587ci HD, 597ci HD, and 597ci HD DI Combo Operations Manual

HUMMINBIRD®

500 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 the full benefit from all the features and applications of your Humminbird® product.

Contact our Customer Resource Center at **1-800-633-1468** or visit our Web site at **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.

WARNING! This product contains chemicals known to the State of California to cause cancer and/or reproductive harm.

WARNING! Do not travel at high speed with the unit cover installed. Remove the unit cover before traveling at speeds above 20 mph.

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 wheelie 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.*

ATTENTION INTERNATIONAL CUSTOMERS: Products sold in the U.S. are not intended for use in the international market. Humminbird® international units provide international features and are designed to meet country and regional regulations. Languages, maps, time zones, units of measurement, and warranty are examples of features that are customized for Humminbird® international units purchased through our authorized international distributors.

To obtain a list of authorized international distributors, please visit our Web site at **humminbird.com** or contact our Customer Resource Center at **(334) 687-6613**.

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*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. To obtain a list of authorized international distributors, please visit our Web site at **humminbird.com** or contact our Customer Resource Center at (334) 687-6613.*

*NOTE: Entries in this Table of Contents which list (with Temp/Speed only) require the purchase of separate accessories. You can visit our Web site at **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.

Power On the Unit

Follow the instructions below to power on your Humminbird® control head.

587ci HD Combo Title Screen

HUMMINBIRD
fishfinder
587ci HD

640
Vertical
Pixels

60°
Dual Beam
GPS

Press MENU for Startup Options
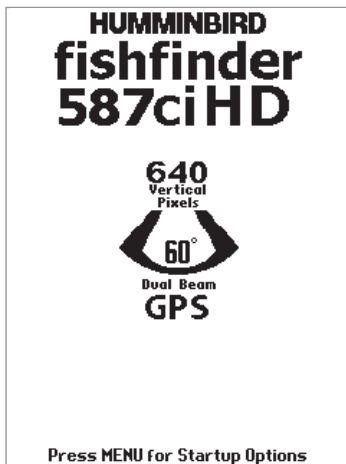
1. Press the ⓞ POWER/LIGHT key.

2. When the Title screen is displayed, press the MENU key to access the Start-Up Options Menu.

3. Use the 4-WAY Cursor Control key to select Normal (if there is a transducer attached to the control head), or Simulator (if there isn't a transducer attached to the control head).

   NOTE: See Start-Up Options Menu for more information.

   • If a functioning transducer is connected, Normal operation will be selected automatically at power up, and your Fishfinder can be used on the water.

   • If a transducer is not connected and you wait too long to select a Start-Up Option, the system will default to whichever menu is already highlighted.

   • In Simulator you can learn how to use your control head and save settings in advance for later use.

How Sonar Works

Sonar technology is based on sound waves. The 500 Series™ Fishfinder uses sonar to locate and define structure, bottom contour and composition, as well as depth directly below the transducer.

Your 500 Series™ Fishfinder sends a sound wave signal and determines distance by measuring the time between the transmission of the sound wave and when the sound wave is reflected off of an object; it then uses the reflected signal to interpret location, size, and composition of an object.

Sonar is very fast. A sound wave can travel from the surface to a depth of 240 ft (70 m) and back again in less than 1/4 of a second. It is unlikely that your boat can "outrun" this sonar signal.

Real Time Sonar

Instant Display
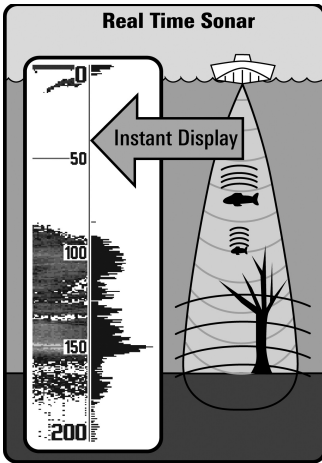
SONAR is an acronym for SOund and NAvigation Ranging. Sonar utilizes precision sound pulses or "pings" which are emitted into the water in a teardrop-shaped beam.

The sound pulses "echo" back from objects in the water such as the bottom, fish, and other submerged objects. The returned echoes are displayed on the LCD screen. Each time a new echo is received, the old echoes are moved across the LCD, creating a scrolling effect.
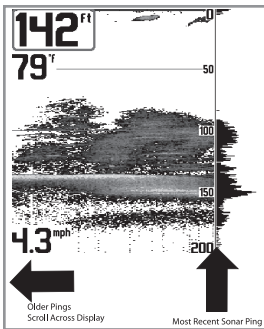
When all the echoes are viewed side by side, an easy to interpret "graph" of the bottom, fish, and structure appears.
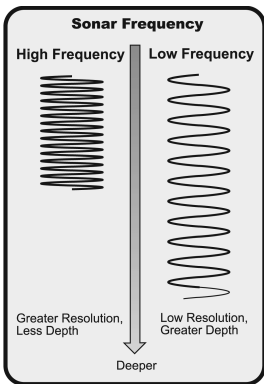
The sound pulses are transmitted at various frequencies depending on the application. Very high frequencies (455 kHz) are used for greatest definition but the operating depth is limited. High frequencies (200 kHz) are commonly used on consumer sonar and provide a good balance between depth performance and resolution. Low frequencies (83 kHz) are typically used to achieve greater depth capability.
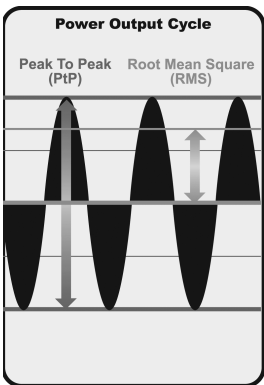
The power output is the amount of energy generated by the sonar transmitter. It is commonly measured using two methods:

- Root Mean Square (RMS) measures power output over the entire transmit cycle.

- Peak to Peak measures power output at the highest points.

The benefits of increased power output are the ability to detect smaller targets at greater distances, ability to overcome noise, better high speed performance, and enhanced depth capability.

3   *How Sonar Works*
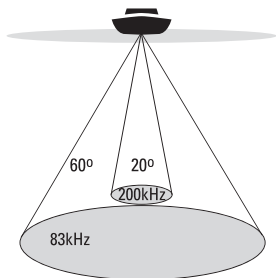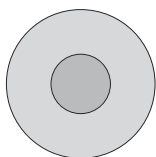
DualBeam PLUS™ Sonar

(DualBeam PLUS™ models only

[587ci HD, 597ci HD])

Your **587ci HD/597ci HD** Fishfinder uses a 200/83 kHz DualBeam PLUS™ sonar system with a wide (60°) area of coverage. DualBeam PLUS™ sonar has a narrowly focused 20° center beam, surrounded by a second beam of 60°, expanding your coverage to an area equal to your depth. In 20 feet of water, the wider beam covers an area 20 feet wide.

DualBeam PLUS™ sonar returns can be blended together, viewed separately, or compared side-by-side. DualBeam PLUS™ is ideal for a wide range of conditions - from shallow to very deep water in both fresh and salt water. Depth capability is affected by such factors as boat speed, wave action, bottom hardness, water conditions and transducer installation.

60 Degree Total Coverage

Bottom Coverage = 1 x Depth

Down Imaging™ Sonar

(Down Imaging™ models only
[597ci HD DI, XNT 9-DI-T Transducer])
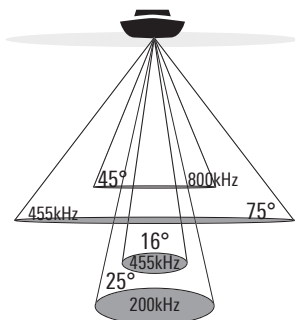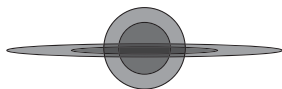
Your **597ci HD DI Fishfinder** uses Down Imaging™ technology. The Down Imaging™ transducer scans the water with razor-thin, high-definition beams. The beams are wide (side to side) but very thin front to back.

The Down Imaging™ beams can be operated at two frequencies: 455 kHz (75°) or 800 kHz (45°). Select 455 kHz for the best overall image quality and depth. Select 800 kHz for the sharpest image. See *Down Imaging™ X-Press™ Menu: Imaging Frequency* for more information.

The transducer also uses conical beams to provide data in traditional 2D format (see *What's on the Sonar View*). Select 455 kHz for a narrowly focused 16° center beam, or select 200 kHz for a wider 25° beam (see *Sonar Menu Tab: Beam Select*).

Depth capability is affected by such factors as boat speed, wave action, bottom hardness, water conditions and transducer installation.

⸫ 75 Degree Total Coverage

⸭ Bottom Coverage = 1 x Depth

DUAL BEAM
Ice transducer

20°
200kHz
60°
83kHz
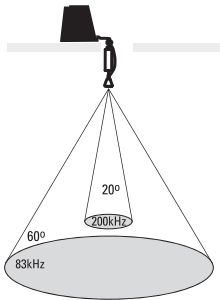
⁂ 60 Degree Total Coverage

⁙ Bottom Coverage = 1 x Depth
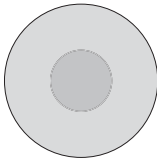
Dual Beam Ice Transducer

(optional-purchase XI 9 20 Ice Transducer only)

Your Fishfinder supports the optional-purchase XI 9 20 Ice Transducer which provides selectable dual-frequency sonar with a wide area of coverage. Selectable dual-frequency gives you the option of two beams, and both beams will cover the bottom and provide high definition. The 20° center beam provides the highest definition, while the 60° beam provides wider coverage. Depth capability is affected by such factors as bottom hardness and water conditions. Whether fishing in shallow or very deep water, selectable dual-frequency is ideal for a variety of conditions.

How GPS Works

Your 500 Series™ Fishfinder also supports GPS (Global Positioning System) and chartplotting. It uses GPS and sonar to determine your position, display it on a grid, and provide detailed underwater information.

GPS uses a constellation of satellites that continually send radio signals to the earth. 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.

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.

The following GPS functionality is currently supported by the 500 Series™ Fishfinder 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

See *Chart View* and *Introduction to Navigation: Add Maps to Your Fishfinder* for more information.

What's on the Sonar Display

The 500 Series™ Fishfinder can display a variety of useful information about the

Depth - (water depth) can be set to alarm when the water becomes too shallow.

Temperature - Water surface temperature.

Timer - Elapsed time with Temp/Speed Accessory or GPS Receiver.

Distance - Distance traveled with Temp/Speed Accessory or GPS Receiver.

Average Speed - Average speed reading with Temp/Speed Accessory or GPS Receiver.

Speed - If a GPS Receiver or Temp/Speed accessory is connected, the Fishfinder can display the speed of the boat and can keep a Triplog of nautical or statute miles traveled.

Second Sonar Return - When the sonar signal bounces between the bottom and the surface of the water and back again. Use the appearance of the second return to determine bottom hardness. Hard bottoms will show a strong second return, while soft bottoms will show a very weak one or none at all.

Cursor Dialog Box - Indicates cursor depth on the display and the depth of the bottom directly below the cursor. 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.
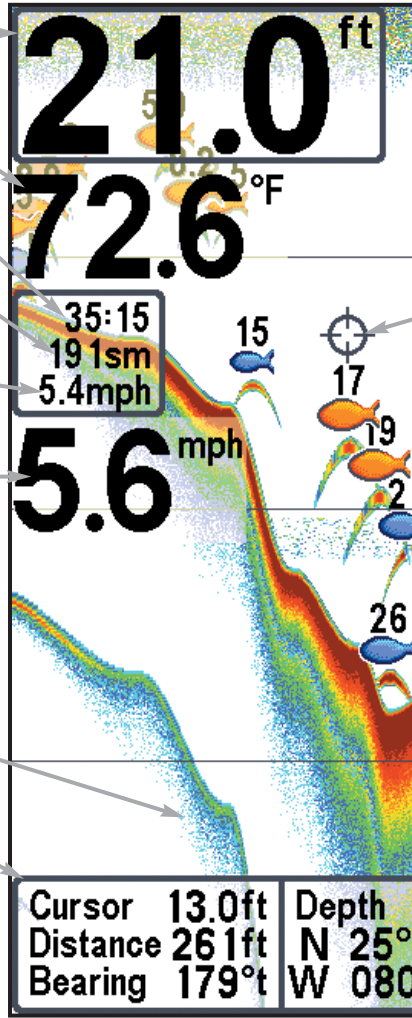
NOTE: Entries in this view that list (with Temp/Speed or GPS Receiver) are available if either device information from the GPS receiver will be displayed on the view.

area under and adjacent to your boat, including the following items:

High Sonar Intensity Return

Bait Ball

Cursor - Available in Freeze Frame and can be positioned in the Sonar View to provide depth of a sonar return and bottom depth below the cursor.

Fish - The Fishfinder displays fish as arches and/or fish icons, and can be set to alarm when a fish of a certain size is detected. When a target is detected, a Fish ID+™ symbol appears on the display with the depth displayed above it. The size of the symbol indicates the intensity of the sonar return. The unit will clearly show schools of Bait Fish as "clouds" of different shapes and sizes, depending on the number of fish and boat speed.

Thermoclines - Layers of water with different temperatures that appear at different depths and different times of the year. A thermocline typically appears as a continuous band of many colors moving across the display at the same depth.

RTS (Real Time Sonar) Window™

Structure - Where fish may be hiding.

Low Sonar Intensity Return

is connected to the 500 Series™ Fishfinder. If both devices are connected, then only the

Understanding the Sonar Display

It is important to understand the significance of the display. The display does not show a literal 3-dimensional representation of what is under the water. Each vertical band of data received by the control head and plotted on the display represents something that was detected by a sonar return at a particular time. As both the boat and the targets (fish) may be moving, the returns are only showing a particular segment of time when objects were detected, not exactly where those objects are in relation to other objects shown on the display.

The returned sonar echoes are displayed on the screen. As a new echo is received, the historical data scrolls across the screen.

Real Time Sonar (RTS™) Window

A **Real Time Sonar (RTS™) Window** appears on the right side of the display in the Sonar View only. The RTS Window™ updates at the fastest rate possible for depth conditions and shows only the returns from the bottom, structure, and fish that are within the transducer beam. The RTS Window™ plots the depth and intensity of a sonar return (see *Sonar Menu Tab: RTS Window*™).

The **Narrow RTS Window**™ indicates the sonar intensity through the use of colors. Red indicates a strong return and blue indicates a weak return. The depth of the sonar return is indicated by the vertical placement of the return on the display depth scale.
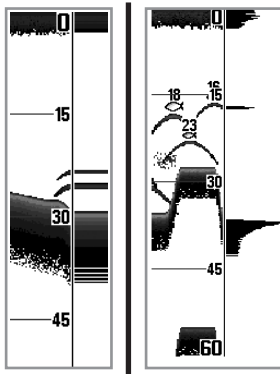
The **Wide RTS Window**™ indicates the sonar intensity through the use of a bar graph. The length of the plotted return indicates whether the return is weak or strong. The depth of the sonar return is indicated by the vertical placement of the return on the display depth scale. The Wide RTS Window™ does not use grayscale.

SwitchFire™

SwitchFire™ controls how the sonar returns are displayed in the Sonar Views. SwitchFire**™** settings are available in the Sonar Menu Tab.

To see the maximum sonar information available within the transducer beam so more fish arches and better jig tracking are shown, choose Max Mode.

To see less clutter and more fish size accuracy interpreted from the transducer beam, choose Clear Mode. See *Sonar Menu Tab: SwitchFire*™ for more information.

Freeze Frame and Active Cursor

Freeze Frame and Active Cursor - Press any arrow on the 4-WAY Cursor Control key, and the screen will freeze and a cursor will be displayed. Use the 4-WAY Cursor Control key to move the cursor over a sonar return, and the depth of the sonar return will be displayed at the bottom of the screen in the cursor dialog box.

The RTS Window™ continues to update in Freeze Frame. To return to a scrolling display and exit Freeze Frame, press the EXIT key. Freeze Frame is available in the Sonar, Split Sonar, and Sonar Zoom Views.

Instant Image Update

Instant Image Update - You can change a variety of sonar menu settings (such as Sensitivity or Upper Range), and the adjustments will be shown instantly on the screen.

Bottom Presentation

As the boat moves, the unit charts the changes in depth on the display to create a profile of the **Bottom Contour**. The type of bottom can be determined from the return charted on the display. A **Hard Bottom** such as compacted sediment or flat rock appears as a thinner line across the display. A **Soft Bottom** such as mud or sand appears as a thicker line across the display. **Rocky Bottoms** have a broken, random appearance.

Bottom Contour Profile with RTS Window™

Rocky Bottom

Hard Bottom

Soft Bottom
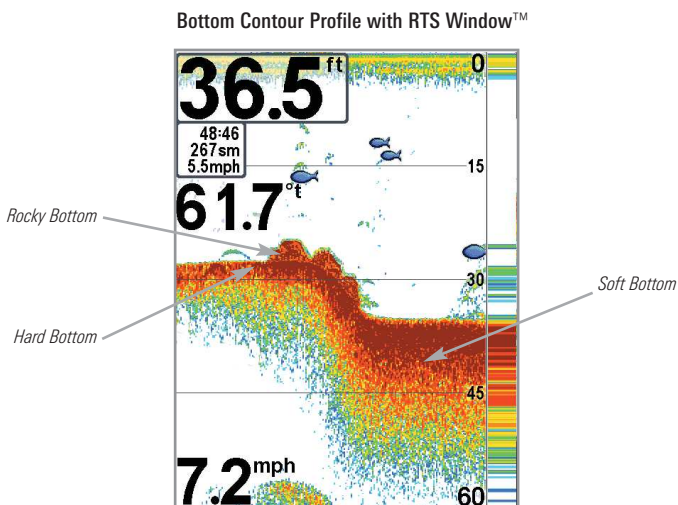
The sonar returns from the bottom, structure, and fish can be represented as either **WhiteLine**™ or **Structure ID**®. See *Sonar Menu Tab: Bottom View* for details on how to set the bottom view.

Structure ID® represents weak returns in blue and strong returns in red.
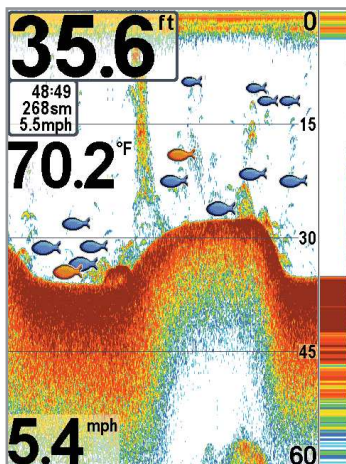
WhiteLine™ highlights the strongest sonar returns in white, resulting in a distinctive outline. This has the benefit of clearly defining the bottom on the display.

What's on the Sonar Display
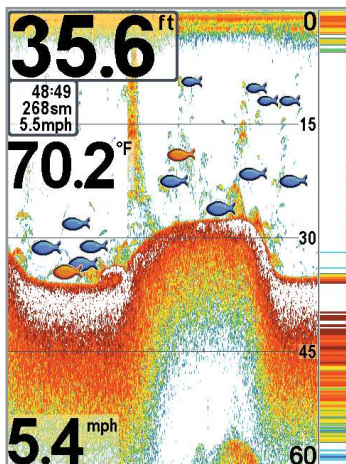
What's on the Down Imaging™ Display

Down Imaging™ uses its unique transducer and sonar technology to provide definition profiling beams produce the detailed sonar data that you see on the can interpret the structure and bottom contour, including the following items:

Depth - (water depth) can be set to alarm when the water becomes too shallow.

Temperature - Water surface temperature.

Bottom Return - Use the appearance of the bottom return to determine bottom hardness. Rock and gravel provide a clearer sonar return than mud and sand because hard objects reflect sonar better than soft objects.

Topography Changes - The light part of the display shows where the beam is hitting hard bottom or rising terrain. The dark part of the display indicates soft bottom (sand, mud) or descending terrain.

Speed - If a GPS Receiver or Temp/Speed accessory is connected, the Fishfinder can display the speed of the boat and can keep a Triplog of nautical or statute miles traveled.

NOTE: Entries in this view that list (with Temp/Speed or GPS Receiver) are available if either the information from the GPS receiver will be displayed on the view.

information about the area directly below your boat. The razor-thin, high-display. Down Imaging™ reveals a variety of recognizable features so that you

Upper Range

Clouded Area may indicate a bait ball and **White Streaks** may indicate fish.

Shadows- Result from a lack of reflected sonar from a particular area and can be as valuable for interpretation than the sonar reflected by the object itself. Use shadows to help you see the image in 3 dimensions, oriented in space. You can gain insight into the actual shape of an object, or the depth to which it has sunk into the bottom, through shadows on the display. Objects standing on the bottom cast a sonar shadow. The longer the shadow, the taller the object. Fish also cast shadows. You can use the shadow to interpret how close the fish is to the bottom.

