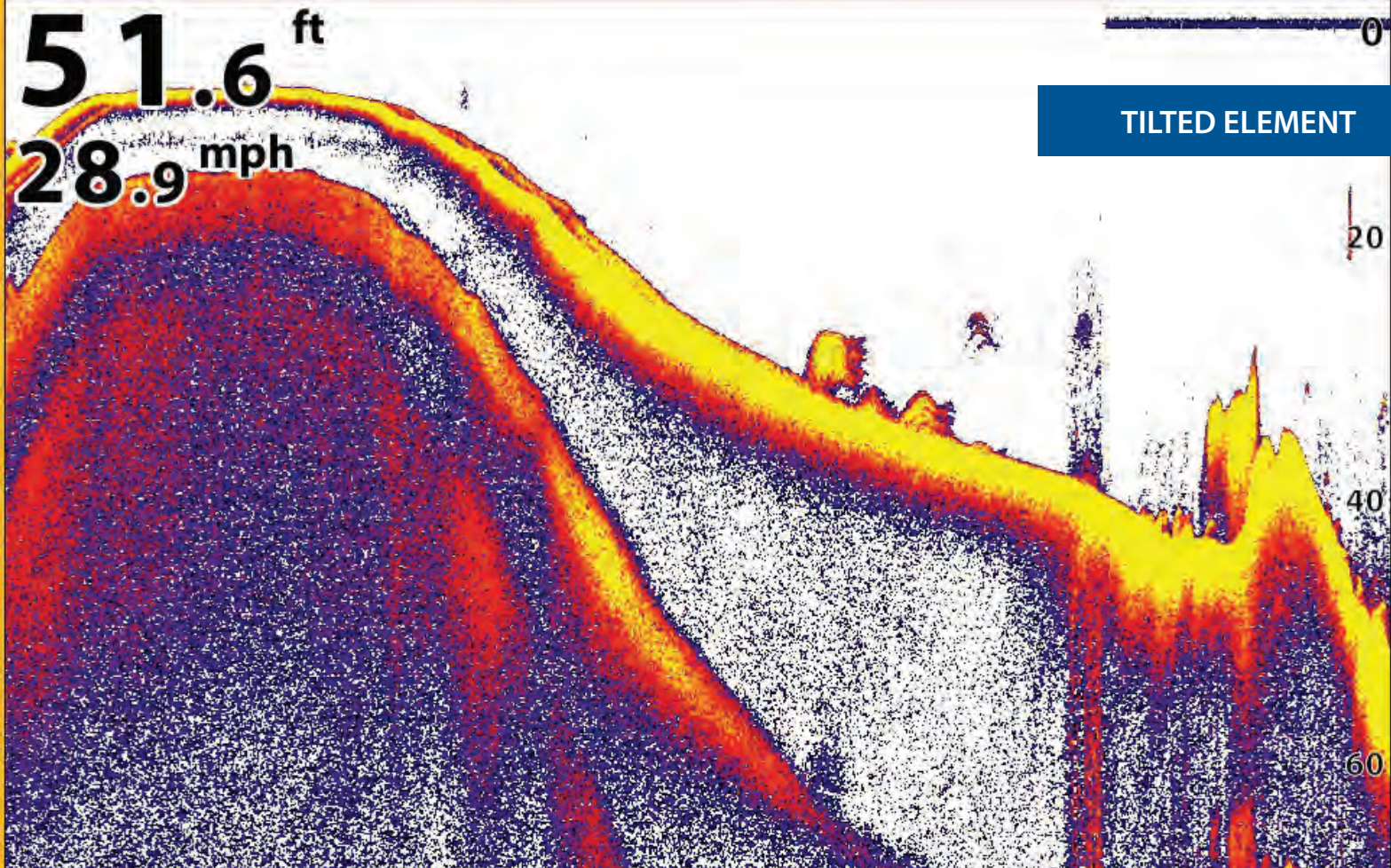




B175HW screenshot courtesy of Humminbird

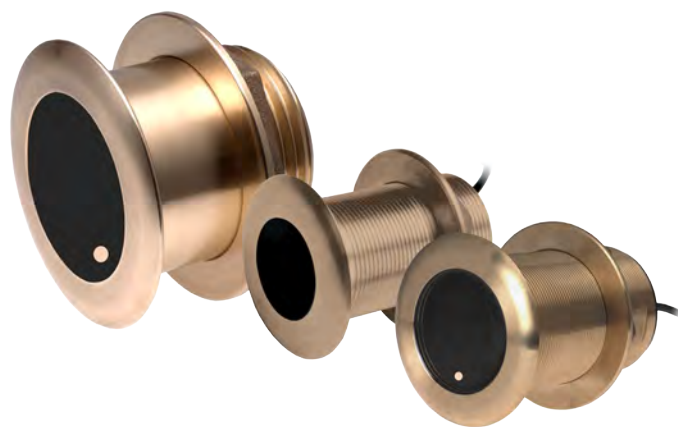
## Tilted Element Chirp Transducers

As Chirp technology remains at the forefront of echo sounder development, AIRMAR continues to add transducers for every installation type.

**When performance matters most, we've got you covered.**

### The Benefits of AIRMAR's Chirp-ready Transducers

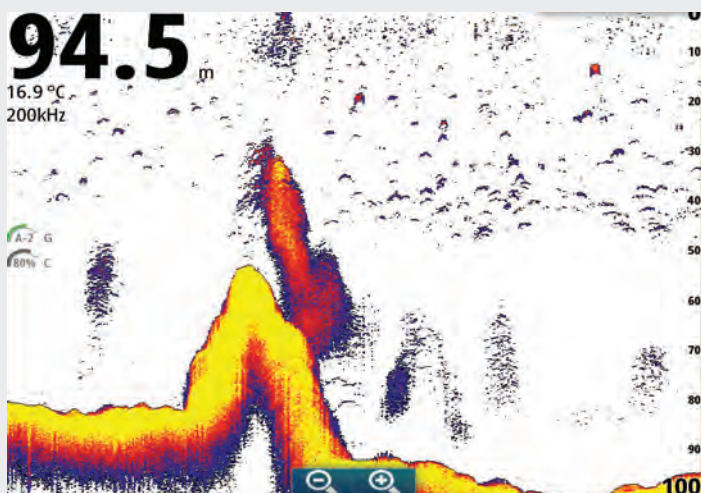
