

**LOWRANCE**

# HDS Gen3 Polaris Operator Manual

ENGLISH





# Preface

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## Warranty

The warranty card is supplied as a separate document.

In case of any queries, refer to [polaris.com](http://polaris.com).

## Regulatory statements

The HDS Gen3 Polaris complies with:

- CE under R&TTE directive 1999/5/EC
- The requirements of level 2 devices of the Radiocommunications (Electromagnetic Compatibility) standard 2008

## About this manual

The manual assumes that the user has basic knowledge of navigation terminology and practices.

Important text that requires special attention from the reader is emphasized as follows:

- ➔ **Note:** Used to draw the reader's attention to a comment or some important information.

**⚠ Warning:** Used when it is necessary to warn personnel that they should proceed carefully to prevent risk of injury and/or damage to equipment/ personnel.

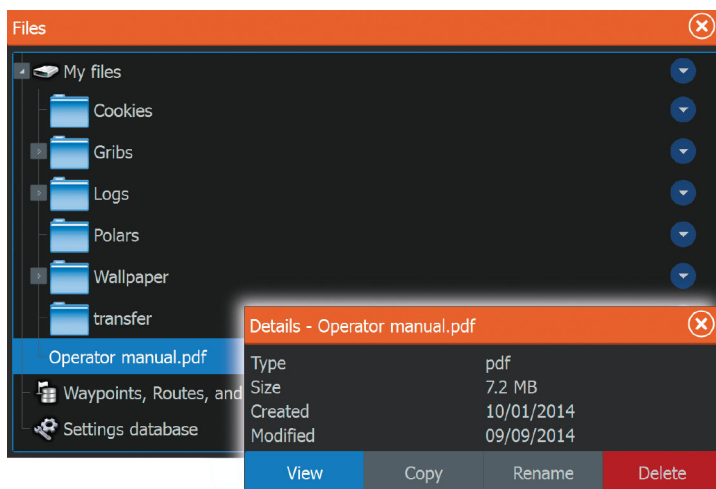
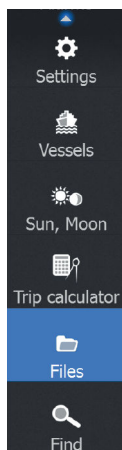
## Manual version

This manual is written for the HDS Gen3 Polaris software version 1.5.

## Viewing the manual on the screen

The pdf viewer included in the HDS Gen3 Polaris makes it possible to read the manuals and other pdf files on the screen. .

The pdf files can be read from a card inserted in the card reader or copied to the unit's internal memory.



Use the menu options or the keys and on-screen buttons to maneuver in the pdf file as described below:

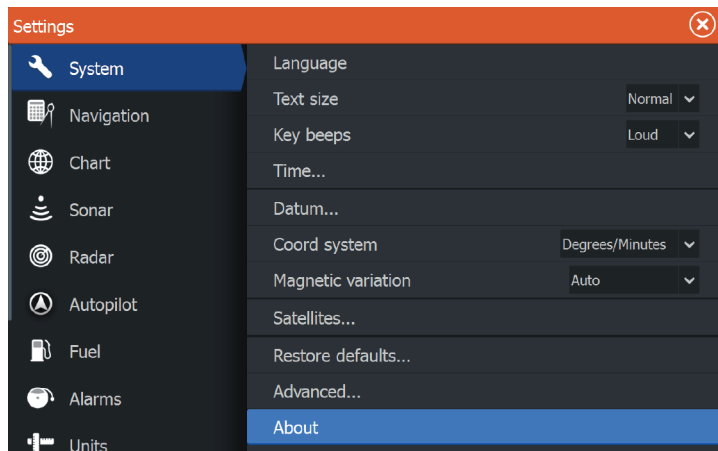
Search, Goto page, Page Up and Down	Select the relevant panel button.
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Scroll pages	Touch operation: Drag finger on the screen in any direction. Key operation: Use the <b>Cursor</b> keys.
Panning on the page	Touch operation: Drag finger on the screen in any direction. Key operation: Use the <b>Cursor</b> keys.
Zoom In/Out	Select the relevant panel button. Touch operation: Use pinch or spread gestures. Key operation: Use the <b>+</b> and <b>-</b> keys
Exit the pdf viewer	Touch operation: Select the <b>X</b> in the upper right corner of the panel. Key operation: Press the <b>X</b> key.

## The Software version

The software version currently on this unit can be found in the About dialog. The About dialog is available in the System Settings. For more information, refer to *"About"* on page 75. For upgrading your software, refer to *"Software upgrades"* on page 82.





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# 1

## Introduction

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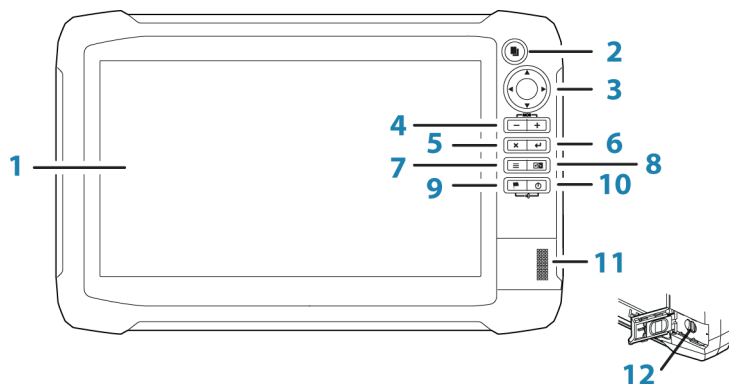
### Operating the system

You can use both the keys and the touchscreen to operate the HDS Gen3 Polaris.

This manual uses the following general terminology to describe operating the unit.

Term	Touch	Key
Select	Tap the panel	Use the cursor keys to select, then confirm by pressing the <b>Enter</b> key
Press and hold	Press and hold on the screen	Use the cursor keys to select, then press and hold the <b>Enter</b> key
Drag	Drag an item to a new position	Use the cursor keys to select an item, confirm by pressing the <b>Enter</b> key. Use the cursor keys to select a new position, and then press the <b>Enter</b> key again to confirm the new position.

## The front panel and keys



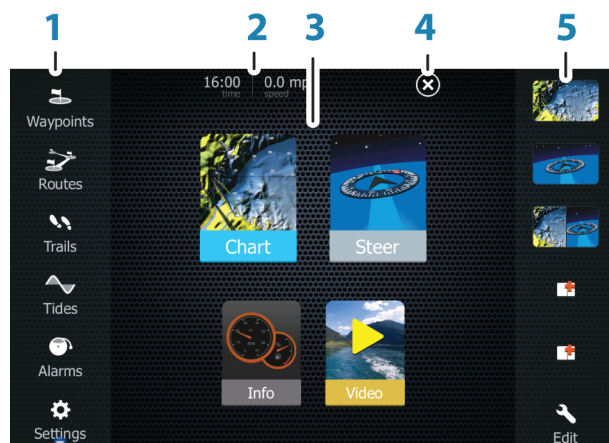
Key	Description
1	<b>Touchscreen</b>
2	<b>Pages key</b> Press once to activate the <b>Home</b> page. Repeat short presses to cycle the favorite buttons. Press and hold from an active page to go to the last used page.
3	<b>Cursor keys</b> Press arrows to move through menu items, to adjust a value, and to move the cursor on a panel.
4	<b>Zoom Out / Zoom In keys and MOB key</b> Zoom keys for panels and images. Simultaneous pressing both keys saves a Man Overboard (MOB) waypoint at the current vehicle position.
5	<b>Exit (X) key</b> Press to exit a dialog, to return to previous menu level, and to remove the cursor from the panel.
6	<b>Enter key</b> Press to select or save your settings.



Key	Description
<b>7</b>	<b>Menu key</b> A single press displays the menu for the active panel/overlay. Press and hold to hide or show the menu. A quick double-press displays the settings menu.
<b>8</b>	<b>Panel key</b> Used on multiple-panel pages. A short press switches between the panels, a long press expands active panel to a full page panel and back again.
<b>9</b>	<b>Waypoint key</b> Press to display the dialog for saving new waypoints. Press twice to quick save a waypoint. Press and hold to access the Find menu.
<b>10</b>	<b>Power key</b> Press once to display the <b>System Controls</b> dialog. Repeat short presses to cycle the backlight brightness. Press and hold to turn the unit ON/OFF.
<b>11</b>	<b>Card reader door</b>
<b>12</b>	<b>microSD Card readers</b>

## The Home page

The **Home** page is accessed from any operation by a short press on the **Pages** key.



Key	Description
<b>1</b>	<b>Tools</b> Select a button to access dialogs used for carrying out a task, or for browsing stored information.
<b>2</b>	<b>Time and Speed</b>
<b>3</b>	<b>Applications</b> Select a button to display the application as a full page panel. Press and hold a button to display pre-configured split page options for the application.
<b>4</b>	<b>Close button</b> Select to exit the <b>Home</b> page and return to the previous active page.
<b>5</b>	<b>Favorites</b> Select a button to display the panel combination. Press and hold a favorite button to enter edit mode for the Favorites panel.

## Application pages



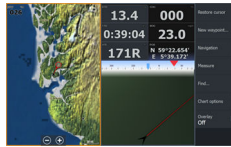
Each application connected to the system is presented on panels. The application can be presented as a full page, or in combination with other panels in a multiple panel page.

All pages are accessed from the **Home** page.

Key	Description
<b>1</b>	<b>Application panel</b>
<b>2</b>	<b>Menu</b> Panel specific menu.
<b>3</b>	<b>System Controls dialog</b> Quick access to basic system settings. Display the dialog by a short press on the <b>Power</b> key.
<b>4</b>	<b>Dialog</b> Information to or input from the user.
<b>5</b>	<b>Alarm message</b> Displayed if dangerous situations or system faults occur.

## Split pages

You can have up to 4 panels on each page.



*2 panels page*



*3 panels page*



*4 panels page*

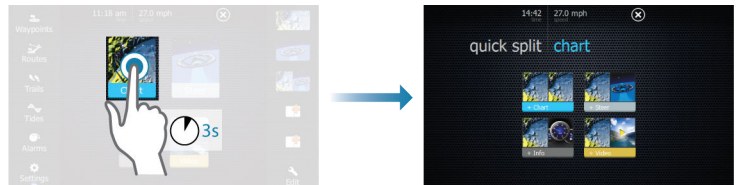
Panel sizes in a split page can be adjusted from the **System Controls** dialog.

## Quick split pages

Each full screen application has several pre-configured **quick split** pages, featuring the selected application combined with each of the other panels.

➔ **Note:** The number of quick split pages cannot be changed, and the pages cannot be customized or deleted.

Access a **quick split** page by pressing and holding the **application** button on the **Home** page.



## Favorite pages

All preconfigured favorite pages can be modified and deleted, and you can create your own. You can have a total of 12 favorite pages. For more information, refer to *"Adding new favorite pages"* on page 27.

## Integration of 3<sup>rd</sup> party devices

A device connected to the NMEA 2000 network should automatically be identified by the system. If not, enable the feature from the advanced option in the System settings dialog.

The 3<sup>rd</sup> party device is operated by using menus and dialogs as on other panels.

This manual does not include specific operation instructions for any 3<sup>rd</sup> party device. For features and functionality, refer to the documentation included with the 3<sup>rd</sup> party device.

### **FUSION-Link Integration**

FUSION-Link devices connected to the NMEA 2000 network can be controlled from the system.

The FUSION-Link devices appear as additional sources when using the audio function. No additional icons are available.

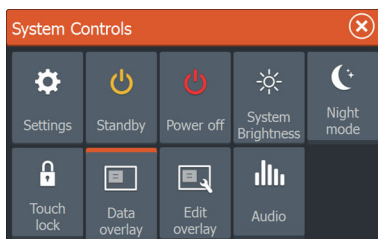
Refer to "*Audio*" on page 56 for more information.

# 2

## Basic operation

### Systems Controls dialog

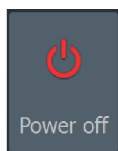
The Systems Controls dialog provides quick access to basic system settings. You display the dialog by making a short press on the **Power** key. The icons displayed on the dialog can vary. For example, the adjust splits option is only available if you are viewing a split page when you open the **System Controls** dialog.



### Activating functions

Select the icon of the function you want to set or toggle on or off. For those functions that toggle on and off, an orange bar across the top of the icon indicates the function is activated, as shown in the Data Overlay icon above.

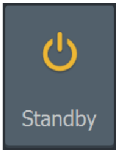
### Turning the system on and off



You turn the system on and off by pressing and holding the **Power** key. You can also turn the unit off from the **System Controls** dialog.

