

Quad Scan Livescanner

Installation Instructions

1. Included Parts

Verify that all applicable components are present before beginning installation. Items marked "if ordered" are included only when that option was purchased.

Component	Description / Identification
Quad Scan Head Unit	The main motorized rotation unit with integrated foot pedal permanently attached, and power harness (red and black wires with inline fuse holder).
10-Button Remote	Wireless remote, factory paired to the head unit. Ten buttons for full mode and speed control.
Extension Pole	Adds length to the inner rotation shaft, extending the transducer deeper below the waterline. Attaches via a hex-screw coupler clamp.
Livescanner Trolling Motor Mount with Hardware	Two-piece clamp assembly that bolts to the underside of the trolling motor. Accepts the Livescanner outer shaft via two compression fitting rings spaced approximately 6 inches apart.
Bounce Brace (if ordered)	Secondary stabilization brace that clamps to the Livescanner outer shaft and connects to the trolling motor shaft via a rotating bushing enclosure, keeping the Livescanner shaft parallel to the trolling motor shaft during stow.
Livescanner Transducer Mount (if ordered)	Clamps to the bottom of the extension pole inner shaft to hold the transducer.
TrackCast Remote (if ordered)	Gesture-controlled remote that mounts to a fishing rod or is handheld. Factory paired to the head unit.

NOTE: The Sync sensor and its associated hardware are covered in a separate installation document included with that option. If you ordered the Sync option, refer to the Sync Sensor Installation Instructions before proceeding past Step 6 of this guide.

2. System Overview

Understanding the physical structure of the Quad Scan before installation will make the process significantly clearer. The unit has two concentric shafts:

- Outer shaft:** A non-rotating structural tube. This is what the trolling motor mount grips via its two compression fittings, and what the bounce brace clamps to. It is fixed in position once the mount is tightened.
- Inner shaft:** A smaller rotating shaft that runs through the center of the outer shaft and extends out of the bottom. This is the shaft the head unit motor drives when you change direction. The extension pole attaches to this inner shaft, adding length so the transducer reaches the correct depth. The transducer mount then clips to the bottom of the extension pole.

The result is that the entire assembly below the mount — extension pole, transducer mount, and transducer — rotates as one unit when the head unit is commanded to move, while the outer shaft and mount hardware remain stationary.

| **NOTE:** Read all steps completely before beginning. Do not apply power until Step 7 instructs you to do so.

3. Mount the Trolling Motor Mount

The trolling motor mount is the primary attachment point for the entire Quad Scan assembly. It bolts directly to the underside of the trolling motor.

1. Position the trolling motor mount against the underside of the trolling motor in the intended mounting location. The two compression fitting rings on the mount should face downward, away from the motor.
2. Insert the provided hex head bolts through the mount and into the trolling motor mounting holes. Thread all bolts by hand before tightening any of them.
3. Tighten all bolts fully and evenly. Bolts must be tight — the mount bears the full weight and dynamic load of the Quad Scan assembly during operation and while the motor is stowed.

| **⚠ WARNING:** Do not leave any bolt loose or partially tightened. A loose mount allows the assembly to shift under load and can result in damage to the unit, the trolling motor, or the boat. Check all bolts for tightness before first use and periodically thereafter.

| **NOTE:** Do not use thread-locking compounds on these bolts unless you are certain the mount will never need to be removed.

4. Install the Quad Scan Head Unit

| **⚠ WARNING:** Do not mount the Livescanner unit so that the top of the unit faces forward when stowed. Doing so will allow water to bypass the gutter system and enter the sealed head.

The Quad Scan head unit mounts to the trolling motor mount via two compression fitting rings that grip the outer shaft. Both rings clamp the same shaft and are spaced approximately 6 inches apart, providing a rigid two-point grip that eliminates flex and wobble.

4. Loosen both compression fitting rings on the trolling motor mount sufficiently to slide the Quad Scan outer shaft through them.
5. Insert the Quad Scan outer shaft up through both compression rings from below. Slide the unit up or down to the desired height — the transducer end should ultimately sit below the waterline with adequate clearance from the trolling motor propeller (see Step 5 for transducer positioning guidance).
6. Rotate the head unit about the outer shaft to set the desired orientation. The head unit should face in a direction that gives the operator comfortable access to the foot pedal and keeps the cable routing clean.
7. Tighten both compression rings firmly and evenly. The outer shaft must not be able to slide or rotate within the rings once tightened.

| **TIP:** Set the height conservatively at this stage — it is easy to lower the unit further once the extension pole and transducer are attached and you can judge the final depth more accurately.

