LOWRANCE

ActiveTarget® 2 XL

Installation manual

English

www.lowrance.com

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Trademarks

Warranty

This product's warranty is supplied as a separate document.

Safety, disclaimer and compliance

This product's safety, disclaimer and compliance statements are supplied as a separate document.

More information

Document version: 001

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Contact us

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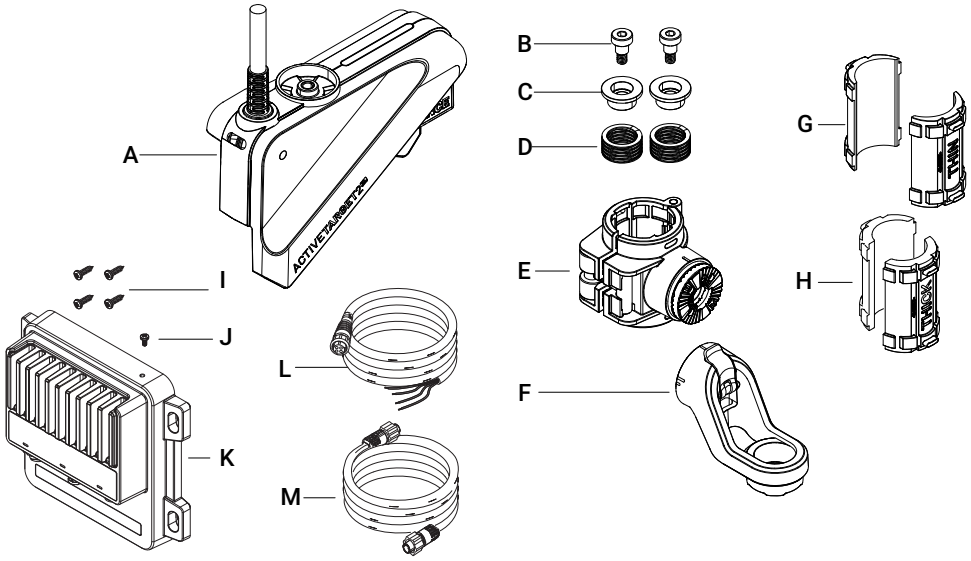
IN THE BOX



A ActiveTarget 2 XL transducer (transducer cable not shown)
B 2x M6-1 x 8 shoulder bolts
C 2x guides
D 2x compression springs
E Shaft clamp
F Arm
G 2x shaft spacers, THIN
H 2x shaft spacers, THICK
I 4x #10 x 3/4, pan, Phillips, self tap screws
J 1x M4-0.7 x 6, pan, Phillips, machine screw
K Sonar module
L Power cable for sonar module
Inline fuse holder and fuse (not shown)
M Ethernet cable
Documentation pack (not shown)

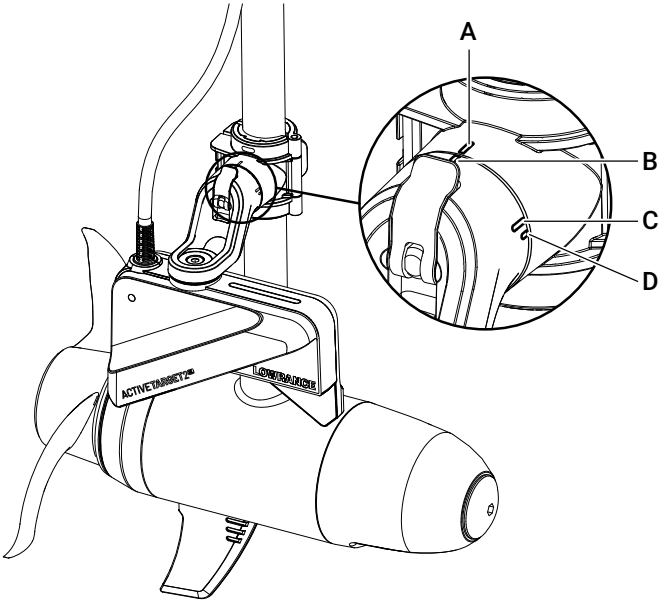
This manual should be used in conjunction with the installation manual provided with your multi-function display.

➔ *Note: For clarity in the diagrams, the transducer cable is not shown in some images.*

TRANSDUCER VIEWS

The shaft mount bracket allows you to orient the transducer to achieve four live sonar views:

- **Forward/Down**. These two views correspond to the same transducer position. Use **Forward** to see the lake bed in front of the transducer. Know the depth of the fish and structure to target your next cast. Use **Down** for vertical fishing to see what is below the transducer.
- **Scout deep (20° from horizontal)**. Use to scan large areas for fish and structure. Search for schooling fish and know the direction of your next cast.
- **Scout shallow (10° from horizontal)**. Use to scan large areas for fish and structure near the surface of the water. Search for schooling fish and know the direction of your next cast.



