

## ic6 PENDANT Hanging Loudspeaker<sup>1</sup>



### KEY FEATURES:

- The ic6 Pendant Loudspeaker is the high-performance ic6 In-Ceiling Loudspeaker mounted in an optional accessory Pendant Housing (sold separately)
- 1 x 6.5" Theory Carbon Fiber Coaxial Driver:
  - 6.5" Carbon Fiber Low Frequency Driver
  - 1.4" AdvancedPoly™ Compression Driver
- White or Black Paintable Grilles Included
- Maximum 112dB/1m from an Pendant Loudspeaker
- Ultra-Wide 125° Conical Coverage (170°@10kHz, -12dB)
- Highest Performance Available in its Class

### OVERVIEW:

The Theory ic6 Pendant high-output hangable loudspeaker will change your expectations of pendant loudspeakers. Via careful processing and computer-optimized tuned ports, the ic6 Pendant delivers exceptional low-frequency bandwidth, punch and resolution. Even when used in foreground music applications - the sound is full-bodied and dynamic.

But it is the typical background music application where the ic6 Pendant really shines. Even at very low levels, the music remains crystal clear and intelligible. The sound is open, airy and delicate, even when played at just a whisper.

But that's not all. The ic6 Pendant offers extremely wide dispersion to highest frequencies (refer to the ic6 Pendant measurements for data), so the coverage area is expansive. You will find that you need fewer ic6 Pendants than pendant loudspeaker from other manufacturers, leaving budget for subwoofers or higher power amplifiers.

This is the highest performance 6.5" pendant speaker available.

Book a visit to the Theory Southern California Experience Center today to learn just how valuable this little loudspeaker will be in your system design toolbox.

### APPLICATIONS:

#### Background and Foreground Business Audio Systems

Bars and sports bars, restaurants, retail stores, hotels, houses of worship, corporate conference, screening rooms, lobbies, casinos, etc.

#### Distributed Audio

Residential and commercial distributed audio systems, airports, higher-ed campuses, and education facilities.

#### High Output Surround Sound Systems

Residential and commercial media rooms, gaming systems, executive boardrooms.

## ic6 Pendant Specifications<sup>1</sup>

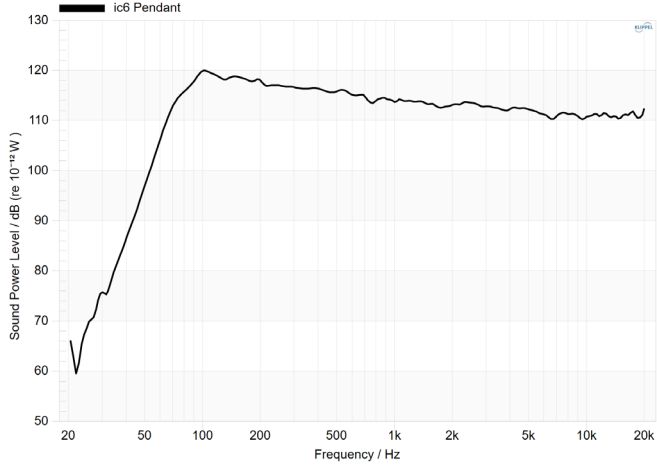
<b>Description:</b>	6.5" High-Output ic6 In-Ceiling Loudspeaker in Optional Paintable Housing
<b>Operation:</b>	Passive, Requires 1 Theory Loudspeaker Controller Amp Channel 16-ohms or 70V/100V Operation, Selectable
<b>DSP Requirements:</b>	Requires Model-Specific Theory-Certified DSP Loudspeaker Processing
<b>Drivers:</b>	1 x 6.5" THEORY Coaxial Driver: 6.5" Carbon Fiber Low Frequency Driver 1.4" Theory AdvancedPoly™ Compression Driver
<b>Enclosure:</b>	Molded ABS Frame with Powder Coated Steel Integral Back Can, Metal Grille
<b>Terminals:</b>	Euroblock Connector with Parallel Output
<b>Outdoor Capability:</b>	Indoor Use Only (refer to ic6 Pendant AW for Outdoor version)
<b>Mounting Points:</b>	Integral Hang Point
<b>Bandwidth:</b>	68Hz -23kHz, -6dB; 58Hz - 25kHz, -10dB
<b>Coverage:</b>	125 Degrees Conical (-6dB @ 10kHz) 172 Degrees Conical (-12dB @ 9.8kHz)
<b>Sensitivity:</b>	92dB <sup>2</sup> (LF); 106dB <sup>2</sup> (HF) SPL/2.83V/1m
<b>Power Handling:</b>	100W (AES); 200W (Continuous); 400W (Peak)
<b>Minimum Recommended Power:</b>	50W rms
<b>Maximum Output:</b>	112dB SPL / 1m (based on AES power rating, LF Sensitivity) 118dB SPL / 1m (peak)
<b>Nominal Impedance:</b>	16-ohms; Hi-Z (70V/100V) Selectable
<b>Transformer Taps:</b>	60W, 30W, 15W, (7.5W, 70V)
<b>Colors:</b>	Matte White or Matte Black (with matching Perforated Paintable Metal Grille)
<b>Dimensions:</b>	11.2" DIAMETER (285mm) x 10.0" D (254mm)
<b>Net Weight:</b>	13.8 lbs. (6.26 kg)
<b>Included Accessories:</b>	Black Paintable Indoor Grille (incl with Matte Black housing only)
<b>Optional Accessories:</b>	White Paintable All-Weather Grille
<b>Safety Certifications:</b>	UL-2043, CAN/ULC S142, safe for use in air handling spaces

