

# SmarterChart™

DIGITAL®  
YACHT

500 SERIES



GPS Chart Plotter With AIS & Sounder Options



## Quick Start Guide



## SmarterChart 500 SERIES

<b>Chart Plotter Name</b>	<b>Description</b>	<b>SOFTWARE</b>
<b>CHART PLOTTER</b>	<i>5" Sunlight Readeable Color Display Internal GPS Receiver</i>	S4xgNS5vc
<b>SOUNDER COMBO</b>	<i>5" Sunlight Readeable Color Display Internal GPS Receiver &amp; Internal Fish Finder</i>	S4xgNS5vc
<b>AIS COMBO</b>	<i>5" Sunlight Readeable Color Display Internal GPS Receiver &amp; Internal AIS</i>	S4xgNS5vc

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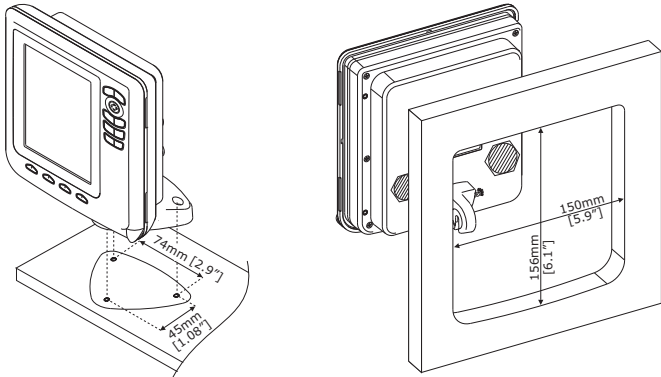
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## Quick Start Guide

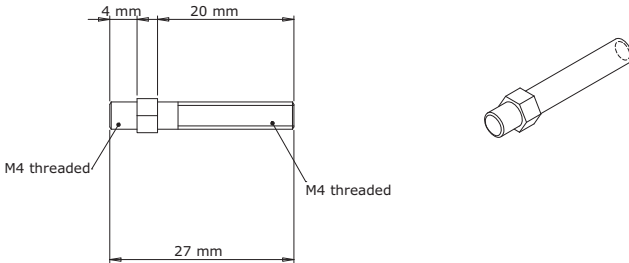
code: (c1620-290410e)

# STEP 1 - Mounting the Chart Plotter

SmarterChart500 can be bracket or flush mounted



Bracket mounting (on the left) and Flush mounting (on the right)



Mounting Screws



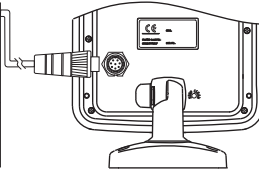
Available as an option is the custom SmarterChart500 waterproof Marine Pod

# STEP 2 - Wiring and Inserting C-Card

All three models require a power connection to the boat's 12v or 24v DC supply. AIS Combo needs to be connected to a VHF or AIS antenna via the BNC connector. Sounder Combo needs to be connected to a suitable Transducer.

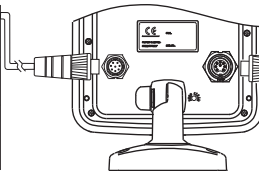
## EXTERNAL WIRING FOR CHART PLOTTER

POWER & I/O CONNECTOR/CABLE		
PIN	CABLE COLOR	FUNCTION
1	BLACK	PWR-/GND/COMMON
2	RED	PWR + (10-35 Vdc)
3	WHITE	INPUT 1+
4	GREEN	COMMON
5	GRAY	OUTPUT 2+
6	YELLOW	OUTPUT 1+
7	BROWN	INPUT 2+
8	BLUE	EXT. ALARM SIGNAL. (to GND when ON)



## EXTERNAL WIRING FOR SOUNDER COMBO

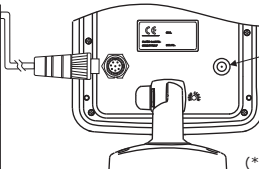
POWER & I/O CONNECTOR/CABLE		
PIN	CABLE COLOR	FUNCTION
1	BLACK	PWR-/GND/COMMON
2	RED	PWR + (10-35 Vdc)
3	WHITE	INPUT 1+
4	GREEN	COMMON
5	GRAY	OUTPUT 2+
6	YELLOW	OUTPUT 1+
7	BROWN	-
8	BLUE	EXT. ALARM SIGNAL. (to GND when ON)



