CBT 50LA-1

Constant Beamwidth Technology™ Line Array Column Loudspeaker with Eight 50 mm (2 in) Drivers

CBT SERIES
CONSTANT BEAMWIDTH TECHNOLOGY™

Key Features:

- Patent-pending Constant Beamwidth Technology™ provides constant directivity up to the highest frequencies and reduces out-of-coverage lobing.
- Switchable voicing provides flat response in music mode or mid-range presence peak in speech mode.
- Dynamic SonicGuard™ overload protection
- Built-in 70V/100V transformer, plus 8 ohm direct capability.
- Swivel (pan) / tilt wall bracket included.

Overview:

The CBT 50LA-1, with Constant Beamwidth Technology™, represents a breakthrough in pattern control, utilizing analog delay beam-forming and amplitude tapering to accomplish consistent vertical coverage without the narrow vertical beaming and out-of-coverage lobing that are typical of straight form-factor passive column speakers.

The slim, compact design fits well into virtually any architectural decor. The combination of superb sound quality, excellent pattern control, and compact (53 cm [20.8 in] tall by 10 cm [3.9 in] wide) design makes CBT 50LA-1 ideal for a wide variety of applications, such as retail stores, concourses, transit spaces, fill applications, conference rooms, architectural spaces, audio for video, lecture halls, and other applications where such a combination is desired.

The voicing can be set to match the application through the Music/Speech switch, conveniently located on the side of the cabinet. The Music setting provides flat frequency response, while the Speech setting produces a mid-range presence boost to provide clear, intelligible speech even at the longest throw distances.

The drivers feature dual neodymium magnets for light weight. Copper-capped pole pieces lower both the driver inductance and the flux modulation. This increases high-frequency extension and reduces distortion at high drive levels. Butyl rubber surrounds provide long life even in high humidity environments. The drivers are shielded.

Dynamic SonicGuard™ minimizes distortion at high drive levels by limiting low frequency excursion dynamically. This maximizes clarity at high drive levels while protecting the drivers from damage due to overpowering.



A swivel (pan) / tilt wall-mount bracket is included and ten M6 inserts on the back panel fit the spacing of common mounting brackets, or can be utilized to suspend the speaker using M6 forged shoulder steel eyebolts, providing versatility of installation.

CBT 50LA-1 can be installed either indoors or outdoors. The drivers are weather-treated, the fiberglass reinforced ABS cabinet with UV resistant paint is excellent for outdoor applications, external screws are stainless steel, and the painted aluminum grille resists rusting in the harshest conditions.

Available in black or white (-WH).

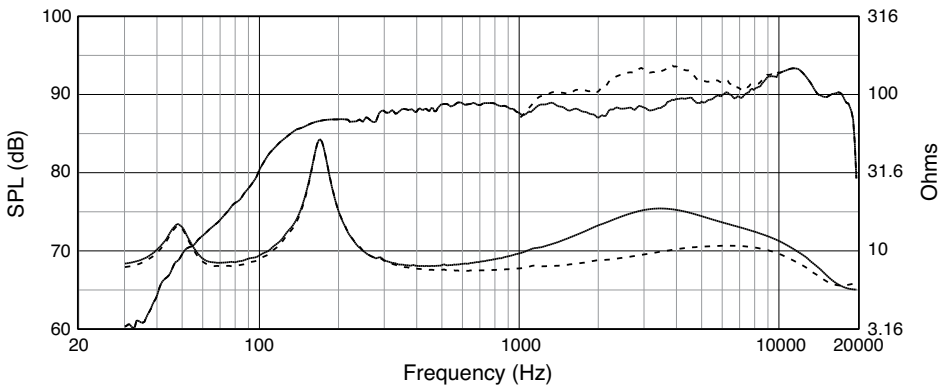
Specifications:

