

LOWRANCE®

ActiveTarget® 2

Installation Manual
English



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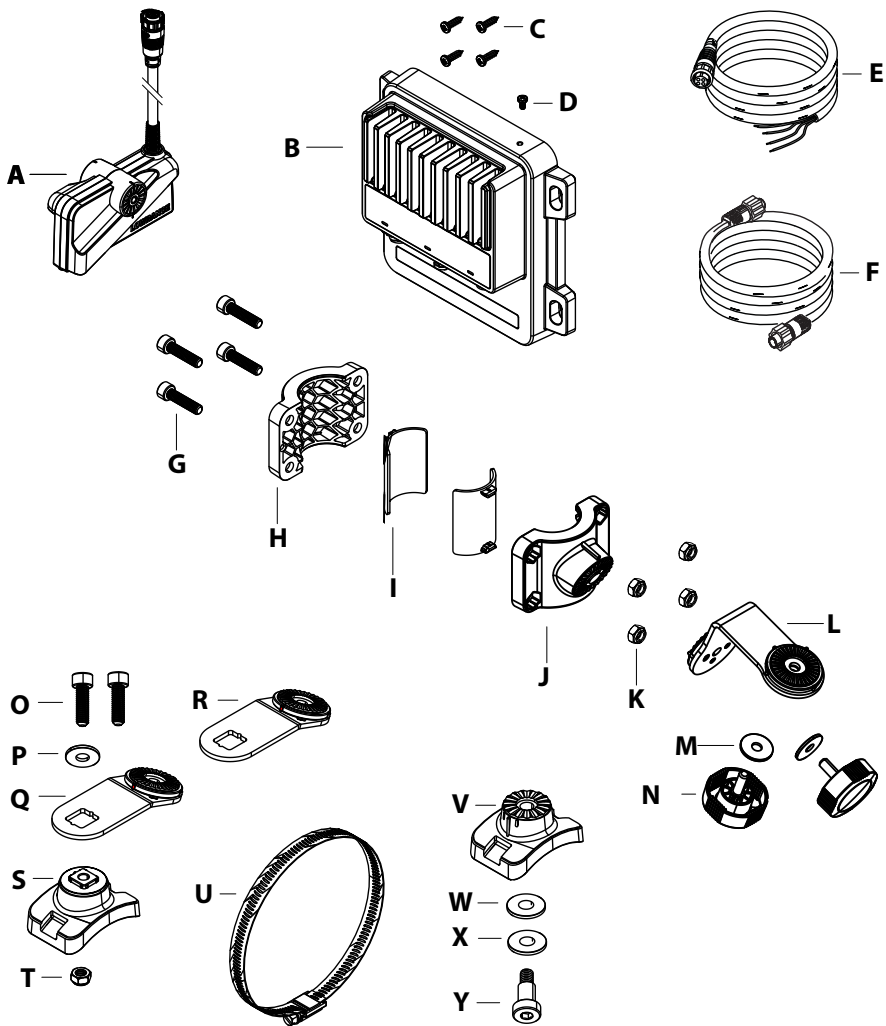
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INTRODUCTION

ActiveTarget 2 is the next-generation ActiveTarget live sonar, offering improved, single-view images of fish locations around your boat. In addition, if connected to a Lowrance HDS Pro multi-function display, you can install two ActiveTarget 2 systems and view simultaneous dual images without transducer interference.

This manual should be used in conjunction with the installation manual provided with your multi-function display.

PARTS INCLUDED



- A** Transducer
- B** Sonar module
- C** Sonar module mounting screw, 4x
- D** M4 sonar module grounding screw
- E** Power cable
- F** Ethernet cable

Shaft mount clamp (pre-assembled)

- G** M6x20 cap screw, 4x
- H** Shaft back collar
- I** Rubber shaft collar insert, 2x
- J** Shaft front collar
- K** M6 nut, 4x
- L** Shaft mount bracket arm
- M** M6 metal washer, 2x
- N** Transducer arm knob, 2x

Scout motor mount clamp (pre-assembled)

- O** M6x20 cap screw, 2x
- P** M6 metal washer
- Q** Motor mount scout bracket arm
- R** Motor mount scout bracket arm (for shallow water less than 3 m (10 ft))
- S** Scout mounting bracket
- T** M6 nut
- U** Hose clamp

Down/forward motor mount clamp

- V** Down/forward mounting bracket
- W** Rubber washer
- X** M8 metal washer
- Y** Shoulder bolt

SONAR MODULE INSTALLATION

⚠ WARNING: Always wear appropriate eye wear, ear protection and dust mask when drilling, cutting, or sanding. Remember to check the reverse side of all surfaces whenever drilling or cutting.

Choose location

Choose a mounting location carefully. Make sure there are no hidden electrical wires or other parts behind the panel before you drill or cut. Ensure any cutting or drilling is done in a safe position and will not weaken the boat's structure. If in doubt, consult a qualified boat builder or marine electronics installer.

Do not:

- Mount where it can be used as a hand hold.
- Mount where it will interfere with the operation, launching or retrieving of the boat.
- Mount where it might be submerged or exposed to moisture.
- Mount in a way that moisture or condensation follows the cables into the device.

