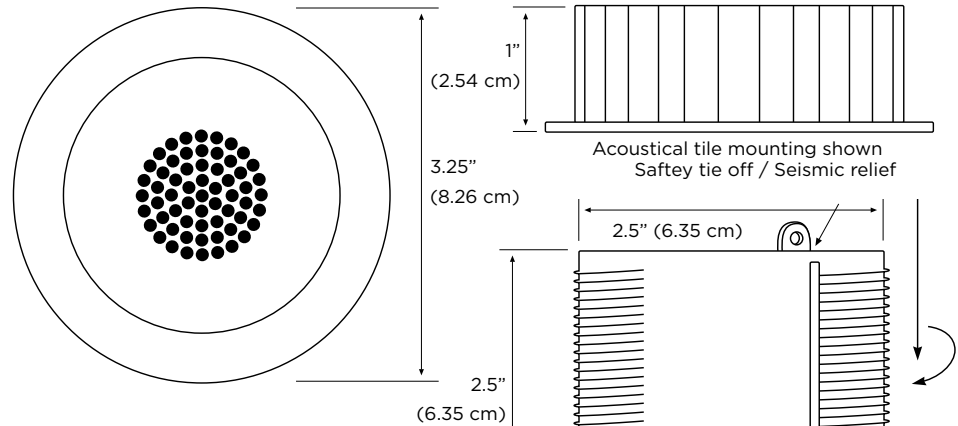


## Qt emitter™



## APPLICATION

Qt emitters are miniature, direct field speakers and are omnidirectional, providing nearly 180 degrees of sound dispersion. These plug-and-play emitters may be used interchangeably with all of Cambridge Sound Management's sound masking, paging and music control modules.

Qt emitters are offered in one format: micro adjustable emitter. These adjustable emitters allow the sound masking input to be reduced by up to 9dB, in 3dB increments to compensate for different acoustic conditions within a zone.

## HOW TO SPECIFY

Emitter	Control	Color	Standard cable lengths (ft) May be specified	Quantity
E (Emitter)	A (Adjustable)	W (White)	16 ft (4.9 m)	4
	A (Adjustable)	B* (Black)	30 ft (9.1 m)	

\* For black color emitters, CSM ships white emitters with the appropriate color cap. Emitter caps easily attach to the emitter grill for a flawless painted look.

Examples:

E-A-W-16-4: An adjustable white emitter with a 16' cable that comes in a pack of 4.

E-A-B-30-4: An adjustable black emitter with a 30' cable that comes in a pack of 4.

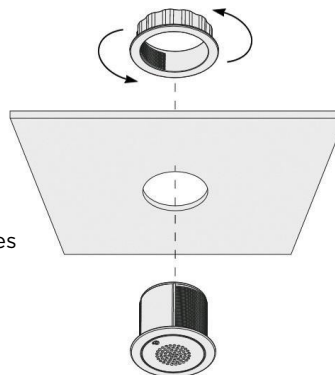
## INSTALLATION

Installation is on a simple grid pattern.  
(A standard 9' (2.74 m) ceiling uses a 10' X 10' (3 m x 3 m) grid.)

Emitters are plug-and-play, daisy-chained together with CAT-3, plenum-rated cables, pre-terminated with industry standard RJ-45 connectors. The Qt adjustable emitter back plate features three dip switches to enable -3dB, -6dB and -9dB adjustments.

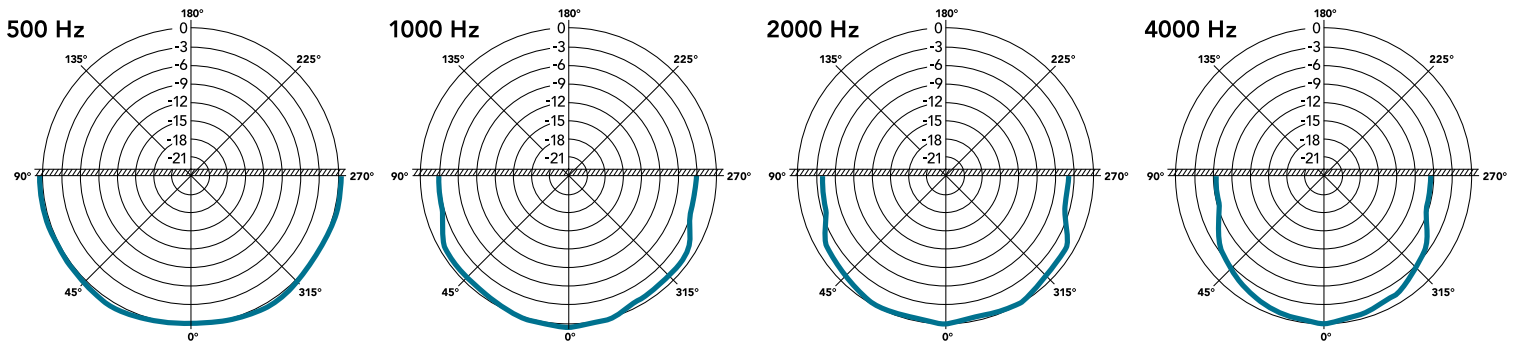
Emitters fit any ceiling tile from 1/2" to 1-1/2" thick. The required hole saw is included with purchase of control module.

