

LAKEMASTER MAP CARDS

User Manual



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532816-1EN_B





SIMPLY. CLEARLY. BETTER.


THANK YOU!


Thank you for choosing Humminbird®, the #1 name in marine electronics. 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. We encourage you to read this manual carefully in order to get the full benefit from all the features and applications of your Humminbird product.


Contact Humminbird Technical Support through our Help Center at <https://humminbird-help.johnsonoutdoors.com/hc/en-us>.


 **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!** The electronic chart in your Humminbird unit is an aid to navigation designed to facilitate the use of authorized government charts, not to replace them. Only official government charts and notices to mariners contain all of the current information needed for the safety of navigation, and the captain is responsible for their prudent use.


 **WARNING!** Do NOT save data files (waypoints, routes, tracks, groups, recordings, etc.) to your map card. Saving data to your map card will permanently damage it. You can save navigation data to the control head and export it to a blank card. See **Save and Export Navigation Data** for details.


 **WARNING!** Do NOT delete or change the contents of your map card. Changing the card will permanently damage it.


 **WARNING!** Humminbird is not responsible for the loss of data files (waypoints, routes, tracks, groups, recordings, etc.) that may occur due to direct or indirect damage to the unit's hardware or software. It is important to back up your control head's data files periodically. Data files should also be saved to your PC before restoring the control head defaults or updating the software. See your control head operations manual for details.


 **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 birth defects or other reproductive harm.


 **NOTE:** Do NOT leave the control head SD slot cover open. The slot cover should always be closed to prevent water damage to the unit.


 **NOTE:** Some features discussed in this manual require a separate purchase. 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.

 **NOTE:** The illustrations in this manual may not look the same as your product, but your unit will function in the same way.

 **NOTE:** To purchase accessories for your control head, visit our Web site at humminbird.com or contact Humminbird Technical Support through our Help Center at <https://humminbird-help.johnsonoutdoors.com/hc/en-us>.

 **NOTE:** The procedures and features described in this manual are subject to change without notice. This manual was written in English and may have been translated to another language. Humminbird is not responsible for incorrect translations or discrepancies between documents.

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

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

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.

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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 wheeled 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. Johnson Outdoors Marine Electronics, Inc. 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.

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OVERVIEW

Install a Humminbird LakeMaster® map card with VX Technology to add enhanced or high definition lake maps to your Humminbird chartplotter. Humminbird LakeMaster Premium map cards with VX Technology allow you to add layers to your map that show aerial imagery [available for select lakes only] and shaded relief.

- **Compatibility:** Humminbird LakeMaster and LakeMaster Premium chart cards with VX Technology are available to use with HELIX® **G3/G3N AND G4/G4N** control heads with chartplotting capabilities and **all APEX™ and SOLIX® control heads**. Visit humminbird.com to review the latest compatibility information.

SET UP THE CONTROL HEAD

Use the following instructions to start using the latest LakeMaster features with your Humminbird control head.

1 | Update the Control Head Software and Humminbird Basemap

It is important to install the latest software update to enable Humminbird LakeMaster map cards with VX Technology on your control head.

1. Check the Current Software Version

LakeMaster with VX Technology requires the following software versions:

- **APEX/SOLIX:** 4.070 and later
- **HELIX:** 2.750 and later

APEX/SOLIX

1. **Power On:** Press the POWER key.
2. Press the HOME key.
3. Select **Settings**.
4. Select **Network**.
5. Select **System Info**.

Read the Software Version number. You must have software version 4.070 and later installed on your control head.

HELIX

1. **Power On:** Press the POWER key.
2. When the title screen is displayed, press the MENU key.
3. Select **System Status** from the Start-Up Options menu.

Read the Software Version number. You must have software version 2.750 and later installed on your control head.

4. **Power Off:** Press and hold the POWER key.

2. Check the Current Humminbird Basemap Version (HELIX only)

LakeMaster with VX Technology requires the following basemap versions to operate on HELIX control heads:

- **HELIX 5, 7 and 8:** 2.010 [released 07/2020] and later
- **All other compatible HELIX models:** 1.031 [released 07/2020] and later

1. **Power On:** Press the POWER key.
2. When the title screen is displayed, press the MENU key.
3. Select **System Status** from the Start-Up Options menu.

Read the Humminbird Basemap version number. You must have version 2.010 and later [for HELIX 7 and 8] or version 1.031 and later [for all other compatible HELIX models].

4. **Power Off:** Press and hold the POWER key.

3. Update the Control Head Software and Humminbird Basemap

If you need to update the control head software or basemap, follow the instructions in this section. See your control head operations manual for additional information about updating software.

Review the following important information before proceeding with the updates:

- **The control head can take between 10-15 minutes to complete both updates (if applicable). Do not disconnect power to the control head or interrupt the update process.**
- HELIX control head software must be updated before the Humminbird Basemap can be updated.
- If you have more than one control head, each control head must be updated individually. They cannot be updated through a networked unit.

WARNING! Before the control head software is updated, save your navigation data, sonar recordings, and screen snapshots to an SD card. Humminbird is not responsible for the loss of data files (waypoints, routes, tracks, groups, snapshots, recordings, etc.) that may occur due to direct or indirect damage to the unit's hardware or software. See your control head operations manual for more information.

1. Insert a formatted microSD or SD card into the slot on your PC.
If you have a microSD card, you will use a card adapter with your PC.
2. **Download:** Visit humminbird.com. Click Support > Software Updates. The available software updates are listed as Downloads under each product.
 - Under Downloads, click the file name. Confirm the file name is for your control head model.
 - Read the instructions in the dialog box and select Download.
 - Follow the on-screen prompts to save the software file to the microSD or SD card
3. Power on the control head.
4. Insert the microSD or SD card with the updated software file into the control head card slot. For microSD compatible control heads, remove the microSD card from the adapter and insert it into the control head card slot.
5. The control head will recognize the new software and run through a series of prompts to install the software. Follow the on-screen prompts to complete the software update.



NOTE: The control head will automatically restart after the control head software update is complete.

6. Repeat step 5 to install the Humminbird Basemap software (HELIX users only).



NOTE: After the Humminbird Basemap software update is complete, your control head is ready for use. The control head will not restart again.

7. When you have finished updating your control head, remove the microSD or SD card from the control head card slot.
8. Repeat steps 1 through 5 for each control head.

2 | Insert the LakeMaster Map Card

Your control head is compatible with an SD card or a microSD card. To insert the map card, follow the instructions included with your control head operations guide. Also, use the following guidelines:

- **Confirm the map card is locked.** The switch should be pushed down.



WARNING! Do NOT save data files (waypoints, routes, tracks, groups, recordings, etc.) to your map card. Saving data to your map card will permanently damage it. You can save navigation data to the control head or export it to a blank card. See **Save and Export Navigation Data** for details.

- **Do not force the card into the slot.** The card should click easily into place. See your control head operations manual for instructions.
- **Do not leave the card slot cover open.** The slot cover should always be closed to prevent water damage to the unit.

Confirming the Map Card is Locked



SET UP FOR THE DAY

Use the following instructions to get started each time you go out on the water.

1 | Power On

1. Press the POWER key.
2. Choose your startup mode.

If you are on the water with GPS reception, select Normal mode. [Normal mode is required for on-the-water use.]

If you are off the water and don't have GPS reception, select Simulator mode.

2 | Display a Chart View

Display a Chart View

APEX/SOLIX

1. Press the HOME key.
2. Select **Chart View** from the Favorites bar.

HELIX

1. Press the VIEW key until a Chart View is displayed on-screen.

OR

1. Press and hold the VIEW key to open the Views X-Press Menu.
2. Select **Chart > Chart View**.

Chart View with LakeMaster Map Card Installed (APEX/SOLIX)

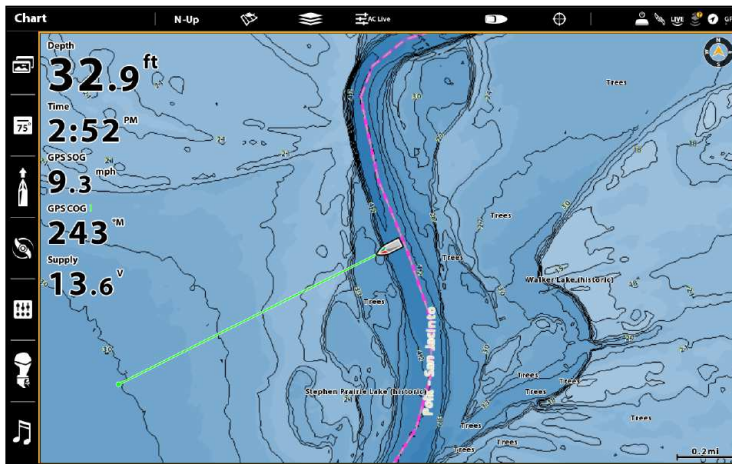
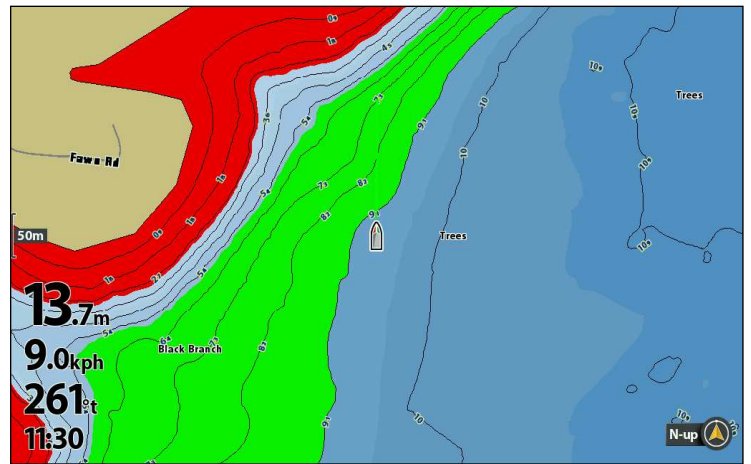


Chart View with LakeMaster Map Card Installed (HELIX)



The map displayed on the Chart View is based on your latitude/longitude position and the map card installed in the control head, so your current position will be displayed automatically. GPS reception is required for the correct position to be displayed.

