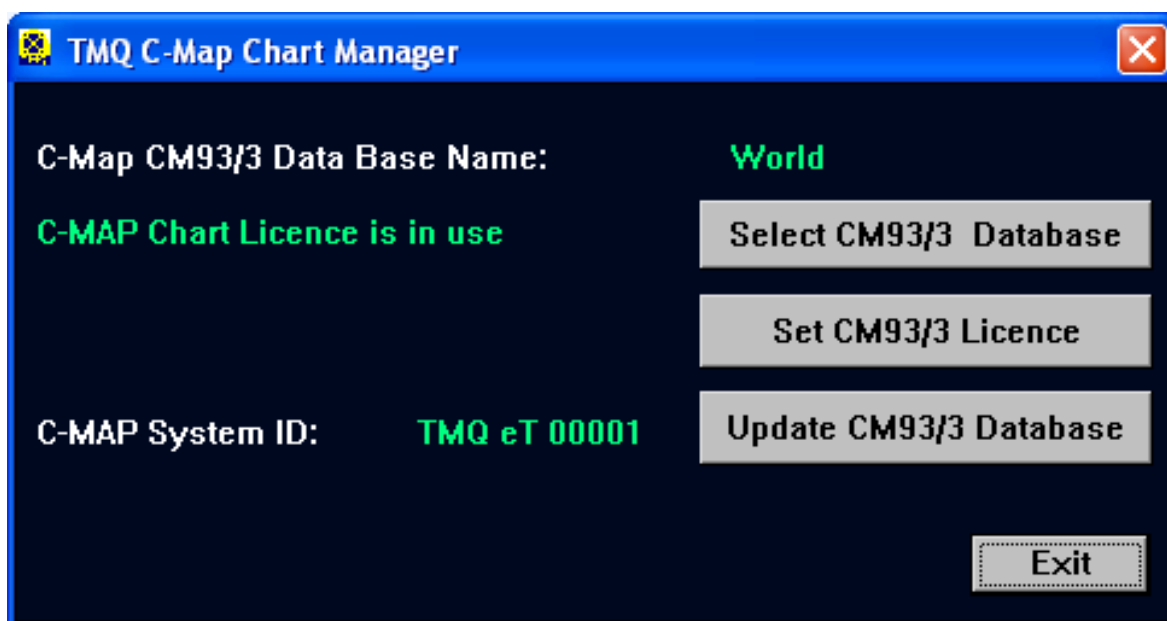
### Access Sequences:

  →  →  'Charts' →  'Config' →  'C-MAP'

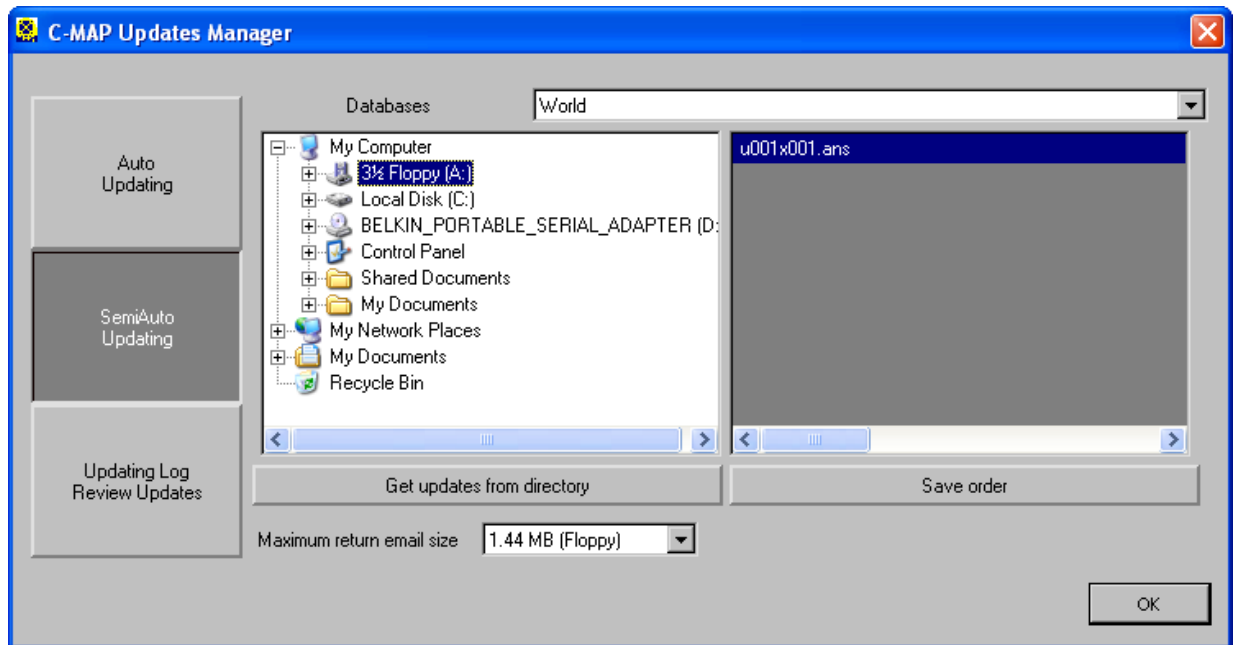
 Press 'Menu' → 0 → 6 → 2

 Press Alt+M → 0 → 6 → 2

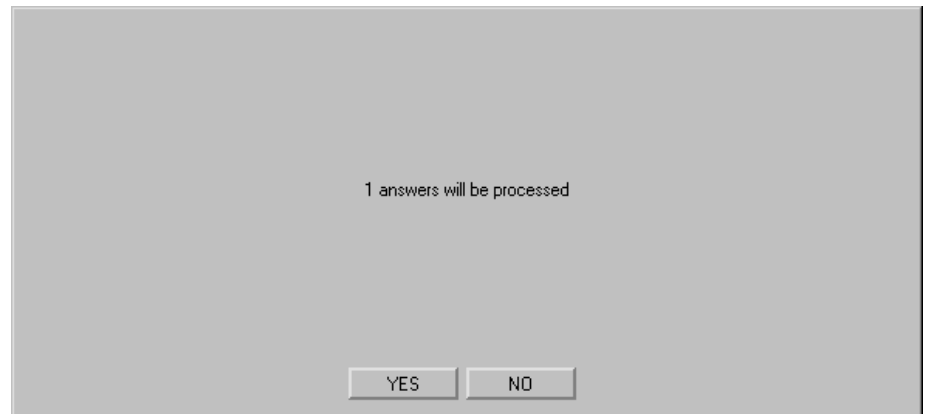
### 1. Select 'Update CM93/3 Database'



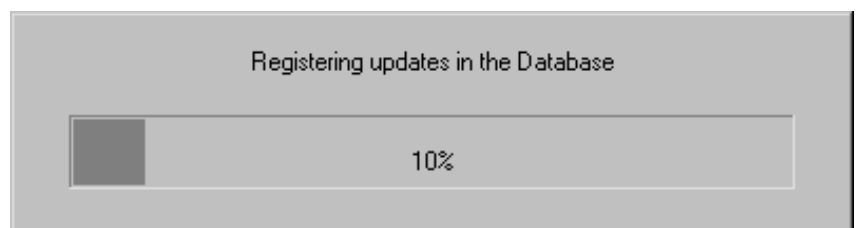
2. Select the Floppy drive (or location that you saved the C-Map \*.ans update file to) the update file will be visible in the right panel of the C-Map Updates Manager window. Then click the 'Get updates from directory' button.



3. Click 'YES' to continue



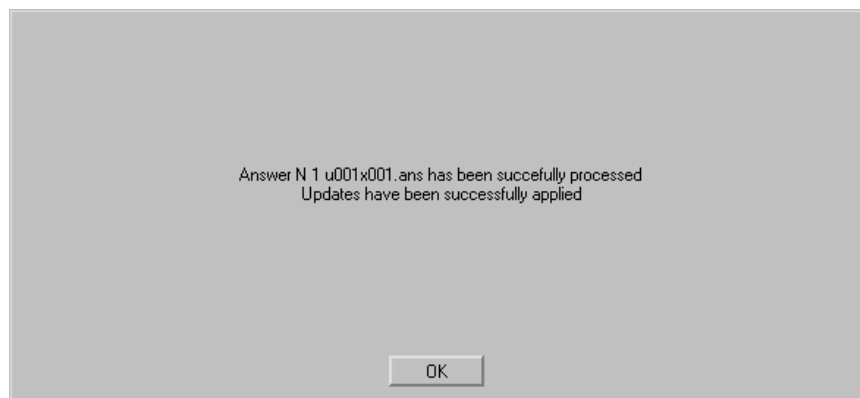
4. Updates are applied



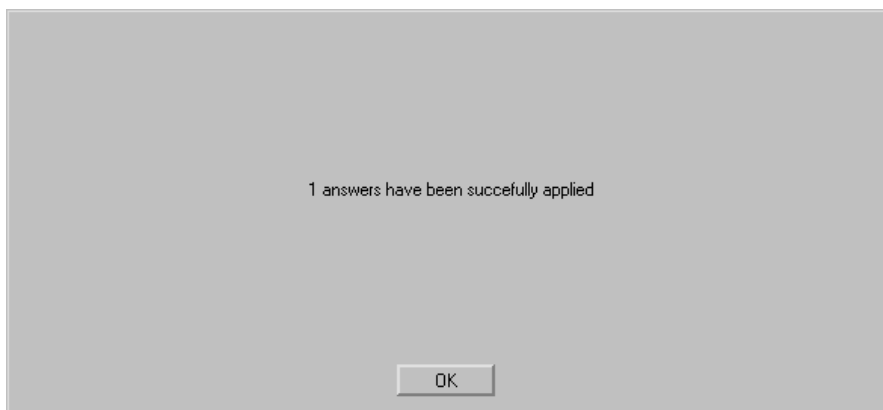


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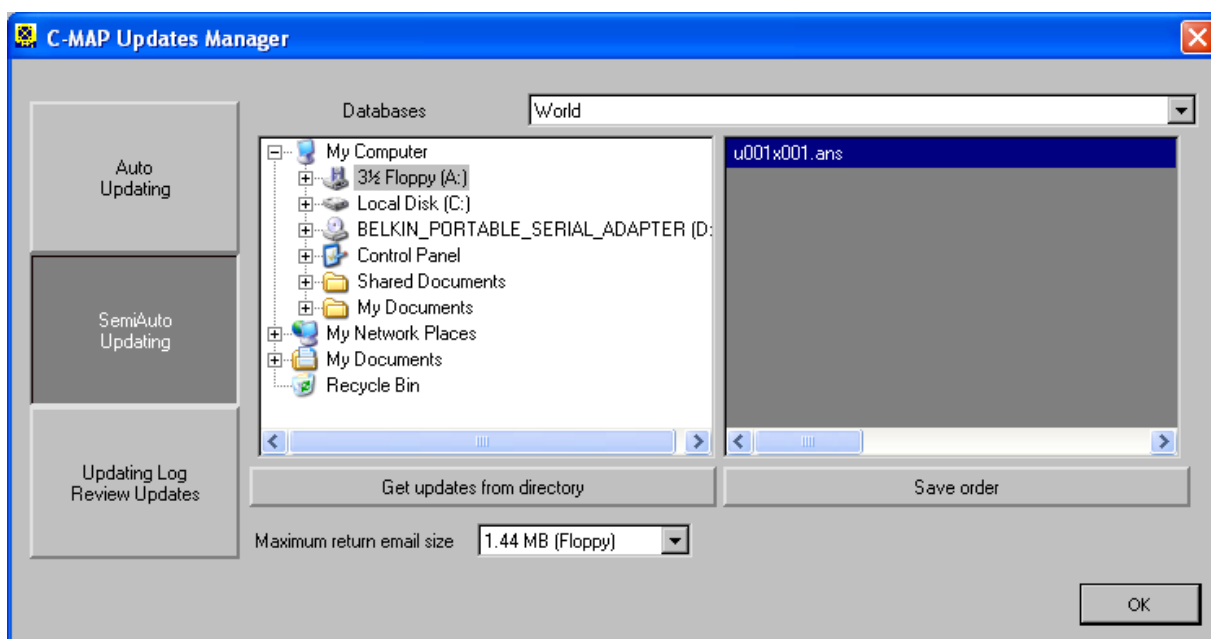
5. Confirmation of update is provided, click 'OK'



