

786ci Chartplotter Operations Manual

531702-1_A



700 series™

Thank You!

Thank you for choosing Humminbird®, America's #1 name in fishfinders. Humminbird® has built its reputation by designing and manufacturing top-quality, thoroughly reliable marine equipment. Your Humminbird® is designed for trouble-free use in even the harshest marine environment. In the unlikely event that your Humminbird® does require repairs, we offer an exclusive Service Policy - free of charge during the first year after purchase, and available at a reasonable rate after the one-year period. For complete details, see the separate warranty card included with your unit. We encourage you to read this operations manual carefully in order to get full benefit from all the features and applications of your Humminbird® product.

Contact our Customer Resource Center at either **1-800-633-1468** or visit our web site at **www.humminbird.com**.

WARNING! *This device should not be used as a navigational aid to prevent collision, grounding, boat damage, or personal injury. When the boat is moving, water depth may change too quickly to allow time for you to react. Always operate the boat at very slow speeds if you suspect shallow water or submerged objects.*

WARNING! *Disassembly and repair of this electronic unit should only be performed by authorized service personnel. Any modification of the serial number or attempt to repair the original equipment or accessories by unauthorized individuals will void the warranty. Handling and/or opening this unit may result in exposure to lead, in the form of solder.*

WARNING! *This product contains lead, a chemical known to the state of California to cause cancer, birth defects and other reproductive harm.*

NOTE: *Some features discussed in this manual require a separate purchase, and some features are only available on international models. Every effort has been made to clearly identify those features. Please read the manual carefully in order to understand the full capabilities of your model.*

ENVIRONMENTAL COMPLIANCE STATEMENT: *It is the intention of Humminbird® to be a responsible corporate citizen, operating in compliance with known and applicable environmental regulations, and a good neighbor in the communities where we make or sell our products.*

WEEE DIRECTIVE: *EU Directive 2002/96/EC "Waste of Electrical and Electronic Equipment Directive (WEEE)" impacts most distributors, sellers, and manufacturers of consumer electronics in the European Union. The WEEE Directive requires the producer of consumer electronics to take responsibility for the management of waste from their products to achieve environmentally responsible disposal during the product life cycle.*

WEEE compliance may not be required in your location for electrical & electronic equipment (EEE), nor may it be required for EEE designed and intended as fixed or temporary installation in transportation vehicles such as automobiles, aircraft, and boats. In some European Union member states, these vehicles are considered outside of the scope of the Directive, and EEE for those applications can be considered excluded from the WEEE Directive requirement.



This symbol (WEEE wheelee bin) on product indicates the product must not be disposed of with other household refuse. It must be disposed of and collected for recycling and recovery of waste EEE. Humminbird® will mark all EEE products in accordance with the WEEE Directive. It is our goal to comply in the collection, treatment, recovery, and environmentally sound disposal of those products; however, these requirements do vary within European Union member states. For more information about where you should dispose of your waste equipment for recycling and recovery and/or your European Union member state requirements, please contact your dealer or distributor from which your product was purchased.

ROHS STATEMENT: Product designed and intended as a fixed installation or part of a system in a vessel may be considered beyond the scope of Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

CALIFORNIA PROPOSITION 65 STATEMENT: Lead in cable jackets and boots is restricted to 300 parts per million or less as determined by ICP-AES test methods.

Navionics® Gold, HotMaps™, and HotMaps Premium™ are registered trademarks of Navionics®. 700 Series™, Cannon®, CannonLink™, Humminbird®, HumminbirdPC™, InterLink™, WeatherSense®, UniMap™, and X-Press™ Menu are trademarked by or registered trademarks of Humminbird®.

Table of Contents

How GPS and Cartography Work	1
What's On the Display	3
Views	5
Bird's Eye Views	7
Chart Views	9
Instrument View	13
Screen Snapshot View	14
Screen Snapshots	15
View Orientation	18
Viewing Cartography	19
Introduction to Navigation	22
Waypoints, Routes, and Tracks	23
Save, Edit, or Delete a Waypoint	24
Navigate to a Waypoint or Position	26
Add a Waypoint Target or Trolling Grid	27
Save, Edit, or Delete a Route	29
Save or Clear a Current Track.....	30
Edit, Delete, or Hide Saved Tracks	31
Man Overboard (MOB) Navigation	32
Using Your 700 Series™ Control Head	34
Key Functions	35
POWER/LIGHT Key	35
VIEW Key	35
INFO Key	36
MENU Key	36
4-WAY Cursor Control Key	37

Table of Contents

MARK Key	38
GOTO Key.....	38
ZOOM (+/-) Key.....	39
VIEW PRESET Keys	39
EXIT Key	40
Multi-Media Card (MMC)/SD Slot	41
Adding Maps to Your Chartplotter.....	41
Updating Software	42
Exporting Navigation Data	43
Accessory Bus	44
Powering On the Unit	45
The Menu System	46
Start-Up Options Menu	47
Normal Operation	48
Simulator	48
System Status	49
Self Test.....	49
Accessory Test.....	50
GPS Diagnostic View	51
PC Connect (<i>with optional-purchase PC Connect cable only</i>)	51
X-Press™ Menu	52
Main Menu	53
Quick Tips for the Main Menu	54
User Mode (Normal or Advanced)	55

Table of Contents

Navigation X-Press™ Menu <i>(Navigation views only)</i>	57
Waypoint [Name] <i>(Only with an active cursor on a waypoint)</i>	58
Cursor To Waypoint <i>(Chart Views only)</i>	59
Save Current Track	59
Clear Current Track	60
Save Current Route <i>(only when Navigating)</i>	60
Skip Next Waypoint <i>(only when Navigating)</i>	61
Cancel Navigation <i>(only when Navigating)</i>	61
Cancel MOB Navigation <i>(only when MOB Navigation is activated)</i>	62
Remove Target <i>(only if Target is Active)</i>	62
Remove Grid <i>(only if Grid is Active)</i>	63
Waypoint [Name] <i>(Most recently-created waypoint)</i>	63
Select Readouts	65

Screen Snapshot X-Press™ Menu <i>(Screen Snapshot View only)</i>	73
----------------------------------------------------------------------------	-----------

Delete Image <i>(optional-purchase MMC/SD Card, Screen Snapshot View only)</i>	74
Delete All Images <i>(optional-purchase MMC/SD Card, Screen Snapshot View only)</i>	74

Alarms Menu Tab	75
------------------------	-----------

Low Battery Alarm	76
Aux. Temp. Alarm <i>(with optional-purchase temp. probe or Temp/Speed only)</i>	76
Temp. Alarm	77
Off Course Alarm.....	78
Arrival Alarm	79
Drift Alarm	79
Alarm Tone	80

Table of Contents

Navigation Menu Tab	81
Current Track	82
Saved Tracks	83
Waypoints	85
Routes	87
Chart Orientation	89
North Reference	89
Waypoint Decluttering	89
Grid Rotation	90
Trackpoint Interval	90
Track Min Distance (<i>Advanced</i>)	91
Track Color Range	91
Map Datum (<i>Advanced</i>)	92
Course Projection Line	92
Export All Nav Data (<i>Advanced</i>)	93
Delete All Nav Data (<i>Advanced</i>)	93
Continuous Navigation Mode	94
GPS Receiver Override	94
Chart Menu Tab	95
Chart Detail Level	96
Map Borders	97
Lat/Lon Grid.....	98
Spot Soundings.....	98
Nav aids on Bird's Eye View	98
Shaded Depth	99
Set Simulation Position (<i>Advanced</i>)	99
Set Map Offset (<i>Advanced</i>)	100
Clear Map Offset (<i>Advanced</i>)	100

Table of Contents

Setup Menu Tab	101
Units - Depth	102
Units - Temp (<i>International only</i>)	102
Units - Distance.....	102
Units - Speed.....	103
User Mode	103
Language (<i>International only</i>)	103
Triplog Reset	104
Restore Defaults	104
Aux. Temp. Offset (<i>Advanced</i>).....	105
Temp. Offset (<i>Advanced</i>)	105
Speed Calibration (<i>Advanced, with Temp/Speed only</i>).....	106
Local Time Zone (<i>Advanced</i>)	106
Daylight Saving Time (<i>Advanced</i>)	107
Position Format (<i>Advanced</i>)	107
Time Format (<i>Advanced, International only</i>).....	108
Date Format (<i>Advanced, International only</i>).....	108
Digits Format (<i>Advanced</i>)	109
NMEA Output (<i>Advanced</i>)	109
Demonstration.....	110
Views Menu Tab	111
Accessories Menu Tab	112
Using Screen Snapshot	112
Troubleshooting	115
Chartplotter Doesn't Power Up	115
Display Problems.....	116
Finding the Cause of Noise	117

Table of Contents

700 Series™ Chartplotter Accessories	118
Specifications	120
Glossary	121
Contact Humminbird®	129

***NOTE:** Entries in this Table of Contents which list (International Only) are only available on products sold outside of the U.S. by our authorized International Distributors. It is important to note that products sold in the U.S. are not intended for resale in the international market. To obtain a list of authorized International Distributors, please visit our website at www.humminbird.com or contact our Customer Resource Center at **1-800-633-1468** to locate the distributor nearest you.*

***NOTE:** Entries in this Table of Contents which list (with PC Connect Cable only) or (with Temp/Speed only) require the purchase of separate accessories. You can visit our website at www.humminbird.com to order these accessories online or contact our Customer Resource Center at **1-800-633-1468**.*

***NOTE:** Some features discussed in this manual require a separate purchase, and some features are only available on international models. Every effort has been made to clearly identify those features. Please read the manual carefully in order to understand the full capabilities of your model.*

How GPS and Cartography Work

Your 700 Series™ Chartplotter supports GPS and chartplotting. It uses GPS to determine your position and display it on a grid. The Global Positioning System (GPS) is a satellite navigation system designed and maintained by the U.S. Department of Defense. GPS was originally intended for military use; however, civilians may also take advantage of its highly accurate position capabilities, typically within +/- 4.5 meters, depending on conditions. This means that 95% of the time, the GPS receiver will read a location within 4.5 meters of your actual position. Your GPS Receiver also uses information from WAAS (the Wide Area Augmentation System), EGNOS (the European Geostationary Navigation Overlay Service), and MSAS (the MTSAT Satellite Augmentation System) satellites if they are available in your area.



GPS uses a constellation of over 24 satellites that continually send radio signals to the earth. Your present position is determined by receiving signals from up to 16 satellites and measuring the distance from the satellites.

All satellites broadcast a uniquely coded signal once per second at exactly the same time. The GPS receiver on your boat receives signals from satellites that are visible to it. Based on time differences between each received signal, the GPS receiver determines its distance to each satellite. With distances known, the GPS receiver mathematically triangulates its own position. With once per second updates, the GPS receiver then calculates its velocity and bearing.

The following GPS functionality is currently supported by the 700 Series™ Chartplotter when it is connected to the included GPS receiver:

- View current position
- View current track (breadcrumb trail)
- View precision speed and heading from your GPS receiver
- Save tracks, waypoints, and routes
- Travel a route and navigate from one waypoint to the next.

Your 700 Series™ supports Navionics® Gold, HotMaps™ and HotMaps™ Premium on MMC or SD card media. You can insert optional-purchase cards in the (MMC)/SD slot on your control head to access additional detailed maps. See *Using Your 700 Series Control Head: MMC/SD Card* for more information.

***NOTE:** Your 700 Series™ supports Navionics® Gold, HotMaps™, and HotMaps™ Premium. Your 700 Series™ does not support Navionics® Classic Charts or Platinum™ Cartography.*

Your unit also comes with a built-in UniMap™ with a more detailed map of North America (Domestic models) or a more detailed map of Europe and Southeast Asia, including Australia and New Zealand (International models).

Your 700 Series™ uses the GPS Receiver to determine the position of the boat automatically and uses the zoom level settings on a particular view to select the best chart to display. See *Viewing Cartography* for more information.

What's On the Display

The 700 Series™ Chartplotter can display a variety of useful information.

Latitude and Longitude Position of Cursor

Cursor Info Box: indicates the Latitude and Longitude of the cursor position, the distance to travel to the cursor position and the bearing to the cursor position is shown with a GPS receiver. A waypoint can be marked at the cursor position for later retrieval and use with a GPS receiver.

Route: Two or more linked waypoints that show intended navigation and the shortest path from one waypoint to the next.

Boat Icon

Map Scale

Track: Detailed position history, displayed as a breadcrumb trail of trackpoints.

Cartography

NEXT: Next Waypoint in the Route

TTG: Time to Go to Waypoint

DTG: Distance to Go to Waypoint

Speed Over Ground: the measurement of the boat's progress across a given distance, and is the speed measurement provided by GPS.





Bearing to Cursor

Distance to Cursor

Waypoint

Course Projection Line: Arrow extending from the bow of the boat that projects your current course and shows where the boat will go if you continue on your present course.

Active Cursor Icon

Selectable Readout Boxes

XTE: Cross Track Error: Distance of Boat from Route

Bearing to Waypoint

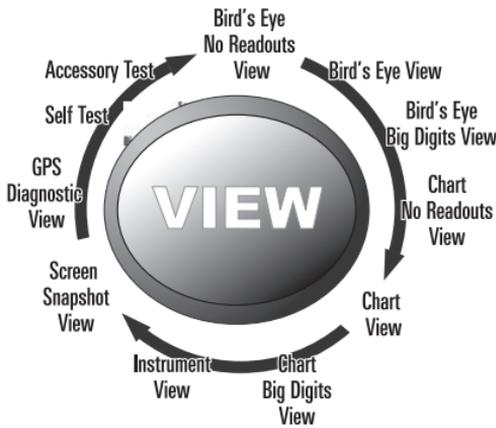
Course Over Ground: the current direction the boat is traveling measured in degrees from North.

Latitude and Longitude Position of Boat

Views

The GPS and navigation information from your Chartplotter are displayed on your screen in a variety of easy-to-read views. There are many views available on your Chartplotter. When you press the VIEW key, the display cycles through the available views on your screen. When you press the EXIT key, the display cycles through the available views in reverse order.

When you first power up the control head, *GPS Diagnostic View* will be the default view until GPS Communications are established. At that point, all the other views become available. You can display and hide any view to suit your preferences.



NOTE: When you change any menu settings that affect the display, the view will update immediately. You don't have to exit the menu to apply the change to the screen.

The views available on your Chartplotter are as follows:

- Bird's Eye No Readouts View
- Bird's Eye View
- Bird's Eye Big Digits View
- Chart No Readouts View
- Chart View
- Chart Big Digits View
- Instrument View
- Screen Snapshot View

See *Start-Up Options Menu*:

- GPS Diagnostic View
- Self Test
- Accessory Test

To customize your views rotation:

You can choose which views are hidden or visible in your view rotation.

1. Press the MENU key twice to access the tabbed Main Menu, then press the RIGHT Cursor key until the Views tab is selected.
2. Press the UP or DOWN Cursor keys to select a View.
3. Press the LEFT or RIGHT Cursor keys to change the status of the view from Hidden to Visible or vice versa.

To program each PRESET key:

Another way to access your favorite views quickly is to store them on the VIEW PRESET keys. Instead of using the VIEW key to cycle through every view to find the one you want, you can program the VIEW PRESET keys to display a specific view immediately.

1. Press the VIEW key to cycle to the view you want to store.
2. Press and hold one of the VIEW PRESET keys for several seconds. A chime will indicate that the view has been saved. You can store up to three views, one on each key.

To change the Digital Readouts:

Each view displays digital readout information (such as speed or time), which varies with the view selected, the accessory attached, and whether or not you are navigating. See *Navigation X-Press™ Menu: Select Readouts* for more information.

1. Press the MENU key once to access the Navigation X-Press™ Menu.
2. Press the DOWN key to highlight Select Readouts, and press the RIGHT Cursor key to access the Select Readouts submenu.
3. Press the UP or DOWN Cursor keys to select a Readout position, then press the RIGHT or LEFT Cursor keys to choose what will be displayed in that position. To hide the data window, select Off.

You may also choose **Bird's Eye Big Digits View** or **Bird's Eye No Readouts View** if you prefer.

NOTE: *Bird's Eye Big Digits View, Chart Big Digits View, and Instrument View share the same set of eight readouts. When you change the readouts displayed on one of these views, the readouts are also changed on the other two views. See **Navigation X-Press™ Menu: Select Readouts** for more information.*

Bird's Eye Big Digits View

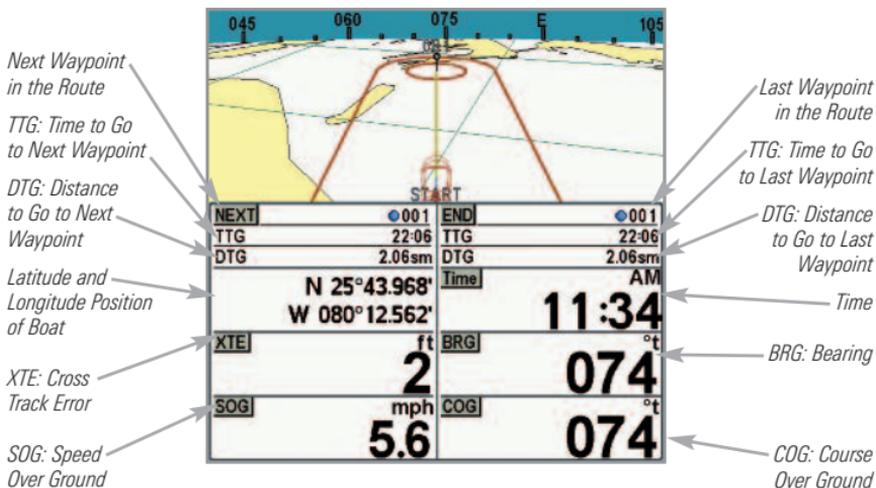


Chart Views

Chart Views - The standard Chart, Chart Big Digits, and Chart No Readouts Views show cartography from the built-in UniMap™ or an optional MMC/SD map for the area surrounding your current position. The current track (also known as the position history or breadcrumb trail) showing where the boat has been, along with saved tracks, waypoints, and the current route (when navigating), are overlaid on the chart.

- Use the 4-WAY Cursor Control key to shift/pan the chart to another area.
- Press the ZOOM (+/-) keys to zoom in and out.
- Press the INFO key to get information on the chart objects near the cursor.

***NOTE:** Standard Bird's Eye View and Chart View share the same set of nine readouts, seven of which are adjustable. When you change the readouts displayed on the Bird's Eye View, the readouts are also changed on the Chart View.*

***NOTE:** Bird's Eye Big Digits View, Chart Big Digits View, and Instrument View share the same set of eight readouts. When you change the readouts displayed on one of these views, the readouts are also changed on the other two views. See **Navigation X-Press™ Menu: Select Readouts** for more information.*

***NOTE:** When two or more waypoints overlap, or are displayed close together on a chart view, the screen will automatically declutter—waypoint names will shorten and the waypoint icons will change into small blue icons.*

*To view a **Decluttered Waypoint** at full size, use the 4-WAY Cursor Control key to move the cursor onto a decluttered waypoint icon. When the cursor snaps onto the icon, the full-size waypoint name and icon will be displayed. You can also press the ZOOM+ key until you can see the individual waypoints on the screen.*

Chart View without Active Cursor, shown with Optional-Purchase Navionics® Cartography

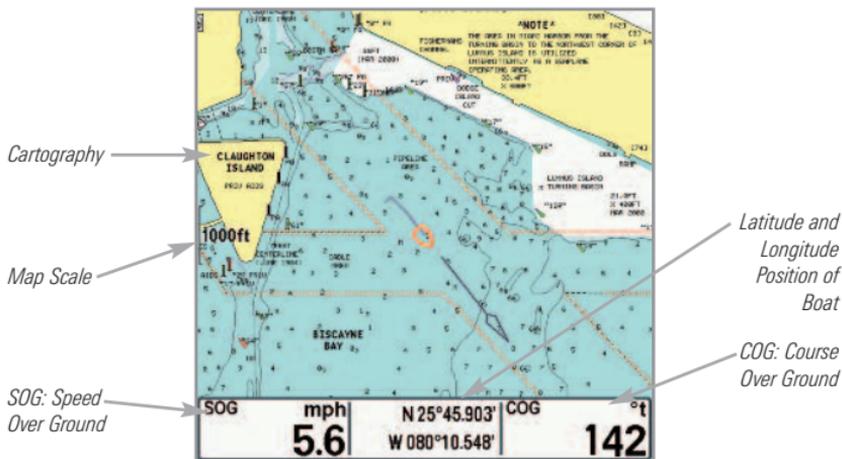
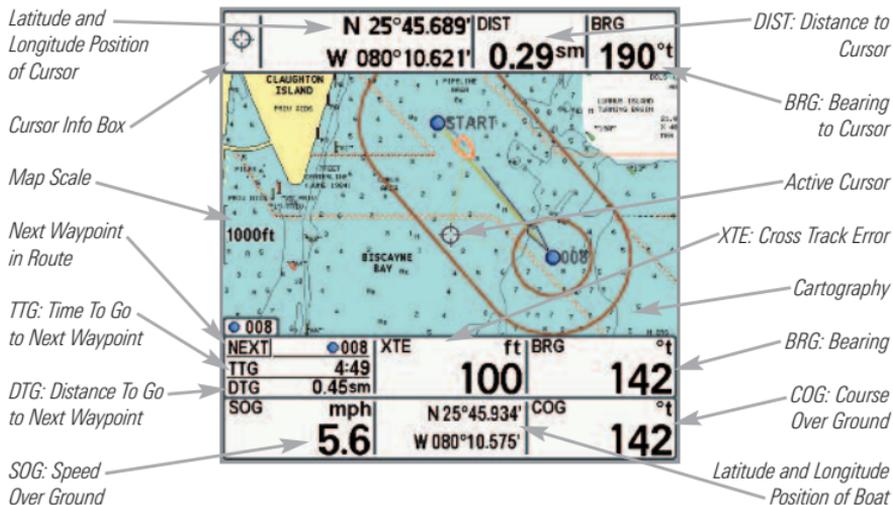


Chart View with Active Cursor, shown with Optional-Purchase Navionics® Cartography



Chart View with Active Cursor, with Optional-Purchase Navionics® Cartography, Showing Navigation



You may also choose **Chart Big Digits View** or **Chart No Readouts View** if you prefer.

