

**DENON**  
PROFESSIONAL

# DELTA 12

## 12-INCH 2-WAY 2400-WATT LOUDSPEAKER WITH WIRELESS CONNECTIVITY

For situations that demand the ultimate in speaker performance, Denon Professional proudly offers the Delta Series—a family of powered loudspeakers that delivers the very highest level of acoustic performance, essential for critical musical productions, dynamic AV playback and clear, articulate spoken presentations. The Delta Series was designed from a clean sheet of paper to exacting performance standards, using custom-developed, purpose-matched components.

The Delta 12 features an integral low-distortion Class D amplifier capable of 2400 watts peak (1200 watts continuous) output, rugged, linear transducers, DSP-controlled custom crossovers, EQ contour switch and a computer-designed high-frequency waveguide for an optimized 90° x 60° coverage field and extremely flexible connection/control facilities for adapting to any usage condition. Plus, it utilizes dynamic thermal protection, to ensure crystal-clear sound reproduction at any volume level.

However, it's not the printed specifications or the number of inputs and outputs that qualifies the Delta 12 as such an elite performer. It's the performance. The sound is effortless, clear and natural. There is no sense of strain or coloration. With lesser speakers, the listener can immediately hear the "reproduced" nature of the sound; that unmistakable nasal artificiality and edgy, strident distortion that betrays the sound of an inaccurate speaker system.

When you hear the Delta 12, it sounds like real life. The full frequency range is conveyed with absolute authority, providing convincing, realistic sound from any genre of music. Bass instruments are full and muscular. Vocals are distinct and precise, while horns are rich and energetic, their characteristic "sheen" perfectly preserved. Drums and percussion have great impact and impressive weight. Even today's complex, multi-layer music is reproduced with agility and nuance at any volume, from subtle indoor setting to full-volume outdoor concert. When you need even greater low-frequency extension and output, simply add either the Delta Series 15 S or 18 S subwoofer to create a system of absolutely uncompromised capability.

Denon Professional recognizes that adaptability and connection flexibility are just as important to demanding professionals as outstanding sonic performance. Therefore, the Delta 12 features a built-in mixer with multiple inputs and outputs. The cabinets are scratch-resistant, fronted with a powder-coated metal grille, perfect for anything from vocal reinforcement in a lecture hall to multimedia presentations in convention centers and any critical music assignment imaginable. Even their rubber feet are reinforced with steel. You can hang the Delta 12 via their integrated M10 rigging points or use them as floor wedge monitors. They can also be mounted via the built-in 35mm pole sockets. This level of connection and mounting options means that virtually every situation benefits from using Delta Series loudspeakers.

### LIVE DRIVE APP

Even if you can't physically reach the speakers, you can still adjust them with your iPad or iPhone with the Live Drive app. With our wireless technology, you can precisely tailor the performance parameters of your Delta Series loudspeakers remotely. Level-match, adjust EQ, delay-compensation and more—from virtually anywhere. It's streamlined, sound-shaping control at your fingertips, so you can easily adapt the Delta Series to new venues or performances, even if you're away from the mix position.



### FEATURES

- Unrivalled acoustic accuracy via advanced engineering and design
- 2400 watts peak Class D power (1200 watts continuous)
- 12-inch LF transducer, 1.75-inch HF driver with 1-inch acoustic aperture
- Optimized 90° x 60° sound coverage field
- Works with free Live Drive app for wireless sound-shaping control
- Wirelessly level-match, EQ, delay-compensation, and more
- DSP-controlled, custom crossover and active thermal protection
- Built-in mixer, (2) Mic/Line inputs, volume control, XLR output
- Limit/Clip indicator with red LED
- EQ contour switch; Ground Lift switch
- Trapezoidal cabinet with custom-molded heavy-duty handle
- Flyable via (12) M10 rigging points
- Designed and tuned in the U.S.A.
- Industry-standard 35mm pole-mount socket

