

# AcousticDesign™ Series AD-C6T-ZB

#### **KEY FEATURES**

- Zero bezel design for the needs of modern applications
- Consistent tonal characteristics across the entire AcousticDesign Series for surface, ceiling, and pendant applications
- DMT (Directivity Matched Transition<sup>TM</sup>)
  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<sup>™</sup> voicings available via the Q-SYS Platform including CX-Q amplifiers
- Blemish-free removable logo
- Removable conduit cover plate, also available as accessory for pre-install wiring
- UL1480 and UL2043 certified
- Available in white (RAL 9003), with black grille accessory sold separately.
- Complete EASE, CF2, CAD, & BIM information available online



## AcousticDesign™ Series AD-C6T-ZB

6.5" small format, zero bezel ceiling mount loudspeaker

The Q-SYS AcousticDesign  $^{\infty}$  AD-C6T-ZB is a 6.5" two-way, zero bezel ceiling loudspeaker ideally suited for a wide variety of foreground and background sound reinforcement applications which utilize 70/100V or 16 $\Omega$  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-ZB 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 Q-SYS'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 150° conical DMT coverage.

The accurate frequency response of the AD-C6T-ZB is maintained even in 70/100V applications by use of a low-loss, low-saturation 30-watt transformer with selectable taps, including  $16\Omega$  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 losening 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.

Intrinsic Correction™ voicings that optimize performance and speed the install process are easily deployed via the Q-SYS Platform including CX-Q Series amplifiers.

The AD-C6T-ZB is available in white (RAL 9003) with black grilles sold separately, and has the ability to be painted to match any decor.

