

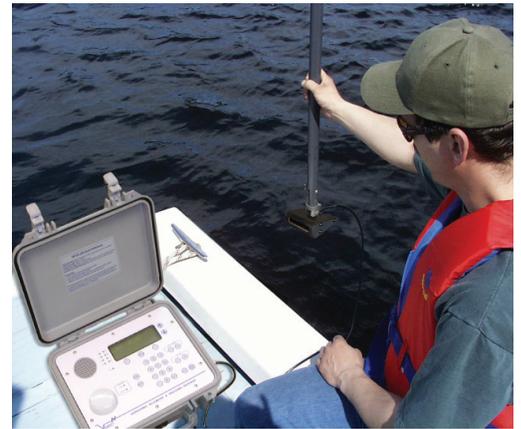
# VH110 and VH180-D Directional Hydrophones



The VH110 and VH180-D directional hydrophones are hydro-dynamically shaped so they can be easily moved through water while receiving acoustic signals.

V9, V13, and V16 69 kHz transmitters. The frequency range of the VH180-D is 180 kHz for use with V5-180 and V9-180 transmitters.

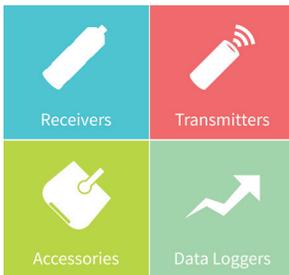
The VH110 and VH180-D are used with the VR100 receiver to locate and track ultrasonic transmitters on passing fish or equipment. The frequency range for the VH110 is 50 to 84 kHz, which makes it suitable for reception of V7, V8,



The VH110 and VH180-D hydrophones are used with a VR100 receiver to track the full range of VEMCO tags.

## Specifications

Frequency range	VH110: 50kHz – 85kHz VH180-D: 180kHz
Tag compatibility	VH110: V7, V8, V9, V13, V16 69 kHz VH180-D: V5-180, V9-180
Receiver compatibility	VR100
Operational temperature range	-5°C to +40°C (water must not freeze)
Case (dimensions and material)	Hydrodynamic black anodized aluminum; 95 x 83 x 32 mm
Weight in air	VH110-10m: 840 g VH180-D-10m: 830 g
Cable type and available lengths	Shielded twisted pair, polyurethane jacket; Length 10m
Uses	Directional hydrophone “hears” pings from only one side of case. Best for actively tracking a tagged animal.
Recommended max. tow speed	5 knots if mounted to a pole
Preamplifier gain	50 dB nominal
Beam pattern (±10%) (See figures on Page 2)	69kHz: Horizontal ± 20°; Vertical ± 50° 180kHz: Horizontal ± 15°; Vertical ± 30°

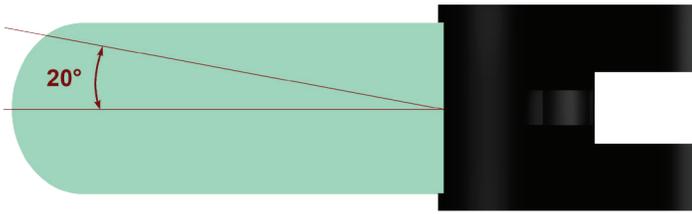


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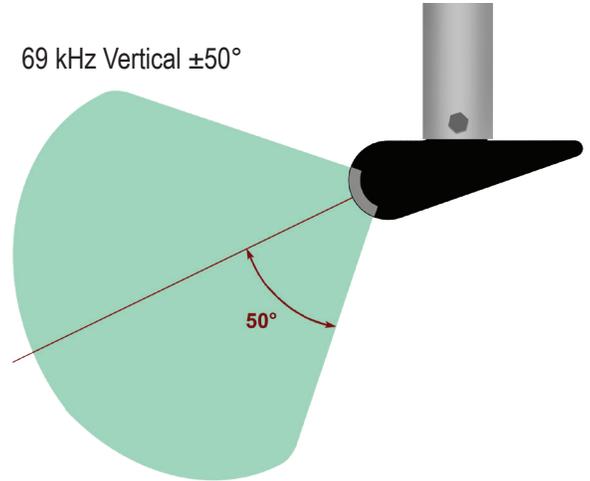
[www.vemco.com](http://www.vemco.com)

## Beam Pattern Figures

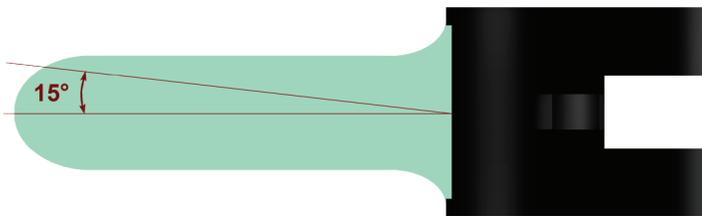
69 kHz Horizontal  $\pm 20^\circ$



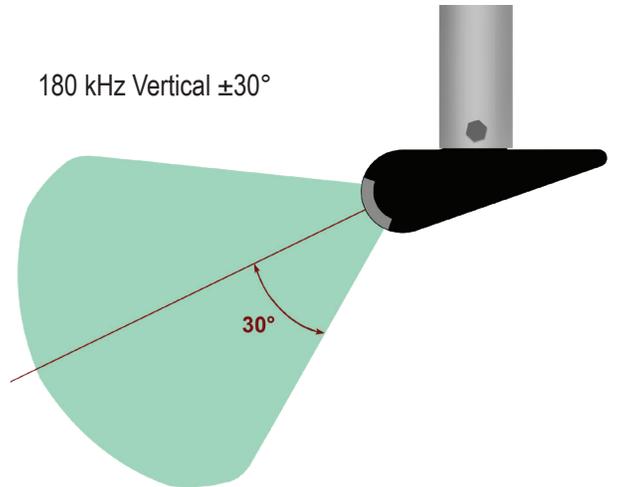
69 kHz Vertical  $\pm 50^\circ$



180 kHz Horizontal  $\pm 15^\circ$



180 kHz Vertical  $\pm 30^\circ$



## Tips

1. Turn off boat motor and depth sounder to reduce acoustic interference.
2. The attachment hole is  $11/16''$  diameter. The figure (right) shows one method used to mount the hydrophone to a pole.