If your current position is not displayed, confirm you have GPS reception and that your LakeMaster Map Card with VX Technology is installed. Also, use the following instructions to review the Chart Source and Selected Chart Card.

Change the Chart Source

APEX/SOLIX

1. Press the HOME key.
2. Select **Settings** > **Chart**.
3. Select a chart source.

Global: Turn Global on to share the map source with the other control heads in a network.


HELIX

1. **Main Menu:** Press the MENU key twice.
 2. Select the **Chart** tab.
 3. Select **Map Source**.
 4. Select the installed chart card.
- Auto:** The best available map will be selected automatically.

Select a VX Chart Card

(for use with multiple VX cards)

If you have multiple Humminbird cards with VX Technology inserted, select the one you want to use.

 **QUICK TIP!** If you are unsure if your card is a VX or Legacy card, check the image on the microSD card. If your card is VX, the bird on your card will be gray; if your card is Legacy, the bird will be yellow.

APEX/SOLIX

1. Press the HOME key.
2. Select **Settings** > **Chart** > **Selected Chart Card**.
3. Select the card you want to use.

HELIX

1. **Main Menu:** Press the MENU key twice.
2. Select the **Chart** tab > **Selected Chart Card**.
3. Select the card you want to use.

Chart Menu (APEX/SOLIX)

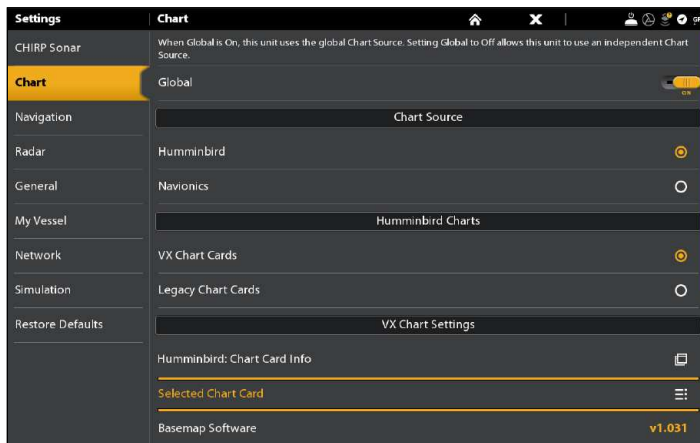
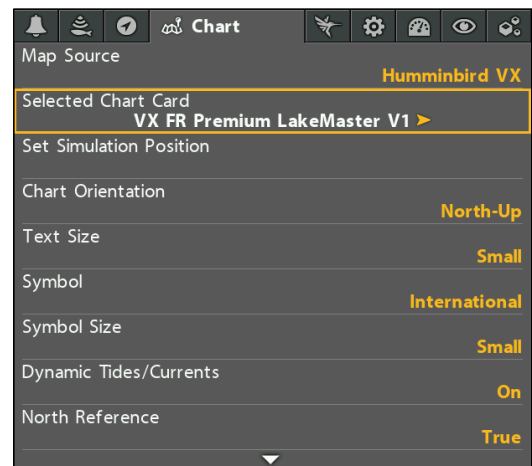



Chart Tab (HELIX)




3 | Select a Chart Preset

Use Chart Presets to quickly alternate between settings. You can use the default Fishing or Navigation settings provided, or you can create a custom User preset with your preferences. The Fishing and Navigation presets are also fully customizable. You can restore each preset back to its default settings at any time.

 **NOTE:** With a few exceptions that are noted in this guide, changing a setting in the active preset will not affect that setting in the other presets.


APEX/SOLIX

1. Tap **Chart** in the status bar, or press the MENU key.
2. Select **Chart Options**.
3. Select a Chart Preset.

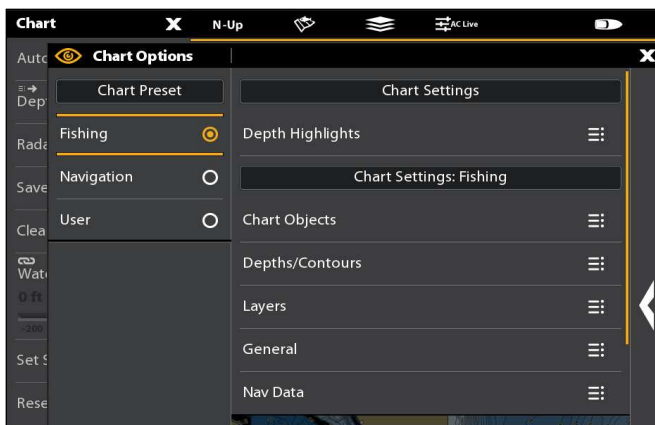
 **QUICK TIP!** You can also change this setting by tapping the chart preset icon in the status bar. See *Using the Status Bar* for more information.

HELIX

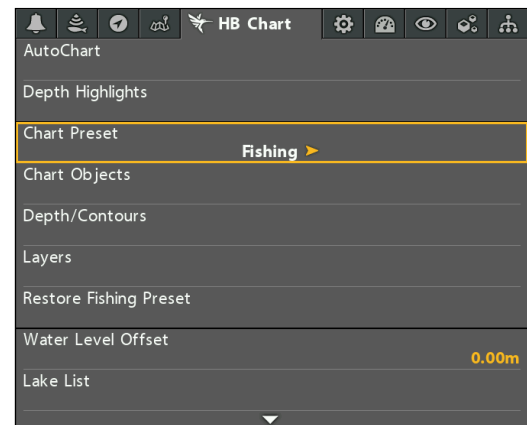
1. **Main Menu:** Press the MENU key twice.
2. Select the **HB Chart** tab.
3. Select a Chart Preset.

 **QUICK TIP!** You can also change this setting by pressing the MENU key once to open the Chart X-Press Menu.

Select a Chart Preset [APEX/SOLIX]



Select a Chart Preset [HELIX]



4 | Adjust the Water Level Offset

It is important to note if the water level is higher or lower than usual. For example, if you know the lake is down 4 feet, set the Water Level Offset to -4.

APEX/SOLIX

1. Tap **Chart** in the status bar, or press the MENU key once.
2. Select **Water Level Offset**.
Tap the on/off button, or press the ENTER key, to turn it on.
3. Press and hold the slider, or press and hold the ENTER key, to adjust the setting.

If the water level is higher than normal, set a positive amount.

If the water level is lower than normal, set a negative amount.

If the water level has not changed [normal], turn off Water Level Offset.

HELIX

1. **Main Menu:** Press the MENU key twice. Select the **HB Chart** tab.
2. Select **Water Level Offset**.
3. Use the RIGHT or LEFT Cursor keys to adjust the setting.

If the water level is higher than normal, set a positive amount.