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



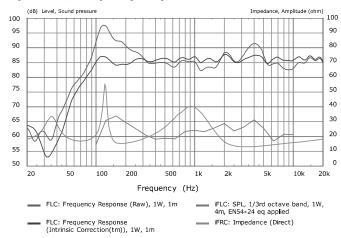
## AD-C6T-ZB

| HF transducer  Effective frequency range 1, 2, 3, 8  Rated noise power / voltage 6  Sensitivity (dB)  Coverage (-6 dB) (°)  Horizontal / Vertical 9  Declared values of SPL, 1/3rd octave band CPB, 1000: 62  2000: 64  Directivity factor 2, 5, 8  Maximum SPL (dB)  Recommended amplifier  Transformer taps / impedance  Bypass: 16  7.5 W (70  30 W (70  60 W (70)  Input connector type  Euroblock  Enclosure material   | 2 V (rms)  W, 1m <sup>2,3,4,8</sup> : 88 : 135° conical DMT 76 / 177, 1kHz: 151 / 151  |
|--|--|
| Effective frequency range 1, 2, 3, 8  Rated noise power / voltage 6  Sensitivity (dB)  Coverage (-6 dB) (°)  Horizontal / Vertical 9  Declared values of SPL, 1/3rd octave band CPB, 1000: 62 2000: 64  Directivity factor 2, 5, 8  Directivity index (dB) 2, 5, 8  Maximum SPL (dB)  Recommended amplifier  Transformer taps / impedance  Bypass: 16  7,5 W (70 30 W (70 60 W (70) Input connector type  Enclosure material   | 2 V (rms)  W, 1m <sup>2, 3, 4, 8</sup> : 88  : 135° conical DMT  76 / 177, 1kHz: 151 / 151 / 130, 4kHz: 71 / 59  ; 630: 59.2; 800: 61.8  1; 1250: 61.6; 1600: 62.9  4; 2500: 61.9; 3150: 63.2; 4000: 65.7      |
| Rated noise power / voltage 6  Sensitivity (dB)  Rated @1  Coverage (-6 dB) (°)  Horizontal / Vertical 9  Declared values of SPL, 1/3rd octave band CPB, 1000: 62  2kHz: 99  Declared values of SPL, 1/3rd octave band CPB, 1000: 62  Directivity factor 2,5,8  Directivity index (dB) 2,5,8  Maximum SPL (dB)  Recommended amplifier  Transformer taps / impedance  Bypass: 16  7.5 W (70  30 W (70  60 W (70)  Input connector type  Euroblock  Enclosure material   | 2 V (rms)  W, 1m <sup>2,3,4,8</sup> : 88  : 135° conical DMT  76 / 177, 1kHz: 151 / 151  / 130, 4kHz: 71 / 59  ; 630: 59.2; 800: 61.8  1; 1250: 61.6; 1600: 62.9  4; 2500: 61.9; 3150: 63.2; 4000: 65.7        |
| Sensitivity (dB)         Rated @1           Coverage (-6 dB) (°)         Rated 2.5.           Horizontal / Vertical °         500Hz: 1           2kHz: 99         2kHz: 99           Declared values of SPL, 1/3rd octave band CPB, 1000: 62         2000: 64           Directivity factor 2.5,8         6.5           Directivity index (dB) 2.5,8         8           Maximum SPL (dB)         Rated, 1m           Recommended amplifier         60 watts           Transformer taps / impedance         Bypass: 16           7.5 W (70         30 W (70           60 W (70         60 W (70           Input connector type         Euroblock           Enclosure material         ABS baffle  | W, 1 m <sup>2,3,4,8</sup> : 88  : 135° conical DMT  76 / 177, 1kHz: 151 / 151  / 130, 4kHz: 71 / 59  ; 630: 59.2; 800: 61.8  1; 1250: 61.6; 1600: 62.9  4; 2500: 61.9; 3150: 63.2; 4000: 65.7                  |
| Coverage (-6 dB) (°)         Rated 2.5.           Horizontal / Vertical °         500Hz: 1 2kHz: 99           Declared values of SPL, 1/3rd octave band CPB, 1000: 62 2000: 64         500: 59.4           IW, 4m (Hz: dB)°         6.5           Directivity factor 2.5.8         6.5           Directivity index (dB) 2.5.8         8           Maximum SPL (dB)         Rated, 1m           Recommended amplifier         60 watts           Transformer taps / impedance         Bypass: 16 7.5 W (70 30 W (70 60   | : 135° conical DMT 76 / 177, 1kHz: 151 / 151 / 130, 4kHz: 71 / 59 ; 630: 59.2; 800: 61.8 1; 1250: 61.6; 1600: 62.9 4; 2500: 61.9; 3150: 63.2; 4000: 65.7   |
| Horizontal / Vertical 9   500Hz: 1   2kHz: 99     Declared values of SPL, 1/3rd octave band CPB, 1000: 62   2000: 64     Directivity factor 2,5,8   6.5     Directivity index (dB) 2,5,8   8     Maximum SPL (dB)   Rated, 1m     Recommended amplifier   60 watts     Transformer taps / impedance   Bypass: 16   7.5 W (70   15 W (70   30 W (70   60 W (70   15 W (70   60 W (70  | 76 / 177, 1kHz: 151 / 151<br>/ 130, 4kHz: 71 / 59<br>; 630: 59.2; 800: 61.8<br>1; 1250: 61.6; 1600: 62.9<br>4; 2500: 61.9; 3150: 63.2; 4000: 65.7  |
| Declared values of SPL, 1/3rd octave band CPB, 1000: 59.4     1W, 4m (Hz: dB)9   | / 130, 4kHz: 71 / 59 ; 630: 59.2; 800: 61.8 1; 1250: 61.6; 1600: 62.9 4; 2500: 61.9; 3150: 63.2; 4000: 65.7  |
