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Navico product references

This manual refers to the following Navico product:

• DownScan Imaging™ (DownScan)

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Warranty
The warranty card is supplied as a separate document.
In case of any queries, refer to the brand website of your display or system: www.lowrance.com.

Compliance statements
This equipment complies with:
• CE under 2014/53/EU Directive
• The requirements of level 2 devices of the Radio communications (Electromagnetic Compatibility) standard 2008

The relevant Declaration of Conformity is available in the product’s section at the following website: www.lowrance.com.

About this manual
This manual is a reference guide for operating the following Hook² X models: 4x GPS, 4x Sonar, 5x GPS HDI, and 7x GPS HDI.

These units are only capable of the sonar views and frequencies indicated in the specification included in the transducer’s installation guide for the transducer provided with the unit. The model is provided on the front of the unit. The following is a list of the models, the transducer which should be used and the sonar functionality available.

• 4 X Sonar and 4 X GPS: The Bullet transducer should be used which provides traditional sonar functionality only.
• 5 X GPS HDI and 5 X GPS HDI: The SplitShot transducer should be used which provides traditional sonar and DownScan functionality.

Transducers added via one of the optional transducer adapter cables will still only have the available views and frequencies that the display is designed to work with. Airmar transducers are not supported via the adapter cable.

In the manual, 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.
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Introduction

Front controls

1  **Pages** - Press to toggle between available pages.

2  **Zoom in/out** - Press to zoom the image.
   Press both keys simultaneous to create a MOB (Man Over Board) waypoint at the vessel’s position.
   ➤ **Note:** Creating a MOB waypoint is not available on 4x Sonar only models.

3  **Arrows** - Press to pan the image in any direction.
   On the GPS Plotter page: press to position the cursor on the image.
   ➤ **Note:** The GPS Plotter page is not available on 4x Sonar only models.
   In menus and dialogs: press to highlight an option.

4  **Exit (X)** - In menus and dialogs: press to return to previous menu level and to exit a dialog.

5  **Menu/Enter** - With no menu or dialog active: press to display the menu.
   In menus and dialogs: press to confirm a selection.

6  **Cursor/Waypoint** - On the GPS Plotter page: Press to activate/deactivate the cursor.
   On any page: press and hold to save a waypoint.
   ➤ **Note:** On 4x Sonar only models this is a Fish ID toggle key. Press to toggle between fish arches and fish symbols on the sonar image.

7  **Power** - Press to display the System Controls dialog.
   Press and hold to power the unit on/off.
1 Application panel
2 Menu - Panel specific menu.
3 System Controls dialog - Quick access to basic system settings.
4 Dialog - Information to or input from the user.
5 Alarm message - Displayed if dangerous situations or system faults occur.

Each application connected to the system is presented on panels.
Basic operation

System Controls dialog
The System Controls dialog provides quick access to basic system settings. You display the dialog by making a short press on the Power key.

Settings
Provides access to application and system settings.
The system settings dialog available on models with GPS.

The system settings dialog available on the 4x Sonar only models.
**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.

**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 panel may be less visible when the Night mode is selected.

**Data Overlay**

You can have data information as overlay on pages. The data overlay is global to all pages.

**Turning Data overlay on and off**

You can turn overlay data on or off for all pages 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**

On models with GPS, you can have up to 3 data overlays on the GPS, sonar and DownScan (available on 5x and 7x models only) pages. Use the Edit overlay option on the System Controls dialog to:

- Change a selected data overlay to display different data.
- Select a predefined size from the size drop-down list.
- Select the OFF option in the predefined size drop-down list to remove the selected data overlay from the page.

On 4x Sonar only models, you can have up to 3 data overlays on the sonar page. Use the Edit overlay option on the System Controls dialog to:

- Select a predefined size from the size drop-down list.
- Select the OFF option in the predefined size drop-down list to remove the selected data overlay from the page.

**Stop sonar**

Select the Stop sonar option in the System Controls dialog to stop all sonar from pinging. Use the stop sonar option anytime you want to disable all sonar but not power off the unit.
GPS plotter

Note: The GPS plotter page is not available on 4x Sonar only models.

The GPS plotter page displays your vessel’s position. On the GPS plotter page you can plan and navigate routes, see your vessel’s trail, and place waypoints.

GPS plotter page

- Zoom the image by using the Zoom keys
- Pan the image in any direction by using the Arrow keys
- Display item information by positioning the cursor on an item then selecting the Info option in the menu

1 Data overlay (Can be edited, moved or removed. Refer to "Data Overlay" on page 12).
2 Waypoint*
3 Vessel with trail (displaying the trail is optional*)
4 Route*
5 North indicator
6 Range scale
* Optional items. You turn the optional items on/off individually from the GPS settings dialog.

**Vessel symbol**
When the system has a valid GPS position lock, the vessel symbol indicates vessel position. If no GPS position is available, the vessel symbol includes a question mark.