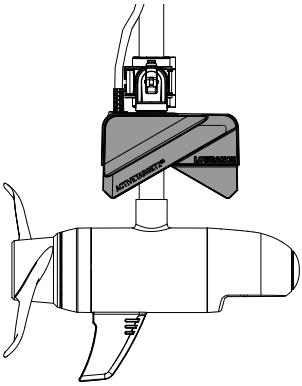
A Selection mark on the shaft clamp
B Alignment mark for Forward/Down view
C Alignment mark for Scout deep view
D Alignment mark for Scout shallow view

The shaft mount is compatible with a range of trolling motor shafts and transducer poles, including Ghost series trolling motors.

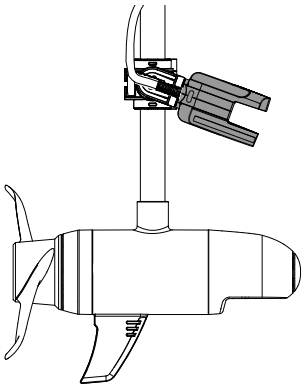
➔ *Note: A separate mounting bracket is available if you are installing the ActiveTarget 2 XL on a Recon trolling motor.*

Transducer orientations for different views

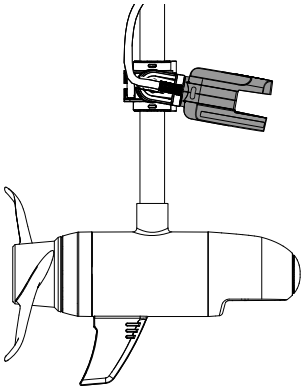
The shaft mount bracket allows for adjusting the transducer to three different orientations to achieve the four different views.



Forward/Down view

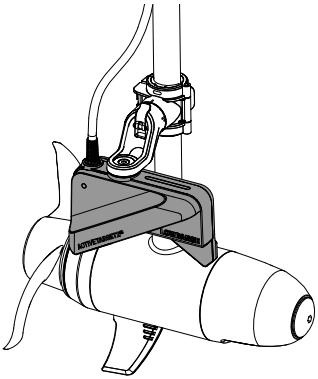


Scout deep view

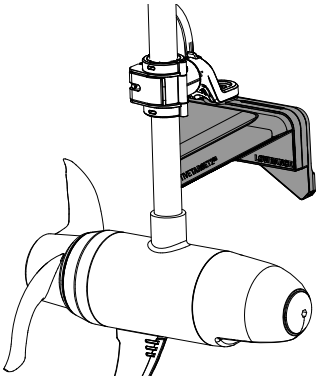


Scout shallow view

The shaft mount bracket can be mounted on the starboard or port side of the trolling motor shaft.



Starboard side,
Forward/Down view



Port side,
Forward/Down view

Assembling the shaft mount bracket

To build the shaft mount bracket, attach the arm to the shaft clamp.

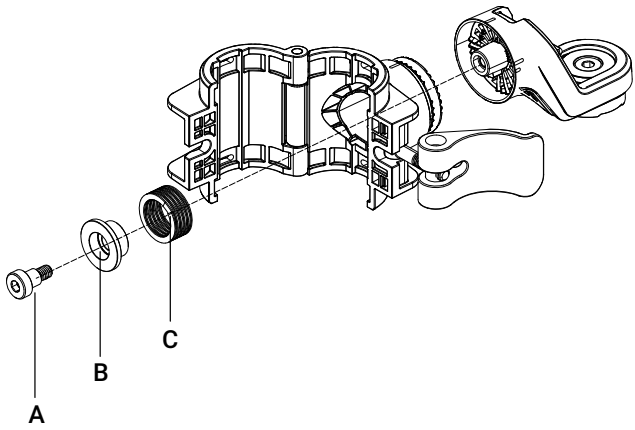
The shaft clamp is preassembled to install the ActiveTarget 2 XL transducer on the starboard side of the trolling motor.

➔ *Note: If you prefer to install the transducer on the port side of the trolling motor, skip to* **Assembling the shaft mount bracket for port installation** *on page* **9**.

1 Fit the arm against the shaft clamp as shown.

2 Fit a compression spring (**C**) and guide (**B**) into the recess on the inside of the shaft clamp. Install the shoulder bolt (**A**) through the guide and spring and use a 5 mm Allen key to tighten the shoulder bolt into the arm.

