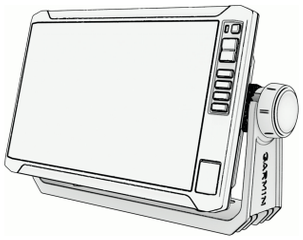
GARMIN



ECHOMAP™ UHD2 6/7/9 SV
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.

To avoid possible personal injury or damage to this device and vessel, only install this device when the vessel is on land, or when properly secured and docked in calm water conditions.

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/ECHOMAP_UHD2_679sv.

Tools Needed

- Drill
- Drill bits
  - Bail mount, fixed or swivel: 3 mm ($^1/_8$ in.) drill bit or drill bits appropriate for the surface and hardware
  - Flush mount: 3 mm ($^1/_8$ in.) and 12.7 mm ($^1/_2$ in.) drill bits
- #2 Phillips screwdriver
- Jigsaw or rotary tool (flush mount)
- File and sandpaper (flush mount)
  - 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.

NOTE: The swivel base is not available for ECHOMAP UHD2 9 sv models.

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 4).

Fixed-Bail Mounting the Device

NOTICE

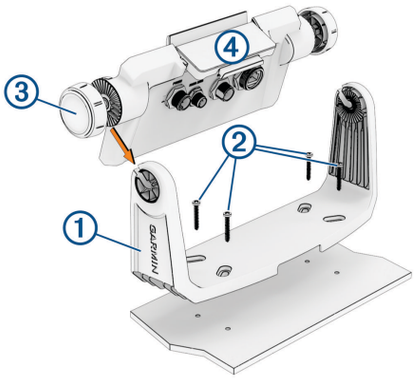
If you are mounting the bracket on fiberglass with screws, it is recommended to use a countersink bit to drill a clearance counterbore through only the top gel-coat layer. This will help to avoid cracking in the gel-coat layer when the screws are tightened.

1. If you do not want to use the included wood screws to secure the bail-mount bracket, select the mounting hardware appropriate for the bail-mount bracket and your mounting surface.

NOTICE

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.

2. Using the bail-mount bracket as a template①, mark the pilot holes through the screw holes.



3. Complete an action:
   - If you are using the included wood screws ②, drill the four pilot holes using a 3 mm ($^1/_8$ in.) drill bit.
   - If you are using your own mounting hardware, drill the four pilot holes using a drill bit appropriate for your hardware.
4. Secure the bail-mount bracket to the mounting surface using the included wood screws or your mounting hardware.
5. Loosely install the bail-mount knobs ③ on the sides of the cradle.
6. Place the cradle ④ in the bail-mount bracket.
7. Tighten the bail-mount knobs.

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Bail Mounting a Device with a Swivel Base

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.

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.

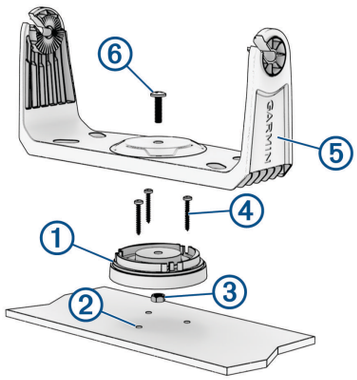
NOTE: The swivel base is not available for ECHOMAP UHD2 9 sv models.

1. If you do not want to use the included wood screws to secure the swivel base, select the mounting hardware appropriate for the swivel base and your mounting surface.

NOTICE

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.

2. Using the swivel base ① as a template, mark the pilot holes ② through the outer three screw holes.



3. Complete an action:
   - If you are using the included wood screws, drill the three pilot holes ② using a 3 mm ($^1/_8$ in.) drill bit.
   - If you are using your own mounting hardware, drill the three pilot holes using a drill bit appropriate for your hardware.
4. 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.
5. Align the outer three screw holes in the swivel base with the pilot holes.
6. Secure the swivel base to the mounting surface using the included wood screws ④ or your mounting hardware.
7. Place the bail-mount bracket ⑤ on the swivel base.
8. Insert the swivel-mount bolt ⑥ through the center hole in the bail mount.
9. 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.
10. Loosely install the bail-mount knobs on the sides of the cradle.
11. Place the cradle in the bail-mount bracket.
12. Tighten the bail-mount knobs.

Flush Mounting the Device

NOTICE

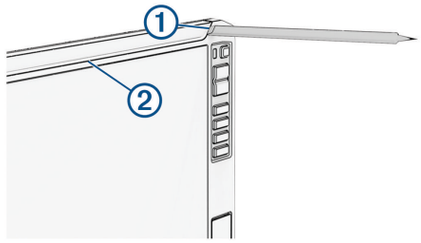
Be careful when cutting the hole to flush mount the device. There is only a small amount of clearance between the case and the mounting holes, and cutting the hole too large could compromise the stability of the device after it is mounted.