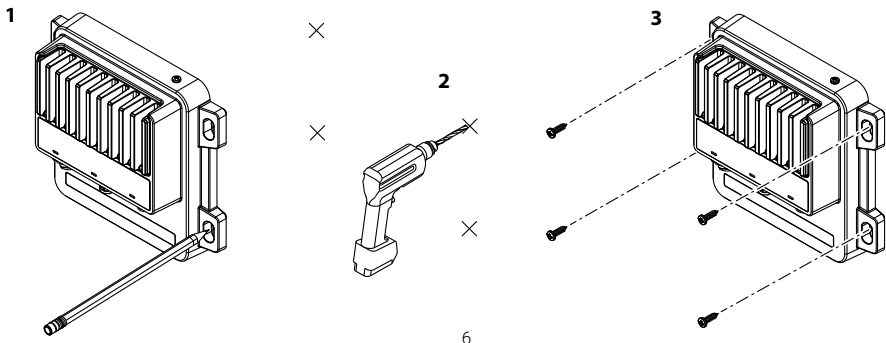
Do:

- Consider the overall width and height requirements.
- Leave sufficient clearance to connect all relevant cables.
- Check it is possible to route cables to the intended mounting location.
- Leave enough unobstructed space above and below the module to ensure it cools adequately and the ambient temperature does not exceed 55°C (131°F). If overheating is a concern, consider additional ventilation, such as a vent or extraction fan.

⚠ WARNING: Inadequate ventilation and subsequent overheating of the equipment may cause unreliable operation and reduced service life. Exposing the equipment to conditions that exceed the specifications could invalidate your warranty.

Mount sonar module

Mark the screw locations using the module as a template. Drill the pilot holes. Secure the module using fasteners suitable for the material you're mounting the module to.



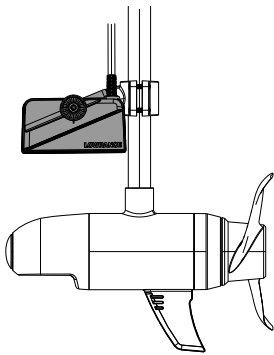
TRANSDUCER INSTALLATION: SINGLE VIEW

You can mount the transducer to the shaft or motor of your trolling motor to achieve three possible views:

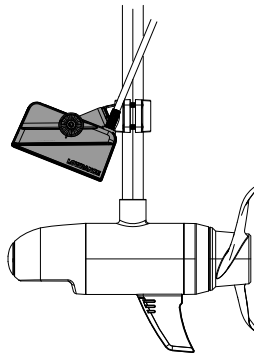
- **Down.** Use for vertical fishing to see what is below the transducer. Watch your lure and fish movements in real-time.
- **Forward.** Use to see fish and structure in front of the transducer. Know the depth of the fish and structure to target your next cast.
- **Scout.** Use to scan large areas for fish and structure. Search for schooling fish and know the direction of your next cast.

Shaft mounting

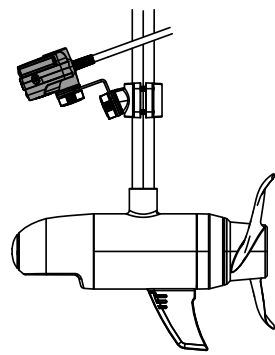
A transducer mounted to the shaft can be positioned for all three views:



Down

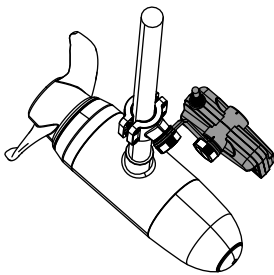


Forward

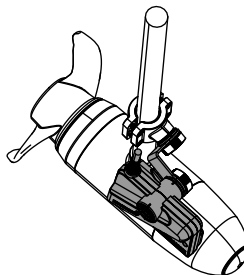


Scout

It can be mounted on the port or starboard side of the shaft.



Port

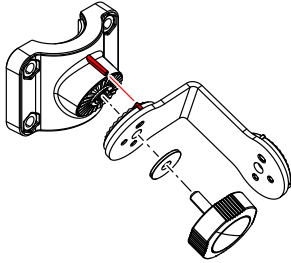


Starboard

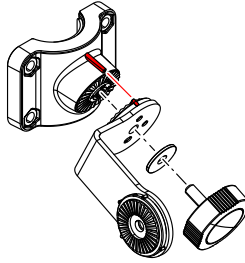
Down, forward or scout view

Use one knob and washer to attach the short side of the bracket arm to the shaft front collar. Align the lines on the arm with the lines on the collar to achieve the desired view.

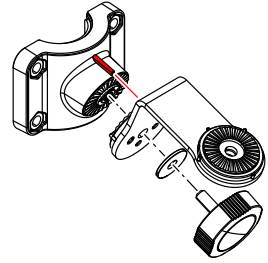
→ **Note:** If you have a pre-assembled shaft mount clamp in scout view, you can readjust it to the down/forward position by loosening the knob and rotating the arm.



