

# Control HST

Wide-Coverage Speaker with  
5-1/4" LF, Dual Tweeters and  
HST Technology™

## Professional Series

### Key Features:

- ▶ HST Hemispherical Soundfield Technology™ (patent-pending):
  - Provides extremely wide horizontal coverage that approaches 180°, covering a greater area with fewer speakers.
  - Reduces the primary wall reflection, resulting in a flat frequency response and consistent sound character at all listening positions.
- ▶ Components: 5-1/4" CMMD woofer and two splayed 3/4" fluid-cooled tweeters.
- ▶ 100 Watt power handling in direct 8Ω setting, plus built-in 60 Watt 70V/100V multi-tap transformer.
- ▶ High fidelity sound character with broad frequency response of 50 Hz – 20 kHz.
- ▶ Indoor/outdoor; black or white (-WH) color.

### Applications:

The Control HST utilizes JBL's patent-pending Hemispherical Soundfield Technology™ to achieve extremely wide coverage of the listening space along with eliminating the primary wall reflection that tends to cause inconsistent sound when speakers are attached to a wall. The wide hemispherical soundfield covers from wall to wall, allowing a single speaker to provide high-fidelity full-range sound to a large listening area. This can reduce the number of speakers needed for covering a space, lowering the overall cost for a sound system.

The patent-pending design includes a wall-facing woofer, two horizontally splayed tweeters, a wall bracket that spaces the speaker the required distance from the wall, and a tapered cabinet that provides proper loading and dispersion of the sound. With most on-wall (surface-mount) speakers, the baffle of the speaker is some distance from the wall. It is the nature of low and low-mid frequency sound waves to wrap around the speaker, where they reflect back out from the wall, recombining with the original sound. When this occurs, some frequencies add coherently to the original sound and other frequencies cancel, causing peaks and dips in the resulting frequency response and inconsistencies from location to location within the listening space. By substantially reducing this occurrence, Control HST is able to provide a flatter resulting frequency response along with a more consistent sound character throughout the room.

Control HST is ideal for a wide variety of applications, including retail stores, restaurants, corridors, educational facilities, hospitality, music cafes, leisure venues, upscale lobbies, and other background/foreground music and paging applications. The IP-54 outdoor capability also makes it suitable for applications where an outdoor capable speaker is required.

The well-damped woofer incorporates a CMMD ceramic metal matrix diaphragm for a very high stiffness-to-weight ratio, high output, resistance to humidity and long-term durability. The dual tweeters feature aluminum diaphragms with a CMMD treat, polyurethane surround, a neodymium magnet, and fluid-cooling for high output, low distortion and humidity resistance.

The system is capable of handling 100 Watts, and is equipped with a 60W 70V/100V multi-tap transformer. Connection is made via a 4-pin phoenix-type removable locking connector which also includes loop-thru terminals for connecting in parallel to another speaker.

A heavy-duty weather-capable zinc-rich, thick powder coated U-bracket is included. The speaker must be installed on its U-bracket for proper spacing to the wall. Do not mount the speaker directly in the corner of a room or onto a pole. It requires a wall surface in order to work properly.

Outdoor capability is enhanced by the painted aluminum grille that eliminates rusting, ABS with 10% Glass Fill cabinet, and weather-resistant drivers. The speaker is sealed-type (non-ported).

Black or white (-WH).



### Specifications:

#### System:

Frequency Range (-10 dB) <sup>1</sup> :	50 Hz – 20 kHz
Frequency Response (±3 dB) <sup>1</sup> :	68 Hz – 18 kHz
Coverage Pattern <sup>2</sup> :	180° H x 160° V (1 kHz – 2 kHz, nominal) 160° H x 150° V (ave, 1 kHz – 16 kHz)
Directivity Factor (Q):	5.4 (1 k – 16 kHz)
Directivity Index (DI):	7.2 dB (1 k – 16 kHz)
System Power Rating (IEC) <sup>3</sup> :	100 W (400 W peak), 2 hrs. 75 W (300 W peak), 100 hrs.
Sensitivity (2.83V @ 1m):	88 dB (Ave. 80 Hz – 20 kHz)
Maximum SPL <sup>4</sup> :	Direct 8Ω: 108 dB (peaks of 114 dB) 60 W Tap: 97 dB @ 60W
Crossover Network:	1.6 kHz, 3rd order (18 dB/oct) high-pass to HF, 2nd order low-pass to LF
Nominal Impedance:	8 ohms
Transformer Taps:	70V: 60W, 30W, 15W, 7.5W 100V: 60W, 30W, 15W

#### Transducers:

Low Frequency Driver:	CMMD™ ceramic metal matrix diaphragm cone, 25 mm (1 in) voice coil.
High Frequency Drivers:	Two splayed tweeters with CMMD-treated aluminum diaphragms, polyurethane surround, polyimide bobbin, neodymium magnet, and fluid-cooling.