- One broadband transducer covers up to 117 kHz of bandwidth – greater opportunities to detect fish in the water column
- Superior resolution – precise separation between baitfish and gamefish represented on the display with crisp images
- Enhanced bottom fishing – resolve targets close to the bottom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



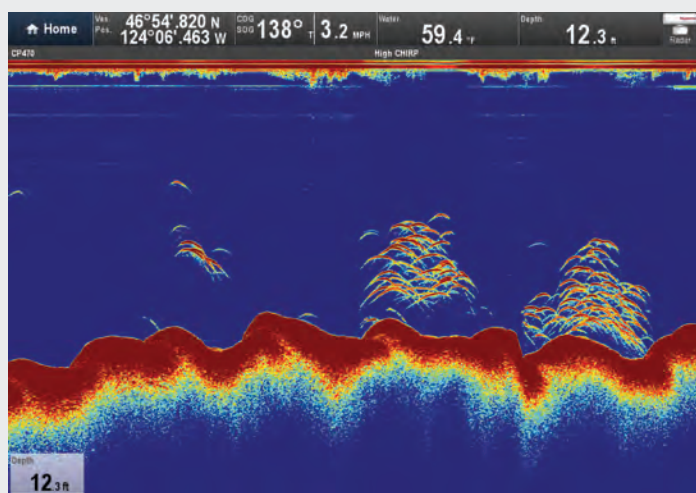
**AIRMAR®**, DEFINING CHIRP TECHNOLOGY.