Chart Big Digits View

Next Waypoint
in the Route

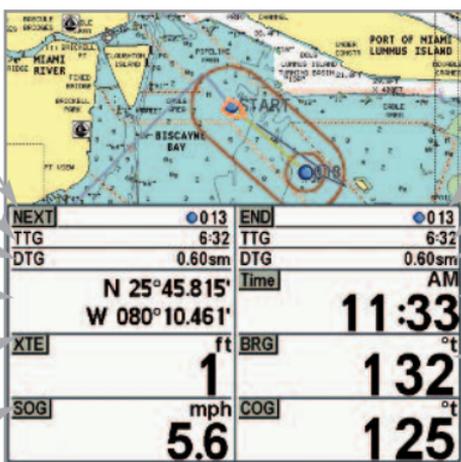
TTG: Time to Go
to Next Waypoint

DTG: Distance
to Go to Next
Waypoint

Latitude and
Longitude of
the Boat

XTE: Cross
Track Error

SOG: Speed
Over Ground



Last Waypoint
in Route

TTG: Time to Go
to Last Waypoint

DTG: Distance
to Go to Last
Waypoint

Time

BRG: Bearing

COG: Course
Over Ground

Chart No Readouts View

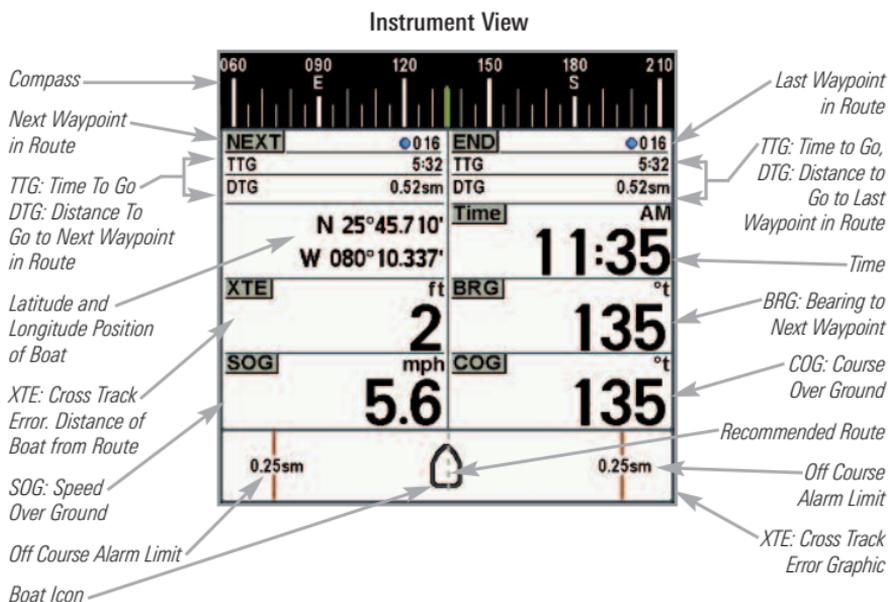


Instrument View

Instrument View allows you to display a digital instrument panel with 8 selectable readouts. This view provides a digital compass at the top of the view, as well as 8 selectable readouts, and a Cross Track Error (XTE) graphic at the bottom of the view. The XTE graphic shows the boat's position in relation to the Off Course Alarm limits, as well as the optimal route (shown as the dotted line in the middle).

For best results, you should try to keep the boat as close to the dotted line as possible. If your course exceeds the Off Course Alarm limits, an alarm will sound, and the boat icon will change position and will turn from black to red to indicate the alarm state.

NOTE: *Bird's Eye Big Digits View, Chart Big Digits View, and Instrument View share the same set of eight readouts. When you change the readouts displayed on one of these views, the readouts are also changed on the other two views. See **Navigation X-Press™ Menu: Select Readouts** for more information.*



NOTE: *If there is only one waypoint in a route, the Next Waypoint and the End Waypoint info boxes will display the same information, both for that next waypoint.*

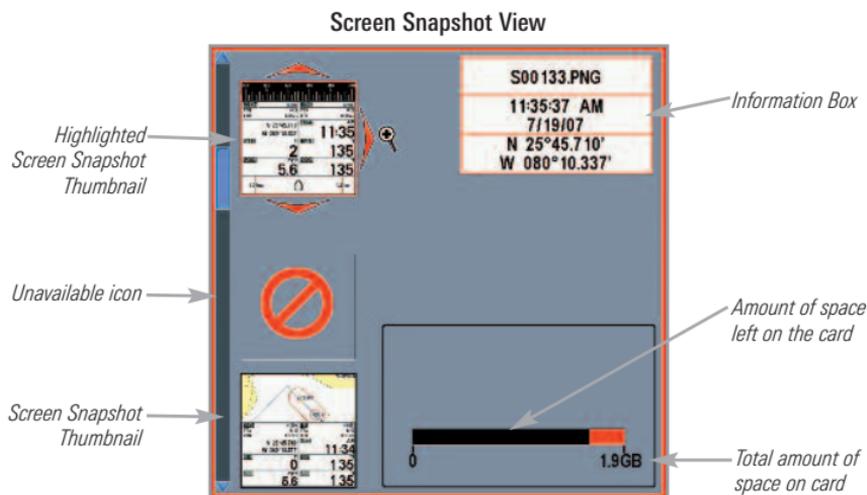
Screen Snapshot View

Screen Snapshot View shows the screen snapshots that you have saved on the MMC/SD card (optional-purchase). Use this view to access your saved screen snapshots by selecting the thumbnail for each file.

Press the DOWN or UP Cursor keys to scroll through the snapshot thumbnails in this view. The selected thumbnail will be highlighted with red arrows. Press the RIGHT Cursor key to open a file.

In addition, press the MENU key once while in this view, and the **Screen Snapshot X-Press™ Menu** will appear.

***NOTE:** You must have an optional-purchase MMC/SD card installed for the Screen Snapshot features to work. Also, the speed of the screen capture depends on the type of card you use. In general, SD cards capture the screen faster than MMC cards.*



Screen Snapshots

The **Screen Snapshot** feature takes a picture of your screen and saves the screen snapshot to the MMC/SD card (optional-purchase) installed in your unit. The screen snapshot will include the menus, dialog boxes, warnings, and messages that were active when the screen snapshot was taken.

Working with screen snapshots is a four-step process:

1. Activating Screen Snapshot from the Accessories tab.
2. Making a Screen Snapshot using the MARK key.
3. Viewing a Screen Snapshot using the Screen Snapshot View.
4. Deleting a Screen Snapshot using the Screen Snapshot X-Press™ Menu.

To activate Screen Snapshot:

1. Press the MENU key twice to access the Main Menu, and then press the RIGHT Cursor key until the Accessories tab is selected.
2. Press the DOWN Cursor key to highlight Screen Snapshot.
3. Press the LEFT or RIGHT Cursor keys to turn Screen Snapshot On or Off. (Off, On, Default = Off)

To make a screen snapshot (Screen Snapshot must be activated):

1. Make sure you have installed an optional-purchase MMC/SD card into the card slot.
2. From any view you want to capture, press the MARK key.
 - When you start a screen capture, a message will appear to indicate that a waypoint has been created at the cursor location on the screen, and the screen will freeze while the snapshot is being saved to the MMC/SD.
 - A status dialog box will appear that shows the file number assigned to the screen capture (.PNG) as well as the progress of the save as a percentage. Screen Snapshot file names start with an "S."
 - A waypoint created by a screen snapshot shares the same file name and has a screen snapshot icon.

***NOTE:** Navigation is not affected by the Screen Snapshot feature. Also, if Screen Snapshot is enabled, but there is not a GPS receiver connected, pressing the MARK key will capture the screen image but an error will display that says a GPS position fix is required to create a waypoint.*

To view saved screen snapshots from the Screen Snapshot View:

1. Make sure that the optional-purchase MMC/SD card used to capture the screen is installed in the card slot.
2. Press the VIEW key until you see the Screen Snapshot View.
3. Press the UP or DOWN Cursor keys to scroll through the available screen snapshots thumbnails. The selected thumbnail will be highlighted with arrows. Press the RIGHT Cursor key to view the full image.
 - When you highlight a screen snapshot thumbnail, the amount of space remaining on the MMC/SD card will be displayed in the information box.
 - A red border around the full screen indicates that the view is a saved screen capture, not a “live” view.
 - Press the DOWN Cursor key to view the next screen snapshot.
 - Press the LEFT Cursor key to return to the Screen Snapshot View file list.

To view saved screen snapshots from a Chart View:

Waypoints created with a screen snapshot are displayed in Chart View as a screen snapshot icon.

1. Make sure that the optional-purchase MMC/SD card used to capture the screen is installed in the card slot.
2. Press the VIEW key until you see a Chart View.
3. Use the 4-WAY Cursor Control key to move the active cursor onto a screen snapshot icon. When the cursor snaps onto the screen snapshot icon, a thumbnail preview of the snapshot will be displayed on the screen.
4. Press the INFO key to access the Waypoints Info submenu.

5. Press the DOWN Cursor key to highlight View Snapshot, and press the RIGHT Cursor key to view the screen snapshot on the full screen.
 - A red border around the full screen indicates that the view is a saved screen capture, not a “live” view.
 - Press the EXIT key to return to the Chart View.

NOTE: You must have an optional-purchase MMC/SD card installed to store or view screen snapshot thumbnails. If you press the INFO key while the cursor is on a snapshot waypoint, and the MMC/SD card is missing, the chart information box will be displayed instead of the screen snapshot.

NOTE: You may view data files associated with each screen snapshot by removing the MMC/SD card from your unit and installing it in your optional-purchase MMC/SD card reader connected to a PC. Use Windows Explorer and HumminbirdPC™ to see the contents of your MMC/SD card. See www.humminbird.com for details.

You will notice that a .DAT (or a .TXT) file is created for every .PNG screen capture. This data file includes the thumbnail view, and is required for viewing the screen snapshot from your unit, so don't delete these files.

To delete saved screen snapshots:

You can delete the highlighted image, or all captured images, using the Screen Snapshot X-Press™ Menu.

1. From the Screen Snapshot View, press the UP or DOWN Cursor keys to highlight the screen snapshot you want to delete.
2. Press the MENU key once to access the Screen Snapshot X-Press™ Menu.
3. Press the UP or DOWN Cursor key to select Delete Image, and then press the RIGHT Cursor key to complete your selection. The Confirm dialog box will appear. To confirm deletion, press the RIGHT Cursor key once more. To cancel deletion, press the LEFT Cursor key.

NOTE: To delete ALL of your saved screen snapshots, select Delete All Images from the Screen Snapshot X-Press™ Menu, and press the RIGHT Cursor key to confirm the deletion.

View Orientation

All the **Chart** Views allow you to choose the orientation of the view. When **North-Up orientation** is selected, True North is shown at the top of the display. In other words, objects located to the north of the boat are drawn above the boat. When **Course-Up orientation** is selected, the direction of motion of the boat is shown at the top of the display. In other words, objects ahead of the boat are drawn above the boat. In both orientations, the view pans automatically, so that the boat is always centered on the display.

When the boat is stationary, it is drawn as a circle. When the boat is in motion, it takes on a boat shape, pointed in the direction of motion (always Up in the Course-Up orientation).

Viewing Cartography

In the Chart Views, there are several cartography-related functions that you can access using the keys on your control head.



Chart View with Cursor Present,
shown with Optional-Purchase
Navionics® Cartography

Panning: Use the 4-WAY Cursor Control key to move the chart around on the display in the direction of the key being pressed. When you do this, a bull's eye cursor is drawn at the center of the screen and is linked to the boat by a gray line, even if the boat is off the screen. At the same time, the distance and bearing from the boat to the cursor position and the latitude/longitude coordinates of the cursor are displayed in the upper info boxes.

Zooming: Press the Plus (+) key to Zoom In and the Minus (-) key to Zoom Out to see the cartography at different magnification levels. The zoom level is indicated on the left side of the display. If you zoom in beyond the available chart data, the display will go into Overzoom mode whereby the last available chart data is amplified to reflect the level selected. If you zoom in so far that no cartography is available, a lat/long grid will be drawn instead.

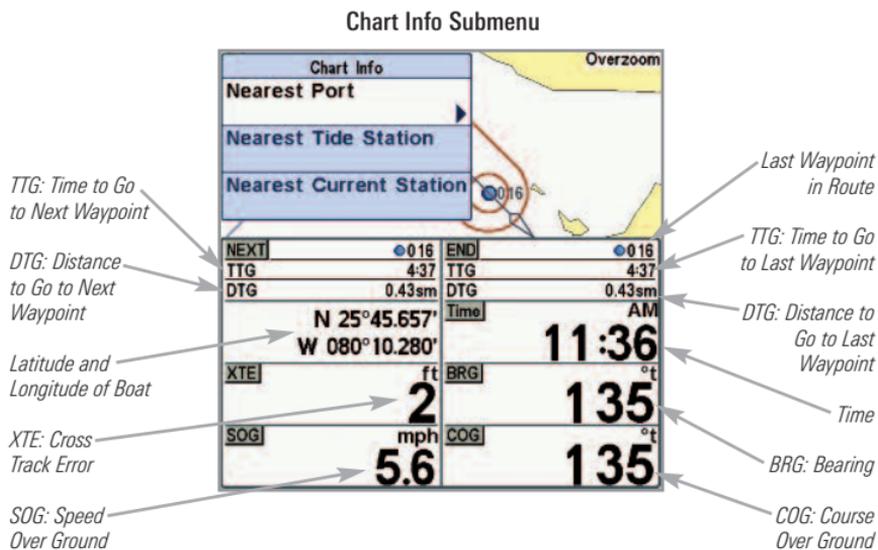
Decluttered Waypoints: When two or more waypoints overlap, or are displayed close together on a chart view, the screen will automatically declutter—waypoint names will shorten and the waypoint icons will change into small blue icons.

To view a Decluttered Waypoint at full size, use the 4-WAY Cursor Control key to move the cursor onto a decluttered waypoint icon. When the cursor snaps onto the icon, the full-size waypoint name and icon will be displayed. You can also press the ZOOM+ key until you can see the individual waypoints on the screen.

Chart Info: Press the INFO key to get detailed information about the chart. If the cursor is active, you will see information about the chart objects located near the cursor. If the cursor is not active, the Chart Info submenu will appear. Use the 4-WAY Cursor Control key to select the nearest port, the nearest tide station, or the nearest current station and see information about any of these objects.

NOTE: The built-in UniMap™ does not contain any Port, Tide, or Current information. This information is only available from optional-purchase MMC/SD cards.

Nearest Port: The position and services information for the nearest port to your present position will be displayed. Press the EXIT key to remove the information box and the cursor bull's eye will be centered over the port position. The cursor information boxes at the bottom of the display will indicate the distance and bearing to the port from your present position.



Nearest Tide Station: Tide information for the nearest tide station to your present position will be displayed. This includes the position of the station and the times of the high and low tides for today's date. A tide graph is also displayed showing the rise and fall of the tides for the 24 hour time period encompassing the date. You can change the date to look at tide information before or after the date displayed by pressing the LEFT or RIGHT Cursor key respectively. Press the EXIT key to remove the information box, and the cursor bull's eye will be centered over the tide station position. The cursor information boxes at the bottom of the display indicate the distance and bearing to the tide station from your present position.

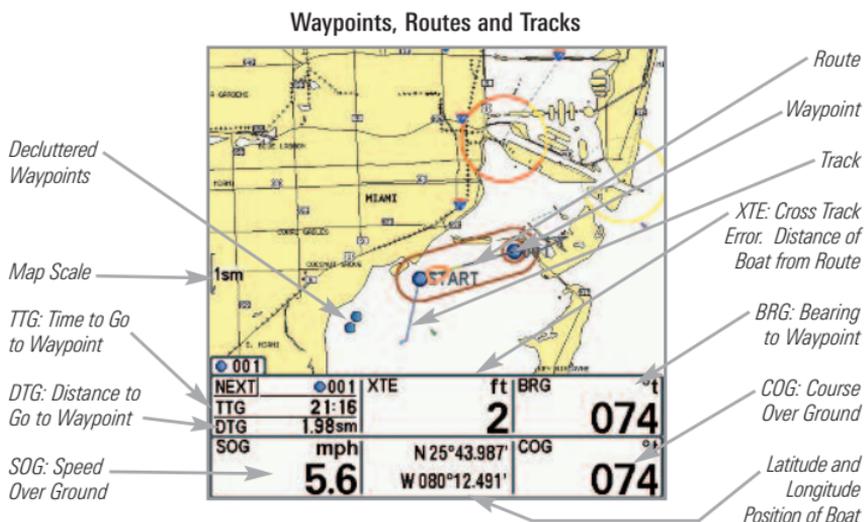
Nearest Current Station: Current information for the nearest current station to your present position will be displayed. This includes the position of the station and the current changes for today. Two graphs are also presented that show the time, direction, and flow speed of the current changes for the 24 hour time period of today's date. You can change the date to look at current information before or after the date displayed by pressing the LEFT or RIGHT Cursor key respectively. Press the EXIT key to remove the information box, and the cursor bull's eye will be centered over the current station position. The cursor information boxes at the bottom of the display will indicate the distance and bearing to the current station from your present position.

Introduction to Navigation

Use your 700 Series™ Chartplotter to mark waypoints at areas of interest and to navigate to those waypoints via a savable route. A route represents the shortest intended distance between waypoints. You can also view and save tracks, which represent the actual path of the boat.

Waypoints, Routes, and Tracks

Waypoints are stored positions that allow you to mark areas of interest or navigation points. Your Chartplotter can store up to 3000 waypoints.



NOTE: When two or more waypoints overlap, or are displayed close together on a chart view, the screen will automatically declutter—waypoint names will shorten and the waypoint icons will change into small blue icons.

To view a **Decluttered Waypoint** at full size, use the 4-WAY Cursor Control key to move the cursor onto a decluttered waypoint icon. When the cursor snaps onto the icon, the full-size waypoint name and icon will be displayed. You can also press the ZOOM+ key until you can see the individual waypoints on the screen.

Routes link two or more waypoints together to create a path for navigation and are used in trip planning. You can link individual waypoints together by using the GOTO key. A route represents your intended navigation and shows the shortest path from each waypoint to the next. As you travel a route, staying on the route line is the most efficient way to get to your destination, although you should always look out for obstacles not shown on the chart. Your 700 Series™ Chartplotter can store up to 50 routes that can each contain up to 50 waypoints.

Tracks consist of detailed position history and are displayed as a breadcrumb trail of trackpoints. The Current Track shows the position history since the unit was powered up (maximum of 20,000 trackpoints displayed). You can clear the Current Track or save it at any time. Your 700 Series™ Chartplotter can store up to 50 saved tracks, each containing 20,000 trackpoints. The current track represents your actual path so far.

Save, Edit, or Delete a Waypoint

Save your current position as a waypoint: On any view, press the MARK key to save the current position of the boat as a waypoint.

Save the cursor position as a waypoint: On the **Chart** views, use the 4-WAY Cursor Control key to move the cursor to the position you want to save as a waypoint. Then press the MARK key to save the position as a waypoint.

***NOTE:** When you save a waypoint by any of these methods, a numerical waypoint name is automatically assigned. You can edit the waypoint information later to give it a different name and select an icon to represent it (see **Program or Edit the waypoint fields**).*

Display the Waypoints Submenu: From any view, press the MENU key twice to display the Main Menu, then use the RIGHT Cursor key to select the Navigation tab. Select Waypoints, and press the RIGHT Cursor key to display the Waypoints submenu.