TRANSDUCER Connector	
PIN	FUNCTION
1	DEPTH +
2	GND
3	TEMP1 +
4	POWER SUPPLY +5Vdc, 1A max
5	SENSE +
6	DEPTH SHIELD
7	DEPTH -
8	SPEED +

## EXTERNAL WIRING FOR AIS COMBO

POWER & I/O CONNECTOR/CABLE		
PIN	CABLE COLOR	FUNCTION
1	BLACK	PWR-/GND/COMMON
2	RED	PWR + (10-35 Vdc)
3	WHITE	INPUT 1+
4	GREEN	COMMON
5	GRAY	OUTPUT 2+ (*)
6	YELLOW	OUTPUT 1+
7	BROWN	-
8	BLUE	EXT. ALARM SIGNAL. (to GND when ON)



AIS ANTENNA

(\*) AIS + GPS data at 38400 baud

## REMOVING/FITTING A CHART CARTRIDGE (C-CARD)



# STEP 3 - Turning the Chart Plotter on for the First Time



4 x Soft Keys  
(Function shown on Screen)

Zoom Keys

Cursor Key

6 x Function Keys

Press the POWER key to turn the SmarterChart 500 on

The first time you turn the chart plotter on, you will see the "First Setup" menu that guides you through the main settings – you can always change these at a later time

Default settings are recommended for English speaking International User

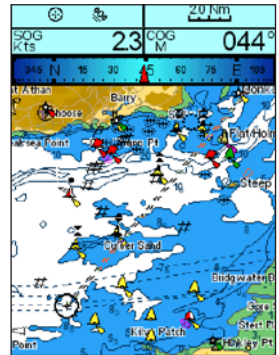
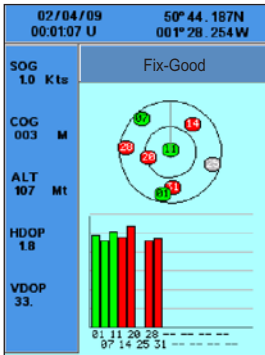
## DESCRIPTION OF INITIAL SETTINGS

- Language** : Sets the language that all chart plotter menus and windows will be displayed in.
- Chart Language** : Selects a sub-menu with two items: Language to set the language used for all Chart Text and Chart Information and the Mode to define how and when text is translated.
- Distance+Speed Units** : Selects the units for Distance and Speed (default setting is Nm+Kts).
- Depth+Altitude Units** : Selects the units for Depth and Altitude (default setting is Mt).
- Temperature Units** : Selects the units for temperature (default setting is °C).
- Time Reference** : Selects between UTC or local time, by entering the Local Time offset (default setting is UTC).
- Daylight Saving Time** : Sets the Daylight Saving Time ON/OFF (default setting is Off).
- Time Format** : Selects between 12 and 24 hour time display (default setting is 24 hour).
- Date Format** : Selects between Day-Month-Year or Month-Day-Year date format (default setting is DD-MM-YY).
- Nav-Aids Presentation:** Selects between International or US chart symbols (default setting is INT).
- Keypad Beep** : Enables/disables the audible beep when the chart plotter keypad is pressed (default setting is On).
- Input/Output** : Allows the setup of the external NMEA ports for connecting other equipment.
- Simulation Mode** : Allows the setup of a special simulation mode useful for training purposes.

Once the initial setting have been set, press the left hand 'Ok' Soft Key to store the values and finish powering up.

# STEP 4 - Getting Started

All models feature an internal high sensitivity 50 channel GPS that on power up will immediately start searching for satellites. When the chart plotter powers up the GPS Status window below is displayed. Pressing the 'CLEAR' key will take you to the normal Chart display page.

