The Benefits of AIRMAR's Chirp-ready Transducers

- One broadband transducer covers up to 117 kHz of bandwidth – greater opportunities to detect fish in the water column
- Superior resolution – precise separation between baitfish and gamefish represented on the display with crisp images
- Enhanced bottom fishing – resolve targets close to the bottom or near structure/wrecks
- Amazing detail – recognize haloclines and thermoclines
- Improved signal to noise ratio – find fish and track bottom at high boat speeds

Benefits of Transom Mount Transducers

Transom models are best suited for small and trailered vessels where a thru-hull installation is not practical. Perfect for freshwater boat styles and center consoles. Simple to install and ideal for small trailered vessels where a thru-hull may interfere with loading.

- Simple installation on transom of the boat
- Great performance at boat speeds below 30 knots
- Easy maintenance and low-cost replacement
Why does frequency matter?

Selecting the best frequency for your specific application is very important. The good news is that once you know what frequency will work best for the type of fishing you do, there’s an AIRMAR transducer designed to maximize the performance of your sounder.

AIRMAR Chirp transducers are available in various frequency combinations:

- Dual Band:
  - Low/High (LH)
  - Low/Medium (LM)
  - Low/High Wide (LHW)
  - Low Wide/Medium (LWM)

- Single Band:
  - Low
  - Medium
  - High
  - High Wide

**Low Frequency = Greater Depth (ex. 42-65 kHz)**
- Sound waves will not present as clear a picture of the bottom on the display, but will sound down in very deep areas where high frequency sound waves cannot reach
- Provides greater depth range, wider beamwidth, and ultimately more coverage under the boat
- Chirp signal processing technology used with AIRMAR broadband, Chirp-ready transducers provides more detail at greater depths and is less susceptible to noise
- Great for operating at high boat speeds

**High Frequency = Greater Detail (ex. 130-210 kHz)**
- More sensitive to small targets and will send back detailed information which will display as crisp, high-resolution images on the echosounder screen
- Best for shallower water and popular with anglers fishing at depths less than 1500 feet

**Medium Frequency = The Best of Both Worlds (ex. 80-130 kHz)**
- Provides the ability to sound deeper than the high frequency, along with better resolution than the low frequency
- Wider beam than the high frequency, achieving more coverage under the boat and greater opportunity to find fish
- Clear images at higher boat speeds

![Diagram showing depth ranges for different frequencies and power levels.](image-url)
Transom Mount
300 W & 600 W

Features:
• Depth & fast-response water-temperature sensor
• Hull Type: For displacement or planing hulls (wood, fiberglass, aluminum or steel)
• Engine Type: Single or twin I/O, OB and jet drive systems

TM150M
300 W
Medium Frequency
• Medium—95 kHz to 155 kHz
  26° to 17° beamwidth
  Maximum depth 600 ft
• 60 kHz of total bandwidth from one transducer
* This model is a 300 W.

TM165HW
600 W
High Wide Frequency
• High—150 kHz to 250 kHz
  30° average beamwidth
  Maximum depth 500 ft
• 100 kHz of total bandwidth from one transducer
* This model is a 600 W.

Bottom Coverage
Relative to Frequency and Depth

<table>
<thead>
<tr>
<th>Depth</th>
<th>TM150M 95 kHz-155 kHz</th>
<th>TM165HW 150 kHz-250 kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 ft</td>
<td>24 ft</td>
<td>26 ft</td>
</tr>
<tr>
<td>100 ft</td>
<td>46 ft</td>
<td>54 ft</td>
</tr>
<tr>
<td>300 ft</td>
<td>138 ft</td>
<td>160 ft</td>
</tr>
<tr>
<td>600 ft</td>
<td>278 ft</td>
<td>Too Deep</td>
</tr>
<tr>
<td>1000 ft</td>
<td>Too Deep</td>
<td>Too Deep</td>
</tr>
</tbody>
</table>

This chart compares the high and medium ceramic elements inside the transducer, showing the difference in bottom coverage under the boat.
Transom Mount
1 kW

Features:
• Depth & fast-response water-temperature sensor
• Hull Type: For displacement or planing hulls (wood, fiberglass, aluminum or steel)
• Engine Type: Single or twin I/O, OB and jet drive systems