Program a specific position as a waypoint: To create a waypoint that is NOT your current position, from the Waypoints submenu select Create, and press the RIGHT Cursor key. Use the 4-WAY Cursor Control key to program a waypoint name, latitude, longitude, and icon before selecting Save.

Edit a waypoint: From the Waypoints submenu, select Edit and press the RIGHT Cursor key to display the saved waypoints list. Select the waypoint you want to edit and press the RIGHT Cursor key. Use the 4-WAY Cursor Control key to edit a waypoint name, latitude, longitude, and icon before selecting Save.

To make it easier to select a waypoint to edit, select **Sort By** and press the RIGHT or LEFT Cursor keys to select a sort order:

- **Name** shows the waypoints alphabetically.
- **Time** shows the most recently-created waypoint first.
- **Distance** shows the closest waypoint first.

Program or Edit the waypoint fields: Use the 4-WAY Cursor Control key to move from field to field, and the UP and DOWN Cursor keys to change values once you are in a field.

In the Waypoint Name, Latitude, and Longitude fields, press the UP and DOWN Cursor keys to change the letter or number. All upper and lower case letters are available, as well as digits 0-9 and some punctuation characters.

In the Waypoint Icon field, press the UP and DOWN Cursor keys to change the icon used to represent the waypoint on the Chart Views. You can exit these fields with the LEFT and RIGHT Cursor keys or by pressing the EXIT key.

Delete a waypoint: From the Waypoints submenu, select Delete, and press the RIGHT Cursor key to display the saved waypoints list. Select the waypoint you want to delete, then press the RIGHT Cursor key. You will be asked to confirm deletion before the waypoint is permanently deleted.

Navigate to a Waypoint or Position

Navigate to the cursor position: From the Chart views, use the 4-WAY Cursor Control key to move the cursor to a position or waypoint on the display. Press the GOTO key. Navigation will begin immediately.

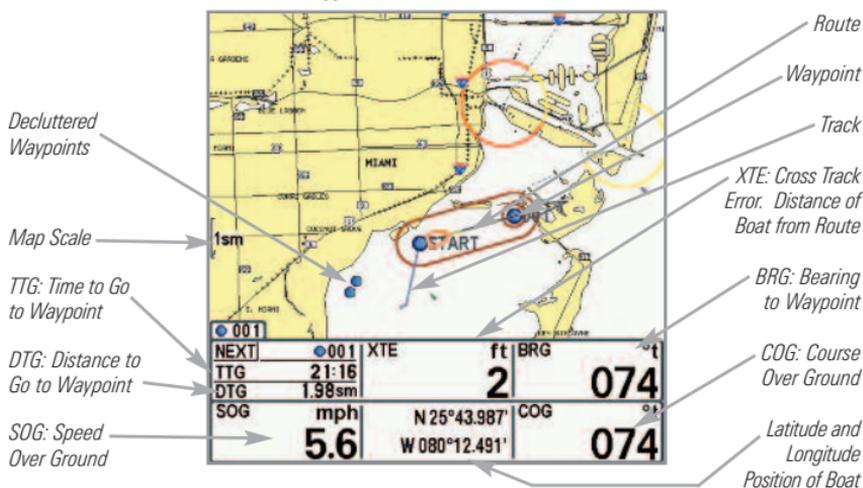
Navigate to a specified waypoint: Press the GOTO key. Press the DOWN Cursor key to highlight a waypoint from the saved waypoints list, and press the RIGHT Cursor key to start navigation.

NOTE: By repeating the previous instructions, you can add more waypoints to create a longer multi-segment route.

NOTE: When two or more waypoints overlap, or are displayed close together on a chart view, the screen will automatically declutter—waypoint names will shorten and the waypoint icons will change into small blue icons.

*To view a **Decluttered Waypoint** at full size, use the 4-WAY Cursor Control key to move the cursor onto a decluttered waypoint icon. When the cursor snaps onto the icon, the full-size waypoint name and icon will be displayed. You can also press the ZOOM+ key until you can see the individual waypoints on the screen.*

Waypoints, Routes and Tracks



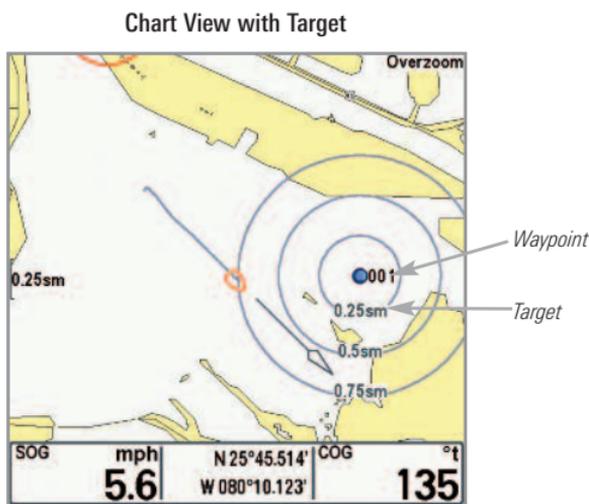
Skipping a waypoint: From the Navigation X-Press™ Menu, select Skip Next Waypoint, and press the RIGHT Cursor key. If there is not another waypoint to skip to, navigation will be cancelled.

Cancel navigation: From the Navigation X-Press™ Menu, select Cancel Navigation, and press the RIGHT Cursor key. Canceling navigation removes the route and any waypoints created using the GOTO key, but it does not remove any saved routes from memory. You will be prompted to save the current route when you cancel navigation.

Add a Waypoint Target or Trolling Grid

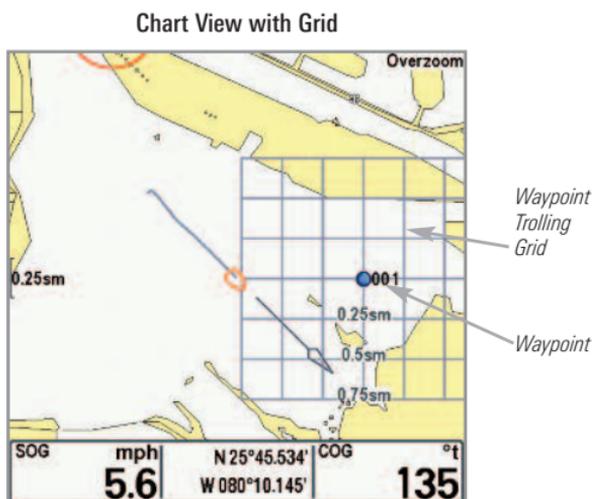
Add or Remove a Waypoint Target: The target shows various distance ranges in circular format from the waypoint you choose.

From the Waypoints submenu, select Target, and press the RIGHT Cursor key to display the saved waypoints list. Select the waypoint you want to target. A target consisting of concentric circles centered on the selected waypoint will appear on all of the navigation views. To remove the target, choose Remove Target from the Navigation X-Press™ Menu.



Add or Remove a Trolling Grid: The trolling grid shows various distance ranges in grid format from the waypoint you choose. The trolling grid can be used as a guide when trolling around a waypoint.

From the Waypoints submenu, select Grid, and press the RIGHT Cursor key to display the saved waypoints list. Press the DOWN or UP Cursor keys to highlight a waypoint, and press the RIGHT Cursor key to select. A trolling grid centered on the selected waypoint will appear on all of the navigation views. The grid can be rotated to any heading by adjusting the Grid Rotation setting on the Navigation Main Menu. To remove the trolling grid, choose Remove Grid from the Navigation X-Press™ Menu.



NOTE: Only one waypoint can have either a target or a grid applied to it at one time. If you apply a target or a grid to a new waypoint, the original waypoint will lose its target or grid.

NOTE: The spacing of the rings on the waypoint target and the spacing of the grid lines on the trolling grid are the same as the length of the scale bar on the left edge of the display. Zooming in or out will decrease or increase the spacing, respectively.

Save, Edit, or Delete a Route

Save the current route: While you are navigating, the current route can be saved. From the Navigation X-Press™ Menu, select Save Current Route, and press the RIGHT Cursor key. Navigation will continue.

Display the Routes submenu: From any view, press the MENU key twice to display the Main Menu, then press the RIGHT Cursor key to select the Navigation tab. Press the DOWN Cursor key until Routes is highlighted, and press the RIGHT Cursor key to display the Routes submenu.

Create a route: From the Routes submenu, select Create and press the RIGHT Cursor key. A Route Edit dialog box will be displayed with an empty route. You can name the route, add waypoints to the route from the saved waypoints list, and order the waypoints in the route using the 4-WAY Cursor Control key to move between fields.

Edit a saved route: From the Routes submenu, select Edit and press the RIGHT Cursor key. A Route Edit screen will be displayed. Select the route you want to edit and press the RIGHT Cursor key. Re-name the route or change, delete, or re-order the waypoints used in the route.

Edit waypoint order in a route: From the Route Edit dialog box, highlight a waypoint in the In Route list, and press the RIGHT Cursor key to access the Waypoint In Route submenu. From this submenu, you can move the waypoint up or down in the route order or delete it from the list.

Delete a saved route: From the Routes submenu, select Delete and press the RIGHT Cursor key. Select the route you want to delete and press the RIGHT Cursor key. You will be asked to confirm your choice by pressing the RIGHT Cursor key again before the route is deleted.

Travel a saved route: From the Routes submenu, select Travel, and press the RIGHT Cursor key. The saved routes list will appear. Select the route you want to travel, and press the RIGHT Cursor key to make this route the current route and begin navigation. You may also travel the route in forward or reverse order by changing the Direction setting in the saved routes list.

Route Info: From the Routes submenu, select Info, and press the RIGHT Cursor key. The saved routes list will appear. Select a route, and press the RIGHT Cursor key. The following information will be displayed for the route you select: The waypoints in the route, with the distance and bearing from each waypoint to the next, as well as the distance and bearing from the current position to the first waypoint in the route.

Save or Clear a Current Track

Save the current track: From the Navigation X-Press™ Menu, select Save Current Track, and press the RIGHT Cursor key. The track will remain on the display but will change from black to gray. To remove the track completely from the display, see *Edit, Delete, or Hide Saved Tracks*.

*NOTE: When you save a track, a name is automatically assigned. The track name consists of a date/time stamp, but can be re-named later (see *Edit, Delete, or Hide Saved Tracks*).*

Clear the current track: From the Navigation X-Press™ Menu, select Clear Current Track, and press the RIGHT Cursor key. The track will be removed from the display and permanently deleted.

Edit, Delete, or Hide Saved Tracks

Display the Saved Tracks Submenu: From any view, press the MENU key twice to display the Main Menu, then press the RIGHT Cursor key to select the Navigation tab. Select Saved Tracks, and press the RIGHT Cursor key to display the Saved Tracks submenu.

Edit a saved track: From the Saved Tracks submenu, select Edit, and press the RIGHT Cursor key to display the saved tracks list. Select the track you want to edit and press the RIGHT Cursor key.

When the Edit Track dialog box appears, use the Cursor keys to move between fields. In the Name field, the UP and DOWN Cursor keys change the letter or number. All upper and lower case letters are available, as well as digits 0-9 and some punctuation characters. You can exit the Name field with the LEFT and RIGHT Cursor keys or by pressing the EXIT key. Select Save and press the RIGHT Cursor key to save your changes.

Delete a saved track: From the Saved Tracks submenu, select Delete, and press the RIGHT Cursor key to display the saved tracks list. Select the track you want to delete and press the RIGHT Cursor key. You will be asked to confirm deletion before the track is permanently deleted.

Hide or display a saved track: From the Saved Tracks submenu, select Visibility, and press the RIGHT Cursor key to display the saved tracks list. Select the track you want to hide or display and press the RIGHT or LEFT Cursor keys to select Hidden or Visible. Press the EXIT key to return to the Saved Tracks submenu.

Man Overboard (MOB) Navigation

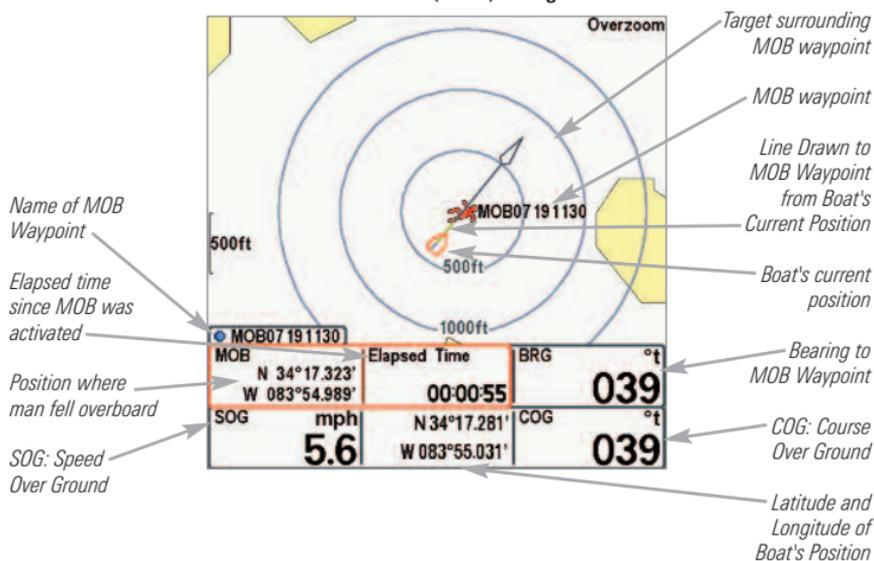
As soon as you know that you have a man overboard (MOB), you should activate MOB navigation to maximize the chances for a successful rescue. MOB navigation allows you to create an MOB waypoint to locate the point at which your man went overboard and the relation of the boat to that point.

Activate MOB navigation: Press and hold the GOTO key for more than 1.5 seconds to activate the Man Overboard (MOB) function.

When MOB is activated, a MOB waypoint is created at the boat's current position, regardless of whether the chart cursor is active or not. The MOB waypoint has a large, distinctive icon. Once MOB is activated, any current navigation will be cancelled and the current route will be discarded without user notification. MOB navigation will begin immediately, and the MOB View will show the following:

- The view will switch to the Chart View, and the elapsed time since MOB was activated will be displayed.
- A line will be drawn from the boat's current position to the MOB waypoint, and the MOB waypoint will be targeted.
- The latitude/longitude position of the MOB waypoint will be displayed in an additional information box.

Man Overboard (MOB) Navigation



Cancel MOB navigation: Press the MENU key once to access Navigation X-Press™ Menu. Select Cancel MOB, and press the RIGHT Cursor key. Canceling MOB navigation removes the route and any waypoints created using the GOTO key but does not remove any saved routes from memory.

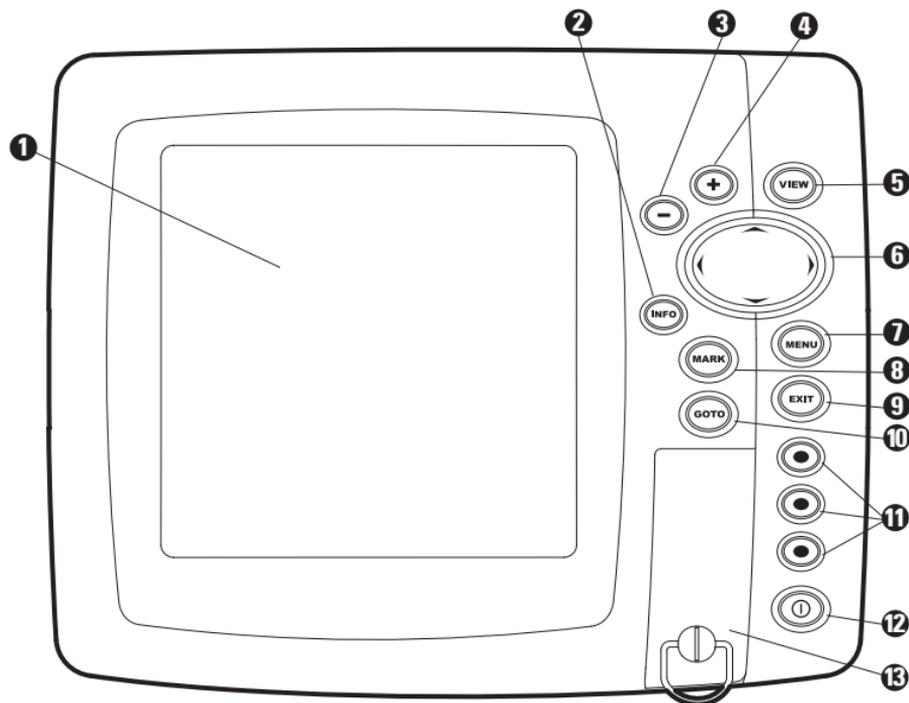
Delete MOB waypoint: After you have cancelled MOB navigation, the MOB waypoint will remain in the Navigation X-Press™ Menu until it is deleted.

1. Press the MENU key once to access the Navigation X-Press™ Menu.
2. Select the MOB waypoint, and press the RIGHT Cursor key.
3. Select Delete from the MOB waypoint submenu, and press the RIGHT Cursor key again. The Confirmation dialog box will appear, allowing you to confirm or cancel the deletion.

It is not possible to re-activate MOB or modify the current route without first canceling MOB navigation. The Off Course trigger is also disabled and the Off Course Alarm circle is not drawn. Any press of the GOTO key, or selection of a GOTO menu option, will cause an error beep and a short message will be displayed that will disappear after 2 seconds.

Using Your 700 Series™ Control Head

Your 700 Series™ Chartplotter interface is easy to use. A combination of keys and special features allows you to control what you see on the display. Refer to the following illustration, and see *Key Functions* for more information.



- 1 Screen
- 2 INFO key
- 3 ZOOM (-) key
- 4 ZOOM (+) key
- 5 VIEW key
- 6 4-WAY Cursor Control key
(LEFT, RIGHT, UP, or DOWN Cursor keys)

- MENU key 7
- MARK key 8
- EXIT key 9
- GOTO key 10
- VIEW PRESET keys 11
- POWER/LIGHT key 12
- MMC/SD Card slot cover 13

Key Functions

Your Chartplotter user interface consists of a set of easy-to-use keys that work with various on-screen views and menus to give you flexibility and control over your fishing experience.



POWER/LIGHT Key

The POWER/LIGHT key is used to power the Chartplotter on and off. You can also use the POWER/LIGHT key to adjust the backlight and contrast of the display.

Power On the control head: Press the POWER/LIGHT key to power the unit on. When the Title screen is displayed, press the MENU key to access the Start-Up Options Menu.

Power Off the control head: Press and hold the POWER/LIGHT key for 3 seconds. A message will appear to indicate how many seconds there are until shutdown occurs. To ensure that shutdown occurs properly and any menu settings will be saved, your Chartplotter should always be turned off using the POWER/LIGHT key.



Adjust the Backlight or the Display Background

Color: Press the POWER/LIGHT key to access the Light and Background submenu. Use the 4-WAY Cursor Control key to select Light or Background, and then use the LEFT or RIGHT Cursor key to change the settings. Press EXIT to exit the Light and Background submenu.



VIEW Key

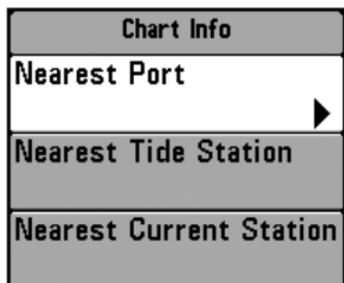
The VIEW key is used to cycle through all available views. Press the VIEW key to advance to the next view. Repeatedly pressing VIEW cycles through all views available. Views can be hidden to optimize the system to your fishing requirements (see *Views* or *Views Menu Tab*).

NOTE: Press the EXIT key to cycle through the views in reverse order.



INFO Key

Info - Press the INFO key while in Bird's Eye or Chart View to display information about objects that are near an active cursor.



If the cursor is not active, the Chart Info submenu will be displayed. Press the DOWN Cursor key to select Nearest Port, Nearest Tide Station, or Nearest Current Station. Then press the RIGHT Cursor key to display the requested information.

***NOTE:** The built-in UniMap™ does not contain Port, Tide, or Current information. This information is only available from optional purchase MMC/SD cards.*



MENU Key

The MENU key is used to access the menu system.

Start-Up Options Menu - Press the MENU key during the power up sequence to view the Start-Up Options Menu.

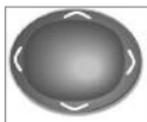
X-Press™ Menu - Press the MENU key once to access the X-Press™ Menu. The X-Press™ Menu provides a shortcut to the most frequently-used settings, and the options on the X-Press™ Menu correspond with the current view or navigation mode.

Press the UP or DOWN Cursor keys to highlight your X-Press™ Menu choice, then press the RIGHT or LEFT Cursor keys to change the setting. The X-Press™ Menu will collapse temporarily and the screen will update if it is affected by your menu setting change, which allows you to see the effects of your change immediately. Reactivate the full X-Press™ Menu by pressing the UP or DOWN Cursor keys.

