

ic6 In-Ceiling Loudspeaker



KEY FEATURES:

- High-Output Weather Resistant In-Ceiling Loudspeaker System with UL-2043, CAN/ULC S142 Safety Certifications
- 1 x 6.5" Theory Carbon Fiber Coaxial Driver:
 - 6.5" Carbon Fiber Low Frequency Driver
 - 1.4" AdvancedPoly[™] Compression Tweeter
- Round and Square White Paintable Grilles Included
- Easily converts to a Pendant Loudspeaker with optional White or Black ic6 Pendant Housing (sold separately)
- Maximum 112dB/1m from an Architectural Loudspeaker
- Ultra-Wide125° Conical Coverage (170°@10kHz, -12dB)
- Highest Performance Available in its Class

OVERVIEW:

The Theory ic6 high-output in-ceiling loudspeaker will change your expectations of small-format, high-efficiency in-ceiling loudspeakers. Via careful processing and computer-optimized tuned ports, the ic6 delivers exceptional low-frequency bandwidth, punch and resolution. Even when used in foreground music applications - no subwoofer is necessary.

But that's not all. The ic6 offers extremely wide dispersion to highest frequencies (refer to the ic6 Pendant measurements for data), so the coverage area is massive, even when installed in low ceilings. Reserve space in the ceiling during the construction phase of the project with Theory's optional pre-construction brackets. Each bracket shows the loudspeaker model number so no errors are made prior to drywall.

No ceiling? No problem. Theory's optional ic6 Pendant Housings convert your Theory in-ceiling loudspeaker into a stylish, pendant-style loudspeaker in less than 5 minutes.

This is the highest performance 6.5" ceiling 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.

Premium Outdoor and Marine

Premium residential and commercial outdoor spaces, porches, restaurant patios, and yachts.



ic6 Specifications¹

Description:	6.5" High-Output Weather Resistant In-Ceiling Loudspeaker System
Operation:	Passive, Requires 1 Theory Loudspeaker Controller Amp Channel
	16-ohms or 70V/100V Operation, Selectable
DSP Requirements:	Requires Model-Specific Theory-Certified DSP Loudspeaker Processing
Drivers:	1 x 6.5" Theory Coaxial Driver:
	6.5" Carbon Fiber Low Frequency Driver
	1.4" Theory AdvancedPoly™ High Frequency Compression Driver
Enclosure:	Molded ABS Frame with Powder Coated Steel Integral Back Can, Metal Grille
Terminals:	Euroblock Connector with Parallel Output
Outdoor Capability:	Indoor and Outdoor Use (when used with optional ic6 all-weather grille)
Mounting Points:	4 x Retractable Dog Ears
Bandwidth:	68Hz -23kHz, -6dB;
	58Hz - 25kHz, -10dB
Coverage:	125 Degrees Conical (-6dB @ 10kHz)
	172 Degrees Conical (-12dB @ 9.8kHz)
Sensitivity:	92dB² (LF); 106dB² (HF) SPL/2.83V/1m
Power Handling:	100W (AES);
	200W (Continuous);
	400W (Peak)
Minimum Recommended Power:	50W rms
Maximum Output:	112dB SPL / 1m (based on AES power rating, LF sensitivity)
	118dB SPL / 1m (peak)
Nominal Impedance:	16-ohms; Hi-Z (70V/100V) Selectable
Transformer Taps:	60W, 30W, 15W, (7.5W, 70V)
Colors:	White Perforated Paintable Metal Grille
Dimensions:	Speaker: 9.2" DIAMETER (234mm) x 8.6" D (218mm)
	Round Grille: 9.4" DIAMETER (239mm) x 0.16" D (4mm)
	Square Grille: 9.4" SQ. (239mm) x 0.16" D (4mm)
	Cutout: 8.6" DIAMETER (218mm)
Total Installed Depth:	8.6" (218mm)
Maximum Wall Thickness:	1.5" (38mm)
Net Weight:	12.6 lbs. (5.67 kg)
Included Accessories:	White Paintable Round Indoor Grille
	White Paintable Square Indoor Grille
	Cutout Template
Optional Accessories:	Pre-construction Bracket
	Ceiling Tile Bridge
	Pendant Housing - Matte White or Matte Black
	White Paintable All-Weather Grille
Safety Certifications:	UL-2043, CAN/ULC S142, safe for use in air handling spaces

1 - 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.

2 - 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 Measurements







Frequency / Hz

ic6 SPL Horizontal 0°-90°

r = 2 m, Reference: 1 m, 0.1 V, smoothed 12/oct

On-Axis

Pressure Level / dB (re 20 µPa)

punos 60







THEORY AUDIO DESIGN, LLC



ic6 Dimensions



ic6 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" (165mm) coaxial driver comprised of one (1) 6.5" carbon fiber low-frequency driver, and one (1) 1.4" (35mm) Advanced Polymer compression tweeter. It shall utilize white, paintable perforated metal grilles in both round and square shapes. 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 loudspeaker enclosure shall be constructed from a molded ABS frame with powder coated steel integral back can. The external wiring connectors shall be a Euroblock connector with parallel output and shall accept bare wire. External dimensions shall be 9.2" Diameter (234mm) and 8.6" Depth (218mm). The total enclosure shall weigh 12.6 lbs. (5.67 kg) per unit. The loudspeaker shall be the Theory Audio Design ic6 In-Ceiling Loudspeaker.

© 2023 THEORY AUDIO DESIGN, LLC. All rights reserved.

Theory Audio Design, LLC dba Theory Professional routinely engages in programs to improve, modify and revise its products without notice or obligation.

THEORY AUDIO DESIGN, LLC dba THEORY PROFESSIONAL 25741 Atlantic Ocean Drive, Suite B

Lake Forest, CA 92630

Tel: 949-245-0505 www.theoryaudiodesign.com