Down/forward (port)



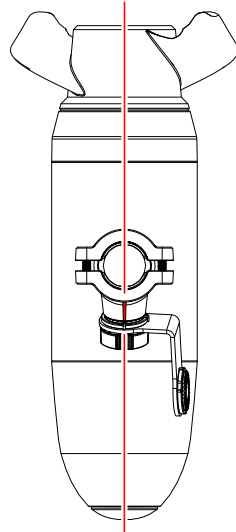
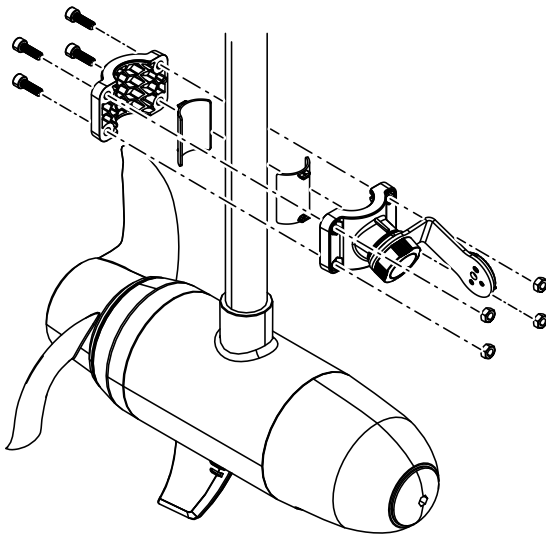
Down/forward (starboard)



Scout (port & starboard)

To create the clamp, align the front and back collars and rubber inserts with the centerline of the trolling motor. Ensure the shaft front collar is angled in the downward position (arrows on both sides of the collar indicate the top).

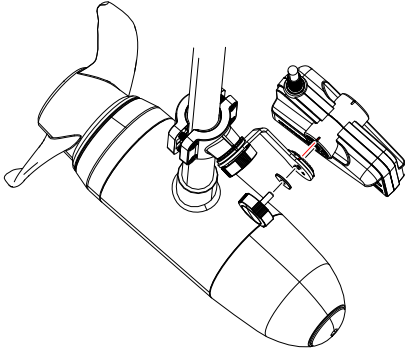
→ **Note:** If you have a pre-assembled clamp, you'll need to unscrew the front and back collars and reassemble the clamp as shown.



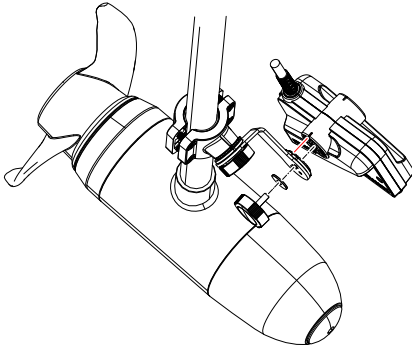
Secure the clamp to the trolling motor shaft with the cap screws and nuts. Use the arm to finely adjust the alignment before securing the clamp.

⚠ WARNING: Tighten the screws by hand and not electric drill. Tighten them just enough to prevent movement under normal use. Do not use any type of thread-locking compound on the cap screws or nuts as it may degrade the quality of the bracket and cause it to break.

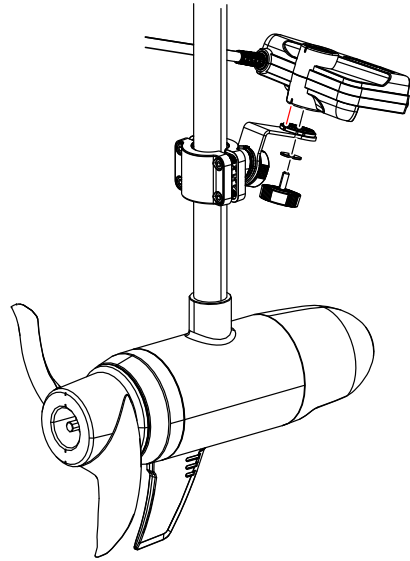
Use the remaining arm knob and washer to attach the transducer to the bracket arm. Align the lines on the arm with the lines on the transducer.



Down



Forward

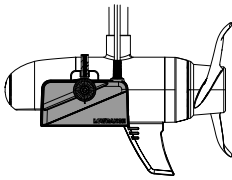


Scout

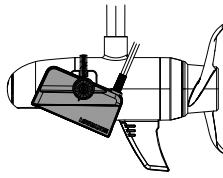
⚠ WARNING: When installing your transducer, leave enough slack in the cable so you can adjust the transducer to all possible views (down, forward or scout). Also, leave enough slack in the cable loop so the motor shaft can spin all the way around without damaging the cable.

