

# TECHNICAL DATA

## EdgeMax™ EM180



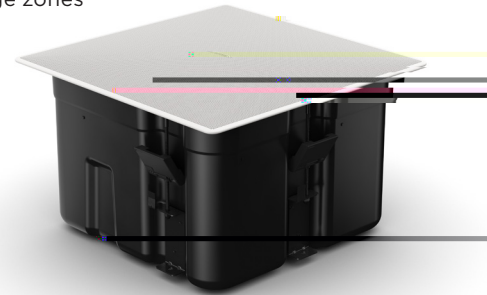
PROFESSIONAL

### Product Overview

Bose Professional EdgeMax™ in-ceiling premium loudspeakers feature proprietary Bose PhaseGuide® technology with high-frequency compression drivers to create a new category that combines the room-filling coverage patterns typical of larger surface-mount speakers with the architect-preferred aesthetics of in-ceiling models. Designed to mount near wall-ceiling boundaries, EdgeMax™ loudspeakers provide improved audio quality and coverage, while reducing the number of required units, compared to conventional dome-tweeter ceiling speakers.

### Key Features

- PhaseGuide™** - provides a unique asymmetrical vertical pattern for room-filling coverage when mounting near wall-ceiling boundaries
- Product Edge™** - for demanding interior designs by eliminating center-of-ceiling or wall-mounted loudspeakers, and reducing speaker counts
- Nominal Coverage Pattern** - designed for in-ceiling mounting centered along wall coverage zones
- High-Frequency Compression Driver** - for best-in-class audio quality with superior frequency response and coverage consistency versus typical dome tweeters
- 8-Channel** - with wall-boundary loading provides extended bass impact
- 2-Phase** - for 70/100V applications
- Neutral Design** - for fast, easy installs
- Magnetic Access** - for quick access to wiring and tap settings
- 45 Hz - 20 kHz Frequency Range** - eliminates need for subwoofers
- Ceiling Mountable** - enables stereo designs
- Compliance** : UL1480A, UL2043



### Technical Specifications

SINGLE MODULE PERFORMANCE		
Frequency Response (-3 dB) <sup>(1)</sup>	50 - 18,000 Hz	
Frequency Range (-10 dB)	45 - 20,000 Hz	
Nominal Coverage Pattern	180° H x asymmetrical 75° V (0° to 75° referenced to wall)	
	B E E E D E F E C E E <sup>(4)</sup>	A E S A D C E E <sup>(5)</sup>
Power Handling, long-term continuous	125 W	150 W
Power Handling, peak	500 W	600 W
Sensitivity (SPL/ 1W @ 1 m) <sup>(2)</sup>	93 dB	93 dB
Calculated Maximum SPL @ 1 m <sup>(3)</sup>	114 dB	115 dB
Calculated Maximum SPL @ 1 m, peak	120 dB	121 dB
Crossover	1.0 kHz (passive 2-way crossover with integrated 70/100V transformer)	
Loudspeaker EQ	Recommended but not required	
Recommended high-pass protection	55 Hz with minimum 12-dB / octave filter	
Overload protection	Resistor-network power reduction with automatic reset	
Transformer taps	70V: 2.5, 5, 10, 20, 40, 80 W, bypass / 100V: 5, 10, 20, 40, 80 W, bypass	
TRANSDUCERS		
Low Frequency	1x 8-inch woofer (1.5-inch voice coil)	
High Frequency	1x compression driver (1.3-inch voice coil)	
Nominal Impedance	8 ohms (transformer bypass)	
PHYSICAL		
Enclosure Material	Engineered-plastics front baffle with integrated steel formed enclosure	
Grille	Micro perforated steel, powder-coated finish, white: RAL 9010, paintable	
Environmental	Indoor only; UL-1480A listed, in compliance with UL2043 for plenum-space installation	
Connectors	Euro block 6-pin connector with loop-through, front-baffle mounted	
Suspension / mounting	Four (4) auto-hold, spring-loaded mounting arms plus four (4) M6 safety cable tabs	
Maximum ceiling thickness	80 mm (3.2")	
Dimensions (H x W x D)	339 x 339 x 249 mm (13.4" L x 13.4" W x 9.8" D) enclosure	
Ceiling cutout and clearance	390 x 390 x 13 mm (15.4" L x 15.4" W x 0.5" D) grille flange, as mounted	
	345 x 345mm (13.6" L x 13.6" W) with 236 mm (9.3") mounting depth	
Net Weight	10.1 kg (22.2 lbs) with grille	
Shipping Weight	12.5 kg (29 lbs)	
Accessories	Adjustable Tile Bridge (Included), Black grille, rough-in pan for new construction	

**Footnotes**

- (1) Frequency response and range measured on-axis in quarter-space (corner loaded) environment with recommended Active EQ
- (2) Sensitivity measured on-axis in quarter-space (wall loaded) environment with recommended Active EQ
- (3) Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression
- (4) Bose extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest factor, 500-hour duration
- (5) AES standard 2-hour duration with IEC system noise