6. Check to see if update has been applied then Click 'OK'

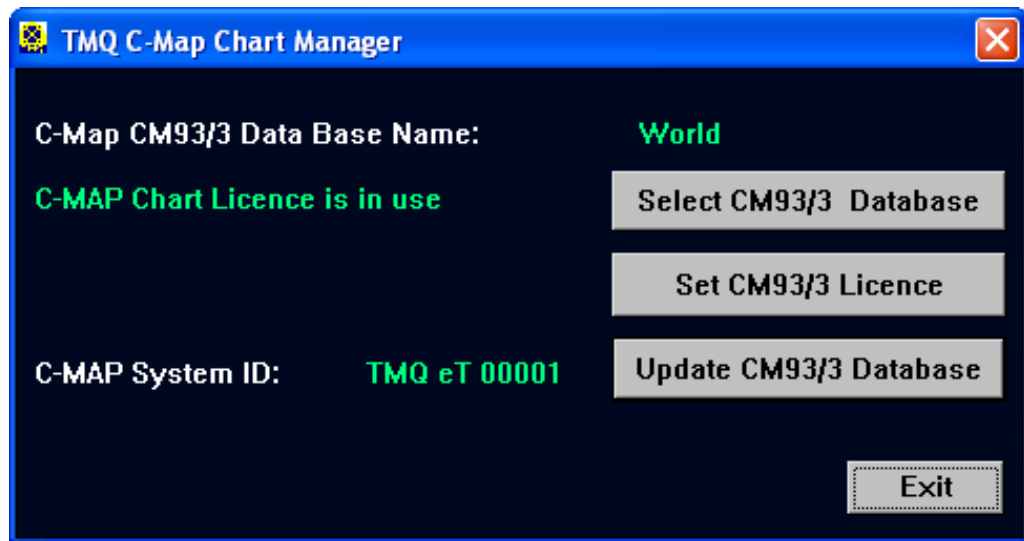


7. Click 'OK' to exit the C-Map Updates Manager



---

8. Click 'Exit' to exit the TMQ C-Map Chart Manager.



Installation of the C-Map updates is now complete.

---

## Installing TMQ Charts

TMQ Charts are stored on the C-Plot installation disc. TMQ Charts cannot be installed while C-Plot is running, in order to install TMQ Charts 'Exit' C-Plot first. To install TMQ Charts a PIN is required for the set of charts to be installed.

1. Insert the C-Plot Installation CD-ROM into the CD Drive and wait for the C-Plot Setup screen to be displayed.
2. On the C-Plot Setup screen, click the 'TMQ Charts' button. A 'TMQ Chart Installation' dialogue box will appear.
3. Choose the desired chart set from the list and click 'Do It'.
4. Enter the PIN for the selected set of charts into the data field provided on the 'Pin Checking' dialogue box and click 'OK'.
5. The selected set of charts will now be installed onto the computer's hard drive. Wait for the chart installation to finish.
6. Repeat steps 3 – 5 until all desired chart sets have been installed.
7. Click the 'Quit' button to return to the C-Plot Setup screen, and then click 'Quit' in the C-Plot Setup screen to complete the installation. C-Plot can now be started and TMQ Charts loaded.

## Installing TMQ Charts

In order to install TMQ Charts, please ensure that C-Plot is closed (Exit)

Start Installing TMQ Charts

Insert the C-Plot Installation CD-ROM into the CD Drive and wait for the C-Plot Setup screen to be displayed.

On the C-Plot Setup screen, click the 'Install TMQ Charts' button. A 'TMQ Chart Installation' dialog will appear.

Choose the desired chart set from the list and click 'Do It'.

Enter the PIN for the selected set of charts into the data field provided on the 'Pin Checking' dialog box and click 'OK'.

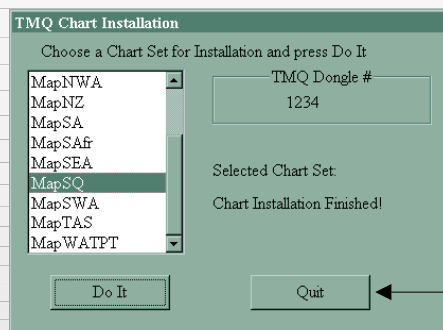
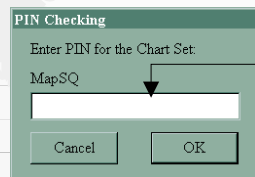
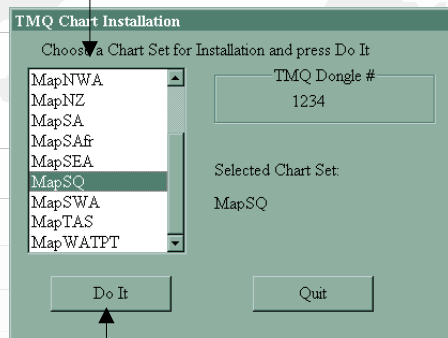
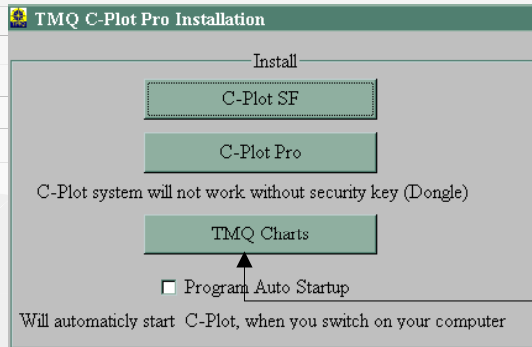
The selected set of charts will now be installed onto the computer's hard drive. Wait for the chart installation to finish.

Do you wish to install another set of TMQ Charts?

No

Click the 'Quit' button to return to the C-Plot Setup screen, and then click 'Quit' in the C-Plot Setup screen to complete the installation. C-Plot can now be started and TMQ Charts loaded.

Installing TMQ charts is complete



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## ***C-Com – Communications Server***

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# TMQ C-Com Communications Server

---

## User Manual

C-Com enables full control of a systems communication ports, such as COM1. The application enables incoming data to be shared amongst all *C-Com Enabled* TMQ applications. C-Com allows effortless monitoring and configuration of all data inputs. All user settings are saved and hence modification of the configuration of C-Com should only need to be done when new hardware is connected to the system, or when the current hardware input of the system has been modified. C-Com can also aid in diagnosing any input related errors that may occur during the normal operation of the system. The following manual outlines the features of the C-Com server and how it can be used to efficiently integrate input data for use by all *C-Com Enabled Applications*.

### 1.0 Exploring the Main Window

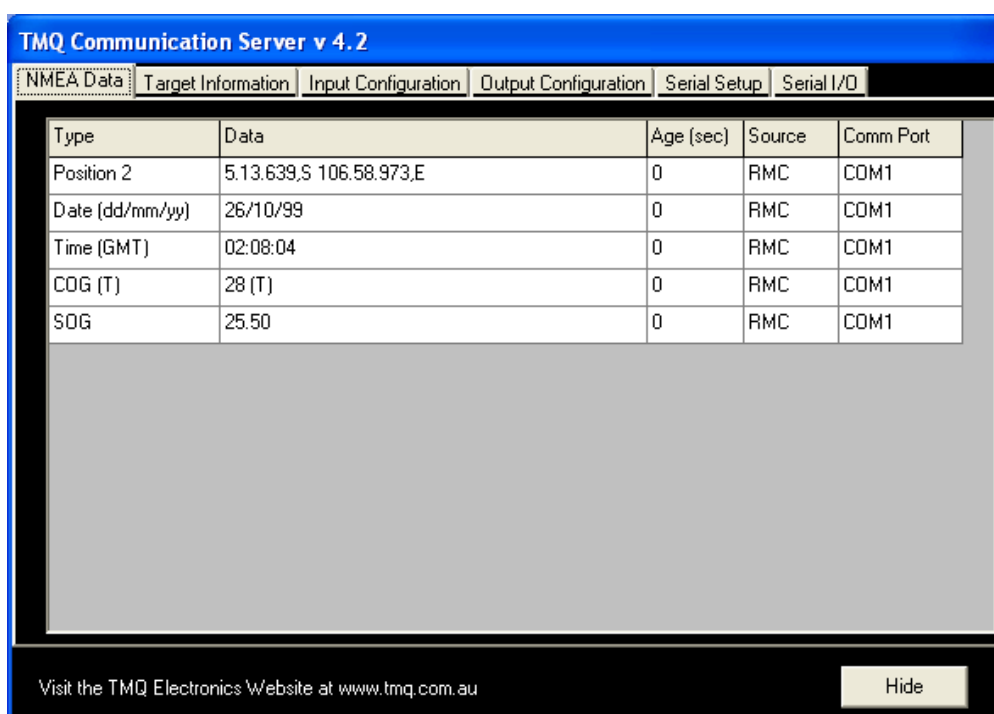



Figure 1

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The main window of C-Com contains the majority of features required to effectively configure the systems data inputs. C-Com consists of a Main window and a Communication Port configuration window (discussed in a later section). The user interface is very easy to use with a row of labelled tabs toward the top of the window (see Figure 1). Clicking on any one of these tabs reveals the information associated with that particular tab.

In the bottom right-hand corner of the main window is the ‘Hide’ button, this button allows C-Com to run in the background (i.e. No screen presence). In order to render the main window visible, simply double-click on the TMQ Communications Server icon () in the System Tray. The following sections will outline each of the main window tabs and the information displayed.

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## 1.1 The NMEA Data Tab

The NMEA Data tab (See Figure 1) is simply a displayed summary of the configured inputs. The display is in the form of a table with 5 labeled columns.