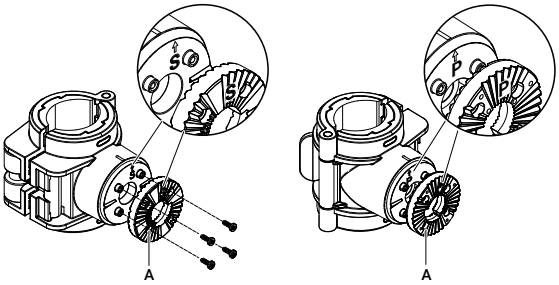
⚠ **IMPORTANT:** Tighten the shoulder bolts by hand, not with an electric drill. Tighten until the shoulder bolt bottoms out on the mating component. Overtightening could cause damage to the components.
The shoulder bolts come with pre-applied thread lock patch. Do not use any other type of thread locking compound, beacuse it could degrade the quality of the bracket and cause it to break.



Assembling the shaft mount bracket for port installation

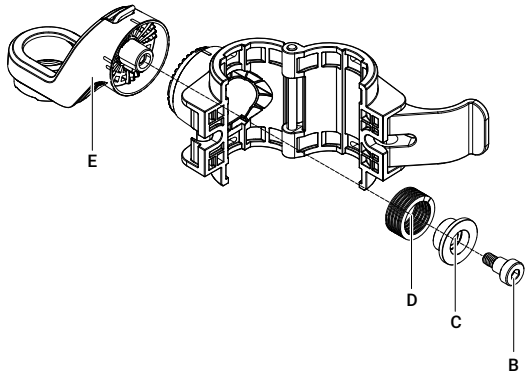
If you want to install the transducer on the port side of the trolling motor, reconfigure the shaft clamp as follows:

1. Use a T8 Torx® driver or bit (supplied) to remove the four screws securing the detent plate (**A**) onto the shaft clamp. Remove the detent plate.
2. Flip over the detent plate (**A**) so that the side marked **P** faces outwards.
   - When the shaft clamp is configured for a port installation, the letter **P** faces outwards on the detent plate.
   - When the shaft clamp is configured for a starboard installation, the letter **S** faces outwards on the detent plate.
3. Fit the detent plate back against the shaft clamp. Use a T8 Torx® driver or bit to reinstall the four screws securing the detent plate to the shaft clamp.



4. Fit the arm (**E**) onto the reconfigured shaft clamp. Use a 5 mm Allen key to tighten the bolt (**B**) through the guide (**C**), spring (**D**), and shaft clamp.

> ⚠ **IMPORTANT:** Tighten the shoulder bolts by hand, not with an electric drill. Tighten until the shoulder bolt bottoms out on the mating component. Overtightening could cause damage to the components.
> The shoulder bolts come with pre-applied thread lock patch. Do not use any other type of thread locking compound, beacuse it could degrade the quality of the bracket and cause it to break.



Attaching the shaft mount bracket to the trolling motor

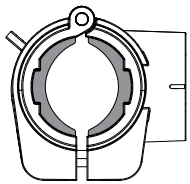
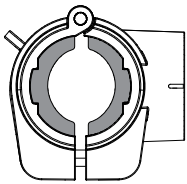
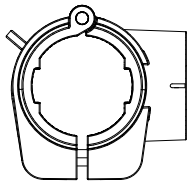
Move to the trolling motor.

➔ *Note: Deploying the trolling motor, if possible, may simplify the installation.*

➔ *Note: Do not use a shaft mount bracket on a Recon trolling motor or any other pivot-style trolling motor.*

1 Clip the molded spacers (supplied) into the inside of the shaft clamp if they are needed to fit the shaft clamp onto your transducer pole or trolling motor.

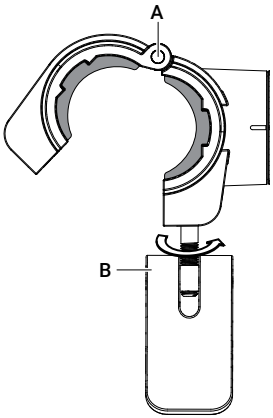
The following spacers are recommended:

Thin spacers	Thick spacers	No spacers
Use two thin spacers for • Ghost series trolling motors • Other round poles with diameter 29–33 mm (1.14–1.30 in) including Power-Pole® and Ultrex™	Use two thick spacers for • Round poles or shafts with diameter 27–29 mm (1.07–1.14 in)	Do not use spacers for • Ultrex™ Quest™
		

