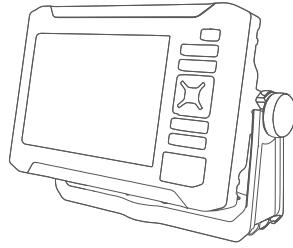# GARMIN.

ECHOMAP™ UHD2 5X/7X
INSTALLATION INSTRUCTIONS

Important Safety Information

⚠ WARNING
Failure to follow these warnings, cautions, and notices could result in personal injury, damage to the vessel or device, or poor product performance.
See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.
When connecting the power cable, do not remove the in-line fuse holder. To prevent the possibility of injury or product damage caused by fire or overheating, the appropriate fuse must be in place as indicated in the product specifications. In addition, connecting the power cable without the appropriate fuse in place voids the product warranty.

⚠ CAUTION
To avoid possible personal injury, always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.
To avoid possible personal injury or damage to the device and vessel, disconnect the vessel's power supply before beginning to install the device.
To avoid possible personal injury or damage to the device or vessel, before applying power to the device, make sure that it has been properly grounded, following the instructions in the guide.

NOTICE
For the best possible performance, the device must be installed according to these instructions.
When drilling or cutting, always check what is on the opposite side of the surface to avoid damaging the vessel.

Read all installation instructions before proceeding with the installation. If you experience difficulty during the installation, contact Garmin® Product Support.

Software Update

You may need to update the chartplotter software after installation. For the instructions on how to update the software, see the owner's manual at garmin.com/manuals/echomapUHD2.

Tools Needed

- Drill
- Drill bits
  - Bail mount: drill bits appropriate for the surface and hardware
  - Swivel mount: 3 mm ($^1/_8$ in.) drill bit
  - Flush mount: 3 mm ($^1/_8$ in.) and 9.5 mm ($^3/_8$ in.) drill bits
- #2 Phillips screwdriver
- Jigsaw or rotary tool
- File and sandpaper
- Marine sealant (optional)

Mounting Considerations

You can mount the device using one of three methods.

Bail mount: You can mount the device using the bail mount, which allows you to tilt the device.

Swivel mount: You can mount the device using the swivel base and bail mount, which allows you to swivel and tilt the device.

Flush mount: You can mount the device in the dashboard, which provides a more integrated installation.

Before permanently installing any part of your device, you should plan the installation by determining the location of the various components.

- The mounting location must provide a clear view of the screen and access to the keys on the device.
- The mounting location must be sturdy enough to support the device and the mount.
- The cables must be long enough to connect the components to each other and to power.
- To avoid interference with a magnetic compass, do not install the device closer to a compass than the compass-safe distance value listed in the product specifications (*Specifications*, page 9).

Fixed-Bail Mounting the Device

NOTICE

If you are mounting the bracket on fiberglass with screws, it is recommended to use a countersink bit to drill a clearance counterbore through only the top gel-coat layer. This will help to avoid cracking in the gel-coat layer when the screws are tightened.

1 Select the mounting hardware appropriate for the bail-mount bracket ① and your mounting surface.
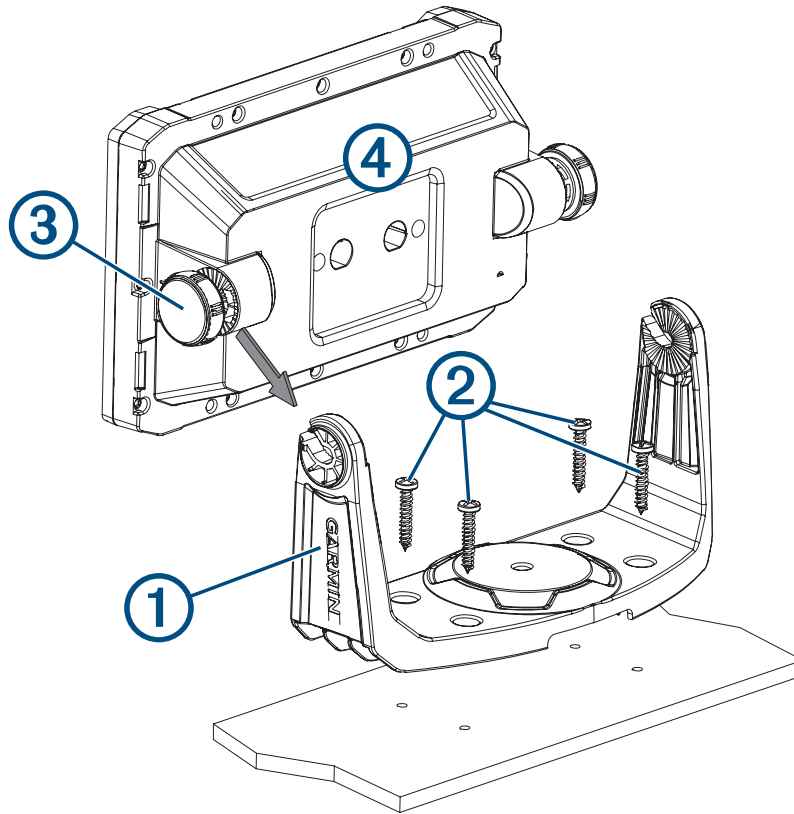
2 Using the bail-mount bracket as a template, mark the pilot holes through the screw holes.
3 Using a drill bit appropriate for the mounting hardware, drill the four pilot holes.
4 Using the selected mounting hardware ②, secure the bail-mount bracket to the mounting surface.
5 Loosely install the bail-mount knobs ③.
6 Place the device ④ in the bail-mount bracket.
7 Tighten the bail-mount knobs.