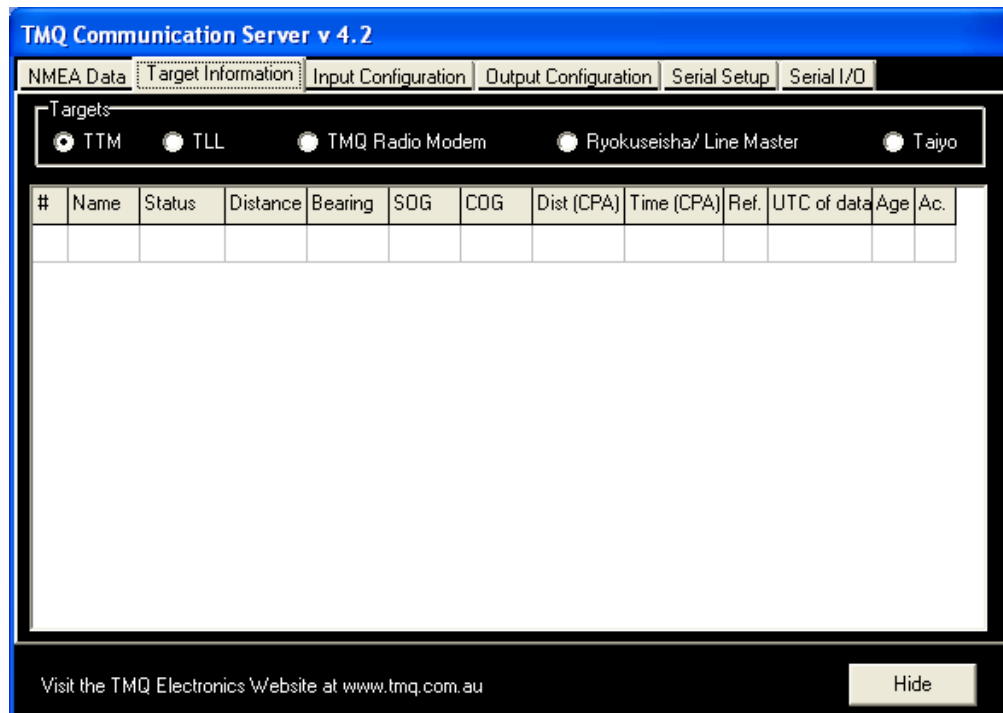
- **Type** – This column contains the types of data that have been configured in C-Com.
- **Data** – This column contains the actual value of the data that is being received.
- **Age** – This column displays the *age* of the data in seconds. Whenever new data is received and the *Data* column for that particular ‘Type’ is refreshed and the ‘Age’ display is reset to zero.
- **Source** – This column indicates the NMEA sentence that is being used as the source of the particular *Type* of data.
- **Comm Port** – This column indicates the communications port that has been configured to receive a particular NMEA sentence.

If there is a problem with receiving any type of data, the first sign on the C-Com display, will be an increasing *Age* for the data. Once the data has reached a certain age it is removed from this table.



---

## 1.2 The Target Information Tab



**Figure 2**

The Target Information tab display is much the same as the NMEA Data tab display. However, this tab displays information on various types of targets. There are three different types of targets represented on this display, *TTM Targets*, *TLL Targets*, *RDM Targets*, *Ryokuseisha* and *Taiyo*. Each of these target types is displayed in its own table (see figure 2). In order to view a particular Target Table, simply click the desired table in the box above the table. The targets are displayed in order of Target Number and, as with the NMEA Data display, when a target's *age* reaches a certain value the target is removed from the table.

---

## 1.3 The Input Configuration Tab

The Input Configuration tab allows the NMEA Source and Communications Port for each *Type* of data to be configured. In addition it allows the NMEA sentence to be checked for reliability (CSS & VCS).

This tab is comprised of two key areas, the Configuration table & the configuration modification section. The Configuration table displays the current configuration settings, while the configuration modification section allows the settings of the highlighted data type (Configuration Table) to be altered.

### 1.3.1 The Configuration Table

The first column of the configuration table (*Data*) lists all the possible data types that can be configured via C-Com. The next two columns, *Source* and *NMEA Type* display the current communications port and NMEA sentence settings. If these are 'None' it means that the data type in question has not yet been configured. The final two columns *CSS* (Check Sentence Structure) and *VCS* (Verify Check Sum) display the status of the reliability verification parameters.

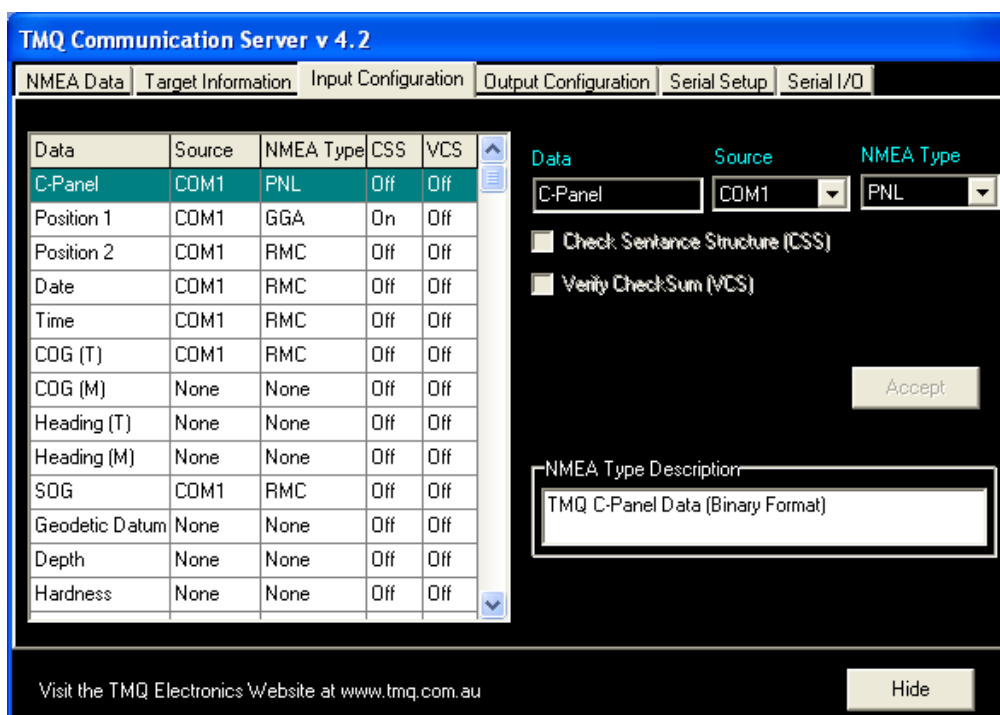


Figure 3

- 
- Check Sentence Structure (CSS): This option configures C-Com to check the particular NMEA Sentence to ensure it has the correct sentence structure (i.e. The correct number of fields). This can improve the reliability of the system by discarding sentences that may have been corrupted while being transmitted between devices.
  - Verify Check Sum (VCS): This option configures C-Com to verify the check sum of the NMEA sentence in question. This method is far more reliable than the CSS method, unfortunately contrary to the NMEA Standard 0183, many companies fail to include a check sum in their sentences and in these cases the VCS feature should not be set.

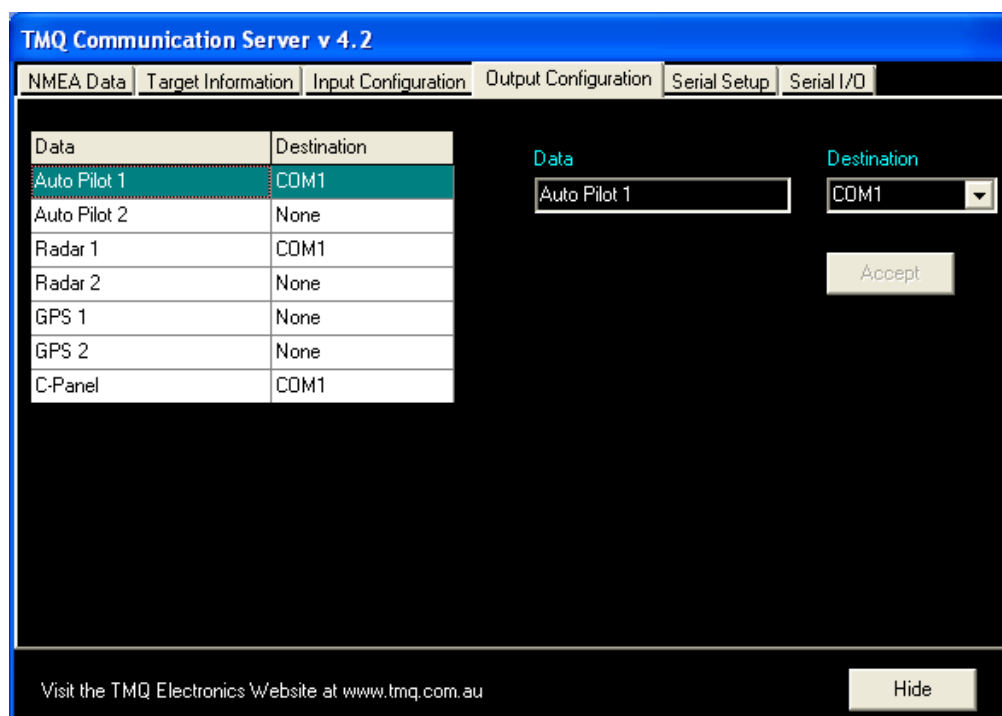
### 1.3.2 Configuration Modification Section

This section is made up of everything else that appears on this tab apart from the configuration table. The first fields to identify are those marked *Data*, *Source* & *NMEA Type*. These fields relate directly to the first three columns of the table. When a row in the configuration table is highlighted, the information in the above mentioned fields reflect that of the highlighted row. It is now possible to modify the configuration of the highlighted row. The *Source* and *NMEA Type* can be modified via the drop down lists (The data field cannot be modified). The two tick boxes below allow the CSS and VCS checks to be turned on or off. If the tick box is 'ticked' the associated check is 'ON', and vice versa.

Once the desired changes have been made in the configuration modification section click the *Apply* button to apply these changes to the Configuration Table. Continue making changes until all desired *Data* types are configured then click the *Accept All* button. Once *Accept All* has been clicked the configuration displayed in the configuration Table will take effect. Check the NMEA Data tab to ensure that all of the configured *Data* types are being received correctly. If the *Reset* button is clicked, instead of the *Accept All* button, the configuration will return to settings that were established the last time *Accept All* was clicked. A flowchart outlining the input configuration procedure can be found in the accompanying documentation.

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## 1.4 Output Configuration Tab



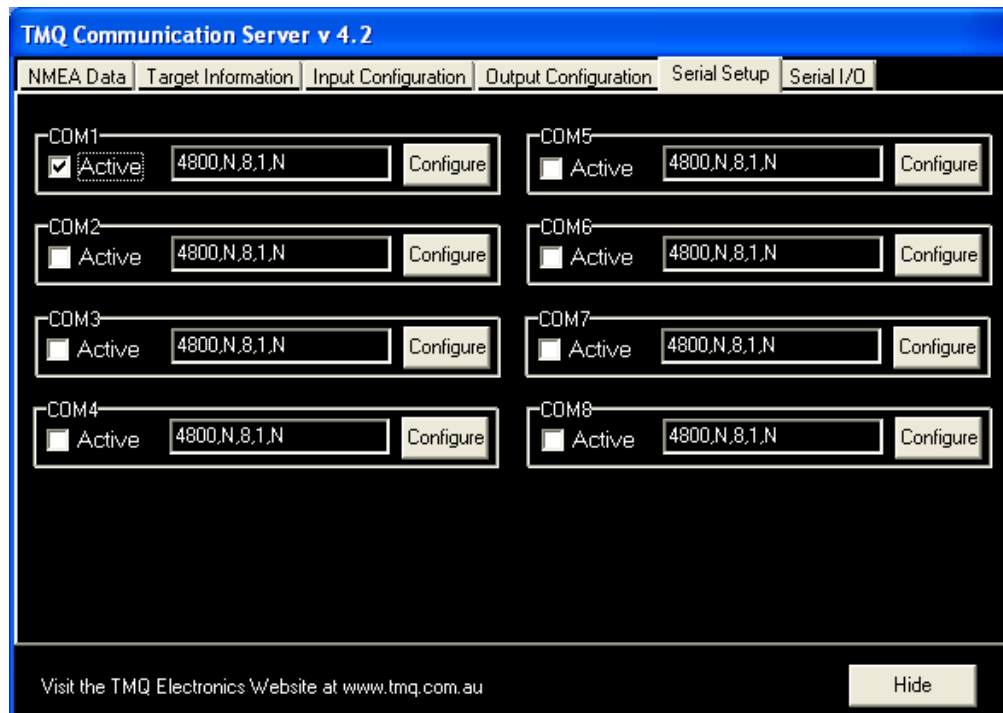
**Figure 4**

The Output Configuration Tab allows the manner, in which C-Com outputs data, to be configured. It is organised in the same way as the Input Configuration Tab. The Output Configuration Table contains two columns *Data* and *Destination*. Similarly the Configuration Modification section has both *Data* and *Destination* fields. Only the *Destination* field can be modified through the use of the drop down list.