***NOTE:** Menu options can be expanded or simplified by setting the User Mode to Advanced or Normal. See **Main Menu: User Mode** for details.*

Main Menu - The full Main Menu is organized under tabbed headings to help you find a specific menu item quickly. Your 700 Series™ Chartplotter has the following menu tabs: Alarms, Navigation, Chart, Setup, Views, and Accessories.

Press the MENU key twice to access the Main Menu. Press the RIGHT or LEFT Cursor keys to select a tab. Then press the DOWN or UP Cursor key to highlight a menu option, and press the LEFT or RIGHT Cursor key to change a menu setting.



4-WAY Cursor Control Key

(LEFT, RIGHT, UP, or DOWN Cursor keys)

The 4-Way Cursor Control key has multiple functions, depending on the view, menu, or situation.

- **Menu Selection** - Press the DOWN or UP Cursor keys to highlight a menu option, then press the RIGHT or LEFT Cursor keys to change a menu setting.

NOTE: Menu settings are implemented and saved immediately - no further action is required.

- **Active Cursor** - Press any arrow on the 4-WAY Cursor Control key, and the active cursor will appear on the screen. In any Chart View, the 4-WAY Cursor Control key also pans the charts and highlights decluttered waypoint icons.

NOTE: In Active Cursor mode, you can make the cursor move diagonally by pressing in between two arrows on the 4-WAY Cursor Control key.

- **Bird's Eye View** - The 4-WAY Cursor Control key controls the motion of the eye point.



MARK Key

Press the MARK key while in any view to mark the position of a waypoint. The MARK key function works if you have a GPS receiver connected or if you have activated Screen Snapshot from the Accessories menu tab. The waypoint location and characteristics are influenced by the active features on the control head as follows:

- **If the cursor is active**, the waypoint will be marked at the cursor location.
- **If the cursor is not active**, the waypoint will be marked at the boat location.
- **If Screen Snapshot is active**, a waypoint will be created, and a screen snapshot will also be saved to the optional-purchase MMC/SD card (see *Views: Screen Snapshot View*). Navigation is not affected by the Screen Snapshot feature.

NOTE: If Screen Snapshot is enabled but there is no GPS receiver connected, pressing the MARK key will capture the screen image and display an error saying that a GPS position fix is required to create a waypoint

NOTE: You must have an optional-purchase MMC/SD card installed for the screen snapshot feature to work.



GOTO Key

The GOTO key has multiple functions, depending on the situation:

- **If the Cursor is active**, press the GOTO key while in any view to create a waypoint and start navigation towards that waypoint. If the **Cursor is not active**, press the GOTO key to display the saved waypoints list, and then highlight a waypoint. Press the RIGHT Cursor key to begin navigation.
- If the GOTO key is pressed and held for more than 1.5 seconds, the **Man Overboard (MOB)** function is activated. Once MOB is activated, any current navigation will be cancelled and the current route will be discarded without user notification (see *Man Overboard (MOB) Navigation*).



ZOOM (+/-) Key

Press the - or + ZOOM keys while in any of the Chart or Bird's Eye Views to change the scale of the view to appear closer or farther away.



VIEW PRESET Keys

The VIEW PRESET keys are used to save your three favorite views for quick retrieval. Instead of using the VIEW key to cycle through all the views to find the one you want, you can program the VIEW PRESET keys to display a specific view immediately.

To program the VIEW PRESET keys:

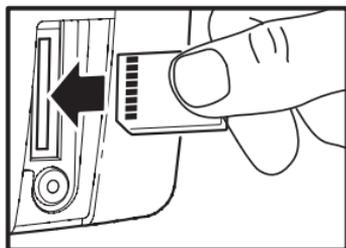
1. Press the VIEW key or EXIT key until you see the view you want to save.
2. Press and hold one of the VIEW PRESET keys for several seconds. A chime will indicate that the view has been saved. You can store up to three views, one on each key.



EXIT Key

The EXIT key has multiple functions, depending on the situation:

- **If an alarm is sounding**, press the EXIT key to cancel the alarm.
- **If a menu tab is selected**, press the EXIT key to exit the menu mode and return to the view.
- **If a menu is active**, press the EXIT key to return to the previous level in the menu system.
- **From any view**, press the EXIT key to cycle through the available views in reverse order.
- **If the Cursor is active**, press the EXIT key to remove the cursor from the display.



Inserting an MMC/SD
into the Card Slot

Multi-Media Card (MMC)/SD Slot

The multi-media card (MMC)/SD slot on your control head can be used with MMC/SD cards (optional-purchase required) to add detailed charts to your Chartplotter, update your Chartplotter software, or export navigation data from your Chartplotter.

***NOTE:** The MMC/SD Cards require a separate purchase. For more information, visit our web site at www.humminbird.com or contact our Customer Resource Center at 1-800-633-1468.*

To insert an MMC/SD card:

1. Remove the MMC/SD slot cover.
2. Position the MMC/SD card so that the label faces the right side of the unit, and insert the card into the slot. Press down on the card until it clicks into place.
3. Close the slot cover and turn the knob just 1/4 of a turn to close. Do NOT overtighten, as this will not improve water resistance and may damage the cover.

To remove an MMC/SD card:

1. Remove the MMC/SD slot cover.
2. Press the MMC/SD card into the slot and then release. The card will eject from the slot.

Adding Maps to Your Chartplotter

Your 700 Series™ Chartplotter includes a built-in UniMap™. You can also purchase MMC/SD cards with additional chart information for a particular location.

When you install the MMC/SD cards in your control head, your 700 Series™ Chartplotter will retrieve that chart and display it automatically (see *Multi-Media Card MMC/SD*).

Updating Software

Software updates can be added to your Chartplotter. Go to the Humminbird® web site for information and computer requirements at www.humminbird.com or call **1-800-633-1468**.

In addition to your Chartplotter and personal computer with Internet access, you will need one of the following optional-purchase accessories:

- MMC Card Reader (AS CR)

OR...

- PC Connect Cable (AS PC2)

***NOTE:** The MMC/SD Card Reader and PC Connect cable require a separate purchase. For more information, visit our web site at www.humminbird.com or contact our Customer Resource Center at **1-800-633-1468**.*

Updating Software requires the following top-level steps:

1. Log on to www.humminbird.com.
 - Register your Chartplotter.
 - Download HumminbirdPC™ to your computer.
2. Once you have registered your Chartplotter, you can access software downloads from your online profile.
- 3a. MMC/SD Card: Follow the instructions provided with the MMC/SD Card Reader to connect the MMC/SD Card Reader to a personal computer and download the software update.
 - Install the MMC/SD card with the updated software file into your control head.
 - Power on your control head. The Chartplotter will recognize the new software and run through a series of prompts to confirm software installation.

OR...

- 3b. PC Connect Cable: Follow the instructions included with the PC Connect Cable to connect your Chartplotter to your computer.

Exporting Navigation Data

You can export all saved Tracks, Waypoints, and Routes from your Chartplotter to an optional-purchase MMC/SD card. The Export All Nav Data menu option is available when User Mode is set to Advanced. See *Main Menu: User Mode* and *Navigation Menu Tab* for more information.

To Export All Navigation Data:

1. Make sure the User Mode is set to Advanced and that an optional-purchase MMC/SD card is installed in the slot.
2. Press the MENU key twice to access the Main Menu, then press the RIGHT Cursor key until the Navigation tab is selected.
3. Press the DOWN Cursor key to highlight Export All Nav Data.
4. Press the RIGHT Cursor key to export all navigation data. The Confirm dialog box will appear. To confirm export, press the RIGHT Cursor key once more. To cancel export, press the LEFT Cursor key.

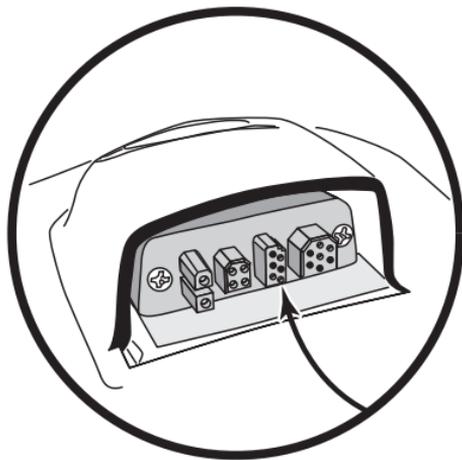
NOTE: If no MMC card is installed, an error message will be displayed. Insert the MMC card and try again.

NOTE: The MMC/SD cards and MMC/SD Card Reader require separate purchases. The MMC/SD Card Reader accessory can be used in conjunction with your personal computer to view and organize your exported navigation data. To purchase this accessory, visit our web site at www.humminbird.com or contact our Customer Resource Center at 1-800-633-1468.

Accessory Bus

Use the **Accessory Bus** to expand the functionality of your Chartplotter. Accessories plug directly into the Chartplotter, enabling Advanced features such as WeatherSense® and the SmartCast® Wireless Sonar Link. Additional tabs and menu options will be added to the menu system automatically when an accessory is plugged into the unit. In addition, multiple accessories can be attached simultaneously. See *Accessories Menu Tab* and *700 Series™ Chartplotter Accessories* in this manual, as well as your accessory's Operations Manual for additional details.

***NOTE:** Accessories to enable WeatherSense® and the SmartCast® Wireless Sonar Link require separate purchases. You can visit our web site at www.humminbird.com or contact our Customer Resource Center at 1-800-633-1468 for additional details.*



Powering On the Unit

Press the POWER/LIGHT key to power on your Chartplotter. The Title screen is shown until the Chartplotter begins operation. After the Title screen is displayed, a 30 second Navigation Warning screen is shown. From these two screens, you can access the following operation options:

- **Start-Up Options Menu** - While the Title screen is displayed, press the MENU key to access the Start-Up Options Menu. Select *Simulator* to learn how to use your Chartplotter before taking your boat on the water. Additional menu options are also available from this menu. See *The Menu System: Start-Up Options Menu* for more information.
- **Normal Mode** - While the Navigation Warning screen is displayed, press the EXIT key. The Chartplotter will enter Normal mode for on-the-water operation.
- **Demonstration Mode** - If you don't press any keys during the Navigation Warning screen, the Chartplotter will enter *Demonstration Mode*. Demonstration Mode can be turned off (see *Setup Menu Tab: Demonstration*).

786ci Title Screen



The Menu System

The Menu System is divided into easy-to-use menu modules. The main components of the menu system are as follows:

- **Start-Up Options Menu:** Press the MENU key while the Title Screen is displayed (during the power on sequence) to view the Start-Up Options Menu. From the Start-Up Options Menu, you can choose the following Chartplotter Modes: Normal, Simulator, System Status, and PC Connect.
- **X-Press™ Menu:** The X-Press™ Menu provides a shortcut to the most frequently-used settings, and the options on the X-Press™ Menu correspond with the current view.
- **Main Menu:** The Main Menu is a standard set of menu settings which are organized under the following tabbed headings: Alarms, Navigation, Chart, Setup, Views, and Accessories.

***NOTE:** The X-Press™ Menu(s) and the Main Menu options can also be expanded or simplified by setting the User Mode to Advanced or Normal (see **Main Menu: User Mode**).*

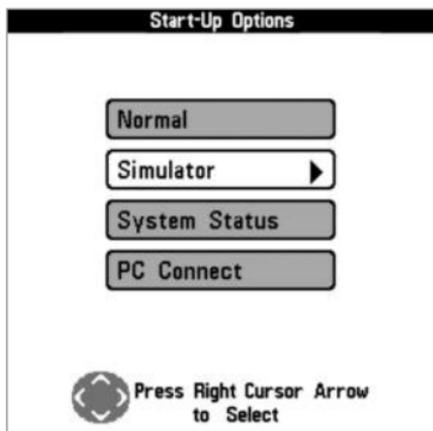
Start-Up Options Menu

To view the Start-Up Options Menu, press the MENU key while the Title Screen is displayed during the power on sequence. See *Powering On the Unit* for more information.

Press the UP or DOWN Cursor keys to highlight a menu option, then press the RIGHT Cursor key to start one of the following operation modes:

- Select **Normal** to use the Chartplotter on the water.
- Select the **Simulator** to learn how to use your Chartplotter before taking your boat on the water.
- Select **System Status** to view system connections and conduct a unit self-test.
- Select **PC Connect** to use the optional-purchase PC Connect Cable.

See the following pages for more information about each of these options.



Normal

Use **Normal** for on-the-water operation. Press the POWER/LIGHT key to power on your Chartplotter. After the Title screen is displayed, a 30 second Navigation Warning screen is shown. While the Navigation Warning screen is displayed, press the EXIT key. The Chartplotter will enter Normal mode for on-the-water operation.

Exit Normal operation by powering your Chartplotter off.

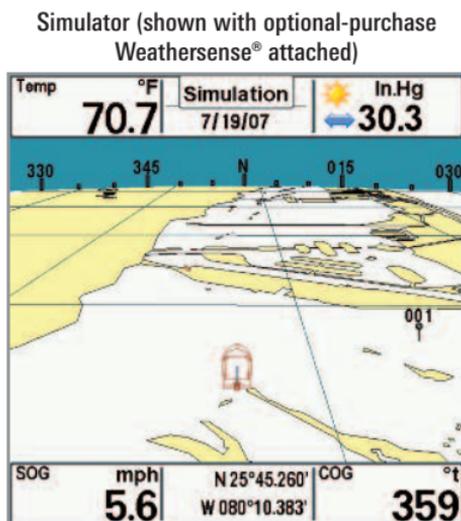
Simulator

Use **Simulator** to learn how to use your Chartplotter before taking your boat on the water. The Simulator is a very powerful tool that provides a randomly-updated display which simulates on the water operation.

Selecting Simulator from the Start-Up Options Menu allows you to pre-configure your Chartplotter for on-the-water operation. Any menu changes you make will be saved for later use. We recommend going through this manual while using the Simulator, since all of the menus function and affect the display in the same way as they would in Normal operation.

A message will appear on the display periodically to remind you that you are using the Simulator.

Exit the Simulator by powering your Chartplotter off.



System Status

Use **System Status** to view system connections and to conduct a unit self-test.

After you select System Status from the Start-Up Options Menu, press the VIEW key to display the following options:

- Self Test
- Accessory Test
- GPS Diagnostic View.

Exit System Status by powering your Chartplotter off.

Self Test displays results from the internal diagnostic self test, including unit serial number, Printed Circuit Board (PCB) serial number, software revision, total hours of operation, and the input voltage.

Self Test Screen

SYSTEM STATUS	
Self Test	
PASSED	
S/N	
-1-12029932485	
SOFTWARE VERSION	
4.161	
VOLTAGE	TOTAL TIME
13.7 ^V	155 ^{hrs}
PCB S/N	
-1-0001-001	
Press VIEW for Next Screen	

Accessory Test lists the accessories connected to the system.

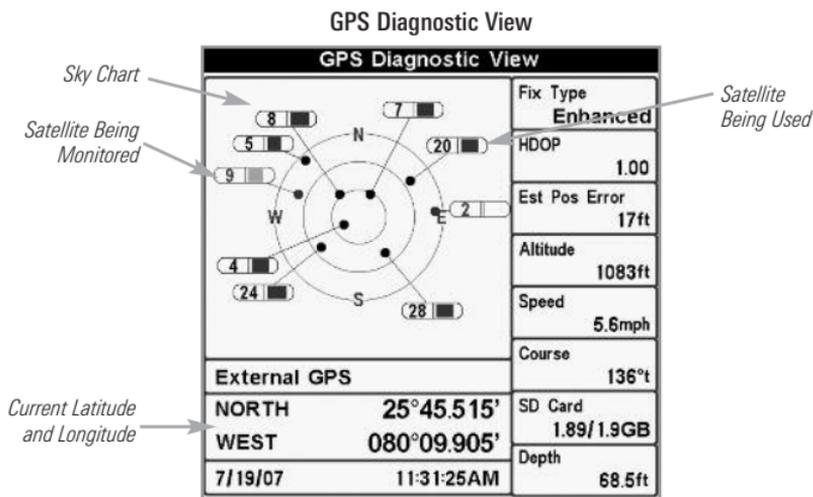
System Status Accessory Test Screen

SYSTEM STATUS	
ACCESSORY TEST	
CannonLink	UNCONNECTED
GPS	CONNECTED
InterLink	UNCONNECTED
SmartCast WSL	UNCONNECTED
Speed	UNCONNECTED
Temperature	UNCONNECTED
WeatherSense	UNCONNECTED

NOTE: The speed accessory will be detected only if the paddlewheel has moved since your Chartplotter was powered up.

GPS Diagnostic View shows a sky chart and numerical data from the GPS receiver. The sky chart shows the location of each visible GPS satellite with its satellite number and a signal strength bar. A dark gray bar indicates that the satellite is being used to determine your current position. A light orange bar indicates that the satellite is being monitored, but is not yet being used.

This view also reports the current position, local time and date, and other numeric information. The current GPS Fix Type is reported as No Fix, 2D Fix, 3D Fix, or Enhanced. An Enhanced fix has been augmented using information from WAAS, EGNOS, or MSAS. A 3D or Enhanced Fix is required for navigation. HDOP (the Horizontal Dilution of Precision) is a GPS system parameter which depends on the current satellite configuration. HDOP is used to calculate the Estimated Position Error.



PC Connect *(with optional-purchase PC Connect cable only)*

Use **PC Connect** to update the software of the Chartplotter control head. This feature requires the use of the PC Connect Cable. Complete instructions are included with the PC Connect Cable accessory. See **Multi-Media Card (MMC)/SD Slot: Updating Software** for additional information.

NOTE: The PC Connect Cable requires a separate purchase. For more information visit our web site at www.humminbird.com or contact our Customer Resource Center at 1-800-633-1468.

Exit PC Connect mode by powering the Chartplotter off.

Waypoint 001
Cursor To Waypoint
Save Current Track
Clear Current Track
Save Current Route
Skip Next Waypoint
Cancel Navigation
Cancel MOB Navigation
Remove Target
Remove Grid
Waypoint 00153
Select Readouts

X-Press™ Menu

X-Press™ Menu

The X-Press™ Menu provides a shortcut to your most frequently-used settings. The options provided on the X-Press™ Menu correspond with the current view.

To use an X-Press™ Menu:

1. In any view, press the MENU key once to open the X-Press™ Menu.
2. Press the UP or DOWN Cursor keys to highlight an X-Press™ Menu option, then use the RIGHT or LEFT Cursor keys to change the menu setting.

NOTE: The X-Press™ Menu will collapse temporarily and the screen will update if it is affected by your menu setting change, which allows you to see the effects of your change immediately.

3. Reactivate the X-Press™ Menu by pressing the UP or DOWN Cursor keys.

Total Screen Update - When you change any menu settings that affect the current view, the view will update immediately (i.e. you don't have to exit the menu to apply the change to the screen).

Menu options can be simplified or expanded by setting the User Mode to Normal or Advanced. See **Main Menu: User Mode** for details.

Alarms	
Low Battery Alarm	Off
Aux. Temp. Alarm	Off
Temp. Alarm	Off
Off Course Alarm	600ft
Arrival Alarm	Off
Drift Alarm	Off
Alarm Tone	Medium

Main Menu
Normal User Mode

Main Menu

The Main Menu provides the standard set of menu options, including the settings that are changed less frequently. The Main Menu is organized under the following tabs to help you find a specific menu item quickly: Alarms, Navigation, Chart, Setup, Views, Accessories.

*NOTE: Menu options can be expanded or simplified by setting the User Mode to Advanced or Normal. See **Main Menu: User Mode** for details.*

To use the Main Menu:

1. In any view, press the MENU key twice to open the Main Menu.
2. Press the RIGHT or LEFT Cursor keys to highlight a menu tab.
3. Press the DOWN or UP Cursor keys to select a specific menu option under that tab.
4. Press the RIGHT or LEFT Cursor keys again to change a menu setting.
 - A down arrow at the bottom of a menu means that you can scroll to additional menu options using the DOWN Cursor key.
 - A right or left arrow on a menu option means that you can use the RIGHT or LEFT Cursor keys to make changes or to see more information.
 - Press the EXIT key to move quickly to the top of the tab.

Total Screen Update - When you change any menu settings that affect the current view, the view will update immediately (i.e. you don't have to exit the menu to apply the change to the screen).

Quick Tips for the Main Menu

- **From any menu option on a menu tab**, press the EXIT key to jump directly to the top of the tab.
- **From the bottom of a menu tab**, press the DOWN key to jump directly to the top of the tab.
- **From the top of a menu tab**, press the LEFT or RIGHT Cursor keys to scroll to the next tab. You can also jump to the beginning or end of the tab rotation by repeatedly pressing the RIGHT or LEFT Cursor keys.
- If there is a **down arrow at the bottom of a menu tab**, press the DOWN Cursor key to scroll to additional menu options.
- If there is a **right or left arrow on a menu option**, press the RIGHT or LEFT Cursor keys to make setting changes or see more information.
- If you press MENU or EXIT to leave the Main Menu and then **return to the Main Menu at a later time**, the menu will open to the same tab as the last time the Main Menu was displayed.