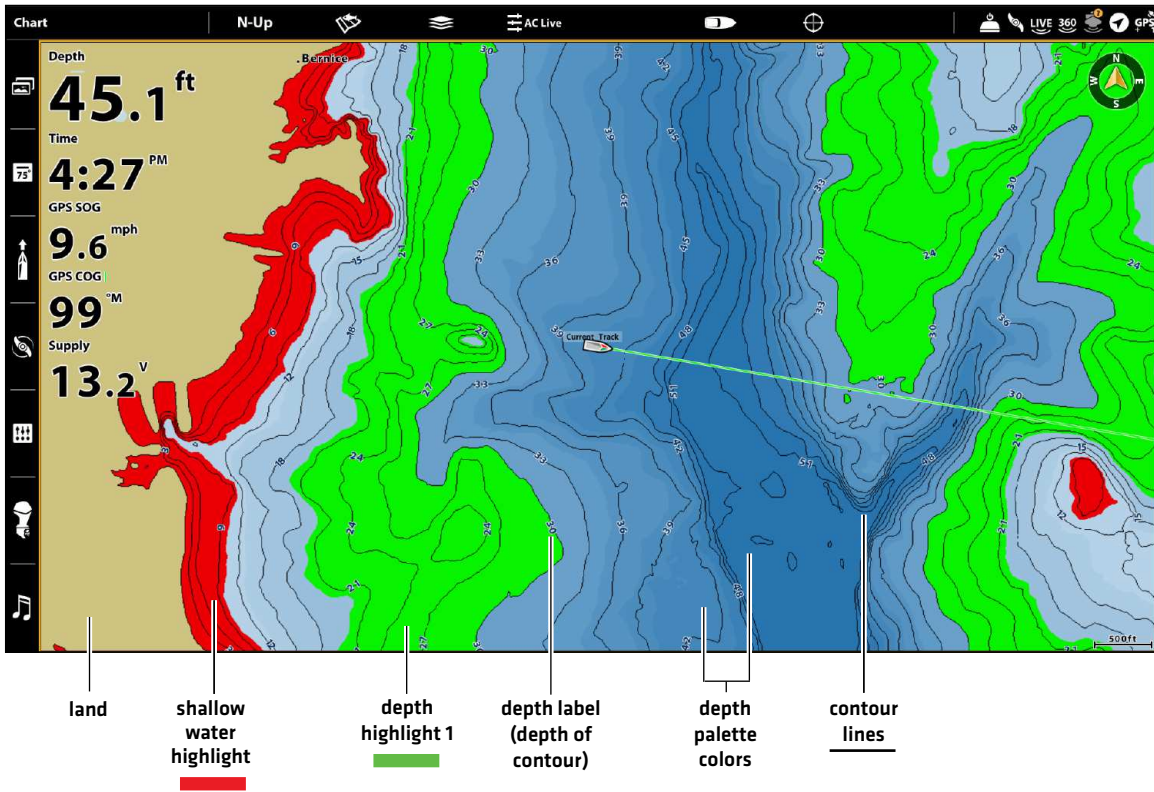
If the water level is lower than normal, set a negative amount.

If the water level has not changed [normal], set Water Level Offset to [0] zero.

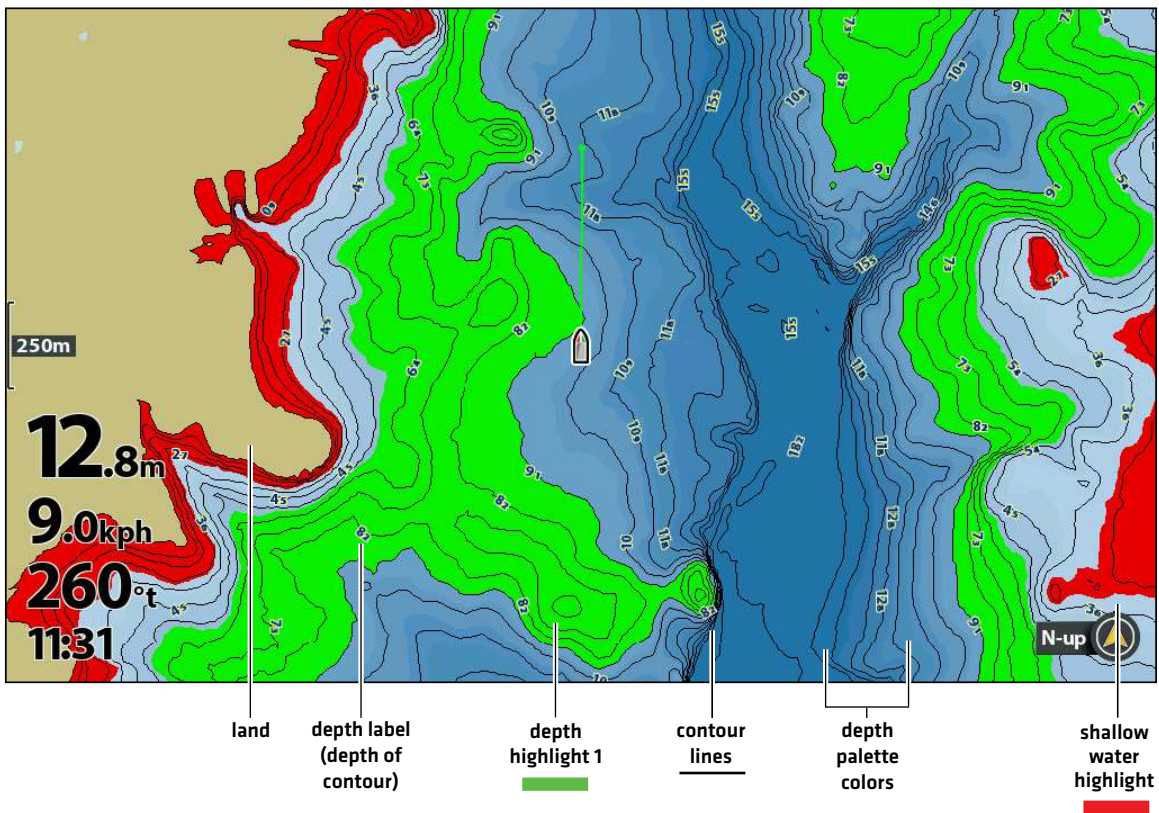
WHAT'S ON THE MAP

The installed LakeMaster Map Card provides multiple colors to help you identify depth and contours on the map.

What's on the LakeMaster Map (APEX/SOLIX)



What's on the LakeMaster Map (HELIX)



Tips for Using the Map

In addition to the chart and navigation features available with your Humminbird control head, use the following tips with your LakeMaster Map Card.

APEX/SOLIX



Move the Joystick.

HELIX



Press any arrow on the 4-Way Cursor Control key.

Move Across the Chart

Move the Joystick [APEX/SOLIX] or press any arrow on the 4-WAY Cursor Control key [HELIX] to move the cursor across the chart.

Optional: Press the -ZOOM key repeatedly to zoom out. Move the Joystick [APEX/SOLIX] or press any arrow on the 4-WAY Cursor Control key [HELIX] to move the cursor across the chart.



See More on the Chart

Zoom in [+] and Zoom out [-] to see more of the chart display [contour lines, depth colors, etc.].



View Map Information

Move the cursor to an icon, contour line, or position on the chart, and press the CHECK/INFO key. If you have an APEX or SOLIX control head, press the CHECK/INFO key a second time or select Map Info from the Info Menu.

Change the Chart Orientation

Select your display preference: North-Up, Head-Up, Course-Up, etc.

APEX/SOLIX

1. Tap **Chart** in the status bar, or press the MENU key once.
2. Select **Chart Options**.
3. Select **General > Orientation**.
4. Select an orientation to apply to the chart.

HELIX

1. **Main Menu:** Press the MENU key twice.
2. Select the **Chart** tab.
3. Select **Chart Orientation**.
4. Select an orientation to apply to the chart.

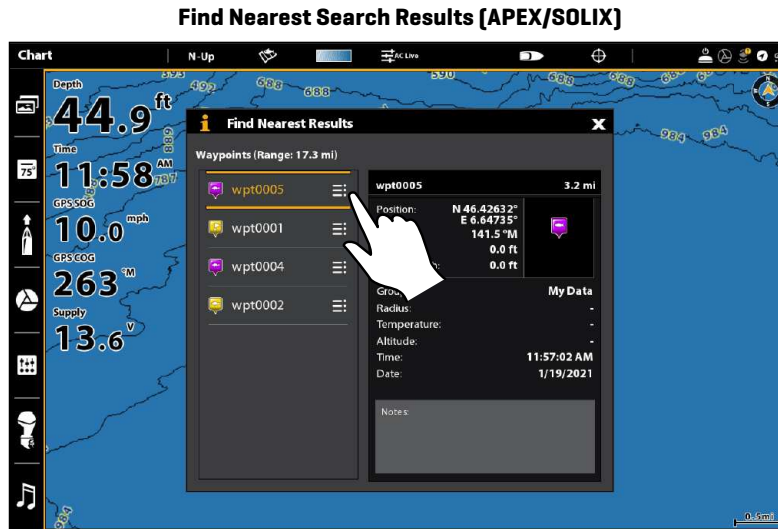


QUICK TIP! You can also change this setting by tapping the chart orientation icon in the status bar. See *Using the Status Bar* for more information.

| | |
|---------------------------------|--|
| Head Up | The vessel's current heading points up, and the chart rotates around the vessel icon so that it always points up on the view. The heading is provided by the connected compass/heading sensor. If a compass is not connected, the vessel will be oriented according to the COG [Course Over Ground]. |
| North Up | The chart is oriented with North up on the display, and the vessel rotates according to its heading or COG [Course Over Ground]. |
| COG Up [APEX/SOLIX only] | The chart is displayed with the vessel oriented in a fixed position pointing up, and the chart rotates according to the vessel COG [Course over Ground]. |
| Course Up | During navigation, the intended course or route leg is shown at the top of the view. Objects ahead of the vessel are drawn above the vessel. When the vessel is not navigating, the current heading is displayed. |

Search the area for the nearest waypoints, routes, and tracks.