To configure an output to a device, simply choose the appropriate communications port for the desired device and click *Apply*. As with Input Configuration once all the desired devices have been provided with destination communication ports, click *Accept All* to accept the displayed configuration, or *Reset* to return to the settings saved when *Accept All* was last clicked.

---

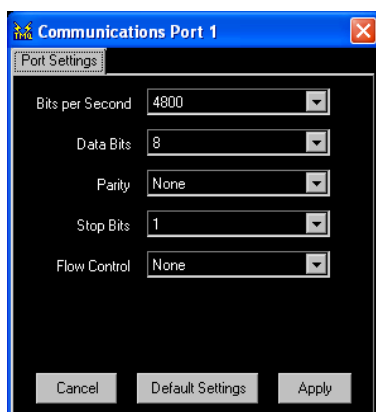
## 1.5 Serial Setup Tab



**Figure 5**

The Serial Setup tab allows the individual communications ports to be configured. Each communications port has a tick box marked *Active*, a field that displays the current configuration settings and a *Configure* button. The *Active* tick box allows the associated communications port to be started or stopped (Ticked = Started, Not ticked = Stopped). The configuration display field simply displays the current configuration; it cannot be modified from this field. In order to modify the configuration settings for communications port simply click the *Configure* button of the associated port.

Once the *Configure* button has been clicked a dialogue box will appear. Select the desired setting from the drop down list can set each of the fields. Once the desired modifications have been made click the *Apply* button. To cancel configuration of the communications port at any time, click *Cancel*. Click on the *Default Settings* button to return the configuration settings to the default values (i.e. 4800 bps, 8 Data Bits, Parity – ‘None’, 1 Stop Bit and Flow Control – ‘None’).



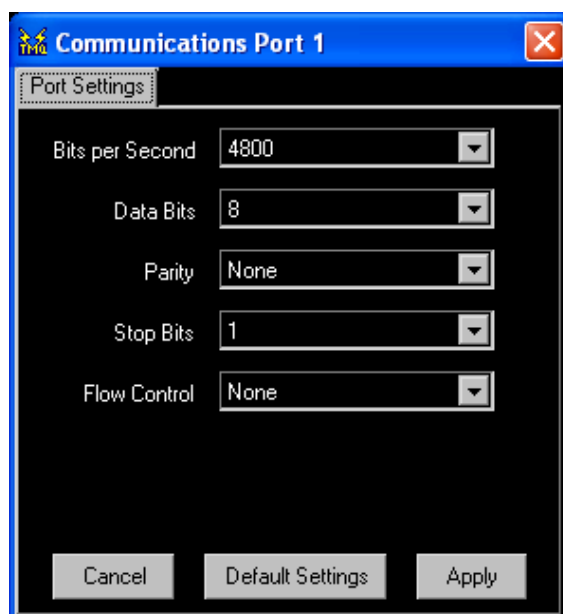
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Place a 'tick' in the box for 'Data access type ☒ Non Standard Serial Port' if data is not received on the serial port. Check for data using the 'Serial I/O' tab with the correct Com port selected.

### 1.5.1 C-Panel / C-Temp Special Configuration Information.

When configuring the C-Panel to enable external alarms or two way communication with some types of GPS antenna it may be necessary to place a 'Tick' (☒) in the 'Data access type ☒ Non Standard Serial Port' box for the configuration of that port. This should be done if the C-Panel does not produce an audible alarm signal when C-Plot is displaying an alarm, for example; C-Plot may be alarming due to an incorrect direction for a GOTO and the C-Panel isn't 'Beeping'.

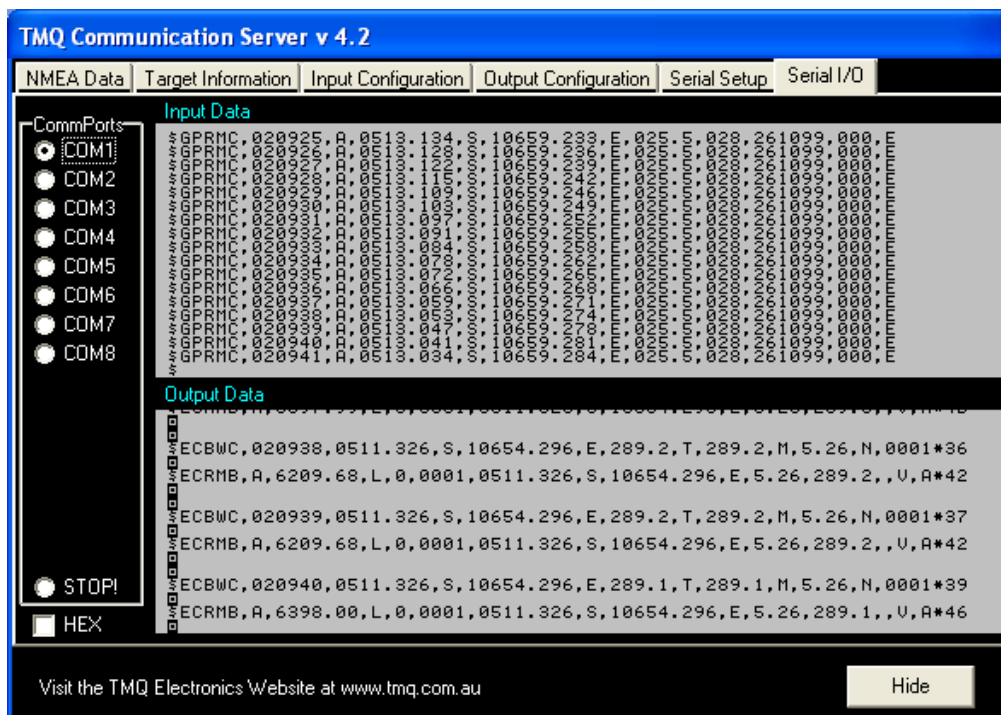
When connecting a C-Temp probe do not place a 'Tick' in the 'Data access type ☐ Non Standard Serial Port' box. Under certain circumstances the C-Temp probe may need resetting if temperature data is not present. This can be achieved via the C-Com communications server. Select the 'Serial Setup' tab then deactivate the Com port that the temperature probe is connected to. Leave deactivated for 5 seconds and reactivate in again, this will reset the temperature probe.



Communication Port Configuration Dialogue Box

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## 1.6 Serial I/O Tab



**Figure 6**

The Serial I/O Tab allows the input and output data streams to be monitored. Simply click the desired communications port in the *CommPorts* box, to display the raw data being received and sent via this port. This is a useful tool to use when configuring the Input and Output settings of C-Com. Clicking on the ‘Stop!’ selection will prevent the data from scrolling up the screen so that it can be comfortably analysed.





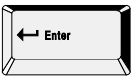












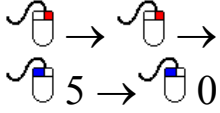

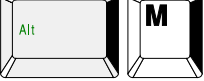
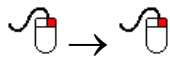


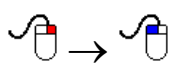
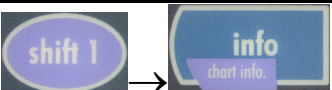
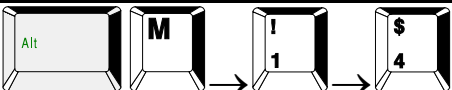

## 2.0 Summary

C-Com is a powerful and productive tool allowing *C-Com Enabled* TMQ applications to share the communications ports effectively. A set of flowcharts is provided to enable C-Com to be used efficiently. These flowcharts outline such procedures as Input Configuration, Output Configuration and adding new devices to the system.

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## ***Short Cut Keys***



Function	Description	C-Panel	Keyboard	Mouse
Cancel	Used to end an operation or function without executing this operation			
OK	This key is used to verify operations			
Zoom In	Increases the size of the chart, less of the chart is visible on the screen			
Zoom Out	Decreases the size of the chart, more of the chart is visible on the screen			
Center Vessel	Modifies the display so that the vessel is in the center of the screen			
Go To Cursor (On/Off)	Creates a quick route between the vessel's current position and the cursor.			
Main Menu	Displays the Main Menu			
Object Information	Displays Information for the selected Object			
Chart Information	Displays information for the currently loaded chart			

Remove Object	Removes a selected object (Mark, Event, Track, etc)			Various: Object Dependant
Track	This will toggle the track on and off	→		→  →  →
Add Event	Places an Event symbol at the vessel's current position			
Add Mark	Places a Mark at the current cursor position			→  →  →
Edit Object	Enables editing of the object at the position of the cursor			Various: Object Dependant
Load Chart	Load a new chart	→  →		→  →  →
Load Best HCRF Chart	Loads the most suitable HCRF chart for the current cursor position	→	→	→
Change Palette	Changes the current palette	→  →		→  →  →
Screen Shift	Moves the chart in 1/3 of the screen in the desired direction			
Exit	Close C-Plot and return to Windows	→  →		→  →  →

## *Software Warranty*

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## Software Warranty

TMQ Electronics products are thoroughly inspected and tested before shipment from the factory. The CD-ROM that this software is supplied on is warranted to be free of defects in workmanship and materials for a period of **90 days** from the date of shipment from the factory.

Any failed medium will be replaced without charge to the purchaser during the above-mentioned period, in accordance with the following terms and conditions:

- 1. The defective part is returned, "freight prepaid" to TMQ Electronics, 1/18 Alexandra Place, Murarrie, 4172.*
- 2. Proof of purchase is supplied.*
- 3. Information is provided regarding the nature of the failure or problem occurring.*
- 4. A return address is supplied to enable the replacement software to be forwarded.*

This warranty does not cover defects or damages caused through accident, misuse or abuse. The owner is also responsible for providing reasonable protection of the medium.

This warranty is extended to and is solely for the benefit of the original consumer purchaser.

TMQ Electronics shall not be liable for damage or losses incurred resulting from the use and operation of this product. TMQ Electronics reserves the right to make changes or improvements in later versions of this software, without incurring the obligation to upgrade software already supplied.