2 Make sure the trolling motor shaft is clean and dry.

3 The pivot pin of the shaft clamp (**A**) should be positioned towards the nose cone of the trolling motor.

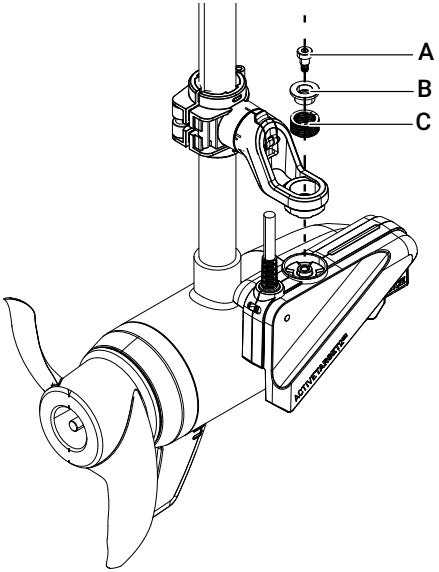
4 Make sure the shaft mount bracket fits the shaft securely. Make fine adjustments to the fit of the shaft clamp by opening the shaft clamp locking lever (**B**) and screwing it either clockwise (to tighten the clamp) or counterclockwise (to loosen the clamp).



Attaching the transducer

1 Position the transducer with its cable at the propeller end of the trolling motor.

2 Attach the transducer onto the assembled bracket. Fit a compression spring (**C**) and guide (**B**) into the arm as shown. Install the shoulder bolt (**A**) through the guide and spring and use a 5 mm Allen key to tighten the shoulder bolt into the transducer.



⚠ **WARNING:** When securing the transducer cable, leave enough slack in it so you can adjust the transducer to all possible views (Forward/Down, Scout deep or Scout shallow) when you want to. Leave enough slack in the cable loop so the motor shaft can spin all the way around without damaging the cable.

Changing views

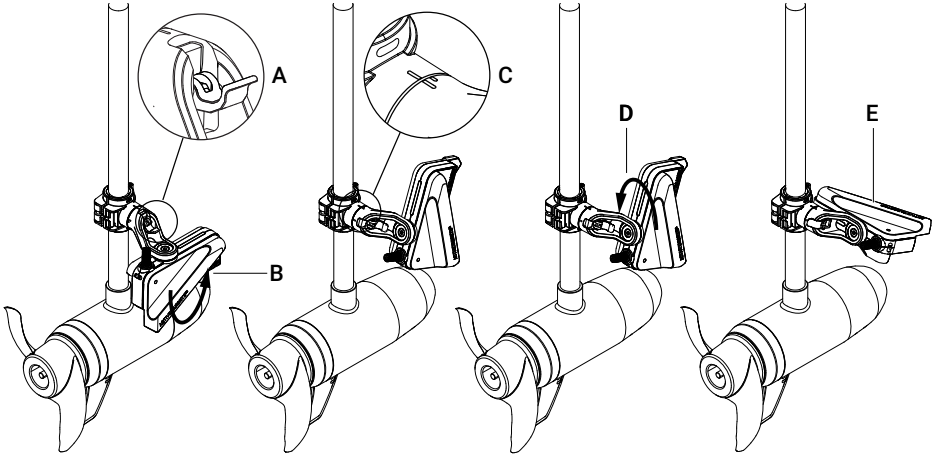
Changing from Forward/Down view to one of the Scout views

1 Open the locking arm (**A**).

2 Rotate the whole arm, with the transducer, upwards (**B**), so the mark for the view you want aligns with the selection mark on the shaft clamp (**C**).

➔ *Note: The arm and transducer rotate around the side attachment point in one piece. Built-in mechanical stops prevent the arm from rotating past the desired positions.*

⚠ **WARNING:** Built-in mechanical stops prevent the arm from rotating past the positions described. Damage to the shaft mount assembly may occur if you try to force the arm past these positions.



3 Grip the transducer firmly and rotate it 90° towards the shaft (**D**) onto its side (**E**).

➔ *Note: The transducer rotates around its attachment point at the top. There are detents every 90° that lock the transducer into position. Do not rotate past the first detent position. The bracket is firm enough to resist movement when it is underwater, so it may require a bit of force to adjust.*

4 Close the locking arm.

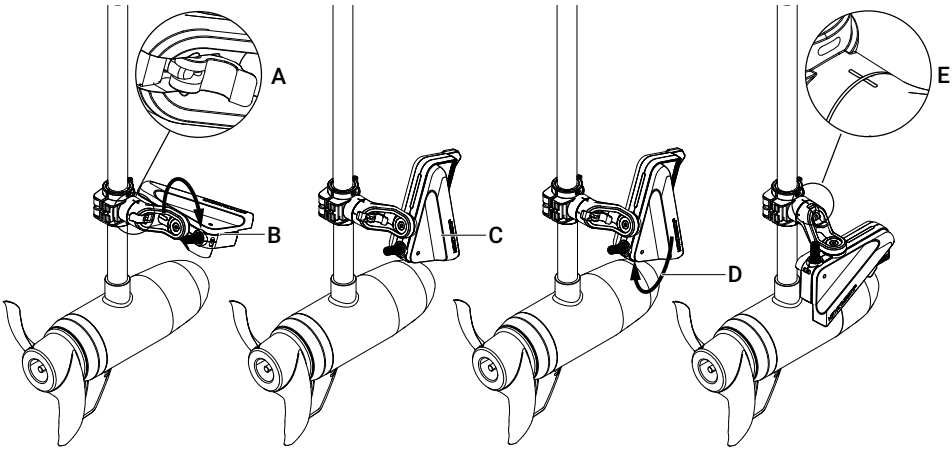
On your multi-function display, assign **Auto** mode or **Scout** mode in the ActiveTarget app when the transducer is in either the Scout deep or Scout shallow position.