If the **Power** key is released before the shut-down is completed, the power off process is cancelled.

## Standby mode

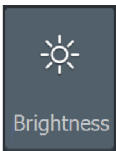


In Standby mode the backlight for screen and keys are turned off to save power. The system continues to run in the background.

You select Standby mode from the **System Controls** dialog.

Switch from Standby mode to normal operation by a short press on the **Power** key.

## Display illumination



### Brightness

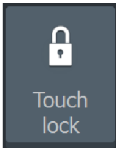
The display backlighting can be adjusted at any time from the **System Controls** dialog. You can also cycle the preset backlight levels by short presses on the **Power** key.

### Night mode

The night mode option optimizes the color palette and backlight for low light conditions.

→ **Note:** Details on the chart may be less visible when the Night mode is selected!

## Locking the touchscreen



You can temporarily lock a touchscreen to prevent accidental operation of the system. Lock the touchscreen when it is undesirable to interact with the touchscreen, such as operation at high speeds and over rough terrain. This feature is also useful when cleaning the screen while the unit is turned on.

When the touch lock is active you can only operate the unit from the keys.

→ **Note:** To prevent false touchscreen activation, the touchscreen will automatically lock when it detects a significant amount of water on the screen.

You lock the touchscreen from the **System Controls** dialog.

You remove the lock function by a short press on the **Power** key.

## Using menus and dialogs

### Menus

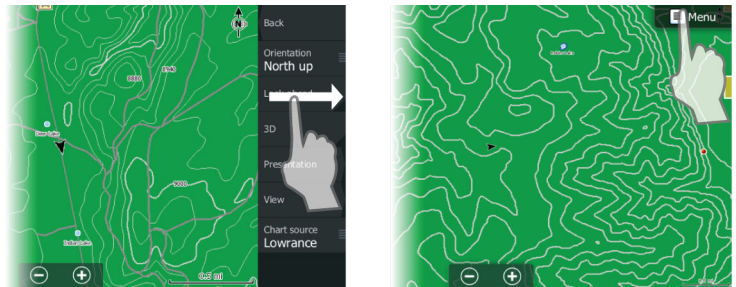
The menu is used to operate the system and to adjust settings.

- Activate a menu item and toggle on/off an option by selecting it
- Adjust a slide bar value by either:
  - dragging the slide bar
  - selecting the **+** or **-** icons

Select the **Back** menu option or the **X** key to return to the previous menu level, and then exit.

Page menus can be hidden to allow pages to be a full screen view. To hide the menu, drag the menu to the right, or press and hold the **Menu** key.

When you hide a menu on one page, the menu on other pages is also hidden. To display the menu again, select the menu option, or press the **Menu** key.



The status of the cursor (active vs. inactive) changes the menu options.

### Dialog boxes

Numeric and alphanumeric keyboards are automatically displayed when required for entering user information in dialogs.

A dialog is closed by saving or cancelling the entry.

A dialog can also be closed by selecting the **X** in the dialog's upper right corner or by pressing the **X** key.



## Selecting pages and panels

### Selecting a page

- Select a full page panel by selecting the relevant application button on the **Home** page
- Select a favorite page by selecting the relevant favorite button
- Select a predefined split panel by pressing and holding the relevant application icon

### Select active panel

In a multiple panel page, only one panel can be active at a time. The active panel is outlined with a border.

You can only access the page menu of an active panel.

You activate a panel by:

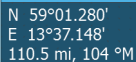
- Touch operation: tapping the panel
- Key operation: pressing the **Panel** key

## Using the cursor on the panel

The cursor can be used to measure a distance, to mark a position, and to select items.

Position the cursor by tapping the desired location on the screen or by using the **Cursor** keys to move the cursor.

By default, the cursor is not shown on the panel.



N 59°01.280'  
E 13°37.148'  
110.5 mi, 104 °M

When the cursor is active, the cursor position window is displayed.

To remove the cursor and cursor elements from the panel, press the **X** key or select the **Clear cursor** option.

### GoTo cursor

You can navigate to a selected position on the image by positioning the cursor on the panel, then using the **Goto Cursor** option in the menu.

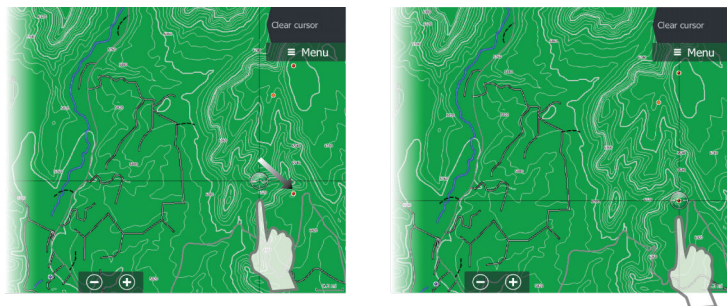
### The Cursor assist function

The cursor assist function allows for fine tuning and precision placement of the cursor without covering details with your finger.

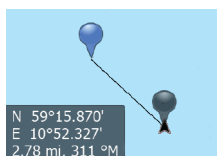
Press and hold your finger on the screen to switch the cursor symbol to a selection circle, appearing above your finger.

Without removing your finger from the screen, drag the selection circle over the desired item to display item information.

When you remove your finger from the screen the cursor reverts to normal cursor operation.



## Measuring distance



The cursor can be used to measure the distance between your vehicle and a selected position, or between 2 points on the chart panel.

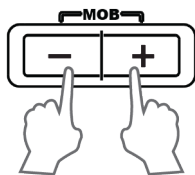
1. Position the cursor on the point from where you want to measure the distance.
2. Start the measure function from the menu.
  - The measuring icons appear with a line drawn from the vehicle center to the cursor position, and the distance is listed in the cursor information window.
3. You can reposition the measuring points by dragging either icon as long as the measuring function is active.

→ **Note:** The bearing is always measured from the grey icon to the blue icon.

You can also start the measuring function without an active cursor. Both measuring icons are then initially located at the vehicle position. The grey icon follows the vehicle as the vehicle moves, while the blue icon remains at the position given when you activated the function.

You terminate the measuring function by selecting the **Finish measuring** menu option.

## Creating a Man Overboard waypoint



If an emergency situation should occur, you can save a Man Overboard (MOB) waypoint at the vehicle's current position by pressing the **Zoom In (+)** and **Zoom out (-)** keys simultaneously.

When you activate the MOB function the following actions are automatically performed:

- a MOB waypoint is positioned at the vehicle's position
- the display switches to a zoomed chart panel, centered on the vehicle's position
- the system displays navigation information back to the MOB waypoint

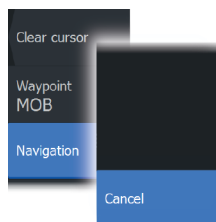
Multiple MOB waypoints are saved by repeatedly pressing the **MOB** buttons. The vehicle continues to show navigation information to the initial MOB waypoint. Navigation to subsequent MOB waypoints needs to be done manually.

### Cancel navigation to MOB

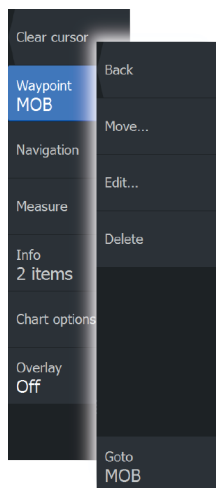
The system continues to display navigational information towards the MOB waypoint until you cancel the navigation from the menu.

### Display MOB waypoint information

You can display MOB information by selecting the MOB waypoint and then the MOB waypoint pop-up.



## The MOB waypoint menu option



When a MOB waypoint is activated, you can use the **Waypoint MOB** menu option to:

- **Move** it on the panel
- **Edit** its attributes
- **Delete** it
- **Goto** it

When you select the Edit menu option the Edit Waypoint dialog opens.

A screenshot of the 'Edit Waypoint' dialog box. The title bar is orange with a close button. The main area has a dark background. At the top, 'MOB-1' is displayed in large white text. Below it, '39.0 m' and '187 °M' are shown. To the right of these are three small icons: a blue 'X', a dropdown arrow, and a rainbow circle. Below this is a table with two columns. The first column has 'N 25°45.037' W 080°07.821'', 'Notes', and a large empty text area. The second column has 'Display icon and name', 'Depth (ft)', 'Alarm radius (mi)', and a large empty text area. At the bottom left, it says 'Created: 9:57 am 10/24/2014'. At the bottom, there are three buttons: 'Delete' (red), 'Goto' (grey), and an empty grey button.

## Screen capture

Simultaneously press the **Pages** and **Power** keys to take a screen capture. Screen captures are saved to internal memory.

Refer to "*Tools*" on page 73 for how to view files.

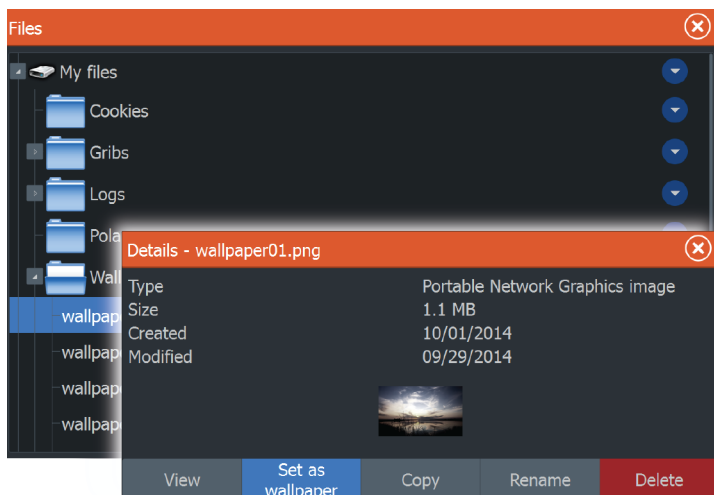
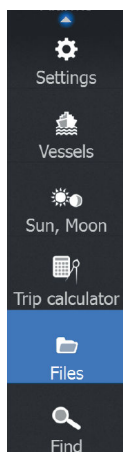
# 3

## Customizing your system

### Customizing the Home page wallpaper

The Home page's wallpaper can be customized. You can select one of the pictures included with the system, or you can use your own picture in .jpg or .png format.

The images can be available on any location that can be seen in the files browser. When a picture is chosen as the wallpaper, it is automatically copied to the Wallpaper folder.

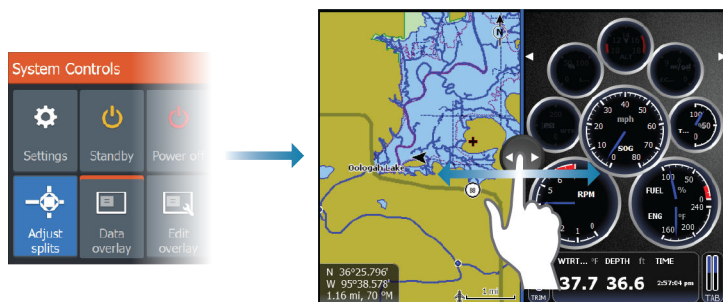


### Adjusting panel size

You can change the panel size for an active split page. The panel size can be adjusted for both favorite pages and for predefined split pages.

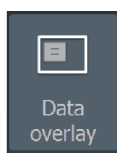
1. Activate the **System Controls** dialog
2. Select the adjust splits option in the dialog
3. Adjust the panel size by:
  - Touch operation: dragging the adjustment icon
  - Key operation: using the **Cursor** keys to move the adjustment icon

4. Confirm your changes by tapping one of the panels, selecting the save option in the menu, or by pressing the **Enter** key.



The changes are saved to the active favorite or split page.

## Data Overlay

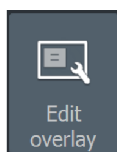


You can have data information as overlay on a page. The information can be any data available on the network.

### Turning Data overlay on and off

You can turn overlay data on or off for any active page by selecting the **Data overlay** icon on the **System Controls** dialog. When Data overlay is on, an orange bar appears above the icon.