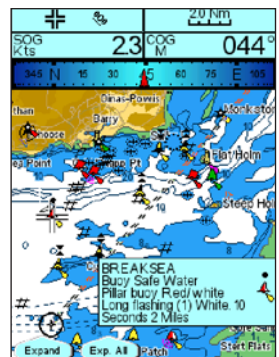


GPS Status page (on the left) and Chart+Databoxes page (on the right)

Using the Cursor key and Zoom keys, it is possible to pan around the area covered by the charts, zooming in on marinas and areas of interest and zooming back out to get more of an overview.

As you move the cursor around the charts, a cursor window will be displayed that gives you the Lat/Lon of the cursor and the Distance and Bearing from the boat. At any time, pressing the 'CLEAR' key will centre the chart back at the boat's position assuming a valid GPS fix is being received.

Placing the cursor on an object (symbol) on the chart, a Quick Info window will appear that gives you additional information about the object – in the case below a Special Purpose Buoy.

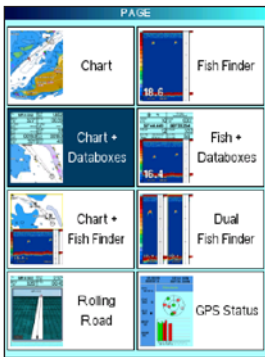


Example of Quick Info window on cartographic object

# STEP 5 - A Guide to What The Keys Do

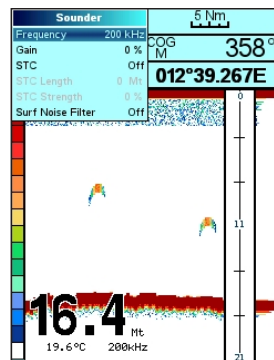
The **'PAGE' Key** - the SmarterChart range of chart plotters can display lots of useful pages of information which are accessed by pressing the **'PAGE'** key. This displays the Page Selection window, which shows all available and unavailable pages. Unavailable pages are shown in grey and cannot be accessed due to particular data or optional accessories not being available.

To select an available page, use the Cursor key to move the blue highlighter onto the page you wish to display and press the **'ENTER'** key.



Page Selection Menu (on the left) and Chart+ Databoxes page (on the right)

The **'ENTER' Key** – in addition to being the confirmation key in menus, the **'ENTER'** key causes a context sensitive pop-up menu to be displayed in the various pages. The contents of this pop-up menu will vary depending upon what page you are on – two examples are shown below.



ENTER pop-up menu (on the left) and Fish Finder page with Sounder pop-up menu (on the right)





The **'POWER' Key** – as well as turning the chart plotter on and off, the **'POWER'** key can take you straight to the LCD Adjustment Menu, where you can adjust Brightness, Contrast and choose a Colour Palette to best suit the lighting conditions. At any time whilst the chart plotter is turned on, a short press of the **'POWER'** key will display the LCD Adjustment Menu shown below.

Pressing and holding the **'POWER'** key for three seconds turns the chart plotter off.