Changing from one of the Scout views to Forward/Down view

1 Open the locking arm (**A**).

2 Grip the transducer firmly and rotate it 90° away from the shaft (**B**) into a vertical orientation (**C**).

➔ *Note: The transducer rotates around its attachment point at the top. There are detents every 90° that lock the transducer into position. Do not rotate past the first detent position. The bracket is firm enough to resist movement when it is underwater, so it may require a bit of force to adjust.*



3 Rotate the whole arm, with the transducer, downwards (**D**), so the mark for Forward/Down aligns with the selection mark on the shaft clamp (**D**).

➔ *Note: The arm and transducer rotate around the side attachment point in one piece. Built-in mechanical stops prevent the arm from rotating past the desired position.*

4 Close the locking arm.

> ⚠ **WARNING:** Built-in mechanical stops prevent the arm from rotating past the positions described. Damage to the shaft mount assembly may occur if you try to force the arm past these positions.

On your multi-function display, assign **Auto** mode, **Forward** mode, or **Down** mode in the ActiveTarget app when the transducer is in the Forward/Down position.

➔ *Note: In Auto mode, the multi-function display defaults to Forward when the transducer is in the Forward/Down position.*

TRANSDUCER INSTALLATION: DUAL VIEWS

You can operate two ActiveTarget 2 XL transducers together to create dual views:

- Scout Live 360 view
- Forward and Scout

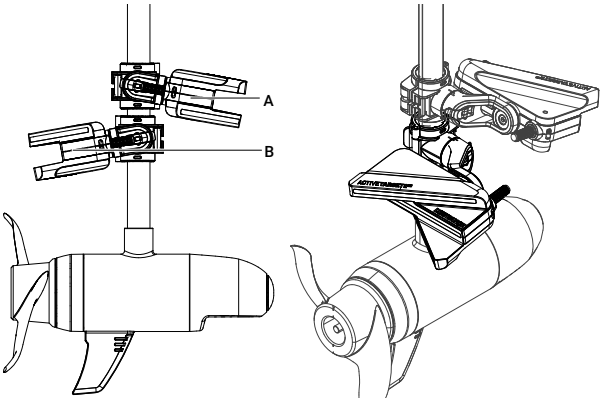
Each ActiveTarget 2 XL transducer needs its own sonar module. The sonar modules are synchronized using the blue wire in the power cable, so they operate simultaneously without interference. Refer to **Connect power cable** on page **18** for wiring.

Scout Live 360 view

Scout Live 360 is an industry-first, 360° live Scout view of the water around your boat, displayed as a composite image on your HDS Pro multi-function display.

Transducer configuration for Scout Live 360

Install two ActiveTarget 2 XL transducers on the shaft of your trolling motor as shown below.



A Front-facing ActiveTarget 2 XL transducer in Scout view
B Rear-facing ActiveTarget 2 XL transducer in Scout view

⚠ **Warning:** Ensure the rear-facing transducer is high enough to avoid interference with the trolling motor propeller.

➔ ***Note:*** *At the completion of the installation, both transducers and their brackets must be on the same side of the trolling motor shaft. This requires one of the shaft mount brackets to be clamped on the shaft backwards. In the steps below, the bracket configured for port is backwards.*

➔ ***Note:*** *The two transducers can be in Scout shallow view, or Scout deep view, however, they must both be in the same view for the image to be processed correctly.*

1 Assemble the shaft mount bracket for the front-facing transducer (**A**) with the arm and transducer on the starboard side. Rotate the transducer on its bracket to one of the Scout views (Scout deep or Scout shallow).

2 Assemble the bracket for the rear-facing transducer (**B**) with the arm and transducer on the **port** side (refer to **Assembling the shaft mount bracket for port installation** on page **9**).

3 Fit this bracket (with transducer attached) **backwards** on the shaft below the front-facing transducer. Rotate the transducer on its bracket to the same Scout view (Scout deep or Scout shallow) as the first transducer.

