

Installation Overview

Following are instructions for the in-dash mount installation of the HELIX 7 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 gimbal knobs [2] included with your control head, a drill and various drill bits, a cutting tool for the dashboard material, a 3/8" wrench, a 5/16" socket wrench, safety glasses and dust mask, and masking tape.

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.

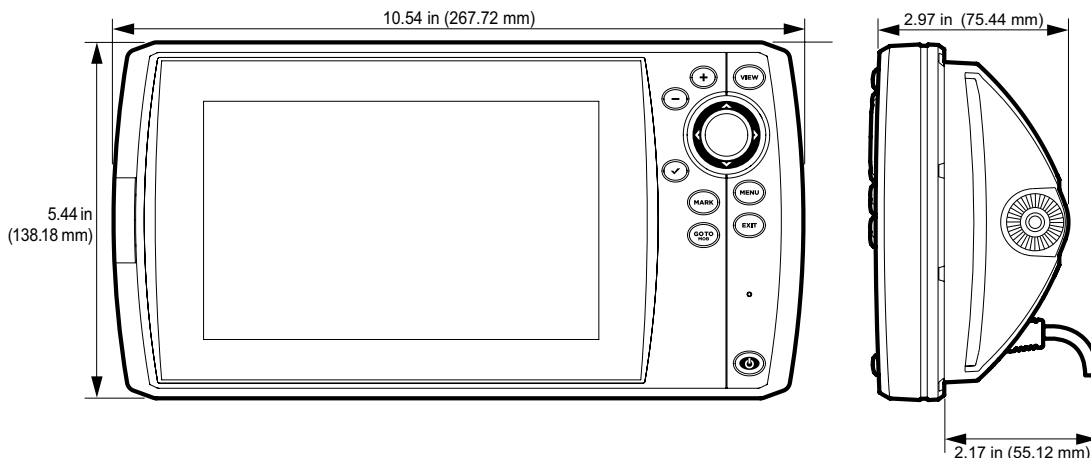
1 | Plan the Mounting Location

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 3 inches [7.62 cm] 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.

NOTE: If a cable is too short for your application, extension cables are available.

HELIX 7 Series In-Dash Mounting Dimensions



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.

HELIX® SERIES IN-DASH MOUNTING Installation Guide

532365-4_A

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**
 - Drill a corner hole away from the main cut line using a drill bit that will create a hole as close to a diameter of .5 inches [12.7 mm] as possible. Repeat for the other three corners as indicated 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 dotted cut line, and continue cutting to the **inside of the line** around the template.
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 In-Dash Mount Bracket

To install the in-dash mount bracket, you will need the gimbal knobs included with your control head. See your control head installation guide for more details.

Preparation

1. Place the control head, with the screen facing down, on a towel or cloth on a stable and level surface.

Install the Ratchets

1. Hold the in-dash mount bracket so the arms on the bracket are pointing up.
2. On the inside of the ratchet, locate the ribs [two semicircles] and align them with the openings on the inside of the bracket arm [see the illustration *Installing the Ratchets on the In-Dash Mount Bracket*]. With this orientation, install the ratchet on the bracket arm.
3. **Repeat:** Repeat step 2 to install the second ratchet.

Install the Gimbal Knobs

1. Holding the ratchets in place, lower the bracket [with the bracket arms pointing down] onto the back of the control head. Align the ratchets on the bracket arms with the openings on the sides of the control head.



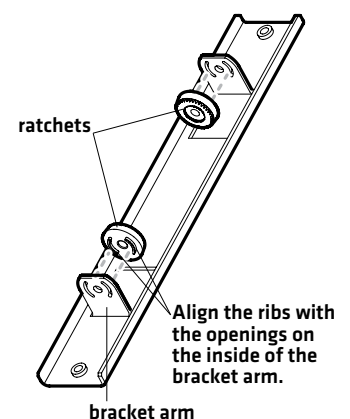
NOTE: The in-dash mount bracket is symmetrical. Therefore, it does not require a specific installation orientation.