 **AIRMAR®**  
TECHNOLOGY CORPORATION





Courtesy of Navico



Courtesy of Raymarine



## Benefits of Tilted Element Transducers

- The transducer's ceramic elements are permanently tilted inside the housing to compensate for the hull deadrise. This ensures the beam is aimed straight down, resulting in maximum echo returns and eliminating the need for a fairing
- Low profile design extends only 6mm below the hull and is available in stainless steel and bronze
- Can be installed on trailered boats
- For hulls under 35 feet, performance closely compares to that of a fairing type installation

Flush/tilted transducers mount through a hole drilled in any fiberglass, metal or wooden hull, with the outside of the fitting flush against the exterior hull surface. Inside the fitting, the transducer's active elements are permanently tilted to 0, 12 or 20 degree angle to compensate for the hull deadrise, ensuring the sonar beam is aimed straight down.

The flush-mount design of these transducers allows for smooth water flow over the hull, meaning less drag and minimal effect on boating performance.

*The best fishing stories begin with the right transducer.*

## 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:            | • Single Band: |
| – Low/High (LH)         | – Low          |
| – Low/Medium (LM)       | – Medium       |
| – Low/High Wide (LHW)   | – High         |
| – Low Wide/Medium (LWM) | – 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)

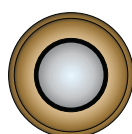
- Provides the ability to sound deeper than the high frequency, along with better resolution than the low frequency
- Wider beam than the high frequency, achieving more coverage under the boat and greater opportunity to find fish
- Clear images at higher boat speeds

# Tilted Element 300 W



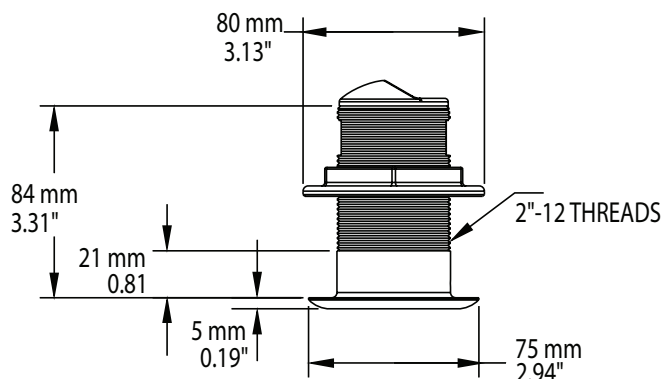
## Features:

- Depth & fast-response water-temperature sensor
- Hull Type: Wood, fiberglass and metal stepped, planing or displacement type hulls
- Hull Deadrise: Up to 24°
- Fixed 20° tilted version for 16° to 24° hull deadrise
- Fixed 12° tilted version for 8° to 15° hull deadrise
- Fixed 0° tilted version for 0° to 7° hull deadrise
- Engine Type: Can be used with all propulsion types



1-Internal  
Broadband Ceramic  
Assembly

## DIMENSIONS



# B150M

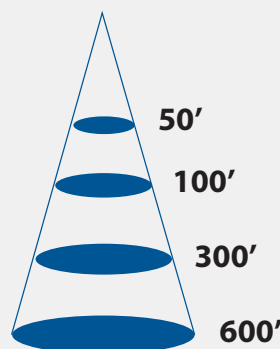
## Medium Frequency

- Medium—95 kHz to 155 kHz  
26° to 17° beamwidth  
Maximum depth 600 ft
- 60 kHz of total bandwidth from one transducer

## Bottom Coverage Relative to Frequency and Depth

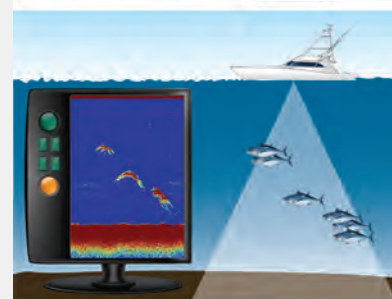
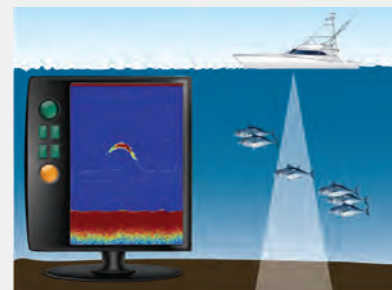
| Depth   | Beam Coverage at Medium Frequency |  |
|---------|-----------------------------------|--|
|         | B150M<br>95 kHz-155 kHz           |  |
| 50 ft   | 24 ft                             |  |
| 100 ft  | 46 ft                             |  |
| 300 ft  | 138 ft                            |  |
| 600 ft  | 278 ft                            |  |
| 1000 ft | Too Deep                          |  |

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



B150M – Medium Frequency  
95 kHz-155 kHz

The fish must be in the beam to be represented on the display.