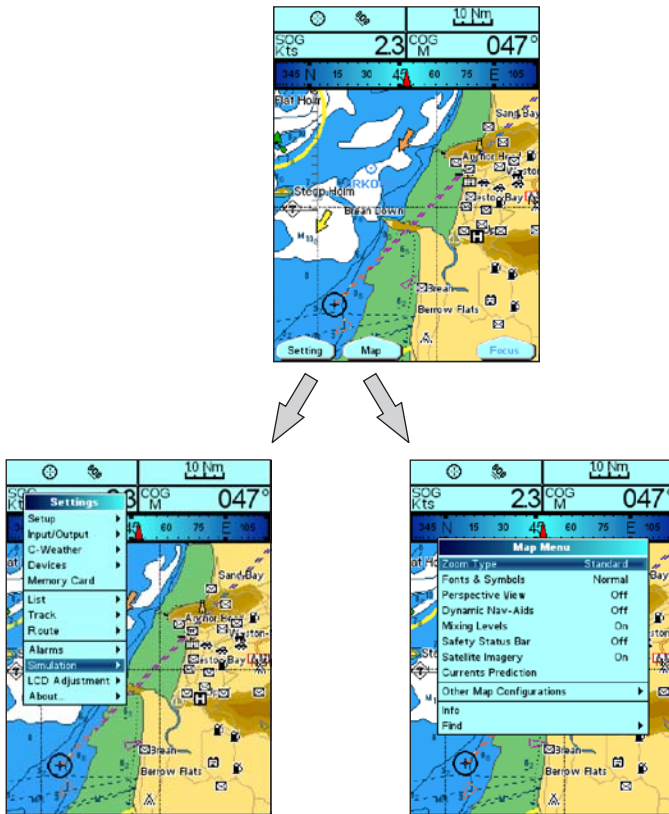
*LCD Adjustment Menu*

The **Soft Keys** – along the bottom of the LCD are four Soft Keys whose function changes depending upon what you are doing. Whenever you need to use these keys, a function label above the key will be displayed on the LCD to tell you what pressing the key will do. An example is shown above in the LCD Adjustment Menu where the four Soft Keys change the Brightness and Contrast of the display when this menu is shown.

# STEP 6 - Accessing the Main Settings Menu and Map Settings Menu

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At any time when there are no labels above the four Soft Keys, pressing any one of the Soft Keys will cause the Main Settings Menu and Map Settings Menu options to appear. Pressing the relevant Soft Key will take you to the Setting or Map menus.



*Main Settings Menu (on the left) and Map Settings Menu (on the right)*

From these menus it is possible to select a setting you want to change by moving the Blue highlight bar up and down using the Cursor key and then pressing the 'ENTER' key to access the Settings or sub-menu. Pressing the 'CLEAR' key exits a setting without changing it or takes you back to the previous menu level.

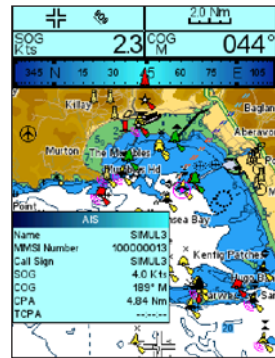
# STEP 7 - Setting Up AIS

All of the SmarterChart 500 range can be connected to AIS Transponders and Receivers and the SC500 AIS Combo features it's own built-in AIS receiver. Once the AIS is connected, a series of powerful AIS functions and features become activated.

Below are examples of how the AIS Targets are displayed as orange triangles and how you can place the cursor on the AIS Target to query it's MMSI Number, Vessel Name and other important information.

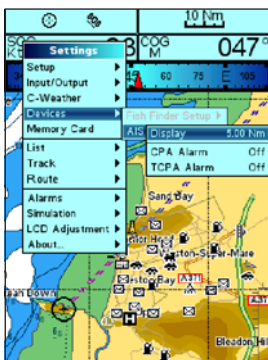


Place the Cursor on the AIS Target



*AIS Targets (on the left) and AIS information (on the right)*

To set the CPA and TCPA Alarms to warn of approaching vessels, press any one of the Soft Keys, then press the Soft Key labelled '**SETTING**' and highlight and select the "**Devices**" followed by "**AIS**" sub-menus.



**Display** sets the display range of AIS targets – default is 5NM but if you want to see targets even further away set this to 20NM. Set to OFF to not display any AIS data.

**CPA** (Closest Point of Approach) sets an alarm that will sound when an AIS target will pass closer to you than the value set i.e. if it will pass you at 0.2NM when CPA alarm is set to 0.5NM

**TCPA** (Time to CPA) sets an alarm that will sound when you are less than X minutes from the moment of CPA i.e. if you set this to 10 mins, the alarm will sound as soon as you are less than 10mins from the moment of CPA

*AIS Menu*

## STEP 8 - Download the Full User Manual

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This Quick Reference Guide is intended to get you up and running and using the most popular features of the SmarterChart range of chart plotters, as quickly as possible.

An electronic copy of the Full User Manual for the complete SmarterChart range is available on the Digital Yacht website – [www.digitalyacht.co.uk](http://www.digitalyacht.co.uk)

As you become more experienced in using your chart plotter, the Full User Manual will provide all of the detail you need to use the advanced and powerful features of these chart plotters.

If you require further Technical Support on any Digital Yacht products please e-mail: [support@digitalyacht.co.uk](mailto:support@digitalyacht.co.uk) or call +44 (0) 1179 554474.



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