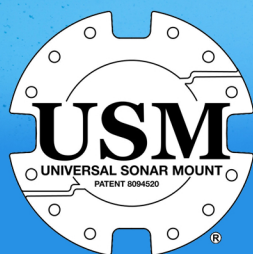


ECHO 81

YOUR SUBSEA SOLUTIONS SPECIALIST



UNIVERSAL SONAR MOUNT

Universal Sonar Mount is the exclusive manufacturer of their products. Made primarily from hard coat anodized marine-grade aluminum, USM is precision engineered to perform reliably in the harshest conditions. Thoughtful design, custom extrusions, CNC machining and intricate welding processes are central to our equipment's unique versatility.

Concept

The Universal Sonar Mount has been extensively prototyped and tested on the water, designed to handle the demanding and unpredictable nature of sonar operations. Modular components provide precise and simple configurability for a wide range of different sonars and sensors.

Key features include:

- Compatibility with all types of vessels and sonar equipment
- Quick setup, safe and easy to operate
- Complete configurability, various mounting locations
- Inboard adjustability and on-the-fly indexing
- Ruggedized, portable and flyaway travel cases

Design

The core functionality of the USM is repeatable, accurate and precise alignment of a sonar head to a boat. Actuation allows the sonar head to be lifted to a position that is substantially parallel to the boat's deck, and enables the Z-Pole to lock in the fore or aft position on the vessel when transiting in the water.

Key features include:

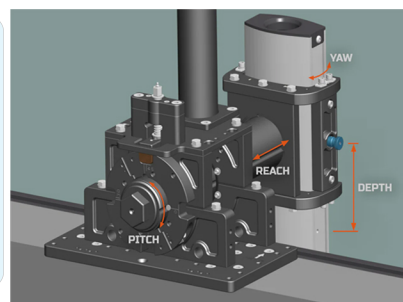
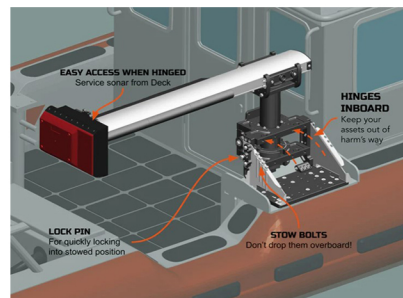
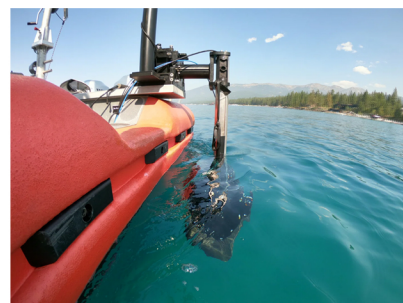
- Calibrated Z-Pole breakaway, protection from submerged hazards
- Mechanically constrained, fully repeatable mounting options
- Complete electrical isolation of the sonar equipment
- Quick-release handles for rapid adjustment
- Fully integrated offsets with documented Lookup Tables

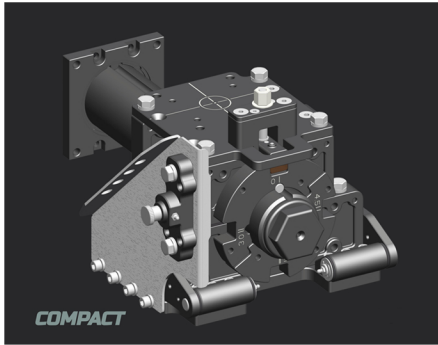
Inboard Adjustability

The data collection process in the world of hydrography is no small undertaking. Determining phase center offsets and calibration of sonar equipment is a tedious process, which USM expedites in a revolutionary way. With every USM, you can:

- Adjust the Yaw, Pitch, and X-Pole Reach
- Index your Z-Pole Depth on-the-fly
- Preserve and reproduce settings with ease

To supplement the calibration process, USM offers Offset Lookup Tables to quickly identify values for your specific configuration.