➔ *Note: The Scout Live 360 view can also be achieved when mounted on the port side. For a port installation, configure the front-facing transducer for a port installation and configure the rear-facing transducer below it for a starboard installation.*

Using Scout Live 360

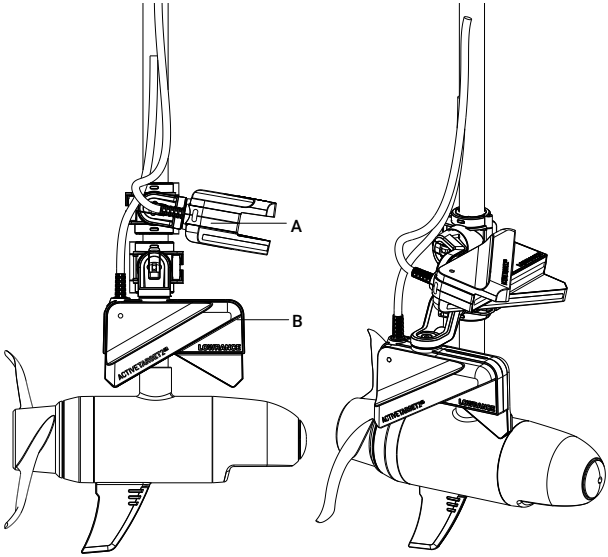
Open the AT Wide app on a HDS Pro display. Navigate to **Settings** > **Sonar**, and select the option to pair the transducers.

➔ *Note: The AT Wide app is only visible on your HDS Pro when the system detects two ActiveTarget 2 XL systems on the same network.*

Forward and Scout view

Forward and Scout view can be displayed as a split panel (two images side by side) on HDS Pro, HDS Live, HDS Carbon and Elite FS 7/9.

Forward and Scout view can also be displayed as full screens on two separate multi-function displays.



A ActiveTarget 2 XL transducer in Scout view
B ActiveTarget 2 XL transducer in Forward/Down view

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.

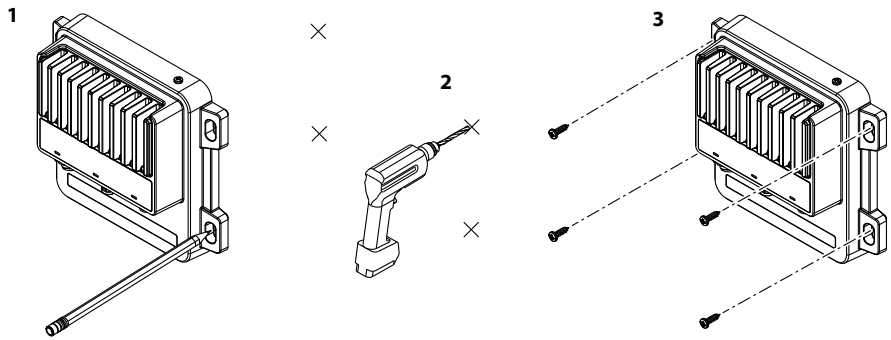
Do:

- 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. (Four #10 x 3/4 self-tapping screws are supplied.)



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:

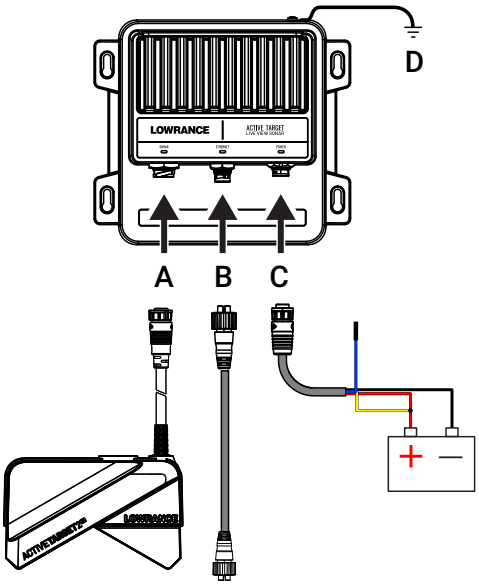
- Make sharp bends in the cables.
- Run cables in a way that water flows into the connectors.
- Run the data cables adjacent to radar, transmitter, or large/high current carrying cables or high frequency signal cables.
- Run cables so they interfere with mechanical systems.
- Run cables over sharp edges 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.*

