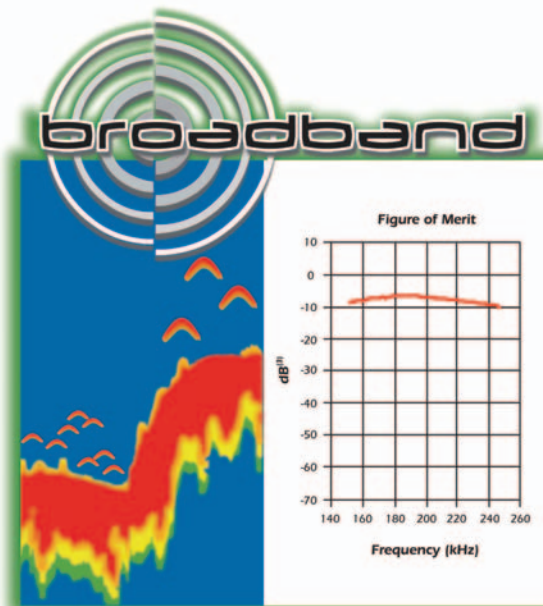


Broadband Transducers



Airmar[®] Broadband Transducers—For All Marine Applications

The outstanding qualities of these high-performance transducers make them the right choice for your marine applications! Many Airmar Broadband Transducers are already supplied as original equipment with many new echosounder systems. Or, when used as replacement transducers for already installed sounders, these transducers will make the perfect, low-cost/high-value, performance enhancement.

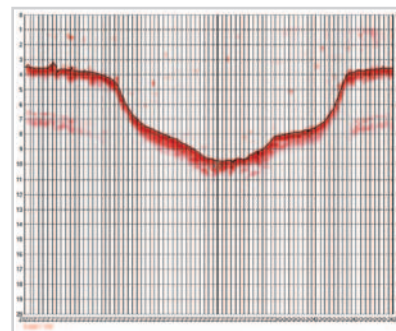
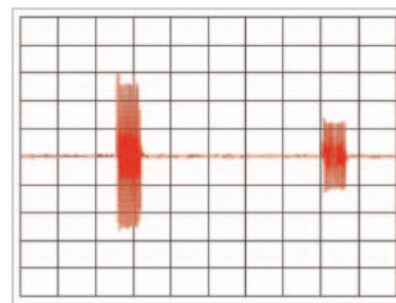
Choose Your Application

Acoustic Doppler—For either vessel-mounted Doppler Speed Logs or ADCP applications, Airmar Broadband Transducers will make an excellent match. The fast rise and fall time characteristics combined with narrow-beam angles make these rugged transducers the ideal choice.

Acoustic Backscatter—For targets large or small, you can detect them with Airmar Broadband Transducers which are available in different frequency ranges. Using a single transducer, or several transducers set at staggered frequencies, you can slide the operating frequency up and down a continuous -3dB band with little variation in acoustic intensity.

Hydrographic Survey—When used at discrete frequencies, the low-ringing and narrow-beam characteristics of these transducers help produce the most accurate single-beam surveys at any water depth. In addition, these transducers can be used with electronics that produce a chirp pulse.

Or Perhaps You Require a Custom Configuration?—Maybe your application requires a special transducer to achieve optimal system performance. No problem. Provide Airmar with your specifications, and, working together, we will determine a solution that meets your requirements.



