Architect & Engineer’s Specifications

AcousticDesign Series

AD-S162T

The professional surface mount loudspeaker system shall be a vertical column design utilizing full-range drivers. The transducers shall be 16 2.5-inch (63.5 mm) drivers with weather-resistant paper cones. The loudspeaker system shall be capable of operation in direct low-impedance mode or over a 70/100V distributed audio line via a built-in low-saturation transformer.

The loudspeaker system shall meet the following performance criteria: effective frequency range of 200 Hz to 17 kHz (free-field, -10 dB from on-axis sensitivity); broad-band sensitivity of 90 dB SPL (WIDE setting) or 92 dB (NARROW setting)(on-axis, free-field sensitivity, 2.83 V in, measured at 1 m); maximum rated SPL (calculated) of 120 dB (WIDE setting) or 122 dB (NARROW setting) peak; rated power capacity of 44 V rms or 240 W (two-hours, IEC60268-1 noise); recommended amplifier power of 240 W; nominal impedance of 8 ohms. The loudspeaker system's nominal coverage angle (-6 dB) shall be 150 degrees horizontal. The vertical coverage angle shall be selectable: 30 degrees (WIDE setting) or 15 degrees (NARROW setting).

The loudspeaker system connectors shall be mounted on a sealed, recessed input panel, with a 4-terminal Euroblock connector having parallel input and output terminals. The loudspeaker system’s transformer tap selector switch shall be a five-position rotary type and shall also reside on the input panel. The tap selections shall be 8 ohm (bypass); 120 W (70V) and N/A (100V); 60 W (70V) or 120 W (100V); 30 W (70V) or 60 W (100V); and 15 W (70V) or 30 W (100V). The two-position rotary switch for selecting the vertical coverage angle (WIDE or NARROW) shall also reside on the input panel.

A weather-tight cover for the input panel shall be provided for optional protection against precipitation and other moisture. The loudspeaker enclosure, which shall meet IEC60529 IP-54 specifications for dust and splash resistance, shall be constructed of aluminum and finished in either of two RAL colors: black (9011) or white (9010). The front of the enclosure shall be protected by a powder-coated aluminum grille. The manufacturer’s logo on the front grille shall be removable without leaving a blemish.

The loudspeaker system shall include a surface mounting bracket that allows the enclosure 0 to 20 degrees of downward tilt, in 5-degree increments, and up to ±51 degrees of horizontal panning. On its rear panel the enclosure shall offer seven different mounting positions for the bracket and shall also have three M6 threaded holes for shoulder eye bolts to be used for attaching safety tethers or for horizontally suspending the loudspeaker.

The enclosure shall be 45.8 in (1162 mm) high, 5.2 in (131 mm) wide, and 5.0 in (126 mm) deep. With the mounting bracket installed, the front of the grille shall stand 7.6 in (192 mm) from the mounting surface when set for zero tilt. The loudspeaker system shall have a net weight of 26 lb (11.8 kg).

The surface-mount column loudspeaker system shall be the QSC AD-S162T.