Motor mounting

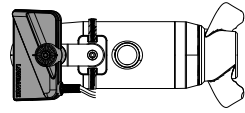
A transducer mounted to the trolling motor can be positioned for all three views:



Down

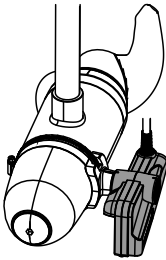


Forward

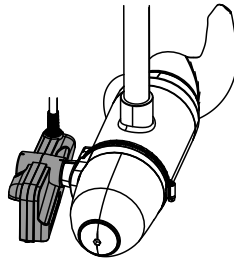


Scout

Down and forward views can be achieved on the port or starboard side of the motor:



Port

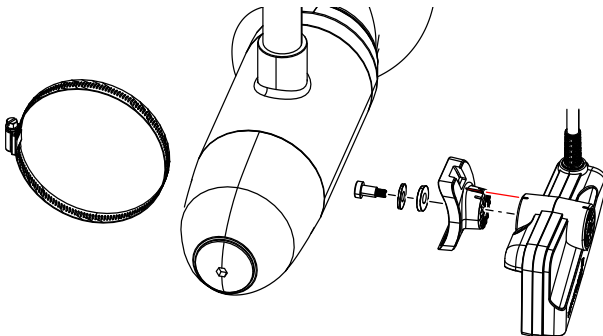


Starboard

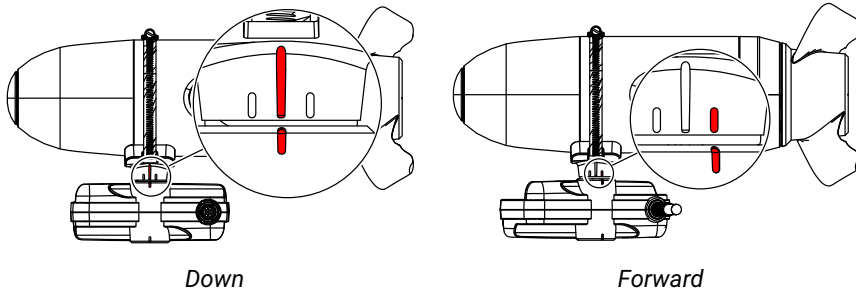
Down or forward view

Use the shoulder bolt, M8 metal washer then rubber washer to attach the down/forward mounting bracket to the transducer.

Unscrew the hose clamp, wrap it around the motor and through the mounting bracket slots. Re-screw the hose clamp to secure the transducer to the motor. Tighten just enough to prevent the transducer from moving during normal use.



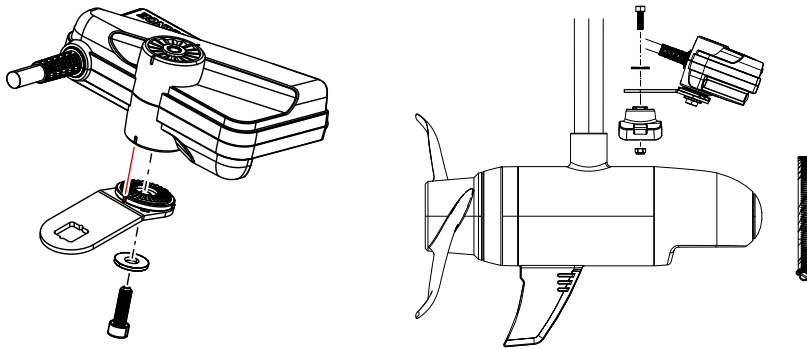
Once attached to the motor, orient the transducer to the down or forward view by firmly gripping and rotating the transducer until the alignment marks match.



Scout view

Use a M6 cap screw and metal washer to attach a motor mount scout bracket arm (the shallow water bracket is ideal for depths less than 3 m (10 ft)) to the transducer. Align the lines on the arm with the lines on the transducer. Use the nut and remaining screw and washer to attach the scout mounting bracket to the other end of the bracket arm.

→ **Note:** If you have a pre-assembled scout motor mount clamp, you can easily swap out the standard bracket arm for the shallow water bracket arm.



Unscrew the hose clamp, wrap it around the motor and through the scout mounting bracket slots. Align the scout mounting bracket with the centerline of the trolling motor. Re-screw the hose clamp to secure entire assembly to the motor. Tighten just enough to prevent the transducer from moving during normal use.

Transom mounting

If you don't have a trolling motor on your vessel, you can install a single ActiveTarget 2 on the transom. A transom bracket is sold as a separate accessory and allows a transducer to be oriented in down or forward view. For mounting instructions, see the ActiveTarget Transom Bracket Installation Guide that comes with the accessory.

TRANSDUCER INSTALLATION: DUAL VIEWS

To view two sonar images on your multi-function display (MFD), you can install two ActiveTarget 2 systems (two sonar modules and two transducers) on your boat. The sonar modules are synchronized using the blue wire in the power cable and run simultaneously without interference between them. You can install the transducers on the same trolling motor to achieve the following dual views:

- Forward and scout
- 180° (forward and back view)
- Scout wide (scout and scout view that requires an optional accessory bracket).

Forward and scout views can be displayed as a split screen (two images side by side) on HDS Pro, HDS Live, HDS Carbon and Elite FS or as full screen on two separate MFDs.

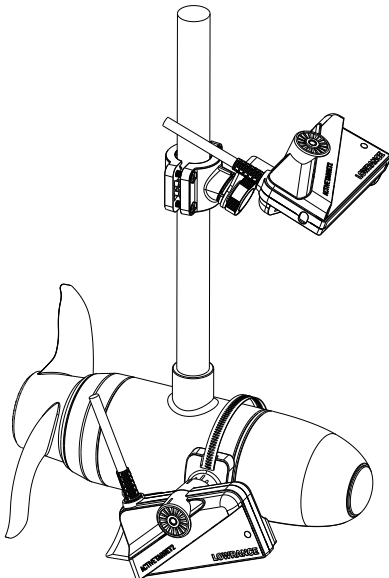
Scout wide and 180° views display as composited images (two images blended at the center to make a single picture) on HDS Pro only.

