



AD-C6T
EN54-24 Listed

AcousticDesign™ Series

AD-C6T-WH

AD-C6T-BK

6.5" small format, ceiling mount
loudspeaker

Features

- Consistent tonal characteristics across the entire AcousticDesign family for surface, ceiling, and pendant applications
- DMT (Directivity Matched Transition™) waveguide ensures smooth, uniform frequency response over the coverage area
- Snap-fit magnetic grille
- 3x double stepped, long travel dog-ear blind mount system
- Intrinsic Correction™ voicings available via Q-SYS Platform including CXD-Q Series amplifiers
- Low-saturation and low-loss 70/100V transformers with 16Ω bypass
- Blemish-free removable logo
- Removable conduit cover plate, also available as accessory for pre-install wiring
- UL1480 and UL2043 certified EN54-24 Type A, 0359-CPR-00623
- Available in black (RAL 9011) or white (RAL 9010)
- Complete EASE, CF2, CAD, & BIM information available online



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The QSC AcousticDesign™ AD-C6T is a 6.5" two-way ceiling loudspeaker ideally suited for a wide variety of foreground and background sound reinforcement applications which utilize 70/100V or 16Ω bypass configurations.

The AcousticDesign™ Series offers integrators a premium quality installed sound solution where performance, consistent coverage, and aesthetics are paramount. Specifically designed to maintain a consistent tonal characteristic across the entire family in ceiling, surface, and pendant applications, the AcousticDesign series allows integrators seamless transitions within blended installations.

The AD-C6T features a high quality 6.5" weather treated paper cone woofer with a 1" voice coil and a .75" aluminum dome tweeter which is positioned on a DMT waveguide.

DMT (Directivity Matched Transition™) is QSC's design philosophy where the high frequency waveguide is matched to the natural conical behavior of the woofer at the crossover point. The result is a coherent transition between transducers with improved off-axis power response for consistent 135° conical DMT coverage.

The accurate frequency response of the AD-C6T is maintained even in 70/100V applications by use of a low-loss, low-saturation 60-watt transformer with selectable taps, including 16Ω bypass, using a rotary selector located under the

snap-fit magnetically attached powder coat steel grille.

To retain lasting good looks, the rugged ABS baffle is further protected by using UV inhibitors that prevent discoloration and by a powder coated steel back can. The magnetic grille features a stick-on logo that can be removed blemish-free for installations where branding is not permitted.

Installers will appreciate the 3x double stepped, long travel dog-ear blind mounting system, which captures from 0" - 2.25" of ceiling thickness. The conduit cover plate can be easily removed by loosening the single captive Phillips screw allowing access to the locking 4-pole Euro-block connector which can accept up to four 18AWG pairs, eliminating the hassles of star topology wiring designs. A locking 4-pole Euro-block connector that can accept four 18AWG pairs eliminates the termination hassles of star topology wiring designs.

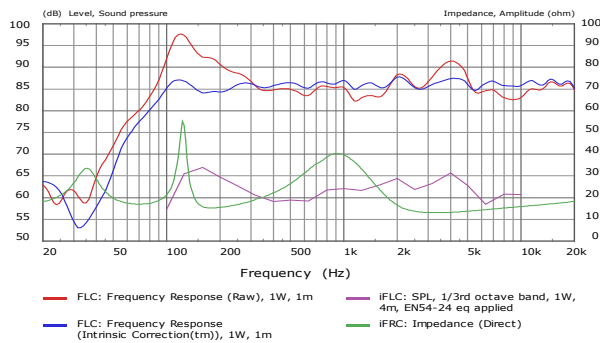
Intrinsic Correction™ voicings that optimize performance and speed the install process are easily deployed via the Q-SYS Platforms, including CXD-Q Series amplifiers, as part of a complete QSC systems solution.

The AD-C6T is available in QSC standard black (RAL 9011) or white (RAL 9010) and may be painted to match any decor.

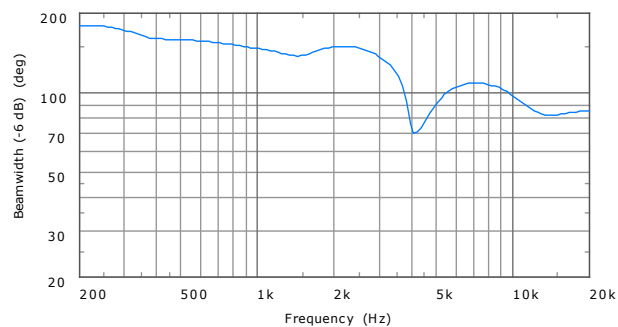
For your system integration needs, complete EASE, CF2, CAD, and BIM files are available for download at QSC.com.