<sup>1</sup> - Specifications when used with required Theory-Certified DSP loudspeaker processing. Failure to use Theory-Certified processing may cause damage, degrades performance and voids manufacturer warranty.

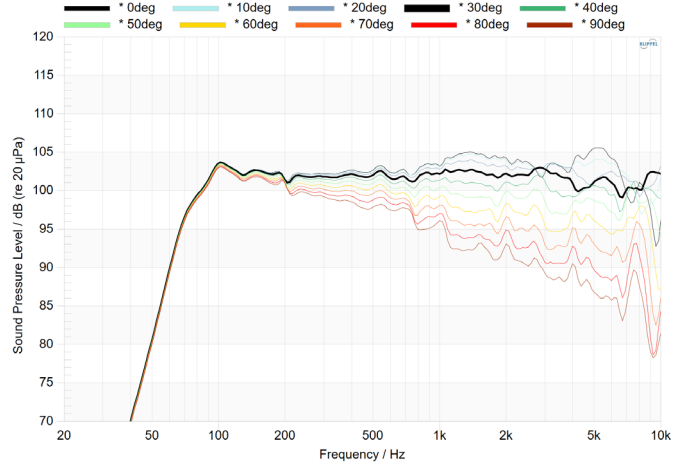
<sup>2</sup> - The loudspeaker employs a passive internal crossover network so only one amp channel is needed to drive the unit. LF and HF sensitivity figures are shown separately because the network does not attenuate the HF signal in a traditional way, driver level balancing is accomplished in required DSP processing. This technique preserves some of the benefit of bi-amplification while only requiring a single amplifier channel.

# ic6 Pendant Measurements

ic6 Pendant Total Radiated Sound Power  
radiated, 1 V, smoothed 12/oct.

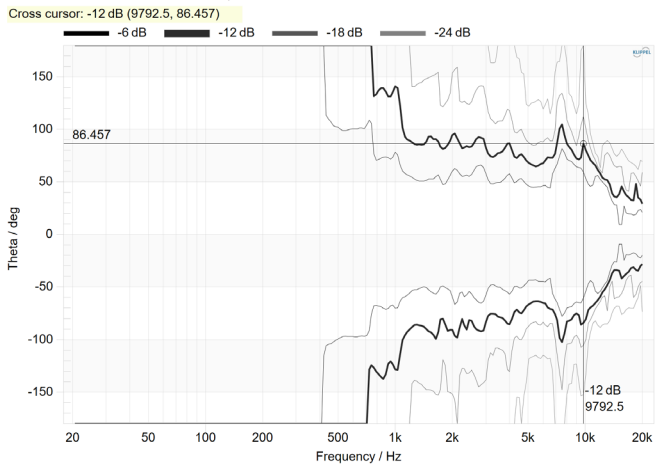


ic6 Pendant Frequency Response 0-90 Degrees  
r = 2 m, phi = -90°, theta = 90°, 1 V, smoothed 12/oct.



