

Sound Advice on Finding the Best Fishfinder For Your Needs,

From the Experts at The GPS Store, Inc.

When it comes to echosounder technology, there are as many choices out there as there are fish in the sea. Echosounders, sonar or fishfinders as they are commonly called, range from simple monochrome LCD machines to professional-grade, multi-frequency units with large color displays. Recently, structure-, side- and down-imaging technologies have gained traction with more and more boaters, providing picture-like detail of the world around and beneath the boat.

At its heart, all sounder technology is designed to do the same thing – provide information about the depth of water, the composition and contour of the bottom, and indicate the presence of bait and/or gamefish in the water column. Marine electronics manufacturers have developed some exciting technologies to help fishermen understand what's going on below the surface. But with so many options and products ranging from compact \$199 fishfinders to combination sounder/navigation systems approaching five-figure price tags, how can boaters decide what best meet their needs?

Sounder Basics. Understanding how sounders work is a good first step in narrowing down what best fits your needs/budget. Like echolocation in the animal world, the unit's "transceiver" emits a sonic pulse through a transducer (think speaker to a stereo) into the water, then "listens" for echoes that bounce off the bottom, structure or fish between the sea floor and the hull. The sounder displays these signals on the display, based on the strength of the return.

How Do You Fish Most? "I begin the selection process by asking customers what type of fishing they do most," said Brian Rock, an NMEA-Certified marine electronics advisor and sales associate at The GPS Store. "A customer may sometimes fish in water up to 1,000 feet deep, but 95% of the time they're in less than 100 feet. In this case, 600W output power will be sufficient the vast majority of the time. But it isn't enough power for 1,000 feet of water. If the customer wants to have that power available anyways, then the price jump (which can be up to three times more) can be justified." A good dealer won't try to push you into a more expensive, feature-packed unit if that isn't what you need.

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What Type of Boat? To a certain extent, the type and size of boat you have dictates what type of sounder system you can install, particularly when it comes to the type of transducer you can use. For example, while bronze through-hull transducers are a very popular option for fiberglass boats, they won't work on aluminum boats. Electrolytic corrosion occurs when the two metals come in contact in a wet environment, so fishermen with "tin boats" must use stainless steel or plastic transducers.

Transom-mounted transducers are an affordable, popular choice for trailerable outboard and I/O-powered fishing boats, however, Inboard-powered boats can't use these because of prop wash and aerated water which cause interference of the pulse resulting in a cluttered picture. Go-fast offshore fishing boats are a good match for powerful sounders with in-hull transducers that shoot through the fiberglass, provided there is adequate room for installation of the transducer and fluid tank. Larger sportfishing vessels often use a bronze thru-hull transducer with a fairing block. Your dealer should ask about your vessel and let you know if there are restrictions that might limit your options.

What Are You Looking For? What you want to "see" on your fishfinder will help you decide on the best technology for your needs. If you're primarily looking for change in bottom composition (from soft mud to shale, for example) bait and fish over the bottom or deep-water schools, a powerful straight-down sounder should fit the bill. If you spend a lot of time "searching" for structure and fish in waters less than 300 feet, some of the innovative side or down-scanning sonars on the market could be ideal. For applications where you need to dial in specific frequencies to differentiate fish species and discriminate between closely spaced fish and bottom, the new Broadband Sounders and Chirp technology might be a worthwhile investment.

What Does This Mean/Do? Sounder and transducer technology has rapidly evolved, offering boaters options that didn't exist even a couple of years ago. For example, Chirp transducer technology constantly scans different frequencies (as opposed to traditional one- or two-frequency sounders), delivering excellent clarity and target separation in all depths. New Structure Scan wide-beam technology can save fuel and time searching for previously unexplored wrecks and reefs. A split screen with Structure Scan and traditional sounder side-by-side helps the boaters tell structure-hugging fish from the structure itself. DownScan Sonar works similarly to structure scan, but with a much narrower beam.

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MFD or Dedicated Sounder? The answer depends on your perspective, and your needs. Excellent sounder performance is found in today's advanced Multi-Function Display systems, usually combining a sounder with a chartplotter and radar in one "box." Still, many opt for stand-alone sounders, and for good reasons. Commercial fishermen, professional guides and serious tournament anglers, for example, know that without a sounder, they're dead in the water. The downside of all-in-one is systems is that if it goes down, you lose everything. "I'll recommend a stand-alone fishfinder, together with an MFD for customers with the space and the budget. Surprisingly, in many cases, a single 12-inch unit will cost more than twin smaller displays," said Rock. "A stand-alone sounder means you'll always have fishfinding, while the separate MFD makes sure you can navigate to waypoints — and some can provide a backup sounder."

Need Pinpoint Position Accuracy? Pinpoint boat positioning over structure is a compelling feature of today's Multi-Function Systems. For example, Lowrance's Trackback ™ feature on their HDS system allows boaters to review their sonar history and zoom in on the mark or structure, mark four corners of the structure and overlay these points directly on the electronic chart. Positioning the boat between these points ensures accurate presentation of baits and lures over wrecks and reefs. This technology is far more accurate and repeatable that using a chartplotter's Man Overboard (MOB) key.

"Today's boaters have so many great choices when it comes to fishfinder technology," said Rock, "it's an exciting time to be an angler. The key is figuring out which features and functions will enhance your time on the water most and improve your individual style of fishing. Your dealer should help you do this — guiding you through these questions and others — until you narrow down the choices to those that best fit your needs, boat and overall electronics budget."

This is precisely the type of assistance Rock and the other staff at The GPS Store provides consumers in its store, on the phone and through its website. Contact The GPS Store at (800) 477-2611 or visit www.TheGPSStore.com to learn more about sounder technology or ask any marine electronics questions.