Structure

Lower Range

device is connected to the 500 Series™ Fishfinder. If both devices are connected, then only
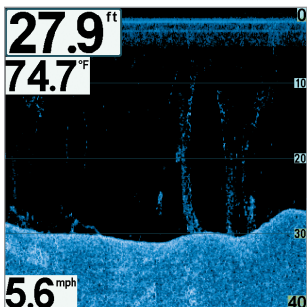
Understanding the Down Imaging™ Display

The images you see on the Down Imaging™ display are produced using sonar technology. Each time the unit pings, a strip of data representing all the echoes received by the transducer are put together on the display to form the image that you see. Like traditional 2D Sonar, the sonar history scrolls left across the screen.

Interpreting the Display

Down Imaging™ beams "illuminate" the bottom contour, structure, and fish. The beams are wide (side to side) but very thin front to back.

Use the light and dark parts of the display to interpret the objects under your boat as follows:

- **Dark shades** represent soft returns (mud, sand) or descending terrain.

- **Light shades** represent denser terrain (timber, rocks) or rising terrain. A very hard bottom may appear as **white** on the display.

- **White Streaks** or **Clouds** may represent fish on the display.

- **Shadows** are not caused by light but by the lack of a sonar return. Objects standing on the bottom cause a sonar shadow to appear on the display. The longer the shadow, the taller the object. Fish may also cast shadows. You can use the shadow to interpret where the fish or object is located in relation to the bottom.

Down Imaging™ Sensitivity

Use **Imaging Sensitivity** to control how the sonar returns appear on the display. Increase the sensitivity to reveal weaker returns that may be of interest, especially in very clear water or greater depths. Decrease the Imaging Sensitivity to eliminate the clutter from the display that is sometimes present in murky or muddy water. See *Imaging Sensitivity* or *Down Imaging*™ *Sensitivity* for more information.

Freeze Frame and Active Cursor

Freeze Frame and Active Cursor - Press any arrow on the 4-WAY Cursor Control key, and the screen will freeze and a cursor will be displayed. Use the 4-WAY Cursor Control key to move the cursor over a sonar return, and the depth of the sonar return will be displayed in the cursor dialog box.

Zoom: Use the zoom feature on your control head to see the returns near the cursor location at a higher magnification. See *Views: Down Imaging*™ *View* for more information.

Views

The sonar and navigation information from your Fishfinder is displayed on your screen in a variety of easy-to-read views. There are many views available on your Fishfinder.

- **Default View:** When you first power up the 587ci HD/597ci HD control head, Sonar View will be the default view. When you first power up the 597ci HD DI, the Chart/Down Imaging™ Combo View will be the default view.

- **Cycle:** When you press the VIEW key repeatedly, 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.

- **Customize:** You can display or hide any view to suit your fishing preferences. See the following pages for more information about each View.

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 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. The digital readouts on the Sonar View can be customized. See *Setup Menu Tab: Select Readouts* for more information.

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

2. Press the DOWN key to highlight Select Readouts, and press the RIGHT Cursor key to access the Select Readouts submenu.

   NOTE: If the Select Readouts option does not appear under the Setup tab, change the User Mode to Advanced.

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. (Course, Navigation, Off, Position, Speed, Temperature, Time+Date, Triplog, Voltage)

Sonar View

Sonar View presents a historical log of sonar returns. The most recent sonar returns are charted on the right side of the window. As new information is received, the historical information scrolls left across the display.

- **Upper and Lower Depth Range** numbers indicate the distance from the surface of the water to a depth range sufficient to show the bottom.

- **Depth** is automatically selected to keep the bottom visible on the display, although you can adjust it manually as well (see *Sonar Menu Tab*).

- **Digital Readouts** shown on the display will change based on the Select Readouts settings or the optional-purchase accessories attached (see *Setup Menu Tab: Select Readouts*).

- **Freeze Frame -** Use the 4-WAY Cursor Control key to freeze the display and move the cursor over a sonar return. The depth of the sonar return will be displayed at the bottom of the screen in the cursor information box.

Sonar View
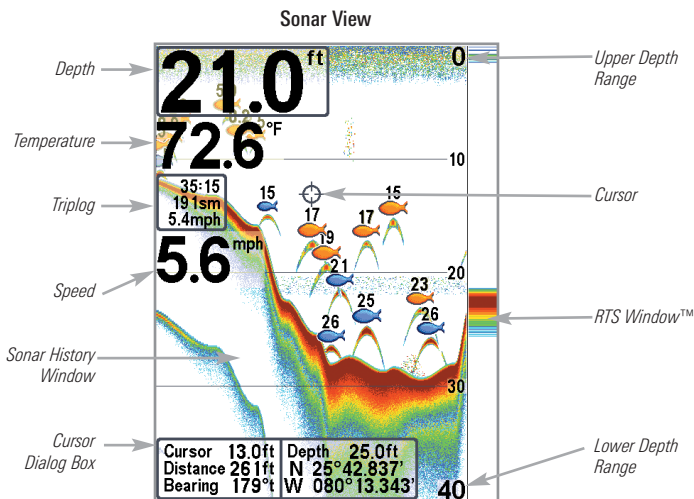
NOTE: If the Depth number is flashing, it means that the unit is having trouble locating the bottom. This usually happens if the water is too deep, the transducer is out of the water, the boat is moving too fast, or for any other reason that the unit can't accurately receive continuous data.

Sonar Zoom View

Sonar Zoom View provides a magnified view of the bottom and structure. The Sonar Zoom View makes it easier to see separate sonar returns that would usually be displayed close together, such as those caused by fish suspended close to the bottom or within structure.

- The **Zoom Level**, or magnification, is displayed in the lower left corner of the display. Press the + or - ZOOM keys to increase or decrease the zoom level.

- The **Zoomed View** is displayed on the left side of the screen. As the depth changes, the zoomed view updates automatically.

- The **Full Range View** is displayed on the right side of the screen. The Full Range View includes the Zoom Preview Box, which shows where the zoomed view is in relation to the full range view.

- The **Upper and Lower Depth Range** numbers indicate the high and low range of the water which is being viewed.
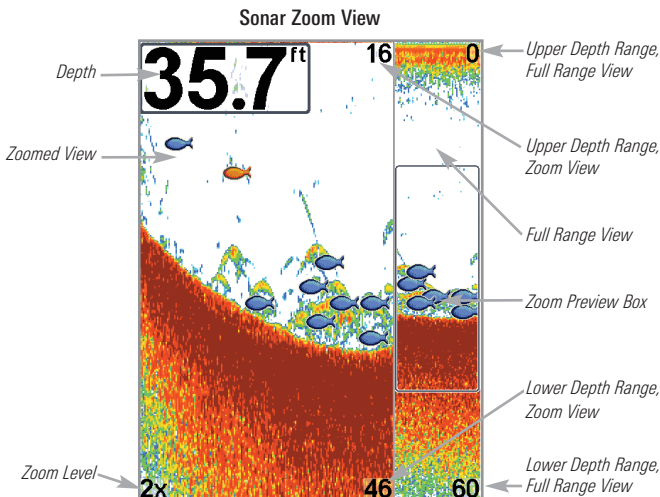
Sonar Zoom View

Digital depth is displayed in the upper left hand corner. The digital readouts in the Sonar Zoom View cannot be customized; therefore, information such as water temperature and voltage are unavailable in the Sonar Zoom View.

Split Sonar View

Split Sonar View displays sonar returns from each down beam frequency on separate sides of the screen. You can use the Split Sonar View to make side by side comparisons between the sonar returns from both beams.

- **DualBeam PLUS™ models (587ci HD/597ci HD)** display sonar returns from the 83 kHz wide beam on the left side of the screen and sonar returns from the 200 kHz narrow beam on the right side of the screen.

- **Down Imaging™ models (597ci HD DI)** display sonar returns from the 455 kHz narrow beam on the left side of the screen and sonar returns from the 200 kHz wide beam on the right side of the screen.

- **Depth** is displayed in the upper left hand corner.

- The **Digital Readouts** in the Split Sonar View cannot be customized; therefore, information such as water temperature and voltage are unavailable in the Split Sonar View.

200/83 kHz Split Sonar View

Depth — **37.8** ft

0 ← *Upper Depth Range*

15

200 kHz Sonar History Window

30

83 kHz Sonar History Window

45

Lower Depth Range

83kHz   60 200kHz   60
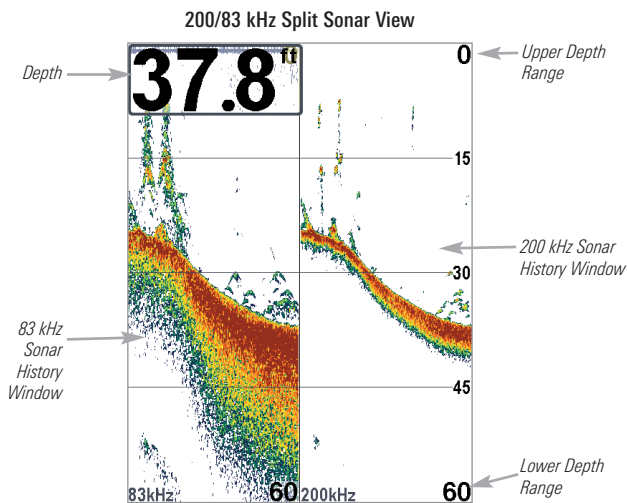
Big Digits View

Big Digits View provides digital data in a large, easy-to-see format.

- **Digital Readouts:** Depth is always displayed. Readouts for temperature, speed, and Triplog information are displayed automatically if the appropriate accessory is connected to the Fishfinder.

  NOTE: The digital readouts in the Big Digits View cannot be customized.

- The **Triplog** shows distance traveled, average speed, and time elapsed since the Triplog was last reset.

Big Digits View

Depth

Temperature

Speed

Timer shows the time elapsed since Triplog was last reset

Distance is the distance traveled since the Triplog was last reset

Voltage displays the battery voltage

Average Speed shows the speed since the Triplog was last reset
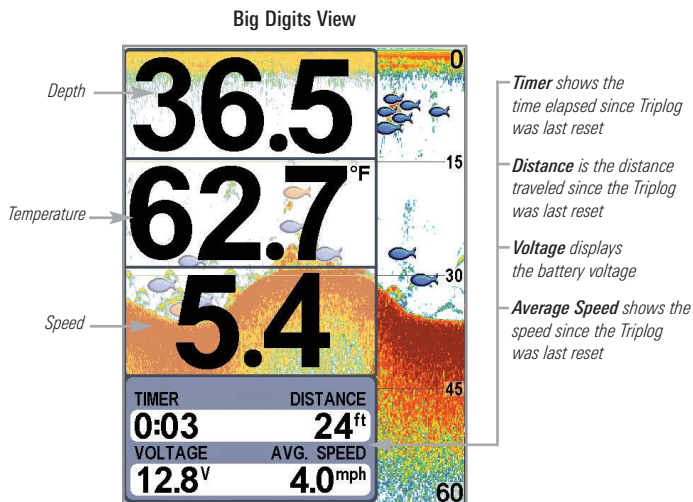
Down Imaging™ View

(Down Imaging™ models only [597ci HD DI])

Down Imaging™ View uses the razor-thin, high-definition profiling beams to produce the detailed sonar data that you see on the display. Sonar returns are charted on the right side of the display. As new information is received, the historical information scrolls left across the display. See *What's on the Down Imaging™ Display* for more information.

- **Down Imaging™ X-Press™ Menu:** Press the MENU key once to access the Down Imaging™ X-Press™ Menu. You can set the sensitivity of the sonar, the chart scrolling speed, the display color palette, and the Upper Range and Lower Range (see *Down Imaging™ X-Press™ Menu*).

- **Freeze Frame:** Press any arrow on the 4-WAY Cursor Control key and the Down Imaging™ View will freeze and a cursor will appear on the screen. Use the 4-WAY Cursor Control key to move the cursor over a sonar return, and observe the following:

  - The **depth of the sonar return** at the cursor location will be displayed in the cursor information box.

  - **Zoom+:** Press the ZOOM+ key, and a zoom box will appear and magnify the area you choose, providing more detail in the individual sonar returns. The zoom scale will increase or decrease as you press + or - repeatedly. Press EXIT to remove the zoom box and return to Down Imaging™ View.

Down Imaging™ View

Depth — 27.9 ft

Temperature — 74.7 °F

Sonar History Window

Bottom Return

Speed — 5.6 mph

Upper Depth Range

Surface Clutter

White Streaks (possibly vegetation or fish)

Lower Depth Range

10
20
30
40
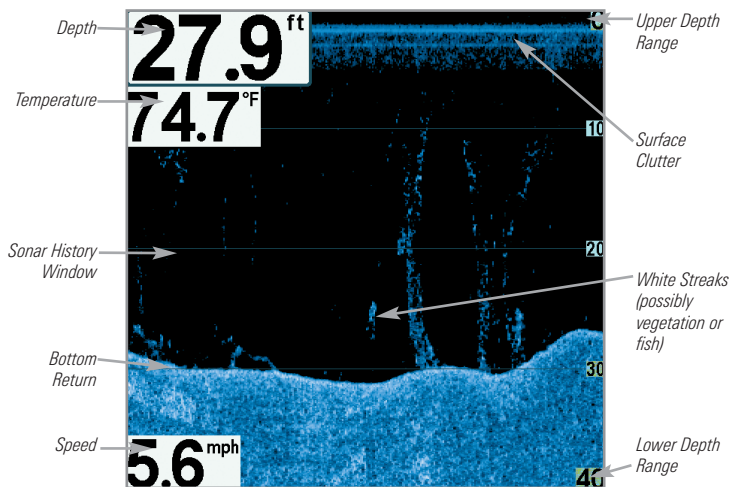
*NOTE: See **What's on the Down Imaging™ Display** and **Down Imaging**™ **X-Press**™ **Menu** for more information.*

Circular Flasher View

Circular Flasher View provides two ways to view sonar data in traditional flasher format. The view is controlled by the Ice Fishing Mode menu option in the Sonar Menu Tab.

- **When Ice Fishing Mode is off**, the Circular Flasher View displays Real Time Sonar (RTS™) data in a traditional flasher format.

- **When Ice Fishing Mode is on**, the Circular Flasher View displays the sonar data in traditional flasher format with additional features including Zoom and Depth Cursor.

Set the Circular Flasher View Mode

1. Press the MENU key twice.

2. Press the RIGHT Cursor key until the Sonar Menu Tab is selected.

3. Press the DOWN Cursor Key to select Ice Fishing Mode. Press the RIGHT or LEFT Cursor key to select On or Off (Default = Off). See *Sonar Menu Tab* for more information.

Ice Fishing Mode: Off

When Ice Fishing Mode is off, the Circular Flasher View displays Real Time Sonar (RTS™) data in a traditional flasher format.

- **Flasher X-Press**™ **Menu:** Press the MENU key once in the Circular Flasher View. Use the X-Press™ Menu to set the Sensitivity, Upper Range, and Lower Range.

- **Depth** and **temperature** are always displayed.

- The **Digital Readouts** cannot be customized.
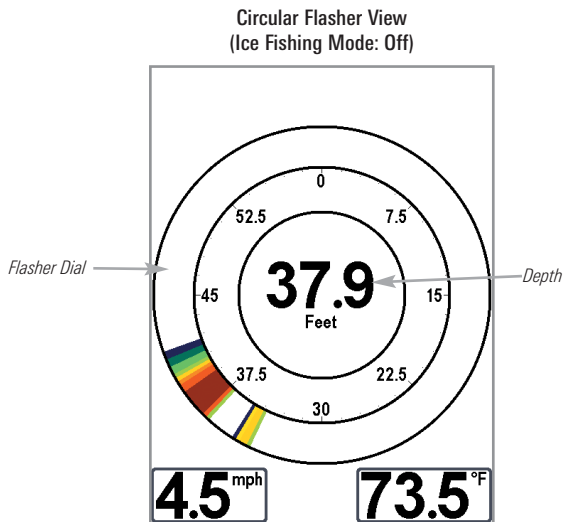
Circular Flasher View
(Ice Fishing Mode: Off)

Views

When Ice Fishing Mode is on, the Circular Flasher View displays the sonar data in traditional flasher format with additional features including Zoom and Depth Cursor.

- **Sensitivity:** When you turn on Ice Fishing Mode, the fishfinder's sensitivity settings are adjusted automatically to accommodate ice fishing conditions. These settings will apply to the other Sonar Views until you turn off Ice Fishing Mode (see *Set the Circular Flasher View Mode* in this section).

- **Flasher X-Press**™ **Menu:** Press the MENU key once in the Circular Flasher View. Use the X-Press™ Menu to set the Sensitivity, Upper Range, Lower Range, and Color Palette.

- **Color Palettes:** The color preview bar in the center of the display indicates the current palette, and the weak to strong sonar return range is displayed from left to right. To change the color palette, see *Flasher X-Press*™ *Menu: Color Palette*.

- The **Digital Readouts** cannot be customized.

Circular Flasher View
(Ice Fishing Mode: On)

Battery Icon indicates the percentage of battery power

Zoom Setting (Off) — Zoom 0x

Flasher Dial

0

52.5   7.5

37.9
Feet

-45   15

37.5   22.5

30

Depth

Units of Measurement

Current Color Palette

Sensitivity (see Flasher X-Press™ *Menu)*

Sensitivity: 17

Noise Filter (see Sonar Main Menu)

Noise Filter: Low   200hHz

Beam Select (see Sonar Main Menu)
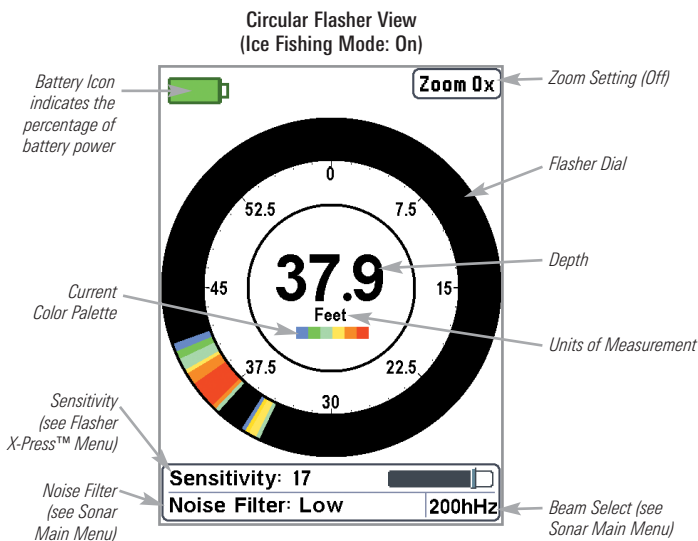
To activate the Depth Cursor:

Use the Depth Cursor to identify depth on the flasher display.

1. **Set up:** Press the VIEW key repeatedly until the Circular Flasher View is displayed on the screen. Turn on the Ice Fishing Mode (see *Sonar Menu Tab*).

2. **Activate:** Press the DOWN Cursor key, and the purple cursor line will appear on the display.

3. **Adjust the Cursor:** Press the UP or DOWN Cursor keys repeatedly until you reach the chosen depth reading. The depth reading of the cursor is displayed in the top, right corner of the view.

4. **Close the Cursor:** Press the EXIT key.

Circular Flasher View
with the Depth Cursor

Depth Cursor Reading

Depth Cursor
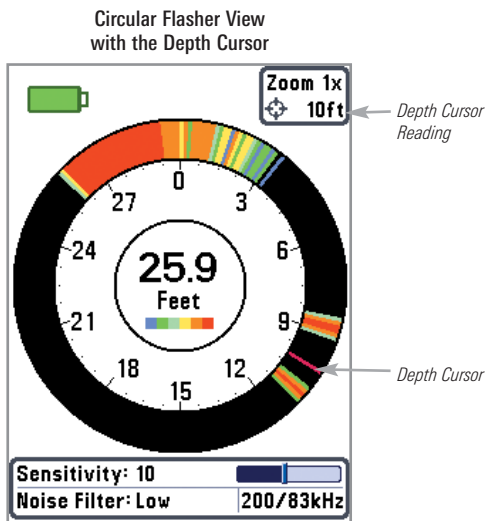
To activate Flasher Zoom:

The Zoom feature displays a 2x magnified view of the area you choose on the flasher display.

1. **Set up:** Press the VIEW key repeatedly until the Circular Flasher View is displayed on the screen. Turn on the Ice Fishing Mode (see *Sonar Menu Tab*).

2. **Activate:** Press the +Zoom key. The Zoom upper limit and lower limit lines will appear on the display.

