
Variable Dispersion Speaker

The speaker shall consist of 4 individual boxes or "cells" made of poly-resin material and each measuring 19.57" W x 6.5" H x 10.79" D. Each cell shall have a complement of 2 x 5.5" low-frequency speakers symmetrically positioned on either side of the front baffle and each shall be flanked by bass reflex ports at the outside edge. Between the low-frequency speakers shall be a multi-slotted, high-frequency wave-guide manifold, which shall be rear-loaded with a 1" high-frequency compression driver. There shall be a steel perforated grille mounted to the front baffle of each cell, which may be removed if necessary. The four cells shall be vertically arranged one on top of another and shall be both mechanically and electronically inter-connected to operate as a single input unit. Connection shall be by way of both dual 2-way Speakon, & parallel screw terminal connections on the middle cell's rear panel. There shall be an internal crossover network dividing the input signal at a frequency of 1.7 kHz to the set of low frequency and hi-frequency drivers. The cells shall be mechanically integrated by metal pivot joints on either side of and vertically in-between their front baffles and also by an adjustable multi-segment steel spine running down the back of the set. It shall be possible to adjust the vertical angle between each cell in 15 degree increments to provide a coverage angle of between 0 degrees vertically to 45 degrees vertically by changing the position of these joints. It shall also be possible to extend the angle to 60 degrees with an optional extender bracket. The horizontal angle shall be fixed at 100 degrees. The speaker shall be capable of true line array-type projection with consistent front-back room coverage. Each unit shall be deliver a sound pressure of 100dB with 1W of input measured at 1m distance and be capable of maximum power handling up to 750 watts continuous program with a rated impedance of 8 Ohms.

The frequency response of the speaker shall be 75Hz-20kHz. Overall speakers dimension shall be 19.57" W x 26.14" H x 10.79" D and the weight shall be 66lbs. The speaker shall be called the HX-7B (black) or HX-7W (white)

The speaker shall also be available in a weather-proof version with a water-resistance rating of IP-X4. The weather-proof version shall be fitted with special weather proof paint on the hardware and grille and a rubber-sealed terminal cover over the connection back-plate and port plugs to prevent water entry. The performance shall be mostly identical to the HX-7, but with a frequency response of 105Hz-20kHz. The speaker shall be called the HX-7B-WP (Black) or HX-7W-WP (White).

There shall be a compatible sub-woofer enclosure designed to extend the frequency response of the speaker system down to 40Hz. The subwoofer enclosure shall be a bass-reflex type constructed of MDF wood and it shall be front-loaded with a 15" low-frequency speaker and shall be covered by a perforated steel grille. The cabinet shall have recessed handles on either side to allow easy transport. The connections shall be on a recessed rear panel and consist of both dual 2-way Speakon, & parallel screw terminals. The sub enclosure shall measure 19.88" W x 20.79" H x 19.17" D and weigh 66 lbs. The subwoofer shall be called the FB-150B (Black) or FB-150W (White).

There shall be several hardware and mounting options for this speaker system:

-There shall be a steel rigging frame with multiple fly points for flying one or more (up to four) HX-7s in a vertical array along with seating for an FB-150 to be placed on top of the frame. The rigging frame shall be called the HY-PF7B (Black) or HY-PB7W (White)

-There shall be speaker connection brackets to allow connecting two or more HX-7s in a vertical arrangement. A pair of connection brackets shall be required to connect each additional HX-7 to a flow array. The bracket shall be weather-proof to facilitate outdoor use. The speaker connection bracket shall be called the HY-CN7B-WP (Black) or HY-CN-7W-WP (White)

-There shall be an angle adjustment bar to allow expansion of the vertical angle adjustment to 60 degrees. Three pairs of the brackets shall be required to adjust the angle between all 4 cells of the HX-7. The Brackets shall be weather-proof to facilitate outdoor use. The angle adjustment bracket (set of 3 pairs) shall be called the HY-60DWB-WP (Black) or HY-60DBW-WP (white)

-There shall be a rigging bracket to flying or mounting of the HX-7 using span cables or other support methods and also for use with other optional HX-7 mounting hardware. The rigging bracket shall mount directly to the top cell of the HX-7 and provide a three-point "T-bar" mounting plate. It shall be water-proof to facilitate outdoor use. The rigging bracket shall be called the HY-

TM7B-WP (Black) or HY-TM7W-WP(White)

-There shall be a ceiling bracket allowing for suspended ceiling mounting of a single HX-7 speaker. The bracket shall provide full horizontal pivot adjustment (up to 360 degrees) and vertical tilt angle adjustment (0-25 degrees) of the entire enclosure in addition to the speaker's vertical dispersion adjustment. The ceiling-mount bracket shall be called the HY-CM7BSET (Black) or HY-CM7WSET (White)

-There shall be a wall-mounting bracket to allow off-wall hanging of a single HX-7 speaker. The parapet-style wall bracket shall provide horizontal pivot adjustment (180 degrees) and vertical tilt angle adjustment (0-25 degrees) of the entire enclosure in addition to the speaker's vertical dispersion adjustment. The wall-mount bracket shall be called the HY-WM7BSET (Black) or the HY-WM7WSET (White).

-There shall be a wall-mounting bracket to allow a single HX-7 speaker to be mounted on a wall at a fixed horizontal and vertical angle position. The mount shall consist of a single steel L-bracket with multiple holes for securing it to the wall and the top of the HX-7 speaker. The bracket shall be water-proof to facilitate outdoor use. The wall-mounting bracket shall be called the HY-MS7B-WP (Black) or HY-MS-7W-WP (white)

-There shall be a speaker stand bracket allow mounting of a single HX-7 speaker on a standard speaker tripod. The bracket shall allow a vertical tilt angle adjustment (0-25 degrees) of the entire enclosure in addition to the speaker's vertical dispersion adjustment. The speaker stand bracket shall be called the HY-ST7B (Black) or HY-ST7W (White).

-There shall be a transformer kit that can be connected via back panel of the HX-7 speaker for the purpose of operating in a high-impedance (70V) system. The transformer shall provide selectable power tap input to the speaker of 30W, 60W, 100W or 200W @ 70V. The transformer shall be called the MT-200.

-There shall be a transformer mounting bracket allowing the MT-200 transformer to be securely mounted to the HX-7 rear panel and easily connecting to the speaker terminals. The transformer mounting bracket shall be called the HY-MT7