2. Confirm the bracket is parallel with the face of the control head [see the illustration *Installing the In-Dash Mount Bracket on the Control Head*]. Thread a gimbal knob into the opening on the control head and tighten using four to five rotations.
3. **Repeat:** Repeat step 2 to install the second gimbal knob.
4. Confirm the bracket is still parallel to the face of the control head and hand-tighten both gimbal knobs to secure the bracket to the control head.

Install the Bolts

1. Place the hardware onto each bolt in the following order: nut and washer. See the illustration *Installing the In-Dash Mount Bracket on the Control Head*.
2. Insert the bolts into the threaded bolt holes on the bracket. Hand-tighten the bolts until there is enough of the bolt exposed on the other side of the bracket to install the end cap. You will fully tighten the bolts in a later procedure.

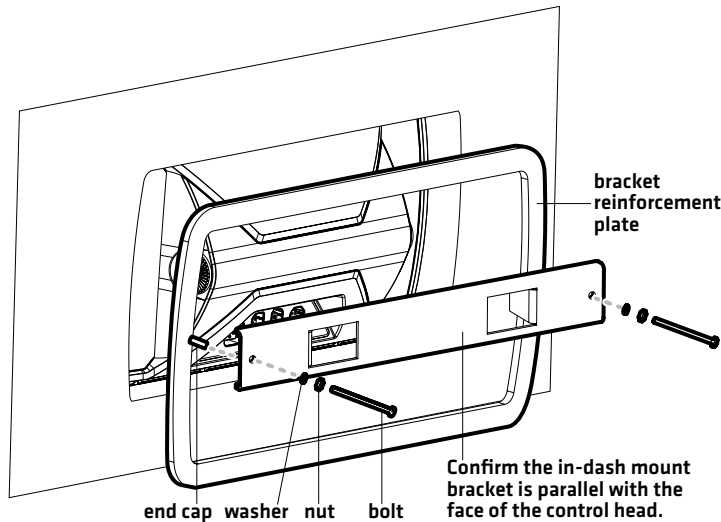
Installing the Ratchets on the In-Dash Mount Bracket



HELIX® SERIES IN-DASH MOUNTING Installation Guide

532365-4_A

3. Install one end cap on the end of each bolt.

Installing the In-Dash Mount Bracket on the Control Head

4 | Install the Control Head

1. From the front of the dashboard, with the control head screen facing out, carefully lower the control head diagonally into the mounting hole. Insert one end of the bracket through the hole first.
2. Adjust the angle so the control head is centered in the mounting hole.
3. Press down lightly on the control head. Confirm the control head is seated flush against the dash. Make adjustments, as needed.
4. From under the dash, place the bracket reinforcement plate around the back of the control head.
5. Finger-tighten each bolt until the end cap is flush against the bracket reinforcement plate. Then, use a 5/16" socket wrench to hand-tighten the bolts no more than 2 additional turns. **Hand-tighten only!**

Do NOT over-tighten the bolts. There should be no play or gaps between the unit and the dash. The bracket should remain straight without bending.

6. Finger-tighten each nut until the nut and washer are flush against the bracket. Fully tighten each nut using a 3/8" wrench while holding the bolt in place. **Do NOT over-tighten the nuts. Hand-tighten only!**

⚠ WARNING! Do NOT use power tools to secure the hardware.

⚠ WARNING! Do NOT over-tighten the bolts. If the bracket is bending or bowing, it is too tight. Over-tightening the bolts may damage the control head.

5 | Route and Connect the Cables

1. See the installation guides included with each hardware component to install power and other optional equipment.
2. Route all cables [power, transducer, accessories] to the control head and insert the connectors into the correct ports on the back of the control head [see the illustration *Connecting the Cables*].

Connecting the Cables