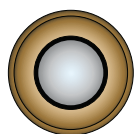
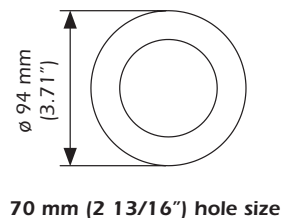
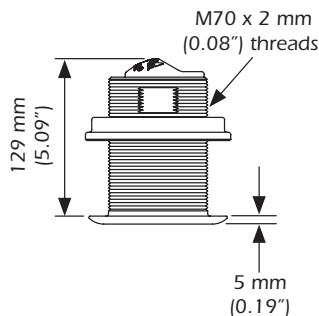
# Tilted Element 600 W



## DIMENSIONS

### Features:

- Depth & fast-response water-temperature sensor
- Hull Type: Wood, fiberglass and metal stepped, planing or displacement type hulls
- Hull Deadrise: Up to 24°
- Fixed 20° tilted version for 16° to 24° hull deadrise
- Fixed 12° tilted version for 8° to 15° hull deadrise
- Fixed 0° tilted version for 0° to 7° hull deadrise
- Engine Type: Can be used with all propulsion types



1-Internal  
Broadband Ceramic  
Assembly

## B75H

SS75H (Stainless Steel)

### High Frequency

- High—130 kHz to 210 kHz  
15° to 9° beamwidth  
Maximum depth 700 ft
- 80 kHz of total bandwidth from one transducer

## B75M

SS75M (Stainless Steel)

### Medium Frequency

- Medium—80 kHz to 130 kHz  
24° to 16° beamwidth  
Maximum depth 900 ft
- 50 kHz of total bandwidth from one transducer

## B75L

SS75L (Stainless Steel)

### Low Frequency

- Low—40 kHz to 75 kHz  
32° to 21° beamwidth  
Maximum depth 1200 ft
- 35 kHz of total bandwidth from one transducer

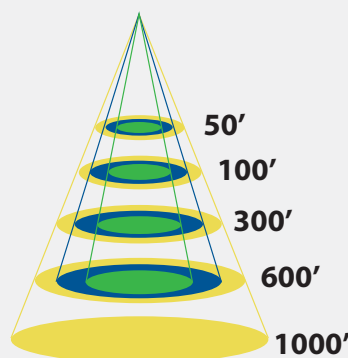
\*This model is 300 W.

## Bottom Coverage Relative to Frequency and Depth

| Depth   | Beam Coverage at Different Frequencies |                        |                       |
|---------|----------------------------------------|------------------------|-----------------------|
|         | B75H<br>130 kHz-210 kHz                | B75M<br>80 kHz-130 kHz | B75L<br>40 kHz-75 kHz |
| 50 ft   | 14 ft                                  | 22 ft                  | 28 ft                 |
| 100 ft  | 26 ft                                  | 42 ft                  | 58 ft                 |
| 300 ft  | 78 ft                                  | 128 ft                 | 172 ft                |
| 600 ft  | 158 ft                                 | 256 ft                 | 344 ft                |
| 1000 ft | Too Deep                               | Too Deep               | 574 ft                |
| 1500 ft | Too Deep                               | Too Deep               | Too Deep              |

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

Models are also available in stainless steel.