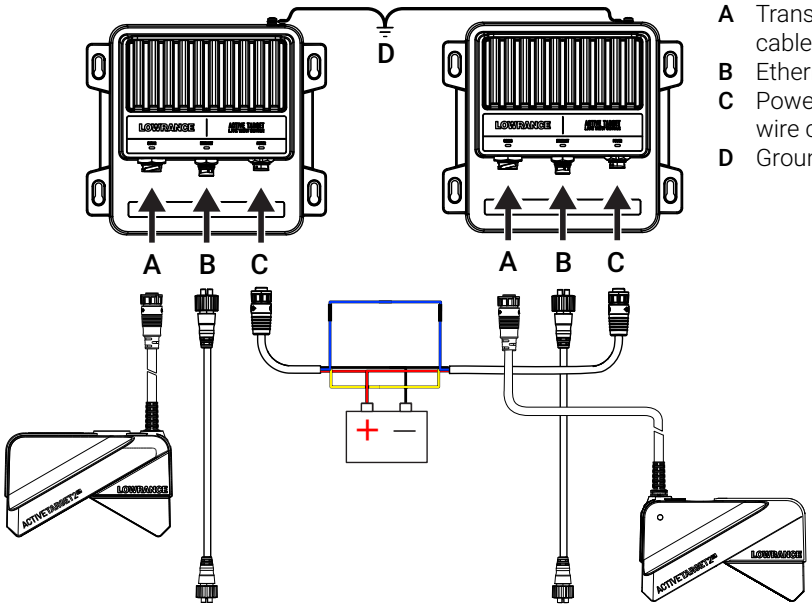
Wiring diagram for a single-view system:



A Transducer cable
B Ethernet
C Power
D Grounding

➔ ***Note:*** *For alternative ways to connect the yellow wire, refer to page* **19**.

Wiring diagram for a dual-view system:



A Transducer cables
B Ethernet cables
C Power, with blue wire connected
D Grounding

➔ *Note: For alternative ways to connect the yellow wire, refer to page* **19**.

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).

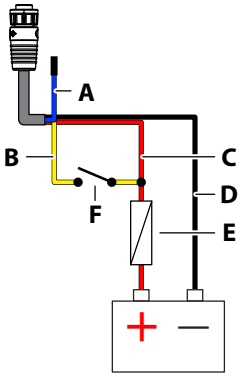
The yellow wire in the power cable is used to control how the unit is turned on and off.

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 (or OFF) when power is applied (or removed) by an external switch, connect the yellow wire to the red wire via a switch after the fuse.

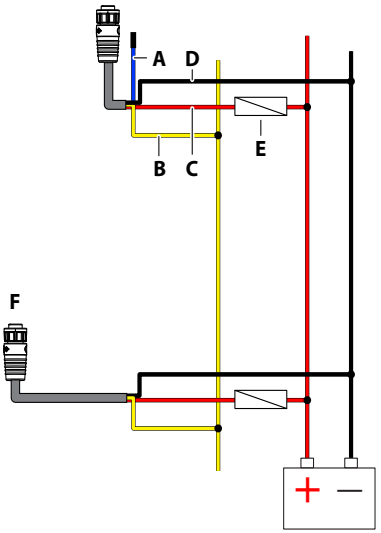


Key	Description	Color
A	Synchronization wire (used only in dual view systems)	Blue
B	Accessory wake up	Yellow
C	+ 12/24 V DC	Red
D	DC negative	Black
E	Fuse	
F	Switch	

Power controlled by MFD/power bus

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

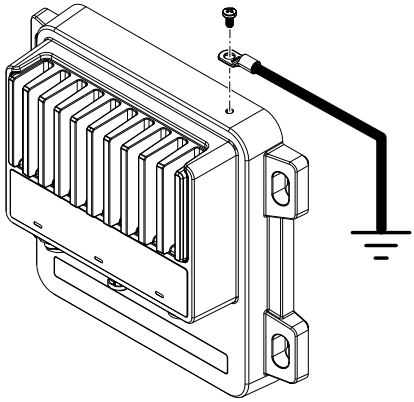
➔ *Note: This ON/OFF functionality is supported in HDS Pro, HDS Live and HDS Carbon multi-function displays.*



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	
F	MFD power cable	

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. (A M4-0.7 x 6 machine screw is supplied for the earth-grounding connection.)



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 mm^2 (12 AWG) or thicker wire.