User Mode (Normal or Advanced)

Menu options can be simplified or expanded by setting your Chartplotter User Mode to Normal or Advanced.

Normal Mode is the default setting when you first power on your 700 Series™ Chartplotter. Normal mode is provided for users who want greater simplicity and fewer menu choices.

Advanced Mode is provided for users who want the highest level of control over the Chartplotter. Several menu settings are added to the Main Menu when the User Mode is changed to Advanced.

To change the User Mode setting:

1. Press the MENU key twice to access the Main Menu.
2. Press the DOWN Cursor key to highlight User Mode on the Setup main menu.
3. Press the LEFT or RIGHT Cursor keys to change the User Mode setting. (Normal, Advanced, Default = Normal)

***NOTE:** Any changes made while in Advanced Mode will remain in effect after you switch back to Normal Mode.*

For example, the Local Time Zone menu option is available when the User Mode is set to Advanced. If you change the Local Time Zone settings while operating in Advanced User mode, the settings you choose will continue to display on the screen even if you switch back to Normal User Mode.

Setup	
Units - Depth	Feet
Units - Distance	Statute Miles
Units - Speed	mph
User Mode	Normal
Triplog Reset	
Restore Defaults	

Setup Tab, Normal Mode

Setup	
Units - Depth	Feet
Units - Temp	°f
Units - Distance	Statute Miles
Units - Speed	mph
User Mode	Advanced
Triplog Reset	
Restore Defaults	
Aux. Temp. Offset	0.0°
Temp. Offset	0.0°
Speed Calibration	0%
Local Time Zone	EST (UTC-5)
Daylight Saving Time	Off
Position Format	dd°mm.mmm'
Time Format	12-hour
Date Format	mm/dd/yy
Digits Format	Large tenths
NMEA Output	Off
Demonstration	Off

Setup Tab, Advanced Mode

Waypoint 001
Cursor To Waypoint
Save Current Track
Clear Current Track
Save Current Route
Skip Next Waypoint
Cancel Navigation
Cancel MOB Navigation
Remove Target
Remove Grid
Waypoint 00153
Select Readouts

Navigation X-Press™ Menu

Navigation X-Press™ Menu

(Navigation Views only)

The **Navigation X-Press™ Menu** provides a shortcut to your most frequently-used settings. Press the MENU key once while in any of the Navigation views to access the Navigation X-Press™ Menu.

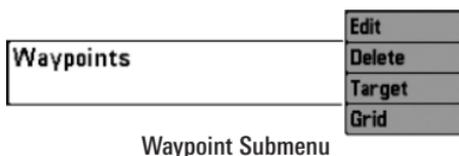
NOTE: Menu options will vary depending on system settings, such as whether you are currently navigating.

*NOTE: Menu options can be expanded or simplified by setting the User Mode to Advanced or Normal. See **Main Menu: User Mode** for details.*

Waypoint [Name] allows you to view the Waypoints submenu for the waypoint under your cursor.

To view the **Waypoint [Name]** Submenu:

1. Use the 4-WAY Cursor Control key to move the cursor onto an existing waypoint and press the MENU key once, or use **Cursor to Waypoint** to select a waypoint from the saved waypoints list.
2. Highlight **Waypoint [Name]** on the Navigation X-Press™ Menu.
3. Press the RIGHT Cursor key to view the Waypoints submenu.



*NOTE: See **Navigation Menu Tab** for more Waypoints information.*

The Waypoint Submenu contains the following menu options:

Edit allows you to edit the Name, Position (Latitude and Longitude), and select the Icon that will be used to represent the waypoint in the Chart views.

Delete allows you to delete a waypoint from the saved waypoints list.

Target allows you to apply a target to a waypoint selected from the saved waypoints list.

Grid allows you to apply a trolling grid to a waypoint selected from the saved waypoints list.



Cursor to Waypoint

(Chart Views only)

Cursor to Waypoint allows you to quickly move the cursor to any saved waypoint so that you can locate it or edit it.

***NOTE:** This X-Press™ Menu option only appears if you have saved waypoints.*

To move the cursor to a saved waypoint:

1. Highlight Cursor to Waypoint on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to initiate Cursor to Waypoint.
3. Press the UP or DOWN Cursor keys to select a waypoint, then press the RIGHT Cursor key to select the destination waypoint.



Save Current Track

Save Current Track allows you to save the current track being displayed. After the current track is saved, a new current track is started.

***NOTE:** Save Current Track appears on the Navigation X-Press™ Menu after navigation is stopped.*

To Save Current Track:

1. Highlight Save Current Track on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to initiate saving the current track.
3. The Confirm dialog box will appear. To save the current track, press the RIGHT Cursor key once more. To cancel saving the current track, press the LEFT Cursor key.

 **Clear Current Track**

Clear Current Track

Clear Current Track allows you to clear the current track being displayed and start a new track at the present position.

To Clear Current Track:

1. Highlight Clear Current Track on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to initiate clearing the current track.
3. The Confirm dialog box will appear. To clear the current track, press the RIGHT Cursor key once more. To cancel clearing the current track, press the LEFT Cursor key.

 **Save Current Route**

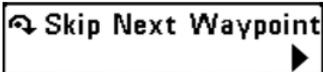
Save Current Route

(only when Navigating)

Save Current Route allows you to save the current route being displayed. This menu option will only appear when you are currently navigating a route.

To Save Current Route:

1. Highlight Save Current Route on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to initiate saving the current route.
3. The Confirm dialog box will appear. To save the current route, press the RIGHT Cursor key once more. To cancel saving the current route, press the LEFT Cursor key.



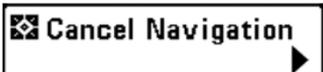
Skip Next Waypoint

(only when Navigating)

Skip Next Waypoint removes the next waypoint from the current route. This menu option will only appear when you are currently navigating a route.

To Skip Next Waypoint:

1. Highlight Skip Next Waypoint on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to initiate skipping the next waypoint.
3. The Confirm dialog box will appear. To skip the next waypoint, press the RIGHT Cursor key once more. To cancel skipping the next waypoint, press the LEFT Cursor key.



Cancel Navigation

(only when Navigating)

Cancel Navigation discards the current route and exits Navigation Mode. This menu option will only appear when you are currently navigating a route. This will not delete a previously-saved route.

To Cancel Navigation:

1. Highlight Cancel Navigation on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to initiate canceling navigation.
3. The Confirm dialog box will appear. To cancel navigation, press the RIGHT Cursor key once more. To avoid canceling navigation, press the LEFT Cursor key.

Cancel MOB Navigation

Cancel MOB Navigation

(only when MOB Navigation is activated)

Cancel MOB Navigation removes the Man Overboard (MOB) waypoint and exits Man Overboard mode. This menu option will only appear when you are currently navigating in Man Overboard mode.

To Cancel MOB Navigation:

1. Highlight Cancel MOB Navigation on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to initiate canceling MOB navigation.
3. The Confirm dialog box will appear. To cancel MOB navigation, press the RIGHT Cursor key once more. To avoid canceling MOB navigation, press the LEFT Cursor key.

***NOTE:** After you have cancelled MOB navigation, the MOB waypoint will remain in the Navigation X-Press™ Menu until it is manually deleted. From the Navigation X-Press™ Menu, select the MOB waypoint, and press the RIGHT Cursor key. Select Delete from the MOB waypoint submenu, and press the RIGHT Cursor key. The Confirmation dialog box will appear, allowing you to confirm or cancel the deletion.*

Remove Target

Remove Target

(only if a Target is Active)

Remove Target removes the waypoint target from the display. This menu option will only appear when a target has already been applied to a waypoint.

***NOTE:** See [Introduction to Navigation: Add a Waypoint Target or Trolling Grid](#) for more information.*

To Remove a Target:

1. Highlight Remove Target on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to remove the target.



Remove Grid

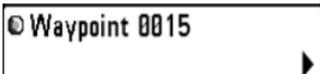
(only if a Grid is Active)

Remove Grid removes the waypoint grid from the display. This menu option will only appear when a grid has already been applied to a waypoint.

*NOTE: See **Introduction to Navigation: Add a Waypoint Target or Trolling Grid** for more information.*

To Remove a Grid:

1. Highlight Remove Grid on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to remove the grid.



Waypoint [Name]

(Most recently-created waypoint)

Waypoint [Name] allows you to view the waypoints submenu for the most recently created waypoint.

NOTE: You must have pressed the MARK key at least once since you last powered up the Chartplotter for this menu option to appear.

To view the Waypoint [Name] Submenu:

1. Use the 4-WAY Cursor Control key to move the cursor to a position on the screen, and press the MARK key once to save a waypoint.
2. Highlight Waypoint[Name] on the Navigation X-Press™ Menu.
3. Press the RIGHT Cursor key to view the Waypoints submenu.



*NOTE: See **Navigation Menu Tab** for more Waypoints information.*

The Waypoint Submenu contains the following menu options:

Edit allows you to edit the Name, Position (Latitude and Longitude) and select the Icon that will be used to represent the waypoint in the Chart views.

Delete allows you to delete a waypoint from the saved waypoints list.

Go To allows you to select a waypoint and start navigation toward that waypoint, or add that waypoint to the end of the current route.

Target allows you to apply a target to a waypoint selected from the saved waypoints list.

Grid allows you to apply a trolling grid to a waypoint selected from the saved waypoints list.

Select Readouts

Select Readouts sets individual digital readouts on the Instrument View, all the Chart Views, and the Bird's Eye Views. The digital readouts are displayed in fixed-position data windows which are arranged around the edges of the screen. Data windows can also display digital readouts from supported accessories such as Temp/Speed, or the data window can be hidden altogether.

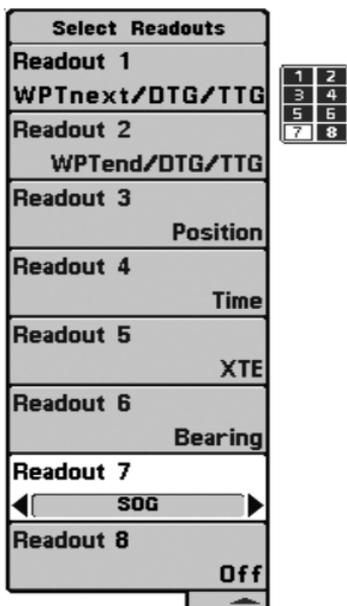
***NOTE:** The availability of the digital readout information corresponds with the view selected, the accessory attached, and whether or not you are navigating. See the tables on the following pages to find your view and the data windows that are available for each readout position in that view.*

It is important to note the following:

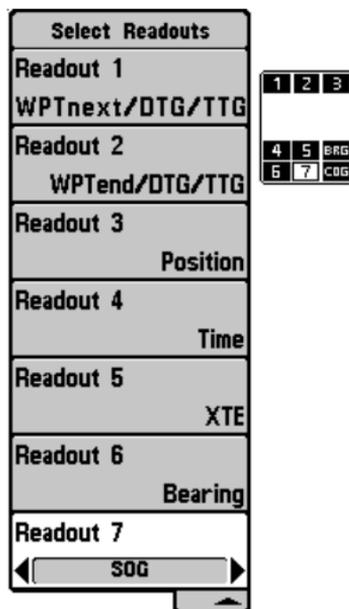
- **Standard Bird's Eye View and Chart View** share the same set of nine readouts, seven of which are adjustable. When you change the readouts displayed on the Bird's Eye View, the readouts are also changed on the Chart View.
- **Bird's Eye Big Digits View, Chart Big Digits View, and Instrument View** share the same set of eight readouts. When you change the readouts displayed on one of these views, the readouts are also changed on the other two views. See *Bird's Eye View, Chart View, and Instrument View* for more information.

To change Select Readouts:

1. Highlight Select Readouts on the Navigation X-Press™ Menu.
2. Press the RIGHT Cursor key to access the Select Readouts submenu.
3. Press the UP or DOWN Cursor keys to select a Readout position, then press the RIGHT or LEFT Cursor keys to choose what will be displayed in that position. To hide the data window, select Off.



Select Readouts: 8 Data Windows
Used by Bird's Eye Big Digits,
Chart Big Digits,
and Instrument View



Select Readouts: 9 Data Windows,
7 Adjustable, Used by Standard
Bird's Eye and Chart View

Default Chart View



Customized Chart View



Each data window can be set as shown below. The selections for each readout will vary, depending on the view and readout position.

9 Data Windows, 7 Adjustable, Used by Standard Bird's Eye and Chart Views Readouts 1, 2, 3, 6 and 7

COG	<u>Course Over Ground:</u> Course Over Ground is the current direction the boat is traveling measured in degrees from North (i.e. 321°, where 000° is North, 090° East, 180° is South, 270° is West). When the Course Over Ground is equal to Bearing, the boat is said to be "On Course" and will arrive at the destination in the most efficient manner. See the Glossary for more information.
Off	The data window is turned off and hidden.
Position	Position is the current location (latitude, longitude) determined by GPS.
SOG	<u>Speed Over Ground:</u> Speed Over Ground is the measurement of the boat's progress across a given distance and is the speed measurement provided by GPS. Accurate destination times can be derived from this measurement. See the <i>Glossary</i> for more information.
Time	The current time.
Time + Date	The current time and date.
Triplog	Displays the triplog, which measures the elapsed time since last reset, the distance traveled since last reset, and average speed during timed interval.
Voltage	Power supplied to the control head.

9 Data Windows, 7 Adjustable, Used by Standard Bird's Eye and Chart Views Readouts 4 and 5

Bearing	Bearing is the direction to a destination waypoint measured in degrees from North (i.e. 321°, where 000° is North, 090° East, 180° is South, 270° is West).
CMG/SMG	<u>Course Made Good/Speed Made Good:</u> Course Made Good is the angle between the starting point on a route and the current position of the boat. The goal is to have CMG and Track equal to the same number. See the <i>Course Made Good</i> illustration. Speed Made Good is the distance from the starting waypoint on the route divided by the time elapsed since starting navigation on the route.
Off	The data window is turned off and hidden.
TRK/CMG	<u>Track/Course Made Good:</u> The Track is the planned line of travel between two waypoints and represents the most efficient path between the two points because it is a straight line. The TRK is measured in degrees. See above for an explanation of Course Made Good.
TTG	<u>Time To Go:</u> Time To Go is the estimated time required to reach the destination waypoint. TTG is calculated using the SOG and DTG.
VMG	<u>Velocity Made Good:</u> Velocity Made Good is the speed of travel relative to the next waypoint on the route. The goal is for VMG to equal Speed.
WPTend/ETA/DTG	<u>Waypoint End/Estimated Time of Arrival/Distance to Go:</u> Waypoint End is the last waypoint on the route. Estimated Time of Arrival is the estimated time of arrival to the last waypoint on the route. Distance To Go is the distance between the current position of the boat and the last waypoint on the route.

9 Data Windows, 7 Adjustable, Used by Standard Bird's Eye and Chart Views Readouts 4 and 5 (con't.)

WPTend/TTG/DTG	<u>Waypoint End/Time To Go/Distance to Go:</u> Waypoint End is the last waypoint on the route. Time To Go is the estimated time required to reach the last waypoint on the route. TTG is calculated using the SOG and DTG. Distance To Go is the distance between the current position of the boat and the last waypoint on the route.
WPTnext/ETA/DTG	<u>Waypoint Next/Estimated Time of Arrival/Distance to Go:</u> Waypoint Next is the next waypoint on the route. Estimated Time of Arrival is the estimated time of arrival to the next waypoint on the route. Distance To Go is the distance between the current position of the boat and the next waypoint on the route.
WPTnext/TTG/DTG	<u>Waypoint Next/Time To Go/Distance to Go:</u> Waypoint Next is the next waypoint on the route. Time To Go is the estimated time required to reach the next waypoint on the route. TTG is calculated using the SOG and DTG. Distance To Go is the distance between the current position of the boat and the next waypoint on the route.
Waypoint/TTG	<u>Waypoint/Time To Go:</u> Waypoint/Time To Go is the estimated time to reach the next waypoint on the route.
XTE	<u>Cross Track Error:</u> Cross Track Error is the straight-line distance of the boat from the intended Track. XTE measures how far the boat is off course and also triggers the Off Course Alarm.

**8 Adjustable Data Windows, Used by Bird's Eye Big Digits,
Chart Big Digits, and Instrument View
Readouts 1, 2, 3, 4, 5, 6, 7 and 8**

Bearing	Bearing is the direction to a destination waypoint measured in degrees from North (i.e. 321°, where 000° is North, 090° East, 180° is South, 270° is West).
CMG/SMG	<u>Course Made Good/Speed Made Good:</u> Course Made Good is the angle between the starting point on a route and the current position of the boat. The goal is to have CMG and Track equal to the same number. See the <i>Course Made Good</i> illustration. Speed Made Good is the distance from the starting waypoint on the route divided by the time elapsed since starting navigation on the route.
COG	<u>Course Over Ground:</u> Course Over Ground is the current direction the boat is traveling measured in degrees from North (i.e. 321°, where 000° is North, 090° East, 180° is South, 270° is West). When the Course Over Ground is equal to Bearing, the boat is said to be "On Course" and will arrive at the destination in the most efficient manner. See the <i>Glossary</i> for more information.
Off	The data window is turned off and hidden.
Position	Position is the current location (latitude, longitude) determined by GPS.
SOG	<u>Speed Over Ground:</u> Speed Over Ground is the measurement of the boat's progress across a given distance and is the speed measurement provided by GPS. Accurate destination times can be derived from this measurement. See the <i>Glossary</i> for more information.

8 Adjustable Data Windows, Used by Bird's Eye Big Digits, Chart Big Digits, and Instrument View Readouts 1, 2, 3, 4, 5, 6, 7 and 8 (con't.)

TRK/CMG	<u>Track/Course Made Good:</u> The Track Line is the planned line of travel between two waypoints and represents the most efficient path between the two points because it is a straight line. The TRK is measured in degrees. See above for an explanation of Course Made Good.
TTG	<u>Time To Go:</u> Time To Go is the estimated time required to reach the destination waypoint. TTG is calculated using the SOG and DTG.
Time	The current time.
Time + Date	The current time and date.
Triplog	Displays the triplog, which measures the elapsed time since last reset, the distance traveled since last reset, and average speed during timed interval.
VMG	<u>Velocity Made Good:</u> Velocity Made Good is the speed of travel relative to the next waypoint on the route. The goal is for VMG to equal Speed.
Voltage	Power supplied to the control head.
WPTend/ETA/DTG	<u>Waypoint End/Estimated Time of Arrival/Distance to Go:</u> Waypoint End is the last waypoint on the route. Estimated Time of Arrival is the estimated time of arrival to the last waypoint on the route. Distance To Go is the distance between the current position of the boat and the last waypoint on the route.
WPTend/TTG/DTG	<u>Waypoint End/Time To Go/Distance to Go:</u> Waypoint End is the last waypoint on the route. Time To Go is the estimated time required to reach the last waypoint on the route. TTG is calculated using the SOG and DTG. Distance To Go is the distance between the current position of the boat and the last waypoint on the route.

**8 Adjustable Data Windows, Used by Bird's Eye Big Digits,
Chart Big Digits, and Instrument View
Readouts 1, 2, 3, 4, 5, 6, 7 and 8 (con't.)**

WPTnext/ETA/DTG	<u>Waypoint Next/Estimated Time of Arrival/Distance to Go:</u> Waypoint Next is the next waypoint on the route. Estimated Time of Arrival is the estimated time of arrival to the next waypoint on the route. Distance To Go is the distance between the current position of the boat and the next waypoint on the route.
WPTnext/TTG/DTG	<u>Waypoint Next/Time To Go/Distance to Go:</u> Waypoint Next is the next waypoint on the route. Time To Go is the estimated time required to reach the next waypoint on the route. TTG is calculated using the SOG and DTG. Distance To Go is the distance between the current position of the boat and the next waypoint on the route.
Waypoint/TTG	<u>Waypoint/Time To Go:</u> Waypoint/Time To Go is the estimated time to reach the next waypoint on the route.
XTE	<u>Cross Track Error:</u> Cross Track Error is the straight-line distance of the boat from the intended Track. XTE measures how far the boat is off course and also triggers the Off Course Alarm.



Screen Snapshot X-Press™ Menu

Screen Snapshot X-Press™ Menu

(Screen Snapshot View only)

The **Screen Snapshot X-Press™ Menu** provides access to the image management functions. Press the MENU key once while in the Screen Snapshot View to access the Screen Snapshot X-Press™ Menu.

NOTE: For more information, see *Views: Screen Snapshot View*.