Forward and scout view

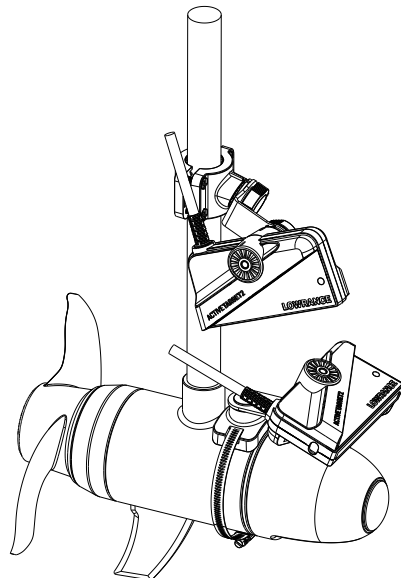
The forward and scout view can be achieved by mounting:

- the scout transducer on the shaft and forward transducer on the motor
- the forward transducer on the shaft and the scout transducer on the motor
- both the forward and scout transducers on the motor.

To attach transducers to the shaft and motor in either scout or forward view, follow the instructions in the “Transducer installation: single view” section of this manual.

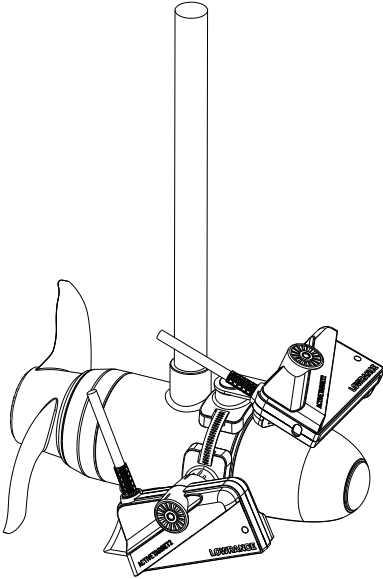


Forward on motor and scout on shaft



Forward on shaft and scout on motor

To attach both forward and scout transducers on the motor, prepare a transducer for each view by following the instructions in the “Motor mounting” section of this manual. Then use a single hose clamp to attach both assemblies to the motor. Align the mounting brackets to the motor just as you would in a single-view installation. Once attached, orient the forward transducer to forward view.



Forward and scout on motor

180° view

180° view (composite forward and back) is achieved by installing:

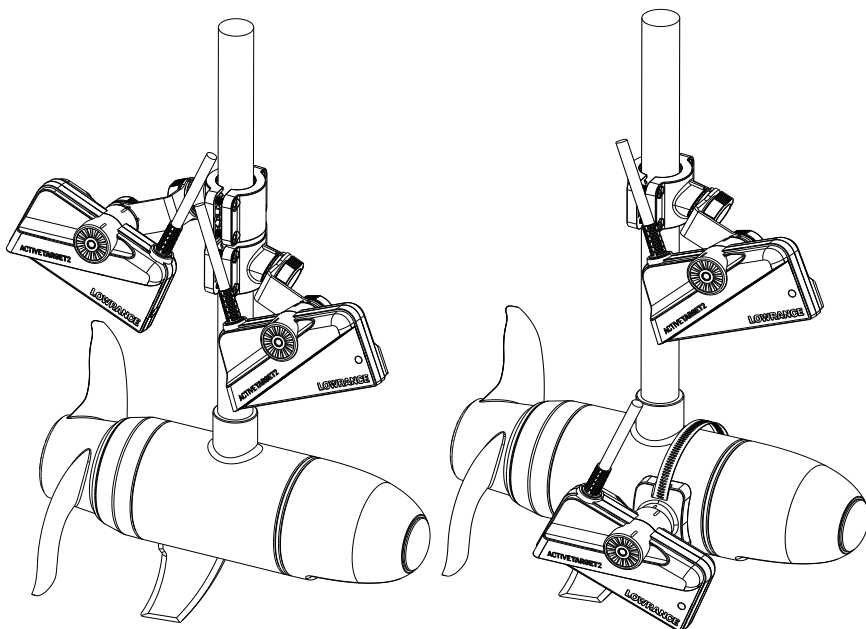
- both the forward and back transducers on the shaft
- the forward transducer on the shaft and back transducer on the motor.

To achieve the 180° view with two transducers on the shaft, attach one shaft mount clamp with transducer in forward (starboard) view and the other in forward (port) view. Then rotate one of the clamps 180° on the shaft so both transducers are on the same side of the motor.

⚠ WARNING: Ensure the backwards-facing transducer is high enough on the shaft to avoid interference with the trolling motor propeller.

To achieve the 180° view with one transducer on the shaft and one the motor, attach a shaft mount clamp with transducer in forward view and a motor mount clamp with transducer in back view.