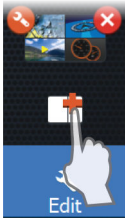
### Edit overlay data



Use the **Edit overlay** option on the **System Controls** dialog to access edit menu options to:

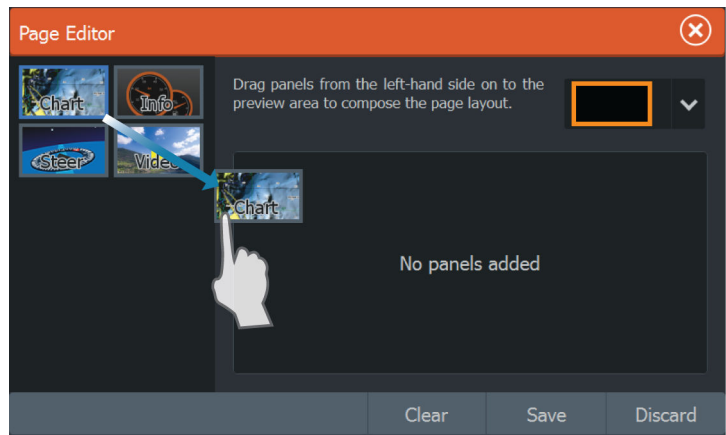
- Add a new data overlay to the active panel.
- Delete a selected data overlay.
- Change a selected data overlay to display different data.
- Configure a selected data overlay appearance (digital or analog, size, and so on).
- Re-locate an item by selecting and moving it.

## Adding new favorite pages

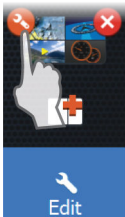


1. Select the **New** icon in the favorite panel on the **Home** page to open the page editor dialog
2. Drag and drop page icons to set up a new page
3. Change the panel arrangement (only possible for 2 or 3 panels), if required.
4. Save the page layout

The system displays the new favorite page, and the new page is included in the list of favorite pages on the **Home** page.



## Edit favorite pages



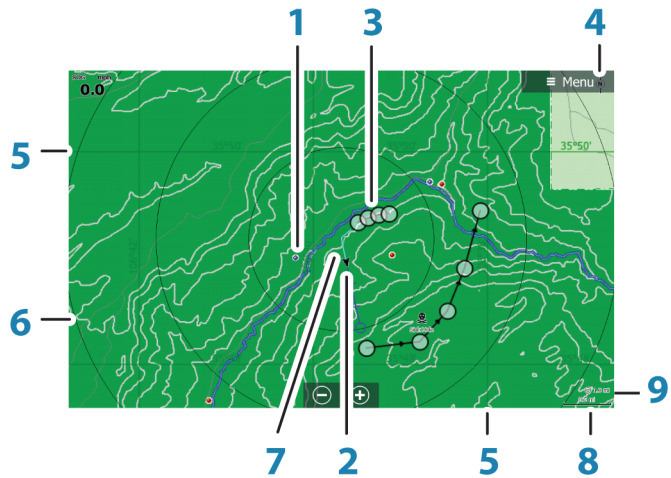
1. Select the edit icon for a favorite icon to enter edit mode
  - Select the X icon to remove the page
  - Select the tool icon to display the page editor dialog
2. Add or remove panels in the page editor dialog.
3. Save or discard your changes to leave the favorite edit mode.

# 4

## Charts

The chart function displays your vehicle's position relative to land and other chart objects. On the chart panel you can plan and navigate routes, place waypoints and display AIS targets. You can overlay a radar image, a StructureScan image or weather information.

### The Chart panel



Key	Description
1	Waypoint*
2	Vehicle with extension line (extension line is optional)
3	Route*
4	North indicator
5	Grid lines*
6	Range rings*
7	Trail*
8	Chart range scale
9	Range rings interval (only displayed when Range rings are turned on)



\* Optional chart items

→ **Note:** You turn the optional images on/off individually. For more information, see "*Chart settings*" on page 35.

## Chart data

The system is delivered with different embedded cartography depending on region.

All units support Polaris HD Imagery cards and Insight charts from Navico including Insight Genesis. The system also supports Navionics Gold, Platinum+ and Navionics+, C-MAP MAX-N/MAX-N+ by Jeppesen as well as content created by variety of third party mapping providers in the AT5 format. For a full selection of available charts please visit [insightstore.navico.com](http://insightstore.navico.com), [c-map.jeppesen.com](http://c-map.jeppesen.com) or [navionics.com](http://navionics.com).

→ **Note:** Insight charts are referred to as Lowrance in the menu.

Charts on chart cards are shared over the Ethernet network, so only one chart card per vehicle is required.

→ **Note:** The system does not automatically switch to embedded cartography if the chart card is removed. A low-resolution chart will be displayed until you re-insert the card or manually switch back to the embedded cartography.

## Showing dual chart types

If you have different chart types available - embedded, in the card slot, or on the Ethernet network - you can show two different chart types simultaneously on a page with two chart panels.

You can select a dual chart panel by pressing and holding the Chart application button on the **Home** page, or by creating a favorite page with two chart panels.

## Selecting chart type

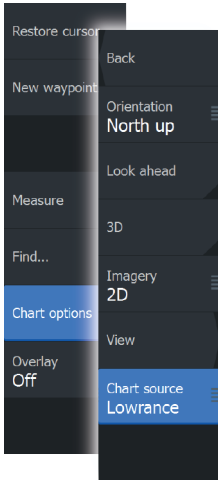


Chart type is set individually for each chart panel.

Activate one of the chart panels, and then select one of the available chart types in the chart source menu option. Repeat the process for the second chart panel, and select an alternative chart type for this panel.

## Vehicle symbol

When the HDS Gen3 Polaris has a valid GPS position lock, the vehicle symbol indicates vehicle position. If no GPS position is available, the vehicle symbol includes a question mark.

→ **Note:** Without a heading sensor on the network, the vehicle icon orientates itself using COG (Course over Ground).

## Chart scale



You zoom in and out on the chart by using the zoom (+ or -) buttons, the + or - keys, or two fingers to pinch (zoom out) and spread (zoom in).

Chart range scale and range rings interval (when turned on) are shown in the lower right corner of the chart panel.

## Panning the chart

You can move the chart in any direction by:

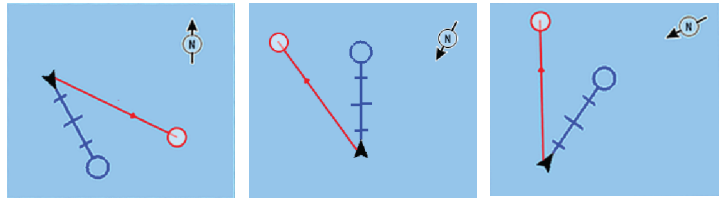
- Touch operation: dragging your finger on the screen
- Key operation: using the **Cursor** keys to move the cursor to the edge of the chart panel in the desired direction

Select the **Clear cursor** menu option or press the **X** key to remove the cursor and cursor window from the panel. This also centers the chart to the vehicle position.

# Positioning the vehicle on the chart panel

## Chart orientation

Several options are available for how the chart is rotated in the panel. The chart orientation symbol in the panel's upper right corner indicates the north direction.



*North up*

*Heading up*

*Course up*

### North up

Displays the chart with north upward.

### Heading up

Displays the chart with the vehicle's heading directed upward. Heading information is received from a compass. If heading is not available, then the COG from the GPS is used.

### Course up

Rotates the chart in the direction of the next waypoint when navigating a route or navigating to a waypoint. If not navigating the heading up orientation is used until navigation is started.

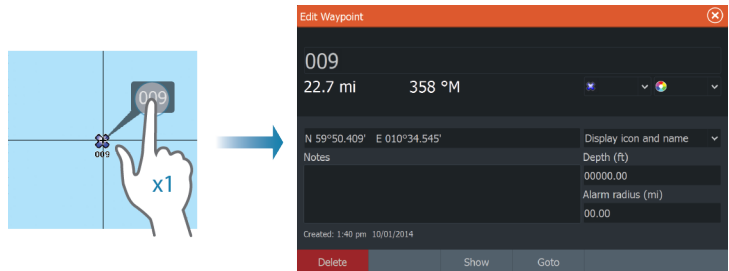
## Look ahead

Moves the vehicle icon closer to the bottom of the screen so that you can maximize your view ahead.

## Displaying information about chart and chart objects

When you select a chart item, a waypoint, a route or a target, basic information for the selected item is displayed. Select the chart item's pop-up to display all available information for that item. You can also activate the detailed information dialog from the menu.

→ **Note:** Pop-up information has to be enabled in chart settings to see basic item information.



## Using the cursor on the chart panel

By default, the cursor is not shown on the chart panel.

N 59°01.280'  
E 13°37.148'  
110.5 mi, 104 °M

When you activate the cursor, the cursor position window is displayed. When the cursor is active, the chart does not pan or rotate to follow the vehicle.

Press the **X** key or select the **Clear cursor** menu option to remove the cursor and the cursor window from the panel. This also centers the chart to the vehicle position.

Select the **Restore cursor** menu option to display the cursor in its previous location. The **Clear cursor** and **Restore cursor** options are useful features for toggling between the vehicle's current location and the cursor position.

## Creating routes

You can create routes as follows on the chart panel.

1. Position the cursor on the chart panel.
2. Select **New** followed by **New route** in the menu.
3. Continue positioning the remaining route points.

4. Save the route by selecting the save option in the menu.

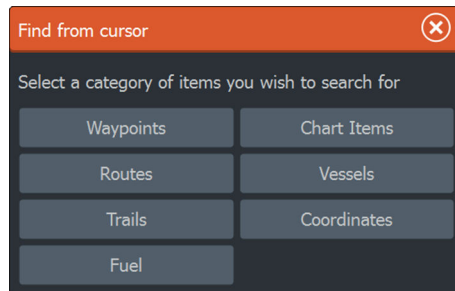
→ **Note:** For more information, refer to *"Waypoints, Routes and Trails"* on page 38.

## Find objects on chart panels

You can search for various chart items from a chart panel.

→ **Note:** The find **Vessels** option is not used by HDS Gen3 Polaris.

Activate the cursor on the panel to search from the cursor position. If the cursor is not active, the system searches for items from the vehicle's position.



→ **Note:** You must have a SIRIUS data package subscription to search for fueling stations.

## 3D charts

The 3D option provides a three dimensional graphical view of land and sea contours.

→ **Note:** All chart types work in 3D mode, but without 3D cartography for the appropriate area the chart appears flat.

When 3D chart option is selected, the Pan and the Rotate icons appear on the right side of the chart panel.

### Panning the 3D chart



You can move the chart in any direction by selecting the Pan icon and then panning in the desired direction.

Select the **Return to vehicle** menu option to stop panning, and to center the chart to vehicle position.

## Controlling the view angle



You can control the view angle by selecting the Rotate icon and then panning the chart panel.

- To change the direction you are viewing, pan horizontally
  - To change the tilt angle of the view, pan vertically
- **Note:** When centered on the vehicle position, only the tilt angle can be adjusted. The view direction is controlled by the chart orientation setting. See *"Positioning the vehicle on the chart panel"* on page 31.

## Zooming a 3D chart

You zoom in and out on a 3D chart by using the zoom (+ or -) buttons, or by using the + and - keys.

## Chart overlay

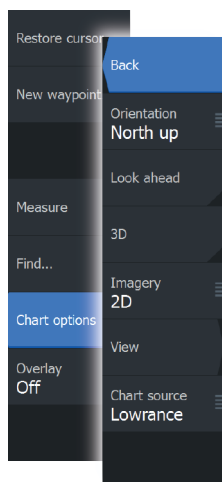
Weather information can be displayed as overlay on your chart panel. This option requires a WM-3 receiver connected to the network, and an active Sirius weather subscription.

- **Note:** Weather overlay is currently only available in the United States.

When an overlay is selected, the chart menu expands to include basic functions for the selected overlay.

Weather functions are described in separate sections in this manual.

## Insight specific chart options



**Orientation, Look ahead, 3D** and **Change to Navionics/ Change to Insight** (previously described in this section) are common for all chart types.

### Chart imagery style

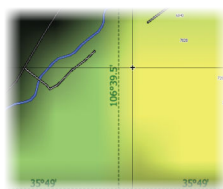
The charts can be displayed in three imagery styles.