**GPS plotter page scale**
You zoom in and out on the GPS plotter page by using the Zoom keys.
The GPS plotter page range scale is shown in the lower right corner of the page.

**Panning the GPS plotter image**
You can move the image in any direction by using the Arrow keys to move the cursor to the edge of the panel in the desired direction.
To remove the cursor and cursor elements from the page, press the Cursor/Waypoint key. This also centers the image to the vessel position.

**Positioning the vessel on the page**

**GPS image orientation**
You can specify how the GPS image is rotated in the panel. The orientation symbol in the panel’s upper right corner indicates the north direction.
North up
Displays the GPS plotter image with north upward.

Course up
The GPS plotter image direction is depending on if navigating or not:
- when navigating: the desired course is oriented up
- if not navigating: the direction the vessel is actually traveling (COG) is oriented up

Look ahead
Moves the vessel icon on the panel to maximize your view ahead of the vessel.

Waypoints, Routes, and Trails
You can position and manage waypoints, routes and trails on the page. For more information, refer to "Waypoints, Routes, and Trails" on page 18.

Navigating
You can use the page for navigating to the cursor, to a waypoint, or navigate a route. Refer to "Navigating" on page 22.

GPS plotter settings
Waypoints, Routes, and Trails

- Waypoints - specifies whether waypoints are (ON) or are not (OFF) displayed on the GPS image.
- Routes - specifies whether routes are (ON) or are not (OFF) displayed on the GPS image.
- Trails - specifies whether trails are (ON) or are not (OFF) displayed on the GPS image.
- Waypoints, routes, trails... - opens the waypoints, routes, and trails dialogs. Use these dialogs to manage waypoints, routes, and trails. Refer to "Waypoints, Routes, and dialogs" on page 18.
Waypoints, Routes, and Trails

Note: Waypoints, routes, and trails are not available on 4x Sonar only models.

Waypoints, routes, and trails are available on the GPS plotter page.

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 W/R/T option on the panel menu. They can also be accessed from the Waypoints, Routes and Trails option on the GPS plotter settings dialog, refer to "GPS plotter settings" on page 16.

Select the menu icon on the dialog to access additional options.
Waypoints

A waypoint is a user generated mark positioned on the chart or GPS plotter panel. 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

Press and hold the Cursor/Waypoint key to save a new waypoint.

- With cursor inactive, the waypoint is placed at the vessel’s position
- With cursor active, the waypoint is placed at the cursor position

Creating a Man Overboard waypoint

If an emergency situation should occur, you can save a Man Overboard (MOB) waypoint at the vessel’s current position by pressing both the Zoom keys simultaneously.

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

- A MOB waypoint is created at the vessel’s position
- The display switches to a zoomed panel, centered on the vessel’s position
- The cursor is positioned on the MOB waypoint, and navigation information to the MOB waypoint is shown in the cursor information window

Multiple MOB waypoints are saved by repeatedly pressing the zoom keys. The cursor information window continues to show navigation information to the initial MOB waypoint until the cursor is moved or removed from the panel.
**Routes**

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

**Creating a new route on the page**

1. Select the new route option from the menu
2. Press the Cursor/Waypoint key to activate the cursor on the panel
3. Use the Arrow keys to position the cursor at the first routepoint on the panel
4. Press the Menu/Enter key to create the routepoint
5. Repeat steps 3 and 4 to continue positioning new routepoints on the panel until the route is completed
6. Press the Exit (X) key when completed and save the route.

**Trails**

Trails are a graphical presentation of the historical path of the vessel, allowing you to retrace where you have travelled.

From the factory, the system is set to automatically track and draw the vessel’s movement on the panel. The system continues to record the trail 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 Edit Trails dialog.

**Creating new Trails**

You can start a new trail from the Trails dialog. The dialog is activated by selecting the trails tab in the dialog displayed when you select the W/R/T option in the menu.

**Editing waypoints, routes and trails**

Waypoints, routes and trails are managed from their perspective dialogs. You edit Waypoints, routes and trails similarly. For example, to edit a trail:

1. Select W/R/T from the menu
2. Select the trails tab in the dialog
3. Select the trail you want to edit.
Waypoints, Routes, and Trails | Hook² X Series Operator Manual
Navigating

Note: Navigating is not available on 4x Sonar only models.

The navigation function is available on the GPS page.

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 18.

When you select to navigate to the cursor position, to a waypoint or a predefined route, the Navigation option appears in the menu. Select Navigate to access cancel, restart, and skip a routepoint options.

Navigate to cursor position

You can start navigating to a cursor position on the GPS plotter or sonar panel.

Position the cursor at the selected destination on the panel, and then select the Goto Cursor option in the menu.

Note: The Goto Cursor menu option is not available if you are already navigating.