→ **Note:** The down/forward motor mount bracket has three lines on it. The two shorter lines can be forward or back, depending on which side of the transducer is assembled to the bracket and which side of the motor its installed on (port or starboard).

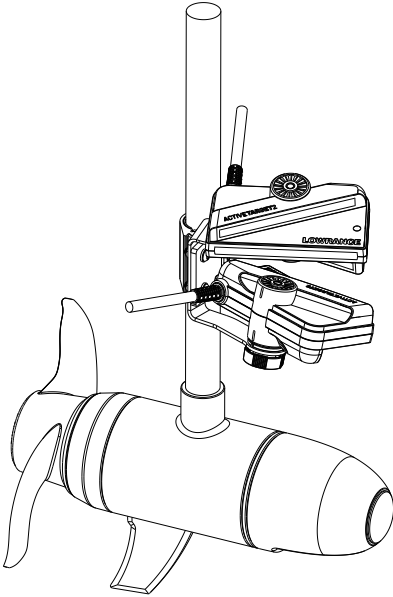


Forward and back on shaft

Forward on shaft and back on motor

Scout wide view

The scout wide view (composite scout and scout) is achieved by installing a non-adjustable bracket arm that attaches to the trolling motor shaft. The scout wide bracket is sold as a separate accessory and holds two ActiveTarget 2 transducers at proper scout angles. For mounting instructions, see the ActiveTarget 2 Scout Wide Bracket Installation Guide that comes with the accessory.



WIRING

⚠ WARNING: Before starting the wiring, turn the electrical power off. If power is left on or turned on while wiring, fire, electrical shock or other serious injury may occur. Make sure the power supply voltage is compatible with the unit.

Do not:

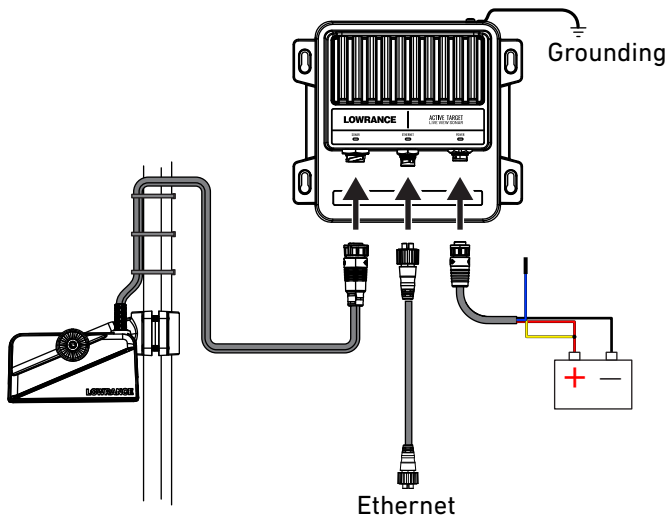
- Make sharp bends in the cables.
- Run cables in a way that water flows into the connectors.
- Run the data cables adjacent to radar, transmitter, or large/high current carrying cables or high frequency signal cables.
- Run cables so they interfere with mechanical systems.
- Run cables over sharp edges or burrs.
- Extend or shorten the supplied transducer or Ethernet cables. If you need extra length, you must buy a longer Ethernet cable or a transducer extension cable.

Do:

- Make drip and service loops.
- Solder/crimp and insulate connections if extending or shortening the power cable.
- Leave room around the connectors to ease the plugging and unplugging of cables.
- Use cable ties on all cables to keep them secure.

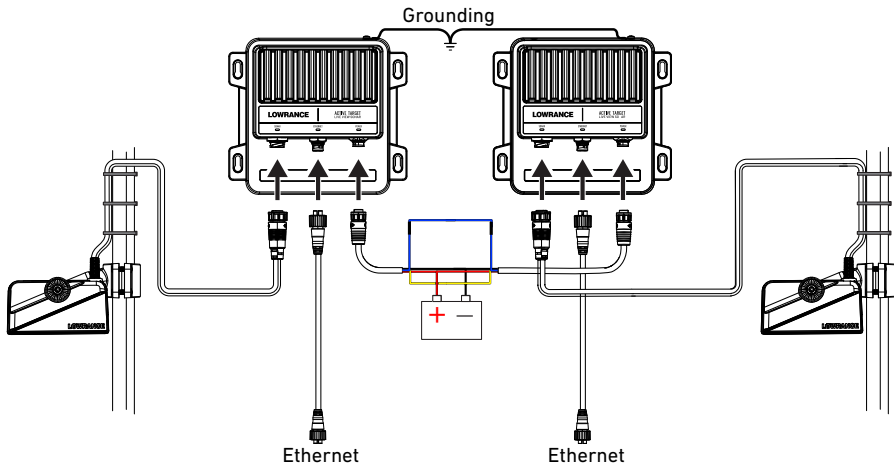
➔ **Note:** Take care not to overtighten the cable ties to avoid damaging the cables.

Wiring diagram for a single-view system:



➔ **Note:** For alternative ways to connect the yellow wire, refer to page 18.

Wiring diagram for a dual-view system:



→ **Note:** For alternative ways to connect the yellow wire, refer to page 18.