*2D mapping style*

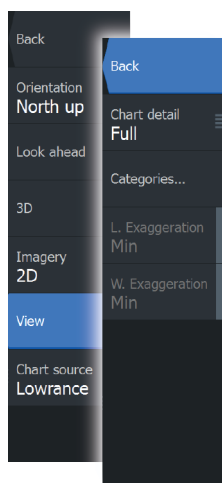


*Shaded relief*



*No contours*

## Insight view options

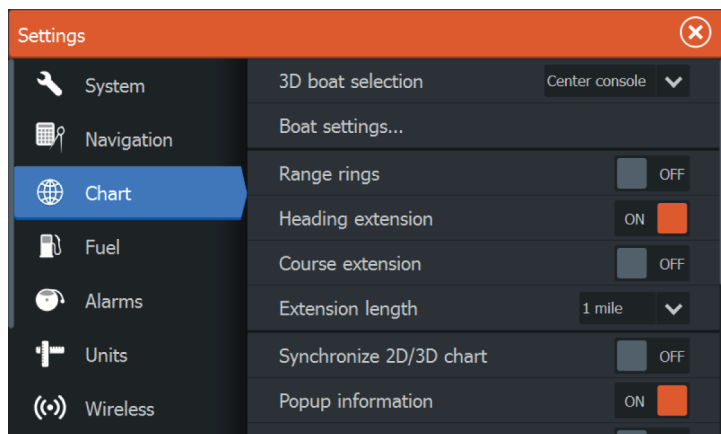


### Insight Chart details

<b>Low</b>	Basic level of information that cannot be removed, and includes information that is required in all geographic areas. It is not intended to be sufficient for safe navigation
<b>Medium</b>	Minimum information sufficient for navigation
<b>Full</b>	All available information for the chart in use

## Chart settings

Settings and display options made in the Chart settings page are common for all chart panels.



### 3D boat selection

Not used by HDS Gen3 Polaris.

### Boat settings

Not used by HDS Gen3 Polaris.

### Range Rings

The range rings can be used to present the distance from your vehicle to other chart objects.

The range scale is set automatically by the system to suit the chart scale.

### Heading extension

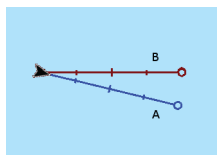
Sets the lengths of the heading and course extension lines for your vehicle.

**A:** Heading

**B:** Course Over Ground (COG)

The lengths of the extension lines are either set as a fixed distance, or to indicate the distance the vehicle moves in the selected time period. If no options are turned on for the vehicle then no extension lines are shown for your vehicle.

Your vehicle heading is based on information from the active heading sensor and the COG is based on information from the active GPS sensor.





**Synchronize 2D/3D chart**

Links the position shown on one chart with the position shown on the other chart when a 2D and a 3D chart are shown side by side.

**Pop-up information**

Selects whether basic information for chart items is displayed when you select the item.

**Grid lines**

Turns on/off viewing of longitude and latitude grid lines on the chart.

**Hide chart**

If the option is set to **ON** when viewing a Lowrance chart, the chart (background) is not displayed and only the vehicle, extensions, waypoints, and routes are displayed on a white background.

**Waypoints, Routes, Trails**

Turns on/off displaying of these items on chart panels. Also opens the Waypoints, Routes and Trails dialogs you can use to manage them.

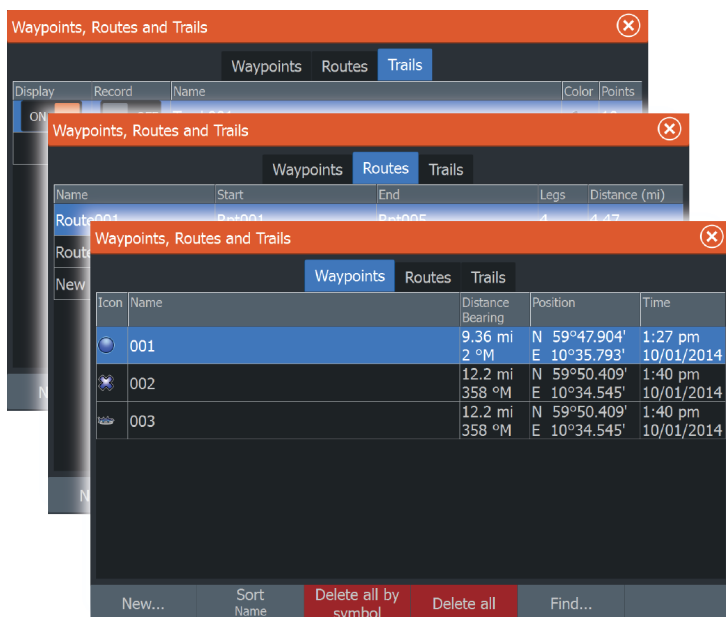
# 5

## Waypoints, Routes and Trails

### Waypoints, Routes, and Trails dialogs

The Waypoints, Routes, and Trails dialogs give access to advanced edit functions and settings for these items.

The dialogs are accessed from the **Tools panel** on the **Home** page or from the chart **Settings** dialog.



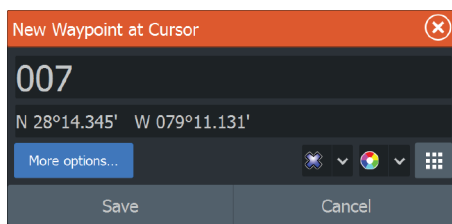
## Waypoints

A waypoint is a user generated mark positioned on a chart. Each waypoint has an exact position with latitude and longitude coordinates.

A waypoint is used to mark a position you later may want to return to. Two or more waypoints can also be combined to create a route.

### Saving waypoints

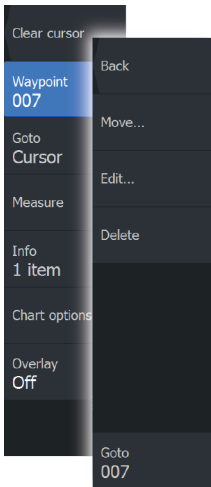
You can save a waypoint at a selected location by positioning the cursor on the panel, then selecting the new waypoint option in the menu.



You can also save a waypoint by pressing the Waypoint key:

- Press once to display the New Waypoint dialog
- Press twice to quickly save a waypoint. If the cursor is active, the waypoint is saved at the cursor position. If the cursor is not active, the waypoint is saved at your vehicle's position.

## Moving a waypoint



1. Select the waypoint you want to move
  - The waypoint icon expands to indicate that it is active
2. Activate the menu and select the waypoint in the menu
3. Select the move option
4. Select the new waypoint position
5. Press the **Enter** key to confirm the new position.

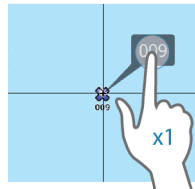
The waypoint is now automatically saved at the new position.

## Edit a waypoint

You can edit all information about a waypoint from the **Edit Waypoint** dialog.

This dialog is activated by selecting the waypoint's pop-up, or from the menu when the waypoint is activated.

The dialog can also be accessed from the Waypoints tool on the **Home** page.

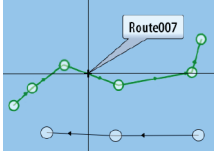
A screenshot of the 'Edit Waypoint' dialog box. It has an orange title bar with a close button. The content area shows '009' at the top, followed by '22.7 mi' and '358 °M'. Below this are fields for coordinates 'N 59°50.409' E 010°34.545'', a 'Notes' field, and a table with 'Depth (ft)' (00000.00) and 'Alarm radius (mi)' (00.00). At the bottom, it says 'Created: 1:40 pm 10/01/2014' and has three buttons: 'Delete' (red), 'Show', and 'Goto'.

## Waypoint alarm settings

You can set an alarm radius for each individual waypoint you create. The alarm is set in the **Edit Waypoint** dialog.

- **Note:** The waypoint radius alarm must be toggled ON in the alarm panel to activate an alarm when your vehicle comes within the defined radius.

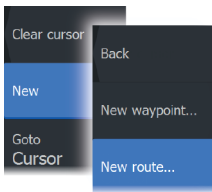
## Routes



A route consists of a series of routepoints entered in the order that you want to navigate them.

When you select a route on the chart panel it turns green, and the route name is displayed.

### Creating a new route on the chart panel



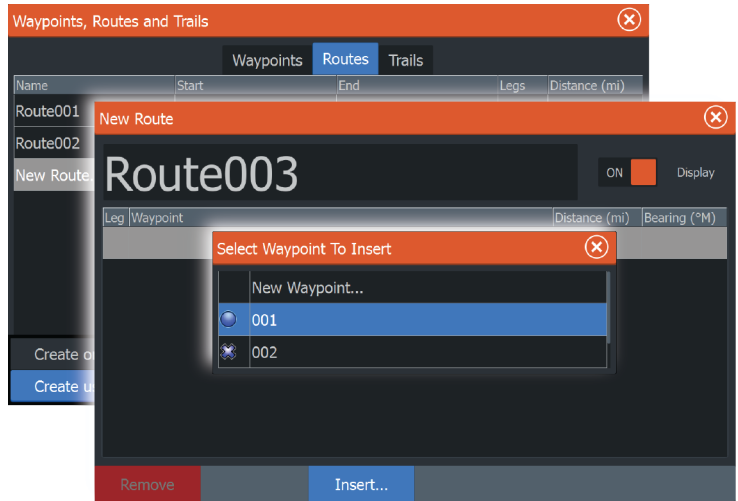
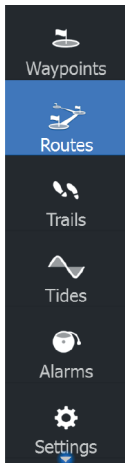
1. Activate the cursor on the chart panel.
2. Select the new route option from the menu.
3. Position the first waypoint on the chart panel.
4. Continue positioning new routepoints on the chart panel until the route is completed.
5. Save the route by selecting the save option in the menu.

### Edit a route from the chart panel

1. Select the route to make it active.
  2. Select the route edit option in the menu.
  3. Position the new routepoint on the chart panel:
    - If you set the new routepoint on a leg, a new point is added between existing routepoints.
    - If you set the new routepoint outside the route, the new routepoint is added after the last point in the route.
  4. Drag a routepoint to move it to a new position.
  5. Save the route by selecting the save option in the menu.
- **Note:** The menu changes depending on the selected edit option. All edits are confirmed or cancelled from the menu.

## Creating routes using existing waypoints

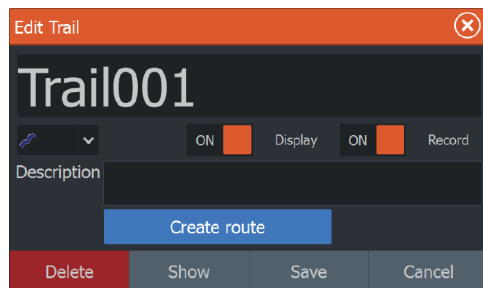
You can create a new route by combining existing waypoints from the **Routes** dialog. The dialog is activated by using the **Routes** tool on the **Home** page.



## Converting Trails to Routes

You can convert a trail to a route from the Edit Trail dialog. The dialog is activated by activating the trail, then selecting the trail's pop-up, or the **Trail** menu option.

The Edit Trails dialog can also be accessed by selecting the Trails tool on the **Home** page.



### The Edit Route dialog

You can add and remove routepoints from the **Edit Route** dialog. This dialog is activated by selecting an active route's pop-up or from the menu.

The dialog can also be accessed by using the **Routes** tool on the **Home** page.

Edit Route

Route002

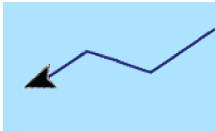
ON ☒ Display

Leg	Waypoint	Distance (mi)	Bearing (°M)
0	Rpt006		
1	Rpt007	0.68	44
2	Rpt008	1.32	126
3	Rpt009	1.25	158

Remove

Insert...

### Trails



Trails are a graphical presentation of the historical path of the vehicle, allowing you to retrace where you have travelled. Trails can be converted to routes from the **Edit** dialog.

From the factory, the system is set to automatically track and draw the vehicle's movement on the chart panel. The system continues to record the until the length reaches the maximum points, and then automatically begins overwriting the oldest points.

The automatic tracking function can be turned off from the Trails dialog.

#### Creating a new trail

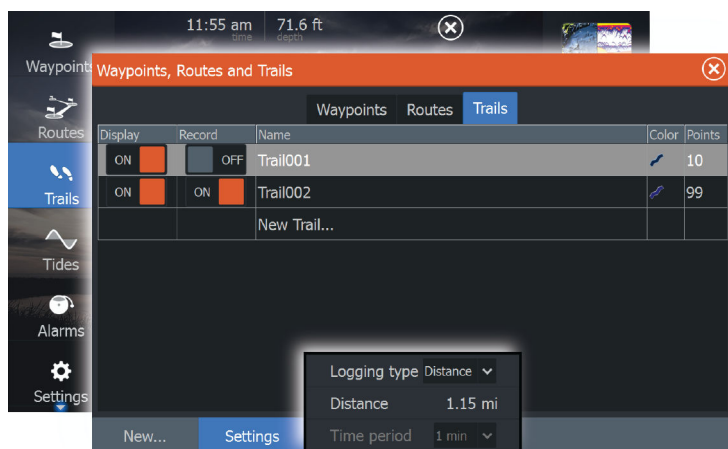
You can start a new trail from the **Trails** dialog, activated by using the **Trails** tool on the **Home** page.