For installations in other ceiling types, see mounting options.



adjustable emitter (back)

## HALF-SPACE POLAR RESPONSE



## EMITTER TECHNICAL SPECIFICATIONS

**Grill Diameter:**  
3.25" (83 mm)

**Enclosure Height:**  
2.5" (64 mm)

**Weight:**  
5.6 oz. (159 g)

**Wiring:**  
Standard CAT3/5/5A/6 cables

**Sensitivity:**  
50 dB at 1 meter and 1 milliwatt input

**Spectral Output:**  
Within 1 dB of optimum spectrum shape for sound masking as measured in standard ISO 1/3 Octave bands as equalized by control module

**Certifications:**  
Plenum-rated, UL-listed and complies with UL-2043

**Frequency Response:**  
Flat +/- 1 dB in 1/3 octave bands over entire speech range as equalized by control module

**Nominal Impedance:**  
4000 ohms nominal: typically permits coverage of 6000 sq. ft. of office area per distribution line without significant line loss

**Masking Output Level:**  
36 - 57 dB when operated from any control module and recommended emitter array

**Directivity:**  
3 dB hemispherically omni-directional when mounted in a ceiling tile. Within 1 1/2 dB of axial response at 60 degrees

**Spatial Uniformity:**  
+/- 1 dB throughout office space at any speech frequency when installed in recommended density array

**Maximum Sound Pressure Output:**  
74 dB at 1 meter when operated with control module

**Power Handling Capacity:**  
2 watts maximum

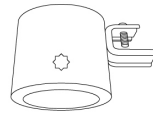
**Accessories:**  
1. 2-11/16" diameter hole saw for ceiling tiles (provided with every control module)  
2. CAT3/5/5A/6 cable with RJ45 connectors (see ordering guide for standard lengths)  
3. Control modules are ordered

## MOUNTING OPTIONS & SPECIFICATIONS



**SKU: UB**  
Universal bracket/ enclosure for wall or ceiling mounting.

Cylinder Length: 3.9" (9.9 cm)  
Cylinder Diameter: 3.3" (8.4 cm)  
Weight: 3.3 oz. (94 g) (w/o emitter)  
Material: PC/ABS  
Color: White (UB-W) or black (UB-B)



**SKU: BB**  
1" beam clamp bracket/enclosure for I-beam or conduit mounting.

Cylinder Length: 3.9" (9.9 cm)  
Cylinder Diameter: 3.3" (8.4 cm)  
Weight: 4.0 oz. (113 g) (w/o emitter)  
Jaw Opening: 0.95" (2 cm)  
Material: PC/ABS  
Color: White (BB-W) or black (BB-B)



**SKU: DB**  
Drywall bracket.

Cylinder Length: 2.1" (5.4 cm)  
Cylinder Diameter: 3.5" (8.9 cm)  
Weight: 1.2 oz. (34 g) (w/o emitter)  
Material: PC/ABS  
Color: White  
Hole saw diameter: 3" (7.6 cm) (Ordered separately)



**SKU: CB**  
Conduit bracket.

Cylinder Length: 4" (10.2 cm)  
Cylinder Diameter: 3" (9.5 cm)  
Conduit Fitting Hole Diameter: 0.75" (1.9 cm) (Conduit fitting by others)  
Weight: 6.5 oz. (w/o emitter)  
Material: Steel enclosure with steel springs  
Max. Drywall Depth: 0.75" (1.9 cm)  
Color: White

## CABLE SPECIFICATIONS

Cables are plenum-rated, solid conductor 24 AWG CAT-3, pre-terminated with bent 3-tyne (prong) contacts straddling each conductor in RJ-45 connectors. Cables are straight through and terminated in T568B wiring scheme. All cables tested for continuity.

## ARCHITECTURAL SPECIFICATIONS

The emitter shall consist of a single 1.25" (3.17 cm) full range transducer installed in a sealed airtight enclosure. The transducer shall have a rolled edge suspension surround. The enclosure and grill shall be one piece with material meeting UL Standard 2043 requirements for heat and smoke release in accordance with the provisions of the following codes: National Electric Code, NFPA 70; International Mechanical Code, NFPA 5000; Standard for the Installation of Air Conditioning and Ventilating Systems, and NFPA 90A.

The emitter shall be provided with internal logic to automatically sequence 4 channels of mutually incoherent masking sound generators when connected with standard CAT type cables. Input and output receptacles shall be standard RJ45 quick connect network type with positive locking. A twist-and-lock mounting ring shall be provided for quick and secure mounting in ceiling materials. The enclosure shall provide a secondary attachment for a security cable where required by local authorities.