3. **Adjust the Zoom Range:** Press the RIGHT or LEFT Cursor keys repeatedly to adjust zoom range and select the area you want to magnify. The zoomed view is shown on the right side of the flasher dial between two lines. The normal view is shown on the left side of the flasher dial.

4. **Close Zoom:** Press the – Zoom key.

Circular Flasher Zoom

Normal View (reading the full depth of the water column)

Zoom Line (upper limit)

0
25.5   4.5
21   9
21.2
Feet
16.5   10.5
15   12
13.5

Zoom Line (lower limit)

Zoom View (2X magnification)

Press the RIGHT or LEFT Cursor key to change the Zoom Range.
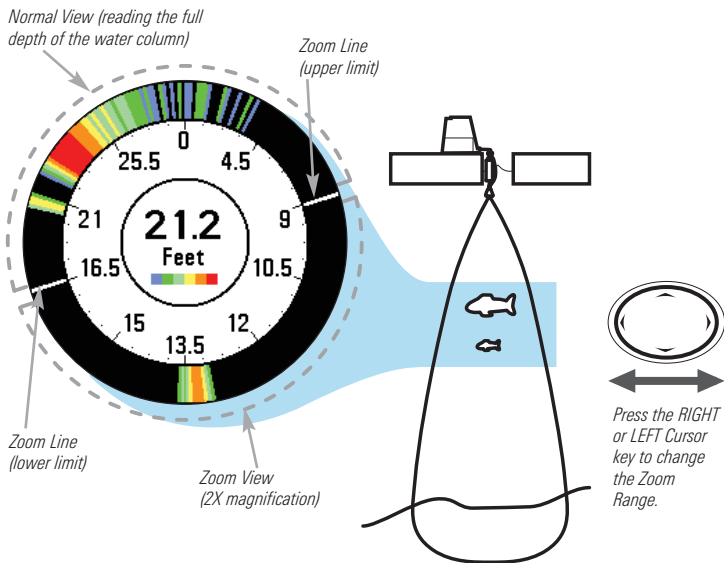
Snapshot and Recording View

The **Snapshot and Recording View** displays the screen snapshots and recordings that are saved on the optional-purchase SD memory card installed in the control head. Use this view to review the snapshot and recording file details, start recording, and adjust the recording settings.

- **Activate Screen Snapshot:** Select Screen Snapshot from the Setup Menu Tab, and select On. Also, install an optional-purchase SD memory card in the control head, and make sure Snapshot and Recording View is set to Visible on the Views Menu Tab.

- **Scroll and View:** Use the UP and DOWN Cursor keys to scroll through the saved Screen Snapshots and Recordings. The active file is highlighted with arrows. Press the RIGHT Cursor key to view the file.

- **Snapshot and Recording X-Press™ Menu:** Press the MENU key once in this view to open the X-Press™ Menu. Use the X-Press™ Menu to Start Recording, Delete Images, or adjust the Recording and Playback settings (see *Recording and Playback* or *Snapshot and Recording X-Press™ Menu*).

Snapshot and Recording View

Highlighted Screen Snapshot

File Name

S000 12.PNG

Time and Date the Screen Snapshot or Recording was taken.

11:34:11 AM
6/14/08

N 25°42.725'
W 080°13.340'

Latitude/Longitude Position of Waypoint

Press the UP or DOWN Cursor keys to scroll through saved screen snapshots and recordings.

Saved Recording

R00003

0   1.8GB

Total amount of space on card
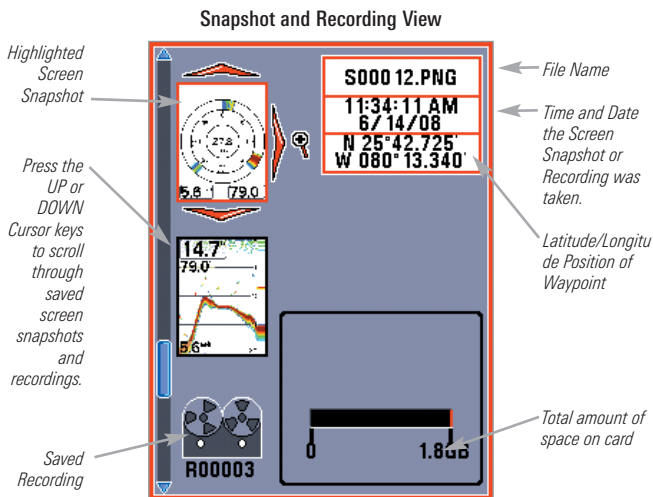
Screen Snapshots

Screen Snapshots are saved pictures of the view on the screen. The screen snapshot will include the menus, dialog boxes, warnings, and messages that were active when the screen snapshot was taken. Saved Screen Snapshots can be viewed from the Snapshot and Recording View or Chart View.

The Screen Snapshot feature is available when an optional-purchase SD memory card is installed and Screen Snapshot is On (see *Setup Menu Tab: Screen Snapshot*).

Make a Screen Snapshot

Waypoint saved at Cursor Location

Screen Snapshot Confirmation

File Name
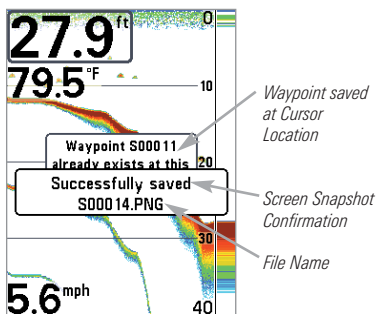
Make a Screen Snapshot:

1. Activate Screen Snapshot and install an SD memory card.

2. From any view or cursor location you want to capture, press the MARK key. The screen will pause while the image is saved.

A waypoint will also be created at the boat or active cursor location. The screen snapshot shares the same file name (.PNG).

Delete a Screen Snapshot

From Snapshot and Recording View, select Delete Image from the X-Press™ Menu.
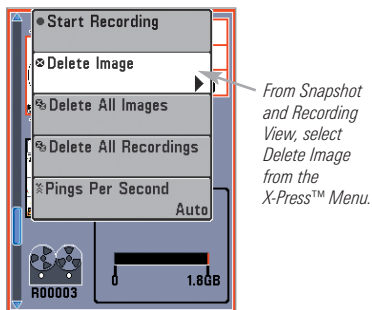
Delete a Screen Snapshot:

1. From the Snapshot and Recording View, press the UP or DOWN Cursor keys to scroll through the saved files and highlight a snapshot file.

2. Press the Menu key once, and select Delete Image from the X-Press™ Menu.

3. Press the RIGHT Cursor key.

NOTE: Navigation is not affected by the Screen Snapshot feature. Also, if Screen Snapshot is enabled, but a GPS receiver is not 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.

View a Screen Snapshot

Snapshot File Name

Time + Date of Snapshot

Waypoint Position

Highlighted Snapshot File

SD memory card storage available

View a Screen Snapshot in Chart View

Screen Snapshot Icon and Waypoint Name

Thumbnail Preview (press the INFO key to view at full size)
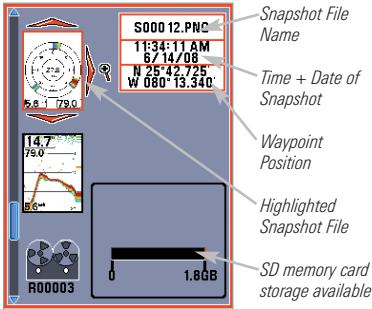
View a saved Screen Snapshot from Snapshot and Recording View:

1. From the Snapshot and Recording View, press the UP or DOWN Cursor keys to scroll through the saved files and highlight a snapshot file.

2. Press the RIGHT Cursor key.

View a saved Screen Snapshot from Chart View:

1. In Chart View, 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 Screen Snapshot will be displayed on the screen.

2. Press the INFO key, and select View Snapshot.

3. Press the EXIT key to return to Chart View.

Notes about Screen Snapshots:

- A **border** around the full screen indicates that the view is a saved screen snapshot and not a "live" view.

- If you press the INFO key, and the snapshot file connected to the icon is not saved on the installed SD memory card, the chart information box will display instead of the screen snapshot.

- Use an optional-purchase SD memory card reader connected to a PC to view the saved screen snapshot data files on your optional-purchase SD memory card (see **humminbird.com** for details). You will notice that a .DAT (or a .TXT) file is created for every .PNG screen snapshot. This data file is required for viewing the screen snapshots from your control head, so don't delete these files.

Recording and Playback

The **Recording** feature records active sonar information. When the recording is played back, the views that were active during the recording are available in Playback. The **Recording and Playback** feature is available when an optional-purchase SD memory card is installed and Screen Snapshot is On (see *Setup Menu Tab: Screen Snapshot)*. Saved Recordings can be played back from the Snapshot and Recording View.

Start Recording

From Snapshot and Recording View, select Start Recording from the X-Press™ Menu.

Slider Bar
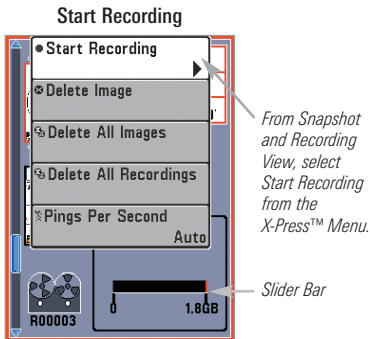
Start recording:

1. From the Snapshot and Recording View, press the MENU key once to open the Snapshot and Recording X-Press™ Menu.

2. Highlight Start Recording, and press the RIGHT Cursor key. A waypoint will also be created at the boat location, and the recording shares the same file name (.SON).

Stop recording:

1. In any view, press the MENU key once to open the Snapshot and Recording X-Press™ Menu.

2. Highlight Stop Recording and press the RIGHT Cursor key.

Notes about Recording:

- **While recording**, press the EXIT key to exit the Snapshot and Recording X-Press™ Menu and scroll to a different view. Recording will continue.

- The **slider bar** at the bottom of the Snapshot and Recording View shows the recording progress and remaining space on the SD memory card.

- **Pings Per Second:** For maximum performance, keep the Pings Per Second setting on Auto (see *Snapshot and Recording X-Press™ Menu).*

- **Viewing saved Screen Snapshots and Recording Playback** are not available while in recording mode.

Playback a Recording

Recording File Information

Highlighted Recording File

Change Playback Settings

"Playback" indicates the control head is playing a saved recording.

Open the X-Press™ Menu to adjust Playback settings.

You can also use Freeze Frame and mark waypoints.
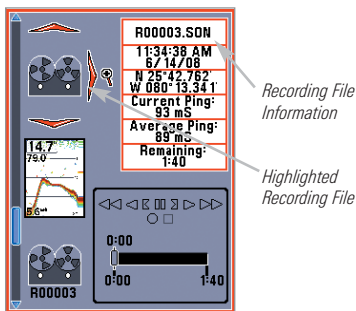
Playback a Recording:

1. From the Snapshot and Recording View, press the UP or DOWN Cursor keys to scroll through the saved files and highlight a saved Recording.

2. Press the RIGHT Cursor key.

Change Playback Settings:

1. Press the MENU key once to open the Snapshot and Recording X-Press™ Menu.

2. Use the X-Press™ Menu to adjust the Sonar Recording's Sensitivity, Upper Range, Lower Range, and the Playback Speed. See *Snapshot and Recording X-Press™ Menu* for details.
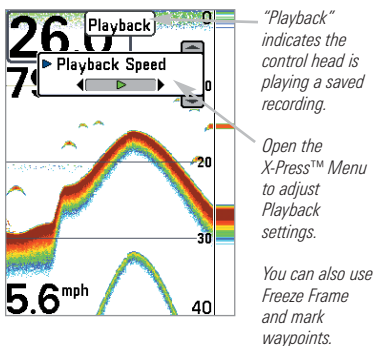
Stop Playback:

1. Press the MENU key once to open the Snapshot and Recording X-Press™ Menu.

2. Highlight Stop Playback, and press the RIGHT Cursor key.

Delete a Recording
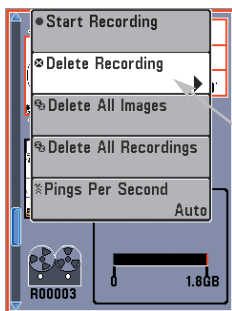
From Snapshot and Recording View, select Delete Recording from the X-Press™ Menu.

Delete a Recording:
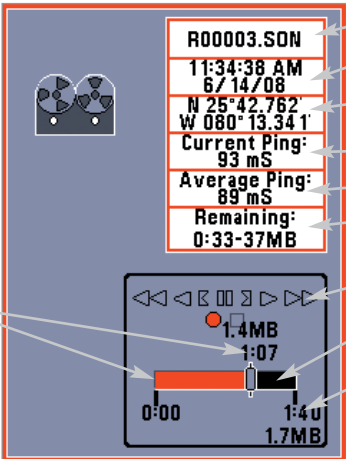
1. From the Snapshot and Recording View, press the UP or DOWN Cursor keys to scroll through the saved files and highlight a saved Recording.

2. Press the Menu key once, and select Delete Recording from the X-Press™ Menu. Press the RIGHT Cursor key.

Notes about Playback:

- **"Playback"** will flash periodically on the screen to indicate that the control head is playing a saved recording and not a "live" view.

- **Navigation** is not affected by the Sonar Recording feature, but any active navigation is cancelled and thumbnails and icons disappear when Playback begins or ends.

- **Playback is paused** automatically at the end of the recording.

- **Freeze Frame:** Press the 4-WAY Cursor Control key to pause Playback and move the Active Cursor to a location on the sonar view. The Cursor dialog box will show the depth and information for the location you choose. Press Exit to resume Playback.

- **Press the MARK key during Playback** to save a Screen Snapshot and/or mark a waypoint in the view or active cursor location you choose.

Recording Playback

Name of recording

R00003.SON

Time and Date recording started

11:34:38 AM
6/14/08

Position where recording started

N 25°42.762'
W 080°13.341'

Current Ping Rate

Current Ping:
93 mS

Average Ping Rate

Average Ping:
89 mS

Amount of time remaining to play

Remaining:
0:33-37MB

Playback speed icons

Amount of time already played

⊲⊲ ⊲ ◁ Ⅱ ▷ ▷ ▷▷

●1.4MB
1:07

0:00   1:4u
1.7MB

Amount of time remaining to play

Overall length of recording

Bird's Eye View

Bird's Eye View shows a 3D perspective view of the track and the chart's land contour from a point above and behind the boat (the eye point). As the boat turns, the eye point moves to follow the boat.

- **To shift the eye point position** so that you can look off to the sides, or even behind the boat: Press the RIGHT or LEFT Cursor keys to turn the eye point right or left. Press the UP Cursor key to move the eye point forward, and press the DOWN Cursor key to move the eye point backward.

- Press the **EXIT key** to move the eye point back to its original position behind and above the boat.

Bird's Eye View

Depth

N 25°42.678'
W 080°13.340'

Latitude and Longitude Position of Boat

Land Contours

Boat Icon

Speed of Boat

70.2°F 5.6ᵐᵖʰ 359°t

Bearing of Boat with Respect to True North
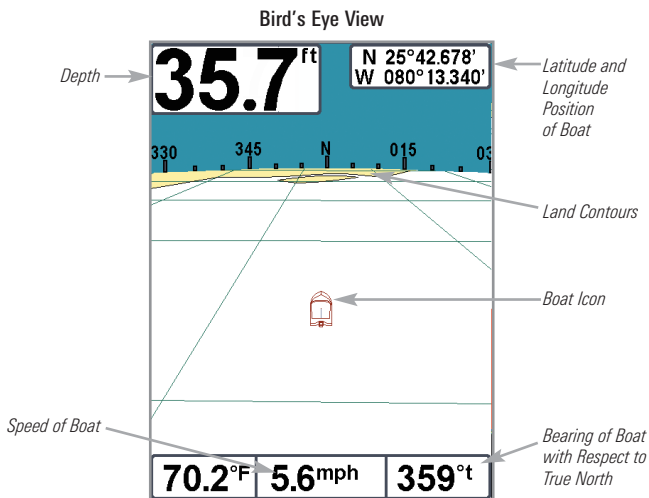
Chart View

Chart View shows cartography from the built-in UniMap™ or an optional SD card 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.

- **Shift/Pan:** Use the 4-WAY Cursor Control key to shift/pan the chart to another area.

- **Zoom:** Press the ZOOM (+/-) keys to zoom in and out.

- **Info:** Press the INFO key to get information on the chart objects near the cursor.

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

Depth

Cartography

Map Scale

Speed of Boat

Water Surface Temperature

Bearing of Boat with Respect to True North
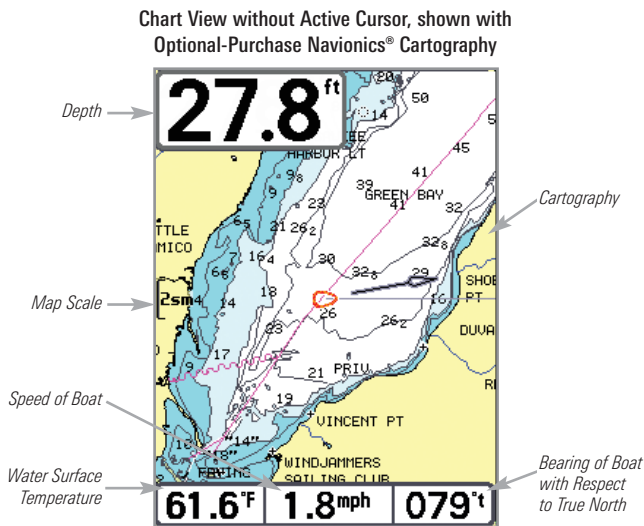
Chart View with Active Cursor, shown with
Optional-Purchase Navionics® Cartography

Depth

Cartography

Map Scale

Active Cursor

*Latitude and
Longitude
Position
of Cursor*

*Distance to the
Cursor and
Bearing
to Cursor*

*Bearing of Boat
with Respect
to True North*
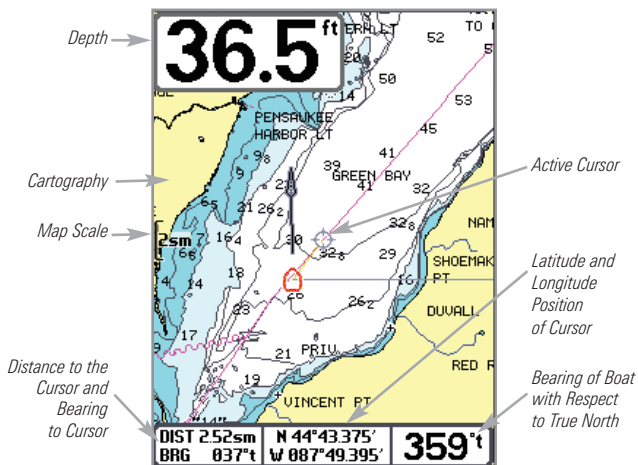
Chart/Sonar Combo View

Combo View is displayed as a split screen, with Chart View on the left and Sonar View on the right side of the screen. To change the width of the Sonar Window, press the MENU key once and select Sonar Window from the X-Press™ Menu.

Combo View

Depth

Cartography

Map Scale

Water Surface Temperature

Sonar Window

Speed of Boat

Bearing of Boat with Respect to True North

36.8 ft

MIAMI

1sm

58.9°F **5.6mph** **359°t**

0

15

30

45

60
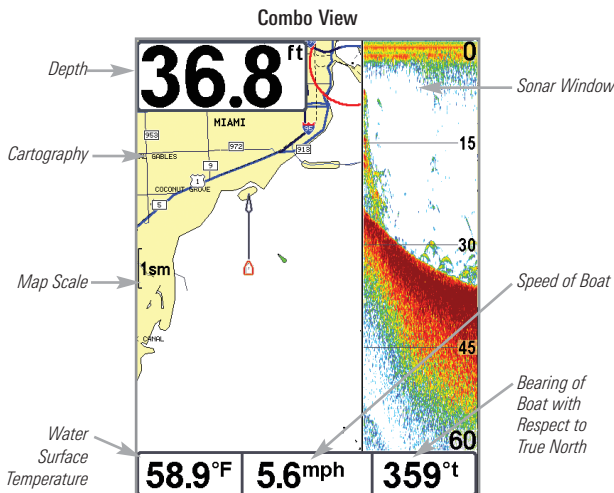
Chart/Down Imaging™ Combo View

(Down Imaging™ models only [597ci HD DI])

Chart/Down Imaging™ Combo View is displayed as a split screen with Chart View on the left and Down Imaging™ sonar information on the right side of the view. To change the width of the Down Imaging™ Window, press the MENU key once and select Sonar Window from the X-Press™ Menu.