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 provided flush-mount template and hardware.

1. Trim the included template and make sure it fits in the location where you want to mount the device.

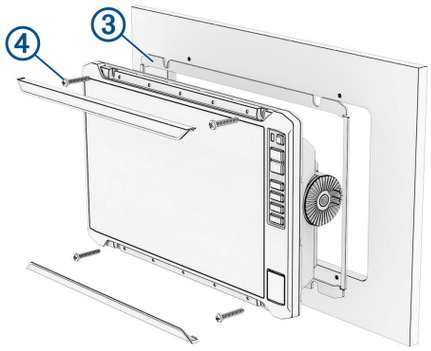
   NOTE: The sun cover provided with this device has a release latch on the right side, as indicated on the template. Be sure to allow enough clearance to access and pull the latch when selecting a location.
2. Secure the template to the mounting location.
3. Using a 12.7 mm ($^1/_2$ in.) drill bit, drill 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 rotary cutting tool or jigsaw, cut the mounting surface along the inside of the solid line indicated on the template.
5. Secure the cradle to the back of the device (*Installing the Device in the Cradle*, page 4).
6. Place the device into the cutout to test the fit.
7. If necessary, use a file and sandpaper to refine the size of the hole.
8. 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.



9. Ensure the mounting holes on the device line up with the pilot holes on the template.
10. 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.
11. Using a 3 mm ($^1/_8$ in.) drill bit, drill the pilot holes.
12. Remove the template from the mounting surface.
13. If you will not have access to the back of the device after you mount it, route the necessary cables through the hole and connect them to the cradle.

    You can press ⏻ to power the device on and off to test the connections.
14. 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.



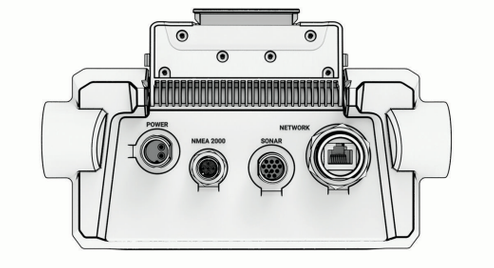
NOTICE

On ECHOMAP UHD2 9 sv models, the top and bottom gasket pieces are not interchangeable and are labeled to help install correctly. Be sure to use the appropriate gasket pieces on the top and bottom to avoid water ingress behind the mounting surface.

15. Place the device into the cutout.
16. Secure the device to the mounting surface using the included screws ④.
17. Install the trim caps by snapping them in place around the edges of the device.

Connection Considerations

Connector View



POWER	Power cable port
NMEA 2000	NMEA 2000® cable port
SONAR	Transducer cable port
NETWORK	Garmin Marine Network cable port for connection to compatible Panoptix™, GCV™, and ECHOMAP devices **NOTE:** This device is not compatible with some Garmin Marine Network devices such as GPSMAP®, GSD™, and radar devices.

NOTICE

To prevent corrosion of the metal contacts, cover unused connectors with weather caps.

Connecting the Power Cable

⚠ WARNING

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.

1. Route the power cable to the power source and to the device.
2. Connect the red wire to the positive (+) battery terminal, and connect the black wire to the negative (-) battery terminal.
3. Insert the power-cable connector into the POWER port on the back of the cradle, pushing firmly.
4. Turn the locking ring clockwise to secure the cable to the device.

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, you may be able to use a transducer cable adapter to connect your existing transducer to this device. Go to garmin.com for more information about transducer accessories.

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. Connect the transducer cable to the appropriate port on the cradle.

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.

NMEA 2000 Considerations

NOTICE

If you are connecting to an **existing** NMEA 2000 network, identify the NMEA 2000 power cable. Only one NMEA 2000 power cable is required for the NMEA 2000 network to operate properly.

A NMEA 2000 Power Isolator (010-11580-00) should be used in installations where the existing NMEA 2000 network manufacturer is unknown.

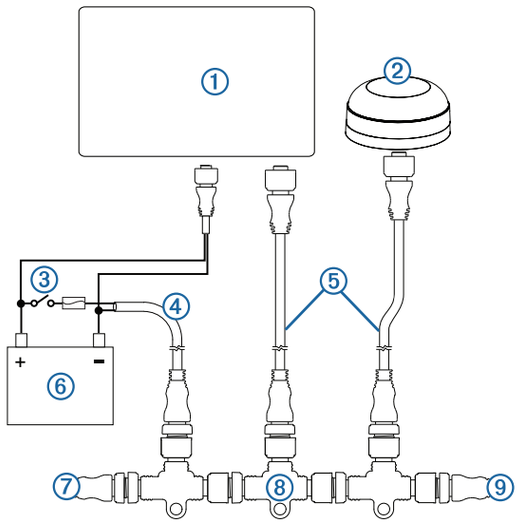
If you are installing a NMEA 2000 power cable, you must connect it to the boat ignition switch or through another in-line switch. NMEA 2000 devices will drain your battery if the NMEA 2000 power cable is connected to the battery directly.