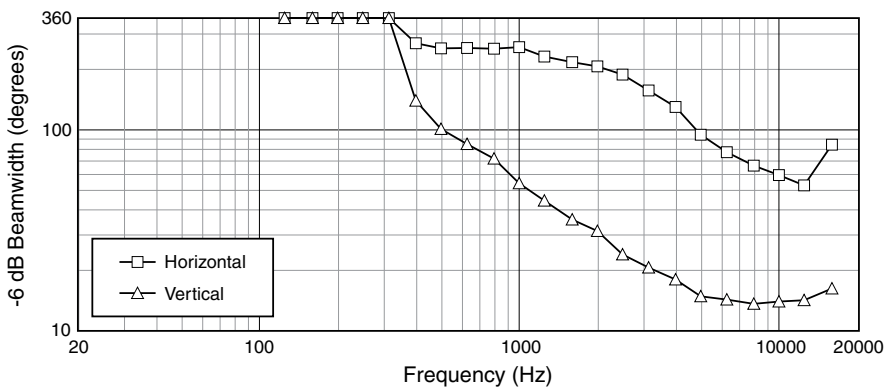
Components:	Eight 50 mm (2 in) Full-Range
Frequency Range (-10 dB)[1]:	80 Hz – 20 kHz
Coverage Pattern:	Vertical 20° (1.5 kHz - 16 kHz, ±10°) Horizontal 150° (ave, 1 kHz – 4 kHz, ±20°)
Sensitivity (2.83V@ 1m)1:	93 dB (speech mode, 2 kHz - 14 kHz) 89 dB (music mode, 300 Hz - 18 kHz)
Nominal Impedance:	8 ohms
Power Capacity (8 ohm setting)[2]:	150W (600W peak), 2 hrs 100 W (400W peak), 100 hrs
Max SPL[3]:	Speech mode: 115 dB cont ave (121 peak) Music mode: 111 dB cont ave (117 peak)
70V/100V Transformer Taps:	60W, 30W, 15W, (7.5W at 70V only), and 8Ω thru, via switch
Enclosure:	Fiberglass reinforced ABS cabinet, painted aluminum grille
Outdoor Capability:	IP-55 rated, per IEC529, when installed with optional MTC-PC2 panel cover. UV, moisture and 200-hr ASTM G85 acid-air/salt-spray resistant.
Colors:	Black or White (-WH)
Insert Points:	Ten M6 swivel (pan)/tilt insert points on back panel.
Mounting:	Included swivel (pan) / tilt wall bracket provides continuously variable +/-80 degree left-right swivel aiming (at no up/down tilt – see Bracket Guide for maximum swivel range at various up/down tilt angles), continuously adjustable ±15 degree tilt, as well as 5 degree fixed increment points within the range. Ten threaded mounting points located on back panel conform to industry standard rectangular 108 x 51 mm (4.25 x 2.0 in) pattern for OmniMount® 30.0 and other compatible third-party brackets. Threaded mounting points can be utilized for suspension.
Dimensions (H x W x D):	528 x 99 x 153 mm (20.8 x 3.9 x 6.0 in)
Net Weight:	4.1 kg (9.0 lb)
Included Accessories:	Swivel (pan) / tilt wall bracket
Optional Accessories:	MTC-PC2 terminal panel cover MTC-CBT-FM1 flush-mount low-profile wall-mount bracket MTC-CBT-SMB1 Stand-Mount Bracket for use with 35 mm speaker stand

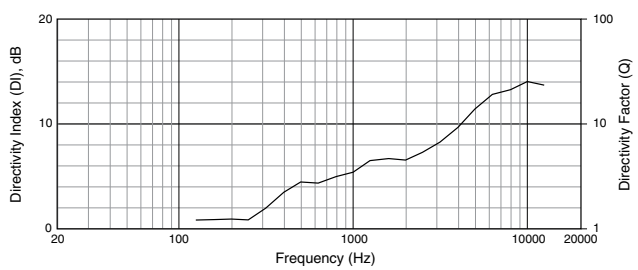
[1]Full space
[2]IEC standard, full bandwidth pink noise with 6 dB crest factor.
[3]Calculated based on power rating and measured sensitivity, exclusive of power compression.

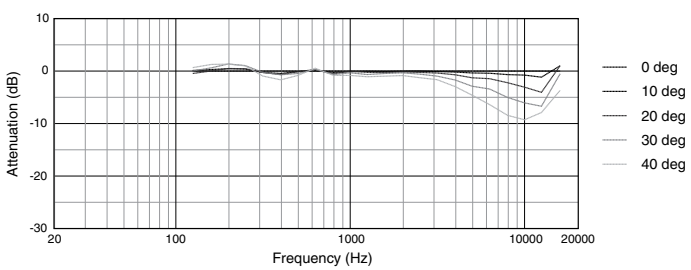
JBL continually engages in research related to product improvement.
Changes introduced into existing products without notice are an expression of that philosophy.