Bail Mounting a Device with a Swivel Base

<table>
<tr><td>NOTICE</td></tr>
</table>

Only pan-head machine bolts or self-tapping screws should be used to secure the swivel base. If you use screws with countersunk heads, you may damage the mounting bracket.

You can install the optional swivel base (included) on the bail mount, so you can turn the device for a wider range of viewing angles.

1   Using the swivel base ① as a template, mark the pilot holes ② through the outer three screw holes.
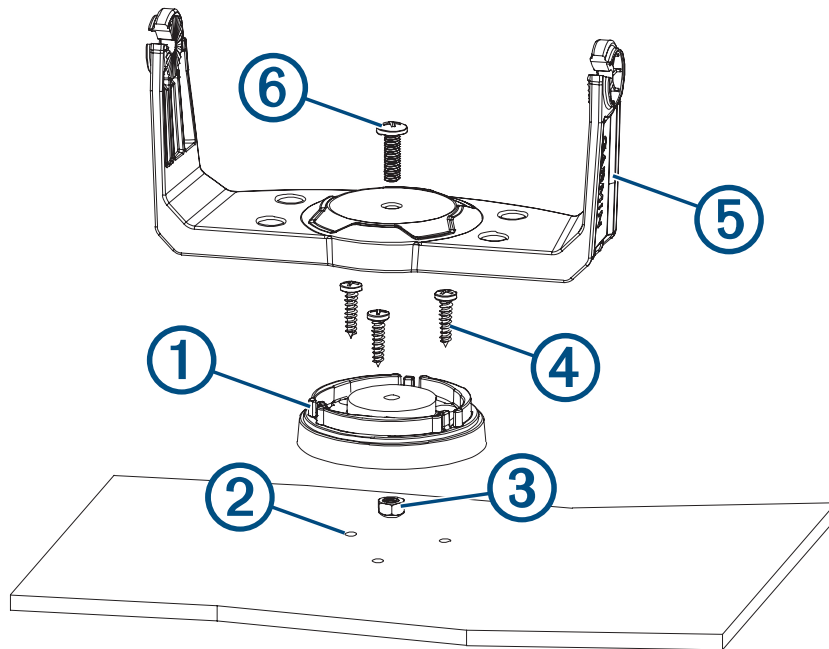
2   Using a 3 mm ($^1/_8$ in.) drill bit, drill the three pilot holes.
3   Press the hex end of the lock nut ③ into the center recess on the underside of the swivel base.
    The dome end of the lock nut must face the mounting surface.
4   Align the outer three screw holes in the swivel base with the pilot holes.
5   Use the included wood screws ④ to secure the swivel base to the mounting surface.
6   Place the bail-mount bracket ⑤ on the swivel base.
7   Insert the swivel-mount bolt ⑥ through the center hole in the bail mount.
8   Tighten the swivel-mount bolt with a #2 Phillips screwdriver to securely assemble the bail-mount bracket, swivel base, and lock nut.
    Do not over-tighten.
9   Loosely install the bail-mount knobs.
10 Place the device in the bail-mount bracket.
11 Tighten the bail-mount knobs.

Flush Mounting the Device

Be careful when cutting the hole to flush mount the device. There is only a small amount of clearance between the case and the mounting holes, and cutting the hole too large could compromise the stability of the device after it is mounted.

Using a metal pry tool such as a screwdriver can damage the trim caps and the device. Use a plastic pry tool when possible.