Delete Image

(optional-purchase MMC/SD Card, Screen Snapshot View only)

Delete Image allows you to delete a single screen capture image from the Screen Snapshot View. This menu option is only available when you have an optional-purchase MMC/SD card installed, you are in Screen Snapshot View, and you have selected an image thumbnail.

To delete an image:

1. From the Screen Snapshot View, press the UP or DOWN Cursor keys to select the image you want to delete.
2. Highlight Delete Image on the Screen Snapshot X-Press™ Menu.
3. Press the RIGHT Cursor key to initiate deleting the image.
4. The Confirm dialog box will appear. To delete the image, press the RIGHT Cursor key once more. To cancel deleting the image, press the LEFT Cursor key.



Delete All Images

(optional-purchase MMC/SD Card, Screen Snapshot View only)

Delete All Images allows you to delete all the images at once from the Screen Snapshot View. This menu option is only available when you have an optional-purchase MMC/SD card installed and you are in Screen Snapshot View.

To delete all images:

1. From the Screen Snapshot View, highlight Delete All Images on the Screen Snapshot X-Press™ Menu.
2. Press the RIGHT Cursor key to initiate deleting all images.
3. The Confirm dialog box will appear. To delete all images, press the RIGHT Cursor key once more. To cancel deleting all images, press the LEFT Cursor key.

Alarms	
Low Battery Alarm	Off
Aux. Temp. Alarm	Off
Temp. Alarm	Off
Off Course Alarm	600ft
Arrival Alarm	Off
Drift Alarm	Off
Alarm Tone	Medium

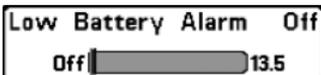
Alarms Menu

Alarms Menu Tab

From any view, press the MENU key twice to access the Main Menu. The Alarms tab will be the default selection.

NOTE: When an alarm is triggered, you can silence it by pressing any key. The alarm will be silenced, and will not be triggered again until a new instance of the alarm condition is detected.

NOTE: Menu options can be expanded or simplified by setting the User Mode to Advanced or Normal. See **Main Menu: User Mode** for details.



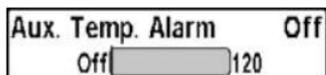
Low Battery Alarm

Low Battery Alarm sounds when the input battery voltage is equal to or less than the menu setting. The battery alarm will only sound for the battery that is connected to the Chartplotter. The Low Battery Alarm should be set to warn you when the battery voltage drops below the safety margin that you have determined.

For instance, if you are running a trolling motor (battery operated), you would want to set the Low Battery Alarm to sound before the battery voltage drops too low for it to be used to start your main, gasoline-powered engine.

To change the Low Battery Alarm setting:

1. Highlight Low Battery Alarm on the Alarms main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Low Battery Alarm setting. (Off, 8.5V - 13.5V, Default = Off)



Aux. Temp. Alarm

(with optional-purchase temp. probe or Temp/Speed only)

Aux. Temp. Alarm sounds when the water temperature from the Paddlewheel/Temperature Probe detected by the Chartplotter reaches the Aux. Temp. Alarm setting, which is either set in degrees Fahrenheit or Celsius [*International Models only*].

For example, if the Aux. Temp. Alarm is set to 58 degrees Fahrenheit, and the water temperature falls from 60 degrees to 58 degrees, the Aux. Temp. Alarm will sound. Similarly, if the water temperature rises from 56 degrees to 58 degrees, the Aux. Temp. Alarm will also sound.

To change the Aux. Temp. Alarm setting:

1. Highlight Aux. Temp. Alarm on the Alarms main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Aux. Temp. Alarm setting. (Off, 33-120 [Fahrenheit], 0-50 [Celsius], Default = Off)



Temp. Alarm

Temp. Alarm sounds when the water temperature detected by the Chartplotter reaches the Temp. Alarm setting, which is either set in degrees Fahrenheit or Celsius [*International Models only*].

For example, if the Temp. Alarm is set to 58 degrees Fahrenheit, and the water temperature falls from 60 degrees to 58 degrees, the Temp. Alarm will sound. Similarly, if the water temperature rises from 56 degrees to 58 degrees, the Temp. Alarm will also sound.

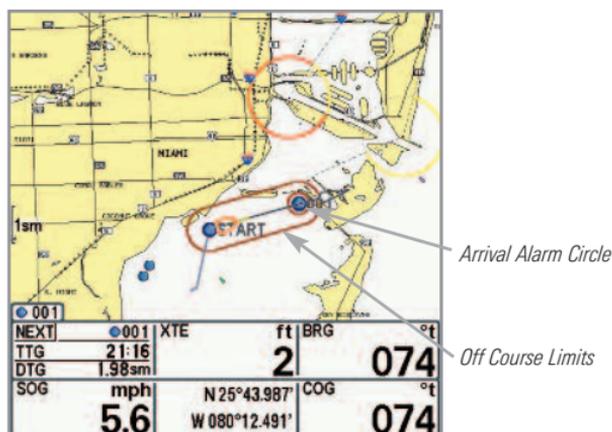
To change the Temp. Alarm setting:

1. Highlight Temp. Alarm on the Alarms main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Temp. Alarm setting. (Off, 33-120 [Fahrenheit], 0-50 [Celsius], Default = Off)

Off Course Alarm 300ft
 Off 3000

Off Course Alarm

Off Course Alarm allows you to set how far the boat is allowed to move off course before the Off Course Alarm will sound during navigation.



To change the Off Course Alarm setting:

1. Highlight Off Course Alarm on the Alarms main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Off Course Alarm setting. (Off, 25 to 3000 feet, 10 to 1000 meters [*International Models only*], Default = 300 ft, 100 m)

Arrival Alarm	150ft
Off	3000

Arrival Alarm

Arrival Alarm sounds when the boat has either exceeded the distance to the destination waypoint, or has entered the Arrival Alarm Circle, based on the menu setting when navigating. Arrival Alarm allows you to set how close the boat must be to the destination waypoint before the Arrival Alarm will sound.

To change the Arrival Alarm setting:

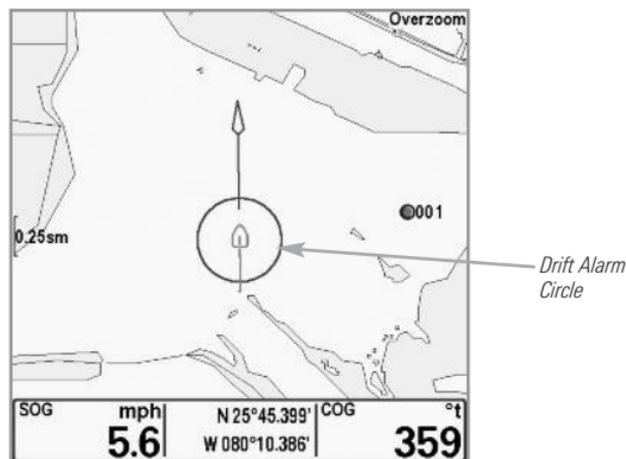
1. Highlight Arrival Alarm on the Alarms main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Arrival Alarm setting. (Off, 25 to 3000 feet, 10 to 1000 meters [*International Models only*], Default = 150 ft, 50 m)

Drift Alarm	Off
Off	3000

Drift Alarm

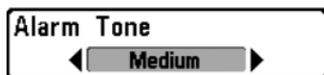
Drift Alarm allows you to set the size of a perimeter around the boat's anchored position. If the anchored boat drifts outside of that perimeter, the Drift Alarm will sound.

Drift Alarm Perimeter



To change the Drift Alarm setting:

1. Highlight Drift Alarm on the Alarms main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Drift Alarm setting. (Off, 25 to 3000 feet, 10 to 1000 meters [*International Models only*], Default = Off)



Alarm Tone

Alarm Tone selects the pitch of the alarm sound.

A brief tone will be produced as you adjust the Alarm Tone so that you can select the tone that you can hear best.

To change the Alarm Tone setting:

1. Highlight Alarm Tone on the Alarms main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Alarm Tone setting. (High, Medium, Low, Default = Medium)



Navigation Menu Tab

Current Track
Saved Tracks
Waypoints
Routes
Chart Orientation North-Up
North Reference True
Waypoint Decluttering On
Grid Rotation 0°
Trackpoint Interval 1 second
Track Min Distance 16ft
Track Color Range 50ft
Map Datum WGS 84 (Default)
Course Projection Line Visible
Export All Nav Data
Delete All Nav Data
Continuous Navigation Mode Off
GPS Receiver Override Auto

Press the MENU key twice to access the Main Menu, then press the RIGHT Cursor key to select the Navigation tab.

NOTE: Menu options will vary depending on system settings, such as whether you are currently navigating.

NOTE: Menu options can be expanded or simplified by setting the User Mode to Advanced or Normal. See Main Menu: User Mode for details.

Navigation Menu Tab

Current Track allows you to view the Current Track submenu.

To view the Current Track Submenu:

1. Highlight Current Track on the Navigation main menu.
2. Press the RIGHT Cursor key to view the Current Track submenu.



Current Track Submenu

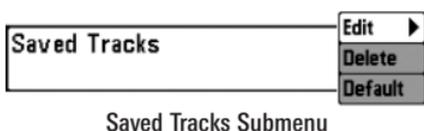
The Current Track Submenu contains the following menu options:

Save allows you to save the current track.

Clear allows you to clear the current track.

Appearance allows you to change the style and color of the current track. (Breadcrumb Trail, Dashed Line, Solid Line or Wide Line, and if a line, the color of the line, or Color By Depth).

If you choose Color By Depth, you cannot choose one color to represent the track; a color range will represent the different depths on the track instead, from light green (shallowest) to black (deepest). You can change the depth range associated with black by using Track Color Range menu setting (see *Navigation Main Menu: Track Color Range*).



Saved Tracks Submenu

Saved Tracks

Saved Tracks allows you view the Saved Tracks submenu.

To view the Saved Tracks Submenu:

1. Highlight Saved Tracks on the Navigation main menu.
2. Press the RIGHT Cursor key to view the Saved Tracks submenu.

The Saved Tracks Submenu contains the following menu options:

Edit allows you to select a saved track and change its Name, Visibility, Style and Color. Select Edit and press the RIGHT Cursor key to display the saved tracks list. Select a track to edit and press the RIGHT Cursor key. When the Edit Track dialog box appears, use the 4-WAY Cursor Control key to move between fields and make changes to the following categories:

Name: Use the 4-WAY Cursor Control key to change the name of the saved track. Press the LEFT or RIGHT Cursor keys to move between name fields, and press the UP and DOWN Cursor keys to change the letter or number of each field. All upper and lower case letters are available, as well as digits 0-9 and some punctuation characters.

Visibility: Press the UP or DOWN Cursor keys to select Hidden or Visible.

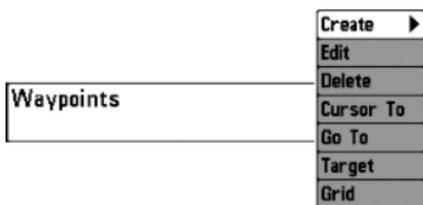
Style: Press the UP and DOWN Cursor keys to choose the track style (appearance).

Color: If the track style you've chosen is a line style, the color field will appear. Press the Up and DOWN Cursor keys to choose a color or shade.

NOTE: You can exit these fields with the LEFT and RIGHT Cursor keys or by pressing the EXIT key. Select Save to confirm your changes.

Delete allows you to delete a track from the saved tracks list. Select Delete and press the RIGHT Cursor key to display the saved tracks list. Select the track you want to delete and press the RIGHT Cursor key. To delete the track, press the RIGHT Cursor key once more. To cancel deleting the track, press the LEFT Cursor key.

Default sets the default appearance of your tracks. Select Default and press the RIGHT Cursor key to display the Default Track dialog box. Use the 4-WAY Cursor Control key to move between fields and change the settings for Visibility, Style and Color.



Waypoints Submenu

Waypoints

Waypoints allows you to view the Waypoints submenu.

To view the Waypoints Submenu:

1. Highlight Waypoints on the Navigation main menu.
2. Press the RIGHT Cursor key to view the Waypoints submenu.

The Waypoints Submenu contains the following menu options:

Create allows you to create a new waypoint and edit it immediately. The current boat position will be used as the default, but you can set the coordinates to any valid position. The icon used to represent the waypoint in the Chart views can also be changed. Press the RIGHT Cursor key to create a waypoint and make changes to the following settings:

Name: Press the LEFT or RIGHT Cursor keys to move between name fields, and press the UP and DOWN Cursor keys to change the letter or number of each field. All upper and lower case letters are available, as well as digits 0-9 and some punctuation characters.

Latitude & Longitude: Press the LEFT or RIGHT Cursor keys to move between latitude or longitude fields, and press the UP and DOWN Cursor keys to change the coordinates of each field.

Icon: Select the Icon field and use the Up and Down Cursor keys to scroll through a variety of icons to assign to your waypoint.

***NOTE:** You can exit these fields by pressing the LEFT and RIGHT Cursor keys or by pressing the EXIT key. Select Save to confirm your changes.*

Edit allows you to choose from the saved waypoints list, and then edit the Name and Position (Latitude and Longitude), as well as assign an Icon to represent the waypoint in the Chart views. Select Edit, and press the RIGHT Cursor key to display the saved waypoints list. Use the UP and DOWN Cursor keys to choose a waypoint from the list, and press the RIGHT Cursor key to display the Edit Waypoint Dialog box. Refer to the details above to change waypoint settings.

Delete allows you to delete a waypoint from the saved waypoints list. Select Delete, and press the RIGHT Cursor key to display the saved waypoints list. Use the UP and DOWN Cursor keys to choose a waypoint, and press the RIGHT Cursor key. The Confirm dialog box will appear. To delete the waypoint, press the RIGHT Cursor key once more. To cancel deleting the waypoint, press the LEFT Cursor key.

Cursor To allows you to move the cursor quickly to a waypoint from the saved waypoints list. Select Cursor To, and press the Right Cursor key to view the saved waypoints list. Use the UP and DOWN Cursor keys to choose a waypoint from the list, and press the Right Cursor key again to initiate the cursor to that waypoint.

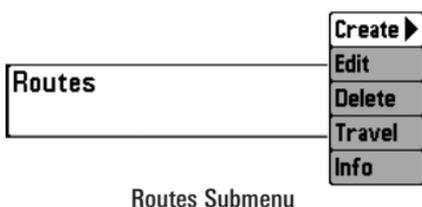
Go To allows you to select a waypoint and start navigation toward that waypoint or add that waypoint to the end of the current route. Select Go To, and press the Right Cursor key to view the saved waypoints list, and use the UP and DOWN Cursor keys to choose a waypoint from the list. Press the Right Cursor key again to initiate navigation.

Target allows you to apply a target to a waypoint selected from the saved waypoints list. Select Target, and press the Right Cursor key to view the saved waypoints list. Use the UP and DOWN Cursor keys to choose a waypoint from the list. Press the Right Cursor key to apply a target to the waypoint you choose.

Grid allows you to apply a trolling grid to a waypoint selected from the saved waypoints list. Select Grid, and press the Right Cursor key to view the saved waypoints list. Use the UP and DOWN Cursor keys to choose a waypoint from the list. Press the Right Cursor key to apply a trolling grid to the waypoint you choose.

***NOTE:** Only one waypoint can have either a target or a grid applied to it at one time. If you apply a target or a grid to a new waypoint, the original waypoint will lose its target or grid.*

***NOTE:** The spacing of the rings on the waypoint target and the spacing of the gridlines on the trolling grid is the same as the length of the scale bar on the left edge of the display. Zooming in or out will decrease or increase the spacing, respectively.*



Routes

Routes allows you to view the Routes submenu.

To view the Routes Submenu:

1. Highlight Routes on the Navigation main menu.
2. Press the RIGHT Cursor key to view the Routes submenu.

The Routes Submenu contains the following menu options:

Create allows you to create a new route from an empty route and add saved waypoints to it immediately. Press the RIGHT Cursor key to access the Create Route dialog box and make adjustments to the following settings:

Name: Press the LEFT or RIGHT Cursor keys to move between name fields, and press the UP and DOWN Cursor keys to change the letter or number of each field. All upper and lower case letters are available, as well as digits 0-9 and some punctuation characters.

Waypoints: Press the UP and DOWN Cursor keys to highlight saved waypoints, and press the RIGHT Cursor key to add them to the In Route list.

In Route: Highlight a waypoint in the In Route list, and press the RIGHT Cursor key to access the Waypoint In Route submenu. From this submenu, you can move the waypoint up or down in the route order or delete it from the list.

***NOTE:** You can exit these fields by pressing the LEFT Cursor key or by pressing the EXIT key. Select Save to confirm your changes.*

Edit allows you to select a saved route and change its name and the waypoints in it. Select Edit, and press the RIGHT Cursor key to display the saved routes list. Use the UP and DOWN Cursor keys to choose a route from the list, and press the RIGHT Cursor key to display the Edit Route dialog box. Refer to the details above to change route settings.

Delete allows you to delete a route from the saved routes list. Select Delete, and press the RIGHT Cursor key to display the saved routes list. Use the UP and DOWN Cursor keys to choose a route, and press the RIGHT Cursor key. The Confirm dialog box will appear. To delete the route, press the RIGHT Cursor key once more. To cancel deleting the route, press the LEFT Cursor key.

Travel allows you to choose a route from the saved routes list and use it as your current route. Routes can be traveled in either the forward or reverse direction. Select Travel, and press the RIGHT Cursor key to display the saved routes list. Press the RIGHT or LEFT Cursor keys to set the Direction you want to travel. Then, use the UP and DOWN Cursor keys to choose a route, and press the RIGHT Cursor key to select it. Navigation will begin immediately.

Info provides information about the route you choose from the saved routes list, including the distance and bearing from each waypoint to the next. Select Info, and press the RIGHT Cursor key to display the saved routes list. Use the UP and DOWN Cursor keys to choose a route, and press the RIGHT Cursor key to view information about that route.

Chart Orientation

◀ North-Up ▶

Chart Orientation

Chart Orientation allows you to select whether the Chart views should be drawn North-Up or Course-Up.

To change the Chart Orientation setting:

1. Highlight Chart Orientation on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Chart Orientation setting. (North-Up, Course-Up, Default = North-Up)

NOTE: The Chart Orientation setting does not apply to the Bird's Eye View.

North Reference

◀ True ▶

North Reference

North Reference allows you to have bearings displayed with one of two orientations: True North or Magnetic North.

To change the North Reference setting:

1. Highlight North Reference on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to change the North Reference setting. (True, Magnetic, Default = True)

Waypoint Decluttering

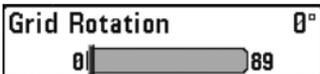
◀ On ▶

Waypoint Decluttering

Waypoint Decluttering allows you to set the declutter feature On or Off. When two or more waypoints overlap, or are displayed close together on a chart view, the screen will automatically declutter—waypoint names will shorten and the waypoint icons will change into small blue icons.

To change the Waypoint Decluttering setting:

1. Highlight Waypoint Decluttering on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Waypoint Decluttering setting. (On, Off, Default = On)



Grid Rotation

Grid Rotation allows you to set the orientation of the trolling grid in degrees, where a setting of 0° displays a standard North, South, East, West alignment. See *Waypoints* for information on how to set a Grid.

NOTE: This feature may appear as either Trolling Grid Rotation or Grid Rotation, depending on your model.

To change the Grid Rotation setting:

1. Highlight Grid Rotation on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Grid Rotation setting. (0° to 89°, Default = 0°)



Trackpoint Interval

Trackpoint Interval allows you to select the time period between trackpoints. The current track can only contain up to 20,000 trackpoints, so longer time periods cause the track to extend back further in time, but will be less detailed.

NOTE: Trackpoint Interval works in conjunction with Track Min Distance. Both conditions must be met before a trackpoint is added to the current track.

To change the Trackpoint Interval setting:

1. Highlight Trackpoint Interval on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Trackpoint Interval setting. (1 second, 5 seconds, 10 seconds, 15 seconds, 30 seconds or 60 seconds, Default = 1 second)

NOTE: During slow travel or drift, setting both Trackpoint Interval and Track Min Distance to small values will allow you to increase the track resolution.



Track Min Distance

(Advanced)

Track Min Distance allows you to set a minimum distance of travel before a trackpoint is added to the track. The Track Min Distance menu option is available when User Mode is set to Advanced (see *Main Menu: User Mode*).

NOTE: Track Min Distance works in conjunction with Trackpoint Interval. Both conditions must be met before a trackpoint is added to the current track.

To change the Track Minimum Distance setting:

1. Make sure the User Mode is set to Advanced, then highlight Track Min Distance on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Track Min Distance setting. (1 to 300 feet or 1 to 100 meters [*International Units only*], Default = 16 ft, 5 m)

NOTE: During slow travel or drift, setting both Trackpoint Interval and Track Min Distance to small values will allow you to increase the track resolution.