1. Tap **Chart** in the status bar, or press the MENU key once.
2. Select **Info**.
3. Select **Find Nearest**.
4. Select an item from the displayed list to search for.
5. Tap, or use the Joystick and Enter key, to select a search result for more information.



Using the Status Bar

The status bar is located at the top of the screen. It changes to match the on-screen view and active map card. You can tap the icons in the status bar to open and close a menu or make a selection.

LakeMaster Status Bar



LakeMaster Premium Status Bar



ADJUST THE MAP DISPLAY SETTINGS

When you install a LakeMaster Map Card with VX Technology, menu options are added to your control head. You can show or hide contour lines, highlight a depth range on the map, highlight shallow water, set safe depth levels and more.

Some of the menu options in this section may be displayed in other parts of the menu system so that you can access them quickly. No matter where you make the change, the control head will update the setting across the system.

NOTE: With a few exceptions that are noted in this guide, changing a setting in the active preset will not affect that setting in the other presets.

Open the Depth/Contours Menu

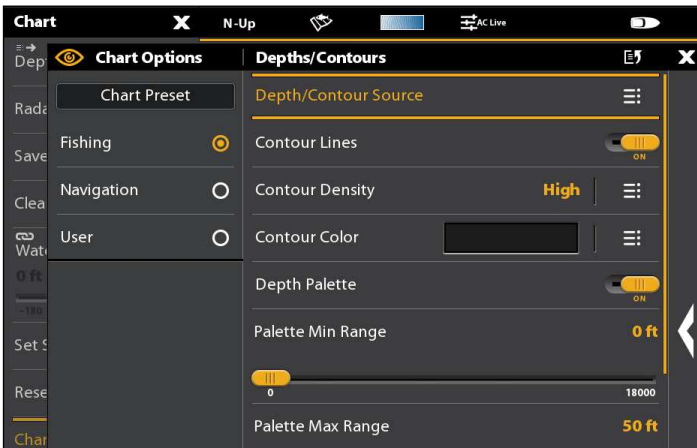
APEX/SOLIX

1. From the **Chart X-Press** Menu, select **Chart Options**.
2. Select **Depths/Contours**.

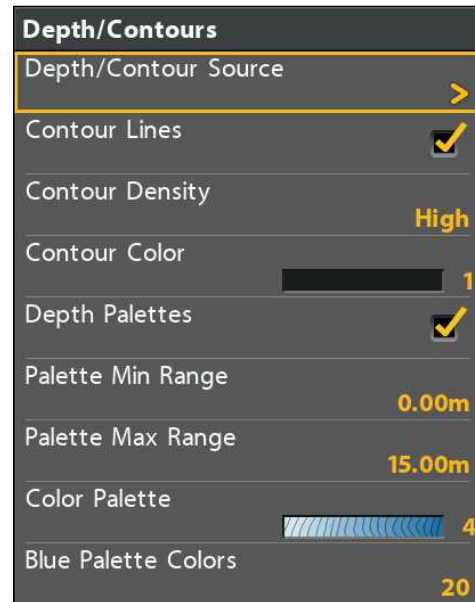
HELIX

1. **Main Menu:** Press the MENU key twice.
2. Select the **HB Chart** tab.
3. Select **Depth/Contours**.

Depths/Contours Menu (APEX/SOLIX)



Depth/Contours Menu (HELIX)



Display Contour Lines and Adjust the Contour Density

You can display or hide the contour lines on the map, and you can adjust the distance between each contour line.

Show/Hide Contour Lines

Show or hide water contour lines in Chart Views.

APEX/SOLIX


1. From the **Depths/Contours** Menu, select **Contour Lines**.
2. Tap the on/off button, or press the ENTER key, to show or hide contour lines.

HELIX

1. From the **Depth/Contours** Menu, select **Contour Lines**.
2. Press the CHECK/INFO key or the RIGHT Cursor key to show or hide contour lines [check mark = visible, blank = hidden].

Adjust the Contour Density

Use Contour Density to adjust the density of the contour lines displayed on the map. You can set the density to High, Medium, or Low. Contour lines must be turned on to adjust this feature.

 **NOTE:** Contour density can only be customized in the Fishing and User presets. Navigation contour density cannot be changed.

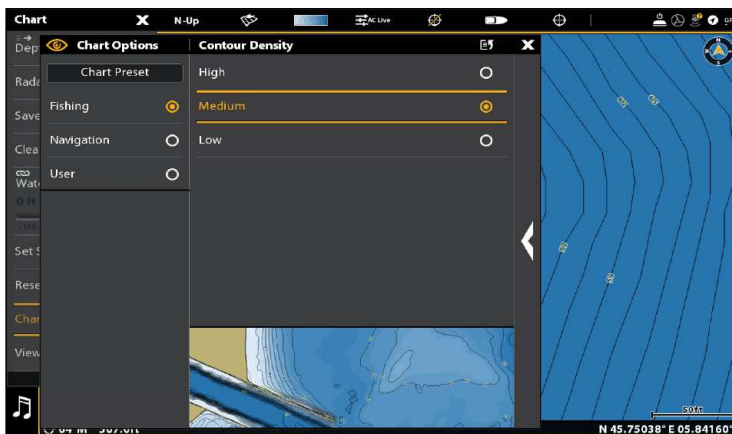
APEX/SOLIX

1. From the **Depths/Contours** Menu, select **Contour Density** to open the submenu.
2. Select a Contour Density setting.

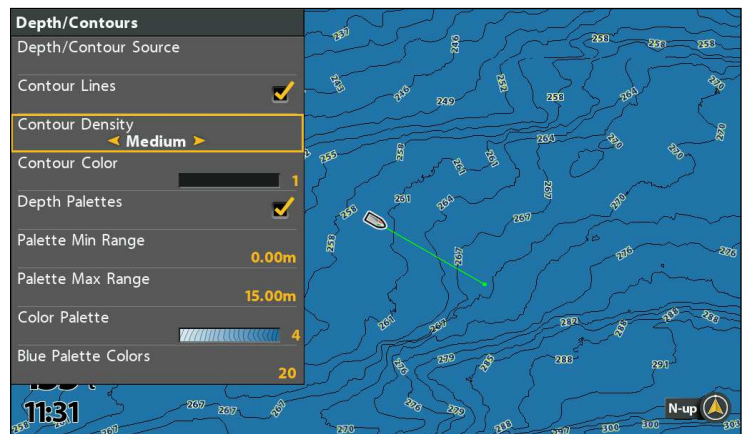
HELIX

1. From the **Depth/Contours** Menu, select **Contour Density**.
2. Press the RIGHT or LEFT Cursor keys to adjust the setting.

Adjusting the Contour Density (APEX/SOLIX)



Adjusting the Contour Density (HELIX)



Change the Contour Lines Color

Contour lines must be turned on to adjust this setting.

APEX/SOLIX

1. From the **Depths/Contours** Menu, select **Contour Color** to open the submenu.
2. Select a color. Tap, or press the ENTER key, to turn it on.

HELIX

1. From the **Depth/Contours** Menu, select **Contour Color**.
2. Press the RIGHT or LEFT Cursor keys to select a color.

Display Depth Palette Colors and Adjust the Palette Range

You can adjust the range of data shown on the chart by changing the minimum and maximum range on the display. The range you select affects how the depth colors are displayed. For related color options, see [Change the Color Palette](#).

Show/Hide Depth Palette Colors

Turn depth area colors in the Chart Views Off or On.

APEX/SOLIX

1. From the **Depths/Contours** Menu, select **Depth Palette**.
2. Tap the on/off button, or press the ENTER key, to show or hide depth colors.

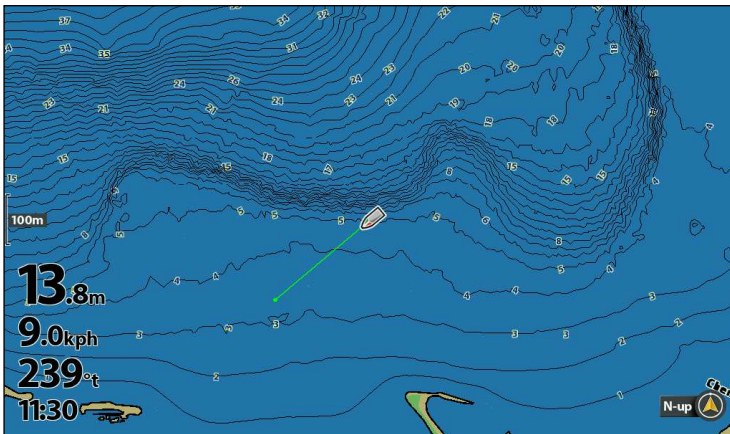


QUICK TIP! You can also change this setting by tapping the color palette icon in the status bar. See [Using the Status Bar](#) for more information.