You can mount the device in your dashboard using the flush-mount template and appropriate hardware.

1 Trim the template and make sure it fits in the location where you want to mount the device.
2 Secure the template to the mounting location.
3 Using a 9.5 mm ($^3/_8$ in.) drill bit, drill one or more of the holes inside the corners of the solid line on the template to prepare the mounting surface for cutting.
4 Using a jigsaw or rotary cutting tool, cut the mounting surface along the inside of the solid line indicated on the template.
5 Place the device into the cutout to test the fit.
6 If necessary, use a file and sandpaper to refine the size of the hole.
7 If your device has trim caps, use a plastic pry tool or a flat piece of plastic to carefully pry up the corners of the trim caps ①, slide the pry tool to the center ②, and remove the trim caps.
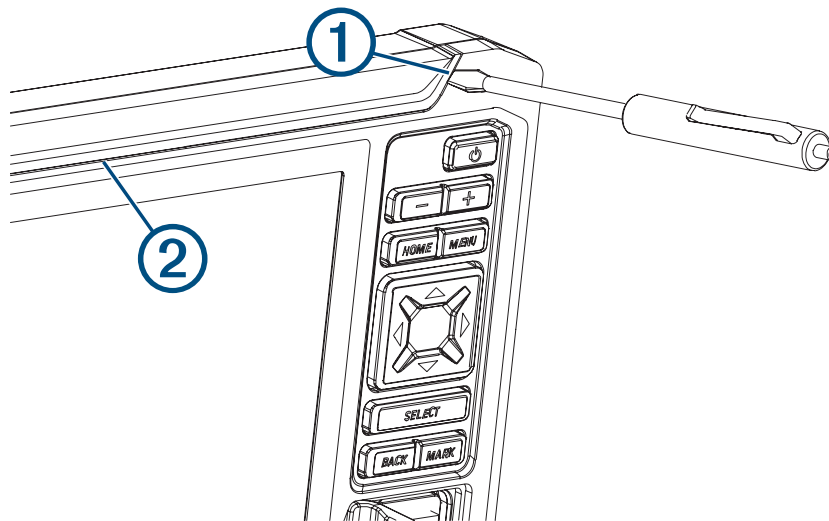

8 Ensure the mounting holes on the device line up with the pilot holes on the template.
9 If the mounting holes on the device do not line up with the pilot holes on the template, mark the new pilot-hole locations on your template.
10 Using a 3 mm ($^1/_8$ in.) drill bit, drill the pilot holes.
11 Remove the template from the mounting surface.
12 If you will not have access to the back of the device after you mount it, connect the power and transducer cables.
   You can press ⏻ to power the device on and off to test the connections.

13 Install the rubber gasket pieces ③ on the back of the device.

The pieces of the rubber gasket have adhesive on the back. Make sure you remove the protective liner before installing them on the device.
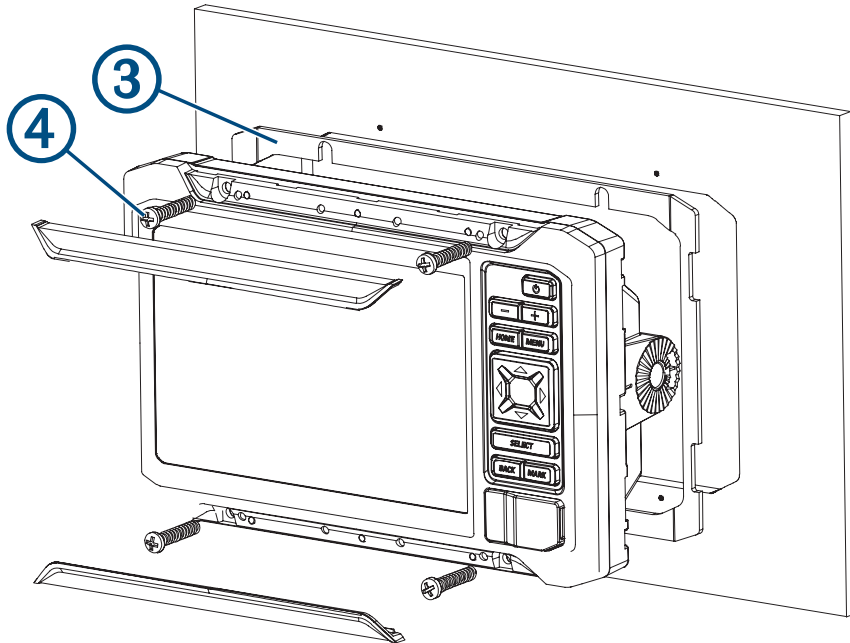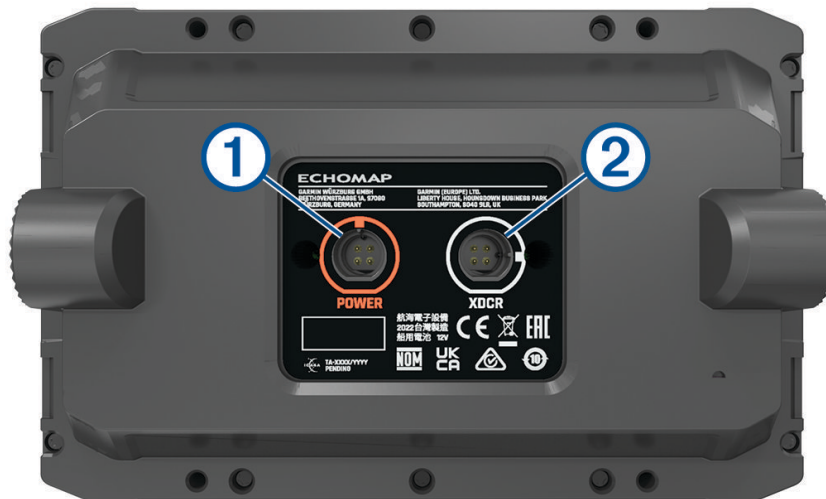