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

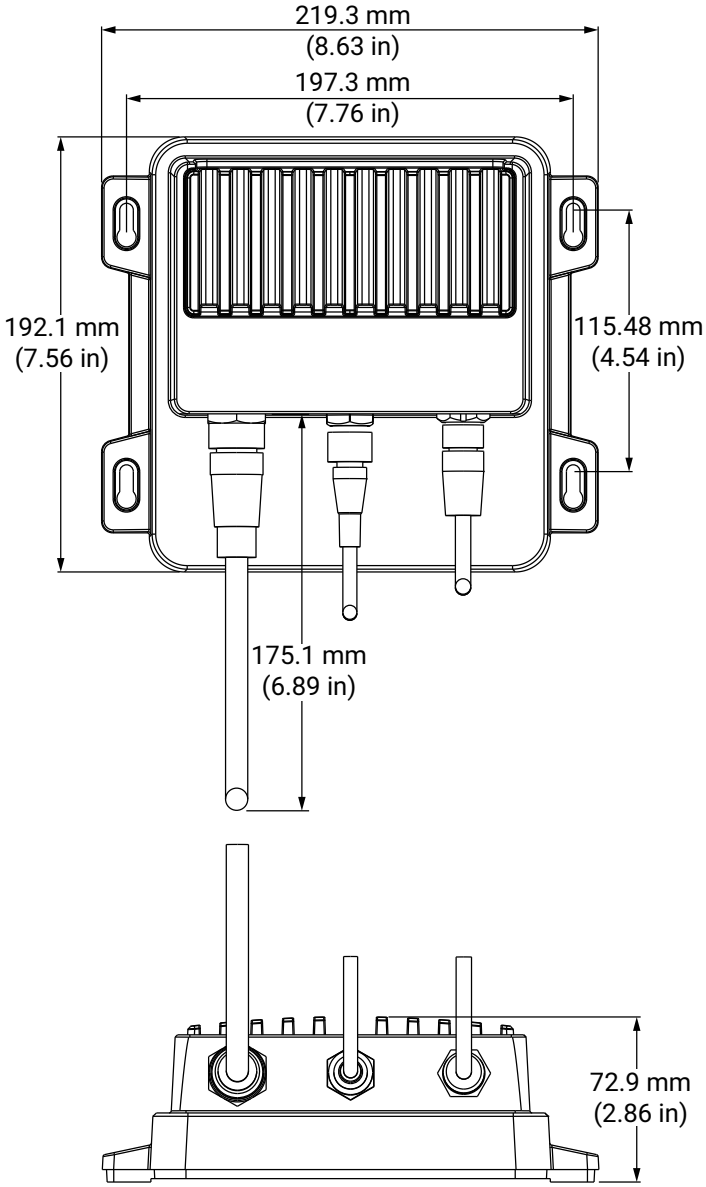
LED indicators

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

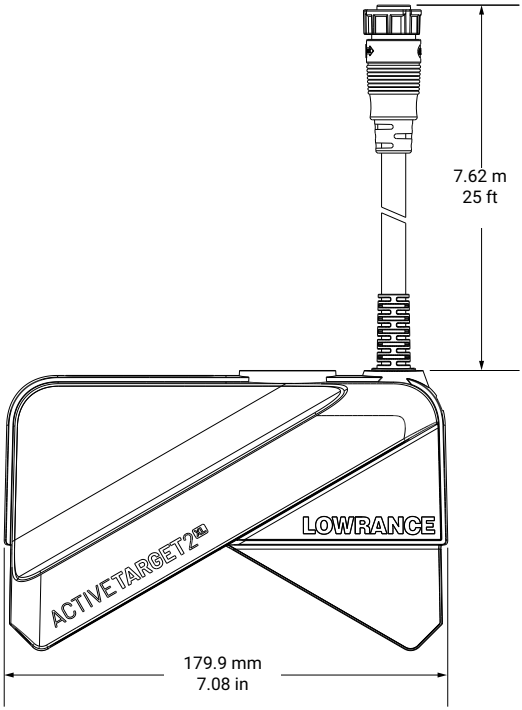
LED	Description
Power	Solid green during power up. When started, alternates between green and red.
Ethernet	Flashes when there's network activity.
Transducer	Solid green when active. OFF when inactive.

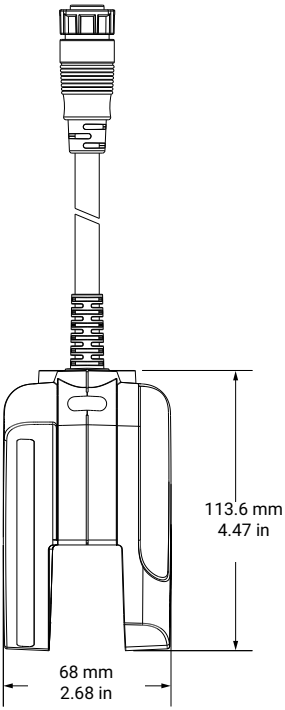
DIMENSIONS

Sonar module



ActiveTarget 2 XL 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)	1.5 A at 13.8 V
Reverse polarity protection	Yes
Fuse rating	5 A
Physical	
Weight	1.86 kg (4.12 lb)

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 (transducer and cable)	1.61 kg (3.55 lb)
Cable length	7.62 m (25 ft) 3.05 m (10 ft) sold with transducer-only SKU
Mounting options	Shaft mount (included) Recon trolling motor mount (sold separately)

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