TM185M
Medium Frequency
• Medium—85 kHz to 135 kHz
  16° to 11° beamwidth
  Maximum depth 1500 ft
• 50 kHz of total bandwidth from one transducer

TM185HW
High Wide Frequency
• High—150 kHz to 250 kHz
  25° constant beamwidth
  Maximum depth 500 ft
• 100 kHz of total bandwidth from one transducer

Bottom Coverage
Relative to Frequency and Depth

<table>
<thead>
<tr>
<th>Depth</th>
<th>Beam Coverage at Different Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TM185M 85 kHz-135 kHz</td>
</tr>
<tr>
<td>50 ft</td>
<td>14 ft</td>
</tr>
<tr>
<td>100 ft</td>
<td>28 ft</td>
</tr>
<tr>
<td>300 ft</td>
<td>84 ft</td>
</tr>
<tr>
<td>600 ft</td>
<td>168 ft</td>
</tr>
<tr>
<td>1000 ft</td>
<td>282 ft</td>
</tr>
<tr>
<td>1500 ft</td>
<td>422 ft</td>
</tr>
</tbody>
</table>

This chart compares the high wide and medium ceramic elements inside the transducer, showing the difference in bottom coverage under the boat.
Transom Mount
1 kW

Features:
• Depth & fast-response water-temperature sensor
• Hull Type: For displacement or planing hulls (wood, fiberglass, aluminum or steel)
• Engine Type: Single or twin I/O, OB and jet drive systems

<table>
<thead>
<tr>
<th>Transducer Model</th>
<th>Frequency</th>
<th>Beam Coverage</th>
<th>Maximum Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM265LH</td>
<td>Low</td>
<td>42 kHz - 65 kHz</td>
<td>25° to 16° beamwidth</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>130 kHz - 210 kHz</td>
<td>10° to 6° beamwidth</td>
</tr>
<tr>
<td>TM265LM</td>
<td>Low</td>
<td>42 kHz - 65 kHz</td>
<td>25° to 16° beamwidth</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>85 kHz - 135 kHz</td>
<td>16° to 11° beamwidth</td>
</tr>
<tr>
<td>TM275LHW</td>
<td>Low</td>
<td>42 kHz - 65 kHz</td>
<td>25° to 16° beamwidth</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>150 kHz - 250 kHz</td>
<td>25° constant beamwidth</td>
</tr>
</tbody>
</table>

This chart compares the high and medium ceramic elements inside the transducer, showing the difference in bottom coverage under the boat.

Low frequency in each of these transducer models is the same (42 kHz - 65 kHz). The maximum depth range sounds to 3,000 ft.
The Chirp Advantage

Traditional sounders operate at only two discrete frequencies – typically 50 kHz and 200 kHz. This results in limited depth range, resolution, and ultimately what targets can be detected in the water column.

In contrast, AIRMAR’s game-changing Chirp-ready transducers provide over 70+ kHz of bandwidth. Transmitting over a wide frequency band results in a greater opportunity to detect what is in the water column. As a result, all targets detected in the entire bandwidth will be seen on the display—even those fish holding close to the bottom—ultimately improving target detection, detail, and range resolution.

Most Chirp transducers vary their beam width as they sweep through their frequency range (low, medium, and high). At the lowest frequency the beam is the widest and it narrows as the frequency increases.

AIRMAR’s new wide beam Chirp transducers are the exception to this rule and have a fixed beam width of either 25° or 40° across the frequency band. This translates into even more coverage under the boat, revealing more fish in the water column than ever before.

**Additional Mounting Options**

Choosing your mounting option depends on the design of the hull as well as the material it’s manufactured with, the boats intended use, and the desired level of performance.

**Need Help Choosing the Right Transducer?**

Download the free, award-winning iInstall app! It’s a great tool that takes the guesswork out of selecting the right transducer for your application. Based on frequency, mounting, housing, and cable options, iInstall will reveal the available option(s) and give you instant access to their specifications. Designed for iPhone, iPad and iPod smart phones and tablets running iOS 6.1 and newer.

www.airmar.com