



**AcousticDesign™ Series**  
**AD-S402T-BK**  
**AD-S402T-WH**

(x4) 2.75" columnar surface mount  
loudspeaker

**Features**

- Consistent tonal characteristics across the entire AcousticDesign Series for surface, ceiling, and pendant applications
- Weather resistant construction for outdoor usage, IP-54 rated
- UL1480A certified
- PTT (Progressive Taper Topology™) network reduces unwanted side lobes
- Low-saturation and low-loss 70 / 100 V transformers with low impedance bypass
- Sealed input cover plate with removable gland nut
- Close to wall quick hang pan/tilt mounting bracket
- Intrinsic Correction™ voicings available via the Q-SYS Ecosystem including CX-Q Series amplifiers
- Available in black (RAL 9011) or white (RAL 9010)
- Complete EASE, CF2, CAD, & BIM information available online



**Transportation Terminals • Lecture Halls • Atriums • Education**  
**Worship Facilities • Court Houses • Concourses**  
**Large System Ancillary Support**

The QSC AcousticDesign™ AD-S402T is a columnar array line consisting of four weather treated 2.75" transducers. Columnar loudspeakers are ideally suited for a wide variety of acoustically difficult applications where speech intelligibility is a primary concern.

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.

With rugged powder coated aluminum construction, stainless steel hardware, and sealed input panel cover, the AD-S402T is designed for indoor or outdoor use, exceeding IEC60529 IP-54 ratings for dust and splash resistance.

A carefully crafted PTT (Progressive Taper Topology™) network is utilized to create a passive curvature of the array line which greatly reduces side lobing, often problematic of straight array lines, resulting in precise and consistent directivity control.

The accurate frequency response of the AD-S402T is maintained even in 70 / 100 V applications by use of a low-loss, low-saturation transformer with selectable taps, including a bypass for

low impedance application, using a rotary selector located behind the sealed input cover plate. The input cover plate comes with an attached wire sealing gland nut for direct cable attachments onto a locking 4-pole Euro-style connector for added security of the wire terminations. The gland nut may be removed in provision of alternative conduit or flex tubing landed requirements.

Installers will appreciate the quick-hang pan/tilt mounting bracket supplied the AD-S402T. This feature greatly reduces the amount of live-load time during high reach installation, allowing the installer to work faster, safer, and smarter. The mount includes a zero pan locking screw in consideration of wind load conditions. The mount may be attached to several landing positions on the enclosure to provide a close to wall appearance. When tilt is not required, the tilt section of the mount may be removed to bring the enclosure even closer to the wall. The included shoulder eyebolt provides a safety tether anchor point.

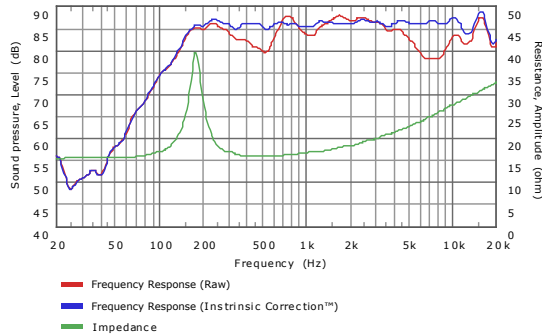
Intrinsic Correction™ voicings that optimize performance and speed the install process are easily deployed via the Q-SYS Ecosystem including CX-Q Series amplifiers, as part of a complete QSC systems solution.

The AD-S402T is available in QSC standard black (RAL 9011) or white (RAL 9010) and may be painted to match any decor.

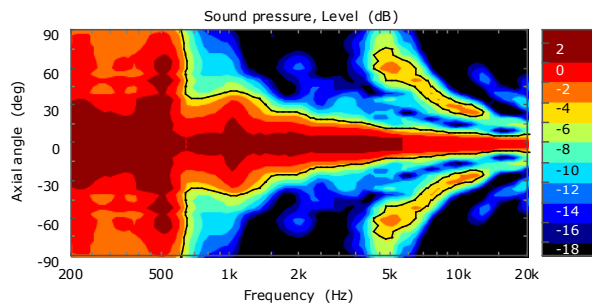
For your system integration needs, complete EASE, CF2, CAD, and BIM files are available for download at QSC.com.

# AD-S402T-BK, AD-S402T-WH Details

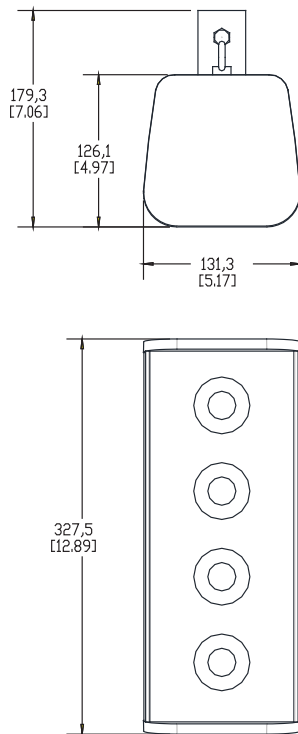
## Impedance / Frequency Response:



## Vertical Contour:



## Dimensions:



## Specifications

System Details	AD-S402T-BK, AD-S402T-WH
Transducer	(x4) 69.8 mm [2.75 in] weather treated paper cone woofer
Effective frequency range <sup>1,2,3,8</sup>	110 Hz – 20 kHz
Rated noise power / voltage <sup>6</sup>	60 W / 31 V (rms)
Sensitivity [dB]	Rated @1 W, 1m <sup>2,3,4,8</sup> : 85
Coverage (-6 dB) [°]	Rated <sup>2,5,8</sup> : 150 x 35
Horizontal x Vertical <sup>9</sup>	500 Hz: 180 x 90, 1 kHz: 180 x 80 2k Hz: 160 x 46, 4 kHz: 180 x 28
Directivity factor <sup>2,5,8</sup>	11
Directivity index [dB] <sup>2,5,8</sup>	10.5
Maximum SPL [dB]	Rated, 1m (continuous / peak) <sup>7</sup> : 105 / 111
Recommended amplifier	120 W
Transformer taps / impedance	Bypass: 16 Ω 3.75 W (70 V) 7.5 W (100 V) Tap: 1333 Ω 7.5 W (70 V); 15 W (100 V) Tap: 667 Ω 15 W (70 V); 30 W (100 V) Tap: 333 Ω 30 W (70 V); Tap: 167 Ω
Input connector type	Euroblock connector with parallel output
Enclosure material	Powder coated aluminum
Grille material	Powder coated aluminum
Ingress protection	IP-54
Operating environment	Designed for indoor or outdoor use
Operating temperature range	-4 to 122° F (-20° to 50° C)
Net weight	7.5 lb (3.4 kg)
Product dimensions (H x W x D)	12.89 x 5.17 x 4.97 in (327.5 x 131.3 x 126.1 mm)
Shipping weight	11 lb (5 kg)
Shipping dimensions (H x W x D)	21.4 x 12.2 x 9.6 in (544 x 310 x 244 mm)
Included accessories	Sealed input cover plate with gland nut Quick hang pan/tilt wall bracket Shoulder eyebolt safety tether anchor
Safety Agency	UL1480A Transformer UL registered per UL1876, ROHS, CE compliant.

1 -10dB from rated sensitivity

2 Full-space, 4 m

3 Reference axis

4 200 - 10 kHz average

5 1k - 10 kHz average

6 IEC, 2 hrs

7 Calculated from rated noise power and sensitivity

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

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

# QSC®

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AD-S402T Spec Sheet 09/21/2020