## Trails settings

Trails are made up of a series of points connected by line segments whose length depends on the frequency of the recording.

You can select to position trail points based on time settings, distance, or by letting the system position a waypoint automatically when a course change is registered.

→ **Note:** The Trails option must also be turned ON in the chart settings to be visible.





# 6

## Navigating

The navigation function included in the system allows you to navigate to the cursor position, to a waypoint or along a predefined route.

For information about positioning waypoints and creating routes, refer to *"Waypoints, Routes and Trails"* on page 38.

### Steer panel



The Steer panel can be used to display information when you are navigating. It is activated from the **Home** page, either as a full page panel or as part of a multiple panel page.

Key	Description
1	Data fields
2	Vehicle heading
3	Bearing to waypoint
4	Destination point

Key	Description
5	Bearing line with allowed off course limit When travelling on a route the bearing line shows the intended course from one waypoint towards the next. When navigating towards a waypoint (cursor position, MOB, or an entered latitude and longitude position), the bearing line shows the intended course from the point at which navigation was started towards the waypoint.
6	Vehicle symbol Indicates distance and bearing relative to the intended course. If the XTE (Cross Track Error) exceeds the defined XTE limit, this is indicated with a red arrow including the distance from the track line. Refer to <i>"Navigation settings"</i> on page 48.

## Data Fields

The Steer panel provides the following information:

XTE	Cross track error
SOG	Speed over ground
COG	Course over ground
POS	Position
DTD	Distance to destination
TTD	Time to destination

## Navigate to cursor position

You can start navigating to a cursor position on any chart panel. Position the cursor at the selected destination on the panel, and then select the **Goto Cursor** option in the menu.

→ **Note:** This is straight line navigation, not turn-by-turn.

## Navigate a route

You can start navigating a route from the chart panel, steer panel, or from the Route dialog.

When route navigation is started, the menu expands and shows options for canceling the navigation, for skipping a waypoint, and for restarting the route from current vehicle position.

**Starting a route from the chart panel**

Activate a route on the panel, and then select the route navigation option from the menu.

You can select a routepoint to start navigating from a selected position.

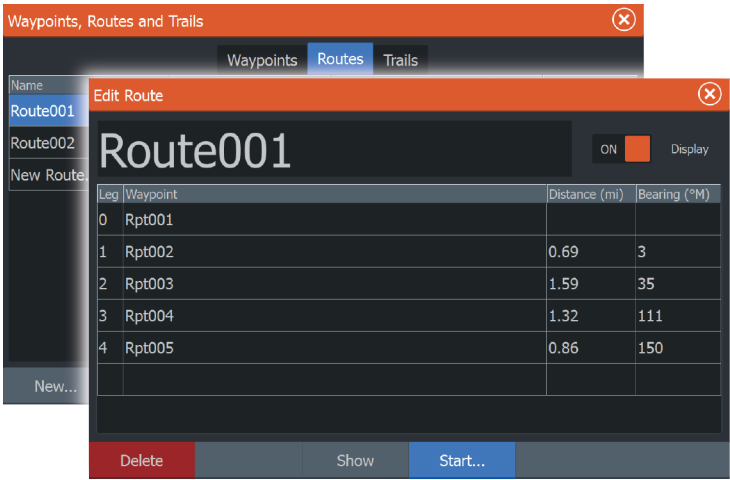
**Starting a route from the steer panel**

Select the start route option on the menu, and then details from the dialogs.

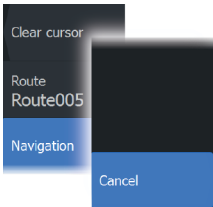
**Start navigating a route from the Route dialog**

You can start navigating from the **Route** dialog, activated by:

- Selecting the **Route** tool from the **Home** page
- Selecting the route details from the menu

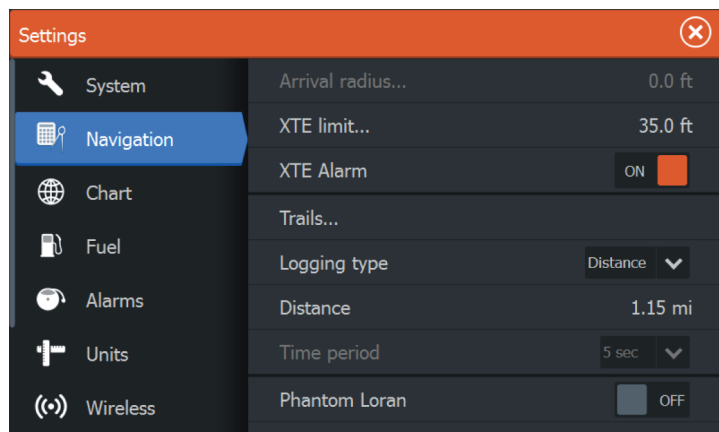


**Cancel navigation**



When you are navigating, the menu includes an option for cancelling the navigation.

## Navigation settings



### Arrival radius

Sets an invisible circle around the destination waypoint.

The vehicle is considered arrived at the waypoint when it is within this radius.

### XTE limit

This setting defines how far the vehicle can deviate from the selected route.

If the vehicle goes beyond this limit, an alarm is activated..

### XTE alarm (Cross track error)

Turns on/off the XTE alarm.

### Trails

Opens the Trails dialog where trails settings can be adjusted and trails can be converted into routes for navigation. Refer to *"Converting to Routes"* on page 42.

## Logging type

You can select to record trail points based on time, distance, or by letting the unit position a point automatically when a course change is registered.

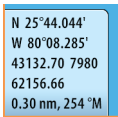
Specify one of the following logging types in the Navigating Settings dialog:

- **Auto** - the unit positions a point automatically when a course change is registered.
- **Distance** - select the Distance field and enter the distance you want to record.
- **Time** - select the Time field and enter the time you want to record.

## Phantom Loran

Enables use of Phantom Loran positioning system.

### Loran settings



N 25°44.044'  
W 80°08.285'  
43132.70 7980  
62156.66  
0.30 nm, 254 °M

Defines Loran chains (GRI) and preferred station for waypoint entry, cursor position and position panel.

The graphic example shows a cursor position window with Loran position information.

For more information refer to your Loran system documentation.

# 7

## Info panels

The **Info** panels consist of multiple gauges - analog, digital, and bar - that can be customized to display selected data. The panel displays data on dashboards, and you can define up to ten dashboards within the panel.

### Dashboards

A set of dashboard styles are predefined to display vehicle, navigation, and angler information.

You switch between the panel's dashboards by selecting the left and right arrow buttons on the panel. You can also select the dashboard from the menu.



*Vehicle dashboard*



*Navigation dashboard*



*Angler dashboard*

→ **Note:** Additional dashboards can be activated from the menu if other systems (e.g. CZone) are present on the network.

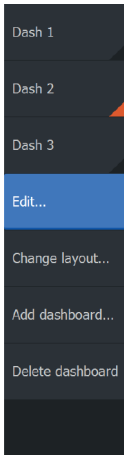
### Customizing the Instrument panel

You can customize the Instruments panel by changing the data for each of the gauges in the dashboard, by changing the dashboard layout, and by adding new dashboards. You can also set limits for analog gauges.

All edit options are available from the Instruments panel menu.

Available editing options depends on which data sources are connected to your system.

## Edit a dashboard



Activate the dashboard you want to edit, then:

1. Activate the menu.
2. Select the edit option.
3. Select the gauge you want to change. Selected gauge is indicated with a blue background.
4. Select information to be displayed, configure limits, and eventually change the source for the information.
5. Save your changes by selecting the save option in the menu.



# 8

## Video

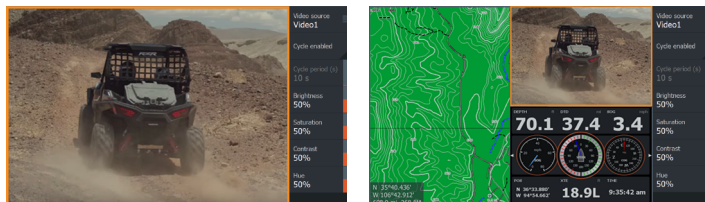
The video function allows you to view videos or camera sources on your system.

→ **Note:** The video images are not shared from the Ethernet network. You can only view the video on the unit connected to the video source.

### The Video panel

A video panel can be set up as a single panel, or as one of the panels on a multiple panel page.

The video image is proportionally scaled to fit into the video panel. Areas not covered by the image are colored black.



### Setting up the video panel

#### Video source

HDS Gen3 Polar supports one video input channel.

#### Video standard

HDS Gen3 Polar supports NTSC and PAL video. Check the local video standard or the standard of your cameras.

#### Adjusting the video image

You can optimize the video display by adjusting the video image settings. Default for all settings: 50%.

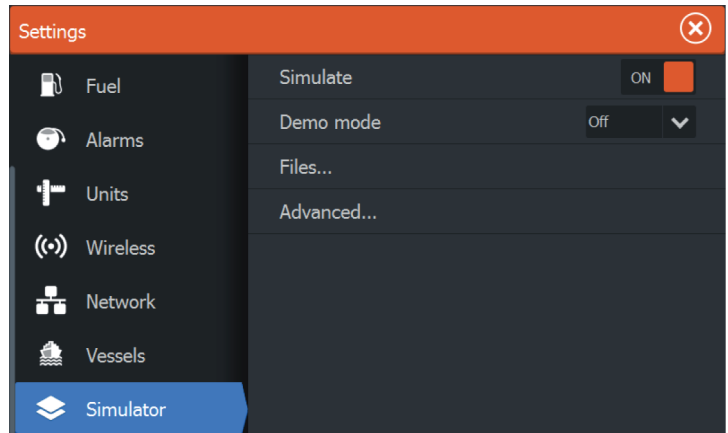


# 9

## Simulator

The simulation feature lets you see how the unit works in a stationary position and without being connected to the GPS.

Use the simulator to become familiar with your unit before using it.



### Demo mode

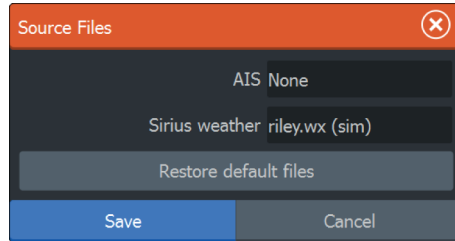
In this mode the unit automatically runs through the main features of the product; it changes pages automatically, adjusts settings, opens menus, and so on.

If you tap on a touchscreen or press a key when demo mode is running, the demonstration pauses. After a time-out period, demo mode resumes and any changed settings are restored to default.

→ **Note:** Demo mode is designed for retail/showroom demonstrations.

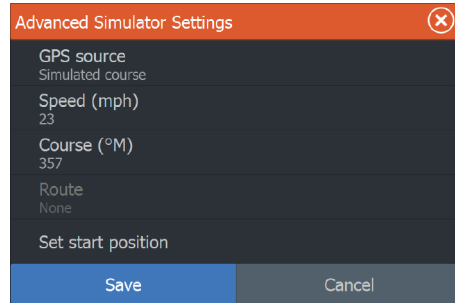
## Simulator source files

You can select which data files are used by the simulator. A set of source files is included in your system, and you can import files by using a card inserted into the card reader. You can also use your own recorded files in the simulator.



## Advanced simulator settings

The Advanced simulator settings allows for manually controlling the simulator.



### GPS source

Selects where the GPS data is generated from.

### Speed, Course and Route

Used for manually entering values when GPS source is set to Simulated course or Simulated route. Otherwise, GPS data including speed and course come from the selected source file.

### Set start position

Moves your vehicle to the current cursor position.

→ **Note:** This option is only available when the GPS source is set to Simulated course.