#### Physical:

Enclosure:	Fiberglass-reinforced ABS
Attachment:	Four M6 points for included U-bracket. Additional M6 insert point provided for adding secondary safety attachment cable. U-bracket must be utilized. Must be mounted on wall surface. Do not mount on pole.
Grille:	Aluminum grille, painted to match cabinet color.
Input Connection:	Removable locking euro-block 4-pin connector with screw-down terminals for bare wire. Two pins for input and two pins for parallel loop-thru. Max. wire 12 AWG (2.5 mm <sup>2</sup> ).
Environmental:	IP54 per IEC529. Exceeds Mil Spec 810 for humidity, salt spray, temperature & UV, and ASTM G85 for salt spray.
Dimensions:	362 x 256 x 184 mm (14.25 x 10.1 x 7.2 in), cabinet 208 mm (8.2 in) depth with included bracket.
Colors:	Available in black (RAL9004) and white (-WH, RAL9016)
Net Weight:	3.6 kgs (8.0 lb), 4.3 kgs (9.5 lb) with U-bracket
Shipping Weight:	5.4 kgs (12.0 lb)
Included Accessories:	U-bracket, matches loudspeaker color (black or white), zinc-rich extra-thick powder coated steel.

<sup>1</sup> Half-space (mounted on a wall)

<sup>2</sup> Average 1 kHz to 16 kHz

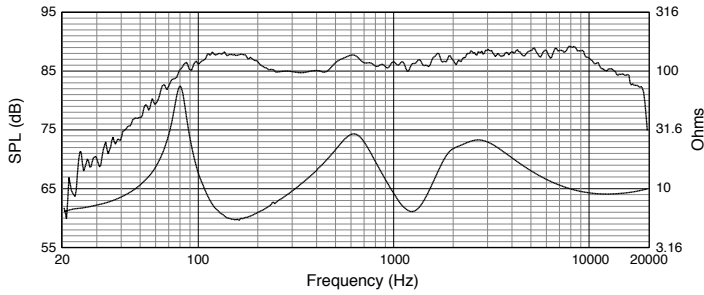
<sup>3</sup> IEC standard, full bandwidth pink noise with 6 dB crest factor.

<sup>4</sup> Calculated based on power rating and measured full-space sensitivity.

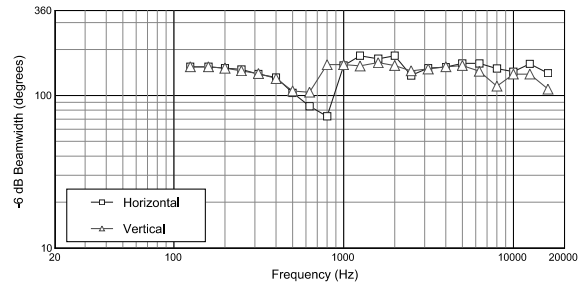
# ▶ Control HST Wide-Coverage Speaker with 5-1/4" LF, Dual Tweeters and HST Technology™

## Frequency Response and Impedance:

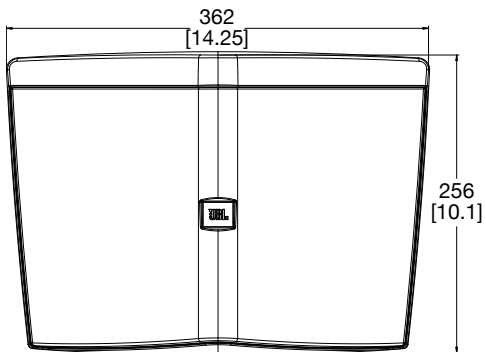
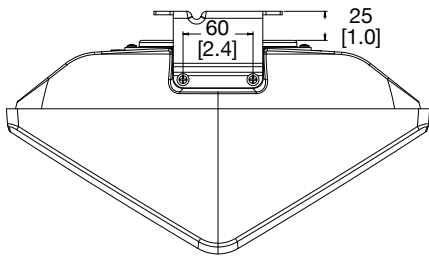
1 Watt at 1 meter, 2π half-space (wall-mounted)



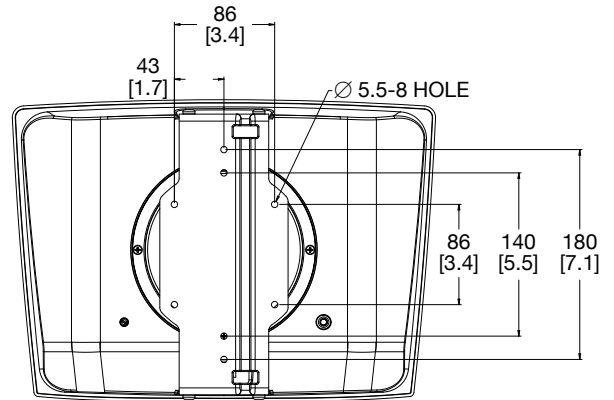
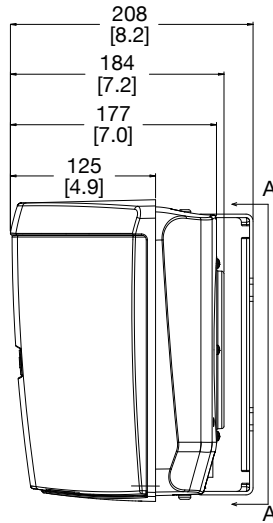
## Beamwidth:



## Dimensions:



Dimensions in mm (inches)



REAR VIEW



PROFESSIONAL  
by HARMAN

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