Chart/Down Imaging™ Combo View

Depth

Chart Window

Digital Readouts

Upper Depth Range

Down Imaging™ Window

Lower Depth Range
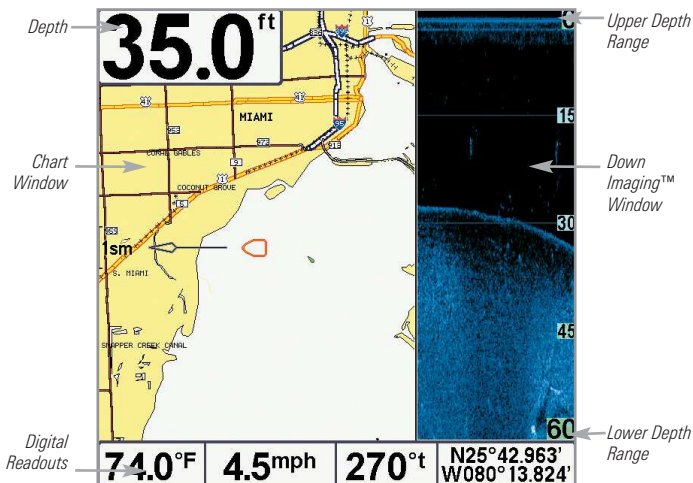
Down Imaging™/Sonar Combo View

(Down Imaging™ models only [597ci HD DI])

Down Imaging™/Sonar Combo View shows traditional Sonar information on the top of the screen and Down Imaging™ sonar information on the bottom.

- **X-Press™ Menu:** Press the MENU key once to access the Down Imaging™ X-Press™ Menu. You can set the sensitivity of the sonar, the chart scrolling speed, and the display color palette (see *Down Imaging™ X-Press™ Menu and Sonar X-Press™ Menu*).

- **Freeze Frame:** Press any arrow on the 4-WAY Cursor Control key and the view will freeze and a cursor will appear on both views on the screen. Use the 4-WAY Cursor Control key to move the cursor over a sonar return, and the depth of the sonar return will be displayed in the cursor dialog box.

Down Imaging™/Sonar Combo View

Depth — **38.0**^{ft}

Upper Depth Range

Traditional Sonar Window

Down Imaging™ Sonar Window

Lower Depth Range
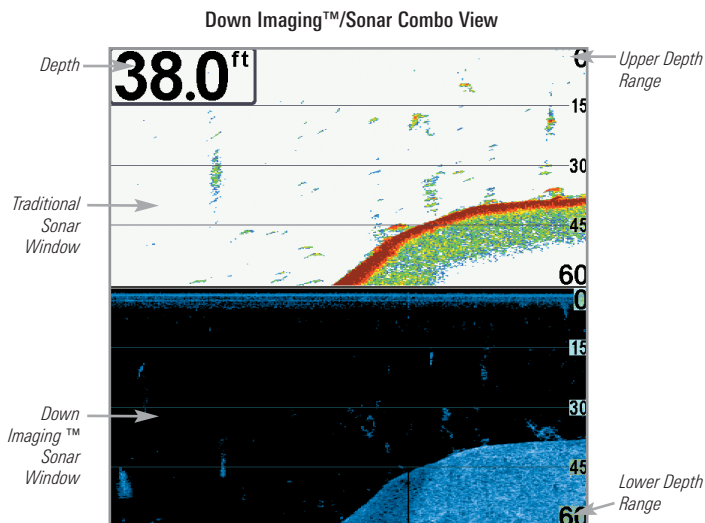
View Orientation

Both Chart and Combo Views allow you to choose the orientation of the view (see *Navigation Menu Tab: Chart Orientation*). In both orientations, the view pans automatically so that the boat is always centered on the display.

- **North-Up:** True North is shown at the top of the display. Objects located to the north of the boat are drawn above the boat.

- **Course-Up:** The direction of motion of the boat is shown at the top of the display. Objects ahead of the boat are drawn above the boat.

  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 or Combo Views there are several cartography-related functions that you can access using various keys.
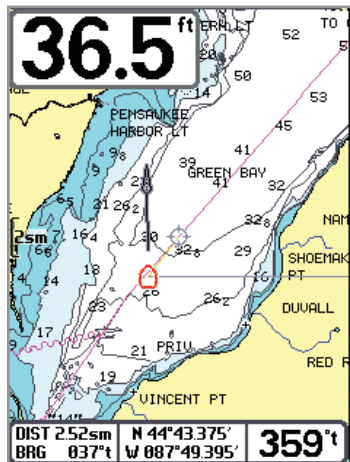
Chart View with Cursor Present,
shown with Optional-Purchase
Navionics® Cartography

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 temperature and speed boxes in the lower left corner are replaced with the distance and bearing from the boat to the cursor position and the latitude/longitude coordinates of the cursor.

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: Use 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.

Chart Info
Nearest Port ▶
Nearest Tide Station
Nearest Current Station
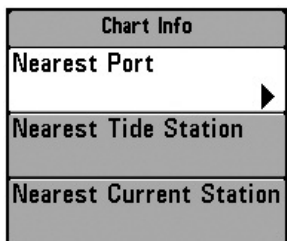
If the cursor is not active, the Chart Info submenu will appear. Use the 4-WAY Cursor Control key to select the nearest port, the nearest tide station, or the nearest current station and see information about any of these objects.

NOTE: The built-in UniMap™ does not contain any Port, Tide, or Current information. This information is only available from optional-purchase SD memory 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 500 Series™ Fishfinder 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 Fishfinder can store up to 3000 waypoints.

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 500 Series™ Fishfinder 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 500 Series™ Fishfinder can store up to 50 saved tracks, each containing 20,000 trackpoints. The current track represents your actual path so far.

Waypoints, Routes, and Tracks
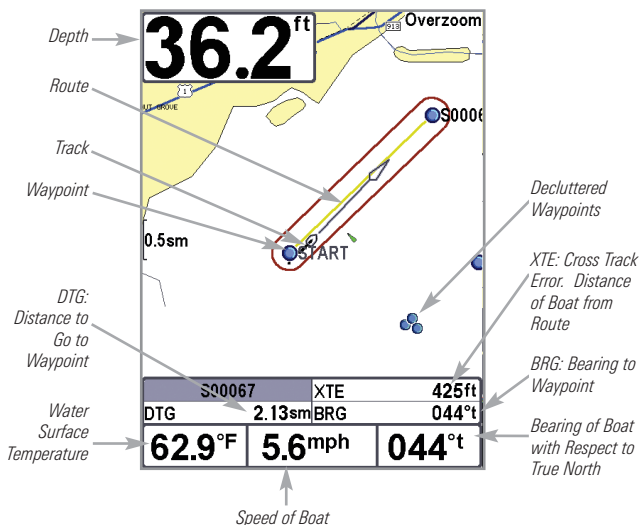
Depth →

Route

Track

Waypoint

Overzoom

S0006

0.5sm

START

Decluttered Waypoints

XTE: Cross Track Error. Distance of Boat from Route

DTG: Distance to Go to Waypoint

BRG: Bearing to Waypoint

Water Surface Temperature

Bearing of Boat with Respect to True North

S00067	XTE	425ft
DTG	2.13sm BRG	044°t
62.9°F	5.6mph	044°t

Speed of Boat

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.*

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** or **Combo** View, 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.

Save a position from the sonar history: On any Sonar View or Down Imaging™ View, use the 4-WAY Cursor Control key to move the cursor to a feature in the sonar history (also called the Sonar Saver feature). Press the MARK key to create a waypoint at the location where that sonar reading was taken. The new waypoint will also record the depth at that location.

> *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 or DOWN Cursor keys to change values once you are in a field.
>
> In the Waypoint Name, Latitude, and Longitude fields, press the UP or 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 or DOWN Cursor keys to change the icon used to represent the waypoint on the Combo and Chart Views. You can exit these fields with the LEFT or 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 or Combo View, 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.*

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

The **Waypoint Target** shows a target consisting of concentric circles in various distance ranges centered on the waypoint you choose. 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.

Chart View with Target

Waypoint Target

Chart View with Grid

Trolling Grid

Add a Waypoint Target: From the Waypoints submenu, select Target, and press the RIGHT Cursor key to display the saved waypoints list. Select a waypoint and press the RIGHT Cursor key.

Add a Trolling Grid: From the Waypoints submenu, select Grid, and press the RIGHT Cursor key to display the saved waypoints list. Select a waypoint and press the RIGHT Cursor key. The grid can also be rotated to any heading by adjusting the Grid Rotation setting on the Navigation Main Menu.

Remove Target or Trolling Grid: Press the MENU key once, and choose Remove Target or Remove Grid from the Navigation X-Press™ Menu, and press the RIGHT Cursor key.

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 or 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 or 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.

Add Maps to Your Fishfinder

Your 500 Series™ Fishfinder includes 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).

You can also purchase SD memory cards with additional chart information for a particular location. When you install the SD memory card in your control head, your 500 Series™ Fishfinder will retrieve that chart and display it automatically.

> *NOTE: The SD memory cards require a separate purchase. Your 500 Series™ Fishfinder supports LakeMaster®, Navionics® Gold, HotMaps™ and HotMaps™ Premium on SD card media. Your 500 Series™ Fishfinder does NOT support Navionics® Classic Charts or Platinum™ Cartography.*
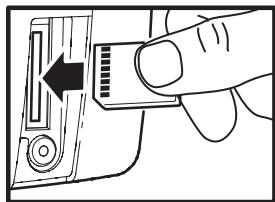
Inserting an SD Memory Card into the Card Slot

To insert an SD memory card:

1. Remove the SD memory card slot cover.

2. Position the SD memory 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.

4. **To Remove:** Press the SD memory card into the slot and then release. The card will eject, and you can then pull the card from the slot.

Export Navigation Data

You can export all saved Tracks, Waypoints, and Routes from your Fishfinder to an optional-purchase SD memory card.

To Export All Navigation Data:

1. Make sure that an optional-purchase SD memory 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. Highlight Export All Nav Data and press the RIGHT Cursor key. 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 an SD memory card is not installed, an error message will be displayed. Insert the SD memory card and try again.

*NOTE: The SD memory cards and USB Memory Card Reader require separate purchases. The USB Memory 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 **humminbird.com** or contact our Customer Resource Center at **1-800-633-1468**.*

Update Software

Set up an online account at **humminbird.com** so that you will receive the latest Humminbird® news and software upgrades for your Fishfinder. You can also download HumminbirdPC™ from your account, which allows you to manage your waypoints, routes, and tracks on your personal computer.

Required Equipment: Personal computer with Internet access, a formatted SD memory card, and an SD Memory Card Reader.

*NOTE: To purchase the USB Memory Card Reader (AS CR) visit our Web site at **humminbird.com** or contact our Customer Resource Center at **1-800-633-1468**. Our Customer Resource Center will also assist you with any questions you might have about updating your Humminbird® Fishfinder.*

To update the control head software:

1. Install a formatted SD memory card into the card reader connected to your PC.

2. **Register your Fishing System:** Log on to humminbird.com. Click My Account. Set up a new account.

3. **Download:** From My Account\My Profile\My Equipment, click the file name of the latest software update [unit name (version #)].

    • Read the instructions in the dialog box and click Download.

    • Follow the prompts to save the software file directly to the SD Card.

4. Install the SD card with the updated software file into the control head card slot.

5. Power on your Fishfinder. The control head will recognize the new software and run through a series of prompts to confirm software installation.

What's on the 500 Series™ Control Head

Your 500 Series™ Fishfinder 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.
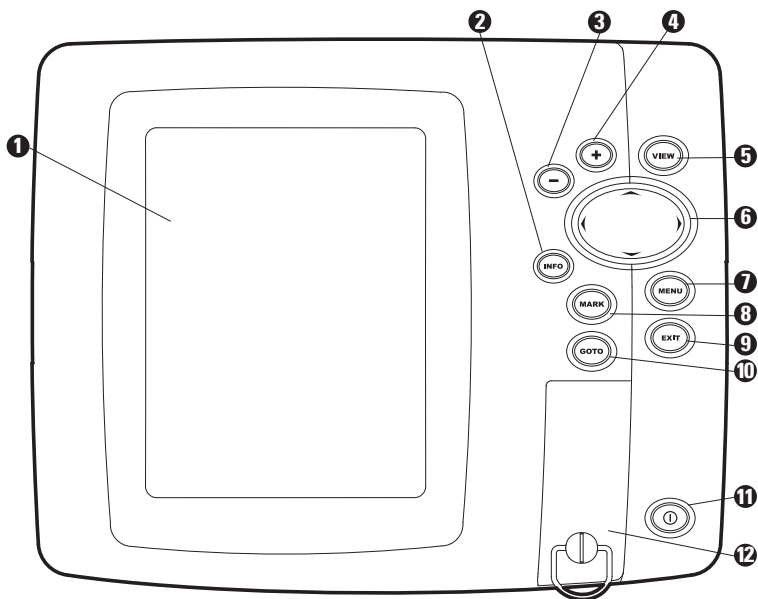
❶ *Screen*	*MENU key* **❼**
❷ *INFO key**	*MARK key* **❽**
❸ *ZOOM (-) key*	*EXIT key* **❾**
❹ *ZOOM (+) key*	*GOTO key* **❿**
❺ *VIEW key*	*POWER/LIGHT key* **⓫**
❻ *4-WAY Cursor Control key*	*SD Memory Card slot cover* **⓬**
(LEFT, RIGHT, UP, or DOWN Cursor keys)	

*Your control head will have one of the INFO keys shown here ⓘ ✓. Both keys function in the same way.

Key Functions

Your Fishfinder 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 Fishfinder 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 Fishfinder should always be turned off using the POWER/LIGHT key.
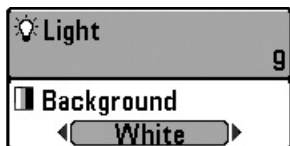
Adjust the Backlight or the Display Background Color: Press the POWER/LIGHT key to access the Light and Background submenu. Use the 4-WAY Cursor Control key to select Light or Background, and then use the LEFT or RIGHT Cursor key to change the settings. Press EXIT to exit the Light and Background submenu.

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

Press the INFO key while in Bird's Eye, Chart, or Combo 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. See *Views: Viewing Cartography* for more information.

NOTE: Your control head will have one of the keys shown here. Both keys function in the same way.

MENU Key

The MENU key is used to access the menu system. See *The Menu System* for more information.

- **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 in any view to access the X-Press™ Menu, which provides frequently-used menu settings that correspond with the current view or navigation mode.

- **Main Menu:** Press the MENU key twice in any view to access the Main Menu, which is organized under tabbed headings to help you find a specific menu item quickly.
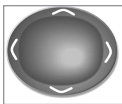
4-WAY Cursor Control Key
(LEFT, RIGHT, UP, or DOWN Cursor keys)

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.

• **Freeze Frame:** In Sonar View and Down Imaging™ View, press any arrow on the 4-WAY Cursor Control key to freeze the display and move the active cursor to a location on the screen. A cursor dialog box will display to show the depth of the location you choose.

• **Active Cursor:** Press any arrow on the 4-WAY Cursor Control key, and the active cursor will appear on the screen.

• **Chart Views:** Press any arrow on the 4-WAY Cursor Control key to pan the chart and highlight decluttered waypoint icons.

NOTE: In either Freeze Frame or Active Cursor mode, you can also make the cursor move diagonally by pressing in between two of the 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.

• **Snapshot and Recording View:** Press the UP or DOWN Cursor keys to highlight a recording icon, and then press the RIGHT Cursor key to start recording playback. Press the RIGHT or LEFT Cursor keys to control the speed of playback.

• **Circular Flasher View (Ice Fishing Mode: On):** Press the UP or DOWN Cursor keys to move the Depth Cursor. Press the RIGHT or LEFT Cursor keys to adjust the Zoom Range (see *Views: Circular Flasher View*).

MARK Key

MARK

Press the MARK key while in any view to mark the position of a waypoint. The MARK key function works if you have the GPS receiver connected.

- **Active Cursor:** The waypoint will be marked at the cursor location.

- **Without Active Cursor:** 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 SD memory card (see *Views: Snapshot and Recording View*). Navigation is not affected by the Screen Snapshot feature.

  NOTE: If Screen Snapshot is enabled but there is not a 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 SD memory card installed for the screen snapshot feature to work.

GOTO Key

GOTO

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.

ZOOM (+/-) Key

+   −

The Zoom (+/-) key has multiple functions, depending on the situation:

- In any of the **Navigation Views or the Sonar Zoom View**, press the +/-Zoom key to change the scale of the view to appear closer or farther away.

- In the **Circular Flasher View** (Ice Fishing Mode: On), press the +Zoom key to display a 2x magnified view of the selected area on the Flasher dial. See *Views: Circular Flasher View* for more information.

- **Down Imaging™ View:** Use the 4-WAY Cursor Control key to move the active cursor to a position on the screen. Press the + ZOOM key to magnify your selection. Press the -Zoom key to decrease the scale.

   NOTE: The cursor must be active for the zoom feature to work in the Down Imaging™ View.

EXIT
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 Freeze Frame is active**, press the EXIT key to return to a scrolling display.

- **If the Cursor is active**, press the EXIT key to remove the cursor from the display.
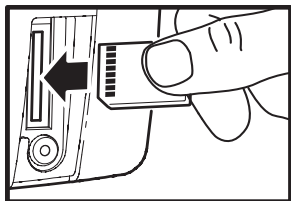
Inserting an SD Memory Card into the Card Slot

SD Memory Card Slot

The SD memory card slot on your control head can be used with SD memory cards (optional-purchase required) to add detailed charts to your Fishfinder or export navigation data from your Fishfinder (see *Introduction to Navigation*).

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

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 during the power on sequence to view the Start-Up Options Menu. From the Start-Up Options Menu, you can choose the following Fishfinder Modes: Normal, Simulator, and System Status.

- **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, Sonar, Navigation, Chart, Setup, and Views.

    *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

Press the MENU key during the power on sequence to view the Start-Up Options Menu, and select one of the modes described on the following pages. Also, see *Power on the Unit* for additional information.

```
Start-Up Options




    Normal

    Simulator        ▶

    System Status




    Press Right Cursor
      Arrow to Select

   Transducer not connected
```
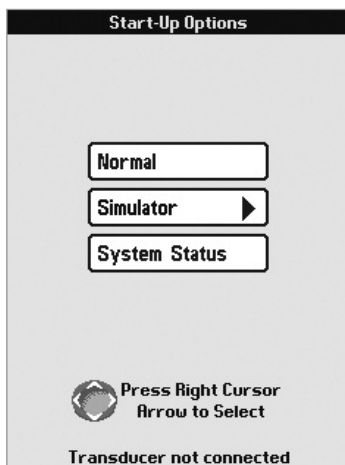
Normal

Use **Normal** for on-the-water operation with a transducer connected. If a functioning transducer is connected, Normal operation will be selected automatically at power up, and your Fishfinder can be used on the water.

To exit Normal operation, power off your Fishfinder.

Simulator

Use **Simulator** to learn how to use your Fishfinder 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.
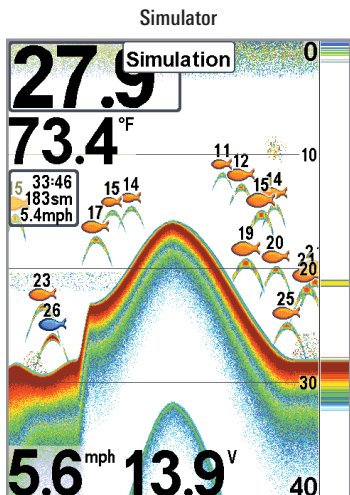
Simulator

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. Any menu changes you make will be saved for later use.

NOTE: It is important to select Simulator manually from the Start-Up Options Menu as opposed to letting the Fishfinder enter Simulator automatically (as it will if a transducer is not connected and you do nothing during power up).

A message will appear often on the display to indicate Simulator mode.

To exit Simulator, power off your Fishfinder.

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

To exit System Status, power off your Fishfinder.

Self Test Screen

SYSTEM STATUS

Self Test

PASSED

S/N	MODEL
70622010114	587HD

SOFTWARE VERSION

4.770

VOLTAGE	TOTAL TIME
13.3^V	24^{hrs}

PCB S/N

01706060941

Press VIEW for Next Screen

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.

Accessory Test

SYSTEM STATUS

ACCESSORY TEST

Speed	CONNECTED
Temperature	CONNECTED

Accessory Test lists the accessories connected to the system.

NOTE: The speed accessory will be detected only if the paddlewheel has moved since your Fishfinder 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 gray 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.

