

U.S. Pats.:
2,310,243
2,373,692

THE KLIPSCHORN K-3 WOOFER

This corner type horn, first described in the Jour. Acous. Soc. Am., October, 1941, has gone through several design revisions whereby the frequency range has been extended down to 30 cps and up to 500 cps, without increase in size of the housing.

The low distortion of this horn speaker brings a new sense of realism to be found only in horns. Tuba, bass viol and diapason are reproduced as they would be heard in the concert hall.

Occupying only 15 cubic feet, this speaker's performance is comparable to theater units many times as large.

Originally designed for home use, the power handling capacity is adequate for moderately large halls; the high efficiency permits use of small power amplifiers. In the home, peak electrical inputs of one watt or less are adequate to give "front row balcony" listening levels.

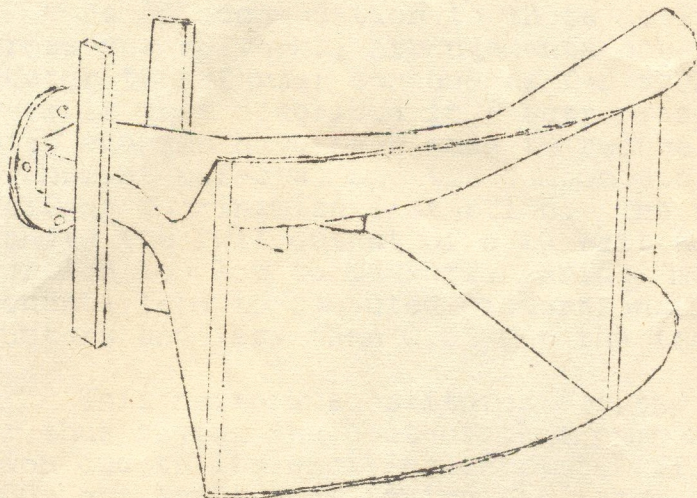
By taking advantage of the acoustic impedance presented by a room corner, long wave lengths (low frequencies) can be radiated by this small structure. Such low frequencies would require conventional structures 4 to 8 times as large. The dimensions of the woofer unit only are; 33" high, approximately 30" wide across the front panel, and contained in a maximum 31" radius from the room corner. To accommodate the companion high frequency horn requires about 10" additional height. An extra cover plate is furnished to conceal the HF horn; this plate is of plywood with a veneer which can be finished to match the walls or other articles of furniture. Construction of the woofer unit is of plywood.

Driver recommended for use with this woofer is the Jensen PLA 15A. High frequency horns for distortion-free extended high range are available in the KLIPSCHORN K-5 for use with the Western Electric 713A driver, and the K-5 JX for use with the Jensen XP 101, model 1, spec. 1738-2.

Price, without driver, \$97.50, FOB Cincinnati. For those doing their own installing, a discount of 25% is offered, with a net price of \$73.00, FOB Cincinnati.

KLIPSCH AND ASSOCIATES
HOPE, ARKANSAS
10 October, 1946

KLIPSCHORN K-5
HIGH FREQUENCY HORN
Pat. Pending



This horn, of a novel cell design, first described in the Jour. Acous. Soc. Am., January, 1946, has the requisite polar characteristic for use with the KLIPSCHORN K-3 corner woofer. With the recommended drivers, efficiency also matches that of the woofer so that no padding or equalization is needed to preserve balance between the low and high frequency speakers. Freedom from dis-

tortion is a major consideration, and this speaker offers a degree of distortion-free performance found only in horns of good design. Extension of the frequency spectrum at the upper end is tolerable only when such distortion-free performance is available.

Cutoff due to taper is 330 cps; it is recommended that cross-over frequency of 500 cps be used. The upper frequency limit is determined by the driver used; with the WE 713A motor, the upper limit of performance is well above 12,000 cps.

Construction; the two curved surfaces are molded fabric laminates assembled to wood parts with modern adhesives approved for wood aircraft construction. Four inner cells give the effect of an 8 cell horn. Polar characteristic is 90° horizontal by 60° vertical giving complete uniform coverage of a room from the corner besides offering the same $\pi/2$ steradians solid angle of radiation offered by the woofer for use with which this HF horn was specifically designed. Back legs extend the height of the horn so as to provide a support for the cover of the 2 speaker assembly.

Mounting ring is for the Western Electric 713A motor; ring for the Jensen XP 101 may also be obtained on special order.

Dimensions: approximately 21" long, 9" high, 25" wide. With 713A motor, length is such that it fits on top of the K-3 woofer. With the Jensen XP 101, the larger motor is compensated by a shorter horn length so that this combination also fits the woofer.

Price, without driver, \$75.00, list, FOB Hope. For those doing their own installing, a discount of 36% is offered to make the net price \$48.00, FOB Hope.

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10 October, 1946