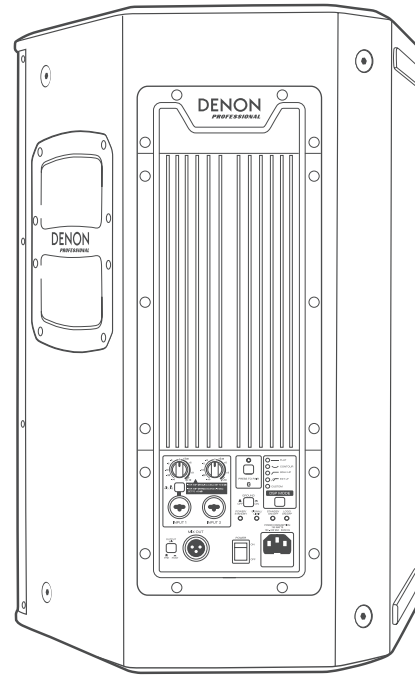
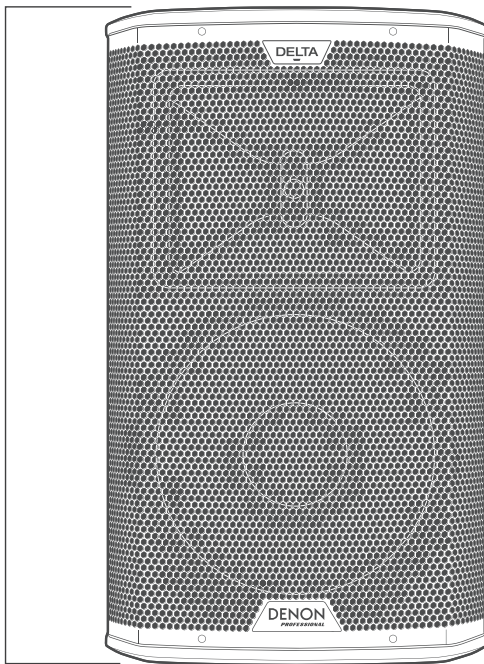
## SPECIFICATIONS

