



Installation Overview

Following are instructions for the in-dash mount installation of the HELIX control head. We encourage you to read this guide before starting the installation, so you may understand the installation requirements.

Supplies: In addition to the hardware supplied with your accessory, you will need the (2) gimbal knobs and cable tray included with your control head, a drill and various drill bits, a cutting tool for the dashboard material, 7/16" (11 mm) adjustable wrench, safety glasses and dust mask, and masking tape. If the dashboard is thicker than 5/8" (16 mm), you may need to use the longer carriage bolts (included with hardware).


 **WARNING!** Do NOT use power tools to secure the hardware. We encourage you to read the installation instructions so you may understand the installation requirements.

 **NOTE:** The illustrations in this manual may not look the same as your product, but your product will function in the same way.

1. Plan the Mounting Location

Start by locating a suitable, flat area of the dashboard for mounting. Consider the following to find the best mounting location:

- **Interference:** The mounting location must provide adequate distance from electric motors or any equipment that may cause electronic interference.
- **Stability:** The mounting area should be protected from waves, shock, vibration, and water.
- **Depth:** The mounting area should have a depth of 4½" (114.3 mm) to allow space for the control head and cables.
- **Ventilation:** The area beneath the mounting surface should be well-ventilated.
- **Accessibility:** The location should be easily accessible for all cables to reach the ports on the back of the control head.
- **Multiple Control Heads:** If you plan to install more than one control head side by side, leave a minimum space of 5/8" (15.9 mm) horizontally or 1/2" (12.7 mm) vertically between control heads. Take your measurement from the front edges of the control head. See the template for more information.

 **NOTE:** If a cable is too short for your application, extension cables are available. For assistance, contact Humminbird Customer Service.

2. Cut the In-Dash Mounting Hole

To in-dash mount the HELIX control head, start by placing the components on the surfaces where you intend to install them.

1. Review the instructions, measurements, and cutting options indicated on the In-dash Mounting Template.
 2. Tape the template to the chosen in-dash mounting location.
 3. Using the template, select the cutting method that is best for your boat:
 - Drill one entry hole away from the main cut line that is large enough to insert the blade of your cutting tool.
- OR**
- Using a 5/8" drill bit, drill the 4 corner holes (inside the main cut line) as shown on the template. Use one of the corner holes as an entry hole, or drill an additional entry hole away from the main cut line.
4. Carefully begin cutting toward the cut line, and continue cutting to the **inside of the line** around the template.

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5. **Test the Mounting Hole:** Install the control head in the mounting hole to test the fit. Make adjustments to the mounting hole as needed. Remove the template when finished.
6. Thoroughly clean and deburr the mounting hole.

3. Install the Bracket

To install the in-dash mount bracket, you will need the gimbal knobs included with your control head.

1. Place the control head on a towel or cloth, with the screen facing down, on a stable and level surface.
2. See the illustration *Installing the Bolts*. Install the carriage bolts (1/4" - 20) onto the bracket with the flat washer (1/4" x 3/4") and seal washer (1/4" x 1/2") in the order shown in the illustration. Hand tighten the washers fully until they are flat and secure on the bracket.
3. Line up the bracket arms with the ratchets on the side of the control head. The opening in the bracket arms should face up (away from the control head ports). Adjust the bracket so it is parallel with the control head screen. See the illustration *Installing the Bracket*.
4. Install the gimbal knobs into each side of the control head. **Hand-tighten only!** See the illustration *Installing the Bracket*.

4. Install the Control Head

1. From the front of the dashboard, with the control head screen facing out, carefully lower the control head into the mounting hole.
2. Press down lightly on the control head. Confirm the control head is centered and flush against the dashboard. Make adjustments, as needed.
3. From under the dashboard, insert the vertical bracket holes over the bolts. Ensure the top and bottom of the vertical bracket is evenly aligned and flush against the dash. See the illustration *Installing the Vertical Bracket*.