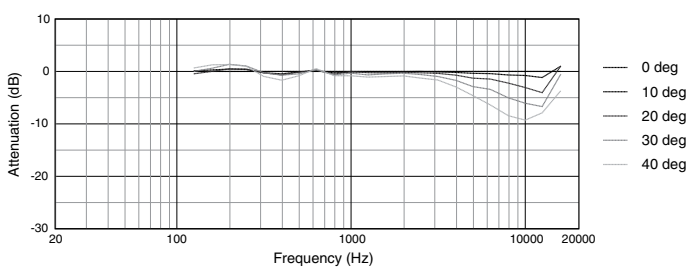
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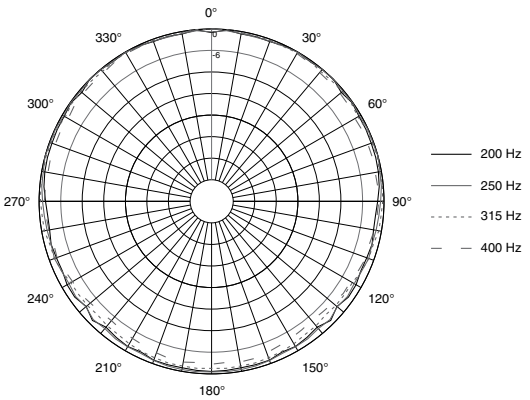


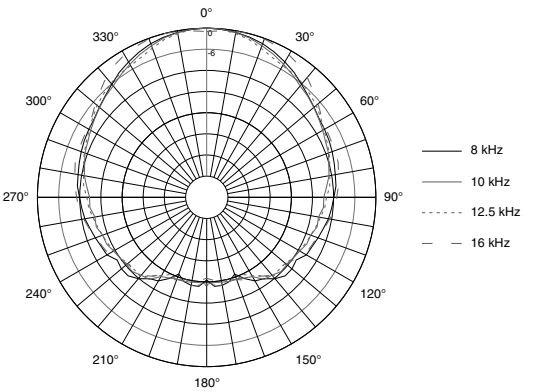


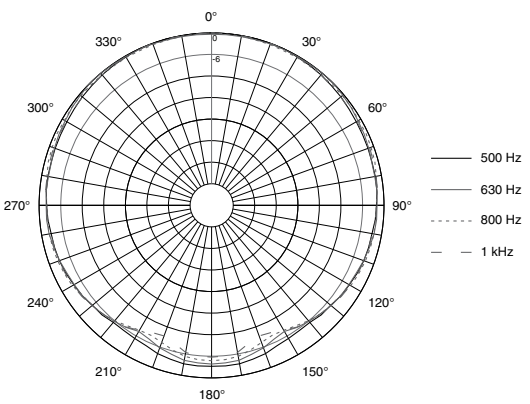


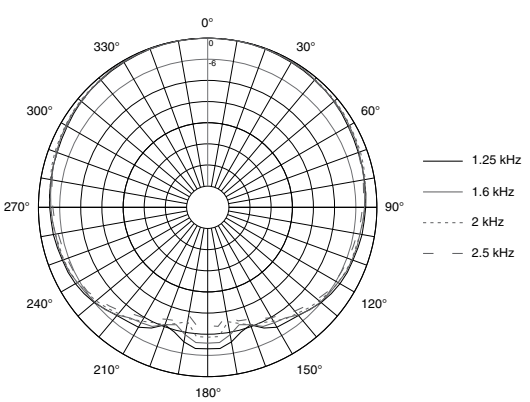


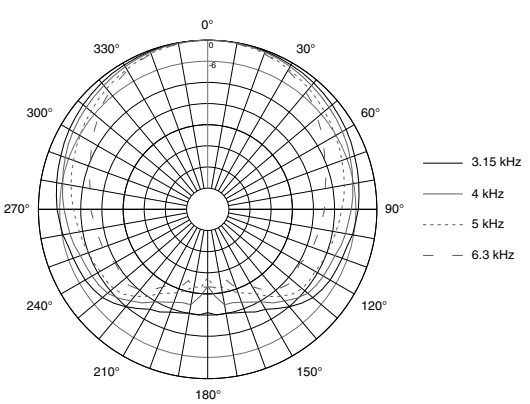



0°
30°
60°
90°
120°
150°
180°
210°
240°
270°
300°
330°
0
-6
200 Hz
250 Hz
315 Hz
400 Hz