<p><b>SYSTEM CONFIGURATION:</b></p> <p>System Type: 12-inch two-way, self-powered, horn-loaded HF</p>	<p><b>AC LINE POWER:</b></p> <p>Power Supply Design: Fully regulated switching, with Power Factor Correction</p> <p>Input Voltage Nominal Range: 100–240 VAC, 50/60Hz</p> <p>Input Voltage Operating Range: 90–264 VAC, 50/60Hz</p> <p>Voltage Selection: Automatic (self-regulating)</p> <p>Power Connector: Male IEC</p> <p>Current Requirement: 6A per system @ 120 VAC 3A per system @ 240 VAC</p> <p>AC Line Cord: 9.8 ft. (3m) IEC female to regional AC male, 18 AWG</p>
<p><b>ACOUSTIC PERFORMANCE</b></p> <p>Frequency Range (-10 dB): 43–20kHz</p> <p>Frequency Response (+/-3 dB): 51–20kHz</p> <p>Maximum Peak SPL (Measured): 133 dB @ 1m</p> <p>Coverage Pattern (Averaged): 90° H x 60° V</p> <p>Directivity Index (D.I.): 9.5 dB</p>	<p><b>CONNECTORS AND CONTROLS:</b></p> <p>Input Connectors: 2 x XLR/TRS combo connectors, balanced</p> <p>Input Impedance: 10 K<math>\Omega</math> balanced, 20 K<math>\Omega</math> unbalanced</p> <p>Input level Controls: 2 x rotary volume control</p> <p>Acoustic Polarity: Positive voltage applied to XLR Pin 2 generates positive pressure from LF driver</p> <p>Line/Mic Level Selector: Push-button switch (applies to Input 1 only)</p> <p>Output Connector: Male XLR</p> <p>Output Mix Control: Switch to select output mix pre- or post-volume control</p> <p>Ground Switch: Push button to lift input signal input ground connection</p> <p>Bluetooth: Momentary contact to initiate Bluetooth pairing mode</p> <p>DSP Mode Selection: Momentary contact to cycle through DSP EQ modes</p> <p>DSP Modes Available: 5 total: Flat, Contour, 80Hz HP, EXT LF, User</p> <p>DSP Wireless Control: Live Drive™ iOS app over Bluetooth</p> <p>Grille Logo LED On/Off Control: Recessed push-button switch</p> <p>Standby mode On/Off Control: Recessed push-button switch</p> <p>LED Indicators: Signal Present / Limit, Power / Standby</p> <p>Line Input Level Control Range: -<math>\infty</math> to 0dB, +4dBu nominal, +10dBu for max output</p> <p>Mic Level Control Range: -<math>\infty</math> to +50dB</p>
<p><b>POWER AMPLIFICATION:</b></p> <p>Peak Power: 2400 watts (1600 watts LF + 800 watts HF)</p> <p>Continuous Power: 1200 watts (800 watts LF + 400 watts HF)</p> <p>Amplifier Topology: Class D/Switching, Bridged LF and HF</p> <p>Amplifier Cooling: Passive</p>	<p><b>ENCLOSURE:</b></p> <p>Construction: 15mm and 18mm premium plywood, internally-braced</p> <p>Finish: High-durability, textured, catalyzed polyurethane, black</p> <p>Mounting: 12 x M10 female threaded screw sockets</p> <p>Handles: 3 x ergonomic handles with aluminum cross-bar</p> <p>Stand mount: 1 x 35mm female socket</p> <p>Grille: 1.2mm-thick perforated steel, black powder-coat</p> <p>Operating Temperature: -10°C to 40°C (14°F to 104°F)</p> <p>Dimensions (HWD): 24.1" x 14.3" x 14.6" 611mm x 364mm x 372mm</p> <p>Net Weight: 52.2 lbs (23.7 kg)</p>
<p><b>TRANSDUCER:</b></p> <p>LF Transducer: 12-inch (305mm) cone transducer, 3-inch (76mm) voice coil, ferrite magnet</p> <p>HF Transducer: 1.75-inch (44mm) voice coil, ferrite magnet compression driver with 1-inch (25mm) exit</p>	
<p><b>DSP FUNCTIONALITY:</b></p> <p>System Control: high-pass &amp; low-pass crossover filters, transducer EQ and delay compensation Transducer excursion, thermal, and amplifier clip protection.</p> <p>User Controls: Rear panel selection of 5 DSP EQ modes: Flat, Contour, 80 Hz HP, EXT LF, User</p>	
<p><b>WIRELESS CONTROL AND MONITORING:</b></p> <p>Wireless Type: Bluetooth 2.0 + EDR. Class 2 RF</p> <p>Wireless Range (typical): 82 ft. (25m) clear line-of-sight.</p> <p>Wireless Control App: Live Drive™ (app by Alto Professional, available on the App Store)</p> <p>Simultaneous Devices Connectable: 1 to 3 Delta Series loudspeakers</p> <p>Compatible Wireless Devices: iPhone 3GS and newer, iPad 2 and newer, iPod touch (4th generation) and newer</p> <p>iOS Version Requirements: iOS 6.1 and newer</p> <p>Wireless Control Features: Level Control (-<math>\infty</math> to + 10dB), Mute, Signal level metering (-70 to 0dB) DSP mode (Flat, Contour, 80 Hz HP, Ext. LF, User) Rear Panel control lockout, 3 Band EQ (Low, Mid, High), Delay, Polarity, User high-pass filter, Monitoring (Limit, Peak, Fault)</p>	

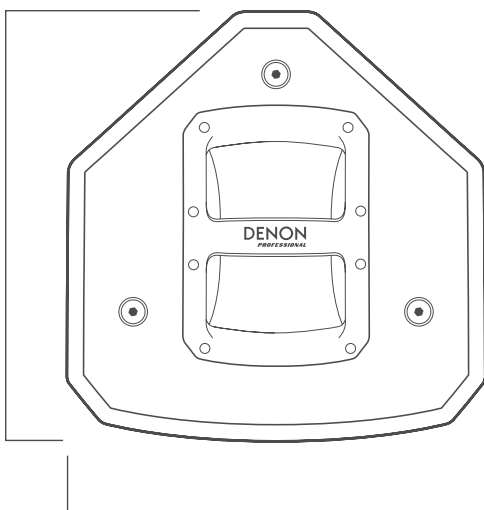
## PHYSICAL PROPERTIES

Height	24.1" (611mm)
Width	14.3" (364mm)
Depth	14.7" (372mm)
Net Weight	52.2 lbs (23.7 kg)