GPS Diagnostic View

☶ Sensitivity	10
1▮▮▮▮▮▮▯▯▯▯	20
E↕ Lower Range	
	Auto
☶ Chart Speed	
	5
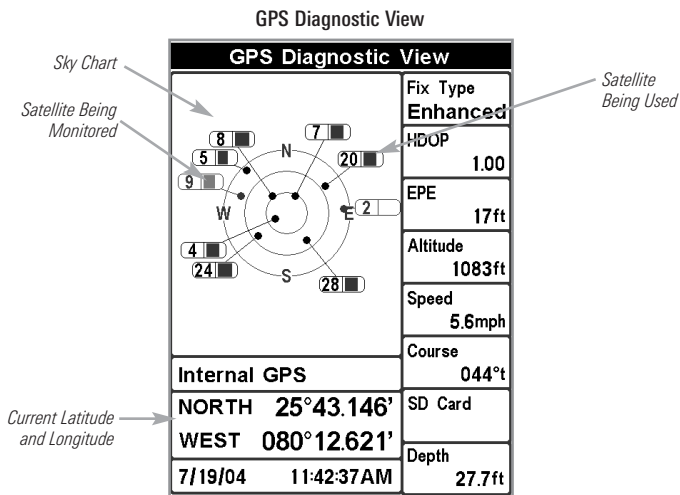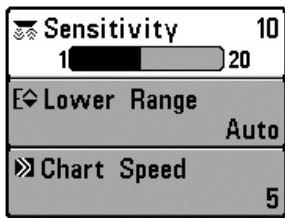
X-Press™ Menu

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. For example, if you are in a Sonar View and press the MENU key once, the Sonar X-Press™ Menu will display.

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 press 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 🗟 ❄ 🖵 💳 🖾

Depth Alarm	
	Off
Fish ID Alarm	
	◇
Low Battery Alarm	
	Off
Temp. Alarm	
	Off
Off Course Alarm	
	600ft
Arrival Alarm	
	Off
Drift Alarm	
	Off
Alarm Tone	
	Medium
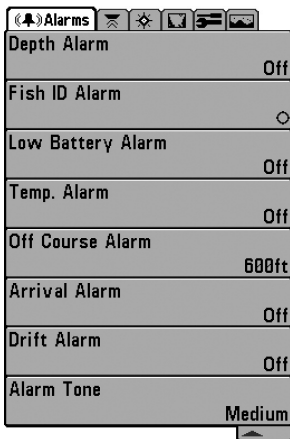
Main Menu, Normal User Mode

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, Sonar, Navigation, Chart, Setup, Views.

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).

- **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 the MENU key or EXIT key 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.

Note for all Menu Settings

The settings in all menus are adjusted in the same way. Simply use the 4-WAY Cursor Control key to highlight a menu option, and then change the settings or activate the option (see *Main Menu* or *X-Press*™ *Menu*).

Below is an example of how the menu options are described in this manual. Each description shows the menu option appearance, the available settings, and the specific control head settings required (i.e. advanced user mode, international only, view, navigation, or accesssory).

Menu Option Name

Setup User Mode and other control head requirements

Noise Filter	
◀	Low	▶

Noise Filter
(Advanced)

Settings: Off, Low, Medium, High1, High2, High3, Default = Low

Available Menu Settings and Default

Noise Filter adjusts the sonar Noise Filter to limit interference on the display from sources such as your boat engine, turbulence, or other sonar devices.

Setting Description

Menu Option as it appears on the screen

User Mode (Normal or Advanced)

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

Normal Mode is the default setting when you first power on your 500 Series™ Fishfinder. 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 Fishfinder. 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 RIGHT Cursor key until the Setup tab is selected.

3. Press the DOWN Cursor key to highlight User Mode on the Setup main menu.

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

(🔊)	☰ Sonar	☼	📷	🔗	🖼

Beam Select
200kHz

Imaging Frequency
455kHz

Surface Clutter
5

SwitchFire
Clear Mode

Fish ID +
On

Fish ID Sensitivity
5

RTS Window
Narrow

Sonar Colors
Original Palette

Bottom View
Structure ID

Zoom Width
Narrow

Ice Fishing Mode
Off

Imaging Colors
Blue

Sonar Tab, Normal Mode

(🔊)	☰ Sonar	☼	📷	🔗	🖼

Beam Select
200kHz

Imaging Frequency
455kHz

Surface Clutter
5

SwitchFire
Clear Mode

Fish ID +
On

Fish ID Sensitivity
5

RTS Window
Narrow

Sonar Colors
Original Palette

Bottom View
Structure ID

Zoom Width
Narrow

83kHz Sensitivity
0

455kHz Sensitivity
0

Depth Lines
On

Noise Filter
Low

Max Depth
Auto

Water Type
Fresh

Ice Fishing Mode
Off

Imaging Colors
Blue

Sonar Tab, Advanced Mode

🌊 Sensitivity
16
⌐ Upper Range
0ft
⌐ Lower Range
48ft
⟫ Chart Speed
7
⌐ Bottom Range
15ft
🔲 Bottom Lock
On
🔀 Cancel Navigation

Sonar X-Press™ Menu

Sonar X-Press™ Menu

(Sonar Views only)

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

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

⊗ Sensitivity	10
1 ▬▬▬▬	20

Sensitivity

Settings: Low = 1, High = 20; Default = 10

Sensitivity controls how much detail is shown on the display and will adjust the sensitivity of all sonar frequencies.

When operating in very clear water or greater depths, increase the sensitivity to see weaker returns that may be of interest. If the sensitivity is adjusted too high, the display may become too cluttered.

Decrease the sensitivity to eliminate the clutter from the display that is sometimes present in murky or muddy water. If Sensitivity is adjusted too low, the display may not show many sonar returns that could be fish.

NOTE: The Sensitivity setting is a global setting and will adjust the sensitivity of all sonar frequencies.
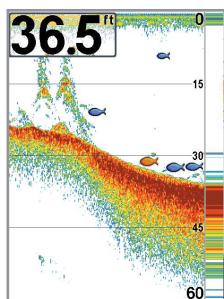
Sensitivity at Low   Sensitivity at Medium   Sensitivity at High

E◇ Upper Range	35ft
0 ▮	990

Upper Range

(Advanced: Sonar, Split Sonar, Circular Flasher, and Big Digits Views only)

Settings: 0 to 990 ft or 0 to 397 m [International Models only]; Default = 0

Upper Range sets the shallowest depth range that will be displayed on the Sonar, Split Sonar, Circular Flasher, and Big Digits Views. Upper Range is often used with Lower Range.

For example, if you are only interested in the area between 20 and 50 feet deep, you should set the Upper Depth Range to 20 and the Lower Depth Range to 50. The Sonar View will then show the 30 foot area between 20 and 50 and will not show the surface or the bottom (assuming the bottom is deeper than 50 feet). Greater detail will be shown for the area between 20 and 50 feet.

NOTE: A minimum distance of 10 feet will be maintained between the Upper and Lower Range regardless of the manual settings entered.

| ⟐Lower Range   Auto |
| Auto⟦▭⟧1200 |

Lower Range

Settings: Auto, 10 to 1200 ft, 3 to 400 m [International Models only]; Default = Auto

Lower Range sets the deepest depth range that will be displayed by the unit. Auto is the default setting.

Auto: The Lower Range will be adjusted by the unit to follow the bottom automatically. Auto is the default setting.

Manual: You can adjust the Lower Range to lock the unit on a particular depth. "M" will be displayed in the lower right corner of the screen to indicate the unit is in Manual mode. Adjust the Upper and Lower Range together to view a specific depth range, especially when looking for fish or bottom structure.

For example, if you are fishing in 60 feet of water but are only interested in the first 30 feet (surface to a depth of 30 feet), you should set the Lower Depth Range limit to 30. The display will show the 0 to 30 foot range, which allows you to see a more detailed view than you would see if the display went all the way to the bottom.

NOTE: A minimum distance of 10 feet will be maintained between the Upper and Lower Range regardless of the manual settings entered.

⚌ Chart Speed 6	
1 ▮▮▮▮▮▮ Ultra	

Chart Speed

Settings: 1-9, Ultra, where 1 = Slow, 9 = Fast, Ultra = Fastest; Default = 5

Chart Speed determines the speed at which the sonar information moves across the display, and consequently, the amount of detail shown.

A **faster speed** shows more information and is preferred by most anglers; however, the sonar information moves across the display quickly. A **slower speed** keeps the information on the display longer, but the bottom and fish details become compressed and may be difficult to interpret. Regardless of the Chart Speed setting, the RTS Window™ will update at the maximum rate possible for the depth conditions. Adjust Chart Speed to your personal preference.
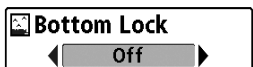
⚌ Bottom Lock
◀ Off ▶

Bottom Lock

(Sonar Zoom View only)

Settings: Off, On; Default = Off

Bottom Lock changes the mode of the zoomed view in the Sonar Zoom View. Bottom Lock continuously graphs the bottom at a constant point on the display regardless of changes in depth. This "flattens" out the bottom contour but is effective at showing fish on or near the bottom.

⚌ Bottom Range 15ft
10 ▮ 60

Bottom Range

(Sonar Zoom View only when Bottom Lock is On)

Settings: 10 to 60 ft, 2 to 10 fathoms, or 3 to 20 m [International Models only], Default = 15 ft

Bottom Range allows you to control how much of the water column, measured up from the bottom, is shown in the Sonar Zoom View. Choose a small value to see low-lying bottom structure or details of the bottom return. Choose a larger value to see large structure in deeper water.

NOTE: It is possible to set the Bottom Range to be greater than the depth. In this case, you may see surface clutter in a wavy band that mirrors changes in the depth.

Cancel Navigation
(only when Navigating)

Settings: Press the RIGHT Cursor key and follow screen instructions.

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.

NOTE: A minimum distance of 10 feet will be maintained between the Upper and Lower Range regardless of the settings entered manually.

〰 Imaging Sensitivity 10	
Auto ▮▮▮▮▯ 20	
⬍ Upper Range	
0ft	
⬍ Lower Range	
Auto	
≫ Chart Speed	
10	
▦ Imaging Colors	
Blue	
✖ Cancel Navigation	

Down Imaging™ X-Press™ Menu

Down Imaging™ X-Press™ Menu

(Down Imaging™ Views only [597ci HD DI])

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

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

〰 Down Sensitivity Auto	**Imaging Sensitivity**
Auto [====] 20	**Settings: Auto, 1 to 20, where Low = 1, High = 20; Default = 10**

Imaging Sensitivity controls how the sonar returns are displayed on the Down Imaging™ Views.

Increase the Imaging Sensitivity to reveal weaker returns that may be of interest, especially in very clear water or greater depths. A high imaging sensitivity setting shows more sonar returns from small baitfish and suspended debris in the water; however if the sensitivity is adjusted too high, the display may become too cluttered.

Decrease the Imaging Sensitivity to eliminate the clutter from the display that is sometimes present in murky or muddy water. If the sensitivity is adjusted too low, the display may not show many sonar returns that could be fish.
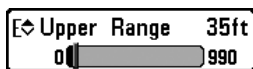
E⇌ Upper Range 35ft	**Upper Range**
0 [====] 990	*(Advanced)*
	Settings: 0 to 990 ft or 0 to 397 m [International models only], Default = 0

Upper Range sets the shallowest depth range that will be displayed on the Down Imaging™ Views. Upper Range is often used with Lower Range.

> For example, if you are only interested in the area between 20 and 50 feet deep, you should set the Upper Depth Range to 20 and the Lower Depth Range to 50. The Sonar View will then show the 30 foot area between 20 and 50 and will not show the surface or the bottom (assuming the bottom is deeper than 50 feet). Greater detail will be shown for the area between 20 and 50 feet.

NOTE: A minimum distance of 10 feet will be maintained between the Upper and Lower Range regardless of the manual settings entered.

| Lower Range	Auto
Auto	1200

Lower Range

Settings: Auto, 10 to 1200 ft, 3 to 400 m [International Models only]; Default = Auto

Lower Range sets the deepest depth range that will be displayed by the unit.

Auto: The Lower Range will be adjusted by the unit to follow the bottom automatically. Auto is the default setting.

Manual: You can adjust the Lower Range to lock the unit on a particular depth. **M** will be displayed in the lower right corner of the screen to indicate the unit is in Manual mode. Adjust the Upper and Lower Range together to view a specific depth range, especially when looking for fish or bottom structure.

> For example, if you are fishing in 60 feet of water but are only interested in the first 30 feet (surface to a depth of 30 feet) you should set the Lower Depth Range limit to 30. The display will show the 0 to 30 foot range, which allows you to see a more detailed view than you would see if the display went all the way to the bottom.

NOTE: A minimum distance of 10 feet will be maintained between the Upper and Lower Range regardless of the settings entered manually.

Chart Speed	6
1	Ultra

Chart Speed

Settings: 1-9, Ultra, where 1 = Slow, 9 = Fast, Ultra = Fastest; Default = 5

Chart Speed determines the speed at which the sonar information moves across the display, and consequently, the amount of detail shown.

A **faster speed** shows more information and is preferred by most anglers; however, the sonar information moves across the display quickly. A **slower speed** keeps the information on the display longer, but the bottom and fish details become compressed and may be difficult to interpret.

▨ Imaging Colors
◄ ▭ Blue ▭ ►

Imaging Colors

Settings: Blue, Amber 1, Amber 2, Brown, Green, Inverse, Gray, Green/Red; Default = Blue

Imaging Colors allows you to select which color palette you would like to use for the Down Imaging™ display.

▨ Cancel Navigation
►

Cancel Navigation

(only when Navigating)

Settings: Press the RIGHT Cursor key and follow screen instructions.

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.

⊗ Sensitivity	10
1▮▮▮▮▯▯▯	20
⊏⇕ Upper Range	
	0ft
⊏⇕Lower Range	
	Auto
⊗Cancel Navigation	
▦Color Palette	
	Palette 1
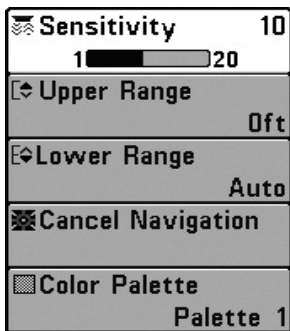
Flasher X-Press™ Menu

Flasher X-Press™ Menu

(Circular Flasher View only)

The **Flasher X-Press™ Menu** provides a shortcut to your most frequently-used settings. Press the MENU key once while in the Circular Flasher View to access the Flasher 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.

NOTE: To activate Ice Fishing Mode, see Sonar Menu Tab.

⚓ Sensitivity   10
1▮▮▮▮░░░░ 20

Sensitivity

Settings: Low = 1, High = 20; Default = 10

Sensitivity controls how much detail is shown on the display and will adjust the sensitivity of all sonar frequencies.

When operating in very clear water or greater depths, increase the sensitivity to see weaker returns that may be of interest. If the sensitivity is adjusted too high, the display may become too cluttered.

Decrease the sensitivity to eliminate the clutter from the display that is sometimes present in murky or muddy water. If Sensitivity is adjusted too low, the display may not show many sonar returns that could be fish.

NOTE: The Sensitivity setting is a global setting and will adjust the sensitivity of all sonar frequencies.

⬓↕ Upper Range   35ft
0▮░░░░░░ 990

Upper Range

(Advanced: Sonar, Split Sonar, Circular Flasher, and Big Digits Views only)

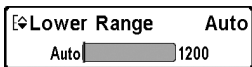**Settings: 0 to 990 ft or 0 to 397 m [International Models only]; Default = 0**

Upper Range sets the shallowest depth range that will be displayed on the Sonar, Split Sonar, Circular Flasher, and Big Digits Views. Upper Range is often used with Lower Range.

NOTE: A minimum distance of 10 feet will be maintained between the Upper and Lower Range regardless of the manual settings entered.

| ⟳Lower Range   Auto |
| Auto ▭▭▭▭ 1200 |
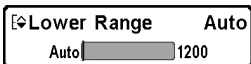
Lower Range

Settings: Auto, 10 to 1200 ft, 3 to 400 m [International Models only]; Default = Auto

Lower Range sets the deepest depth range that will be displayed by the unit. Auto is the default setting.

Auto: The Lower Range will be adjusted by the unit to follow the bottom automatically. Auto is the default setting.

Manual: You can adjust the Lower Range to lock the unit on a particular depth. Adjust the Upper and Lower Range together to view a specific depth range, especially when looking for fish or bottom structure.

NOTE: A minimum distance of 10 feet will be maintained between the Upper and Lower Range regardless of the manual settings entered.

| Color Palette |
| ◄ Palette 1 ► |

Color Palette

(Circular Flasher View, Ice Fishing Mode only)

Settings: Palette 1, Palette 2, Palette 3; Default = Palette 3

Color Palette sets the colors used to display sonar returns in the Circular Flasher View when Ice Fishing Mode is turned on. The active color palette is shown in the center of the circular flasher display. The color palettes range from weak to strong sonar return signals, which are displayed left to right on the color preview bar. See *Views: Circular Flasher View* for more information.

Choose from the following color palettes:

Palette 1: Green (weak), Yellow (medium), Red (strong)

Palette 2: Yellow (weak), Green (medium), Red (strong)

Palette 3: Blue (weakest), Green (weak), Light Green (weak to medium), Yellow (medium), Orange (fairly strong), Red (strong)
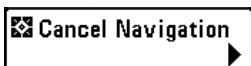
| Cancel Navigation |
| ► |

Cancel Navigation

(only when Navigating)

Settings: Press the RIGHT Cursor key and follow screen instructions.

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.

○ Start Recording
☐ Stop Recording
⊗ Delete Image
✤ Delete All Images
⊗ Delete Recording
✤ Delete All Recordings
≈ Pings Per Second **Auto**
▷ Playback Speed ▷
▣ Stop Playback

Snapshot and Recording
X-Press™ Menu

Snapshot and Recording X-Press™ Menu

(Snapshot and Recording View only)

The **Snapshot and Recording X-Press™ Menu** provides access to the snapshot management and sonar recording functions. Press the MENU key once while in the Snapshot and Recording View to access the Snapshot and Recording X-Press™ Menu.

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

○ Start Recording	

Start Recording
(optional-purchase SD Memory Card, Snapshot and Recording View only)

Settings: Press the RIGHT Cursor key to activate.

Start Recording allows you to start sonar recording from the Snapshot and Recording View. This menu option is only available when an optional-purchase SD memory card is installed and Snapshot and Recording View is on the screen.

☐ Stop Recording	

Stop Recording
(optional-purchase SD Memory Card only)

Settings: Press the RIGHT Cursor key to activate.

Stop Recording allows you to stop sonar recording. This menu option is only available when an optional-purchase SD memory card is installed and the control head is actively recording.

☒ Delete Image	

Delete Image
(optional-purchase SD Memory Card, Snapshot and Recording View only)

Settings: Press the RIGHT Cursor key and follow screen instructions.

Delete Image allows you to delete a single screen capture image. This menu option is only available when an optional-purchase SD memory card is installed, Snapshot and Recording View is on the screen, and you have selected an image thumbnail.

☒ Delete All Images	

Delete All Images
(optional-purchase SD Memory Card, Snapshot and Recording View only)

Settings: Press the RIGHT Cursor key and follow screen instructions.

Delete All Images allows you to delete all the images at once. This menu option is only available when an optional-purchase SD memory card is installed and Snapshot and Recording View is on the screen.

⊗Delete Recording ▶

Delete Recording

(optional-purchase SD Memory Card, Snapshot and Recording View only)

Settings: Press the RIGHT Cursor key and follow screen instructions.

Delete Recording allows you to delete a single sonar recording. This menu option is only available when an optional-purchase SD memory card is installed, Snapshot and Recording View is on the screen, and you have selected a recording file.

⊗Delete All Recordings ▶

Delete All Recordings

(optional-purchase SD Memory Card, Snapshot and Recording View only)

Settings: Press the RIGHT Cursor key and follow screen instructions.

Delete All Recordings allows you to delete all the recordings at once. This menu option is only available when an optional-purchase SD memory card is installed and Snapshot and Recording View is on the screen.

⋇Pings Per Second   10
1▮▮▮▮▮▮▮▮Auto

Pings Per Second

(optional-purchase SD Memory Card, Snapshot and Recording View only)

Settings: 1-10, Auto, Default = Auto

Pings Per Second allows you to specify the ping rate for an active sonar recording.

NOTE: Pings Per Second is available when an optional-purchase SD memory card is installed, Snapshot and Recording View is on the screen, and the control head is actively recording (not playing back).

Auto is the default setting for Pings Per Second and automatically adjusts the ping rate for best recording quality. If there is limited memory on your SD memory card, you can slow the ping rate by setting the Pings Per Second manually, but the recording will capture less sonar detail. For maximum performance, keep the Pings Per Second setting on Auto.

Playback Speed

(optional-purchase SD Memory Card, Snapshot and Recording View only)

Settings: Record, Rewind 1, Rewind 2, Slow Play Reverse, Pause, Slow Play, Normal Play, Fast Forward 1, Fast Forward 2, Stop

Playback Speed allows you to specify the playback speed for a sonar recording from the Snapshot and Recording View. This menu option is only available when an optional-purchase SD memory card is installed and Recording Playback is active.