14 Place the device into the cutout.

15 Secure the device to the mounting surface using the included screws ④.

16 Install the trim caps by snapping them in place around the edges of the device.

Connection Considerations

Connector View

①	POWER	Power cable port
②	XDCR	4-pin transducer cable port

Power Cable

When connecting the power cable, do not remove the in-line fuse holder. To prevent the possibility of injury or product damage caused by fire or overheating, the appropriate fuse must be in place as indicated in the product specifications. In addition, connecting the power cable without the appropriate fuse in place voids the product warranty.

- The power cable (included) connects the device to power.
- If it is necessary to extend the power and ground wires, you must use 0.82 mm^2 (18 AWG) or larger wire.

NOTE: Disregard the blue and brown wires.

Item	Wire Function	Wire Color
①	Power	Red
②	Ground	Black
③	Not used	Blue
④	Not used	Brown

Connecting the Device to Power
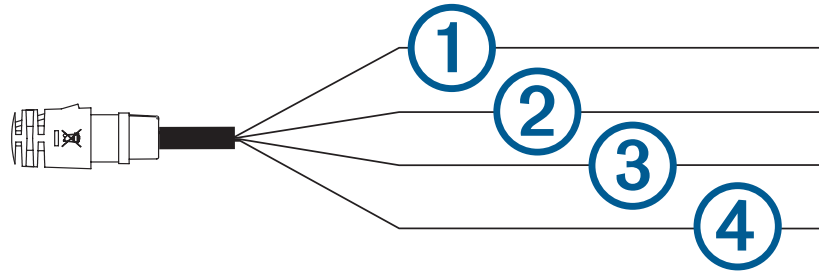
When connecting the power cable, do not remove the in-line fuse holder. To prevent the possibility of injury or product damage caused by fire or overheating, the appropriate fuse must be in place as indicated in the product specifications. In addition, connecting the power cable without the appropriate fuse in place voids the product warranty.

NOTE: Disregard the blue and brown wires on the wiring harness.

1. Route the power cable between the power source and the device.
2. Connect the red wire from the wiring harness to the positive (+) battery terminal.
3. Connect the black wire from the wiring harness to your boat's common ground or to the negative (-) battery terminal if no common ground is available.
4. Align the divot on the power cable connector with the keying on the POWER port on the back of the device.

NOTICE

You must align the holes on the cable connector with the pins in the cable port. Misalignment of the cable connection could damage the device.

5. Push the connector firmly into the port until fully seated.

If the device behaves erratically, the cable connector may not be fully seated. Disconnect the cable connector from the port, check the pin alignment, and firmly push the connector into the port.

Connecting the Device to a Transducer

Go to garmin.com/transducers or contact your local Garmin dealer to determine the appropriate type of transducer for your needs.

NOTE: If you use an existing transducer and the transducer cable pin connector does not match the device port, an 8-pin to 4-pin transducer cable adapter (Garmin part number 010-12719-00) is included with some device bundles and available at garmin.com.