# 10

## Audio

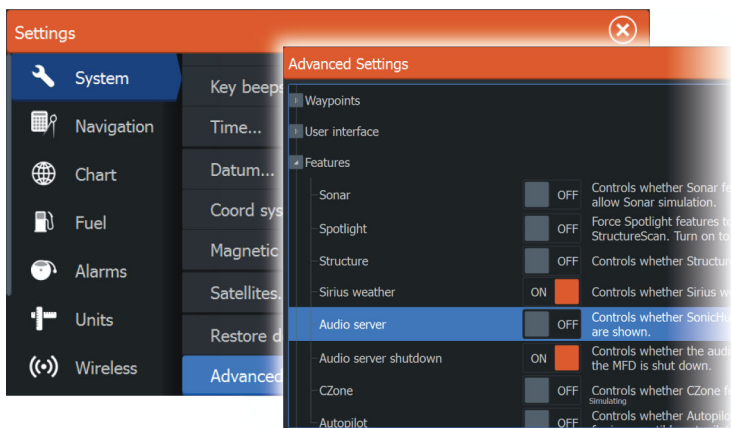
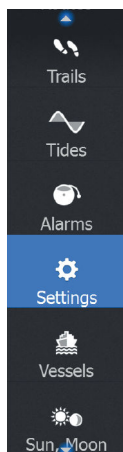
If a SonicHub server or a FUSION marine entertainment system is connected to the NMEA 2000 network, you can use the HDS Gen3 Polaris to control and customize the audio system on your vehicle.

When connected to a WM-3 Satellite module with an active subscription, you can include SiriusXM products on your system. You can also connect a SiriusXM radio to a FUSION system. Sirius audio and weather service covers mainland U.S., waters and coastal areas into the Atlantic and Pacific oceans, Gulf of Mexico, and the Caribbean Sea. The SiriusXM products received vary depending on your selected subscription package. For more information refer to [www.siriusXM.com](http://www.siriusXM.com).

Before you can start using your audio equipment, it must be installed according to the HDS Gen3 Polaris Installation manual and to the documentation included with the audio device.

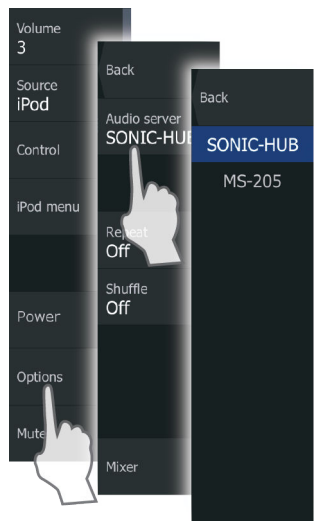
### Enabling audio

A compatible audio device connected to the NMEA 2000 network should automatically be identified by the system. If not, enable the feature from the **Advanced Settings** dialog.



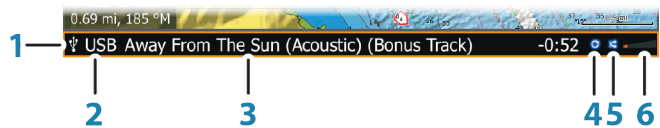
### Audio server

If a SonicHub server and a FUSION system are connected to the same network, one of the devices must be selected as the Audio server. If only one of the devices is present, it is the selected Audio server by default.



### The Media bar

When audio is enabled, the Media bar appears at the bottom of the screen on all pages. The information in the Media bar varies depending on the active audio source. Select the Media bar to replace the application menus with Audio menus.



Key	Description
1	Media bar
2	Audio source

Key	Description
<b>3</b>	Track, file, or station information
<b>4</b>	Repeat - shown only when repeat is on
<b>5</b>	Shuffle - shown only when shuffle is on
<b>6</b>	Volume level

## Setting up the audio system

### Selecting audio source

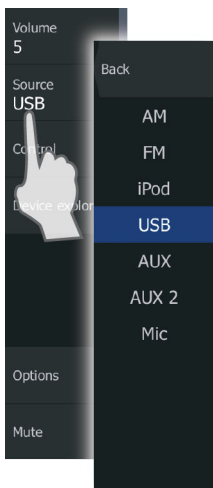
You can switch between available audio sources from the menu.

- **Note:** The Mic source selects a high voltage level input allowing you to broadcast loud hailer messages over the audio system.

### Volume

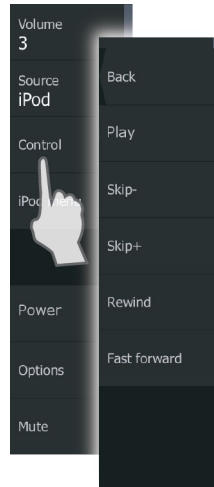
#### Master volume control

By default the volume for all speaker zones are adjusted when you adjust the master volume.



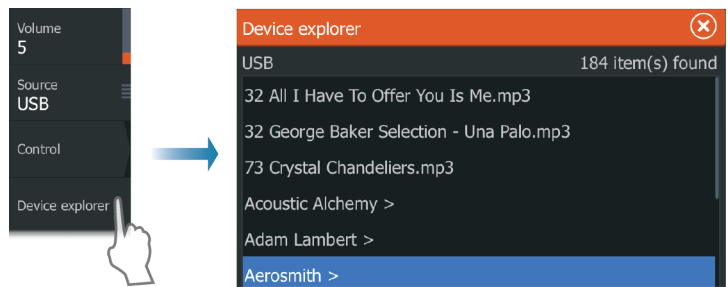
## Audio controls

Use the menu to control the playback. The menu options vary depending on the active audio device.



## Device explorer

You can use the **device menu** or **Device explorer** menu options to access the source's native menu or file structure, which can be used to select tracks. An example of an USB Device explorer:



## Audio options

Use the **Options** menu option to repeat or shuffle tracks or albums, and to open the Mixer. The options vary depending on the active audio device.

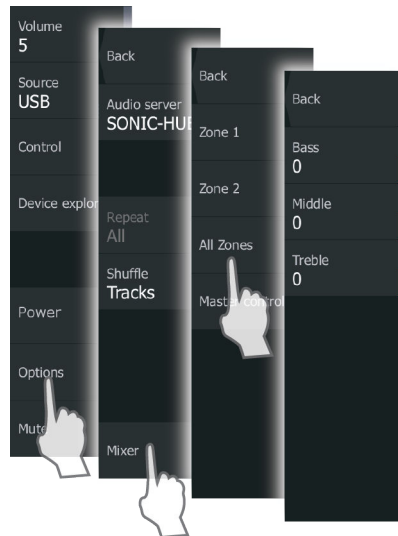
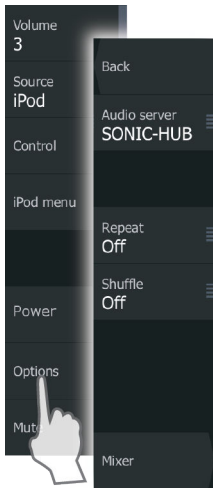
### Audio mixer

Use the Mixer to:

- Adjust the balance, volume, and volume limits individually for each zone.
- Adjust the bass and treble, and the balance between zones.
- Turn on or off individual speaker zones in the **Master control**.

The Mixer options vary depending on the activated audio device. The following is an example of the USB source mixer option for the

**All Zones:**



## Auxiliary sources

AUX and AUX 2 (labeled AUX and SAT IN on the SonicHub) can be used for Sirius radio and external audio devices that support RCA connectivity. Sirius radio playback can be controlled when a



Lowrance weather module is connected to SAT IN. Other auxiliary audio sources only have volume control.

## Detaching Sirius from the AUX source

If a Sirius radio is connected to the FUSION radio/server, the AUX source is automatically attached to the Sirius feed. **Sirius** then appears in the source list when the FUSION server is active.

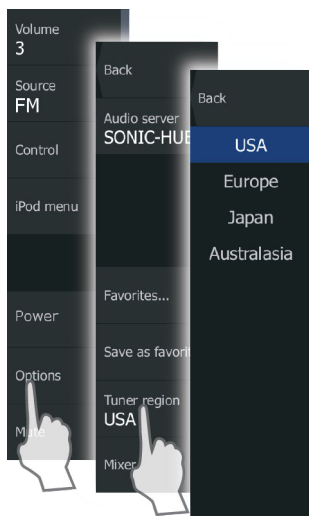
To use the AUX source for a different device, the Sirius must be detached from the AUX source.

→ **Note:** To use SiriusXM, an optional SiriusXM tuner must be connected to the FUSION server.

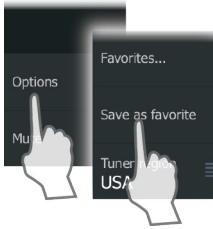
## Radio

### Selecting tuner region

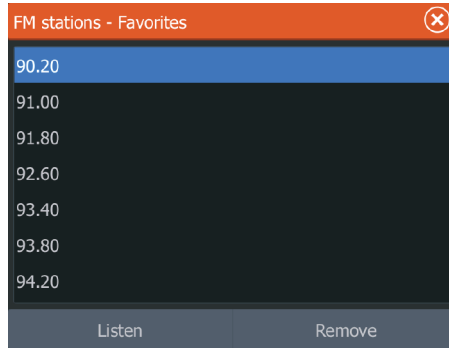
Before playing FM or AM radio, and using a VHF radio, you must select the appropriate region for your location.



## Radio favorites



When a channel is tuned in, you can add the station to the favorite's list. All favorite channels can be viewed, selected, and deleted from the Favorites dialog.



## Sirius radio (North America only)

### Channels list

The channels list displays all available Sirius channels, whether or not you have a subscription for the channel.

### Favorites list

You can create a list of your favorite Sirius channels from within the channels list. You cannot add unsubscribed channels.

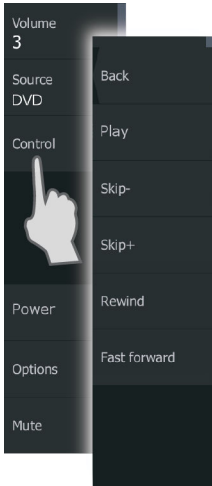
### Locking channels

You can lock selected Sirius channels from being broadcasted. A 4-digit-code must be entered to lock channels and the same code entered to unlock the channels.

## DVD video

You can view DVD video from a FUSION-Link device on units with a Video Adapter cable (000-11010-001), sold separately.

### Controlling DVD video



1. Insert a DVD into the device.
2. Open the **Home** page and select the **Video** page.
3. Activate the Audio panel and select **DVD** as the source on the menu.
4. Select the **Control** menu option.
5. Use the menu options to control the playback.

# 11

## SiriusXM weather

When connected to a Navico Weather module, you can subscribe and include Sirius audio and Sirius Marine Weather Service on your system (North America only).

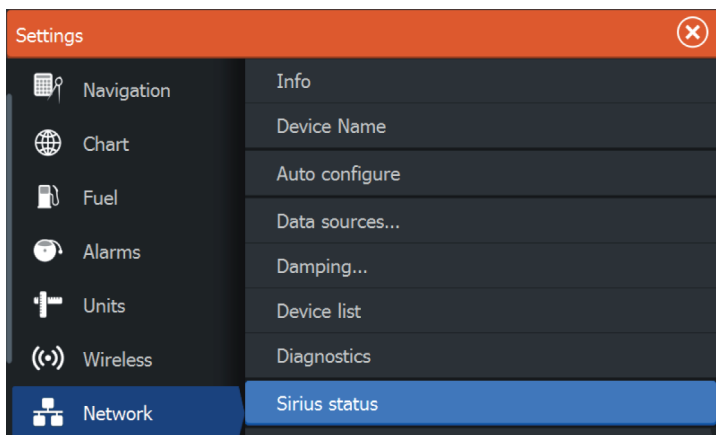
Sirius audio and weather service covers inland U.S. waters and coastal areas into the Atlantic and Pacific oceans, Gulf of Mexico and the Caribbean Sea.

The audio and weather products received vary depending on your selected subscription package. For more information refer to [www.siriusxm.com/marineweather](http://www.siriusxm.com/marineweather)

### Sirius status panel

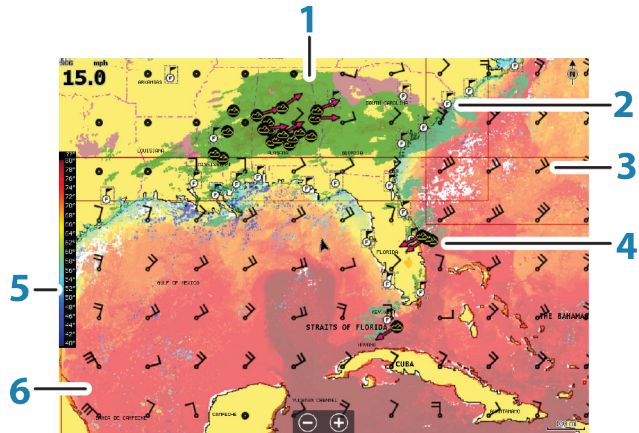
When the weather module is connected to the system, you get access to the Sirius status panel.

The status panel shows signal strength is indicated as 1/3 (weak), 2/3 (good) or 3/3 (preferred). It also includes antenna status, service level, and the electronic serial number for the weather module.