Track Color Range

Track Color Range allows you to set the depth range that will be displayed as black, the deepest depth, when Color By Depth is selected as the style for the current track (see *Navigation Menu Tab: Current Track*).

To change the Track Color Range:

1. Highlight Track Color Range on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Track Color Range setting. (50 to 3000 feet or 20 to 1000 meters [*International Units only*], Default = 50 ft, 20 m)

Map Datum

◀ WGS 84 (Default) ▶

Map Datum

(Advanced)

Map Datum allows you to change the map coordinate system used by the Chartplotter to match those of a paper map. The Map Datum menu option is available when User Mode is set to Advanced (see *Main Menu: User Mode*).

To change the Map Datum setting:

1. Make sure the User Mode is set to Advanced, then highlight Map Datum on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Map Datum setting. (Default = WGS 84)

Course Projection Line

◀ Visible ▶

Course Projection Line

Course Projection Line allows you to display or hide an arrow extending from the bow of the boat that projects your current course, and shows where the boat will go if you continue on your present course.

To change the Course Project Line setting:

1. Highlight Course Projection Line on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Course Projection Line setting. (Hidden, Visible, Default = Visible)



Export All Nav Data allows you to export all saved Tracks, Waypoints, and Routes to an MMC/SD card. The Export All Nav Data menu option is available when User Mode is set to Advanced (see *Main Menu: User Mode*).

To Export All Navigation Data:

1. Make sure the User Mode is set to Advanced, and that an optional-purchase MMC/SD card is installed in the slot, then highlight Export All Nav Data on the Navigation main menu.
2. Press the RIGHT Cursor key to export all navigation data. The Confirm dialog box will appear. To confirm export, press the RIGHT Cursor key once more. To cancel export, press the LEFT Cursor key.

NOTE: If no MMC card is installed, an error message will be displayed. Insert the MMC card and try again.



Delete All Nav Data allows you to delete all saved Tracks, Waypoints, and Routes. The Delete All Nav Data menu option is available when User Mode is set to Advanced (see *Main Menu: User Mode*).

This menu option should be used with caution!

To Delete All Navigation Data:

1. Make sure the User Mode is set to Advanced, then highlight Delete All Nav Data on the Navigation main menu.
2. Press the RIGHT Cursor key to delete all navigation data. The Confirm dialog box will appear. To delete all navigation data, press the RIGHT Cursor key once more. To cancel deleting all navigation data, press the LEFT Cursor key.

Continuous Navigation Mode

◀ Off ▶

Continuous Navigation Mode

Continuous Navigation Mode allows you to continue to navigate and fish around a particular waypoint, even if you pass over it multiple times.

To activate or de-activate Continuous Navigation:

1. Highlight Continuous Navigation Mode on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to turn Continuous Navigation Mode On or Off. (Off, On, Default = Off)

GPS Receiver Override

◀ Auto ▶

GPS Receiver Override*(Advanced)*

GPS Receiver Override allows you to set which GPS receiver to use if you have multiple GPS receivers plugged into your system. These multiple GPS receivers may either be internal, external, or connected via the InterLink™. If you select Auto, your unit will select a GPS receiver automatically.

NOTE: If only one GPS receiver is plugged into your Chartplotter, then Auto will be the only option shown.

To activate or de-activate GPS Receiver Override

1. Make sure the User Mode is set to Advanced, then highlight GPS Receiver Override on the Navigation main menu.
2. Press the LEFT or RIGHT Cursor keys to select which GPS receiver to use. (Default = Auto)



Chart Detail Level	All
Map Borders	MMC/SD Only
Lat/Lon Grid	Hidden
Spot Soundings	Visible
Nav aids on Bird's Eye View	Visible
Shaded Depth	15ft
Set Simulation Position	
Set Map Offset	
Clear Map Offset	

Chart Menu

Chart Menu Tab

Press the MENU key twice to access the Main Menu and then press the RIGHT Cursor key to select the Chart tab.

NOTE: Menu options can be expanded or simplified by setting the User Mode to Advanced or Normal. See Main Menu: User Mode for details.

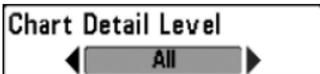


Chart Detail Level

Chart Detail Level allows you to select how much chart detail you want displayed on the Navigation Views.

- **Basic** shows land areas, ports, obstructions and restricted areas.
- **Navigation** shows nav aids, landmarks, ferryways and navigation routes in addition to the Basic information.
- **Underwater** shows depth contours, fishing areas, underwater wrecks, tides and currents in addition to the Basic and Navigation information.
- **All** shows roads, buildings, railways, and other notations in addition to the Basic, Navigation, and Underwater information.

To change the Chart Detail Level setting:

1. Highlight Chart Detail Level on the Chart main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Chart Detail Level setting. (Basic, Navigation, Underwater, All, Default = All)

***NOTE:** Some chart details are only available with optional-purchase MMC/SD cards.*

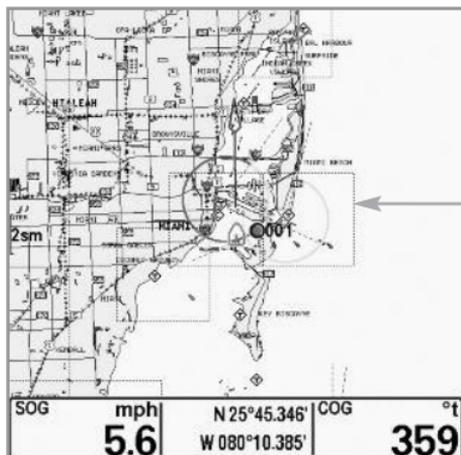
Map Borders

◀ MMC/SD Only ▶

Map Borders

Map Borders allows you to display or hide map borders. The dotted lines of a Map Border indicate an area which contains a different map.

Map Borders



To change the Map Borders setting:

1. Highlight Map Borders on the Chart main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Map Borders setting. (Hidden, MMC/SD Only, All Visible, Default = MMC/SD Only)

Lat/Lon Grid

Hidden

Lat/Lon Grid

Lat/Lon Grid allows you to display or hide a grid showing latitude and longitude lines.

To change the Lat/Lon Grid setting:

1. Highlight Lat/Lon Grid on the Chart main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Lat/Lon Grid setting. (Hidden, Visible, Default = Hidden)

Spot Soundings

Hidden

Spot Soundings

Spot Soundings allows you to display or hide spot soundings, which are depth measurements shown on the chart.

NOTE: Spot Soundings are only available with optional-purchase MMC/SD cards.

To change the Spot Soundings setting:

1. Highlight Spot Soundings on the Chart main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Spot Soundings setting. (Hidden, Visible, Default = Hidden)

Nav aids on Bird's Eye View

Visible

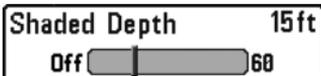
Nav aids on Bird's Eye View

Nav aids on Bird's Eye View allows you to display or hide additional navigational aids in Bird's Eye View, such as lights and buoys.

NOTE: You will see more navigational aids with an optional-purchase MMC/SD card.

To change the Nav aids on Bird's Eye View setting:

1. Highlight Nav aids on Bird's Eye View on the Chart main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Nav aids on Bird's Eye View setting. (Hidden, Visible, Default = Visible)

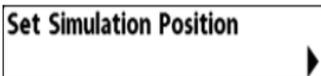


Shaded Depth

Shaded Depth allows you to change the depth used for shading on the chart views.

To change the Shaded Depth setting:

1. Highlight Shaded Depth on the Chart main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Shaded Depth setting. (Off, 1 to 180 Feet, or 1 to 60 Meters [*International Units only*], Default = 15 ft, 5 m)



Set Simulation Position

(Advanced)

Set Simulation Position allows you to set the position of the boat used in the Simulator. The Set Simulation Position menu option is available when User Mode is set to Advanced (see *Main Menu: User Mode*).

To set the Simulation Position:

1. Press any arrow on the 4-WAY Cursor Control key to activate the cursor and move it to the coordinates where you want start the simulation.
NOTE: The cursor must be active in order for this procedure to work.
2. Make sure the User Mode is set to Advanced, then highlight Set Simulation Position on the Chart main menu.
3. Press the RIGHT Cursor key to change the Simulation Position setting. The Confirm dialog box will appear. To confirm the setting, press the RIGHT Cursor key once more. To cancel the setting, press the LEFT Cursor key.

NOTE: If the cursor was not active before you began this procedure, an error message will appear. Exit the menu, set the cursor, then try again.

Set Map Offset allows you to change the map offset used by your Chartplotter. The Set Map Offset menu option is available when User Mode is set to Advanced (see *Main Menu: User Mode*).

NOTE: The Map Offset will be applied to all maps and not just the map that requires the correction. The Map Offset should be cleared if a different map is to be used.

To change the Map Offset setting:

1. Press the 4-WAY Cursor Control key to activate the cursor and move it to the location where the Map Offset will be applied.

NOTE: The cursor must be active in order for this procedure to work.

2. Make sure the User Mode is set to Advanced, then highlight Set Map Offset on the Chart main menu.
3. Press the RIGHT Cursor key to set the Map Offset. The Confirm dialog box will appear. To confirm the setting, press the RIGHT Cursor key once more. To cancel the setting, press the LEFT Cursor key.

NOTE: If the cursor was not active before you began this procedure, an error message will appear. Exit the menu, set the cursor, then try again.

Clear Map Offset allows you to clear the Map Offset. The Clear Map Offset menu option is available when User Mode is set to Advanced (see *Main Menu: User Mode*) and a Map Offset is currently active.

To Clear Map Offset:

1. Make sure the User Mode is set to Advanced, then highlight Clear Map Offset on the Chart main menu.
2. Press the RIGHT Cursor key to clear the Map Offset.

Setup	
Units - Depth	Feet
Units - Temp	°f
Units - Distance	Statute Miles
Units - Speed	mph
User Mode	Advanced
Triplog Reset	
Restore Defaults	
Aux. Temp. Offset	0.0°
Temp. Offset	0.0°
Speed Calibration	0%
Local Time Zone	EST (UTC-5)
Daylight Saving Time	Off
Position Format	dd°mm.mmm'
Time Format	12-hour
Date Format	mm/dd/yy
Digits Format	Large tenths
NMEA Output	Off
Demonstration	Off

Setup Menu Tab

From any view, press the MENU key twice to access the tabbed Main Menu, then press the RIGHT Cursor key until the Setup tab is selected.

NOTE: Menu options will vary depending on which accessories are attached to the unit.

*NOTE: Menu options can be expanded or simplified by setting the User Mode to Advanced or Normal. See **Main Menu: User Mode** for details.*

Setup Menu Tab

Units - Depth

◀ Feet ▶

Units - Depth

Units - Depth selects the units of measure for all depth-related readouts.

To change the Units - Depth setting:

1. Highlight Units - Depth on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Units - Depth setting. (Domestic Models: Feet, Fathoms; International Models: Meters; Default = Feet/Meters)

Units - Temp

◀ °C ▶

Units - Temp

(International only)

Units - Temp selects the units of measure for all temperature-related readouts. *International Models only.*

To change the Units - Temp setting:

1. Highlight Units - Temp on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Units - Temp setting. (Celsius, Fahrenheit; Default = Celsius)

Units - Distance

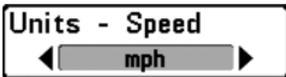
◀ Statute Miles ▶

Units - Distance

Units - Distance selects the units of measure for all distance-related readouts, and will appear in the menu if a Temp/Speed Accessory is connected and the paddlewheel has moved at least once, or if the GPS Receiver is connected.

To change the Units - Distance setting:

1. Highlight Units - Distance on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Units - Distance setting. (Domestic Models: Statute Miles, Nautical Miles, Default = Statute Miles; International Models: Meters/Kilometers, Meters/Nautical Miles, Feet/Statute Miles, Feet/Nautical Miles, Default = Meters/Kilometers)

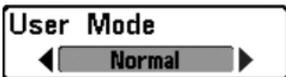
Units - SpeedA screenshot of a menu item labeled "Units - Speed". Below the label is a horizontal bar with a grey background and a black border. Inside the bar, the text "mph" is centered, with a black arrow pointing left on the left side and a black arrow pointing right on the right side.

Units - Speed

Units - Speed selects the units of measure for speed-related readouts, and will appear in the menu if a Temp/Speed Accessory is connected and the paddlewheel has moved at least once, or if the GPS Receiver is connected.

To change the Units - Speed setting:

1. Highlight Units - Speed on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Units - Speed setting. (Domestic Models: mph, kts; International Models: kph; Default = mph/kph)

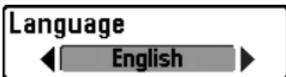
User ModeA screenshot of a menu item labeled "User Mode". Below the label is a horizontal bar with a grey background and a black border. Inside the bar, the text "Normal" is centered, with a black arrow pointing left on the left side and a black arrow pointing right on the right side.

User Mode

User Mode sets the menu system to Normal or Advanced. When set to Normal (default setting), the basic set of menu options are shown in the menu system. When set to Advanced, additional menu options are added to the menu system. See *Main Menu: User Mode* for details.

To change the User Mode setting:

1. Highlight User Mode on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the User Mode setting. (Normal, Advanced, Default = Normal)

LanguageA screenshot of a menu item labeled "Language". Below the label is a horizontal bar with a grey background and a black border. Inside the bar, the text "English" is centered, with a black arrow pointing left on the left side and a black arrow pointing right on the right side.

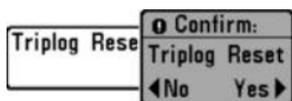
Language

(International only)

Language selects the display language for menus. *International Models only.*

To change the Language setting:

1. Highlight Language on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Language setting. (Default = English)



Triplog Reset

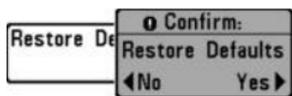
Triplog Reset resets the Triplog to zero, and will appear in the menu if a Temp/Speed Accessory is connected and the paddlewheel has moved at least once, or if the GPS Receiver is connected.

The Triplog provides the following information: timer for elapsed time, distance traveled since last reset, and average speed.

*NOTE: See **Navigation X-Press™ Menu: Select Readouts** to find out how to display Triplog information on the screen.*

To Reset Triplog:

1. Highlight Reset Triplog on the Setup main menu.
2. Press the RIGHT Cursor key to initiate Triplog Reset.
3. The Confirm dialog box will appear. To reset the Triplog, press the RIGHT Cursor key once more. To cancel Reset Triplog, press the LEFT Cursor key.



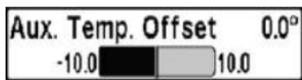
Restore Defaults

Restore Defaults resets ALL menu settings to their factory defaults.

Use this menu choice with caution!

To Restore Defaults:

1. Highlight Restore Defaults on the Setup main menu.
2. Press the RIGHT Cursor key to initiate restoring defaults.
3. The Confirm dialog box will appear. To reset the defaults, press the RIGHT Cursor key once more. To cancel Restore Defaults, press the LEFT Cursor key.



Aux. Temp. Offset

(Advanced)

Aux. Temp. Offset will adjust the aux. temperature readout (the temperature on the optional-purchase temperature probe or Temp/Speed accessory) by the amount entered. This menu option is available when the User Mode is set to Advanced (see *Main Menu: User Mode*).

To change the Aux. Temp. Offset setting:

1. Make sure the User Mode is set to Advanced, then highlight Aux. Temp. Offset on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Aux. Temp. Offset setting. (-10.0 to +10.0 degrees, Default = 0)



Temp. Offset

(Advanced)

Temp. Offset will adjust the temperature readout by the amount entered. This menu option is available when the User Mode is set to Advanced (see *Main Menu: User Mode*).

To change the Temp. Offset setting:

1. Make sure the User Mode is set to Advanced, then highlight Temp. Offset on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Temp. Offset setting. (-10.0 to +10.0 degrees, Default = 0)



Speed Calibration

(Advanced, with Temp/Speed only)

Speed Calibration will adjust the speed readout by the percentage entered, and will appear in the menu if a Temp/Speed Accessory is connected and the paddlewheel has moved at least once, and when the User Mode is set to Advanced (see *Main Menu: User Mode*).

To change the Speed Calibration setting:

1. Make sure the User Mode is set to Advanced, then highlight Speed Calibration on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Speed Calibration setting. (-20% to +20%, Default = 0%)



Local Time Zone

(Advanced)

Local Time Zone selects your time zone in reference to the time reported by the GPS receiver when Time+Date is selected as a Digital Readout (see *Navigation X-Press™ Menu: Select Readouts*). This menu option is available when the User Mode is set to Advanced (see *Main Menu: User Mode*).

To change the Local Time Zone:

1. Make sure the User Mode is set to Advanced, then highlight Local Time Zone on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Local Time Zone. (Default = EST [UTC-5] - Eastern Standard Time)



Daylight Saving Time

(Advanced)

Daylight Saving Time adjusts the time display to account for local Daylight Saving Time when Time+Date is selected as a Digital Readout (see *Navigation X-Press™ Menu: Select Readouts*).

Selecting On adds one hour to the time display adjusted for your local time zone. Selecting Off leaves the time display as adjusted for your local time zone. This menu option is available when the User Mode is set to Advanced (see *Main Menu: User Mode*).

To change the Daylight Saving Time setting:

1. Make sure the User Mode is set to Advanced, then highlight Daylight Saving Time on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to turn Daylight Saving Time On or Off. (Off, On, Default = Off)



Position Format

(Advanced)

Position Format selects the format of the latitude and longitude position display. This menu option is available when the User Mode is set to Advanced (see *Main Menu: User Mode*).

To change the Position Format setting:

1. Make sure the User Mode is set to Advanced, then highlight Position Format on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Position Format. (dd.ddddd°, dd°mm.mmm', or dd°mm'ss", Default = dd°mm.mmm')

Time Format

12-Hour

Time Format*(Advanced, International only)*

Time Format changes the time format used by the unit. This menu option is available when the User Mode is set to Advanced (see *Main Menu: User Mode*). *International Models only*.

Time Format selects a 12 hour or 24 hour format for the time of day displayed when Time + Date is selected as a Digital Readout (see *Navigation X-Press™ Menu: Select Readouts*).

To change the Time Format:

1. Make sure the User Mode is set to Advanced, then highlight Time Format on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Time Format. (12 hour, 24 hour, Default = 12 hour)

Date Format

mm/dd/yy

Date Format*(Advanced, International only)*

Date Format changes the date format used by the unit. This menu option is available in International Models only and when the User Mode is set to Advanced (see *Main Menu: User Mode*).

Date Format selects the format for the date display when Time + Date is selected as a Digital Readout (see *Navigation X-Press Menu: Select Readouts*).

To change the Date Format:

1. Make sure the User Mode is set to Advanced, then highlight Date Format on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Date Format. (mm/dd/yy, dd.mm.yy or yy.mm.dd, Default = mm/dd/yy)

Digits Format

◀ Small tenths ▶

Digits Format*(Advanced)*

Digits Format allows you to add a tenth decimal place to readouts such as Temperature and Depth. The format can be changed to small format, large format, or no format. This menu option is available when the User Mode is set to Advanced (see *Main Menu: User Mode*).

To change the Digits Format setting:

1. Make sure the User Mode is set to Advanced, then highlight Digits Format on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the Digits Format setting. (Small tenths, Large tenths, No tenths, Default = Small tenths)

NMEA Output

◀ Off ▶

NMEA Output*(Advanced)*

NMEA Output turns the NMEA* output on or off. This menu option is available when the User Mode is set to Advanced (see *Main Menu: User Mode*).

NMEA Output should be turned On if you connect the NMEA Output wires of the GPS Receiver cable to another NMEA-compatible device, such as an autopilot.

**NMEA 0183 is a National Marine Electronics Association standard for data communication.*

The following NMEA sentences are output when NMEA Output is turned On:

DPT- Depth

MTW - Water Temperature

GLL - Lat/Lon Position

GGA - GPS Fix Data

RMC - Recommended Minimum Specific GNSS Data

VTG - Course Over Ground and Ground Speed

ZDA - Time and Date

When navigating, the following NMEA sentences are also output when NMEA Output is turned On:

APB - Autopilot Sentence B

BWR - Bearing and Distance to Waypoint

RMB - Recommended Minimum Navigation Info

To turn NMEA Output on or off:

1. Make sure the User Mode is set to Advanced, then highlight NMEA Output on the Setup main menu.
2. Press the LEFT or RIGHT Cursor keys to change the NMEA Output to On or Off. (Off, On, Default = Off)



Demonstration

Demonstration deactivates the Demonstration Mode feature (see *Powering On the Unit*).

To turn Demonstration on or off:

1. Highlight Demonstration on the Setup menu.
2. Press the LEFT or RIGHT Cursor keys to turn Demonstration On or Off. (Off, On, Default = On)

Views	
Bird's Eye No Readouts View	Hidden
Bird's Eye View	Visible
Bird's Eye Big Digits View	Visible
Chart No Readouts View	Visible
Chart View	Visible
Chart Big Digits View	Visible
Instrument View	Visible
Screen Snapshot	Hidden
Self Test	Hidden
Accessory Test	Hidden
GPS Diagnostic View	Visible

Views Menu

Views Menu Tab

From any view, press the MENU key twice to access the tabbed Main Menu, then press the RIGHT Cursor key until the Views tab is selected.