Broadband Transducers

The Broadband Advantage

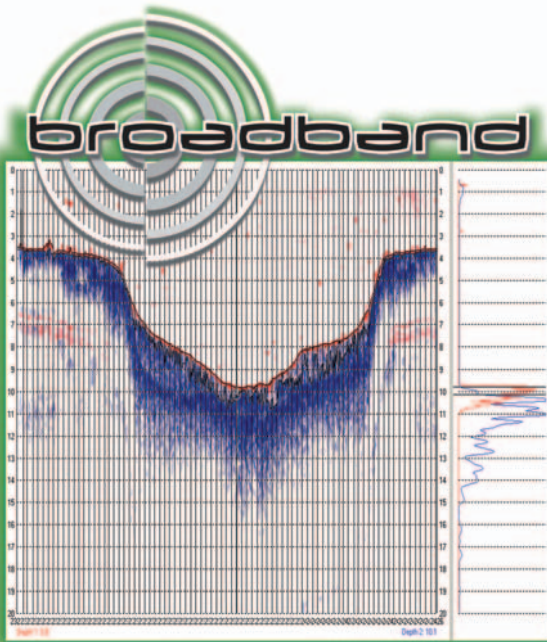
In the past, when considering piezoceramic transducers, the attributes of high sensitivity and bandwidth did not go hand-in-hand. In fact, it is much more typical that there was a significant trade-off between the bandwidth and sensitivity.

That is, however, until Airmar Broadband Transducers became available. Through diligent research of acoustic materials and refinement of our proprietary manufacturing processes, Airmar has developed methods for increasing transducer bandwidth with minimal effect on acoustic sensitivity.

Airmar already manufactures transducers for many different marine and air-ranging applications. Some of these marine applications include hydrographic survey, flow-sensing, fish-detection, and acoustic backscatter. Those OEMs and researchers pursuing these applications demand high acoustic sensitivity as well as broadband performance. The acoustic performance of such transducers: extremely low-ringing, large bandwidths, and reduced side lobes, are preferred.

Few acoustic materials, other than piezoceramics, have this desirable combination of performance characteristics. Certain piezo-composite or magnetostrictive materials can be selected, but these options may not necessarily be affordable solutions.

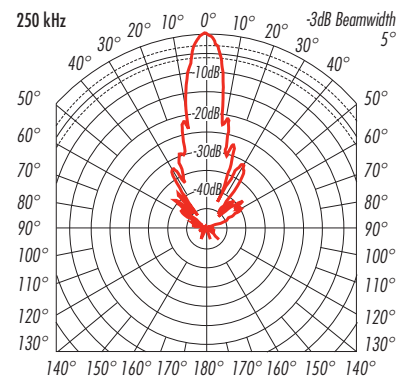
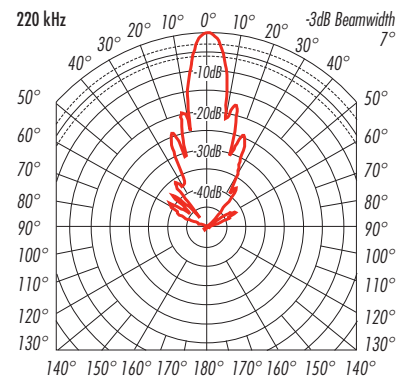
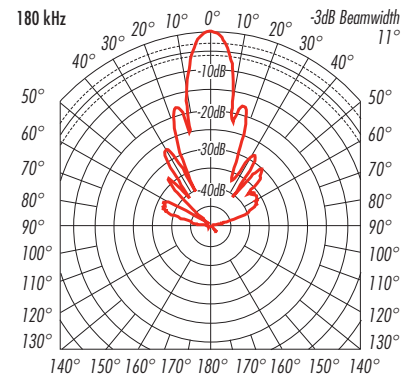
It is central to Airmar's mission to be the industry leader in bringing sophisticated transducer designs and state-of-the-art manufacturing techniques to a large-scale production setting. Our ultimate goal is to offer the very finest, most reliable transducers, and that objective has been achieved with the broadband advantage.



Data sample courtesy of Odom Hydrographic Systems, Inc.
Data collected with an Odom Echotrac Model MKIII, transducer M42, 200/24 kHz.



Directivity Patterns



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As Airmar constantly improves its products, all specifications are subject to change without notice. All Airmar products are designed to provide high levels of accuracy and reliability; however, they should only be used as aids to navigation and not as a replacement for traditional navigation aids and techniques.

BT_rA 06/01/07

Tel: 603.673.9570 ■ Fax: 603.673.4624 ■ www.airmar.com