You can connect your device to a NMEA 2000 network on your boat to share data from NMEA 2000 compatible devices such as a GPS antenna or a VHF radio. The necessary NMEA 2000 cables and connectors are sold separately.

This device is not powered through the NMEA 2000 network. You must connect the device to a power source (*Connecting the Power Cable*, page 3).

If you are unfamiliar with NMEA 2000, you should read the *Technical Reference for NMEA 2000 Products* at garmin.com/manuals/nmea_2000.

The port labeled NMEA 2000 on the cradle is used to connect it to a standard NMEA 2000 network.



Item	Description
①	ECHOMAP UHD2 6/7/9 sv device
②	GPS antenna or other NMEA 2000 device
③	Ignition or in-line switch
④	NMEA 2000 power cable
⑤	NMEA 2000 drop cable
⑥	12 Vdc power source
⑦	NMEA 2000 female terminator or backbone extension cable
⑧	NMEA 2000 T-connector
⑨	NMEA 2000 male terminator or backbone extension cable

Connecting Devices Wirelessly to Share User Data and Sonar

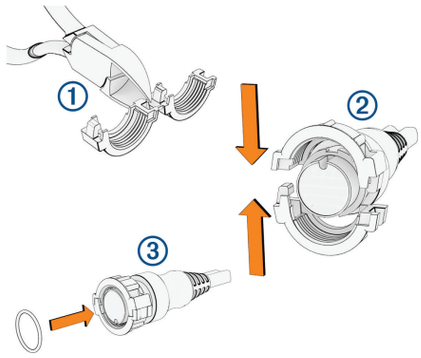
You can connect two ECHOMAP UHD2 devices wirelessly to share user data and sonar.

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

Installing Locking Rings on the Cables

To help make the cable-routing process easier, some locking rings are packaged separately from the cables. When installing a cable that does not have a locking ring installed at the factory, you must install the split-collar locking ring on the cable to ensure a tight connection.

1. Separate the two halves of the locking ring ①.



2 Align the two halves ② of the locking ring over the cable and snap them together.

3 Insert the O-ring ③ into the end of the connector.

4 After connecting the cable to the port, turn the locking ring clockwise to tighten it.

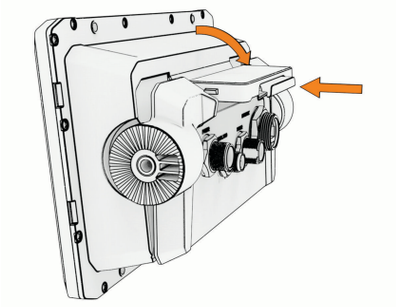
Installing the Device in the Cradle

After the cables are connected to the cradle, you can quickly place the device in the cradle.

1 On a 7xsv or 9xsv device, press the button on the release lever, and lift the lever to unlock it.

2 Place the base of the device in the bottom of the cradle.

3 Tilt the top of the device toward the cradle.



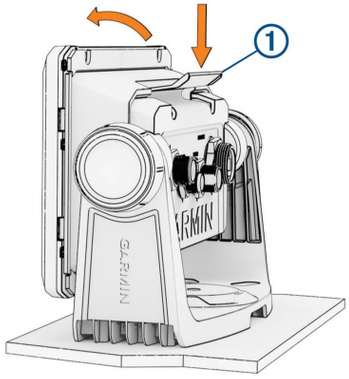
4 Perform an action:

- On a 7xsv or 9xsv device, press the button on the lever, and push the lever down until the device clicks in place.
- On a 6xsv device, press the device into the cradle until it clicks in place.

Removing the Device from the Cradle

1 Perform an action:

- On a 7xsv or 9xsv device, press the button on the release lever on the cradle, and pull the lever up.
- On a 6xsv device, press the release lever on the cradle ① until the device is released.



2 Tilt the device forward, and lift the device out of the cradle.

3 Install the weather cap on the cradle connector.

NOTICE

Failure to install the weather cap on the cradle connector may result in corrosion that interferes with the connection between the cradle and the device.