## Sirius weather display

Sirius weather can be displayed as an overlay on your chart panel. When weather overlay is selected, the chart menu increases to show the available weather options.







Key	Description
1	Precipitation color shading
2	City forecast icon
3	Wind barb
4	Storm icon
5	SST color bar
6	SST color shading

Use the Sirius weather option menu to select which weather symbology that should be displayed and how they should appear on the chart panel.

### Wind barbs

The rotation of the wind barbs indicate the relative wind direction, with the tail showing the direction the wind is coming from. In the graphics below, the wind comes from the northwest.

Wind speed is indicated by a combination of small and large barbs at the end of the wind tail.

	Zero knots / Indeterminate wind direction
	Small barb = 5 knots
	Large barb = 10 knots
	Arrow barb = 50 knots

If a combination of 5 and 10 knot barbs are shown on a tail, then add them together to give you the total wind speed. The example below shows 3 x large barb + 1 x small barb = 35 knots, and 60 knots indicated with 1 x arrow barb + 1 x large barb.



*Wind speed: 35 knots*



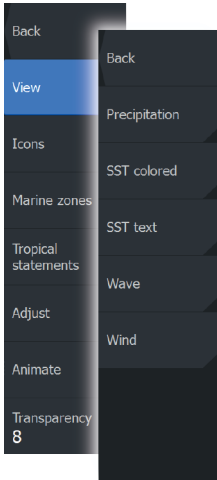
*Wind speed: 60 knots*

### Showing weather details

If pop-up is enabled, you can select a weather icon to display the identity of the observation. If you select the pop-up, detailed information about the observation is displayed. You can also display the detailed information from the menu when the weather icon is selected.

## Sirius view options

### Precipitation



Shades of color are used to show precipitation type and intensity. The darkest color indicates the highest intensity.

Precipitation type	Color code
Rain	From light green (light rain) - yellow - orange - to dark red (heavy rain)
Snow	Blue
Mixed	Pink

### Sea Surface Temperature (SST)

You can show the sea surface temperature as color shading or as text.

When color coding is selected, the SST color bar is shown on the left side of the display.

You define how the color codes are used to identify sea surface temperature. See *"Sirius Weather - Adjusting color codes"* on page 69.










### Wave indication

Colors are used to indicate forecasted wave height. The highest waves are dark red, while the lowest are blue.

You can define how the color codes are used to identify the wave height. Refer to *"Sirius Weather - Adjusting color codes"* on page 69.

## Weather icons

Several weather icons are available to show current or predicted weather conditions. You can select an icon to display detailed weather information.

Icon	Description
	City forecast
	Surface observation
	Tropical storm tracking; past (grey) - present (red) - future (yellow)
	Hurricane (category 1-5) tracking; past (grey) - present (red) - future (yellow)
	Tropical disturbance/depression tracking; past (grey) - present (red) - future (yellow)
	Storm attributes
	Lightning
	Watch box location and warning
	Marine zone location

## Marine zones

Sirius™ service includes access to weather reports for all U.S. Marine Zones, with the exception of the high seas zones.

You can setup the system to read the forecast for a selected area.

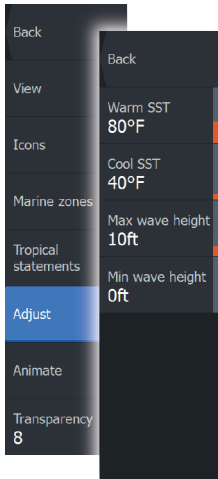
Select the selected zone, and use the menu to confirm your selection.

## Tropical statements

You can read tropical statements including information about tropical weather conditions. These statements are available for the entire Atlantic and the Eastern Pacific.



## Sirius Weather - Adjusting color codes



You can define the sea surface temperature range and wave height color coding.

The temperature above warm and below cool values is displayed as progressively darker red and darker blue.

Waves higher than the maximum value are indicated with progressively darker red. Waves lower than the minimum value are not color coded.

## Animating Sirius weather graphics

The HDS Gen3 Polaris records the weather information you have turned on, and this information can be used to animate past or future weather conditions. The amount of information available in the system depends on the amount of weather activity; the more complex it is, the less time that is available for animation.

You can animate the past or the future, depending on which weather view you have turned on:

- With precipitation overlay, you can animate for the past and only assume weather conditions in the immediate future.
- With colored wave height overlay, you can animate the future (the predictions).

When activated, the time for the current graphic animation is displayed in the lower left corner of the chart panel.

## Weather alarms

You can setup lightning or storm alarms to occur when the conditions are within a certain range of your vehicle.

You can also set up an alarm as a severe weather forecast alarm issued for your chosen marine zone.

A watchbox is defined by the National Weather Service. When the alarm for watchbox is turned on, an alarm occurs when your vehicle is entering or inside a watchbox.

# 12

## Wireless connection

GoFree wireless connectivity gives you the ability to:

- Use a wireless device to remotely view (smartphone and tablet) and control the system (tablet only)
- Access the GoFree Shop
- Download software updates
- Connect to third party applications.



### Connect and disconnect from a wireless hotspot



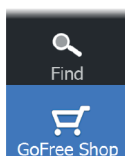
To connect to a wireless hotspot, select the Connect Wireless option in the System Controls dialog. This opens the Wireless Devices dialog. Use this dialog to select the desired hotspot, and enter the login information. Connecting to a wireless hotspot changes the wireless mode to **Client mode**. In this mode you can access the GoFree Shop.



To disconnect from a wireless hotspot, select the disconnect wireless option in the System Controls dialog. This changes the wireless mode to **Access point mode**. In this mode you can connect a wireless device so that Apps such as GoFree Controller & Viewer can access the vehicle's navigation information.

→ **Note:** When changing from **Client mode** to **Access point mode**, the Changing mode dialog does not appear.

### GoFree Shop



→ **Note:** The built-in wireless functionality must be connected to an external wireless hotspot in order to access the GoFree Shop.

At the GoFree Shop you can browse, purchase and download compatible content for your system including navigation charts and Insight Genesis Maps. When you log on, the system automatically

gives you a notification if a new software version is available for your system. If an update is available, you can download it to a card slot or defer the download until later. If you defer the download until later, the notification is available in the About dialog accessible from the System Settings.

## GoFree Controller & Viewer

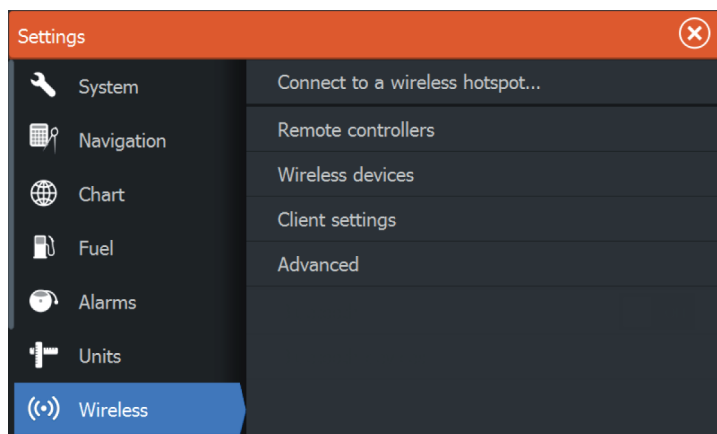


The wireless functionality lets you use a wireless device to remotely view (smartphone and tablet) and control the system (tablet only). The system is viewed and controlled from the wireless device by the GoFree Controller & Viewer Apps downloaded from their relevant Application store. When remote control is accepted, the active page is mirrored to the wireless device.

→ **Note:** To use smartphones and tablets to view and control the system, wireless functionality must be disconnected from the wireless hotspot (in Access point mode).

## Wireless settings

Provides configuration and setup options for the wireless functionality.



### Connect to a wireless hotspot

Displays the Wireless device dialog that you can use to connect the wireless functionality to a wireless hotspot.

## Remote controllers

When a wireless device (smart phone or tablet) is connected, it should appear in the Remote controllers list. Selecting 'Always allow' means the device can automatically connect without needing a password each time. This menu also allows you to disconnect devices that no longer require access.

## Wireless devices

Shows the internal wireless module and any connected WIFI-1 devices, as well as their IP and channel number. If a WIFI-1 is connected and the system detects the software is out of date, an option to update is also displayed. WIFI-1 updates, when required, are included with the display updates.

Select a device to view additional information about it. 'Network Name' and 'Network Key' can be edited for security, and 'Channel' can be changed if the connection to unit is compromised due to interference. 'Mode' can be changed on WIFI-1 devices only. Restore defaults returns the unit to factory settings.

## Client settings

Displays information about the wireless hotspot your unit is connected to or the last one your unit was connected to. You can select the hotspot in the dialog to set it as a hotspot you want to always connect to when in range or you can select to delete it.

## Advanced

Initiates the Iperf and DHCP Probe tools that help in fault-finding and setting up the wireless network.

→ **Note:** Iperf and DHCP Probe are tools provided for diagnostic purposes by users familiar with network terminology and configuration. Navico is not the original developer of these tools, and does not provide support related to their use.

# 13

## Tools

By default, the Tools panel includes icons used for accessing options and tools that are not specific to any panel.

When external equipment is integrated to the HDS Gen3 Polaris, new icons might be added to the Tools panel. These icons are used for accessing the external equipment's features.

### Waypoints/routes/trails

List of waypoints, routes, and trails with details.

Select the waypoint, route, or trail you want to edit or delete.

### Tides

Displays tide information for the tide station nearest to your vehicle.

Select the arrow panel buttons to change the date, or select the date field to access the calendar function.

Available tide stations can be selected from the menu.

### Alarms

#### Active alarms

List of active alarms.

#### Alarm history

List of all alarms with time stamp.

#### Alarm settings

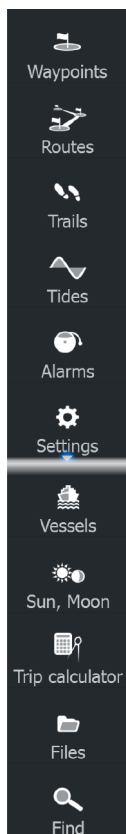
List of all available alarm options in the system, with current settings.

### Settings

Provides access to application and system settings.

### System settings

The system settings provides access to the following:



## **Language**

Controls the language used on this unit for panels, menus, and dialogs. Changing the language causes the unit to restart.

## **Text size**

Used for setting the text size in menus and dialogs.

Default setting: Normal

## **Key beeps**

Controls the loudness of the beep sound when a key is pressed.

Default setting: Loud

## **Time**

Controls the local time zone offset, and the format of the time and date.

## **Datum**

If your paper charts are in a different format, you can change the datum settings accordingly to match your paper charts.

## **Coordinate system**

Several coordinate systems can be used to control the format for latitude and longitude coordinates displayed on the chart panel.

## **Magnetic variation**

Magnetic variation is the difference between true bearings and magnetic bearings, caused by different locations of the Geographic and the Magnetic north poles. Any local anomalies such as iron deposits might also affect the magnetic bearings.

When set to Auto, the system automatically converts magnetic north to true north. Select manual mode if you need to enter your own local magnetic variation.

## **Satellites**

Status page for active satellites.

WAAS (and EGNOS) differential position correction can be configured to ON or OFF.

## **Restore defaults**

Allows you to select which settings are to be restored to their original factory settings.

**⚠ Warning:** If waypoints, routes, and trails are selected, they are permanently deleted.

## Advanced

Shows a panel with more advanced settings. Used for setting how your system displays various user interface information. In addition, controls which features are shown in the interface.

## About

Displays copyright information, software version, and technical information for this unit.

## Navigation

Provides options and dialogs where you specify settings for your navigation, such as arrival radius, XTE limit, XTE Alarm, Trails, Logging Type, and so on. Refer to *"Navigation settings"* on page 48.

## Charts

Provides options and dialogs where you specify settings for your charts. Settings and display options made in the Chart settings page are common for all chart panels. Refer to *"Chart settings"* on page 35.

## Fuel

Provides a dialog showing total fuel used, fuel used per trip, and fuel used per season. In addition, it provides access to configuration engine and tanks, and calibration of tanks (refuel) dialogs.

→ **Note:** Additional sensors and connections are required for using the Fuel options.

## Alarms

Provides the option to enable the siren. It also provides a dialog where you specify turning on alarms for items, and includes active alarm information and alarm history.

## Units

Provides setup of units of measure used on various data types.

## Wireless

Provides dialogs where you set remote controllers, view wireless devices, and customize advanced settings. For more information about using this panel, refer to the Installation Manual.