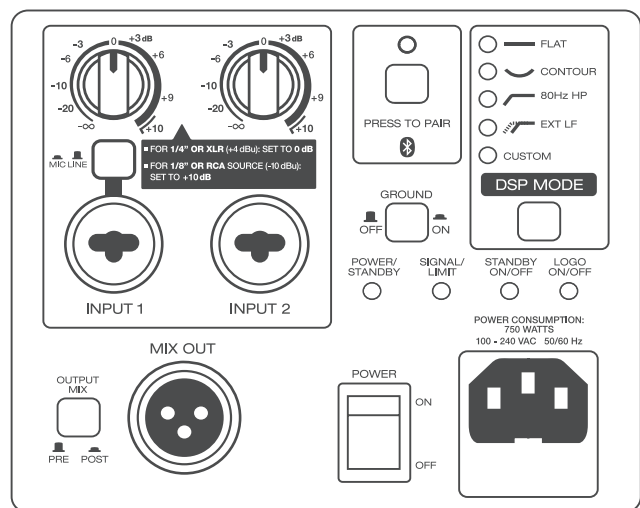
24.1"  
(611mm)



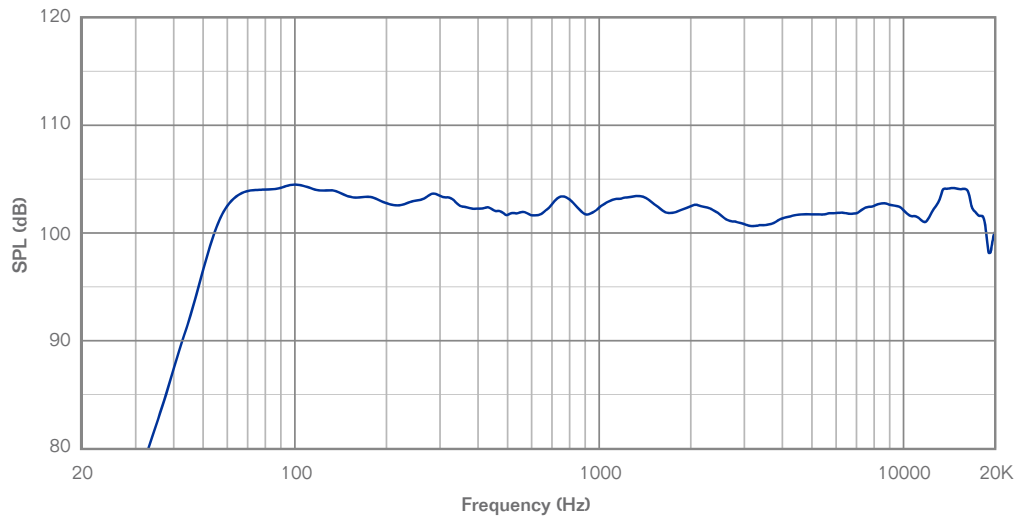
14.7"  
(372mm)



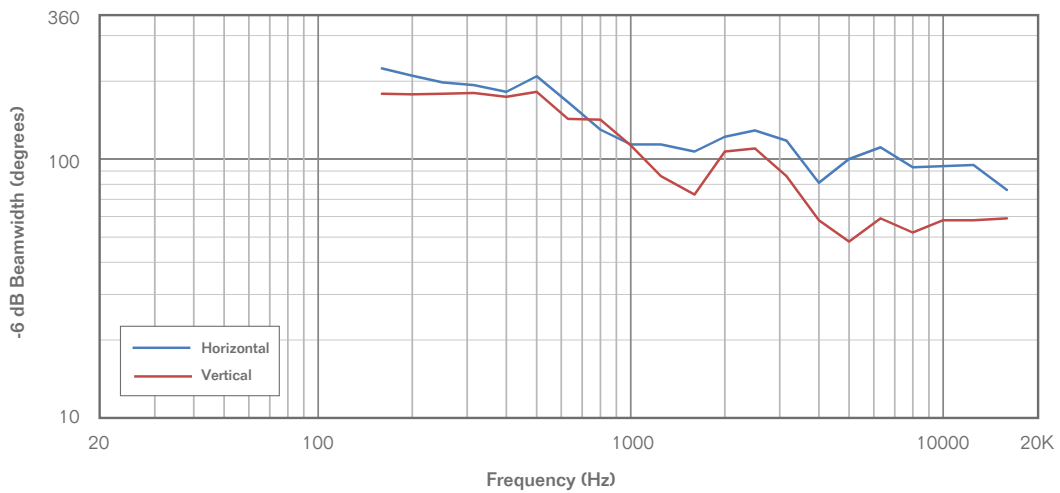
14.3"  
(364mm)