Playback Speed Icons:

●	Record	⟩	Slow Play
◄	Rewind, Reverse	►	Normal Play
◄	Rewind2	►►	Fast Forward
◖	Slow Play Reverse	►►	Fast Forward2
❚❚	Pause	■	Stop

NOTE: You can also change playback speed in the Snapshot and Recording View using the LEFT and RIGHT Cursor keys, although you cannot skip to the beginning or end of a recording using these keys.

NOTE: Sonar chart speed is increased during Fast Forward and reversed during Rewind. This may result in a reduced quality sonar image, since at higher speeds, not every sonar return can be processed.

◪Stop Playback ▶

Stop Playback

(optional-purchase SD Memory Card only)

Settings: Press the RIGHT Cursor key to activate.

Stop Playback allows you to stop playback of a sonar recording from any view. This menu option is only available when an optional-purchase SD memory card is installed and Recording Playback is active.

NOTE: During playback, the amount of time/memory left to play is indicated by the status bar. For more information, see Views: Snapshot and Recording View.

○ Waypoint 001
◈ Cursor To Waypoint
▣ Save Current Track
✕ Clear Current Track
▣ Save Current Route
↻ Skip Next Waypoint
✕ Cancel Navigation
◎ Remove Target
⊞ Remove Grid
▨ Sonar Window   Medium
○ Waypoint 00153

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 the Bird's Eye, Chart, or Combo View 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 001` |

Waypoint [Name]

(Only with an active cursor on a waypoint)

Settings: Edit, Delete, Target, Grid

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

*NOTE: See **Introduction to Navigation** 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 and Combo 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` |

Cursor to Waypoint

(Chart or Combo View only)

Settings: Press the RIGHT Cursor key and follow screen instructions.

Cursor to Waypoint allows you to quickly move the cursor to any saved waypoint so that you can locate it or edit it. This X-Press™ Menu option only appears if you have saved waypoints.

Save Current Track	**Save Current Track**
▶	**Settings:** Press the RIGHT Cursor key and follow screen instructions.

Save Current Track allows you to save the current track on the display. After the current track is saved, a new current track is started. Save Current Track appears on the Navigation X-Press™ Menu after navigation is stopped.

> *NOTE: To save the depth information with the current track, it is important to save the track and also edit the name before powering off the control head.*

Clear Current Track	**Clear Current Track**
▶	**Settings:** Press the RIGHT Cursor key and follow screen instructions.

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

Save Current Route	**Save Current Route**
▶	*(only when Navigating)*
	Settings: Press the RIGHT Cursor key and follow screen instructions.

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.

Skip Next Waypoint	**Skip Next Waypoint**
▶	*(only when Navigating)*
	Settings: Press the RIGHT Cursor key and follow screen instructions.

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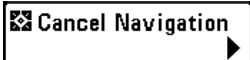
⚠ Cancel Navigation

Cancel Navigation

(only when Navigating)

Settings: Press the RIGHT Cursor key and follow screen instructions.

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.

◎ Remove Target

Remove Target

(only if a Target is Active)

Settings: Press the RIGHT Cursor key to activate.

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.

▦ Remove Grid

Remove Grid

(only if a Grid is Active)

Settings: Press the RIGHT Cursor key to activate.

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.

▦ Sonar Window
◀ Medium ▶

Sonar Window

(Combo View only)

Settings: Wide, Medium, Narrow; Default = Medium

Sonar Window sets the size of the Sonar Window in the Combo View. Sonar Window can only be accessed from the Combo View.

Waypoint [Name]

(Most recently-created waypoint)

Settings: Edit, Delete, Go To, Target, Grid

Waypoint [Name] allows you to view the waypoints submenu for the most recently created waypoint. You must have pressed the MARK key at least once since you last powered up the Fishfinder for this menu option to appear.

*NOTE: See **Introduction to Navigation** for more 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 and Combo 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.

Alarms Menu Tab

(♠)Alarms	⫷	✦	▭	⇌	⌧

Depth Alarm
Off

Fish ID Alarm
◇

Low Battery Alarm
Off

Temp. Alarm
Off

Off Course Alarm
600ft

Arrival Alarm
Off

Drift Alarm
Off

Alarm Tone
Medium

Alarms Menu

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.*

Depth Alarm	Off
Off |————————| 100	
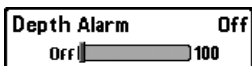
Depth Alarm

Settings: Off, 1 to 100 ft, or 0.5 to 30 m [International Models only]; Default = Off

Depth Alarm sounds when the depth becomes equal to or less than the menu setting.

Fish ID Alarm	
◀|——— ◀ ———|▶	

Fish ID Alarm

Settings: Off, All, Large/Medium, Large; Default = Off

Fish ID Alarm sounds when the Fishfinder detects fish that correspond to the alarm setting. Fish ID Alarm will only sound if Fish ID+™ is on.

> For example, if you've set the Fish ID Alarm to sound for Large fish only, the Fish ID alarm will sound when a large-sized fish is detected.

Off ◀|——— ○ ———|▶

All ◀|— ◀ ◀ ◀ —|▶

Large/Medium ◀|— ◀ ◀ —|▶

Large ◀|——— ◀ ———|▶

Low Battery Alarm	Off
Off |————————| 13.5	
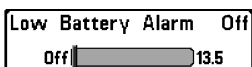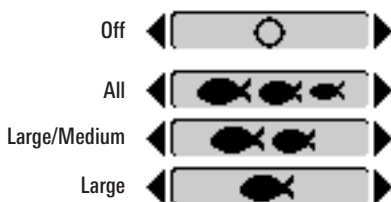
Low Battery Alarm

Settings: Off, 8.5V - 13.5V; Default = Off

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 Fishfinder. 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.

Temp. Alarm	Off
Off▮▯▯▯▯▯	50

Temp. Alarm

Settings: Off, 33-120 Fahrenheit, 0-50 Celsius [International Models only]; Default = Off

Temp. Alarm sounds when the water temperature detected by the Fishfinder 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.

Off Course Alarm	300ft
Off▮▯▯▯▯▯	3000

Off Course Alarm

Settings: Off, 25 to 3000 ft, 10 to 1000 m [International Models only]; Default = 300 ft, 100 m

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.
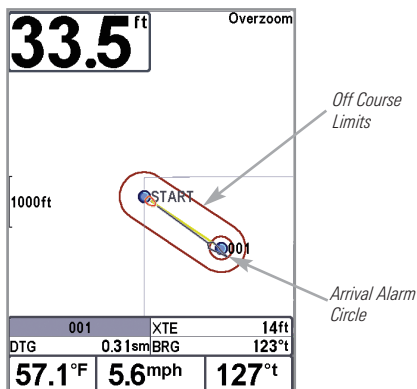
Arrival Alarm	150ft
Off▮▭▭▭	3000

Arrival Alarm

Settings: Off, 25 to 3000 ft, 10 to 1000 m [International Models only]; Default = 150 ft, 50 m

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.

Drift Alarm	Off
Off▮▭▭▭	3000

Drift Alarm

Settings; Off, 25 to 3000 ft, 10 to 1000 m [International Models only]; Default = Off

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

Drift Alarm Circle
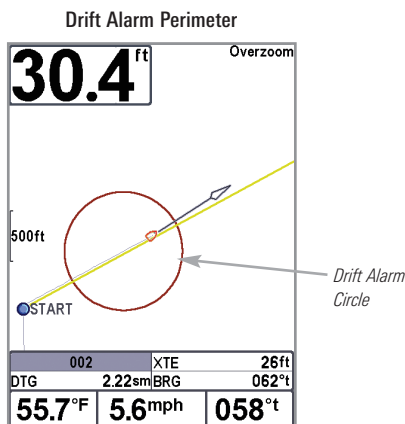
Alarm Tone	
◀ Medium ▶	

Alarm Tone

Settings: High, Medium, Low; Default = Medium

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.

(◁))	⊼Sonar	※	▣	⯍	▱

Beam Select

200kHz

Imaging Frequency

455kHz

Surface Clutter

5

SwitchFire

Clear Mode

Fish ID +

On

Fish ID Sensitivity

5

RTS Window

Narrow

Sonar Colors

Original Palette

Bottom View

Structure ID

Zoom Width

Narrow

83kHz Sensitivity

0

455kHz Sensitivity

0

Depth Lines

On

Noise Filter

Low

Max Depth

Auto

Water Type

Fresh

Ice Fishing Mode

Off

Imaging Colors

Blue

Sonar Menu, Advanced
*Shown with optional
Down Imaging™ menus*

Sonar Menu Tab

Press the MENU key twice to access the Main Menu and then press the RIGHT Cursor key until the Sonar tab is selected.

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

Beam Select
◀ **200kHz** ▶

Beam Select

Settings: DualBeam PLUS™: 200/83 kHz, 200 kHz, 83 kHz; Down Imaging: 200 kHz, 455 kHz; Default = 200 kHz

Beam Select sets which sonar returns from the transducer will be displayed on the screen. The available beam frequencies are determined by your Humminbird® model.

DualBeam PLUS™ models (587ci HD, 597ci HD) allow you to choose 200/83 kHz, 200 kHz, or 83 kHz.

- When set to **200/83 kHz,** the returns from both beams are blended by starting with the 83 kHz wide beam return, dimming it, and then overlaying it with the 200 kHz narrow beam return. The darker 200 kHz narrow beam sonar returns will stand out from the paler 83 kHz wide beam sonar returns. The Split Sonar View continues to display the sonar returns from each beam in their respective windows. The blended information is shown in the Sonar View, Sonar Zoom View, and the Big Digits View. The RTS Window™ in the Sonar View and the Circular Flasher View will only show the returns from the 200 kHz narrow beam.

- When set to **200 kHz**, only the returns from the 200 kHz narrow beam will be displayed in the Sonar View, the Sonar Zoom View, the Big Digits View, and the Circular Flasher View. The Split Sonar View will continue to display returns from both beams in their respective windows. The RTS Window™ in the Sonar View will display the returns from the 200 kHz narrow beam.

- When set to **83 kHz**, the returns from the 83 kHz wide beam will be displayed in the Sonar View, the Sonar Zoom View, the Big Digits View, and the Circular Flasher View. The Split Sonar View will continue to display returns from both beams in their respective windows. The RTS Window™ will display the returns from the 83 kHz wide beam.
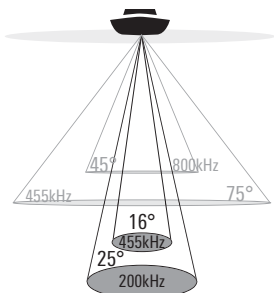
The **Down Imaging™ models (597ci HD DI)** allow you to choose 200 kHz or 455 kHz for conical sonar coverage in the traditional sonar views.

- When set to **200 kHz**, only the returns from the 200 kHz (25°) beam will be displayed in the Down Imaging™ Views.

- When set to **455 kHz**, only the returns from the 455 kHz (16°) narrow beam will be displayed in the Down Imaging™ Views.

⋮ 75 Degree Total Coverage

⋮ Bottom Coverage = 1 x Depth
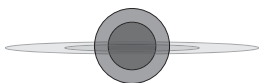
Imaging Frequency
◀ **455kHz** ▶

Imaging Frequency
(Down Imaging™ Views only [597ci HD DI])

Settings: 800 kHz, 455 kHz; Default = 455 kHz

Imaging Frequency allows you to select which frequency to apply to the Down Imaging™ beams (455 kHz or 800 kHz). For the best overall image quality and depth, select 455 kHz. For the sharpest image (but limited depth capability), select 800 kHz.
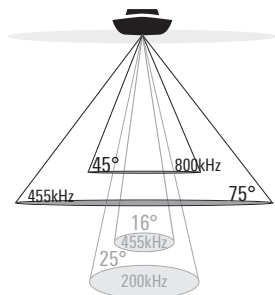
⠿ 75 Degree Total Coverage

⠿ Bottom Coverage = 1 x Depth
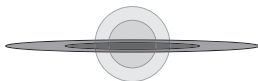
Surface Clutter	5
1 ▮▮▮▯▯ 10	

Surface Clutter

Settings: Low = 1 to High = 10; Default = 5

Surface Clutter adjusts the filter that removes surface clutter noise caused by algae and aeration. The lower the setting, the less surface clutter will be displayed.

Surface Clutter

Surface Clutter

| SwitchFire |
| ◀ **Clear Mode** ▶ |

SwitchFire™

Settings: Max Mode, Clear Mode; Default = Clear Mode
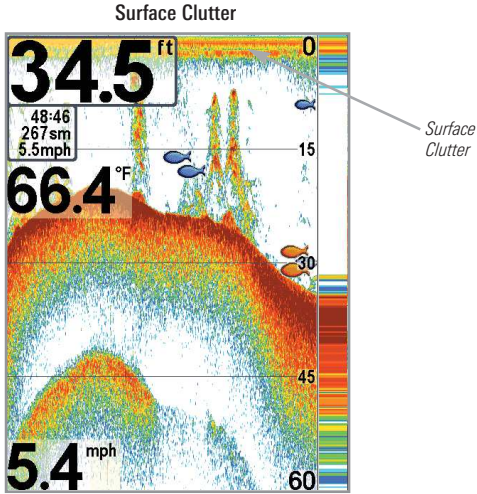
SwitchFire™ controls how the sonar returns are displayed in the Sonar Views.

Choose **Max Mode** to see only raw sonar returns on the display. When Max Mode is selected, you will see the maximum sonar information available within the transducer beam, so more fish arches and better jig tracking are shown.

Choose **Clear Mode** to see less clutter and more fish size accuracy on the display. When Clear Mode is selected, the clutter is filtered, and sonar returns are interpreted to provide more details about the objects within the transducer beam, regardless of their location. In other words, a large arch on the display means a large fish has been detected.

Fish ID+
◀ On ▶

Fish ID+™

Settings: Off, On; Default = On

Fish ID+™ uses advanced signal processing to interpret sonar returns and will display a Fish Symbol when very selective requirements are met. When a fish is detected, a fish icon and its depth are displayed above the return that has been classified as being a fish. Three different fish size icons represent the intensity of the sonar return and provide an indicator of relative fish size.

In **DualBeam PLUS™ models**, targets detected in the 200 kHz narrow beam are represented as orange fish symbols and targets detected in the 83 kHz wide beam are represented as blue fish symbols.

200 kHz, Narrow Beam
Orange Fish Symbols

83 kHz, Wide Beam
Blue Fish Symbols

In **Down Imaging™ models (597ci HD DI)**, targets detected in the 455 kHz conical beam are represented as orange fish symbols, and targets detected in the 200 kHz conical beam are represented as blue fish symbols.

When Fish ID+™ is turned off, the Fishfinder shows only the raw sonar returns on the display. These returns will often result in "arches" forming on the display, indicating potential targets. Due to the transducer beam angle, the distance to a fish decreases as the fish moves into the beam, and then increases as it moves out again, creating a Fish Arch when this distance change is shown on the display. Boat speed, chart speed, and the position of the fish within the sonar beam greatly affect the shape of the arch.

Transducer Cone and Fish Arches
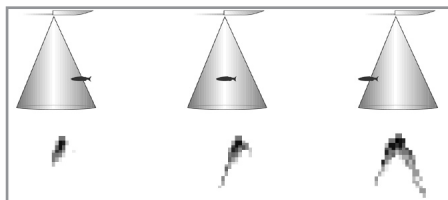
Fish ID Sensitivity	5
1 ▮▮▮ ▭ 10	

Fish ID Sensitivity

Settings: Low = 1, High = 10; Default = 5

Fish ID Sensitivity adjusts the threshold of the Fish ID+™ detection algorithms. Selecting a higher setting allows weaker returns to be displayed as fish. This is useful for identifying smaller fish species or baitfish. Selecting a lower setting displays fewer fish from weak sonar returns. This is helpful when seeking larger species of fish.

Fish ID Sensitivity is used in conjunction with Fish ID+™. Fish ID+™ must be on for Fish ID Sensitivity to affect the ability of the Fishfinder to identify sonar returns as fish.

RTS Window
◀ Narrow ▶

Real Time Sonar (RTS™) Window

Settings: Wide, Narrow, Off; Default = Narrow

RTS Window™ sets the RTS Window™ to either Wide or Narrow, or turns it off in the Sonar View. The RTS Window™ always updates at the fastest rate possible and only displays returns that are within the transducer beam. See *What's on the Sonar Display* for more information.
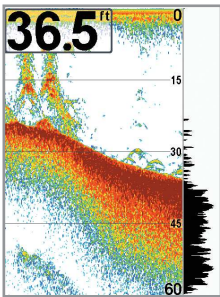
RTS Window™ (Wide)   RTS Window™ (Narrow)   RTS Window™ (Off)
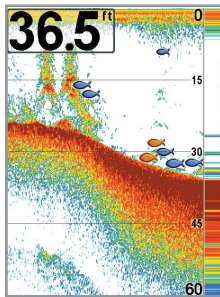
Sonar Colors
◀ Original Palette ▶
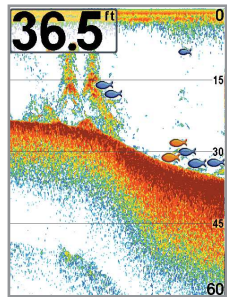
Sonar Colors

(Sonar View, Sonar Zoom View, Circular Flasher View, and Big Digits View)

Settings: Gray, Green, Inverse, Original Palette, Palette 1, Palette 2, Palette 3; Default = Original Palette

Sonar Colors allows you to select which color palette you would like to use for the display. The palette you choose will be applied to the Sonar View, Sonar Zoom View, Circular Flasher View (Ice Fishing Mode: Off), and Big Digits View.

- **Gray:** Light Gray (weak) to Black (strong)
- **Green:** Dark Green (weak) to Light Green (strong)
- **Inverse:** Black (weak) to White (strong)
- **Original Palette:** Cyan (weak) to Red (strong)
- **Palette 1:** Navy Blue (weak), Purple (medium), Yellow (strong)
- **Palette 2:** Navy Blue (weak), Green (medium), Yellow (strong)
- **Palette 3:** Navy Blue (weak) to Red (strong)

*NOTE: To change the color palette for the Circular Flasher View, see **Flasher X-Press™** Menu: Color Palette.*

🖼 Bottom View
◀ Structure ID ▶

Bottom View

Settings: Structure ID, WhiteLine; Default = Structure ID

Bottom View selects the method used to represent bottom and structure on the display.

Structure ID® represents weak returns in blue and strong returns in red.

WhiteLine™ highlights the strongest sonar returns in white, resulting in a distinctive outline. This has the benefit of clearly defining the bottom on the display.

See *What's on the Sonar Display: Bottom Presentation* for more information.

Zoom Width
◀ **Wide** ▶

Zoom Width

Settings: Narrow, Medium, Wide; Default = Wide

Zoom Width adjusts the width of the Zoom window on the Sonar Zoom View.

83kHz Sensitivity	0
-10 ■■■■ ▯ 10	
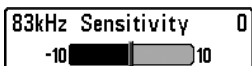
83 kHz Sensitivity

(Advanced, DualBeam PLUS™ Sonar only)

Settings: -10 to +10, Default = 0

83 kHz Sensitivity changes the sensitivity of the 83 kHz beam. Increasing the 83 kHz Sensitivity will display additional weak returns, and decreasing the 83 kHz Sensitivity will display fewer weak returns.

NOTE: 83 kHz Sensitivity is particularly useful for adjusting the sensitivity of the 83 kHz sonar returns in the 200/83kHz Split Sonar View. The 83kHz sensitivity can be adjusted without affecting the sensitivity of the 200 kHz returns shown in the 200 kHz sonar window.

455kH Sensitivity	0
-10 ■■■■ ▯ 10	

455 kHz Sensitivity

(Advanced, Down Imaging™ Views only
[597ci HD DI])

Settings: -10 to +10, Default = 0

455 kHz Sensitivity adjusts the sensitivity of the 455 kHz beam. Increase the sensitivity to display additional weak returns and decrease the sensitivity to display fewer weak returns.

Depth Lines
◀ **On** ▶

Depth Lines

(Advanced)

Settings: Off, On; Default = On

Depth Lines divide the display into four equal sections which are separated by three horizontal depth lines. The depth of each line is displayed along the depth scale. You can turn Depth Lines On or Off.