Some states do not allow the exclusion or limitation of incidental or consequential damages; therefore the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

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## *The Tide Table Utility*

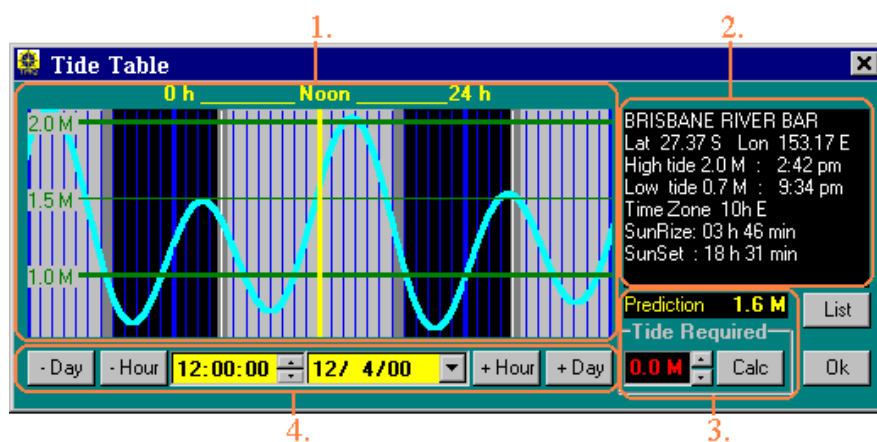


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## 1.0 The Main Tide Table Dialogue Box



The Tide Table Utility enables the tide parameters at a certain location to be studied. It is only available in the 'Pro' version of C-Plot. It can be invoked from the object info dialogue box by clicking the 'Show Tides' Button. The location is selected automatically as the closest to the object being queried. The Main Tide Table Dialogue box contains a large amount of information. The information is displayed in four distinct sections.




1. Main Graph Display
2. General Information
3. Explicit Information
4. Date/Time Information

### 1.1 The Main Graph Display

The **Main Graph Display** depicts the tide curve in a graphical manner. The horizontal scale represents time, while the vertical scale represents tide level in meters. The yellow line represents the current time information with the actual tide level corresponding to that time being displayed in the 'Prediction' data field ('Explicit Information' Section). The time indicator's position can be modified by simply clicking on the main graph display at the desired time, or by entering the time via the 'Date/Time Information' section.

---

 The time represented by the horizontal axis of the graph indicates more than a single day. The area between the '0h' and '24h' lines represent the current day. If the graph is clicked outside of this area the currently selected day will be changed to either the day before or day after, depending which part of the graph was clicked.

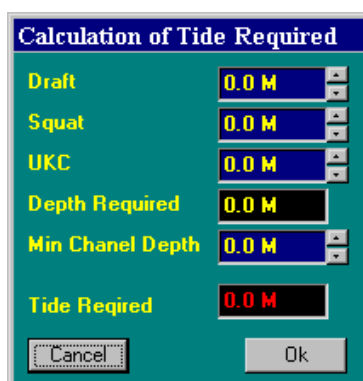
## 1.2 The General Information Section

The **General Information** section displays all information relevant to the area for which the tide information is being displayed. The information shown here includes:

- ❖ Location Name
- ❖ Latitude and Longitude of the select position
- ❖ The High and Low tide times and levels
- ❖ The time zone of the selected position
- ❖ Sunrise and Sunset times

## 1.3 The Explicit Information Section

The **Explicit Information** section contains a 'Prediction' data field and a 'Tide Required' sub-section. The 'Prediction' data field displays the actual Tide level for the selected time and position. The 'Tide Required' sub-section displays the currently calculated minimum tide level required for the vessel to pass through the position safely. Clicking the 'Calc' button and entering the appropriate parameters for the vessel can calculate this value.

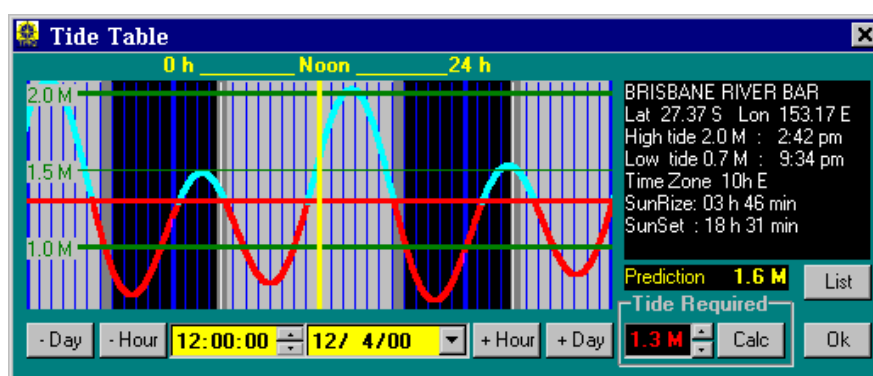


The dialog box titled "Calculation of Tide Required" contains several input fields and two buttons. The fields are: Draft (0.0 M), Squat (0.0 M), UKC (0.0 M), Depth Required (0.0 M), Min Chanel Depth (0.0 M), and Tide Required (0.0 M). The buttons are Cancel and Ok.

Calculation of Tide Required	
Draft	0.0 M
Squat	0.0 M
UKC	0.0 M
Depth Required	0.0 M
Min Chanel Depth	0.0 M
Tide Required	0.0 M
Cancel Ok	

Parameter	Description
Draft	The vertical distance between the waterline and the bottom of the keel.
Squat	The vertical distance the stern travels when vessel is underway.
UKC	Under Keel Clearance
Min. Channel Depth	The minimum depth of the channel, reported by local authorities.

Clicking the associated Up/Down arrows can change these parameters. Click 'OK' when ready to calculate the 'Tide Required'. Once the 'Tide Required' has been calculated it will be shown on the 'Main Graph Display' as a red horizontal line, the tide curve that is bellow this line will also be red. Using this information it is possible to establish the times when the channel is deep enough for the vessel to enter without difficulties.



## 1.4 The Date/Time Section

The **Date/Time** section allows the desired date and time to be selected accurately. Time is represented on the 'Main Graph Display' as a horizontal yellow line and can be changed in several ways:

1. Clicking the '+ Hour' and '- Hour' buttons.
2. Highlighting the hours or minutes in the time display and using the Up/Down arrows

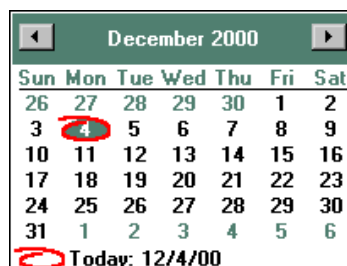


3. Highlighting the hours or minutes in the time display and entering the desired value using the keyboard.
4. Click in the 'Main Graph Display' at the desired time.

Similarly the date can be changed in several ways:

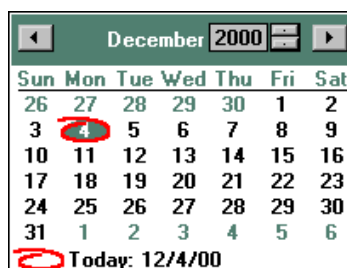
1. Clicking the '+ Day' and '- Day' buttons.
2. Highlighting the Day, Month or Year in the Date display and entering the desired value using the keyboard.
3. Click on the 'Down' arrow to invoke the 'Date Select' dialogue box (Described below).

#### 1.4.1 The Date Select Box

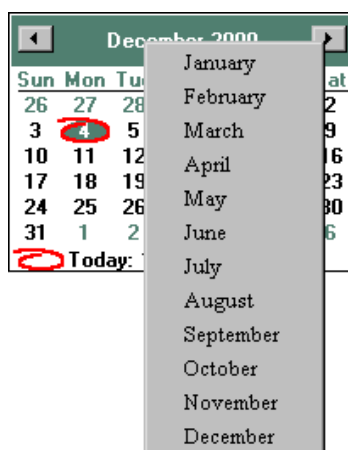


The **Date Select** dialogue box allows the desired date to be selected effortlessly. Simply select the date using the following sequence:

1. Choose the year – This can be done by clicking on the year in the Title of the box, and use the Up/Down arrows.



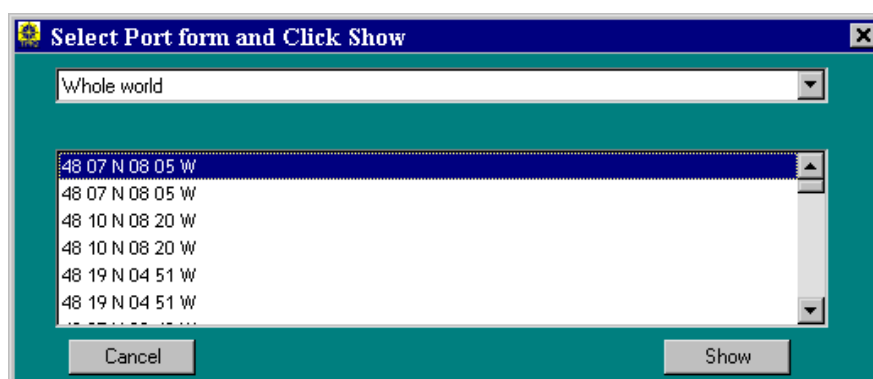
2. Choose the Month – This can be done by either using the left and right arrows in the title bar, or by clicking on the month in the title bar and choosing the month from the list.



3. Choose the Day – This can be done by simply clicking the desired day so that it is highlighted and circled in red.

## 1.5 Choosing the Location from a List

If the automatic location selected by the tide table utility is inappropriate it is possible to select a more appropriate location by clicking the 'List' button.



The drop-down list at the top of the 'Select Port' dialogue box allows the list to be expanded or contracted according to area.

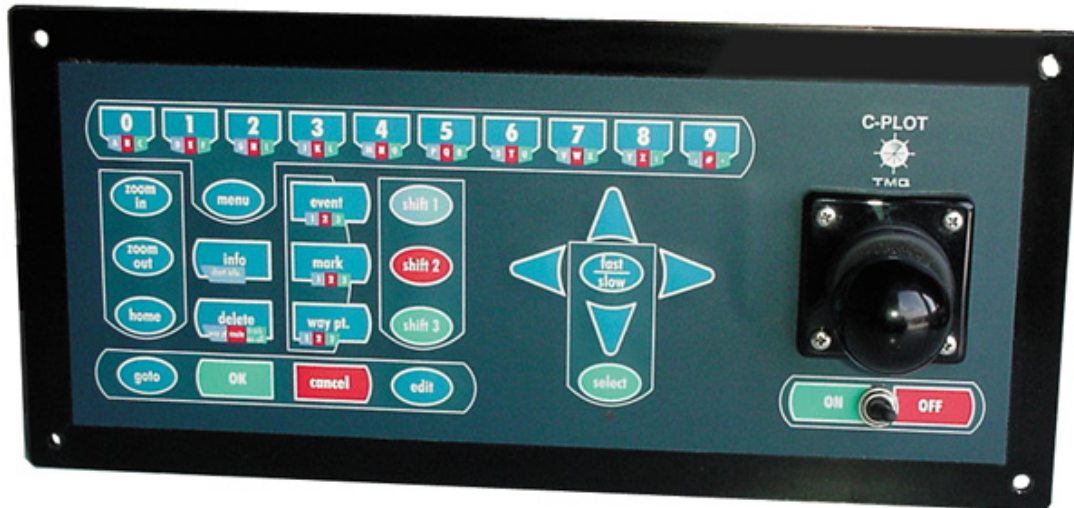


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Once the appropriate area has been selected from the drop-down list, simply click on the desired port in the list and click ‘Show’. Clicking ‘Cancel’ will return to the Tide Table dialogue box without altering the location.