Navigate to a waypoint

You can start navigating towards a waypoint on the panel. Position the cursor over the waypoint, select the waypoint in the menu and then the Goto waypoint option in the menu.

Navigate a route

You can navigate a route on the image by positioning the cursor over the route, selecting the route in the menu and then the start route option in the menu.

When route navigation is started, select the Navigation menu option for canceling the navigation, skipping a waypoint, and restarting the route from current vessel position.
Sonar

The Sonar function provides a view of the water and bottom beneath your vessel, allowing you to detect fish and examine the structure of the bottom.

The Sonar image

1. Fish arches
2. Data overlay
3. Range limit
4. Bottom
Zooming the image
You can zoom the image by using the Zoom keys.

Customize the image settings
By default the unit is set to Auto mode, and most settings are automated. It is recommended that only experienced sonar users use the customize settings to further customize the image.
Select Auto in the menu and change to custom or ice fishing mode to customize image settings.

Custom and Ice Fishing mode options
Custom and Ice fishing modes allow access to controls for manually tuning the sonar.
When Custom or Ice Fishing modes are selected the menu expands with more options. Use these menu options to customize the image.

Fish ID
You can select how you want the echoes to appear on the screen.
- OFF - As traditional fish arches
- ON - As fish symbols

Sonar settings
**Depth offset**

All transducers measure water depth from the transducer to the bottom. As a result, water depth readings do not account for the distance from the transducer to the lowest point of the boat (for example; bottom of the keel, rudder, or skeg) in the water or from the transducer to the water surface.

Before setting the offset, measure the distance from the transducer to the lowest point of the boat in the water or from the transducer to the water surface.

- **A** Lowest point of vessel offset: Set the distance from the transducer to the lowest point of the boat in the water - this should be set as a negative value. For example, -0.3 m (-1 ft).

- **B** Depth below surface (waterline) offset: Set the distance from the transducer to the surface - this should be set as a positive value. For example, +0.5 m (+1.77 ft).

For depth below transducer, set the offset to 0.
**Flasher**

The Flasher shows a digital flasher sonar view below your transducer.

Digital flashers are most commonly used in scenarios such as ice fishing and vertical jigging where the angler does not care as much about the sonar history shown on a traditional sonar view, but is only interested in raw, live sonar returns.

**The Flasher image**

In the example:

- The colored part of the ring between the depth 0 and 5 represents the sonar returns at or near the surface.
- The white part of the ring between the depth 5 and 26 represents the water column and fish targets within this column.
- The colored part of the ring between the depth 26 and < 0 represents the bottom.

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1. Flasher sonar ring
2. Range scale
3. Digital depth
4 Water column activity (fish, bait fish, etc.)
5 Depth

**Customize the image settings**

By default the unit is set to Auto mode, and most settings are automated. It is recommended that only experienced sonar users use the customize settings to further customize the sonar image. Select Auto in the menu and change to custom or ice fishing mode to customize image settings.

**Custom and ice fishing mode options**

Custom and ice fishing mode options are similar.

When Custom or ice fishing modes are selected the menu expands with more options. Use these menu options to customize the image.
**DownScan**

*Note:* DownScan is available on 5x and 7x models only.

DownScan provides detailed images of structure and fish directly below your boat, down to 91 m (300 ft) at 455 kHz and 46 m (150 ft) at 800 kHz.

### The DownScan image

![DownScan Image](image)

1. Data overlay
2. Range limit

### Zooming the DownScan image

You can zoom a DownScan image by using the Zoom keys.

### Customize the image settings

By default the unit is set to Auto mode, and most settings are automated. It is recommended that only experienced sonar users use the customize settings to further customize the sonar image. Select Auto in the menu and change to custom mode to customize image settings.
Custom mode options
When the custom mode is selected the menu expands with more options. Use these menu options to customize the image.
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.

Alarms dialog
Enable the alarm siren from the Alarms dialog.

Select the settings option to open the Alarms Settings dialog. All alarms are setup in the Alarms Settings dialog.
Preventive maintenance

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

It is recommended that you always fit the protective sun cover when the unit is not in use.

Note: The protective sun cover is an accessory (sold separately). Refer to the Installation guide provided with your unit.

Cleaning the display unit

To clean the screen:

- A micro-fiber or a soft cotton cloth should be used to clean the screen. Use plenty of water to dissolve and take away salt remains. Crystallized salt, sand, dirt, etc. can scratch the protective coating if using a damp cloth. Use a light fresh water spray then wipe the unit dry with a micro-fiber or a soft cotton cloth. Do not apply pressure with the cloth.

To clean the housing:

- Use warm water with a dash of liquid dish soap or detergent.

Avoid using abrasive cleaning products or products containing solvents (acetone, mineral turpentine, etc.), acid, ammonia, or alcohol as they can damage the display and plastic housing. Do not use a jet or high pressure wash. Do not run your unit through a car wash.

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 position key, ensure that it is in the correct position.