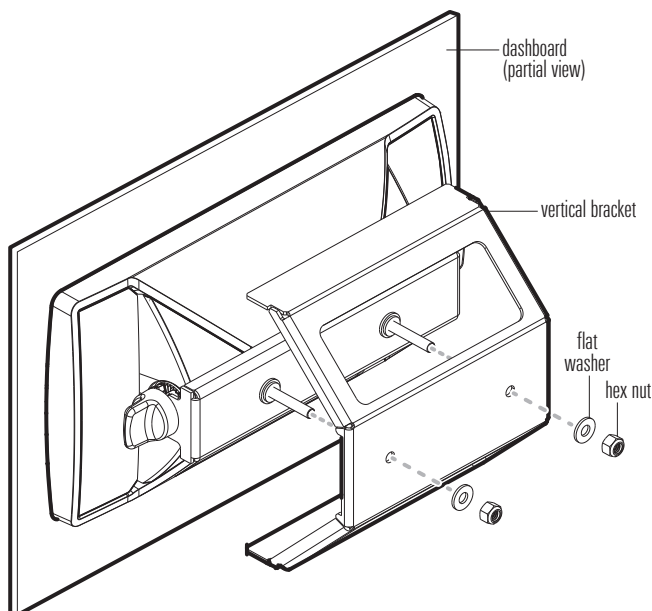


NOTE: If your vertical bracket has multiple bracket holes, use the center bracket holes.

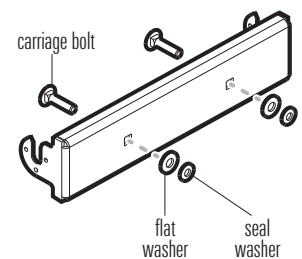
4. Install a flat washer (1/4" x 3/4") and hex nut (1/4" - 20) onto each carriage bolt. See the illustration *Installing the Vertical Bracket*. Use a 7/16" adjustable wrench to hand-tighten the nuts until the assembly is secured. Then tighten no more than 2 additional turns. **Hand-tighten only!**

Do NOT over-tighten the hex nuts. The bracket should remain straight without bending.

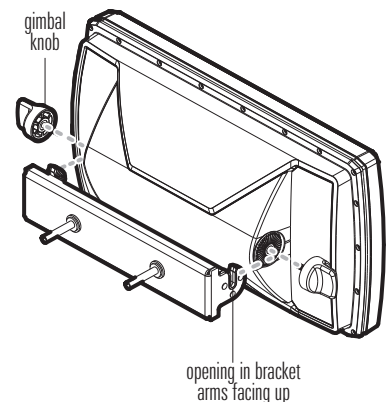
Installing the Vertical Bracket



Installing the Bolts



Installing the Bracket



5. Install the Cable Tray

The cable tray secures the cables and protects them from potential damage.

1. Route the cables to the control head.

CAUTION! Do NOT mount the cables where the connectors could be submerged in water or flooded. If cables are installed in a splash-prone area, it may be helpful to apply dielectric grease to the inside of the connectors to prevent corrosion. Dielectric grease can be purchased separately from a general hardware or automotive store.

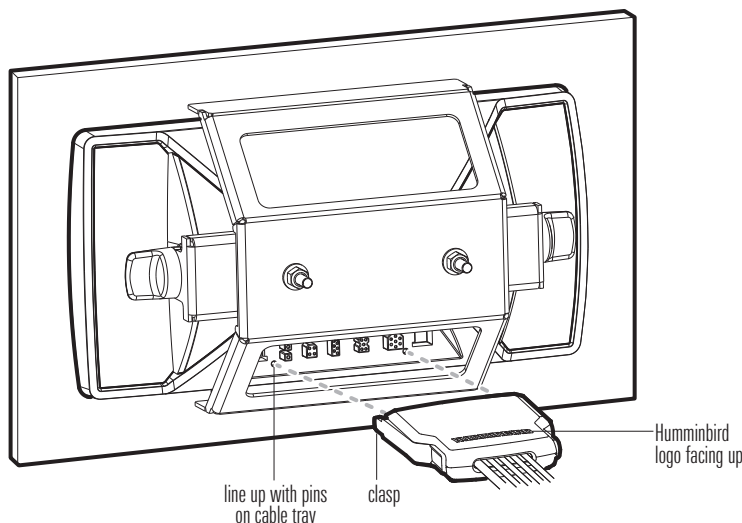
2. Use a Phillips head screwdriver to remove the screws from the bottom of the cable tray. See the illustration *Removing the Screws from the Cable Tray*.
3. Hold the cable tray together and turn it over, so the Humminbird logo is facing up. Lift the cover and set it aside.
4. See the illustration *Locating the Cable Tray Slots*. Insert each cable connector into the correct slots in the tray. Each slot is shaped specifically for each connector, and insertion should be easy. Route the cables using the grooves in the tray.
5. Place the cover onto the tray. Hold the tray together and turn it over.

If the cable tray arms fall out, see the illustration *Assembling the Cable Tray* to put them back in place.

6. Install the screws in the holes on the bottom of the tray. **Hand-tighten only!** See the illustration *Removing the Screws from the Cable Tray* to replace the screws.
7. Turn over the cable tray so the Humminbird logo is facing up. Confirm the cables hang straight, and untwist them if necessary.
8. Line up the slots on the cable tray with the matching ports on the back of the control head. Line up the cable tray pins with the holes on the control head (see the illustration *Locating the Cable Tray Slots*).