This menu tab allows you to set the available views to either hidden or visible in the view rotation. The view will be removed from the view rotation if it is set to Hidden and will be displayed in the view rotation if it is set to Visible.

NOTE: See Views for more information.

The following views are available:

- Bird's Eye No Readouts View
- Bird's Eye View
- Bird's Eye Big Digits View
- Chart No Readouts View
- Chart View
- Chart Big Digits View
- Instrument View
- Screen Snapshot View
- Self Test
- Accessory Test
- GPS Diagnostic View.

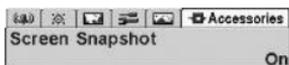
To Hide or Show a view:

1. Press the UP or DOWN Cursor keys to select a View from the Views main menu.
2. Press the LEFT or RIGHT Cursor keys to change the status of the view from Hidden to Visible or vice versa.

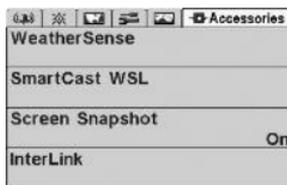
Accessories Menu Tab

From any view, press the MENU key twice to access the tabbed Main Menu, then press the RIGHT Cursor key until the Accessories tab is selected.

If there are not accessories attached to the Accessory Bus, Screen Snapshot will be the only menu choice available. If an accessory is attached, however, additional menu choices that support the accessory will be added automatically. See the Operations Manual that comes with your accessory for detailed information.

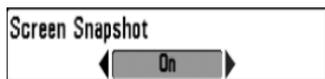


Accessories Menu Tab
(no accessories attached)



Accessories Menu Tab
(with accessories attached)

NOTE: Accessories to enable WeatherSense® and the SmartCast® Wireless Sonar Link require separate purchases. You can visit our web site at www.humminbird.com or contact our Customer Resource Center at 1-800-633-1468 for additional details.



Using Screen Snapshot

Screen Snapshot activates the screen snapshot function. When Screen Snapshot is enabled, pressing the MARK key creates a saved screen capture on the optional-purchase MMC/SD card installed in your unit's card slot. All active menus, dialog boxes, warnings and messages are captured and saved automatically.

NOTE: For more information, see *Views: Screen Snapshot View and Screen Snapshot X-Press™ Menu*.

NOTE: You must have an optional-purchase MMC/SD card installed for the Screen Snapshot feature to work.

To turn Screen Snapshot on or off:

1. Highlight Screen Snapshot on the Accessories main menu.
3. Press the LEFT or RIGHT Cursor keys to turn Screen Snapshot On or Off. (Off, On, Default = Off)

To make a Screen Snapshot (Screen Snapshot must be enabled):

1. Make sure you have installed an optional-purchase MMC/SD card into your card slot.
2. From any view you want to capture, press the MARK key.
 - When you start a screen capture, a message will appear to indicate that a waypoint has been created at the cursor location on the screen, and the screen will freeze while the snapshot is being saved to the MMC/SD.
 - A status dialog box will appear that shows the file number assigned to the screen capture (.PNG) as well as the progress of the save as a percentage. Screen Snapshot file names start with an "S."
 - A waypoint created by a screen snapshot shares the same file name and has a screen snapshot icon.

***NOTE:** Navigation is not affected by the Screen Snapshot feature. Also, if Screen Snapshot is enabled but there is no GPS receiver connected, pressing the MARK key will capture the screen image and display an error saying that a GPS position fix is required to create a waypoint.*

***NOTE:** The speed of the capture depends on the type of card you use; in general, SD cards capture the screen faster than MMC cards.*

To view saved screen snapshots:

1. Make sure that the optional-purchase MMC/SD card used to capture the screen is installed in the card slot.
2. Press the VIEW key until you see the Screen Snapshot View.
3. Press the UP or DOWN Cursor keys to scroll through the available screen snapshot thumbnails. The selected thumbnail will be highlighted with arrows. Press the RIGHT Cursor key to view the full image.

- When you highlight a screen snapshot thumbnail, the amount of space remaining on the MMC/SD card will be displayed in the information box.
- A red border around the full screen indicates that the view is a saved screen capture, not a “live” view.
- Press the DOWN Cursor key to view the next screen snapshot.
- Press the LEFT Cursor key to return to the Screen Snapshot View file list.

To delete saved screen snapshots

You can delete the highlighted image, or all captured images, using the Screen Snapshot X-Press™ Menu.

1. From the Screen Snapshot View, press the MENU key once to access the Screen Snapshot X-Press™ Menu.
2. Press the UP or DOWN Cursor key to select Delete Image or Delete All Images, and then press the RIGHT Cursor key to complete your selection. The Confirm dialog box will appear. To confirm the deletion, press the RIGHT Cursor key once more. To cancel the deletion, press the LEFT Cursor key.

You may view data files associated with each screen snapshot by removing the MMC/SD card from your unit and installing it in your optional-purchase MMC/SD card reader connected to a PC. Use Windows Explorer to see the contents of your MMC/SD card.

You will notice that a .DAT (or a .TXT) file is created for every .PNG screen capture. This data file includes the thumbnail view, and is required to view the screen snapshot from your unit, so don't delete these files.

Troubleshooting

Before contacting the Humminbird® Customer Resource Center, please read the following section. Taking the time to review these troubleshooting guidelines may allow you to solve a performance problem yourself, and therefore avoid sending your unit back for repair.

Chartplotter Doesn't Power Up

If your Chartplotter doesn't power up, use the Installation Guide that also comes with it for specific confirmation details, making sure that:

- The power cable is properly connected to the Chartplotter control head.
- The power cable is wired correctly, with red to positive battery terminal and black to negative terminal or ground.
- The fuse is operational.
- The battery voltage of the power connector is at least 10 Volts.

Correct any known problems, including removing corrosion from the battery terminals or wiring, or actually replacing the battery if necessary.

Display Problems

There are several main conditions or sources of possible interference that may cause problems with the quality of the information displayed on the control head. Look in the following table for some symptoms of display problems and possible solutions:

Problem	Possible Cause
The control head loses power at high speeds.	If the power output of your boat's engine is unregulated, the control head may be protecting itself using its over-voltage protection feature. Make sure the input voltage does not exceed 20 Volts.

Finding the Cause of Noise

Electrical noise usually affects the display with many black dots at high speeds, and high sensitivity readings. One or more of the following sources can cause noise or interference:

Possible Source of Noise

Isolation

Other electronic devices

Turn off any nearby electronic devices to see if the problem goes away, then turn them on one at a time to see if the noise re-appears.

The boat's engine

To determine whether the boat's engine is the source of the noise, increase the RPMs while the boat is in neutral and stationary to see if the noise increases proportionately; if noise appears when you rev the engine, the problem could be the spark plugs, alternator, or tachometer wiring. Replace the spark plugs with resistor plugs, install an alternator filter, or route the control head power and transducer cables away from the engine wiring.

Cavitation from the boat's propeller

Turbulence created by the propeller can cause noise; make sure the transducer is mounted at least 15" (38 cm) from the propeller, and that the water flows smoothly over the face of the transducer at all times.

700 Series™ Chartplotter Accessories

Accessories customize the 700 Series™ Chartplotter to your needs and enable you to stay on the edge of new technology. When an accessory is connected to the 700 Series™ Chartplotter, additional menus and readouts are added automatically to the Main Menu System. Accessories available today that are supported by your Chartplotter include:

WeatherSense® Fishing Condition Monitor: purchase and plug in the WeatherSense® accessory to your 700 Series™ Chartplotter to obtain barometric pressure readouts and trend data in real time.

GPS Connection Cable: purchase the GPS Connection Cable in order to connect a handheld or other NMEA* GPS-compatible device that you may already own to your 700 Series™ Chartplotter.

**NMEA 0183 is a National Marine Electronics Association standard for data communication.*

Wireless Sonar Link (WSL) purchase the Wireless Sonar Link (WSL) accessory to receive remote sonar signals from a SmartCast® Remote Sonar Sensor (RSS). Radio signals from the RSS are received by the WSL and transmitted over the Accessory Bus to the 700 Series™ Chartplotter.

PC Connect Cable: Purchase the PC Connect Cable to connect the 700 Series™ Chartplotter to a PC in order to upload product software updates and new features obtained from www.humminbird.com. This accessory requires the MSWindows-compatible HumminbirdPC™ software downloaded from our web site to your PC in order to communicate with the 700 Series™ Chartplotter.

Downriggers are the key to catching fish you otherwise couldn't even touch. And now Humminbird's **CannonLink™** Downrigger Controller makes operation of up to six Cannon® Mag 20 DT or Mag 20 DT/HS downriggers incredibly easy. Using the controls on your Chartplotter, deploy or retrieve downriggers, hold a specific distance off the bottom, cycle downriggers between two depths, and adjust the Positive Ion Control. Even see temperature and water clarity at depth and speed at the ball right on-screen when using the Cannon® Speed-n-Temp. You'll never be shorthanded again, just make adjustments from the helm, while your mate rigs the lines and brings in the fish!

With the new **InterLink™** Network Connection, you can now share GPS position, waypoints, routes and your current track between two Humminbird® Chartplotters in real time. Mark a waypoint at the console, and it's instantly available on the second unit. No matter where you're at on the boat, you'll have access to your critical fishing and navigation information. Plus, daisy chain **InterLink™** with other System Modules and you'll have a network that lets you share digital data around the boat. It's a simply, clearly, better networking solution!

Humminbird's **AS WX 1** weather accessory provides anglers with access to continuously-updating weather conditions. The AS WX 1 uses sophisticated technology to track nationwide weather information for more than 20 different weather conditions, including precipitation, wind, lightning, and full forecasts for more than 150 cities across the country, then scales and customizes this detail to the angler's specific location. See the AS WX 1 accessory guide for details.

Be sure to check out our web site **www.humminbird.com** for additional new and exciting accessories to grow your 700 Series™ Chartplotter!

***NOTE:** Each accessory requires a separate purchase. You can visit our website at **www.humminbird.com** or contact our Customer Resource Center at **1-800-633-1468** for additional details.*

Specifications

Power Requirement 10-20 VDC

LCD Matrix 640 V x 640 H

Current Draw 650 mA

NOTE: Product specifications and features are subject to change without notice.

Glossary

GPS & Navigation Terms:

Acquisition Time: The length of time that a GPS receiver typically takes to determine a position from at least three satellites. Humminbird® GPS receivers provide very fast acquisition times (under one minute), permitting users to get out on the water faster.

Alarm, Arrival: The audible alert that sounds when the boat is equal to or less than the alarm setting (25 feet – 3000 feet) from the location of the destination waypoint.

Alarm, Drift: Drift Alarm is an audible alert that sounds when the boat is equal to or over the alarm setting (25 feet – 3000 feet) from the location where the alarm was turned on.

Alarm, Off-Course: Off-Course Alarm is an audible alert that sounds when the boat's distance from the intended Track, (Cross Track Error), is equal to or over the alarm setting (25 feet – 3000 feet). See *Track* and *Cross Track Error*.

Altitude: Altitude measures height above sea level. Altitude is a measurement that can be provided by GPS.

Bearing (BRG): Bearing is the direction to a destination waypoint measured in degrees from North (i.e. 321°, where 000° is North, 090° East, 180° is South, 270° is West).

Chartplotter: Chartplotter describes a navigation device that shows Present Position on a Map, along with Tracks, Waypoints, and Routes. All Chartplotters are also considered Trackplotters. All Humminbird® GPS Combo units are Chartplotters. See *Trackplotter*.

Cold Start: Cold Start refers to the procedure that a GPS receiver must perform when it does not have historical information regarding its current location. This procedure typically lasts for several minutes, and may be experienced upon first power up of the receiver, or if the receiver has been moved a great distance.

Course Over Ground (COG): Course Over Ground is the current direction the boat is traveling measured in degrees from North (i.e. 321°, where 000° is North, 090° East, 180° is South, 270° is West). When the Course Over Ground is equal to Bearing, the boat is said to be "On Course" and will arrive at the destination in the most efficient manner. COG is often confused with Heading. See *Heading*.

Cross Track Error (XTE): Cross Track Error is the straight-line distance of the boat from the intended Track. XTE measures how far the boat is off course, and also triggers the Off Course Alarm. See *Track*.

Differential GPS (DGPS): Differential GPS is a system to improve the position accuracy of the Department of Defense GPS through the use of secondary “correction signals” broadcast from ground stations around the coastal United States and on some inland waterways. These correction signals are provided by the USCG and received by an auxiliary Differential Beacon Receiver (DBR) that connects to the GPS receiver. The advent of WAAS has largely negated the need for the added expense of a DBR in the United States.

Distance To Go: Distance To Go is the straight-line distance between Present Position and the Destination Waypoint. DTG and SOG (Speed Over Ground) are used to calculate Time To Go. See *Time to Go* and *Speed Over Ground*.

Estimated Position Error (EPE): Estimated Position Error is a calculation that indicates the potential position inaccuracy the user may experience due to a variety of GPS factors which include satellite position in the sky, signal strength and others factors.

Fix Type: Fix Type indicates whether the GPS receiver is providing 2D fix or 3D fix. A 2D fix requires only three satellites and provides only latitude and longitude. A 3D fix requires four or more satellites, and provides latitude, longitude and altitude.

GPS: GPS is an acronym for Global Positioning System. GPS provides accurate position (latitude, longitude, altitude) information virtually anywhere on the earth through satellite technology and personal receivers on the ground. A series of geosynchronous satellites broadcast a unique signal toward the earth once per second. A GPS receiver, such as that included with many Humminbird® products, receives the signals from these satellites and is able to determine position based on very slight differences in the time each signal is received and the receiver’s knowledge of the location of each of the satellites.

Heading: Heading describes the direction the boat is pointing and is measured in degrees (i.e. 321°, where 000° is North, 090° East, 180° is South, 270° is West). Due to wind and waves, the boat is often traveling in a slightly different direction than it is heading, and therefore Heading is often confused with Course Over Ground. See *Course Over Ground*.

Map Datum: A Map Datum refers to a particular survey of the earth's surface that was referenced when creating a chart (i.e. WGS84). Since the earth is not flat, and not even consistently round, a mathematical model must be used to translate coordinates from the sphere of the earth to the flat surface of a chart. This mathematical model is the Map Datum. Historically, many different Map Datums have been used around the world to create maps; often a reference to the Map Datum can be found in the legend of a paper map. It is important to select the correct Map Datum setting in your fishfinder when comparing GPS position to a paper chart to avoid slight position inaccuracies. Almost all electronic charts use the WGS84 Map Datum and therefore, they do not require setting changes.

MMC: MMC is an acronym for Multi Media Card. An MMC is a postage stamp-sized memory device used to store electronic data such as maps, waypoints, routes and other information. MMC is a very rugged format suitable for the marine environment, but it is not waterproof. The MMC is removable from Humminbird® products, and can be used in a PC that is equipped with an appropriate card reader. MMC is the same format that many digital cameras use. See *SD*.

North, Magnetic: North is the principle reference point of the compass (i.e. North is 000°). Magnetic North relies on the earth's magnetic field to align a metal pointer generally towards True North. However, due to local variations in the earth's magnetic field around the globe, the difference between True North and Magnetic North can be greater than 10°. See *True North*.

North, True: North is the principle reference point of the compass (i.e. North is 000°). True North uses the axis of the rotation of the earth as the reference for North and is constant for all points on the earth. Most GPS units default to True North as the setting. The GPS heading may vary from the boat compass heading because the compass uses Magnetic North. Humminbird® GPS units provide the option of selecting True or Magnetic readouts by using the North Reference menu. See *Magnetic North*.

Present Position: Present Position is the current location (latitude, longitude) determined by GPS. The Present Position is indicated on-screen by a directional boat icon if the boat is moving, or a round symbol if the boat is stationary.

Route: A Route is series of waypoints linked together in a specific sequence to define a navigation path between two points, and saved in the fishfinder's

memory. Routes are often used when frequently traveling between two or more locations because it is a faster and more accurate method than repeatedly selecting individual waypoints each time one travels through the same area. Routes consist of a Start Waypoint, an End Waypoint, and a series of waypoints in between. Users can begin navigation at the beginning, the end (to run the route in reverse) or at any waypoint in between. See *Waypoint*.

SD: SD is an acronym for Secure Digital. An SD card is virtually identical in function to an MMC; however, the speed at which information can be accessed is generally faster, the storage capacity is generally larger, and the card has security features which can be used to prevent extracting the data from the card. SD is the same format that many digital cameras use. See *MMC*.

Selective Availability: Selective Availability (SA) is a GPS system “feature” that can be implemented by the U.S. Department of Defense (DoD) to degrade the accuracy of GPS positioning information. With SA active, the GPS is accurate to within 100 meters 95% of the time. With SA inactive, the GPS is accurate to within 45 meters 95% of the time. Currently, SA is inactive and the consumer can enjoy the greater precision GPS provides; however, the DoD reserves the right to activate SA at any time.

Speed Over Ground (SOG): Speed Over Ground is the measurement of the boat’s progress across a given distance, and is the speed measurement provided by GPS. An alternate, Speed Through Water, is provided by a speed paddlewheel, and is the measurement of the flow past the boat, which may vary depending on current speed and direction. Speed Over Ground is optimal for navigation because accurate destination times can be derived from this measurement. Humminbird® products allow for input and display of both speed measurements.

Time To Go (TTG): Time To Go is the estimated time required to reach the destination waypoint. TTG is calculated using the SOG and DTG. See *SOG* and *DTG*.

Track: A Track is a series of saved points that define the past path of the boat. These Track Points are saved at regular time intervals. Tracks are a useful and quick method to see where you’ve been, and an easy guide to follow to get you back to the starting point. Generally, all GPS units have a limited number of Track Points that can be saved before the unit runs out of memory and begins erasing the first track points saved. Because of this, the user can adjust the Track Point Interval

menu to increase the amount of time between when points are saved, and thus extend the distance covered by a track. Tracks can also be permanently saved to memory, and re-displayed at the user's option.

Track Line (TRK): The Track Line is the planned line of travel between two waypoints, and it represents the most efficient path between the two points because it is a straight line. The TRK is measured in degrees (i.e. 321°, where 000° is North, 090° East, 180° is South, 270° is West). See *Cross Track Error* and *Course Over Ground*.

Trackplotter: Trackplotter describes a navigation device that shows Present Position, along with Track, Waypoint, and Routes, but NO MAP in the background. See *Chartplotter*.

Trolling Grid: Trolling Grid is a Humminbird® feature that displays a precise reference grid around a waypoint. This grid is used as a guide pattern for trolling around a specific area to assure a more efficient and complete coverage of that area. Trolling Grid resolution be changed by zooming in or out on the chart. The Trolling Grid can also be rotated on the display to orient it for optimal boat course for wave and wind conditions.

UTC: UTC is an acronym for Universal Time Constant. UTC is the "standard time" used in navigation, and is the local time in Greenwich England. (UTC is equivalent to Greenwich Mean Time (GMT)). To display the correct Local Time in a Humminbird® GPS unit, the user must use the Local Time Zone menu and select the time zone (i.e. EST, CST).

WAAS: WAAS is an acronym for Wide Area Augmentation System. WAAS is complementary technology to GPS that provides enhanced accuracy through correction signals broadcast from Federal Aviation Administration WAAS satellites stationed over the USA. These secondary signals are automatically received by the standard Humminbird® GPS Receiver. With WAAS signal, GPS accuracy is improved to within 3 meters 95% of the time. Outside the United States, regional governmental coalitions have created similar systems such as EGNOS (Europe) and MSAS (Japan).

Waypoint: A Waypoint is the saved location (latitude, longitude) of a point of interest that is stored in a GPS receiver's memory. This can include a marker buoy, dock, fishing hole or anywhere else the user may want to return to. Humminbird® products offer the ability to name and assign a symbol to the saved location. Depth, Date and Time of Day when the waypoint was created is also saved.

Waypoint Target: Waypoint Target is a Humminbird® feature that displays a precise "bull's eye" around a selected waypoint. This bull's eye is used to easily monitor boat position relative to a waypoint, and is useful for fishing over submerged structure. With Waypoint Targets, a quick look at the screen lets you know how far off the waypoint the boat has drifted.

Contact Humminbird®

Contact the Humminbird® Customer Resource Center
in any of the following ways:

By Telephone:

(Monday - Friday 8:00 a.m. to 4:30 p.m. Central Standard Time):

1-800-633-1468

By e-mail:

(typically we respond to your e-mail within three business days):

cservice@johnsonoutdoors.com

For direct shipping, our address is:

Humminbird

Service Department

678 Humminbird Lane

Eufaula, AL 36027 USA