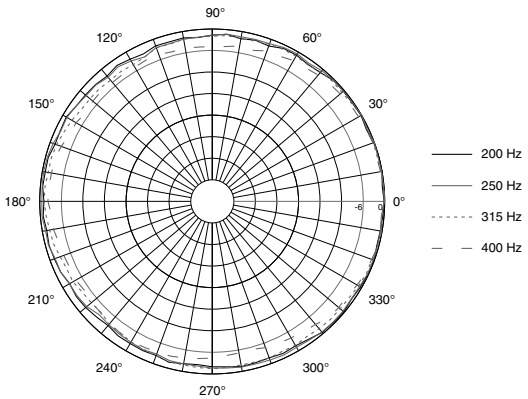

0°
30°
60°
90°
120°
150°
180°
210°
240°
270°
300°
330°
0
-6
8 kHz
10 kHz
12.5 kHz
16 kHz

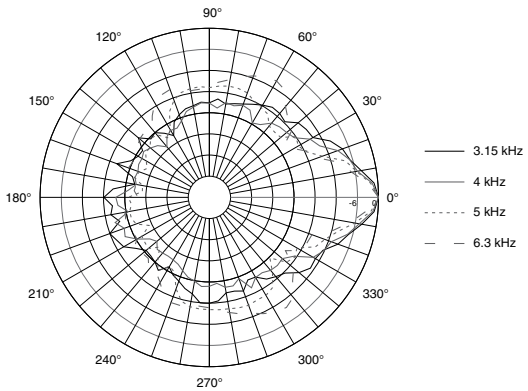

0°
30°
60°
90°
120°
150°
180°
210°
240°
270°
300°
330°
0
-6
500 Hz
630 Hz
800 Hz
1 kHz

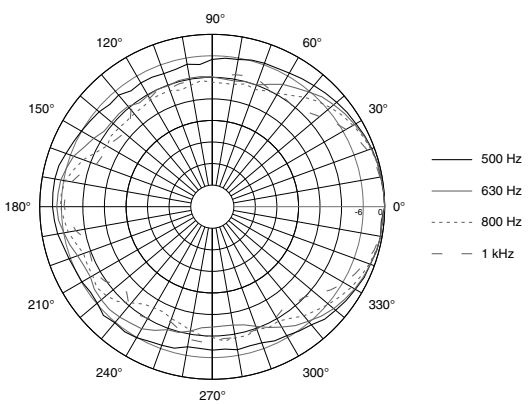

0°
30°
60°
90°
120°
150°
180°
210°
240°
270°
300°
330°
0
-6
1.25 kHz
1.6 kHz
2 kHz
2.5 kHz

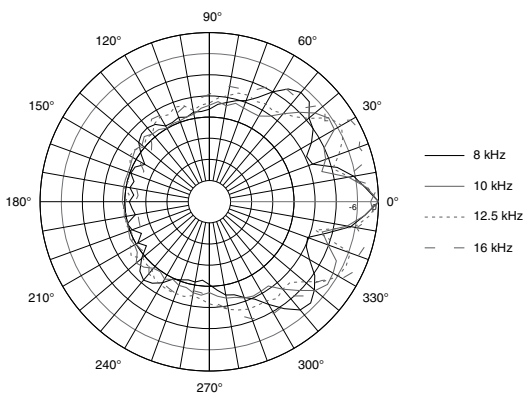

0°
30°
60°
90°
120°
150°
180°
210°
240°
270°
300°
330°
0
-6
3.15 kHz
4 kHz
5 kHz
6.3 kHz