5. Attach the Extension Pole

The extension pole attaches to the inner rotating shaft at the bottom of the outer shaft, adding length so the transducer can be positioned at the correct depth.

8. Locate the coupler at the top of the extension pole. The coupler has small hex screws that clamp it to the inner shaft when tightened.

9. Slide the coupler up onto the bottom of the inner shaft. Align it so the extension pole hangs straight and parallel to the outer shaft.
10. Tighten the hex screws on the coupler evenly to clamp the extension pole firmly to the inner shaft. The extension pole must not be able to slide or rotate independently of the inner shaft — any movement here means the transducer will not track accurately when the head unit rotates.

⚠ WARNING: The extension pole transmits all rotational force from the head unit to the transducer. If the coupler hex screws are not fully tight, the inner shaft will rotate while the extension pole lags behind, resulting in inaccurate transducer positioning and potential cable damage.

6. Install the Transducer Mount and Transducer

The transducer mount clamps to the bottom of the extension pole inner shaft and holds the transducer at the correct angle for forward-facing sonar operation.

11. Attach the transducer mount to the bottom of the extension pole per the transducer mount hardware instructions.
12. Mount your forward-facing sonar transducer to the transducer mount per your sonar manufacturer's instructions.
13. With the transducer mounted, adjust the overall height of the Quad Scan outer shaft in the compression fittings if necessary so that:
 - The transducer is fully submerged below the waterline during normal operation.
 - **The transducer cannot under any circumstances be struck by or come into contact with the trolling motor propeller** — including when the unit rotates to the full extent of its range of motion in either direction. This is the most critical clearance requirement.
14. Once the correct height is confirmed, re-tighten both compression fitting rings firmly.

⚠ WARNING: Failure to maintain adequate clearance between the transducer and the trolling motor propeller will result in destruction of the transducer and potential damage to the trolling motor. Verify clearance through the full rotation range before powering on the unit.

TIP: With the unit powered off, manually rotate the inner shaft by hand through its full range of motion while watching the transducer. This is the most reliable way to confirm propeller clearance before first power-on.

7. Install the Bounce Brace (If Included)

The bounce brace provides a second stabilization point between the Livescanner outer shaft and the trolling motor shaft. It greatly reduces vibration and lateral movement of the Livescanner assembly when the trolling motor is stowed, protecting both the unit and its mounting hardware over time.

The bounce brace has two attachment points:

- **Livescanner outer shaft side:** A rigid split yoke clamp that locks firmly to the outer shaft.
 - **Trolling motor shaft side:** A rotating bushing that clamps to the trolling motor shaft and is fully encapsulated by the bounce brace body. This bushing allows the trolling motor to steer normally while the brace constrains any lateral movement of the Livescanner shaft, keeping it parallel to the trolling motor shaft at all times.
15. Position the bounce brace as far down the Livescanner outer shaft as practical — the greater the distance between the bounce brace and the top trolling motor mount, the more effective the stabilization.
 16. Clamp the split yoke clamp side of the bounce brace firmly to the Livescanner outer shaft. This connection is rigid and must not allow any movement.

17. Position the rotating bushing enclosure side of the bounce brace around the trolling motor shaft and tighten the clamp. The bushing inside allows the trolling motor to rotate for steering while the brace holds the Livescanner shaft in lateral alignment.
18. Confirm that the Livescanner outer shaft is parallel to the trolling motor shaft with the bounce brace installed. Adjust the position of either clamp if needed to achieve parallel alignment before fully tightening.

NOTE: If you ordered the Sync option, your bounce brace includes additional hardware for the Sync sensor gear bushing. Stop here and refer to the Sync Sensor Installation Instructions before proceeding further.

8. Route and Secure All Cables

Proper cable routing is critical to the long-term reliability of the installation. There are two cable systems to manage: the head unit cable to the foot pedal, and the transducer cable.

