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.

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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

MENU	Displays or hides a list of options.
ENTER	Selects a menu item.
▲▼	Scrolls through options or changes settings.
⏻	Turns the device on or off and adjusts the backlight.

Turning on the Device Automatically

You can set the device to turn on automatically when the power is applied. Otherwise, you must select ⏻.

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** > **Beeper**.
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

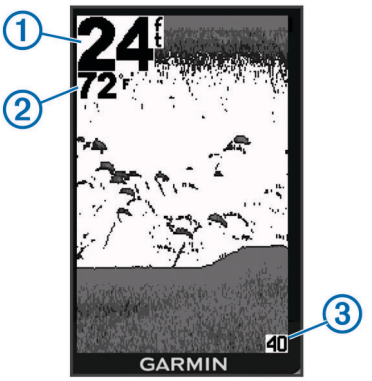
When a menu is open for 20 seconds and no selections are made, the menu closes and the previous screen is displayed.

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 DownVü scanning sonar, you need a compatible chartplotter or fishfinder and a compatible transducer.

DownVü 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 DownVü scanning sonar technology emits a narrow beam, similar to the shape of the 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.

	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

1. Select **MENU** > **Gain** > **Manual**.
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

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

*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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