echo™ 100 Series
Owner’s Manual
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Introduction

WARNING
See the Important Safety and Product Information guide in the product box for product warnings and other important information.

Registering Your Device
Help us better support you by completing our online registration today.
- Keep the original sales receipt, or a photocopy, in a safe place.

Contacting Garmin Product Support
- Go to www.garmin.com/support and click Contact Support for in-country support information.
- In the USA, call (913) 397.8200 or (800) 800.1020.
- In the UK, call 0808 2380000.
- In Europe, call +44 (0) 870.8501241.

Manual Conventions
In this manual, the term “select” is used to describe these actions.
- Highlighting a menu item and pressing ENTER.
- Pressing a key, such as ENTER or MENU.
When you are instructed to select menu items, small arrows may appear in the text. They indicate that you should highlight a series of items using ↑ and ↓, and select ENTER after each item. For example, for “select MENU > Pause/Rewind Sonar,” select MENU, and then select ↑ or ↓ until Pause/Rewind Sonar is highlighted, and then select ENTER.

Getting Started

Keys

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENU</td>
<td>Displays or hides a list of options.</td>
</tr>
<tr>
<td>ENTER</td>
<td>Selects a menu item.</td>
</tr>
<tr>
<td>↑ or ↓</td>
<td>Scrolls through options or changes settings.</td>
</tr>
<tr>
<td>0</td>
<td>Turns the device on or off and adjusts the backlight.</td>
</tr>
</tbody>
</table>

Turning on the Device Automatically
You can set the device to turn on automatically when the power is applied. Otherwise, you must select OFF.
Select MENU > Setup > System > Auto Power > On.

Selecting the Transducer Type
Before you can select the transducer type, you must know what kind of transducer you have.
You may need to set the transducer type to make the sonar function properly.
1 From a sonar view, select MENU > Setup > Sonar Setup > Transducer Type.

2 Select an option:
- If you have a 200/77 kHz, dual-beam transducer, select Dual Beam.
- If you have a 200/50 kHz dual-frequency transducer, select Dual Frequency.
- If you have a DownVü transducer, select DownVü.
- If you have another type of transducer, select it from the list.
NOTE: The echo 101 device supports 200 kHz only.

Adjusting the Contrast
NOTE: This feature is not available on all models.
1 Select MENU > Setup > System > Contrast.
2 Select ↑ or ↓.
TIP: Hold ↑ or ↓ to make large adjustments quickly.
3 Select ENTER.

Setting the Beeper
You can set when the device makes sounds.
1 Select MENU > Setup > Alarms > Beep.
2 Select an option:
- To have the device beep when you select an item and when an alarm is triggered, select On.
- To have the device beep only when alarms are triggered, select Alarms Only.

Menu Timeout
When a menu is open for 20 seconds and no selections are made, the menu closes and the previous screen is displayed.

Using Quick Adjust
After adjusting a setting and returning to a page, you can quickly return to the setting options.
Select ↑ or ↓.

Sonar Display

1 Bottom depth
2 Water temperature (if a temperature-capable transducer is connected)
3 Screen depth as screen scrolls from right to left

Sonar

DownVü Sonar View
NOTE: Not all models support DownVü sonar technology and transducers.
NOTE: To receive DownVu scanning sonar, you need a compatible chartplotter or fishfinder and a compatible transducer.

DownVu high-frequency sonar provides a clearer picture below the boat, providing a more detailed representation of structures the boat is passing over.

Traditional transducers emit a conical beam. The DownVu scanning sonar technology emits a narrow beam, similar to the shape of a beam in a copying machine. This beam provides a clearer, picture-like image of what is beneath the boat.

Sonar Frequencies

NOTE: The frequencies available depend on the transducer being used.

Adjusting the frequency helps adapt the sonar for your particular goals and the present depth of the water.

Higher frequencies use narrow beam widths, and are better for high-speed operation and rough sea conditions. Bottom definition and thermocline definition can be better when using a higher frequency.

Lower frequencies use wider beam widths, which cover a larger area and can let the fisherman see more targets, but could also generate more surface noise and reduce bottom signal continuity during rough sea conditions. Wider beam widths generate larger arches for fish target returns, making them ideal for locating fish. Wider beam widths also perform better in deep water, because the lower frequency has better deep water penetration. They can be used to search for structures such as brush piles.

Selecting a Frequency

1. Select MENU.
2. Select Frequency or FREQ.
3. Select a frequency.

Adjusting the Range of the Depth Scale

You can adjust the range of the depth scale that appears on the right side of the screen. Automatic ranging keeps the bottom within the lower third of the sonar screen, and can be useful for tracking the bottom where there are slow or moderate terrain changes.

When the depth changes dramatically, like a drop off or cliff, manually adjusting the range allows a view of a specified depth range. The bottom is shown on the screen as long as the bottom is anywhere within the manual range established.

1. Select MENU > Range.
2. Select an option.
   • To allow the device to adjust the range automatically based on the depth, select Auto.
   • To increase or decrease the range manually, select Manual, and select ▲ or ▼.
   NOTE: Setting the range on one page applies that setting to all pages.

Adjusting the Zoom

You can adjust the zoom manually by specifying the span and a fixed starting depth. For example, when the depth is 15 meters and a starting depth of 5 meters, the device displays a magnified area from 5 meters deep to 20 meters deep.

You also can allow the device to adjust the zoom automatically by specifying a span. The device calculates the zoom area from the bottom of the water. For example, if you select a span of 10 meters, the device displays an magnified area from the bottom of the water to 10 meters above the bottom.