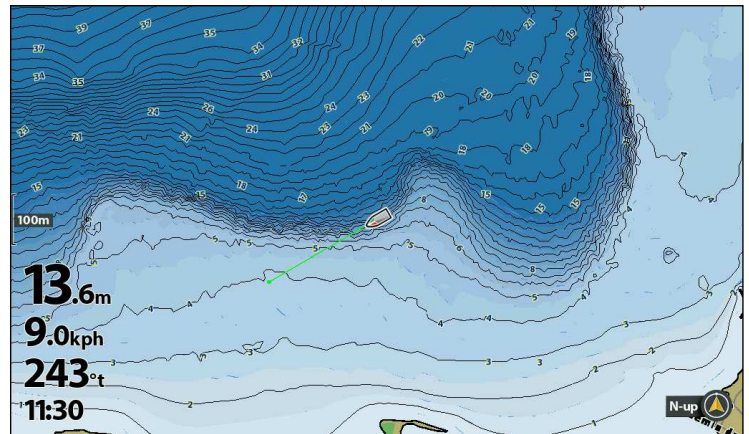
HELIX

1. From the **Depth/Contours** Menu, select **Depth Palettes**.
2. Press the CHECK/INFO key or the RIGHT Cursor key to show or hide depth colors. [check mark = visible, blank = hidden]

Depth Palettes OFF (HELIX)



Depth Palettes ON (HELIX)



Adjust the Palette Range

You can adjust the range of data shown on the chart by changing the minimum range and maximum range on the display. The range you select affects how the depth colors are displayed. For best results, set a narrow depth range threshold.

APEX/SOLIX

1. From the **Depths/Contours** Menu, select **Palette Min Range**.
2. Press and hold the slider, or press and hold the ENTER key, to adjust the setting.
3. Select **Palette Max Range**.
4. Press and hold the slider, or press and hold the ENTER key, to adjust the setting.

HELIX


1. From the **Depth/Contours** Menu, select **Palette Min Range**.
2. Press the RIGHT or LEFT Cursor key to adjust the setting.
3. Select **Palette Max Range**.
4. Press the RIGHT or LEFT Cursor key to adjust the setting.

Change the Color Palette

The Color Palette menu changes the colors used to display the map.


APEX/SOLIX

1. From the **Depths/Contours** Menu, select **Color Palette**.
2. Select a color palette.
3. If you have selected a blue color palette, you can adjust the number of shades displayed. Select **Blue Colors**, and press and hold the slider, or press and hold the ENTER key, to adjust the setting.

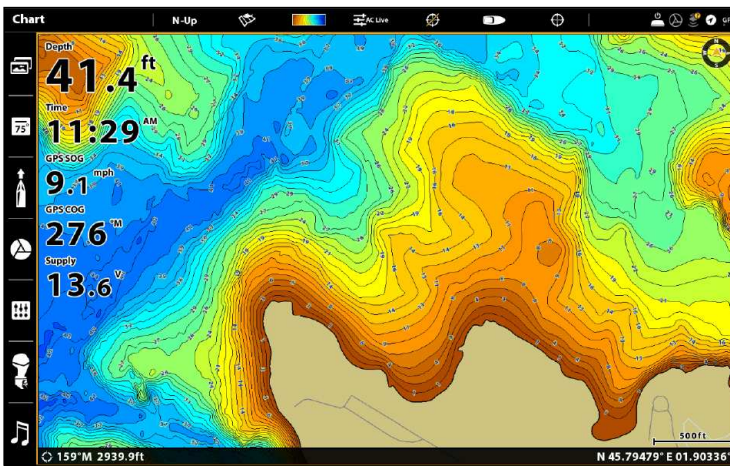
 **QUICK TIP!** You can also change this setting by tapping the color palette icon in the status bar. See *Using the Status Bar* for more information.

HELIX

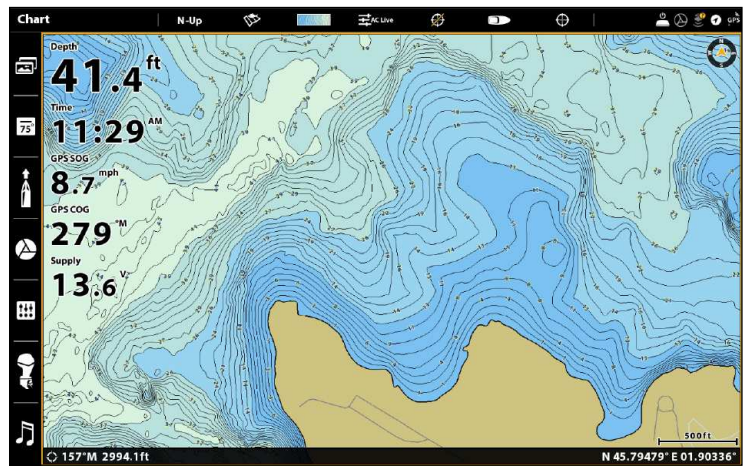
1. From the **Depth/Contours** Menu, select **Color Palette**.
2. Press the RIGHT or LEFT Cursor keys to select a new color palette.
3. If you have selected a blue color palette, you can adjust the number of shades displayed by selecting **Blue Palette Colors** and using the RIGHT or LEFT Cursor keys to adjust the setting.

 **QUICK TIP!** You can also change this setting by pressing the MENU key once to open the Chart X-Press Menu.

Color Palette 1 (APEX/SOLIX)




Color Palette 3 (APEX/SOLIX)



Set Depth Highlights

Highlight deep and shallow waters in Chart View and Chart Combo Views using the following LakeMaster features.

 **NOTE:** Changing these settings will affect all presets, not just the active preset.

Open the Depth Highlights Menu

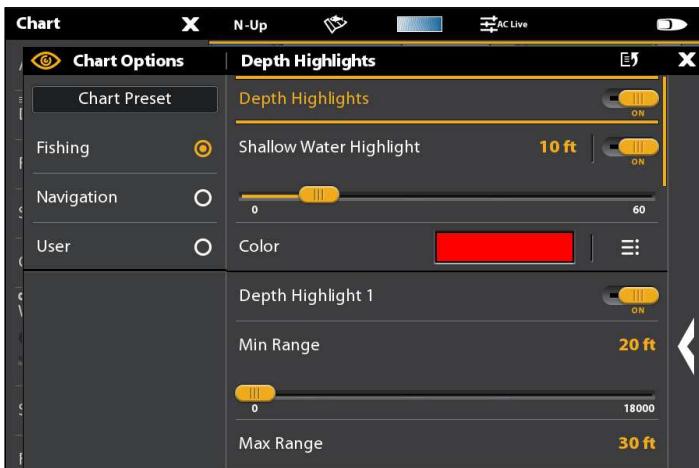
APEX/SOLIX

1. From the **Chart X-Press** Menu, select **Chart Options**.
2. Select **Depth Highlights**.

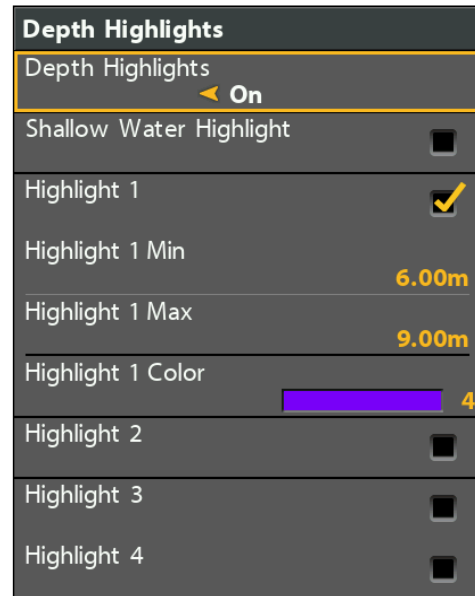
HELIX

1. **Main Menu:** Press the MENU key twice.
2. Select the **HB Chart** tab.
3. Select **Depth Highlights**.

Depth Highlights Menu [APEX/SOLIX]



Depth Highlights Menu [HELIX]



Highlight a Depth Range

Depth Highlights allow you to select up to four depth ranges to be highlighted on the chart.

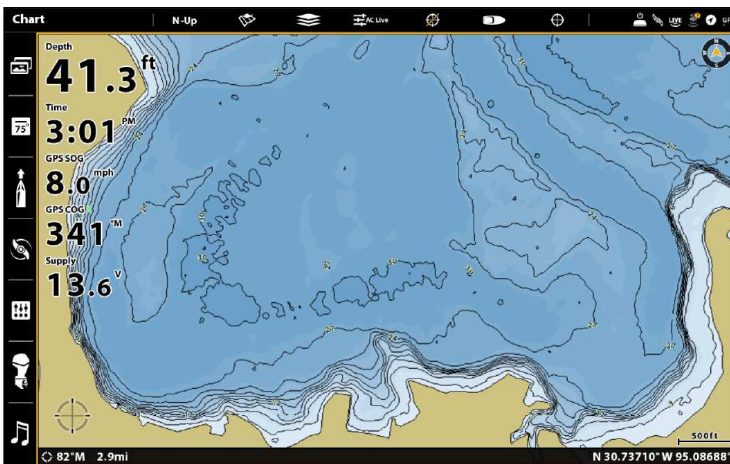
APEX/SOLIX

1. From the **Depth Highlights** Menu, select **Depth Highlights**.
Tap the on/off button, or press the ENTER key, to show or hide depth highlights.
2. With depth highlights turned on, set the depth range for **Depth Highlight 1** by selecting **Min Range** or **Max Range**.
Press and hold the slider, or press and hold the ENTER key, to adjust the setting.
3. To turn on an additional highlight, select **Depth Highlight 2** and tap the on/off button, or press the ENTER key.
4. Repeat Step 2 with **Depth Highlight 2** to adjust the depth range.
5. Repeat Steps 3-4 for each additional depth highlight (up to four).