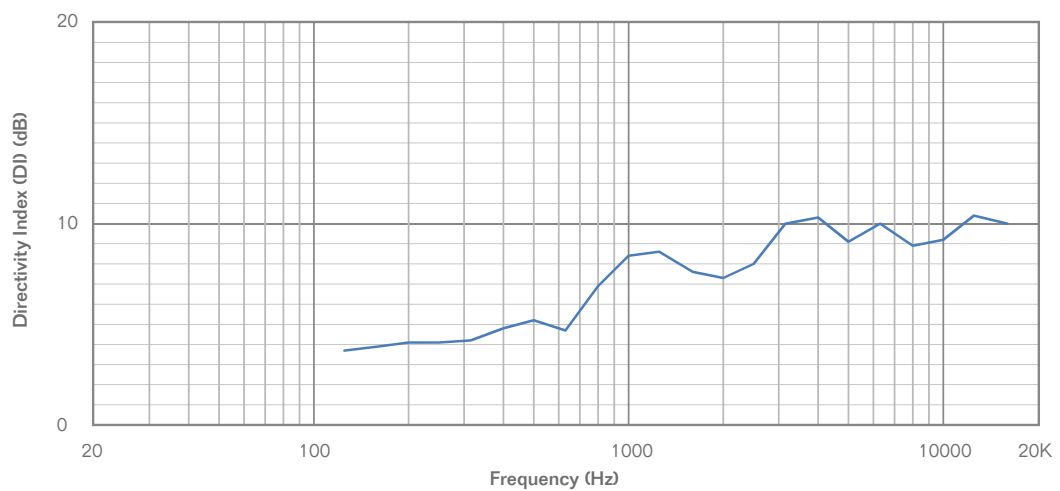
## FREQUENCY RESPONSE ON-AXIS



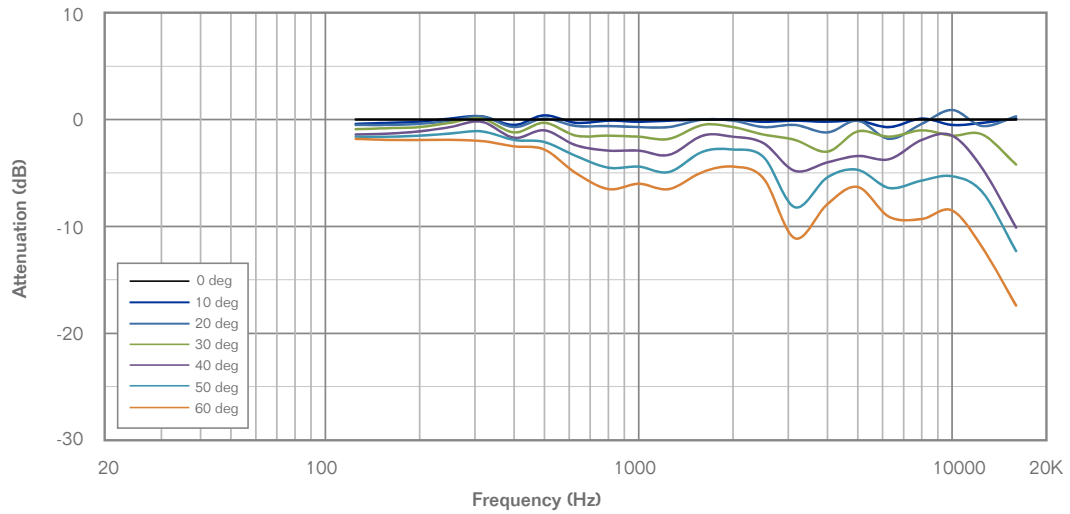
## BEAMWIDTH VS. FREQUENCY