1 Follow the instructions provided with your transducer to correctly install it on your boat.
2 Route the transducer cable to the back of your device, away from sources of electrical interference.
3 Align the divot on the transducer cable connector with the keying on the XDCR port on the back of the device.

NOTICE

You must align the holes on the cable connector with the pins in the cable port. Misalignment of the cable connection could damage the devices.

4 Push the connector firmly into the port until fully seated.

If the device behaves erratically, the cable connector may not be fully seated. Disconnect the cable connector from the port, check the pin alignment, and firmly push the connector into the port.

Connecting Devices Wirelessly to Share User Data and Sonar

You can connect two ECHOMAP UHD2 devices wirelessly to share user data and sonar.

See your *Owner's Manual* for more information.

Specifications

All Models

Material	Polycarbonate plastic
Water rating	IEC 60529 IPX7[1]
Temperature range	From -15° to 55°C (from 5° to 131°F)
Input voltage	From 9 to 18 Vdc
Fuse	3 A, fast-acting (included)
Memory card	1 microSD® card slot; 32 GB max. card size
Display resolution (W x H)	800 x 480 pixels
Display type	WVGA
Sonar frequencies[2]	Traditional: 50/200, 77/200, 83/200 kHz Single Channel CHIRP: from 40 to 250 kHz Garmin ClearVü CHIRP: 260/455/800 kHz
Sonar transmit power (RMS)[3]	CHIRP: 500 W Garmin ClearVü CHIRP: 500 W
Sonar depth[4]	701 m (2,300 ft.) at 77 kHz

5x Models

Dimensions, chartplotter only (W x H x D)	188 x 122 x 61.5 mm ($7^3/_8$ x $4^{13}/_{16}$ x $2^7/_{16}$ in.)
Dimensions, in bail mount with sun cover (W x H x D)	212 x 143.3 x 100 mm ($8^3/_8$ x $5^5/_8$ x $3^{15}/_{16}$ in.)
Display size (W x H)	109 x 65.8 mm ($4^5/_{16}$ x $2^9/_{16}$ in.) 127.3 mm (5 in.) diagonal
Clearance to nearest obstruction behind chartplotter	57 mm ($2^1/_4$ in.)
Weight	0.5 kg (1.1 lb.)
Max. power draw	8.4 W
Typical current draw at 12 Vdc (RMS)	600 mA
Max. current draw at 12 Vdc (RMS)	700 mA
Wireless frequency	2.4 GHz @ 19.7 dBm maximum
Compass-safe distance	7.62 cm (3 in.)

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[1] The device withstands incidental exposure to water of up to 1 m for up to 30 min. For more information, go to www.garmin.com/waterrating.
[2] Dependent upon the transducer.
[3] Dependent upon the transducer rating and depth.
[4] Dependent upon the transducer, water salinity, bottom type, and other water conditions.

7x Models

Dimensions, device only (W x H x D)	232 x 143.1 x 67 mm ($9^1/_8$ x $5^5/_8$ x $2^5/_8$ in.)
Dimensions, in bail mount with sun cover (W x H x D)	243.4 x 153.9 x 105.5 mm ($9^9/_{16}$ x $6^1/_{16}$ x $4^1/_8$ in.)
Display size (W x H)	86.9 x 155.1 mm ($3^7/_{16}$ x $6^1/_8$ in.) 177.8 mm (7 in.) diagonal
Clearance to nearest obstruction behind chartplotter	62.5 mm ($2^7/_{16}$ in.)
Weight	0.68 kg (1.5 lb.)
Max. power draw	15 W
Typical current draw at 12 Vdc (RMS)	1.1 A
Max. current draw at 12 Vdc (RMS)	1.25 A
Wireless frequency	2.4 GHz @ 19.7 dBm maximum
Compass-safe distance	12.7 cm (5 in.)

物質宣言

部件名称	有毒有害物质或元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
印刷电路板组件	✗	○	○	○	○	○
屏幕/背光	✗	○	○	○	○	○
金属零件	✗	○	○	○	○	○
电缆 电缆组件 连接器	✗	○	○	○	○	○

本表格依据 SJ/T11364 的规定编制。

○: 代表此种部件的所有均质材料中所含的该种有害物质均低于
(GB/T26572) 规定的限量

✗: 代表此种部件所用的均质材料中, 至少有一类材料其所含的有害物质高于
(GB/T26572) 规定的限量

* 该产品说明书应提供在环保使用期限和特殊标记的部分详细讲解产品的担保使用条件。

⑩ 产品

連絡地址

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客服專線:(02)2642-9199