| Declared values of SPL, 1/3rd octave band CPB, 1000: 59.4  | ; 630: 59.2; 800: 61.8<br>1; 1250: 61.6; 1600: 62.9<br>4; 2500: 61.9; 3150: 63.2; 4000: 65.7   |
| 1W, 4m (Hz:dB)9         1000: 62 2000: 64           Directivity factor 2, 5, 8         6.5           Directivity index (dB) 2, 5, 8         8           Maximum SPL (dB)         Rated, 1 m           Recommended amplifier         60 watts           Transformer taps / impedance         Bypass: 10 7.5 W (70 30 W (70 60 W  | 1; 1250: 61.6; 1600: 62.9<br>4; 2500: 61.9; 3150: 63.2; 4000: 65.7   |
| 2000: 64    Directivity factor 2, 5, 8    6.5    Directivity index (dB) 2, 5, 8    8    Maximum SPL (dB)   Rated, 1 m   Recommended amplifier   60 watts     Transformer taps / impedance   Bypass: 14     7.5 W (70     15 W (70     30 W (70     60 W (70     Input connector type   Euroblock     Enclosure material   ABS baffle   | 4; 2500: 61.9; 3150: 63.2; 4000: 65.7  |
| Directivity factor 2, 5, 8         6.5           Directivity index (dB) 2, 5, 8         8           Maximum SPL (dB)         Rated, 1 m           Recommended amplifier         60 watts           Transformer taps / impedance         Bypass: 16 7.5 W (70 15 W (70 30 W (70 60 W (70 60 W (70 15 W (70 15 W (70 60 W (70 6   |  |
| Directivity index (dB) 2,5,8         8           Maximum SPL (dB)         Rated, 1 m           Recommended amplifier         60 watts           Transformer taps / impedance         Bypass: 16           7.5 W (70         15 W (70           30 W (70         60 W (70           Input connector type         Euroblock           Enclosure material         ABS baffle  | (continuous / peak) 7: 106 / 112   |
| Maximum SPL (dB)         Rated, 1m           Recommended amplifier         60 watts           Transformer taps / impedance         Bypass: 1d           7.5 W (70         15 W (70           30 W (70         60 W (70           Input connector type         Euroblock           Enclosure material         ABS baffle  | (continuous / peak) 7: 106 / 112   |
| Recommended amplifier         60 watts           Transformer taps / impedance         Bypass: 16           7.5 W (70         15 W (70           30 W (70         60 W (70           Input connector type         Euroblock           Enclosure material         ABS baffle   | (continuous / peak) 7: 106 / 112   |
| Transformer taps / impedance   Bypass: 16   7.5 W (70   15 W (70   30 W (70   60 W (70   15 W (70   60 W (70 |  |
| 7.5 W (70   15 W (70   30 W (70   60 W (70 |  |
| 15 W (70<br>30 W (70<br>60 W (70<br>Input connector type   Euroblock<br>  Enclosure material   ABS baffle  | Ω  |
| 30 W (70 60 W (70 Final Points))  Input connector type Euroblock  Enclosure material ABS baffle  | V); 15 W (100 V) Tap: 667 Ω  |
| Input connector type Euroblock Enclosure material ABS baffl  | V); 30 W (100 V) Tap: 333 Ω  |
| Input connector type     Euroblock       Enclosure material     ABS baffle   | V); 60 W (100 V) Tap: 167 Ω  |
| Enclosure material ABS baffle  | V); N/A (100 V) Tap: 83 Ω  |
|  | connector with parallel output   |
| Grille material Powder of  | e on powder coated steel back can  |
|  | pated 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 mi  | n (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 (2   | 7.8 lb), pair packed   |
| Shipping dimensions (H x W x D) 330 x 73   | x 381 mm (13 x 29 x 15 in), pair packed  |
| Included accessories C-ring an   | tile rails, rail screws, euroblock connector, cut-out template, grille   |
| Optional accessories AD-MR6  | pre-install mud ring), AD-C254BG (black ceiling grille)  |
| UL1876, F  | JL2043, NFPA90, NFPA70 suitable for use in air handling spaces. Transformer UL registered per OHS, CE compliant. Baffle meets UL94-V0 and UL94-5VB flamibility rating; in accordance with P / EN60849 systems. |

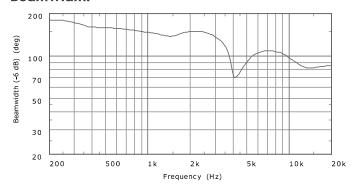
<sup>1 - 10</sup>dB from rated sensitivity
2 Full-space, IEC baffle, 4m
3 Reference axis
4 200 - 10kHz average
5 500 - 5kHz average
6 IEC, 2hrs
7 Calculated from rated noise power and sensitivit

<sup>&</sup>lt;sup>8</sup> 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.

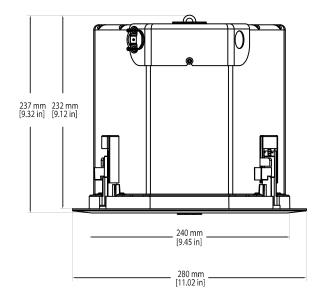
## **Impedance/Frequency Response:**



## **Beamwidth:**



#### **Dimensions**



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