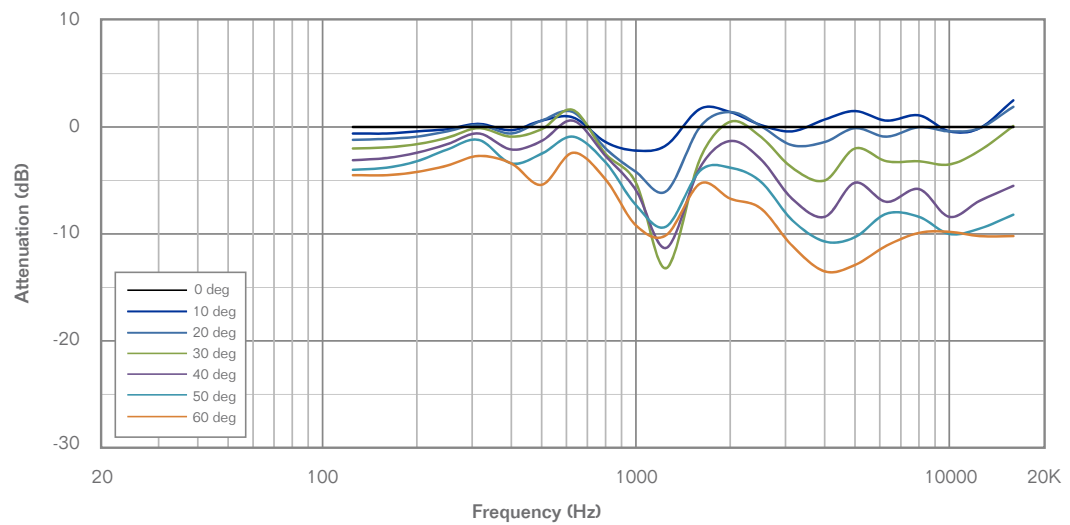
## DIRECTIVITY VS. FREQUENCY



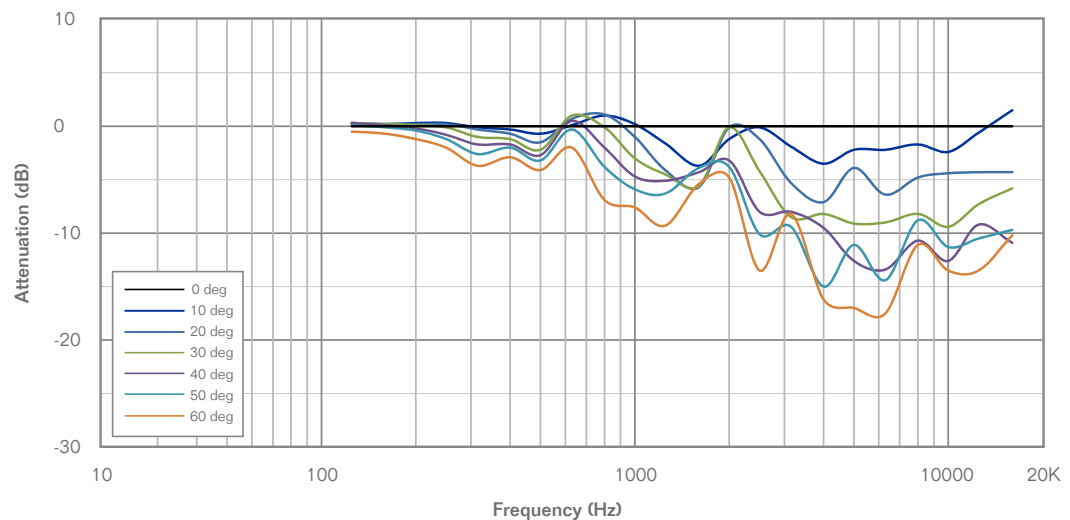
## HORIZONTAL OFF-AXIS FREQUENCY RESPONSE