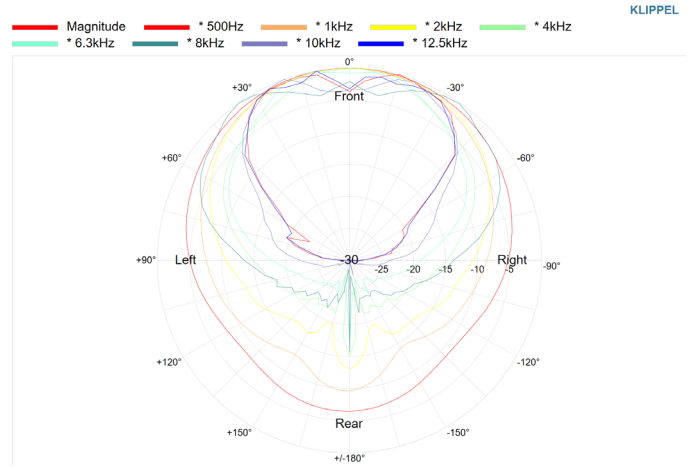
ic6 Pendant Beamwidth

r = 2 m, phi = -90°, Reference: On-Axis, smoothed 12/oct.



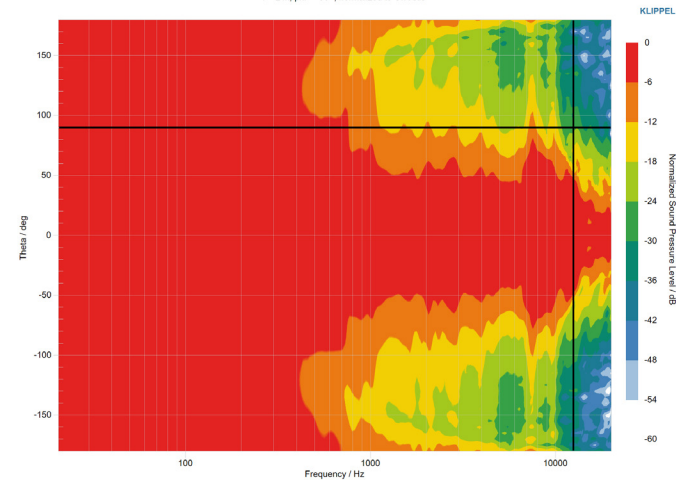
ic6 Pendant Polar Plot (normalized)

r = 2 m, phi = -90°, f = 12500 Hz

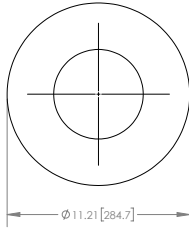


ic6 Pendant Directivity Contour Plot

r = 2 m, phi = -90°, normalized to On-Axis



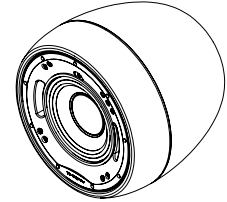
## ic6 Pendant Dimensions



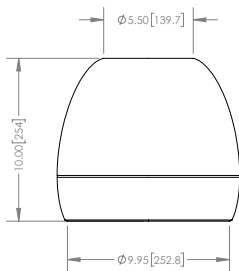
PENDANT HOUSING TOP VIEW



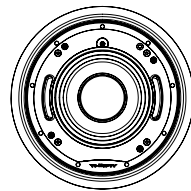
ic6 IN PENDANT HOUSING ISO VIEW



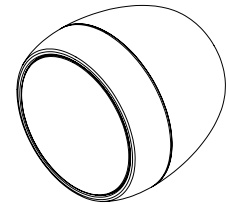
ic6 IN PENDANT HOUSING NO GRILLE



PENDANT HOUSING SIDE VIEW



ic6 IN PENDANT HOUSING BOTTOM VIEW



ic6 IN PENDANT HOUSING WITH GRILLE

## ic6 Pendant Architectural Specifications

The loudspeaker shall be of the two-way type comprising a single molded ABS frame and powder coated steel enclosure containing one (1) 6.5" coaxial driver comprised of one (1) 6.5" (165mm) Carbon Fiber low-frequency driver, and one (1) 1.4" (35mm) Advanced Polymer compression tweeter installed into a molded ABS outer decorative housing. It shall utilize a paintable perforated metal grille that is retained magnetically. Frequency range shall be 68Hz – 23KHz (-6dB). Total power handling shall be 100 Watts (AES); 200W continuous program. Sensitivity measured with 2.83 volts input at 1 meter on axis shall be 92dB. The loudspeaker shall operate via a single connected amplifier channel of suitable power via an internal passive crossover network and *must be combined with external Manufacturer-Certified DSP Processing*. The unit shall have a selectable nominal input impedance of 16-ohms or 70V/100V operation. The external wiring connector shall be a 4-position Euroblock connector with parallel output and shall accept bare wire. External dimensions shall be 11.2" Diameter (285mm) and 10.0" Depth (254mm). The total enclosure shall weigh 13.8lbs. (6.26 kg) per unit. The loudspeaker shall be the Theory Audio Design ic6 Pendant Loudspeaker.

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