Specifications

All Models

Material	Polycarbonate plastic
Water rating	IEC 60529 IPX7[1]
Temperature range	From -20° to 55°C (from -4° to 131°F)
Clearance to nearest obstruction behind chartplotter	118 mm ($4^5/_8$ in.)
Input voltage	From 9 to 18 Vdc
Fuse	3 A, fast-acting (included)
Memory card	1 microSD® card slot; 32 GB max. card size
Wireless frequency	2.4 GHz @ 18.7 dBm maximum
Sonar frequencies[2]	Traditional L, M, H CHIRP: 50/77/83/200 kHz Garmin ClearVü CHIRP: 260/455/800/1000/1200 kHz Garmin SideVü™ CHIRP: 260/455/800/1000/1200 kHz
Sonar transmit power (RMS)[3]	CHIRP: 500 W Garmin ClearVü and Garmin SideVü CHIRP: 500 W
Sonar depth[4]	701 m (2,300 ft.) at 77 kHz

6Xsv Models

Dimensions, device and cradle only (W x H x D)	206 x 131 x 67 mm ($8^1/_8$ x $5^3/_{16}$ x $2^5/_8$ in.)
Dimensions, in bail mount with sun cover (W x H x D)	244 x 155 x 99 mm ($9^5/_8$ x $6^1/_8$ x $3^7/_8$ in.)
Display size (W x H)	138 x 78 mm ($5^7/_{16}$ x $3^1/_{16}$ in.) 157 mm (6 in.) diagonal
Display resolution (W x H)	800 x 480 pixels
Display type	WVGA
Weight	0.8 kg (1.8 lb.)
Max. power draw	18.3 W
Typical current draw at 12 Vdc (RMS)	1.53 A
Max. current draw at 12 Vdc (peak)	3.2 A
Compass-safe distance	25.5 cm (10 in.)

[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.

7Xsv Models

Dimensions, device and cradle only (W x H x D)	218 x 142 x 81 mm ($8^{9}/_{16}$ x $5^{5}/_{8}$ x $3^{3}/_{16}$ in.)
Dimensions, in bail mount with sun cover (W x H x D)	261 x 166 x 99 mm ($10^{5}/_{16}$ x $6^{9}/_{16}$ x $3^{7}/_{8}$ in.)
Display size (W x H)	155 x 87 mm ($6^{1}/_{8}$ x $3^{7}/_{16}$ in.) 178 mm (7 in.) diagonal
Display resolution (W x H)	800 x 480 pixels
Display type	WVGA
Weight	1.0 kg (2.2 lb.)
Max. power draw	18.3 W
Typical current draw at 12 Vdc (RMS)	1.52 A
Max. current draw at 12 Vdc (peak)	3.2 A
Compass-safe distance	22.5 cm (9 in.)

9Xsv Models

Dimensions, device only (W x H x D)	264 x 166 x 80 mm ($10^{3}/_{8}$ x $6^{9}/_{16}$ x $3^{3}/_{16}$ in.)
Dimensions, in bail mount with sun cover (W x H x D)	303 x 182 x 99 mm ($11^{15}/_{16}$ x $7^{3}/_{16}$ x $3^{7}/_{8}$ in.)
Display size (W x H)	198 x 115 mm ($7^{13}/_{16}$ x $4^{9}/_{16}$ in.) 229 mm (9 in.) diagonal
Display resolution (W x H)	1024 x 600 pixels
Display type	WSVGA
Weight	1.3 kg (2.9 lb.)
Max. power draw	20.7 W
Typical current draw at 12 Vdc (RMS)	1.72 A
Max. current draw at 12 Vdc (peak)	3.5 A
Compass-safe distance	20 cm (8 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	邻苯二甲酸二(2-乙基己)酯	邻苯二甲酸丁苄酯	邻苯二甲酸二丁酯	邻苯二甲酸二异丁酯
印刷电路板组件	✕	○	○	○	○	○	○	○	○	○
屏幕/背光	✕	○	○	○	○	○	○	○	○	○
金属零件	✕	○	○	○	○	○	○	○	○	○
电缆 电缆组件连接器	✕	○	○	○	○	○	○	○	○	○
塑料和橡胶零件	○	○	○	○	○	○	○	○	○	○

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。

产品

联系信息

制造厂商 : 台湾国际航电股份有限公司

销售厂商 : 上海佳明航电企业管理有限公司

联络地址 : 上海市徐汇区桂平路 391 号 (新漕河泾国际商务中心 A 座 37 层)

电 话 : 021-60737675

客服专线 : 400-819-1899

連絡地址

製造銷售:台灣國際航電股份有限公司

聯絡地址:新北市汐止區樟樹二路 68 號

電　　話:(02)2642-8999

客服專線:(02)2642-9199

低功率電波輻射器材管理宣告

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3.8.2 章節：

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前項合法通信，指依電信法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

M/N: B04266 / A04266 / A04396

IC: 1792A-04266 / 1792A-04396