- B75L – Low Frequency  
40 kHz-75 kHz
- B75M – Medium Frequency  
80 kHz-130 kHz
- B75H – High Frequency  
130 kHz-210 kHz

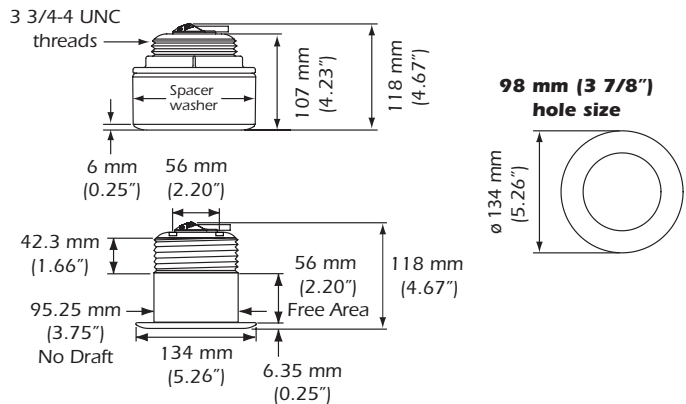
The fish must be in the beam to be represented on the display.



# Tilted Element 1 kW



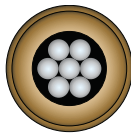
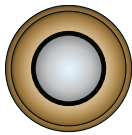
## DIMENSIONS



### Features:

- Depth & fast-response water-temperature sensor
- Hull Type: Wood, fiberglass and metal stepped, planing or displacement type hulls
- Hull Deadrise: Up to 24°
- Fixed 20° tilted version for 16° to 24° hull deadrise
- Fixed 12° tilted version for 8° to 15° hull deadrise
- Fixed 0° tilted version for 0° to 7° hull deadrise
- Engine Type: Can be used with all propulsion types

1-Internal  
Broadband Ceramic  
Assembly  
B175M/H/HW



7-Internal  
Broadband Ceramic  
Assemblies  
B175L

## B175H

SS175H (Stainless Steel)

### High Frequency

- High—130 kHz to 210 kHz  
10° to 6° beam  
Max. depth 1000 ft
- 80 kHz of total bandwidth  
from one transducer

## B175M

SS175M (Stainless Steel)

### Medium Frequency

- Medium—85 kHz to 135 kHz  
16° to 11° beam  
Max. depth 1500 ft
- 50 kHz of total bandwidth  
from one transducer

## B175L

SS175L (Stainless Steel)

### Low Frequency

- Low—40 kHz to 60 kHz  
32° to 21° beam  
Max. depth 2500 ft
- 20 kHz of total bandwidth  
from one transducer

WIDE  
BEAM

## B175HW

SS175HW (Stainless Steel)

### High Wide Frequency

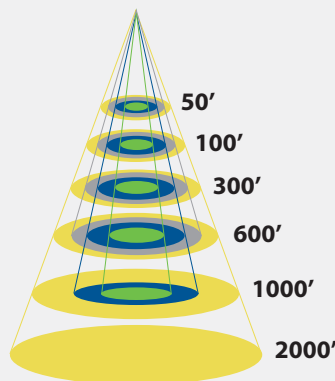
- High—150 kHz to 250 kHz  
25° constant beam  
Max. depth 500 ft
- 100 kHz of total bandwidth  
from one transducer

## Bottom Coverage Relative to Frequency and Depth

| Depth   | Beam Coverage at Different Frequencies |                             |                               |                            |
|---------|----------------------------------------|-----------------------------|-------------------------------|----------------------------|
|         | B175H<br>130 kHz-<br>210 kHz           | B175M<br>85 kHz-<br>135 kHz | B175HW<br>150 kHz-<br>250 kHz | B175L<br>40 kHz-<br>60 kHz |
| 50 ft   | 10 ft                                  | 14 ft                       | 22 ft                         | 28 ft                      |
| 100 ft  | 20 ft                                  | 28 ft                       | 44 ft                         | 58 ft                      |
| 300 ft  | 58 ft                                  | 84 ft                       | 134 ft                        | 166 ft                     |
| 600 ft  | 116 ft                                 | 168 ft                      | 266 ft                        | 332 ft                     |
| 1000 ft | 192 ft                                 | 282 ft                      | Too Deep                      | 554 ft                     |
| 2000 ft | Too Deep                               | Too Deep                    | Too Deep                      | 1110 ft                    |