1. Select MENU > Zoom.

2. Select Manual or Auto.
3. Select Span and select ▲ or ▼ to increase or decrease the magnification of the magnified area.
4. If necessary, select Depth to adjust the zoomed window up or down.
   NOTE: The zoomed window tracks the bottom in auto mode only.

Pausing the Sonar Screen

Select MENU > Pause.

Setting the Sonar Scroll Speed

You can set the rate at which the sonar scrolls from right to left. A higher scroll speed shows more detail, especially while moving or trolling. A lower scroll speed displays sonar information on the screen longer.

1. Select MENU > Setup > Sonar > Scroll.
2. Select a scroll speed.
   NOTE: Setting the scroll speed on one page applies that setting to all the pages.

Configuring the Appearance of Suspended Targets

NOTE: Configuring the appearance of suspended targets on one page applies that setting to all pages.

NOTE: This feature is not available on all transducers.

Select a symbol for suspended targets on the screen:
- Shows suspended targets as symbols.
- Shows suspended targets as symbols with target depth information.
- Shows suspended targets as symbols with background sonar information.
- Shows suspended targets as symbols with background sonar information and target depth information.

1. Select MENU > Setup > Sonar > Fish ID.
2. Select an option.

Sonar Gain and Noise Settings

You can adjust the amount of gain and noise on a sonar screen. The gain setting controls the sensitivity of the sonar receiver to compensate for water depth and water clarity. Increasing the gain shows more detail, and decreasing the gain reduces screen clutter.

NOTE: Setting the gain on one page applies the setting to all the pages.

Setting the Gain Manually

2. Select ▲ until you begin to see noise in the water portion of the screen.
3. Select ▼ to decrease the gain slightly.

Setting the Gain Automatically

1. Select MENU > Gain.
2. Select an option:
   • To display higher-sensitivity, weaker sonar returns with more noise automatically, select Auto-High.
   • To display medium-sensitivity sonar returns with moderate noise automatically, select Auto-Med.
   • To display lower-sensitivity sonar returns with less noise automatically, select Auto-Low.

Alarms

Select MENU > Setup > Alarms.
Battery: Sounds when the battery reaches a specified low voltage.

Deep Water: Sounds when the water depth is deeper than the specified depth.

Drift: Sounds when depth variations at your present location exceed the specified depth.

Fish: Sounds when the device detects a suspended target.
- sets the alarm to sound when fish of all sizes are detected.
- sets the alarm to sound only when medium or large fish are detected.
- sets the alarm to sound only when large fish are detected.

Shallow Water: Sounds when the water depth is shallower than the specified depth.

Water Temperature: Sounds when the water temperature varies more than ± 2 °F (± 1.1 °C). Alarm settings are saved when the device is turned off.

NOTE: You must connect the device to a temperature-capable transducer to use this alarm.

System Settings
Select MENU > Setup > System.

Language: Sets the on-screen language.

System Information: Allows you to view software information.

System Unit Settings
Select MENU > Setup > Units.

Depth: Sets the depth units to feet (ft), meters (m), or fathoms (ftm).

Temperature: Sets the temperature units to Fahrenheit (°F) or Celsius (°C).

NOTE: You must have a temperature-reading transducer connected to display the temperature.

Appendix

Specifications

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<th>Specification</th>
<th>Model</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Range</td>
<td>echo 101 and 151</td>
<td>From 5° to 131°F (from -15° to 55°C)</td>
</tr>
<tr>
<td></td>
<td>echo 201, 301, and 500 series</td>
<td>From 5° to 131°F (from -15° to 55°C)</td>
</tr>
<tr>
<td>Compass Safe Distance</td>
<td>echo 101 and 151</td>
<td>10 in. (250 mm)</td>
</tr>
<tr>
<td></td>
<td>echo 201 and 301</td>
<td>10 in. (250 mm)</td>
</tr>
<tr>
<td></td>
<td>echo 500 series</td>
<td>15.75 in. (400 mm)</td>
</tr>
<tr>
<td>Power Source Voltage Range</td>
<td>echo 101</td>
<td>From 10 to 20 V</td>
</tr>
<tr>
<td></td>
<td>echo 201, 301, and 500 series</td>
<td>From 10 to 28 V</td>
</tr>
<tr>
<td>Rated Current</td>
<td>All models</td>
<td>1 A</td>
</tr>
<tr>
<td>Fuse</td>
<td>All models</td>
<td>AGC/3AG - 3.0 A</td>
</tr>
<tr>
<td>Freshwater Depth*</td>
<td>echo 151</td>
<td>1600 ft (488 m) @ 77 kHz</td>
</tr>
<tr>
<td></td>
<td>echo 201, 201dv, 301, and 301dv</td>
<td>1750 ft. (533 m) @ 77 kHz</td>
</tr>
<tr>
<td></td>
<td>echo 500 and 500dv series</td>
<td>2300 ft. (701 m) @ 77 kHz</td>
</tr>
</tbody>
</table>

*Depth capacity is dependent on water salinity, bottom type, and other water conditions.

Cleaning the Outer Casing

NOTICE
Avoid chemical cleaners and solvents that can damage plastic components.

1. Clean the outer casing of the device (not the screen) using a cloth dampened with a mild detergent solution.
2. Wipe the device dry.

Cleaning the Screen

NOTICE
Cleaners containing ammonia will harm the anti-reflective coating.

The device is coated with a special anti-reflective coating which is very sensitive to skin oils, waxes, and abrasive cleaners.

1. Apply an eyeglass lens cleaner specified as safe for anti-reflective coatings to the cloth.
2. Gently wipe the screen with a soft, clean, lint-free cloth.

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