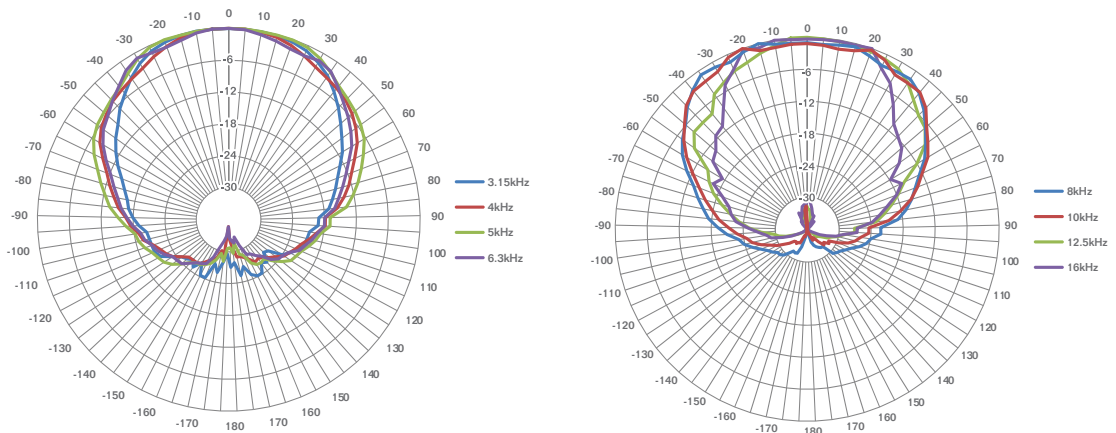
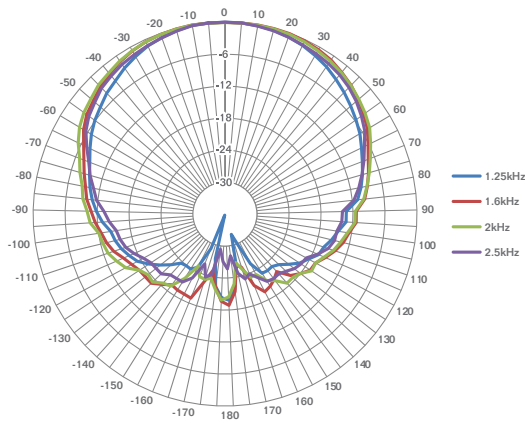
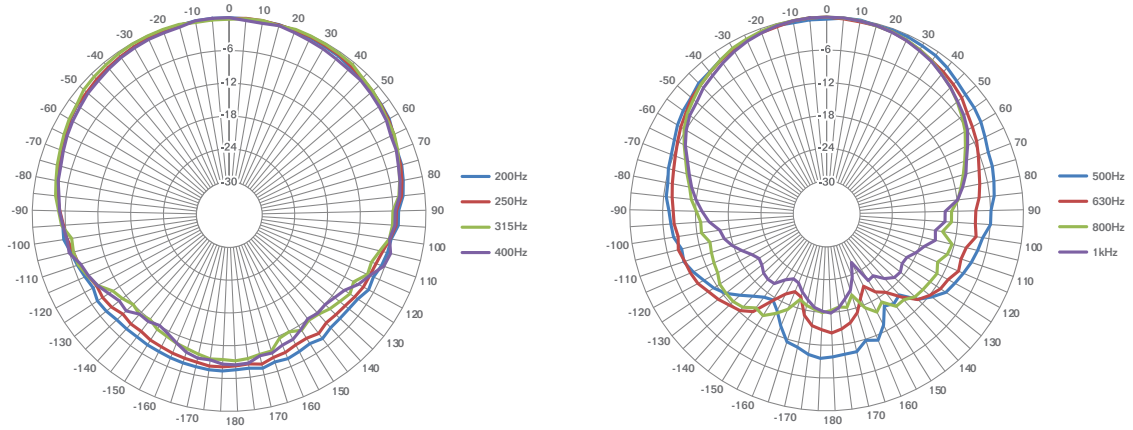
## VERTICAL UP OFF-AXIS FREQUENCY RESPONSE



## VERTICAL DOWN OFF-AXIS FREQUENCY RESPONSE



## POLAR PATTERNS



## POLAR PATTERNS