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## *The C-Panel*









The C-Panel has been specifically designed for use with C-Plot. It has a number of special purpose buttons that allow C-Plot to be used efficiently and effectively.


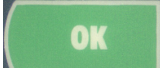






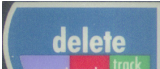
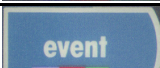




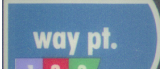
The joystick on the panel can be used to move the cursor around the main chart display. The 'Select' button acts as a 'Left' mouse button click, while 'Shift1 → Select' acts as a 'Right' mouse button click. The combination of the joystick and the 'Select' button enable the C-Panel to be employed in exactly the same way as a mouse.

A number of buttons have multiple functions. The extended functions of such a button can be accessed using the 'Shift' buttons. Each extended function on the button is colour coded to a shift button.



 →  = A, or  →  = B, or  →  = C

The following table outlines the functions of the special purpose buttons on the C-Panel.

Button	Description
	The 'Menu' button accesses the <b>Main Menu</b>
	The 'OK' button is the same as clicking 'OK' with the mouse
	The 'Cancel' button is the same as clicking 'Cancel' with the mouse
	Allows the chart to be viewed more closely
	Allows more of the chart to be viewed on the screen
	Moves the chart so that the vessel is in the center of the screen
	Invokes the 'Go To Cursor' function
	Shows Object/Chart information
	Deletes the selected Object. Toggles the track On and Off
	Places an Event at the vessel's current position
	Places a Mark at the current position of the cursor
	Invokes the 'Edit' dialogue box for the selected object <i>Also used for selecting highlighted submenu button</i>
	Various navigating functions
	Toggles the movement speed of the cursor between 'Fast' and 'Slow'
	This button is redundant for this version of C-Plot

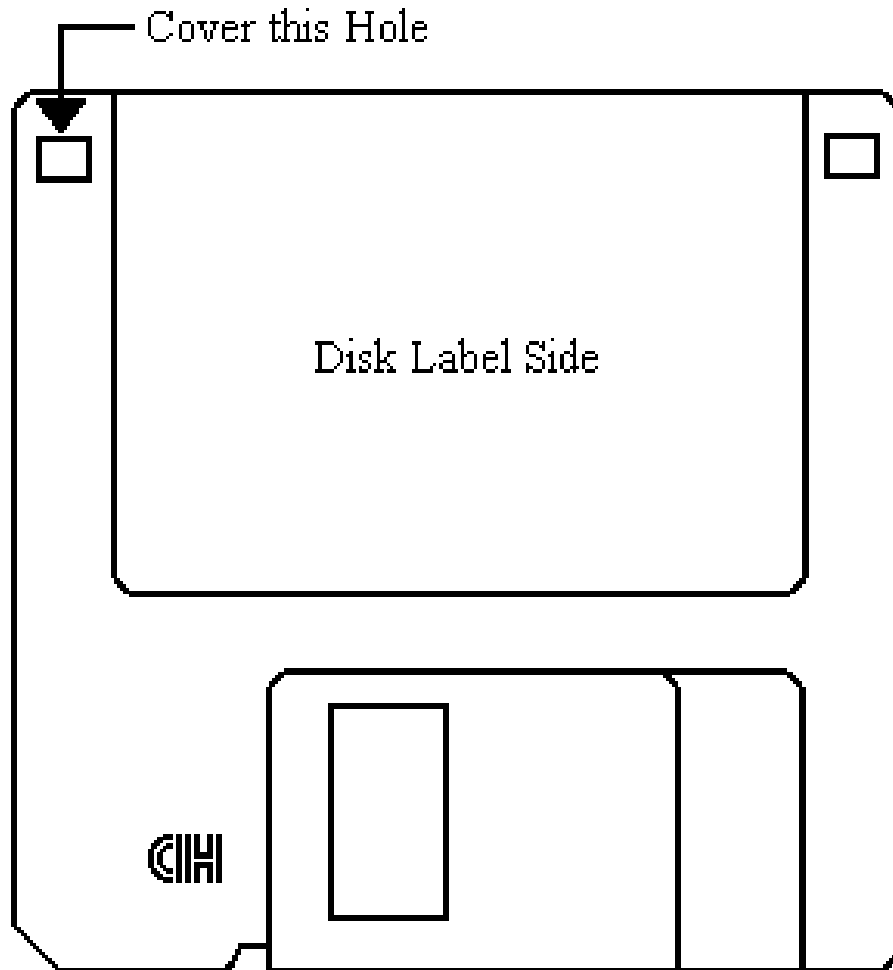
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## ***File Conversion Utilities***

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## Furuno Conversion Utilities

C-Plot is packaged with two utilities for converting Furuno plotter files to C-Plot files. Furuno files are stored on 3.5" 720kb discs. If you are using High-Density (HD) discs to record Furuno data, the extra hole at the top of the disc will need to be covered with non-transparent tape.



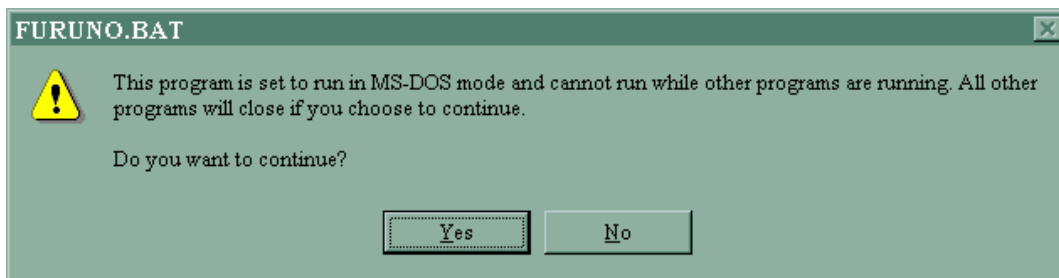
To convert Furuno data for use in C-Plot, it must first be copied from the Furuno disc to the hard drive of the computer. Due to the format of the Furuno disc, this copying must be done in MS-DOS mode. There is a file called 'Furuno GET' (  Furuno GET) that performs this operation automatically. This utility can be found in the C-Plot program group in the 'Start' menu. Furuno disc can be copied to the hard drive of the computer using the following sequence:



- 
1. Close all programs.
  2. Place the Furuno disc to be copied in the 3.5" floppy drive and in the Start Menu:

 Start →  Programs →  C-Plot SF/Pro →  Furuno GET

3. A dialogue box will be displayed stating that this application is set to run in MS-DOS mode. Click 'Yes'.



4. The computer will now restart in Windows mode.

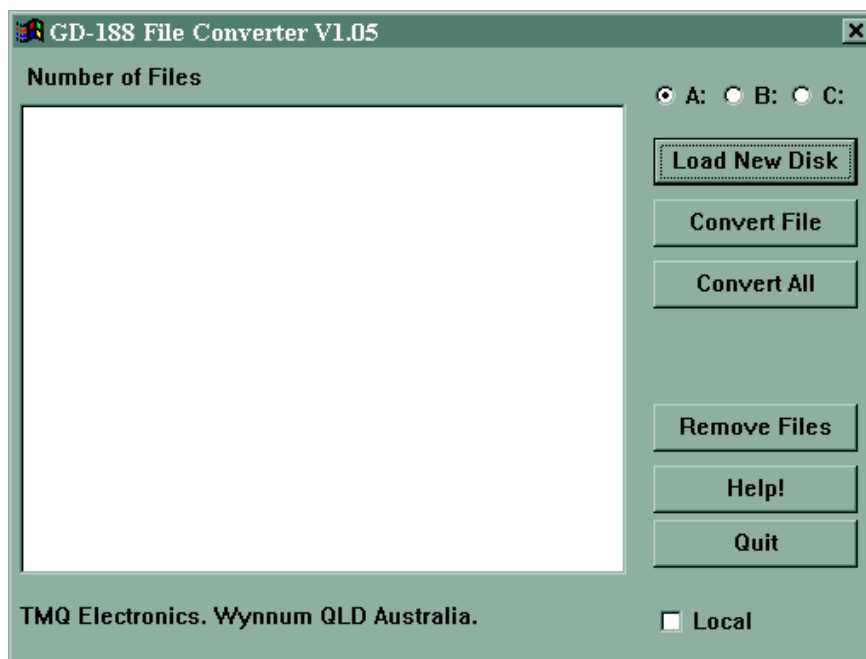
Once the disc has been copied to the hard drive the data can now be converted for use with C-Plot using either the GD-188 or GD-180 utility.

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## GD188™ Conversion Utility

The GD188™ utility enables data from a Furuno GD-188™ floppy disc to be converted for use with C-Plot. To start this utility in the Start menu:

 Start →  Programs →  C-Plot SF/Pro →  GD-188



To convert GD-188™ Files:

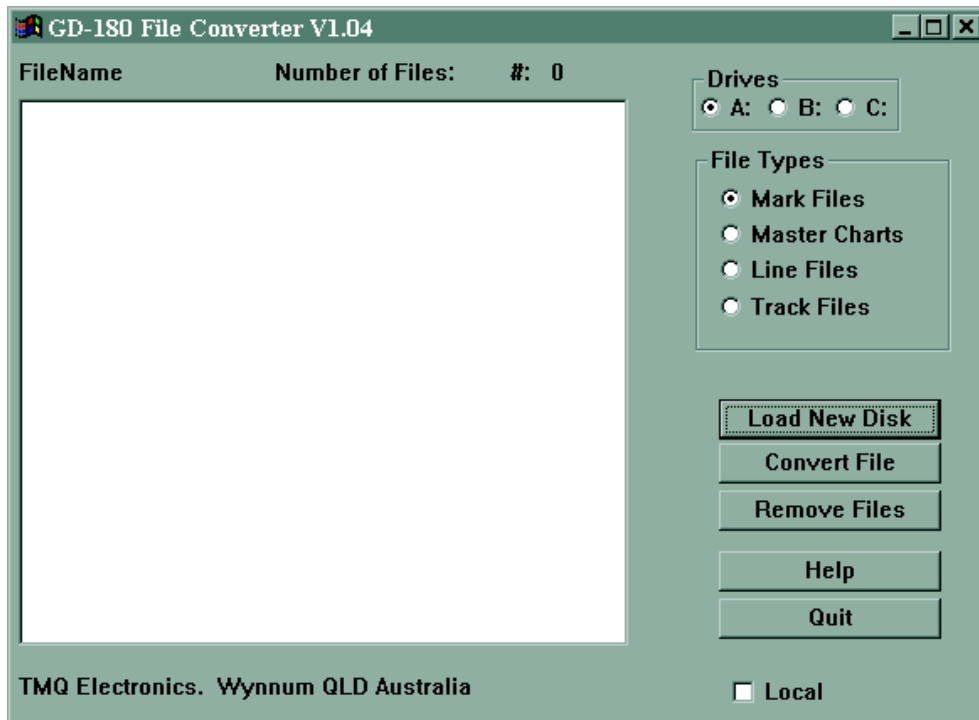
1. Select Drive C: ()
2. Click 'Load New Disc', the list of files available on the disc will be displayed.
3. Select the file to be converted and click 'Convert File', or click 'Convert All' to convert all of the files in the list.
4. The file(s) will be converted and the number of points found in the file(s) will be displayed.
5. Click 'Quit' to close this utility.

