

# **PRELIMINARY**



### **Applications**

Performing Arts Centers Houses of Worship Arenas/Auditoriums Night Clubs Cruise Ship Venues A/V Systems Support

#### **Features**

Max Output 131 dB SPL
LF Device: (1) 10 in (254mm)
HF Device: (1) 1 in (25.4mm);
Voice Coil Diam: 2.5 in (63.5mm)
(4) Integral Mounting Points
Black Polyurea Finish
(2) EP-4 Connectors
+ (1) 4-Position Terminal Strip

## **General Description**

Clair Brothers 10SPOT loudspeaker has been designed as an ultimate hybrid speaker that combines Clair Curved Array Technology together with the One Series coaxial horn technology, resulting in a unique form factor loudspeaker that occupies little visual space while covering listening areas more coherently than typical conventional point sources. Typical applications include distributed systems, under balcony and delay fill and particularly with live entertainment sources.

The frequency response is 90Hz – 20,000Hz, allowing for use for speech and music reproduction. A stand-out feature of 10SPOT is its innovative horn technology. A coaxial horn arrangement provides constant curvature in the vertical plane with progressively divergence in the horizontal plane resulting in a directivity pattern of 90° at the top and 135° at the bottom, across a 45° vertical coverage angle. The 10" woofer as well as the compression driver both load into the unique combination of two overlaid horns. This technology solves the common problem of horn shadowing with prior coaxial designs. The high mid frequencies of the 10" woofer seamlessly joins with the high frequency horn as it extends toward the mouth. Low frequency ports

discretely flank the horn on both sides, offering low frequency extension to -10 @ 70Hz that works well on its own as well as with a variety of companion subwoofers.

Based on its form factor and dispersion characteristics, the 10SPOT is well suited for installation near ceiling to wall intersections in applications, such as hotel/club bar areas. 10SPOT is outfitted with four (4) integral M10 mounting points, each with 1.5 thread, these are the attachment points for an installation mounting bracket (see Options).

Please contact Clair Brothers for more information regarding coverage area planning and simulation.

#### **Options & Accessories**

10SP-TB — Top Mount Tilt Bracket 10SP-MB — Yoke Style Mounting Bracket Custom Rigging Custom Colors Available



# PRELIMINARY-

#### **Audio Specifications**

Loudspeaker Type Passive Coaxial Point Source

Frequency Response 90Hz-20kHz (+/- 2dB) | (-10dB Point) 70Hz

Recommended Power Amplifier CB-PLM5K44 or CB-D40:4L

Prediction Software Clair GLL/AFMG Ease Focus™ Array

Processing, Configuration & System Optimization Software Lake Controller® with Clair DSP, WiFi System Control

Sensitivity (1 Watt @ 1 Meter) 103 dB SPL

Maximum Output<sup>1</sup> Peak 131 dB SPL

Driver LF (1) 10 in (254mm); VC diam. 2.5 in (63.5mm)
HF (1) VC diam. 2.5 in (63.5mm); Exit 1 in (25.4 mm)

Nominal Impedance LF 8 0hms
HF 16 0hms

Power Handling Program 300W Peak 600W

Dispersion Asymmetric Horizontal 90° H at Top, 135° H at Bottom

Vertical 45° V

Input Connection Standard (2) EP-4 Connectors (1 Male, 1 Female)

+ (1) 4-Position Terminal Strip

#### **Mechanical Specifications**

Enclosure Shell 12mm & 18mm Baltic Birch

Finish Black Polyurea Coating

Rigging Points (4) M10 x 1.5 Thread

Grille Powder Coated Perforated Steel, Foam Backed

Dimensions Front Height 16.46 in (418.2mm)

Width 16.42 in (417mm)

Depth 15.46 in (392.6mm)

35 lbs (15.9kg)

Weight 35 lbs (\*
Shipping Weight | TBD |

1) Measured @ 1 meter in free space with 12dB crest factor pink noise, unweighted.

Note: All wattage figures are calculated using the rated nominal impedance.

Clair Brothers products are designed to perform optimally by utilizing factory recommended proprietary DSP settings.

### **Architect and Engineer Specifications**

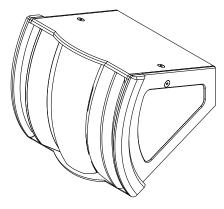
The loudspeaker system shall be a two-way passive, coaxial point source loudspeaker cabinet featuring a total of (2) drivers. The front of the enclosure shall be fitted with a perforated, powder coated steel grille backed with foam. The system shall have an amplitude response of 90Hz to 20,000 Hz (+/-2 dB). The loudspeaker system shall be loaded with one woofer; this low frequency driver shall be 10" nominal diameter with 2.5" voice coil diameter capable of handling 300W of power as per

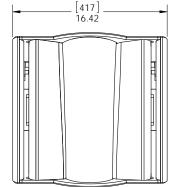
103FOT Fassive	Fili Collingulation
EP-4 PIN	USE
1 & 3	(-)
2 & 4	(+)
Terminal Strip	USE
Black	Low (-)
Black	High (—)
White	High (+)
Red	Low (+)

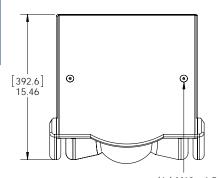
100DOT Dessive Din Configuration

AES Standard. The high frequency section shall consist of a 2.5" voice coil diameter compression driver mounted coaxially on a smoothly transitioning 90-135°H x 45°V horn. The high frequency horn shall provide complete pattern control over the bandwidth. The high frequency horn shall be a constant directivity conic profile. The driver is capable of handling 50 watts (1 kHz to 10 kHz) of pink noise with a 6 dB crest factor for two hours (as per AES-1984 and ANSI S4.26-1984 standards). The enclosure shall be trapezoidal in geometry, constructed with 12mm and 18mm, 11-ply Baltic birch and covered with a durable black polyurea coating. The dimensions shall be 16.46" high, 16.42" wide, and 15.46" deep. The enclosure shall incorporate (4) integral mounting points, each with M10 x 1.5 thread for mounting bracket attachment. The passive system weight shall be 35 lbs (15.9kg). The loudspeaker system shall be the Clair Brothers 10SPOT loudspeaker.

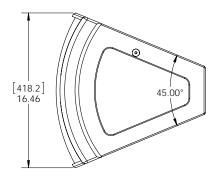








(4x) M10 x 1.5 Thread Mounting Points



Due to constant research, development and improvements all specifications are subject to change without notice

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