8.1 Head Unit to Foot Pedal Cable

The foot pedal is permanently attached to the head unit and is not designed to be removed. Route the cable between them so that:

- There is no possibility of the cable being pinched, cut, or chafed by any moving part, hatch cover, or hardware.
- The cable cannot be snagged by fishing line, equipment, or foot traffic.
- The cable has enough slack to accommodate any movement of the trolling motor during steering without pulling tight.

Secure the cable at regular intervals using cable clamps or tie wraps.

8.2 Transducer Cable

The transducer cable requires special attention because it must accommodate the full rotational range of the inner shaft without being damaged. Route and secure it as follows:

19. Route the transducer cable up along the Livescanner outer shaft from the transducer to the head unit and secure it to the outer shaft at regular intervals using cable clamps or tie wraps.
20. At the bottom of the outer shaft — where the inner shaft exits — leave a carefully measured loop of slack in the cable. This loop must be:
 - **Long enough** to allow the inner shaft to rotate through its full $\sim 340^\circ$ range of motion without pulling the cable taut.
 - **Short enough** that the loose cable cannot reach the trolling motor propeller at any point during rotation.
21. Do not secure the slack loop to the inner shaft or extension pole — it must remain free to accommodate the rotation.

⚠ WARNING: Insufficient slack will cause the transducer cable to pull tight during rotation, potentially tearing the connector from the transducer or the head unit. Excess slack risks the cable contacting the trolling motor propeller. Take time to set this loop correctly before first power-on.

TIP: A good starting point is to manually rotate the inner shaft to each end of its range while watching the cable loop. Adjust the loop length until the cable remains clear of the prop at full rotation in both directions, with just enough slack remaining that the cable is not under tension.

9. Connect Power

The Quad Scan head unit is powered by the two bare wire leads on the power harness — one red (positive) and one black (negative). The unit operates on 12–24V DC and draws a maximum of 7.5 amps. An inline fuse holder with a 7.5 amp fuse is pre-installed on the power harness.

22. Route the power harness from the head unit to your chosen power source — any 12–24V DC supply capable of delivering 7.5 amps is suitable, including a trolling motor battery.
23. Connect the **red wire to the positive (+) terminal** and the **black wire to the negative (–) terminal** of the power source.
24. Ensure both connections are secure and free of corrosion.

⚠ WARNING: Do not cut off, bypass, or modify the inline fuse holder, and do not replace the installed 7.5 amp fuse with a higher-rated fuse. The fuse protects the unit from overcurrent damage — modifying it or installing a higher-rated fuse will void the warranty and may result in damage to the unit or a fire hazard.

NOTE: Polarity matters — connecting the power leads in reverse will damage the unit. Always confirm red to positive and black to negative before applying power.

10. Verify Remote Pairing

Both the 10-button remote and the TrackCast remote (if included) are factory paired to the head unit and tested before shipping. No pairing procedure is required during installation.

After powering on the unit for the first time (Step 11), verify that:

- Pressing the Up and Down Arrow buttons on the 10-button remote changes the unit speed.
- Pressing the Left and Right Arrow buttons nudges the unit in the corresponding direction.
- If a TrackCast remote was included, verify it enters TrackCast mode by pressing the T button and that the unit responds to the TrackCast toggle.

NOTE: If either remote does not respond, refer to the Remote Pairing procedure in the Operating Instructions to re-pair it. Only one remote of each type should be paired — pairing a new remote removes all previous pairings for that remote type.

11. Pre-Power Safety Check and First Power-On

Before applying power for the first time, confirm all of the following:

- All mount bolts are fully tightened.
- Both compression fitting rings are firmly tightened on the outer shaft.
- The extension pole coupler hex screws are fully tightened.
- The transducer cable slack loop is set correctly — enough for full rotation, not enough to reach the propeller.
- The transducer has full clearance from the trolling motor propeller through the entire rotation range. If not already verified manually, rotate the inner shaft by hand through the full range now and confirm clearance.
- Power leads are connected correctly: red to positive, black to negative.

Once all checks are complete, power on the unit by rotating the ON/OFF speed knob on the foot pedal clockwise past the click point. The arrow on the head unit will illuminate yellow, indicating the unit is in Manual mode and ready for use.

TIP: On first power-on, exercise the unit through its full range of motion at low speed using the foot pedals while watching the transducer cable and all hardware. This is the best opportunity to catch any cable routing issues or loose fittings before the boat is on the water.