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## GD-180™ Conversion Utility

The GD180™ utility enables data from a Furuno GD-180™ floppy disc to be converted for use with C-Plot. To start this utility in the Start menu:

 Start →  Programs →  C-Plot SF/Pro →  GD-180



To convert GD-180™ Files:

1. Select Drive C: ()
2. Select the 'Type' of files to be converted
3. Click 'Load New Disc', the list of files available on the disc will be displayed.
4. Select the file to be converted and click 'Convert File'.
5. The file will be converted and the number of points found in the file will be displayed.

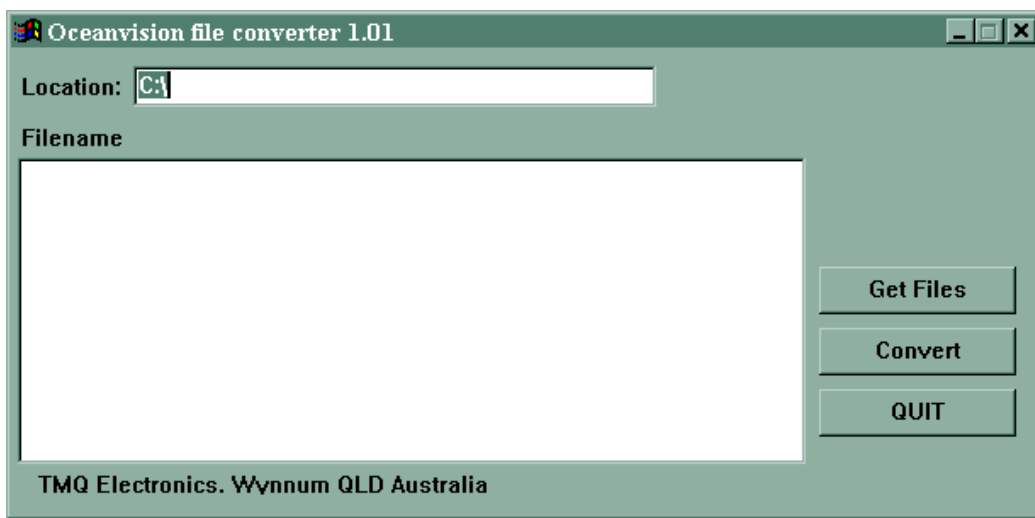
- 
6. Repeat Steps 4 – 5 until all desired files are converted.
  7. Click ‘Quit’ to close this utility.

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## Ocean Vision™ Conversion Utility

The ‘Ocean’ utility enables data from an Ocean Vision™ floppy disc to be converted for use with C-Plot. To start this utility in the Start menu:

 Start →  Programs →  C-Plot SF/Pro →  Ocean



To convert Ocean Vision™ Files:

1. Type the location of the Ocean Vision™ files in the ‘Location’ data field.
2. Click ‘Get Files’. A list of Ocean Vision files in the location specified will be displayed.
3. Select the file to be converted and click ‘Convert’.
4. Repeat Step 3 until all desired files are converted
5. Click ‘Quit’ to close this utility

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## Other Available Conversions

- ➡ Shipmate™ Conversion – carried out at TMQ
- ➡ JRC Ram/Disc Conversion – carried out at TMQ

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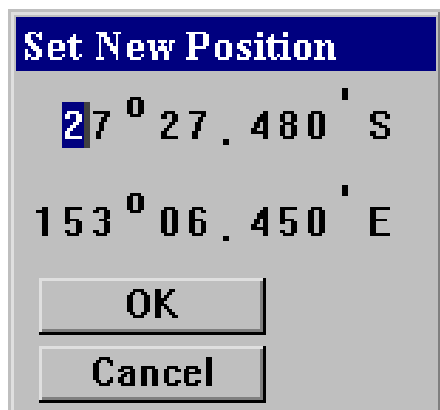
## ***Dead Reckoning Mode***

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If C-Plot should lose GPS input information for an extended period of time, it will automatically switch to 'Dead Reckoning' mode. When C-Plot is in 'Dead Reckoning' mode the Position, Speed, and Course data fields in the 'Ship position Data' section of the main chart display will be RED and the position data field will include the letters 'DR' as shown below.


LAT 27.27.480,S DR	
LNG 153.06.450,E	
COG 331 T, 321 M	↑ ↓
SOG 0.00	↑ ↓
No Time Data	
NO Heading Data	

While C-Plot is in this mode, any of the data fields shown in RED can be modified manually. The Course (COG) and Speed (SOG) data can be modified using the accompanying Up/Down arrows. Clicking on the Position data field will invoke a 'Set New Position' dialogue box, so that the position data can be modified.



The 'Set New Position' dialog box has a blue title bar. It contains two input fields for coordinates. The first field shows '27° 27.480' S' with the '2' in the degrees part highlighted in blue. The second field shows '153° 06.450' E'. At the bottom are two buttons: 'OK' and 'Cancel'.

To modify either the latitude or longitude data simply click on the first digit of either and type the new latitude/longitude. Click 'OK' to accept the new position or 'Cancel' to return to the normal chart display without changing the position of the vessel.

 *C-Plot should not be used in Dead Reckoning mode for an extended length of time. The accuracy of the vessels position on the C-Plot main chart display is totally dependant on the accuracy of the inputted data. Any inaccuracies will cause C-Plot to display an erroneous vessel position. All steps should be taken to re-establish GPS input to the system.*



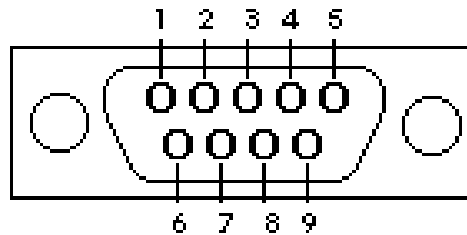
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## ***Interfacing GPS & Auto Pilot Devices***

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## DB9 Female Serial Connector


In order to connect a GPS antenna and/or Autopilot to the computer, the connectors on these devices need to be removed and coupled with a DB9 Female Serial connector.




DB9 Female Serial Connector (Solder side - rear of connector shown)

The wiring should be connected as follows:-

DB9 Pin Number	Use
2	GPS Receiver
3	Auto-Pilot Transmit
5	Signal Ground

 *There are two signal ground wires, one for the GPS and one for the Autopilot. These wires should both be connected to pin 5.*

 *Please consult the GPS and Autopilot manufacturer manuals to identify the appropriate wires to connect to each pin.*

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*Piscatus*

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## Piscatus 3D Seabed Mapping Software by SMI



C-Plot Pro and Piscatus have been developed to share data between the two programs. C-Plot will automatically detect Piscatus on the computer system and provide additional options and functionality to support it.

C-Plot Pro V8 has the ability to share the Lines, Marks, Fill and Events data with Piscatus. This facility enables the C-Plot information to be seen on the Piscatus display. Additionally the fish symbol and depth data from Piscatus can be seen on the C-Plot Pro display.

### Displaying Lines on Piscatus

Position the cursor directly over the Line to be displayed in Piscatus,

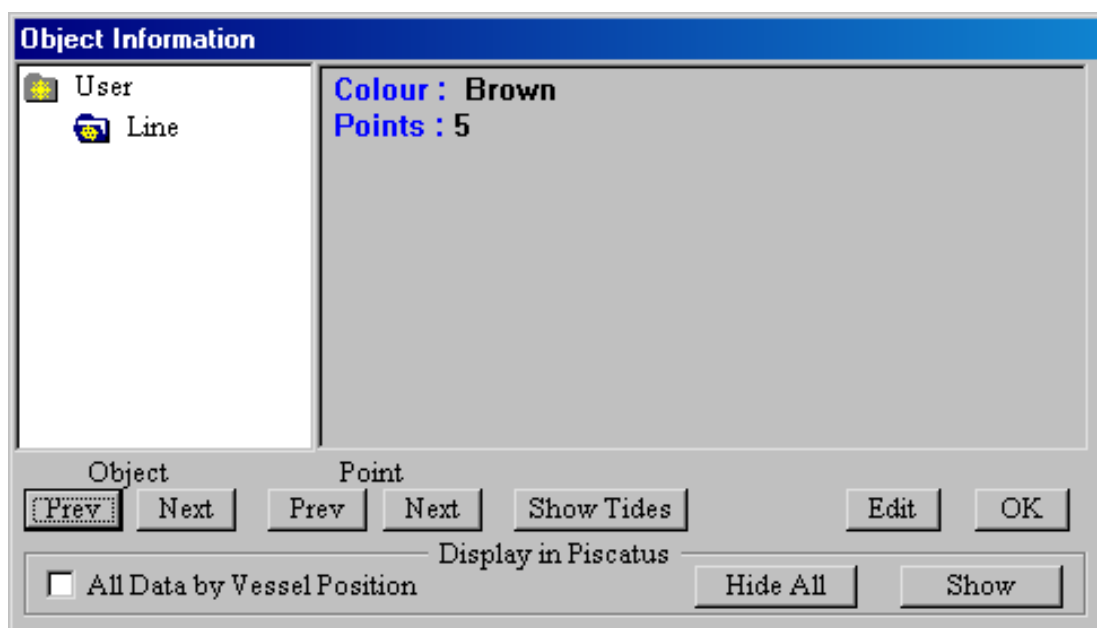
#### Access Sequences



Press 'Info'



Press Ins



---

In the 'Display in Piscatus' section click the 'Show' button to show just the selected line. Or select 'All Data by Vessel Position' feature to display all the available data for the current vessel position. To enable this feature simply 'tick' the box (☒). If this box is not ticked (☐) this feature has been disabled.

All the data from C-Plot can be removed from the Piscatus display in one operation by clicking the 'Hide all' button.

## Displaying Marks on Piscatus

Position the cursor directly over the Mark to be displayed in Piscatus,

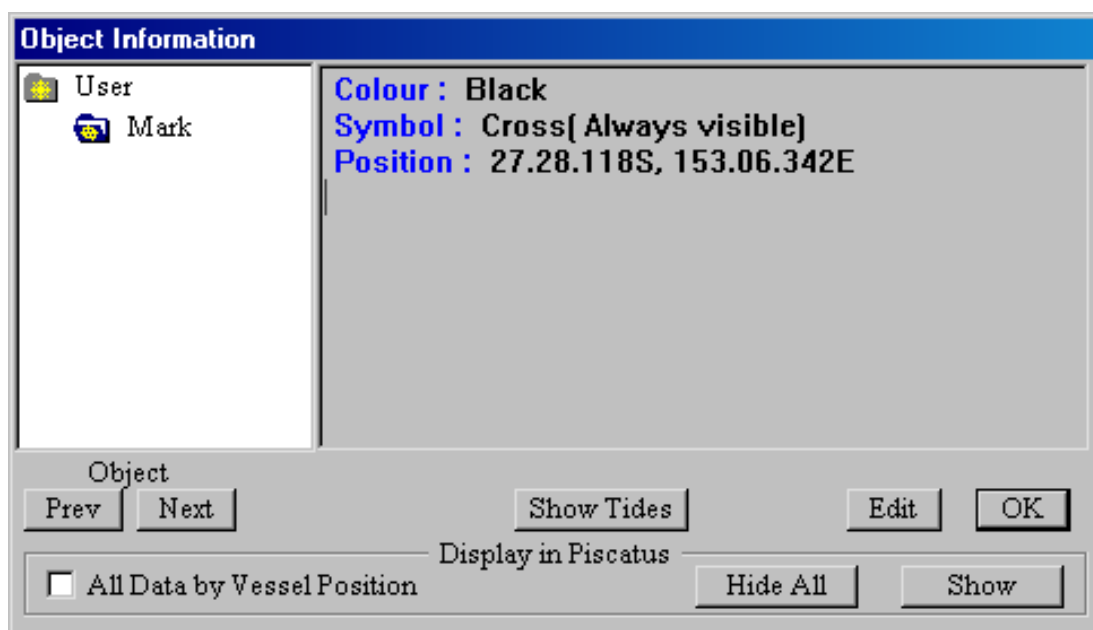
### Access Sequences



Press 'Info'



Press Ins



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In the 'Display in Piscatus' section click the 'Show' button to show just the selected line. Or select 'All Data by Vessel Position' feature to display all the available data for the current vessel position. To enable this feature simply 'tick' the box (☒) . If this box is not ticked (☐) this feature has been disabled. All the data from C-Plot can be removed from the Piscatus display in one operation by clicking the 'Hide all' button.