Depth Lines

Depth Lines

Sonar Menu Tab
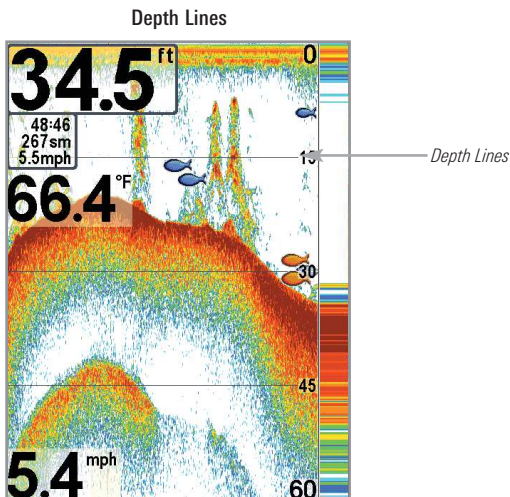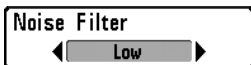
Noise Filter
◀ �_____ Low _____▶

Noise Filter

(Advanced)

Settings: Off, Low, Medium, High 1, High 2, High 3; Default = Low

Noise Filter adjusts the sonar Noise Filter to limit interference on the display from sources such as your boat engine, turbulence, or other sonar devices.

The Off setting removes all filtering. Low, Medium, High 1, High 2, and High 3 settings add progressive filtering of the sonar returns. High 1, High 2, and High 3 are useful when there is excessive trolling motor noise, but in some deep water situations, the High settings may actually hinder your unit's ability to find the bottom.

Max Depth	Auto
Auto ▢_____▢	1200
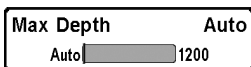
Max Depth

(Advanced)

Settings: Auto, 10 to 1200 ft, 3 to 400 m [International Models only]; Default = Auto

Max Depth controls the maximum depth of operation. When Max Depth is set to Auto, the Fishfinder will acquire bottom readings as needed (within the capacity of the unit). When Max Depth is set to match your fishing maximum depth, your Fishfinder will not attempt to acquire sonar data below that depth, so more detail will be shown on the screen.

NOTE: If the bottom is deeper than the Max Depth setting, the digital depth readout will flash, indicating that the Fishfinder cannot locate the bottom.
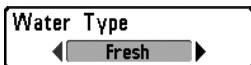
Water Type
◀ **Fresh** ▶

Water Type

(Advanced)

Settings: Fresh, Salt (shallow), Salt (deep); Default = Fresh

Water Type configures your unit for operation in fresh or salt water. In salt water, you can also choose the shallow or deep setting. The Water Type menu option is available when User Mode is set to Advanced (see *Main Menu: User Mode*).

> *NOTE: Make sure that the Water Type is set accurately, especially in salt water, as this affects the accuracy of deep water depth readings. In salt water, what would be considered a large fish might be 2 to 10 times bigger than a large fish in fresh water (depending on the type of fish you are seeking). The salt water setting allows for a greater range in fish size adjustment to account for this difference.*

Ice Fishing Mode
◀ **Off** ▶
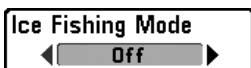
Ice Fishing Mode

Settings: Off, On; Default = Off

Ice Fishing Mode controls how information is displayed in the Circular Flasher View. When Ice Fishing Mode is off, the Circular Flasher View displays Real Time Sonar (RTS™) data in a traditional flasher format.

When Ice Fishing Mode is on, the Circular Flasher View displays the data in flasher format with additional features including Zoom and Depth Cursor. Also, the fishfinder's sensitivity settings are adjusted automatically to accommodate ice fishing conditions. These settings will apply to the other Sonar Views until you turn off the Ice Fishing Mode. See *Views: Circular Flasher View* for more information.

Imaging Colors
◀ **Blue** ▶

Imaging Colors

(Down Imaging™ Views only [597ci HD DI])

Settings: Blue, Amber 1, Amber 2, Brown, Green, Inverse, Gray, Green/Red; Default = Blue

Imaging Colors allows you to select which color palette you would like to use for the Down Imaging™ display.

Current Track
Saved Tracks
Waypoints
Routes
Chart Orientation North-Up
North Reference True
Waypoint Decluttering Off
Grid Rotation 0°
Trackpoint Interval 15 seconds
Track Min Distance 50ft
Map Datum WGS 84 (Default)
Course Projection Line Visible
Export All Nav Data
Delete All Nav Data
Continuous Navigation Mode Off
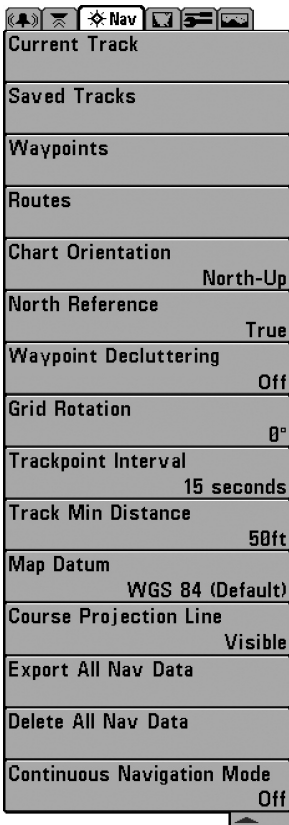
Navigation Menu, Advanced

Navigation Menu Tab

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.
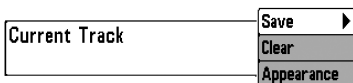
Current Track	Save ▶	**Current Track**
	Clear	
	Appearance	**Settings: Save, Clear, Appearance**

Current Track allows you to view the Current Track submenu. See *Introduction to Navigation: Save or Clear a Current track* for more information.

The Current Track Submenu contains the following menu options:

Save allows you to save the current track.

Clear allows you to delete 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, choose a color).

NOTE: To save the depth information with the Current Track, it is important to save the track and also edit the name before powering off the control head.
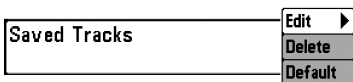
Saved Tracks	Edit ▶	**Saved Tracks**
	Delete	
	Default	**Settings: Edit, Delete, Default**

Saved Tracks Submenu

Saved Tracks allows you view the Saved Tracks submenu. See *Introduction to Navigation: Edit, Delete, or Hide Saved Tracks* for more information.

The Saved Tracks Submenu contains the following menu options:

Edit allows you to select a saved track and change its Name, Visibility (hidden or visible), Style, and Color (for track line styles only).

Delete allows you to delete a track from the saved tracks list.

Default sets the default appearance of your tracks, including Visibility (hidden or visible), Style, and Color (for track line styles only).

Create ▶	**Waypoints**
Edit	**Settings: Create, Edit, Delete, Cursor To, Go To,**
Delete	**Target, Grid**
Cursor To	
Go To	
Target	
Grid	
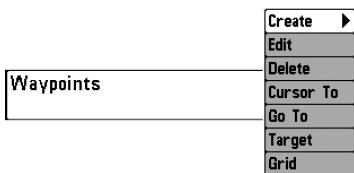
Waypoints

Waypoints Submenu

Waypoints allows you to view the Waypoints submenu. See *Introduction to Navigation* for more information.

The Waypoints Submenu contains the following menu options:

Create allows you to create a new waypoint, name it, 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 and Combo Views can also be changed.

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 and Combo Views.

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

Cursor To allows you to move the cursor quickly to 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.

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
Create ▶	
Edit	Settings: Create, Edit, Delete, Travel, Info

Routes
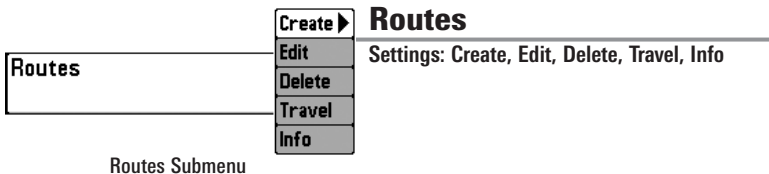
Routes Submenu

Routes allows you to view the Routes submenu. See *Introduction to Navigation: Save, Edit, or Delete a Route* for more information.

The Routes Submenu contains the following menu options:

Create allows you to create a new route from an empty route, name it, and add saved waypoints to it immediately. You can also change the waypoint order of the route from this menu.

Edit allows you to select a saved route and change its name and the waypoints in it.

Delete allows you to delete a route from the saved routes list.

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. When you select a route, navigation begins 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.

| Chart Orientation | **Chart Orientation** |
|◀ North-Up ▶| Settings: North-Up, Course-Up; Default = North-Up |

Chart Orientation allows you to select whether the Chart and Combo Views should be drawn North-Up or Course-Up. The Chart Orientation setting does not apply to the Bird's Eye View (see *Viewing Cartography*).

North Reference
◀ **True** ▶

North Reference

Settings: True, Magnetic; Default = True

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

Waypoint Decluttering
◀ **On** ▶
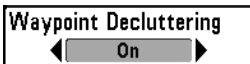
Waypoint Decluttering

(Advanced)

Settings: Off, On; Default = On

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. Select Off to to display waypoints at regular size.
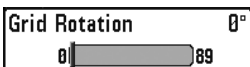
Grid Rotation   0°
0▐   ▌89

Trolling Grid Rotation

Settings: 0° to 89°, Default = 0°

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

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

| Trackpoint Interval | ### Trackpoint Interval |
| ◀ 1 second ▶ | **Settings: 1 second, 5 seconds, 10 seconds, 15 seconds, 30 seconds, or 60 seconds; Default = 1 second** |

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.

Trackpoint Interval works in conjunction with Track Min Distance. Both conditions must be met before a trackpoint is added to the current track. 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 16ft	### Track Min Distance
1▮[ ]300	*(Advanced)*
	Settings: 1 to 300 ft, or 1 to 100 m [International Units only]; Default = 16 ft, 5 m

Track Min Distance allows you to set a minimum distance of travel before a trackpoint is added to the track.

Track Min Distance works in conjunction with Trackpoint Interval. Both conditions must be met before a trackpoint is added to the current track. During slow travel or drift, setting both Trackpoint Interval and Track Min Distance to small values will allow you to increase the track resolution.
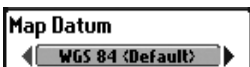
Map Datum	### Map Datum
◀ WGS 84 (Default) ▶	*(Advanced)*
	Settings: Various, Default = WGS 84

Map Datum allows you to change the map coordinate system used by the Fishfinder to match those of a paper map.

Course Projection Line
◄ **Visible** ►

Course Projection Line

Settings: Hidden, Visible; Default = Visible

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.

Export All Nav Data
►

Export All Nav Data

(optional-purchase SD Memory Card required)

Settings: Press the RIGHT Cursor key and follow screen instructions.

Export All Nav Data allows you to export all saved Tracks, Waypoints, and Routes to an SD memory card. If an SD memory card isn't installed, an error message will be displayed. Insert the SD memory card and try again. See *Introduction to Navigation: Export Navigation Data* for more information.

Delete All Nav Data
►

Delete All Nav Data

(Advanced)

Settings: Press the RIGHT Cursor key and follow screen instructions.

This menu option should be used with caution!

Delete All Nav Data allows you to delete all saved Tracks, Waypoints, and Routes.

Continuous Navigation Mode
◄ **Off** ►

Continuous Navigation Mode

Settings: Off, On, Default = Off

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

(table)	
Lat/Lon Grid	
	Hidden
Navaids on Bird's Eye View	
	Visible
Chart Select	
	Auto
Set Simulation Position	
Set Map Offset	
Clear Map Offset	
Shaded Depth	
	5m
Chart Detail Level	
	All
Map Borders	
	MMC/SD Only
Spot Soundings	
	Hidden
Contour Lines	
	Visible
Depth Colors	
	Shaded
Depth Highlight	
	Off
Depth Highlight Range	
	5ft
Water Level Offset	
	0
Shallow Water Highlight	
	0
Lake List	

Chart Menu
(Advanced User Mode, shown
with optional-purchase
LakeMaster® menu options)

Chart Menu Tab

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

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

*NOTE: When a map from an optional purchase MMC/SD card is installed, the Chart Menu Tab will change to display menu options that correspond with the active chart. To manually select a chart card, see **Chart Select**. Also, see **Add Maps to your Fishfinder** for more information.*

| Lat/Lon Grid |
| ◄ **Hidden** ► |

Lat/Lon Grid

Settings: Hidden, Visible; Default = Hidden

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

| Navaids on Bird's Eye View |
| ◄ **Visible** ► |

Navaids on Bird's Eye View

Settings: Hidden, Visible, Default = Visible

Navaids 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.

| Chart Select |
| ◄ **Auto** ► |

Chart Select

Settings: Various, Default = Auto

Chart Select allows you to choose which chart to use if you have built-in charts or a map card. If you select Auto, your unit will select a chart automatically.

| Set Simulation Position |

Set Simulation Position

(Advanced)

Settings: Press the RIGHT Cursor key and follow screen instructions to activate.

Set Simulation Position allows you to set the position of the boat used in the Simulator. 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. Then confirm the position using the Set Simulation menu setting.

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

Set Map Offset

(Advanced)

Settings: Press the RIGHT Cursor key and follow screen instructions to activate.

Set Map Offset allows you to change the map offset used by your Fishfinder. Press the 4-WAY Cursor Control key to activate the cursor and move it to the location where the Map Offset will be applied. Then, confirm the map offset position using the Set Map Offset menu setting.

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.

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

Clear Map Offset

(Advanced)

Settings: Follow screen instructions to activate.

Clear Map Offset allows you to clear the Map Offset. The Clear Map Offset menu option is available when Map Offset is active.

Shaded Depth	15ft
Off ▭	60

Shaded Depth

Settings: Off, 1 to 180 ft, or 1 to 60 m [International Units only], Default = 15 ft, 5 m

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

Chart Detail Level		
◀	All	▶

Chart Detail Level

Settings: Basic, Navigation, Underwater, All; Default = All

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

NOTE: Some chart details are only available with optional-purchase SD memory cards.

Basic shows land areas, ports, obstructions, and restricted areas.

Navigation shows navaids, 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.

Map Borders		
◀	MMC/SD Only	▶

Map Borders

Settings: Hidden, MMC/SD Only, All Visible; Default = MMC/SD Only

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
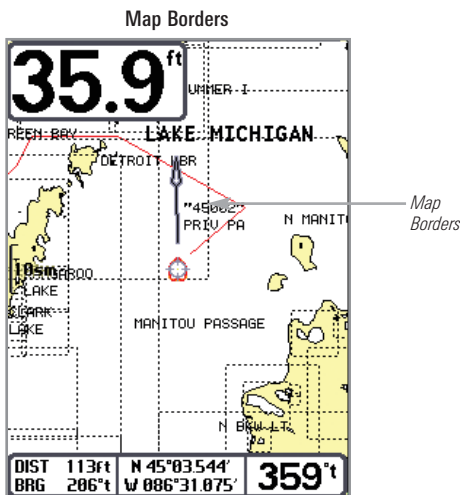
| Spot Soundings |
| ◀ Hidden ▶ |

Spot Soundings

Settings: Hidden, Visible; Default = Hidden

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 SD memory cards.

| Contour Lines |
| ◀ Visible ▶ |

Contour Lines

(optional-purchase LakeMaster® charts only)

Settings: Hidden, Visible; Default = Visible

Contour Lines sets whether the water contour lines are visible or hidden in the Chart Views. Contour Lines are also affected by the Water Level Offset setting.

| Depth Colors 4 |
| Off█▏ 10 |

Depth Colors

(optional-purchase LakeMaster® charts only)

Settings: Off, 1-10; Default = Off

Depth Color sets the depth shading in the Chart views to Off or Shaded.

| Depth Highlight 11ft |
| Off█ 180 |

Depth Highlight

(optional-purchase LakeMaster® charts only)

Settings: Off, 1 to 180 ft, 1 to 30 fathoms, 1 to 60 m (International Models only); Default = Off

Depth Highlight allows you to highlight a depth setting in the chart views. The depth you set will be highlighted in green. Use Depth Highlight with Depth Highlight Range.

Depth Highlight Range (+/-) 8ft
0 ■ 60

Depth Highlight Range (+/-)

(optional-purchase LakeMaster® charts only)

**Settings: 0 to 60 ft, 0 to 30 fathoms, 0 to 20 m
(International Models only); Default = 5 ft, 2m**

Depth Highlight Range adjusts the range on each side of the highlighted depth, when a Depth Highlight is active in the chart views.

> For example, if you know a certain fish is holding at 18 - 20 feet, you can set the Depth Highlight at 19 feet, and the Depth Highlight Range a +/- 1 foot. The view will show a green band from 18 - 20 feet.

Water Level Offset   7ft
-30 ■ 30

Water Level Offset

(optional-purchase LakeMaster® charts only)

**Settings: -30 to +30 ft, -5 to +5 fathoms, -10 to +10 m
(International Models only); Default = 0 ft/m**

Water Level Offset allows you to change the level of the water being read from the control head. The displayed numbers on the Contour Lines will adjust from the Water Level Offset setting, and the water level offset will be highlighted in dark brown.

> For example, if the lake is down 5 feet, set the Water Level Offset setting to -5.

Shallow Water Highlight   11ft
0 ■ 30

Shallow Water Highlight

(optional-purchase LakeMaster® charts only)

**Settings: 0 to 30 ft, 0 to 5 fathoms, 0 to 10 m
(International Models only); Default = 0**

Shallow Water Highlight allows you to select a minimum shallow depth setting so that the depth is highlighted in red in the Chart Views.

> For example, if your boat has a draft of 3 feet, set the Shallow Water Highlight feature to 3 feet, and the unit will draw a red band from 0 - 3 feet. Use this setting with Water Level Offset.

Lake List

(optional-purchase LakeMaster® charts only)

Settings: Press the RIGHT Cursor key to activate.

Lake List allows you to view the list of lakes included on the installed SD memory card.

Sort By: Highlight Sort By, and press the RIGHT or LEFT Cursor keys to select a sort option for the list.

Scroll: Press the UP or DOWN Cursor keys to scroll through the list. As each lake is highlighted, you can view information about the lake in the white box displayed on the screen.

Cursor To: Highlight a lake on the list and press the RIGHT Cursor key to move the active cursor to the location you've chosen. You can then mark waypoints, or press the GO TO key to start navigation toward a waypoint, or press the INFO key for more information.

Chart View with LakeMaster®

Depth Highlight

Water Level Offset

Contour Lines

Shallow Water Highlight
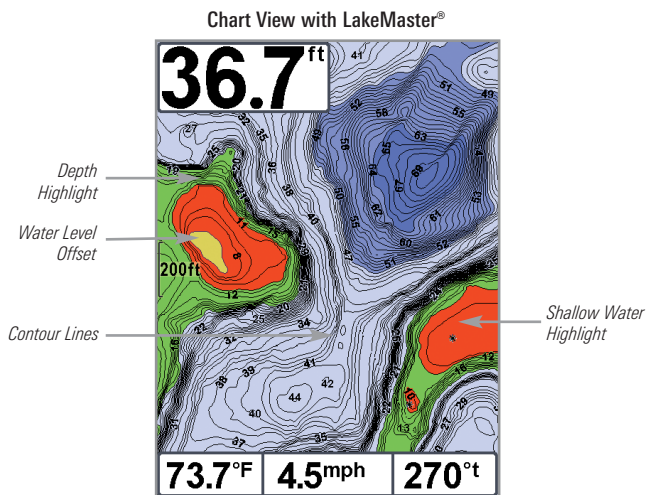
Menu tabs	
(♪) ⊼ ❖ ⊐ Setup ▭	
Units - Depth	
	Feet
Units - Temp	
	°F
Units - Distance	
	Statute Miles
Units - Speed	
	mph
User Mode	
	Advanced
Language	
	English
Triplog Reset	
Restore Defaults	
Select Readouts	
Depth Offset	
	0.0ft
Temp. Offset	
	0.0°
Speed Calibration	
	0%
Local Time Zone	
	EST (UTC-5)
Daylight Saving Time	
	Off
Position Format	
	dd°mm.mmm'
Time Format	
	12-Hour
Date Format	
	mm/dd/yy
NMEA Output	
	Off
Sonar	
	On
Demonstration	
	Visible
Sound Control	
	All Sounds
Screen Snapshot	
	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, Advanced
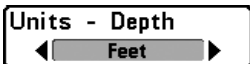
Units - Depth
◀ Feet ▶

Units - Depth

Settings: Domestic Models: Feet, Fathoms; International Models: Meters, Feet, Fathoms; Default = Feet/Meters

Units - Depth selects the units of measure for all depth-related readouts.
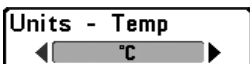
Units - Temp
◀ ℃ ▶

Units - Temp

(International only)

Settings: Celsius, Fahrenheit; Default = Celsius

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

Units - Distance
◀ Statute Miles ▶

Units - Distance

Settings: 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 - Distance selects the units of measure for all distance-related readouts. This menu option is available if a Temp/Speed accessory is connected and the paddlewheel has moved at least once or if the GPS Receiver is connected.
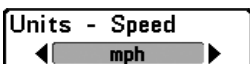
Units - Speed
◀ mph ▶

Units - Speed

Settings: Domestic Models: mph, kts; International Models: kph, mph, kts; Default = mph/kph

Units - Speed selects the units of measure for speed-related readouts. This menu option is available if a Temp/Speed accessory is connected and the paddlewheel has moved at least once or if the GPS Receiver is connected.
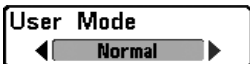
User Mode
◄ **Normal** ►

User Mode

Settings: Normal, Advanced; Default = Normal

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.
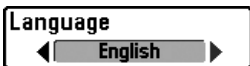
Language
◄ **English** ►

Language

(International Models only)

Settings: Various, Default = English

Language selects the display language for menus.