AD-C6T-BK, AD-C6T-WH Details

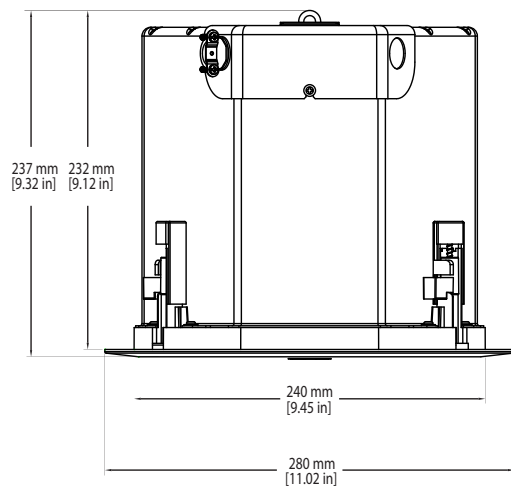
Impedance / Frequency Response:



Beamwidth:



Dimensions:



As part of QSC's ongoing commitment to product development, specifications are subject to change without notice.

¹ -10dB from rated sensitivity

² Full-space, IEC baffle, 4m

³ Reference axis

⁴ 200 - 10kHz average

⁵ 500 - 5kHz average

⁶ IEC, 2hrs

⁷ Calculated from rated noise power and sensitivity

Specifications

System Details	AD-C6T-BK, AD-C6T-WH
LF transducer	165 mm [6.5 in] weather treated paper cone woofer
HF transducer	19 mm [0.75 in] aluminum dome tweeter
Effective frequency range ^{1,2,3,8}	65 Hz – 20 kHz
Rated noise power / voltage ⁶	60 watts / 31 volts (rms)
Sensitivity [dB]	Rated @1W, 1m ^{2,3,4,8} : 88 EN54-24 @1W, 4m ⁹ : 74
Coverage (-6 dB) [°]	Rated ^{2,5,8} : 135° conical DMT
Horizontal / Vertical ⁹	500Hz: 176 / 177, 1kHz: 151 / 151 2kHz: 99 / 130, 4kHz: 71 / 59
Declared values of SPL, 1/3rd octave band CPB, 1W, 4m, EN54-24 eq applied [Hz : dB] ⁹	500: 59.4; 630: 59.2; 800: 61.8 1000: 62.1; 1250: 61.6; 1600: 62.9 2000: 64.4; 2500: 61.9; 3150: 63.2; 4000: 65.7
EN54-24 Equalization ⁹	High Pass, 12dB/oct, Butterworth, Fc: 200Hz High Shelf, 12dB/oct, (Q)1 / (BW)1.38, Fc: 8kHz, Gain: +4dB
Directivity factor ^{2,5,8}	6.5
Directivity index [dB] ^{2,5,8}	8
Maximum SPL [dB]	Rated, 1m (continuous / peak) ⁷ : 106 / 112 EN54-24, 4m (low-Z / Highest-tap) ⁹ : 92.31 / 91.80
Recommended amplifier	60 watts
Transformer taps / impedance	Bypass: 16Ω 7.5W (70V); 15W (100V) Tap: 667Ω 15W (70V); 30W (100V) Tap: 333Ω 30W (70V); 60W (100V) Tap: 167Ω 60W (70V); N/A (100V) Tap: 83Ω
Input connector type	Euroblock connector with parallel output
Enclosure material	ABS baffle on powder coated steel back can
Grille material	Powder coated steel
Ingress protection	IP-34
Operating environment	Designed for indoor use
Operating temperature range	-20 to 50° C [-4 to 122° F]
Cutout dimension	Ø 245 mm [Ø 9.65 in]
Net weight	4.3 kg [9.5 lb]
Product dimensions (Ø x H)	Ø 280 x 237 mm [Ø 11.02 x 9.32 in.]
Shipping weight	12.6 kg [27.8 lb] (pair packed)
Shipping dimensions (H x W x D)	330 x 737 x 381 mm [13 x 29 x 15 in] (pair packed)
Included accessories	C-ring and tile rails, rail screws, euroblock connector, cut-out template, grille
Optional accessories	AD-MR6 (pre-install mud ring)
Safety Agency	EN54-24: 2008 type A, 0359-CPR-00623 UL1480, UL2043, NFPA90, NFPA70 suitable for use in air handling spaces. Transformer UL registered per UL1876, ROHS, CE compliant. Baffle meets UL94-V0 and UL94-5VB flammability rating; in accordance with IEC60849 / EN60849 systems.

⁸ Reference plane is the plane coincident with the loudspeaker baffle plane. Reference axis is the axis perpendicular to the reference plane and passing through the center of the baffle. Vertical plane is the plane intersecting the reference plane at a right angle, including the reference axis and the taps selector knob. Horizontal plane is the plane intersecting the reference plane and the vertical plane at a right angle, including the reference axis.

⁹ Per EN54-24



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