## Displaying Events on Piscatus

Position the cursor directly over the Event to be displayed in Piscatus,

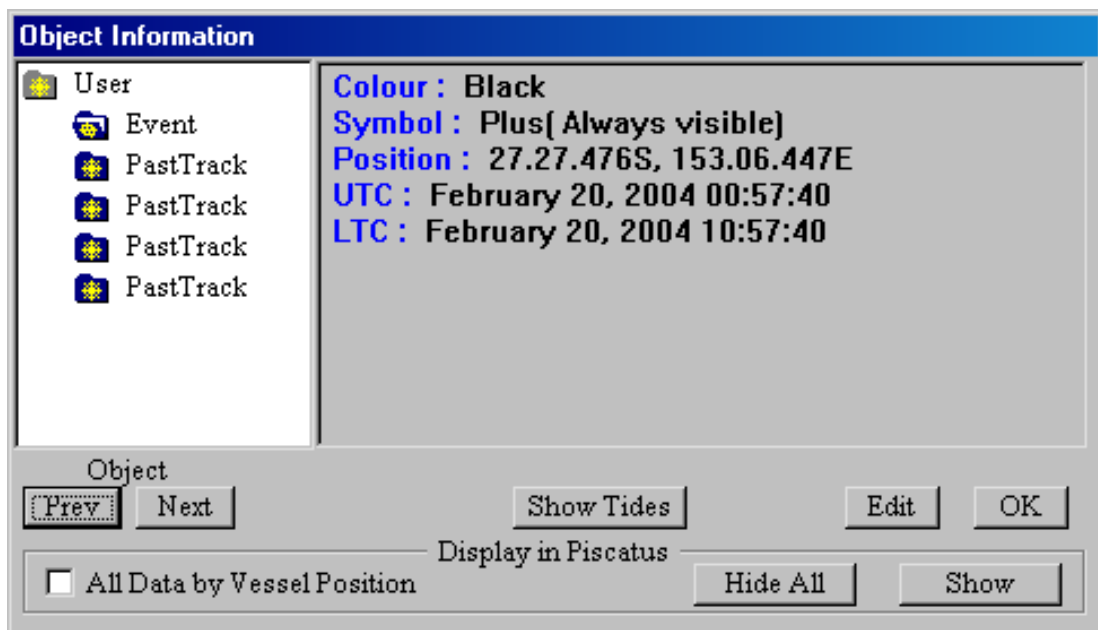
### Access Sequences



Press 'Info'



Press Ins



In the 'Display in Piscatus' section click the 'Show' button to show just the selected line. Or select 'All Data by Vessel Position' feature to display all

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the available data for the current vessel position. To enable this feature simply 'tick' the box (☒). If this box is not ticked (☐) this feature has been disabled.

All the data from C-Plot can be removed from the Piscatus display in one operation by clicking the 'Hide all' button.

## Displaying Area/Fill on Piscatus

Position the cursor directly over the Area/Fill to be displayed in Piscatus,

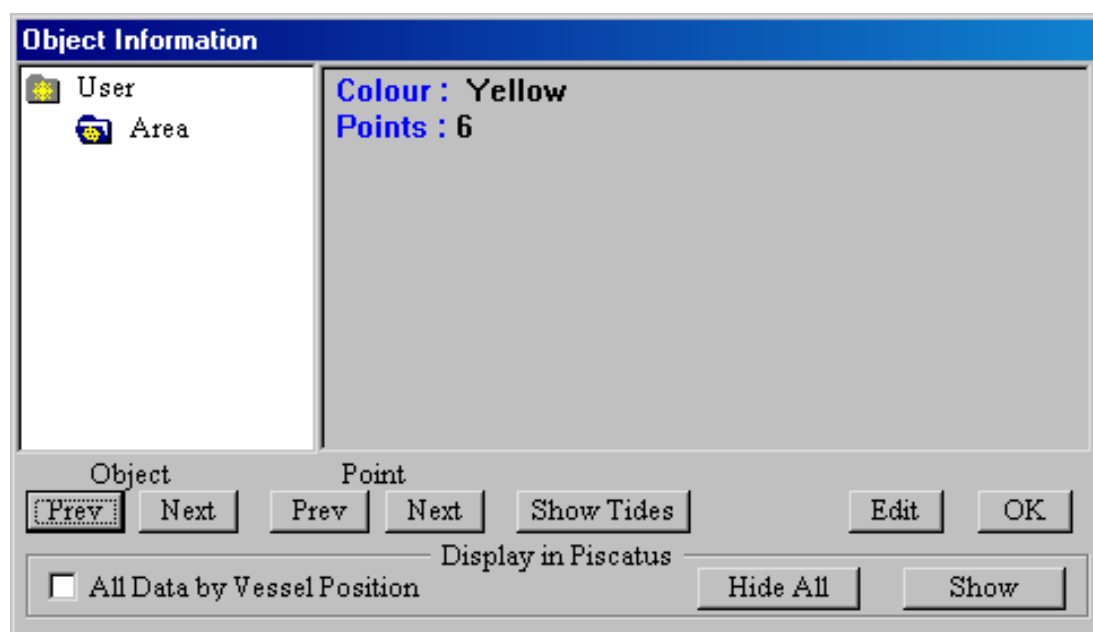
### Access Sequences



Press 'Info'



Press Ins



In the 'Display in Piscatus' section click the 'Show' button to show just the selected line. Or select 'All Data by Vessel Position' feature to display all

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the available data for the current vessel position. To enable this feature simply 'tick' the box (☒). If this box is not ticked (☐) this feature has been disabled.

All the data from C-Plot can be removed from the Piscatus display in one operation by clicking the 'Hide all' button.



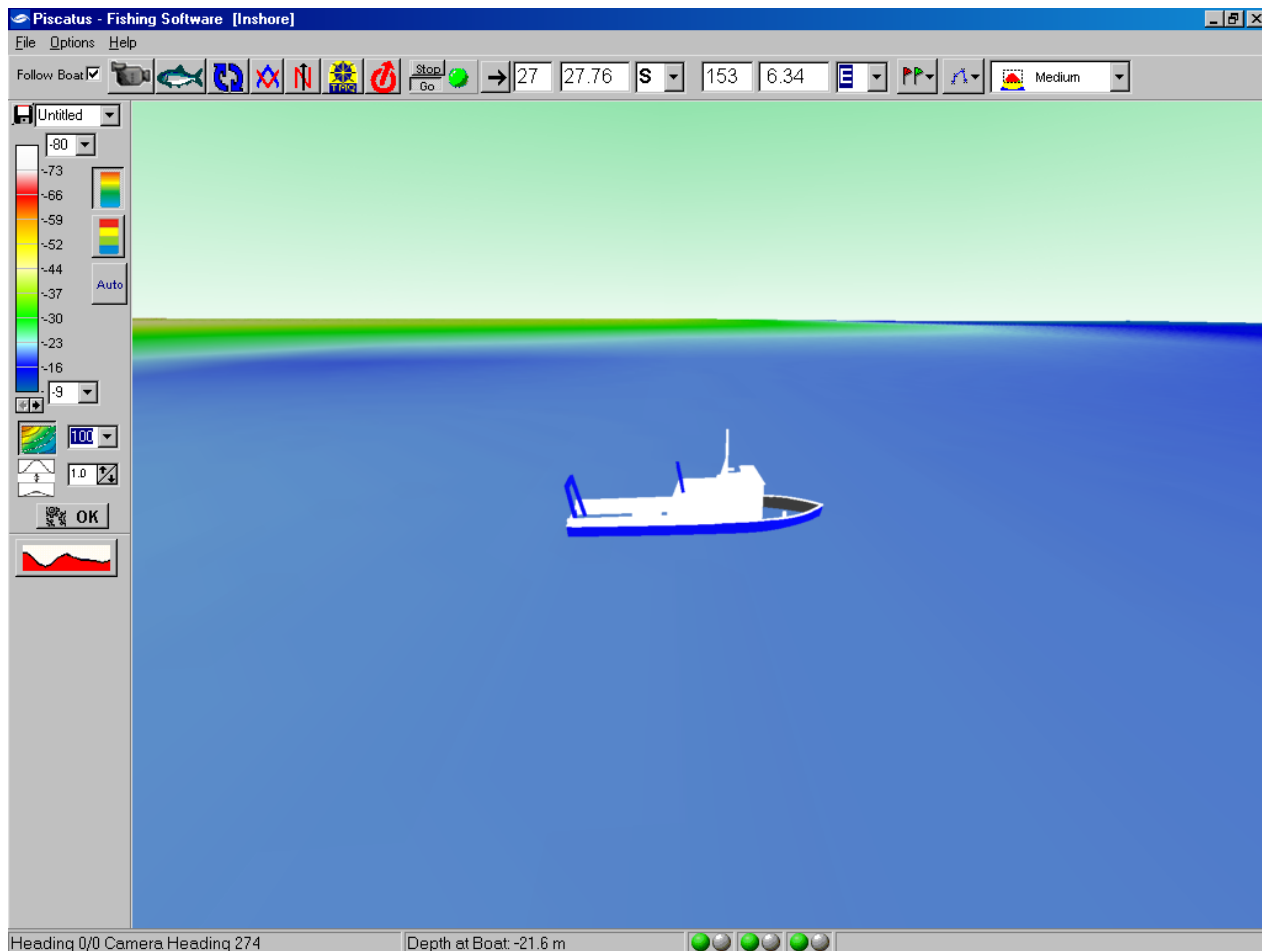
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## Displaying C-Plot Pro position on Piscatus



Piscatus can show the seabed data for the current position as displayed in C-Plot. This function is available on the Piscatus window.

1. Position your cursor in C-Plot as required.
2. From the Piscatus window, click the TMQ Icon.



3. Piscatus will now display the seabed at the coordinates received from C-Plot Pro.
4. 'Follow Boat' function allows the current position of the vessel to be displayed in Piscatus. To enable this feature simply 'tick' the box (☒) . If this box is not ticked (☐) this feature has been disabled.