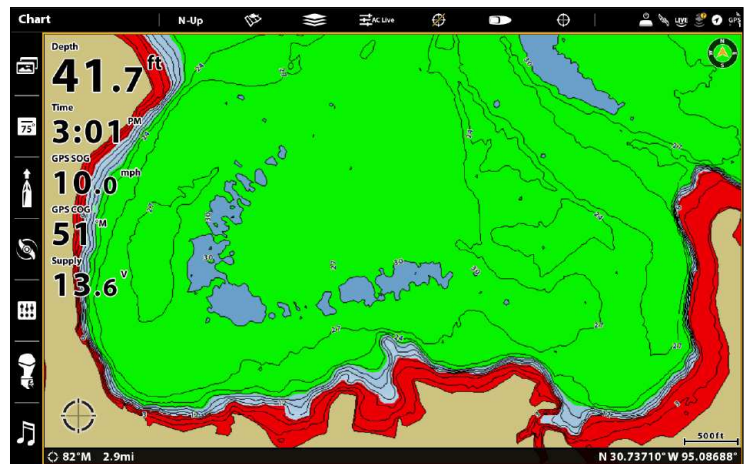
HELIX

1. From the **Depth Highlights** Menu, select **Depth Highlights**.
Press the RIGHT or LEFT Cursor keys to show or hide depth highlights.
2. With depth highlights turned on, set your desired depth range by selecting **Highlight 1 Min** or **Highlight 1 Max**.
Press the RIGHT or LEFT Cursor key to adjust the setting.
3. To turn on an additional highlight, select **Highlight 2**.
Press the CHECK/INFO key or the RIGHT Cursor key to display the highlight. [check mark = visible, blank = hidden]
4. Repeat Step 2 with **Highlight 2 Min** and **Highlight 2 Max** to adjust the depth range.
5. Repeat Steps 3-4 for each additional depth highlight (up to four).

Depth Highlights OFF (APEX/SOLIX)



Depth Highlights ON (APEX/SOLIX)



Change the Highlight Color

If you've set Depth Highlights and they're not easy to see with the color palette you've selected, you can change the Highlight Color.

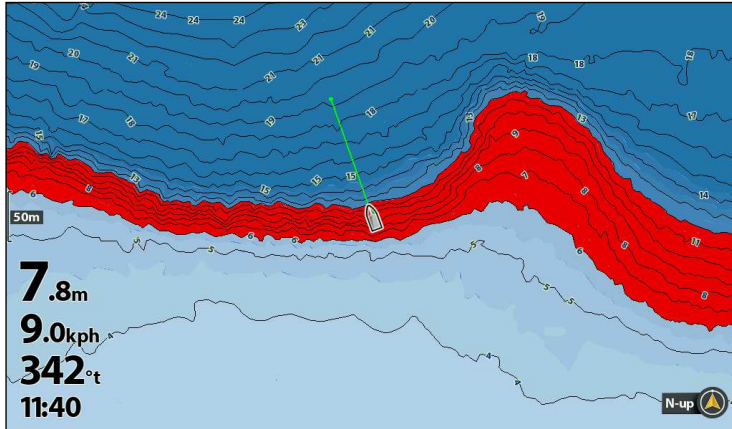
APEX/SOLIX

1. From the **Depth Highlights** Menu, select the Depth Highlight **Color** you wish to change.
2. Tap, or use the Joystick and Enter key, to select a new color.
3. Repeat these steps for each additional highlight you wish to change.

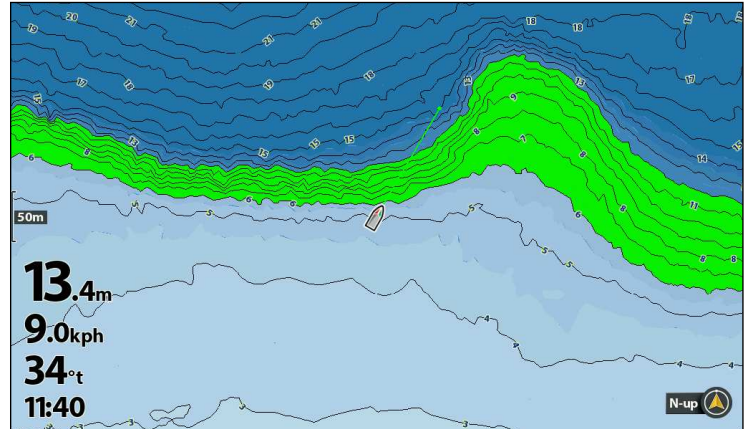
HELIX

1. From the **Depth Highlights** Menu, select the **Highlight Color** you wish to change.
2. Press the RIGHT or LEFT Cursor keys to select a new color.
3. Repeat these steps for each additional highlight you wish to change.

Red Depth Highlights (HELIX)



Green Depth Highlights (HELIX)



Highlight Shallow Water

The Shallow Water Highlight identifies shallow waters when the depth is equal to or less than the level you set. Depth Highlights must be turned on to enable this feature.

APEX/SOLIX

1. From the **Depth Highlights Menu**, select **Shallow Water Highlight**.
2. Tap the on/off button, or press the ENTER key, to show or hide shallow water highlights.
3. Press and hold the slider, or press and hold the ENTER key, to adjust the highlighted depth level.

HELIX

1. From the **Depth Highlights** Menu, select the first **Shallow Water Highlight** menu option.
2. Press the CHECK/INFO key or the RIGHT Cursor key to show or hide shallow water highlights. [check mark = visible, blank = hidden]
3. To adjust the highlighted depth level, select the second **Shallow Water Highlight** menu option.
4. Press the RIGHT or LEFT Cursor keys to adjust the setting.

Change the Shallow Color

If you've set Shallow Water Highlights and they're not easy to see with the color palette you've selected, you can change the Shallow Water Highlight Color.

APEX/SOLIX

1. From the **Depth Highlights** Menu, select the Shallow Water Highlight **Color**.
2. Tap, or use the Joystick and Enter key, to select a new color.

HELIX

1. From the **Depth Highlights** Menu, select **Shallow Water Highlight Color**.
2. Press the RIGHT or LEFT Cursor keys to select a new color.

Set Safe Depth Levels

Use the Safe Depth feature to set the minimum depth level for your vessel and to turn on highlights for hazards shallower than that level.



NOTE: Changing these settings will affect all presets, not just the active preset.

APEX/SOLIX

1. Press the HOME key.
2. Select **Settings > Chart > Safe Depth**.
3. Select **Safe Depth** again and press and hold the slider, or press and hold the ENTER key, to set the minimum depth level for your vessel.

HELIX

1. **Main Menu:** Press the MENU key twice.
2. Select the **HB Chart** tab > **Safe Depth**.
3. Select **Safe Depth** again and use the RIGHT or LEFT Cursor keys to set the minimum depth level for your vessel.

Understand Safe Depth Level Settings

| | |
|----------------------------|--|
| Sounding Highlight | displays soundings shallower than the safe depth in red |
| Symbol Highlight | displays hazardous objects shallower than the safe depth with a red outline |
| Always Show Hazards | forces hazardous objects and spot soundings shallower than the safe depth to display even if the chart object data is hidden |

Change Layers

(LakeMaster Premium Map Cards Only)

If you have a LakeMaster Premium map card, you can display layers that show aerial imagery [available for select lakes only] or shaded relief in Chart View and Chart Combo views. The transparency of these layers is customizable.

- **Aerial Imagery** can be applied to land only or to both land and water.
- **Shaded Relief** uses shadows to show features of the lakebed.

Show/Hide Layers

APEX/SOLIX

1. From the **Chart X-Press** Menu, select **Chart Options**.
2. Select **Layers**.
3. Select a layer. Tap, or press the ENTER key, to show or hide it. [check mark = visible, blank = hidden]



QUICK TIP! You can also change this setting by tapping the layers icon in the status bar [LakeMaster Premium only]. See *Using the Status Bar* for more information.