Connect transducer

Connect the transducer cable to the **SONAR** port of the sonar module. Securely support the cable with cable ties.

⚠ WARNING: Leave enough slack in the cable so you can adjust the transducer to all possible views (forward/down/scout). Also leave enough slack in the cable loop to ensure the motor shaft can spin all the way around without damaging the cable.

Connect Ethernet cable

Connect the Ethernet cable to the **ETHERNET** port of the sonar module. Connect the other end to your multi-function display (MFD) or Ethernet expansion device.

Connect power cable

The sonar module can be powered by a 12 or 24 V DC system. It is protected against reverse polarity, under voltage, and over voltage (for a limited duration).

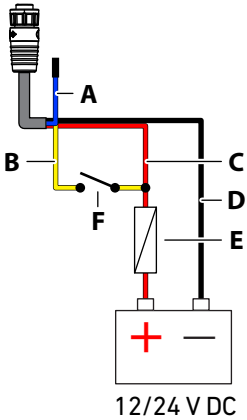
The yellow wire in the power cable is used to control how the unit is turned on and off.

The blue wire isn't used in a single view system (one sonar module and transducer), but it is used in a dual view system (two sonar modules and transducers).

⚠ WARNING: You should always connect the positive supply wire (red) to (+) DC with a fuse or circuit breaker. For recommended fuse rating, refer to the Technical specifications section of this manual.

Power controlled by external switch

To turn the sonar module ON/OFF when power is applied/removed by an external switch, connect the yellow wire to the red wire via a switch after the fuse.

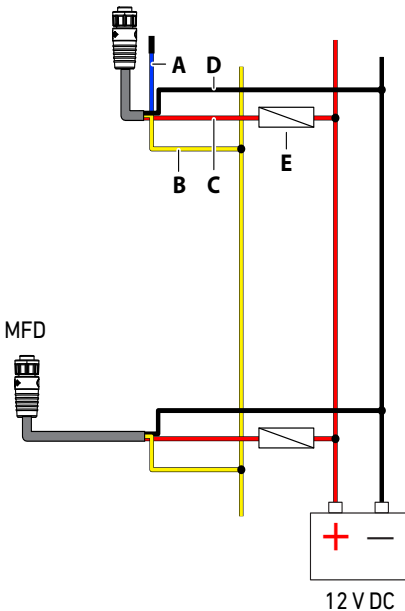


| Key | Description | Color |
|-----|---|--------|
| A | Synchronization wire (used only in dual view systems) | Blue |
| B | Accessory wake up | Yellow |
| C | + 12/24 V DC | Red |
| D | DC negative | Black |
| E | Fuse | |
| F | Switch | |

Power controlled by MFD/power bus

To turn the sonar module ON/OFF when power is applied/removed to your multi-function display (MFD), connect the yellow wire to the display unit's yellow wire.

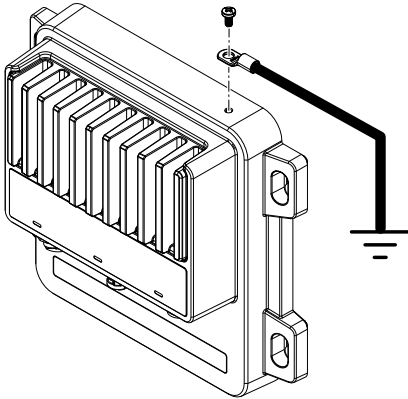
→ **Note:** This ON/OFF functionality is supported in HDS Pro, HDS Live and HDS Carbon multi-function displays.



| Key | Description | Color |
|-----|---|--------|
| A | Synchronization wire (used only in dual view systems) | Blue |
| B | Accessory wake up | Yellow |
| C | + 12 V DC | Red |
| D | DC negative | Black |
| E | Fuse | |

Ground sonar module

You can earth-ground the sonar module using the terminal on the top of the case. This terminal is DC isolated from power to eliminate the risk of galvanic corrosion.



For installations that suffer from noise issues, the grounding terminal allows you to connect to various possible ground points. The grounding point can be the vessel's bonded earth-ground, non-bonded RF ground, or battery minus (DC negative). We recommended you use a 4 mm² (12 AWG) or thicker wire.

→ **Note:** No DC power will flow through the connected conductor.