	Confirm:
Triplog Rese	Triplog Reset
	◄No Yes►
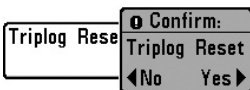
Triplog Reset

Settings: Press the RIGHT Cursor key and follow screen instructions to activate.

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

	Confirm:
Restore De	Restore Defaults
	◄No Yes►
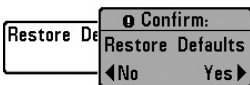
Restore Defaults

Settings: Press the RIGHT Cursor key and follow screen instructions to activate.

Use this menu choice with caution!

Restore Defaults resets ALL menu settings to their factory defaults.

Select Readouts
Readout 1
Temperature
Readout 2
Off
Readout 3
Off
Readout 4
Speed
Readout 5
Time+Date
Readout 6
Off

Select Readouts
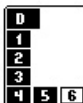
Select Readouts

(Advanced, Sonar View only)

Settings: Various, Default = Off

Select Readouts sets the information to display in each of the 6 fixed-position data windows arranged around the left and bottom edges of the Sonar View screen. To leave the data window blank, select Off. See *Views* to change the Select Readouts.

Data windows can display readouts from connected equipment such as GPS Receiver or the Temp/Speed accessory (optional-purchase required). Each data window can be empty or contain one of the following information categories:

- Course
- Navigation
- Position
- Speed
- Temperature
- Time + Date
- Triplog
- Voltage
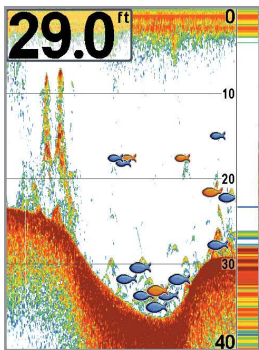
Default Sonar View   Customized Sonar View
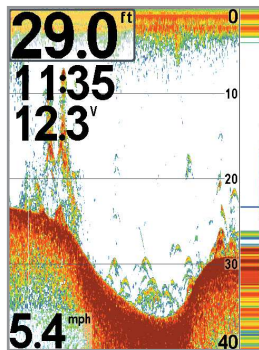
NOTE: The availability of the digital readout information corresponds with the view selected, the accessory attached, and whether or not you are navigating.

Depth Offset	0.0ft
-10.0	10.0

Depth Offset
(Advanced)

Settings: -10.0 to +10.0 ft, or -3 to 3 m [International Models only]; Default = 0

Depth Offset will adjust the digital depth readout to indicate depth from the waterline or boat's keel. Enter a positive vertical measurement from the transducer to the waterline to read the depth from the waterline. Enter a negative vertical measurement from the transducer to keel to read the depth from the keel.

Temp. Offset	0.0°
-10.0 ▮▭▭ 10.0	

Temp. Offset

(Advanced, with Temp/Speed only)

Settings: -10.0 to +10.0 degrees, Default = 0

Temp. Offset will adjust the temperature readout by the amount entered. This menu option is available if a Temp/Speed Accessory is connected and the paddlewheel has moved at least once.

Speed Calibration	0%
-20 ▮▭▭ 20	

Speed Calibration

(Advanced, with Temp/Speed only)

Settings: -20% to +20%, Default = 0%

Speed Calibration will adjust the speed readout by the amount entered. This menu option is available if a Temp/Speed Accessory is connected and the paddlewheel has moved at least once.

Local Time Zone
◀ EST ‹UTC-5› ▶
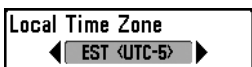
Local Time Zone

(Advanced)

Settings: Various, Default = EST [UTC-5] - Eastern Standard Time

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 on the Sonar View (see *Setup Menu Tab: Select Readouts*).

Daylight Saving Time
◀ Off ▶

Daylight Saving Time

(Advanced)

Settings: Off, On; Default = Off

Daylight Saving Time adjusts the time display to account for local Daylight Saving Time when Time+Date is selected as a Digital Readout on the Sonar View (see *Setup Menu Tab: 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.

Position Format
◀ dd°mm.mmm' ▶

Position Format

(Advanced)

Settings: dd.ddddd°, dd°mm.mmm', or dd°mm'ss"; Default = dd°mm.mmm'

Position Format selects the format of the latitude and longitude position display.

Time Format
◀ 12-Hour ▶

Time Format

(Advanced, International only)

Settings: 12 hour, 24 hour; Default = 12 hour

Time Format changes the time format used by the unit. 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 on the Sonar View (see *Setup Menu Tab: Select Readouts*).

Date Format
◀ mm/dd/yy ▶

Date Format

(Advanced, International only)

Settings: mm/dd/yy, dd.mm.yy, yy.mm.dd; Default = mm/dd/yy

Date Format changes the date format used by the unit. Date Format selects the format for the date display when Time + Date is selected as a Digital Readout on the Sonar View (see *Setup Menu Tab: Select Readouts*).
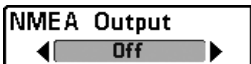
NMEA Output
◀ **Off** ▶

NMEA Output

(Advanced)

Settings: Off, On; Default = Off

NMEA Output turns the NMEA* output on or off. 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.

NOTE: *A separate purchase of accessory AS-HHGPS may be required for the NMEA output function.*

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
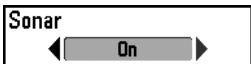
Sonar
◀ **On** ▶

Sonar

Settings: Off, On; Default = Off

Sonar sets whether the Sonar views are shown in the View rotation. Select Off to deactivate Sonar and remove the Sonar Views from the View rotation.

Demonstration
◀ **Visible** ▶
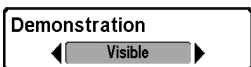
Demonstration

Settings: Off, Visible; Default = Visible

Demonstration controls whether the Demonstration Mode is visible or off. The Demonstration Mode appears on the screen if you don't press any keys during the warning screen at power up. Menu settings cannot be saved in Demonstration (see *Power On the Control Head* and *Start-Up Options Menu*).

Sound Control
◀ **All Sounds** ▶

Sound Control

Settings: No Sounds, Alarms Only, All Sounds; Default = All Sounds

Sound Control allows you to set when the control head will beep or sound because of key presses and/or alarms.
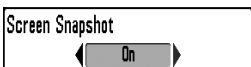
Screen Snapshot
◀ **On** ▶

Screen Snapshot

Settings: Off, On; Default = Off

Screen Snapshot activates the screen snapshot function. When Screen Snapshot is enabled, pressing the MARK key creates a saved screen snapshot on the optional-purchase SD memory 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 Snapshot and Recording View and Snapshot and Recording X-Press™ Menu.

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

NOTE: If you use your SD memory card in two different Fishfinder units that have different screen sizes, the recordings made on one unit will still be present on the card, but will be represented by the Unavailable icon (circle with a slanted line through it) on the Snapshot and Recording View on the other unit.

(⟨⟩)	🔀	☼	🔲	🔁	🖼 Views

Bird's Eye View

Visible

Chart View

Visible

Chart/Down Combo View

Visible

Combo View

Visible

Down Imaging View

Visible

Down/Sonar Combo View

Visible

Sonar View

Visible

Sonar Zoom View

Visible

Split Sonar View

Visible

Big Digits View

Visible

Circular Flasher View

Visible

Snapshot and Recording View

Visible

Self Test

Hidden

Accessory Test

Hidden

GPS Diagnostic View

Hidden

Views Menu
Shown with optional Down Imaging™ Views and Accessory Views

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.*

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.

Fishfinder Doesn't Power Up

If your Fishfinder 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 Fishfinder 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.

Fishfinder Defaults to Simulator with a Transducer Attached

A connected and functioning transducer will cause the newly-started Fishfinder to go into Normal operating mode automatically. If, when you power up the Fishfinder, it goes into Simulator mode automatically, even though a transducer is already connected, this means that the control head is not detecting the transducer. Perform the following troubleshooting tasks:

- Using the Installation Guide that also comes with your Fishfinder, check to make sure that the transducer cable is securely connected to the Fishfinder. Reconnect if necessary, and power up the Fishfinder again to see if this fixes the problem.

- Replace the non-functioning transducer with a known good transducer if available and power up the control head again.

- Check the transducer cable. Replace the transducer if the cable is damaged or corroded.

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.
When the boat moves at higher speeds, the bottom disappears or suddenly weakens, or the display contains gaps.	The transducer position may need to be adjusted. A mix of air and water flowing around the transducer (cavitation) may be interfering with the interpretation of sonar data. See your Installation Guide for suggestions on adjusting the transducer position.
	Electrical noise from the boat's engine may be interfering with sonar reception. See *Finding the Cause of Noise* for more information.
There are no fish detected, even when you know they are in the water under the boat, or sonar readings seem weak or faulty.	Sonar readings may be affected if the transducer is not positioned correctly (i.e. mounted at an angle, not straight down), or there is some kind of mechanical interference, either because it is mounted inside a hull that is too thick for proper sonar transmission, the bond between the transducer and the hull is not airtight, or because the transducer is dirty. Check with your Installation Guide for guidance on re-positioning the transducer, and make sure the transducer is clean.
	Low battery voltage may be affecting the power of signal transmission.
	Electrical noise from the boat's engine may be interfering with sonar reception. See *Finding the Cause of Noise* for more information.

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.

500 Series™ Fishfinder Accessories

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

Temperature/Speed: Simply plugs into the Humminbird® control head and provides real time speed and temperature readouts, as well as a valuable Triplog function.

> *NOTE: If an external Temperature/Speed (TS-W) or Temperature (TG-W) accessory is connected AND a transducer with temperature built in is connected at the same time, the TS-W or TG-W accessory will override the temperature built into the transducer.*

Be sure to check out our Web site at **humminbird.com** for additional new and exciting accessories to grow your Humminbird® Fishfinder!

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

Specifications

Depth Capability . . . . **587ci HD/597ci HD:** 1200 ft (365 m)
597ci HD DI: 250 ft (76 m) Down Imaging™,
600 ft (183) traditional sonar

Power Output . . **587ci HD/597ci HD:** 500 W (RMS), 4000 W (Peak to Peak)
597ci HD DI: 300 W (RMS), 2400 W (Peak to Peak)

Operating Frequency . . . . **XNT 9 20 T:** 200 kHz and 83 kHz
XNT 9 DI T: 455 kHz and 800 kHz ;
200 kHz and 455 kHz (traditional sonar)

Area of Coverage. . . . .
XNT 9 20 T: 60° @ -10 dB in 83 kHz, 20° @ -10 dB in 200 kHz
XNT 9 DI T: 75° @ -10 dB in 455 kHz, 45° @ -10 dB in 800 kHz
XNT 9 DI T (traditional sonar): 25° @ -10 dB in 200 kHz
16° @ -10 dB in 455 kHz

Target Separation. . . . . 2 1/2 Inches (63.5 mm)

Power Requirement . . . . 10-20 VDC

Current Draw . . . . 550 mA

LCD Matrix . . . . **587ci HD:** 640 V x 480 H
597ci HD/597ci HD DI: 640 V x 640 H

Transducer. . . . . **587ci HD/ 597ci HD:** XNT 9 20 T
597ci HD DI: XNT 9 DI T

Transducer Cable Length . . . . 20 ft (6 m)

IPX Rating . . . . IP67 Waterproof/Submersible @ 1 m for 30 minutes
and dust tight

NOTE: Humminbird® verifies maximum stated depth in saltwater conditions, but actual depth performance may vary due to transducer installation, water type, thermal layers, bottom composition and slope.

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

Glossary

Sonar Terms:

Beam (Sonar Beam) The wide, cone-shaped projection of sound waves formed as sound travels underwater. See *Cone Angle*.

Bottom Contour The profile of the bottom graphed to the display as the depth changes.

Bottom Hardness The density (or composition) of the bottom. Varying levels of hardness can be determined by interpreting the "thickness" of the main sonar return. Hard returns appear thin and black, softer returns appear thicker and less black. It is important to note that a sonar return from a sloping bottom can have the appearance of a softer bottom.

Cavitation The effect of air bubbles created as the propeller rotates and the boat moves through the water.

Cone Angle The angular measurement of the sonar beam at a specific dB down point (i.e. -10 dB). See *dB Down Point*.

Dead Zone The area of the sonar beam that receives the sonar signal after the main bottom return. Fish and other objects close to the bottom that fall within the dead zone will probably not be visible in the sonar beam. Precision sonar beams, such as the Humminbird® 20° beam, have a smaller dead zone than wider sonar beams.

Decibel The measurement for sound pressure level, or "intensity"of the sonar return. See *dB Down Point*.

dB Down Point The standard decibel level at which the sonar cone angle is measured, and is written as "@ -10 dB" or "@ -3 dB". Measurements at smaller down points (bigger negative numbers) indicate that the less intensive sonar signals are being used for the measurement.

Display, FSTN (Film Super-Twist Nematic) FSTN is a monochrome display technology characterized by black, high-contrast pixels. All monochrome fixed mount Humminbird® products use FSTN technology.

Frequency A measure of the number of sound wave cycles per second of a sound impulse transmitted underwater. A typical frequency for fishfinders is 200 kHz, which offers a good balance of performance under many conditions. Lower frequencies, such as 50 kHz, are capable of penetrating to greater depths, but with less resolution. Higher frequencies, such as 455 kHz, offer greater resolution, but are limited in depth performance. Humminbird® uses a variety of frequencies that are optimized for specific applications.

Grayscale The use of varying shades of gray to represent the strength of the sonar signal on the display. Traditionally, the strongest sonar signals are represented in black, and progressively weaker signals are represented in progressively lighter shades of gray.

Noise The unintentional, external sound waves that interfere with the optimal operation of sonar. Noise appears as random "dots" on the display and is caused by a variety of sources. Many Humminbird® products have a Noise Filter menu setting that allows the user to clear the screen of noise that is difficult to eliminate (also, see *Troubleshooting*).

Pixels The "picture elements", or small square blocks, that make up the image on the LCD. Measured as a vertical by horizontal number (i.e. 640V x 320H), this key specification typically indicates the quality of resolution. In fishfinders, the total resolution (vertical multiplied by horizontal) is often less important than the "Vertical Pixel" resolution because a greater number of vertical pixels provide finer resolution of targets detected by sonar. Sonar information on the horizontal axis can vary greatly, depending on boat speed and the Chart Speed setting.

Power Output The amount of sound energy emitted into the water by the transducer's transmitter. Power output is measured using either RMS (Root Mean Square) or P-T-P (Peak-to-Peak) measurement systems. Either method is acceptable, but it is important when comparing power outputs, to make sure that the same measurement system is being used for both outputs, because P-T-P numbers are 8 times higher than RMS numbers. Greater power output allows the sonar signal to penetrate through weeds and thermoclines, reach deeper depths and operate more effectively in noisy environments, such as when the boat is running at high speed.

Pulse Width (Pulse Length) The length of time that a sonar sound burst is transmitted into the water. Shorter pulse widths provide better target separation, but cannot travel to great depths. Longer pulse widths provide better depth penetration, but result in poorer target separation. Humminbird® varies pulse width based on depth to optimize both target separation and depth performance. See *Target Separation*.

Second Return Describes the appearance of a second sonar return below the primary sonar return (bottom contour) at exactly twice the true depth. The second return is caused by the same sonar energy bouncing off the bottom once, rebounding to the water surface and then traveling back down to the bottom to be reflected again. Second returns are more common in shallow water and over hard bottoms; it is possible to see a third sonar return under some circumstances. The second return provides useful information to help determine bottom hardness, as areas with harder bottoms will generally create a second return. The second return can be used as a guide to set Sensitivity when in shallower water.

SONAR (SOund and NAvigation Ranging) Sonar technology uses precision sound bursts transmitted underwater to determine the distance and other attributes of objects in the water. Distance can be determined because the speed of sound in water is constant, and the time for the signal to return is measured. Sound also travels very quickly underwater, making sonar a responsive, cost-effective tool. Sonar is the basic technology behind all recreational and commercial fishfinding and depthfinding devices.

Sonar Update Rate   The number of times per second that the transducer's transmitter/receiver sends and receives sonar signals. A very fast sonar update rate collects more information and provides a more detailed image of the bottom, fish, and structure. Many Humminbird® units operate at up to 40 times per second when in single frequency operation. Due to the limitation of the speed of sound in water, the update rate begins to slow as depth increases to deeper than 50 feet. In very shallow water (less than 10 feet), however, update rates as much as 60 times per second can be achieved.

Speed The rate at which the boat moves through the water. Boat speed can be measured as Speed Over Ground or Speed Through Water. Speed Over Ground is provided by GPS, and is the measurement of the boats progress across a given distance. 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 Through Water is most critical for anglers using downriggers, as it impacts the running depth of the down riggers. Speed Over Ground is optimal for navigation, as accurate destination times can be derived from this measurement. Humminbird® products allow for input and display of both sources.

Structure A general term for objects on the bottom that present a discontinuity and are a likely attractor for fish. This includes bottom contour features (drop-offs, humps, and holes), standing structure (stumps, timbers, brush piles), and a wide range of other potential objects (sunken boats, reefs).

Surface Clutter A phenomenon where sonar returns are reflected off of tiny objects near the surface of the water, including algae and even air bubbles. Typically, saltwater environments have significantly greater surface clutter than freshwater due to continuous wind and wave action that causes aeration at the surface.

Target Separation The measurement of minimum distance that a fishfinder needs to be able to recognize two very close objects as two distinct targets (i.e. two fish hanging very close, or a fish hanging very close to structure). Humminbird® fishfinders provide a very good 2 1/2 inches of target separation in shallower than 100 feet of depth. Target separation decreases as depth increases due to the need for longer Pulse Width to achieve greater depth. See *Pulse Width*.

Thermoclines Water layer(s) of distinctly different temperatures that create a sonar reflection due to the density of the differing water temperatures. Typically a thermocline will appear as a continuous band across the display at some distance above the bottom contour. Thermoclines are of interest to anglers because fish will suspend above or below the thermocline as they seek the optimum temperature and oxygen levels.

Time Variable Gain (TVG) A processing step applied to the sonar return to "normalize" the data so that objects of equal size (i.e. fish) appear to be the same size, even if they are separated by a good distance.

Transducer The transducer is part of the sonar system, which mounts on the boat and is in contact with the water, that converts the electrical energy from the transmitter into sound energy, and that forms the sonar beam in turn. Internally, the transducer consists of one or more piezo electric disks that expand by very minute amounts to create the sound wave. This element also works in reverse, converting the returned sound energy back into an electrical signal that the receiver interprets. See *SONAR*.

Zoom A feature that focuses on a smaller area of the bottom to provide enhanced resolution. With enhanced resolution, the angler can more easily see fish hanging in structure or multiple fish hanging close together.

Zoom, Bottom Lock Bottom Lock Zoom is a feature that focuses on a smaller area just above the bottom to provide enhanced resolution. Unlike regular zoom, it continuously graphs the bottom at a constant point on the display regardless of changes in depth. This "flattens" out the bottom contour, but is effective at showing fish on or near the bottom, and is preferred by many saltwater anglers.

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.

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

Bearing (BRG) 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 A navigation device that shows Present Position on a Map, along with Tracks, Waypoints, and Routes. All Chartplotters are also considered Trackplotters.

Cold Start 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) 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) 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) A system used 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 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) 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 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 (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. See *How GPS Works*.

Heading 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 Refers to a particular survey of the earth's surface that was referenced when creating a chart (i.e. WGS84). 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 (Multi Media Card) An MMC is a postage stamp-sized memory device used to store electronic data such a maps, waypoints, routes, and other information. MMC is a very rugged format suitable for the marine environment, but it is not waterproof. MMC is the same format that many digital cameras use. See *SD*.

North, Magnetic 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 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. See *Magnetic North*.

Present Position   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 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 (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 (SA)   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)   The measurement of the boat's progress across a given distance and 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)   The estimated time required to reach the destination waypoint. TTG is calculated using the SOG and DTG. See *SOG* and *DTG.*

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

Trolling Grid 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.

UTC (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)).

WAAS (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 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 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.