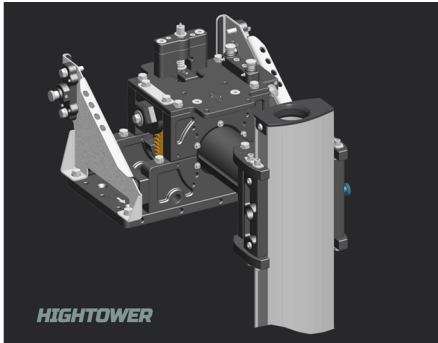




COMPACT

The Compact is USM's lightest, most portable mount with the ability to be taken on international flights. This model is recommended for systems with Z-Pole lengths up to 7', bearing loads up to 45lbs.

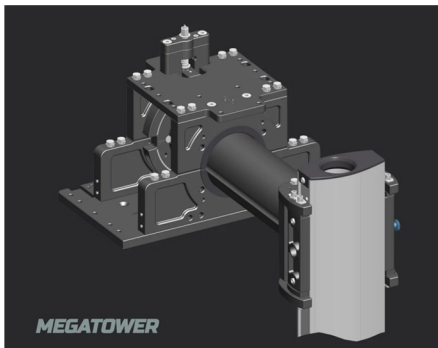
The Compact uses a vertical lead-screw mechanism called the Shear Block Tower to engage and disengage the Z-Pole, also serving as a breakaway safety feature in the event of a collision.



HIGHTOWER

The Hightower is USM's most versatile mount, with exceptional functionality and exclusive options such as the Gear Drive actuation. This model is recommended for systems with Z-Pole lengths up to 10', bearing loads up to 150lbs.

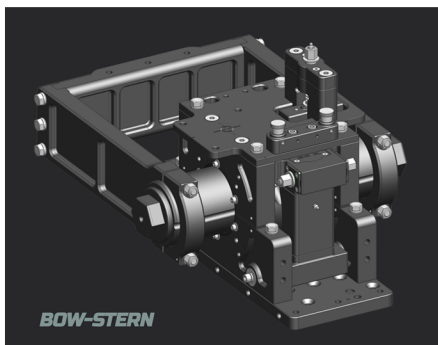
The Hightower uses a vertical lead-screw mechanism called the Shear Block Tower to engage and disengage the Z-Pole, also serving as a breakaway safety feature in the event of a collision.



MEGATOWER

The Megatower is USM's large-scale version of the Hightower, designed to withstand high working torque loads. This model is recommended for systems with Z-Pole lengths up to 14', bearing loads up to 200lbs.

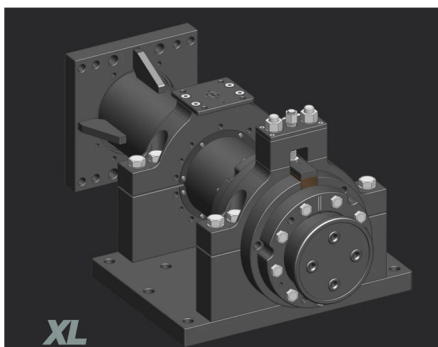
The Megatower uses a vertical lead-screw mechanism called the Shear Block Tower to engage and disengage the Z-Pole, also serving as a breakaway safety feature in the event of a collision.



BOW-STERN

The Bow-Stern Mount is USM's specialty mount, sharing the same platform as the Hightower. Similarly, this model is recommended for systems with Z-Pole lengths up to 10', bearing loads up to 150lbs.

The Bow-Stern uses a vertical lead-screw mechanism called the Shear Block Tower to engage and disengage the Z-Pole, also serving as a breakaway safety feature in the event of a collision.



XL

The XL is USM's gargantuan mount, designed to be used on large vessels and barge ships. This model is recommended for systems with Z-Pole lengths up to 25', bearing loads up to 300lbs.

The XL uses a vertical lead-screw mechanism called the Shear Block Tower to engage and disengage the Z-Pole, also serving as a breakaway safety feature in the event of a collision.



Visit our website for
more info:
www.echo81.com



+1 706-522-3022 • info@echo81.com
481 S. Jackson Street, Hartwell, GA 30643

ECHO81