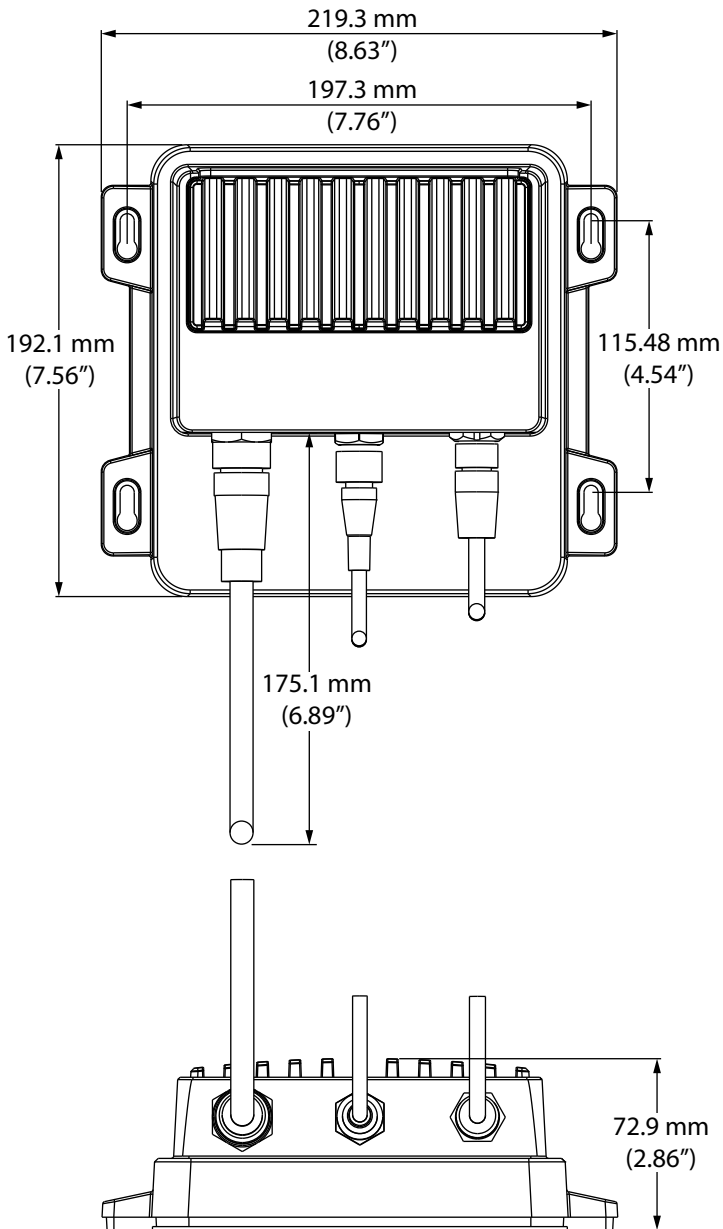
LED indicators

LEDs on the sonar module indicate the module's status.

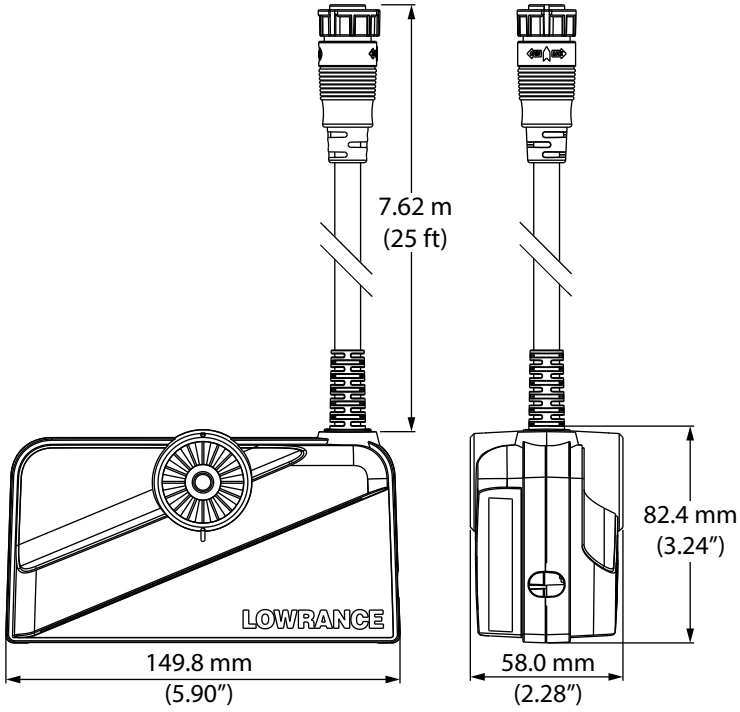
| LED | Description |
|------------|---|
| Power | Solid green during power up. When started, alternates between green and red. |
| Ethernet | Flashes when there's network activity. |
| Transducer | Solid green when active. OFF when inactive. |

DIMENSIONS

Sonar module



Transducer



TECHNICAL SPECIFICATIONS

Sonar module

| Environmental | |
|-----------------------------|--------------------------------|
| Storage temperature | -30°C to 70°C (-22°F to 158°F) |
| Operating temperature | -15°C to 55°C (5°F to 131°F) |
| IP class | IP67 |
| Electrical | |
| Power supply | 12/24 V DC |
| Operating voltage | 10.8 V DC - 31.2 V DC |
| Current drain (maximum) | 1.5A at 13.8 V |
| Reverse polarity protection | Yes |
| Fuse rating | 5 A |
| Physical | |
| Weight | 1.86 kg (4.12 lbs) |

Transducer

| Environmental | |
|---------------------------------|---|
| Storage temperature | -30°C to 70°C (-22°F to 158°F) |
| Water temperature for operation | 0°C to 35°C (32°F to 95°F) |
| Physical | |
| Weight | 1.21 kg (2.67 lbs) |
| Cable length | 7.62 m (25 ft) |
| Mounting options | Trolling motor shaft Trolling motor lower unit Trolling motor shaft scout wide mount (sold separately) Transom mount (sold separately) |



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