## Network

Provides information about your network, settings options, and configuration options. For more information about using this panel, refer to the Installation Manual.

## Vessels

Not used by HDS Gen3 Polaris.

## Simulator

Provides for manually controlling the simulator. For more information, refer to "*Simulator*" on page 53.

## Sun/Moon

Displays sunrise, sunset, moonrise and moonset for a position based on entered date and the position's latitude/longitude.

## Trip calculator

### Trip 1 / Trip 2

Displays trip information with reset option for all data fields.

### Today

Displays trip information for current date. All data fields are automatically reset when the date changes.

## Files

File management system for Files, Waypoints, Routes, Trails, and Settings.

## Copying files to a card in the card reader

You can copy screen captures and logs to a card in the card reader. You can also export System Settings, Waypoints, Routes, and Trails



to a card. Exporting files is covered in the section "*Maintenance*" on page 81.

## Find

Search function for items by categories: waypoints, routes, trails, fuel prices, chart items, vehicle's AIS status and vehicle's messages, and coordinates.

# 14

## Alarms

### Alarm system

The system continuously checks for dangerous situations and system faults while the system is running. When an alarm situation occurs, an alarm message pops up on the screen.

If you have enabled the siren, the alarm message is followed by an audible alarm, and the switch for external alarm becomes active.

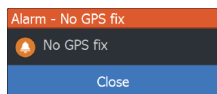
The alarm is recorded in the alarm listing so that you can see the details and take the appropriate corrective action.

### Type of messages

The messages are classified according to how the reported situation affects your vehicle. The following color codes are used:

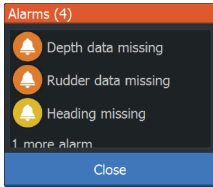
Color	Importance
Red	Critical
Orange	Important
Yellow	Standard
Blue	Warning
Green	Light warning

### Single alarms



A single alarm is displayed with the name of the alarm as the title, and with details for the alarm.

## Multiple alarms



If more than one alarm is activated simultaneously, then the alarm message displays a list of up to 3 alarms. The alarms are listed in the order they occur with the alarm activated first at the top. The remaining alarms are available in the Alarms dialog.

## Acknowledging a message

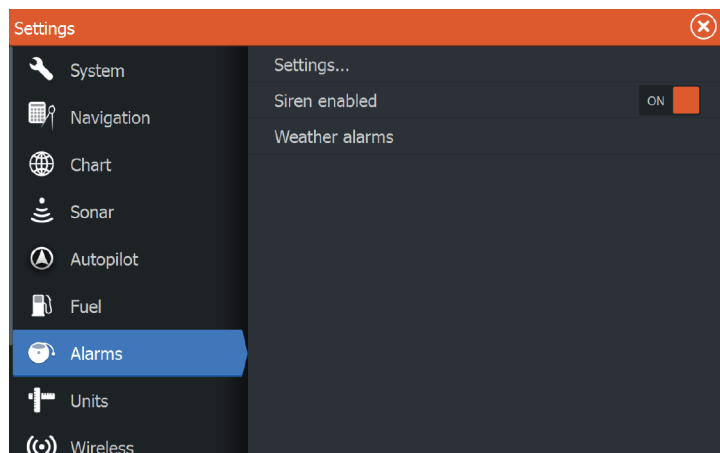
The following options are available in the alarm dialog for acknowledging a message:

Option	Result
Close	Sets the alarm state to acknowledged, meaning that you are aware of the alarm condition. The siren / buzzer stops and the alarm dialog is removed. However, the alarm remains active in the alarm listing until the reason for the alarm has been removed.
Disable	Disables the current alarm setting. The alarm does not show again unless you turn it back on in the Alarms dialog.

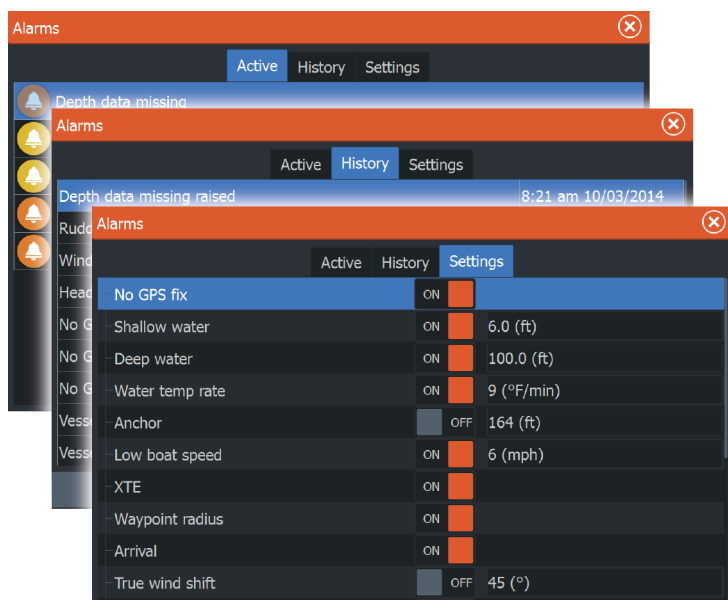
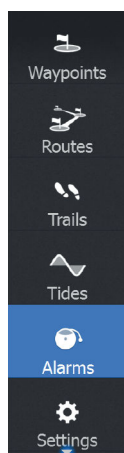
There is no time-out on the alarm message or siren. They remain until you acknowledge the alarm or until the reason for the alarm is removed.

## Alarms dialog

All alarms are setup in the Alarms Settings dialog.



The alarm dialogs can also be activated from the Tools panel. The alarm dialogs include information about active alarms and alarm history.



# 15

## Maintenance

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### Preventive maintenance

The HDS Gen3 Polaris does not contain any field serviceable components, therefore the operator is required to perform only a very limited amount of preventative maintenance.

### Checking the connectors

The connectors should be checked by visual inspection only.

Push the connector plugs into the connector. If the connector plugs are equipped with a lock, ensure that it is in the correct position.

### Touchscreen Calibration

To calibrate your touchscreen, do the following:

1. Turn the unit off
2. Press and hold the **Waypoint** key, and turn the unit on
3. Continue pressing the waypoint key until the calibration process starts

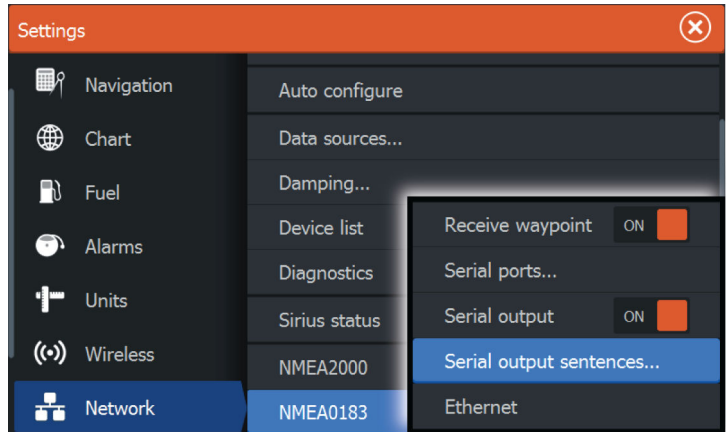
The system automatically runs through the screen calibration. When completed, the unit returns to the application screen.

### NMEA Data logging

All serial output sentences sent over the NMEA 0183 TCP connection are logged to an internal file. You can export and review this file for service and fault finding purposes.

The maximum file size is predefined. If you have added several other files to the system (file recordings, music, pictures, pdf files), this may reduce the allowed file size for the log file.

The system logs as much data as possible within the file size limitation, and then it starts overwriting the oldest data.



## Exporting the log file

The log file can be exported from the files browser.

When you select the Log database you are prompted to select a destination folder and filename. Once accepted, the log file is written to the chosen location.

## Software upgrades

The latest software for the HDS Gen3 Polaris is available for download from our website, [polaris.com](http://polaris.com).

Detailed instructions for how to install the software are included in the upgrade files.

## Backing up your system data

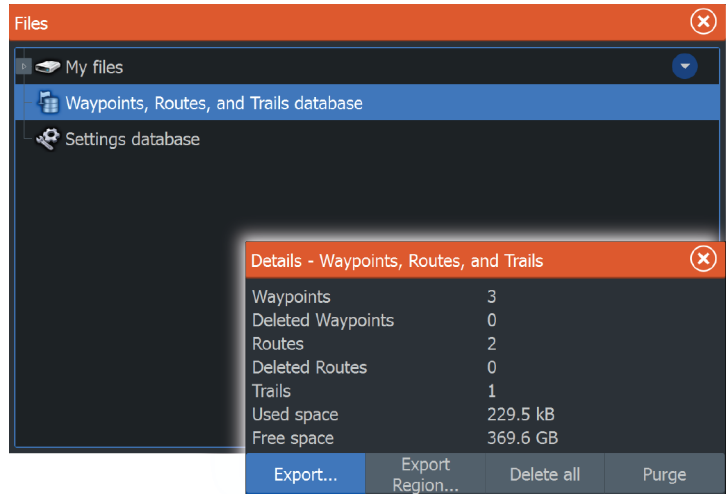
Waypoints, Routes, and Trails that you create are filed in your system. It is recommended to regularly copy these files and your system settings files as part of your back-up routine. The files can be copied to a card inserted in the card reader.

There are no export file format options for the system settings file. The following output formats are available for exporting Waypoints, Routes, and Trails files:

User Data File version 5	This is used to import and export waypoints and routes with a standardized universally unique identifier (UUID), which is very reliable and easy to use. The data includes such information as the time and date when a route was created, and so on.
User Data File version 4	This is best used when transferring data from one system to another, since it contains all the extra bits of information these systems store about items.
User Data file version 3 (w/ depth)	Should be used when transferring user data from an HDS system to a legacy Lowrance (LMS, LCX, etc.)
User data file version 2 (no depth)	Can be used when transferring user data from an HDS system to a legacy Lowrance (LMS, LCX, etc.)
GPX (GPS Exchange, no depth)	This is the format most used on the web that shares among most GPS systems.

## Export all Waypoints, Routes and Trails

Use the export option if you want to backup all Waypoints, Routes, and Trails on your system.

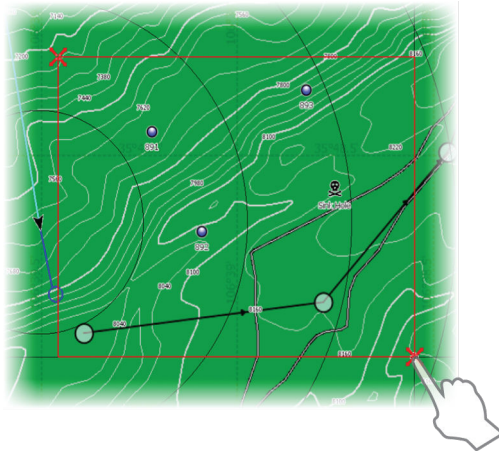




## Export region

The export region option allows you to select the area from where you want to export data.

1. Drag the boundary box to define the desired region
2. Select the export option from the menu
3. Select the appropriate file format
4. Select the serial port field to start the export



## Purging Waypoints, Routes and Trails

Deleted Waypoints, Routes and Trails are stored in the HDS Gen3 Polaris memory until the data is purged. This is necessary to allow user data to be synchronized across multiple units on an Ethernet network. If you have numerous deleted, unpurged Waypoints, purging may improve the performance of your system.






- **Note:** When user data is purged from the memory, it cannot be recovered.



# 16

## Touchscreen operation

Basic touchscreen operation on the different panels is shown in the table below.

The panel sections in this manual have more information about panel specific touchscreen operation.

Icon	Description
	<p>Tap to:</p> <ul style="list-style-type: none"> <li>• Activate a panel on a multi-panel page</li> <li>• Position the cursor on a panel</li> <li>• Select a menu and a dialog item</li> <li>• Toggle a checkbox option on or off</li> <li>• Show basic information for a selected item</li> </ul>
	<p>Press and hold:</p> <ul style="list-style-type: none"> <li>• On any panel with a cursor to activate the cursor assist feature</li> <li>• On a panel button to see available split screen options</li> <li>• On a favorite button to enter edit mode</li> </ul>
	<p>Scroll through a list of available options without activating any option.</p>
	<p>Flick to quickly scroll through e.g. the waypoint list. Tap the screen to stop the scrolling.</p>
	<p>Pan to position a chart or Echosounder image on the panel.</p>

Icon	Description
	<p>Pinch to zoom out on the chart or on an image.</p>
	<p>Spread to zoom in on the chart or on an image.</p>



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