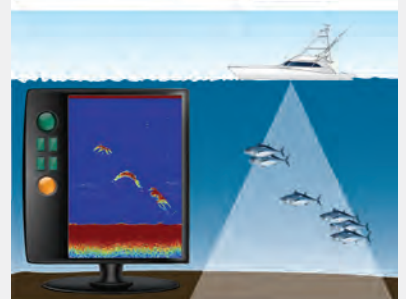
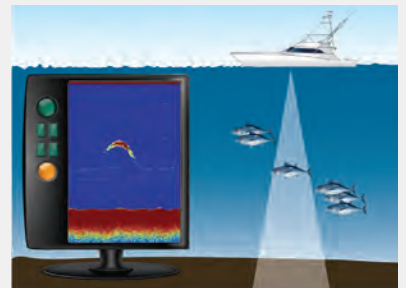
This chart compares the high, medium, low and high wide ceramic elements inside the transducer, showing the difference in bottom coverage under the boat.

Models are also available in stainless steel.



- B175L – Low Frequency  
40 kHz-60 kHz
- B175HW – Wide Beam Frequency  
150 kHz-250 kHz
- B175M – Medium Frequency  
85 kHz-135 kHz
- B175H – High Frequency  
130 kHz-210 kHz

The fish must be in the beam to be represented on the display.





## 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



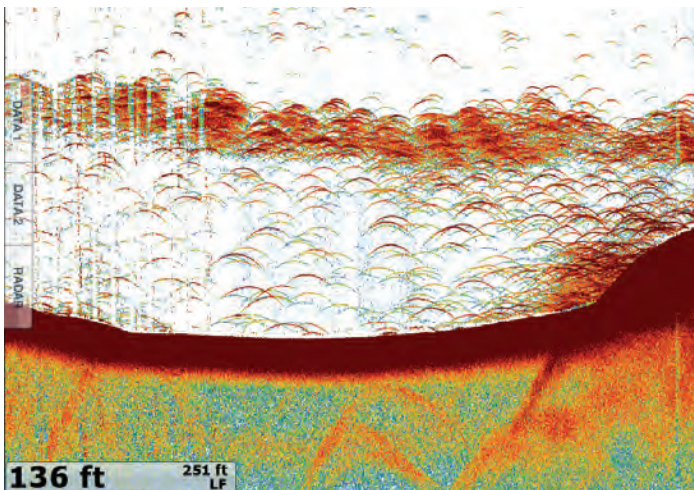
Choosing your mounting option depends on the design of the hull as well as the material it's manufactured with, the boats intended use, and the desired level of performance.

## Need Help Choosing the Right Transducer?

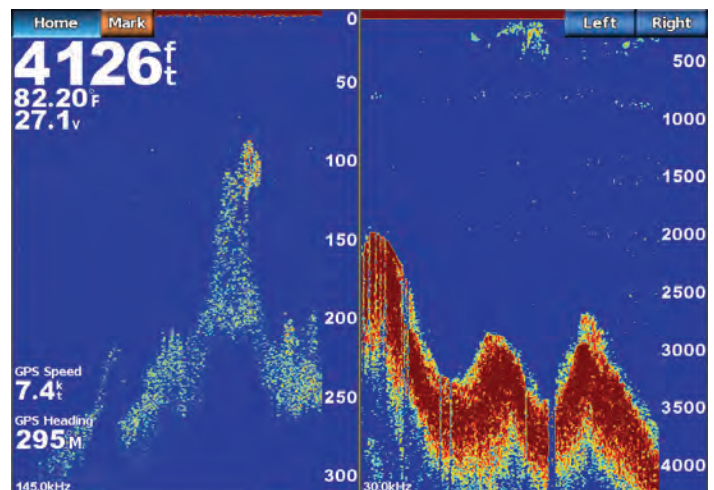
Download the free, award-winning iNstall app! It's a great tool that takes the guesswork out of selecting the right transducer for your application. Based on frequency, mounting, housing, and cable options, iNstall will reveal the available option(s) and give you instant access to their specifications.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



iNstall



Courtesy of Furuno



Courtesy of Garmin



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