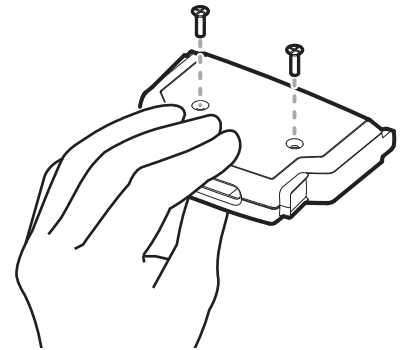
With the Humminbird logo facing up, plug the cable tray into the back of the control head. The cable tray clasps should click into place. See the illustration *Connecting the Cable Tray to the Control Head*.

Connecting the Cable Tray to the Control Head

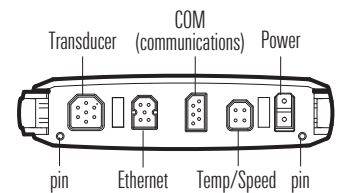


9. Pull carefully on the cable tray to confirm the installation is secure. Make sure both clasps clicked into place in step 8.
10. Your control head is ready for operation. See the Operations Summary Guide to get started.

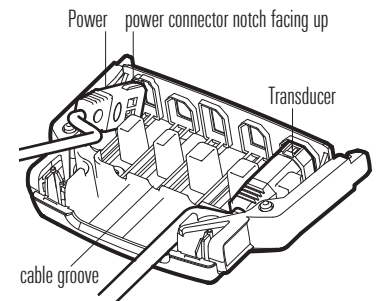
Removing the Screws from the Cable Tray



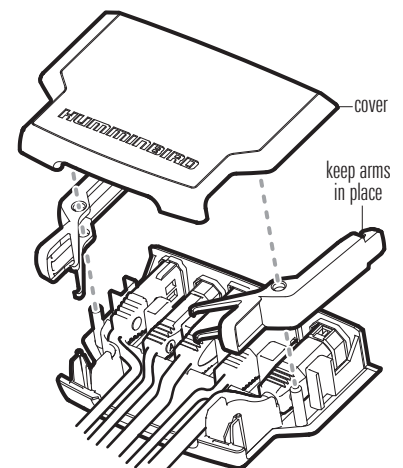
Locating the Cable Tray Slots



Inserting the Cable Connectors into the Cable Tray





Assembling the Cable Tray




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 **WARNING!** This device should not be used as a navigational aid to prevent collision, grounding, boat damage, or personal injury. When the boat is moving, water depth may change too quickly to allow time for you to react. Always operate the boat at very slow speeds if you suspect shallow water or submerged objects.

 **WARNING!** Disassembly and repair of this electronic unit should only be performed by authorized service personnel. Any modification of the serial number or attempt to repair the original equipment or accessories by unauthorized individuals will void the warranty.

FCC NOTICE: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

 **CAUTION!** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

ENVIRONMENTAL COMPLIANCE STATEMENT: It is the intention of Johnson Outdoors Marine Electronics, Inc. to be a responsible corporate citizen, operating in compliance with known and applicable environmental regulations, and a good neighbor in the communities where we make or sell our products.

WEEE DIRECTIVE: EU Directive 2002/96/EC “Waste of Electrical and Electronic Equipment Directive (WEEE)” impacts most distributors, sellers, and manufacturers of consumer electronics in the European Union. The WEEE Directive requires the producer of consumer electronics to take responsibility for the management of waste from their products to achieve environmentally responsible disposal during the product life cycle.

WEEE compliance may not be required in your location for electrical & electronic equipment (EEE), nor may it be required for EEE designed and intended as fixed or temporary installation in transportation vehicles such as automobiles, aircraft, and boats. In some European Union member states, these vehicles are considered outside of the scope of the Directive, and EEE for those applications can be considered excluded from the WEEE Directive requirement.



This symbol (WEEE wheelie bin) on product indicates the product must not be disposed of with other household refuse. It must be disposed of and collected for recycling and recovery of waste EEE. Johnson Outdoors Marine Electronics, Inc. will mark all EEE products in accordance with the WEEE Directive. It is our goal to comply in the collection, treatment, recovery, and environmentally sound disposal of those products; however, these requirements do vary within European Union member states. For more information about where you should dispose of your waste equipment for recycling and recovery and/or your European Union member state requirements, please contact your dealer or distributor from which your product was purchased.