HELIX

1. **Main Menu:** Press the MENU key twice.
2. Select the **HB Chart** tab.
3. Select **Layers**.
4. Select a layer. Press the CHECK/INFO key or the RIGHT Cursor key to show or hide it. [check mark = visible, blank = hidden]

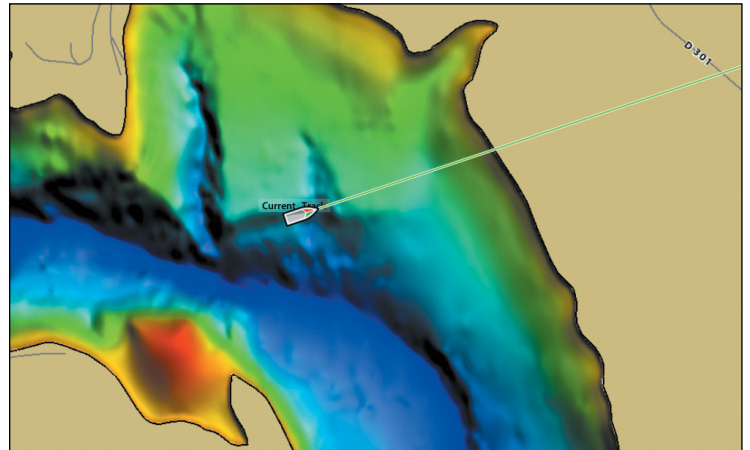


NOTE: Activating a layer will add additional options to the Layers menu. To apply Aerial Imagery to land only or to both land and water, you must first turn on Aerial Imagery.

Aerial Imagery (Land and Water)



Shaded Relief

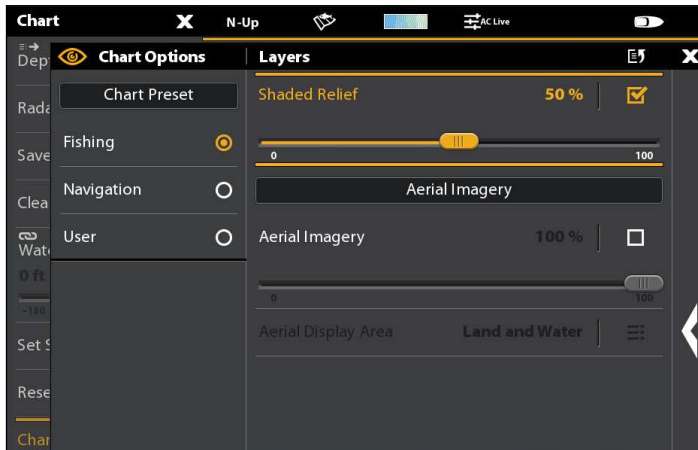


Adjust Transparency of Layers

APEX/SOLIX

1. From the **Chart X-Press** Menu, select **Chart Options**.
2. Select **Layers**.
3. Select the layer you want to adjust:
4. Press and hold the slider, or press and hold the ENTER key, to adjust the setting. [0% = transparent, 100% = opaque]

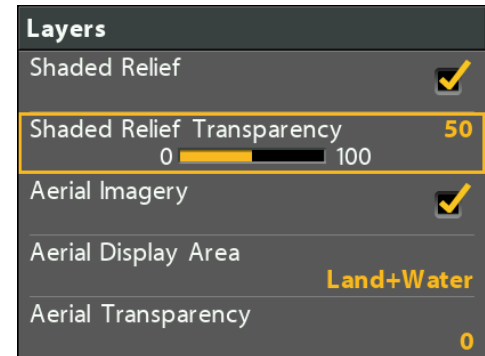
Adjusting Transparency (APEX/SOLIX)



HELIX

1. **Main Menu:** Press the MENU key twice.
2. Select the **HB Chart** tab.
3. Select **Layers**.
4. With the layer you want to adjust visible [see **Show/Hide Layers**], select the Transparency menu option for that layer. Press the RIGHT or LEFT Cursor key to adjust the setting. [0 = opaque, 100 = transparent]

Adjusting Transparency (HELIX)



DISPLAY A LAKE

The lake map displayed on the Chart View is based on the latitude/longitude position and the map card installed in the control head. GPS reception is required for the correct lake to be displayed.

The **Lake List** menu option allows you to display a different lake from the installed LakeMaster Map Card. When you select a lake, the cursor will move to the lake so you can see it on the Chart View. Then, you can mark waypoints, press the GOTO key to start navigation toward a waypoint, or press the CHECK/INFO key for more information.

No GPS Reception: If you don't have a GPS Fix, you can view the lake in Simulator mode. When you power on the control head, select Simulator from the Start-Up Options Menu. You can mark waypoints and routes and save them in Simulator mode.

Display a Lake


SOLIX

1. From the **Chart X-Press** Menu, select **Info**.
2. Select **Lake List**.

Sort: Tap column headers, or use the Joystick and Enter key, to sort the list. Tap a second time to reverse the order of the lakes listed. You can sort by name, county, size, or identify the high-definition lakes (Hi-Def) on your card, etc.

Scroll: Swipe, or use the Joystick, to scroll through the list.

Cursor To: Select a lake on the list and tap, or press the Enter key.

 **QUICK TIP!** You can also search for a lake by name using the on-screen keyboard.

HELIX

1. From the **HB Chart** Menu tab, select **Lake List**.
2. Press the **RIGHT** Cursor key.

Sort By: Select the Display field, and press the **RIGHT** or **LEFT** Cursor keys to select a sort option for the list. You can sort alphabetically, identify the high-definition lakes (Hi-Def) on your card, or view only lakes starting with a certain letter.

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 box displayed on the screen.

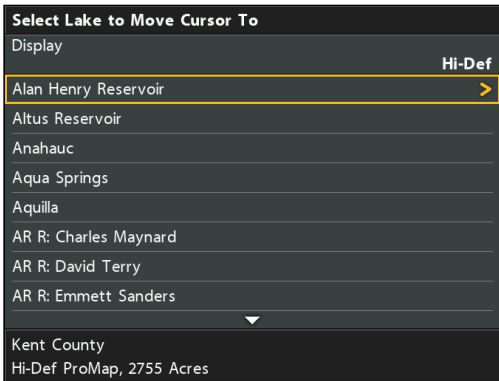
Cursor To: Select a lake on the list and press the **RIGHT** Cursor key.

Selecting a Lake to Display (SOLIX)



| sort | Name | HD | County | State | Size (acres) | Distance |
|---------------|-------------|----|------------|-------|--------------|----------|
| | Acworth | ✓ | Cobb | GA | 272 | 94 |
| | Ajay | ✓ | Orange | FL | 94 | 496 |
| selected lake | Allatoona | ✓ | Cherokee | GA | 11316 | 95 |
| | Alligator | ✓ | Osceola | FL | 3462 | 504 |
| | Arkabutla | ✓ | DeSoto | MS | 14501 | 217 |
| | Bankhead | ✓ | Walker | AL | 8022 | 73 |
| | Barkley | ✓ | Trigg | KY | 48628 | 192 |
| | Beresford | ✓ | Lake | FL | 2211 | 461 |
| | Bill Waller | ✓ | Marion | MS | 178 | 292 |
| | Blue Ridge | ✓ | Fannin | GA | 3170 | 119 |
| | Bogue Homa | ✓ | Jones | MS | 898 | 239 |
| | Brick | ✓ | Osceola | FL | 623 | 506 |
| | Brushy | ✓ | Washington | MS | 13 | 279 |
| | Cairo | ✓ | Ballard | KV | 8382 | 250 |

Selecting a Lake to Display (HELIX)




| display | Hi-Def |
|---------------------------|--------|
| Display | |
| Alan Henry Reservoir | > |
| Altus Reservoir | |
| Anahauc | |
| Aqua Springs | |
| Aquilla | |
| AR R: Charles Maynard | |
| AR R: David Terry | |
| AR R: Emmett Sanders | |
| Kent County | |
| Hi-Def ProMap, 2755 Acres | |

FOLLOW THE CONTOUR

Follow the Contour allows you to navigate a depth contour using i-Pilot Link [separate purchase required]. You can select a contour line and follow it in either direction, or use the Contour Offset feature to stay a set distance from a contour line or shoreline.

When you start i-Pilot Link navigation to Follow the Contour, all other types of navigation are stopped on the Humminbird control head and the Ethernet network.

To purchase i-Pilot Link, and for more information, visit our Web site at humminbird.com or contact Humminbird Technical Support.

 **WARNING!** See your i-Pilot Link manual for warnings, safety information, and operations instructions. You are responsible for the safe and prudent operation of your boat. The i-Pilot Link is designed to be an accurate and reliable tool that will enhance boat operation and improve your ability to catch fish. This product does not relieve you from the responsibility for safe operation of your boat. You must avoid hazards to navigation and always maintain a permanent watch so you can respond to situations as they develop. You must always be prepared to regain manual control of your boat. Learn to operate your i-Pilot Link in an area free from hazards and obstacles.

1 | Preparation

Before you use Follow the Contour, contour lines should be displayed on the Chart View.

1. Set Contour Lines to Visible

APEX/SOLIX

1. From the **Chart X-Press** Menu, select **Chart Options**.
2. Select **Depths/Contours > Contour Lines**.
3. Tap the on/off button, or press the ENTER key, to show or hide contour lines.

HELIX


1. **Main Menu:** Press the MENU key twice.
2. Select the **HB Chart** tab> **Depth/Contours > Contour Lines**.
3. Press the CHECK/INFO key or the RIGHT Cursor key to show or hide contour lines. [check mark = visible, blank = hidden]

2. Set the Contour Offset

You can set Contour Offset to maintain a set distance from a contour line. If you want to navigate along a shoreline, use Contour Offset to maintain a safe distance from the shoreline. Contour Offset is a distance setting only, and does not measure water depth. Enter the Contour Offset based on your knowledge of the water depth in your current area.