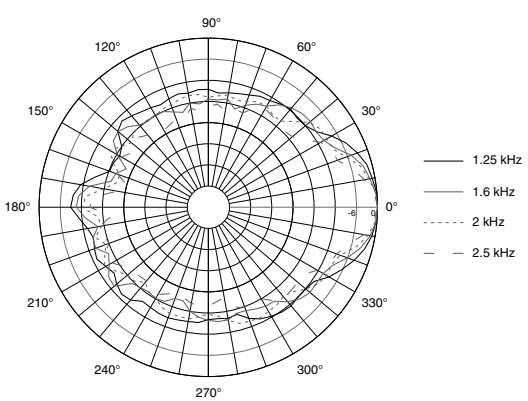
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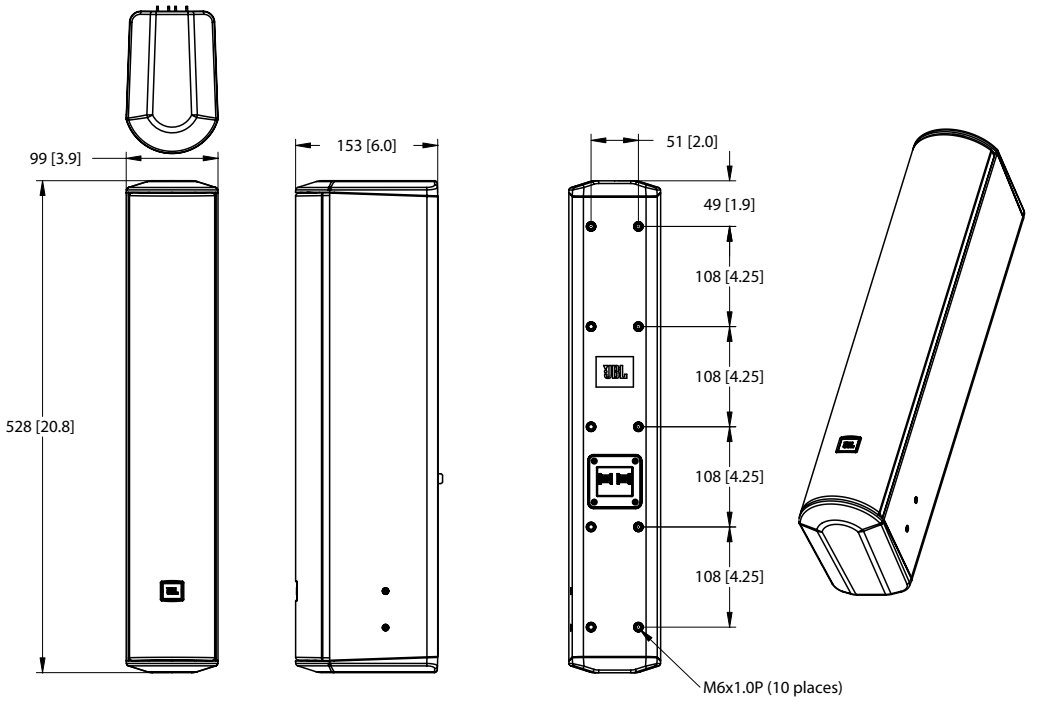


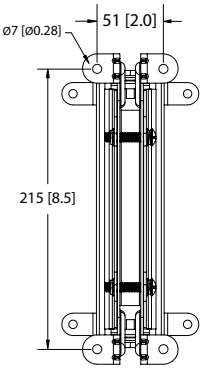




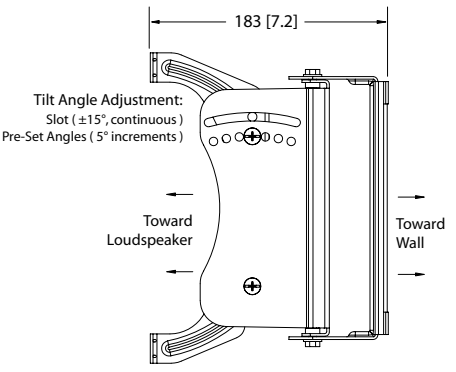




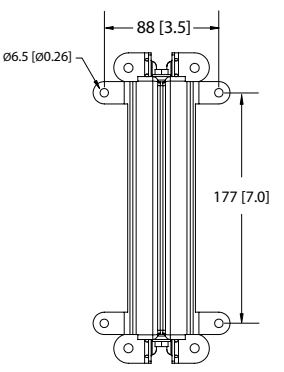




Loudspeaker-Mount Section



Assembled Bracket



Wall-Mount Section

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