No Offset: If you want to navigate the contour without an offset, you can skip this section.

During Navigation: Contour Offset can be adjusted while Follow the Contour navigation is in progress by selecting Contour Offset from the Go To menu [APEX/SOLIX] or the Navigation X-Press Menu [HELIX].

 **WARNING!** Contour Offset does NOT account for changes in water depth. It is important to be aware of depth variations in your current area and adjust the Contour Offset as needed.

To set the Contour Offset, your boat must be positioned within **1/4 mile** of the selected contour.

APEX/SOLIX

1. Press and hold a position on the contour line you plan to follow.
OR
Use the Joystick to move the cursor to select a contour line.
2. Select **Go To > Follow**.
3. Select **Contour Offset**. Drag the slider, or press and hold the slider, to adjust the offset.

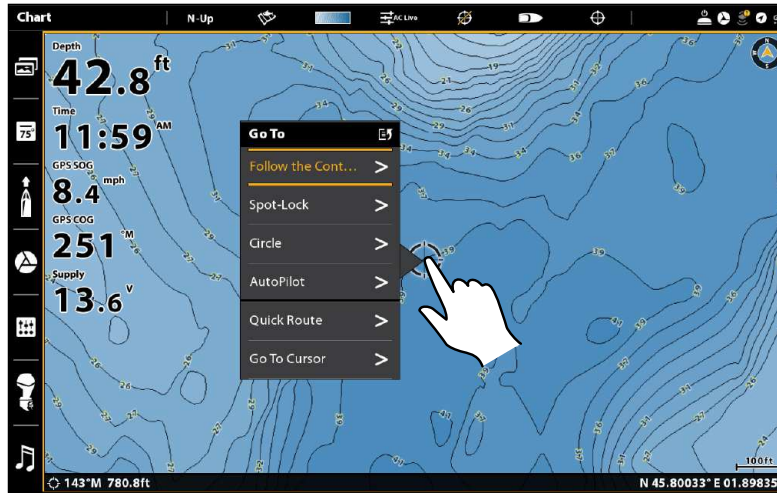
To remove the offset, set the offset to 0 [off].

HELIX

1. Use the 4-WAY Cursor Control key to move the cursor to the contour line you plan to follow. Press the GOTO key.
2. Select **Follow the Contour**. Press the RIGHT Cursor key.
3. Select **Contour Offset**.
4. Press the RIGHT or LEFT Cursor keys to adjust the offset amount.

To remove the offset, set the offset to 0 [off]

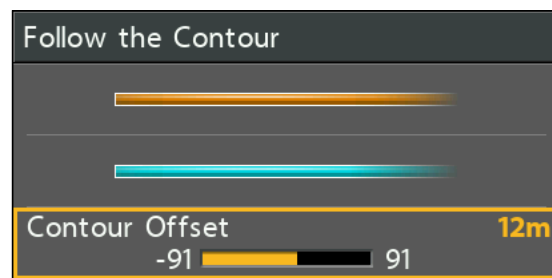
Selecting a Contour Line (APEX/SOLIX)



Setting the Contour Offset (APEX/SOLIX)



Setting the Contour Offset (HELIX)



2 | Start Follow the Contour Navigation

You can start i-Pilot Link navigation if the boat position is within **1/4 mile** of the selected contour.

- ⚠ WARNING!** If the selected contour is a shoreline, set the Contour Offset. See **Preparation: Set the Contour Offset**.
- ⚠ WARNING!** Contour Offset does NOT account for changes in water depth. It is important to be aware of depth variations in your current location and adjust the Contour Offset as needed.
- 📝 NOTE:** When the i-Pilot Link is following the contour, the Current Track is not saved and iTracks cannot be recorded.

APEX/SOLIX

1. Press and hold a position on the contour line you plan to follow.
OR
Use the Joystick to move the cursor to select a contour line.
2. Select **Go To > Follow the Contour**.
3. Select a navigation direction from the submenu.
The navigation direction is previewed in orange or purple on the Chart View.
4. Power on the i-Pilot motor to begin navigation. Refer to the i-Pilot Link manual for additional information.

HELIX

1. **Open the Follow the Contour Submenu:** Use the 4-WAY Cursor Control key to move the cursor to the contour line you plan to follow. Press the GOTO key.
2. Press the UP or DOWN Cursor keys to select a navigation direction. The navigation direction will be previewed in orange or blue in the Chart View.
3. Press the RIGHT Cursor key.
4. Power on the i-Pilot motor to begin navigation. Refer to the i-Pilot Link manual for additional information.

Starting Follow the Contour Navigation (APEX/SOLIX)

submenu — Follow the Contour X N-Up

navigation option 1 (orange) —

navigation option 2 (purple) —

Contour Offset 0 ft

navigation option 1 (previewed in orange) — GPS COG 249

navigation option 2 (previewed in purple) — Supply 13.6

128°M 857.1ft N 45.80033° E 01.89835°

Starting Follow the Contour Navigation (HELIX)

navigation option 1 (orange) —

navigation option 2 (blue) —

navigation option 1 (previewed in orange) —

navigation option 2 (previewed in blue) —

Follow the Contour

Contour Offset 0ft

submenu — 294°t

N 30.78909° W 081.30836°

200ft

39.9ft

0.0mph

90°t

11:30

N-up

Adjust the Contour Offset during Navigation

APEX/SOLIX

1. Tap **Chart** in the status bar.
2. Select **Go To > Contour Offset**.
3. Drag the slider, or press and hold the slider, to adjust the offset.
To remove the offset, set the offset to 0 [off].

HELIX

1. Press the MENU key once.
2. Select **Contour Offset** from the Navigation X-Press Menu.
3. Press the RIGHT or LEFT Cursor keys to adjust the offset.
4. **To remove the offset**, set it to [0] zero.

Reverse Direction

APEX/SOLIX

1. Tap **Chart** in the status bar.
2. Select **Go To > Reverse**.

HELIX

1. Press the MENU key once.
2. Select **Reverse Direction** from the Navigation X-Press Menu.

Cancel i-Pilot Navigation

Use the following instructions to cancel i-Pilot navigation.

APEX/SOLIX

1. Tap **Chart** in the status bar.
2. Select **Go To > Cancel Navigation**.

HELIX

1. Press the MENU key once.
2. Select **Cancel Navigation**. Press the RIGHT Cursor key.
3. Follow the on-screen prompts to cancel navigation.

SAVE AND EXPORT NAVIGATION DATA

When you mark waypoints or save routes, tracks, and groups, they are saved to the control head. Then, you can export this navigation data to an SD/microSD card. Navigation data cannot be saved to your LakeMaster Map Card.



WARNING! Do NOT export navigation data [waypoints, routes, tracks, etc.] to your LakeMaster Map Card. Saving data to your map card will permanently damage it.

Export Navigation Data to a Blank SD/microSD Card

APEX/SOLIX

1. Remove the LakeMaster Map Card.
Press the card into the slot and release it. Carefully remove it from the slot.
2. Insert a blank, unlocked SD/microSD card into the control head card slot.
3. Press the HOME key.
4. Select the **Files** tool.
5. Under **Export**, select **Nav Data**.
6. **Select a Save Location:** Select the port where the SD card is installed.
All saved navigation data will be exported to the selected location.
7. See your control head operations manual or Waypoint Management Guide for more information. These manuals are available on the CD provided with your control head, or you can download them from our Web site at humminbird.com.

HELIX

1. Remove the LakeMaster Map Card.
Press the card into the slot and release it. Carefully remove it from the slot.
2. Insert a blank, unlocked SD/microSD card into the control head card slot.
3. Press the MENU key twice to open the **Main Menu**.
4. Press the RIGHT Cursor key until the **Navigation** tab is selected.
5. Press the DOWN Cursor key to select **Waypoints, Routes, Tracks**.
6. Press the RIGHT Cursor key to open the **Waypoint Management** dialog box.
7. Select **Options > Select All and... > Export**.
8. Follow the on-screen instructions to confirm or cancel the export.
9. See your control head operations manual or Waypoint Management Guide for more information. These manuals are available on the CD provided with your control head, or you can download them from our Web site at humminbird.com.

CONTACT HUMMINBIRD

Any questions relating to the product should be directed to our Help Center at <https://humminbird-help.johnsonoutdoors.com/hc/en-us> or in writing to the address below:

Humminbird Service Department
678 Humminbird Lane
Eufaula AL 36027 USA

Social Media Resources:



[Facebook.com/HumminbirdElectronics](https://www.facebook.com/HumminbirdElectronics)



[Twitter.com \(@humminbirdfish\)](https://twitter.com/humminbirdfish)



[Instagram.com/humminbirdfishing](https://www.instagram.com/humminbirdfishing)



[YouTube.com/humminbirdtv](https://www.youtube.com/humminbirdtv)

