

KLIPSCH

Belle Klipsch®

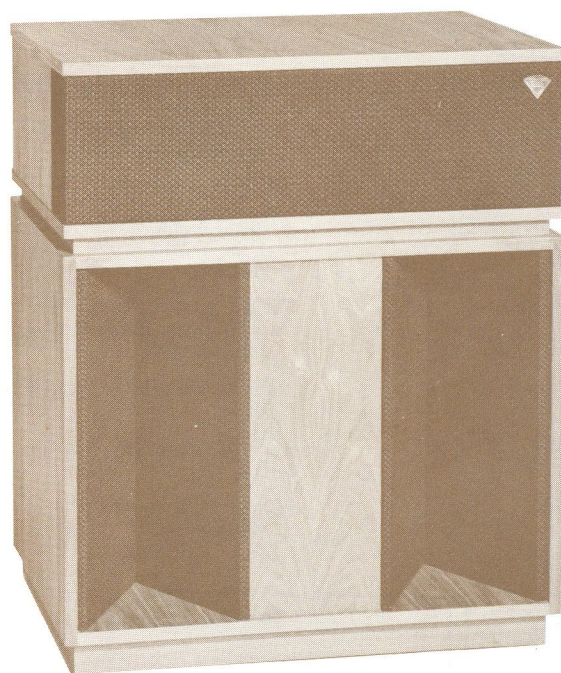
K-457 Loudspeaker

**SAME BASIC DESIGN AS LA SCALA
THEATER SPEAKER. MODERATE SIZE. FAITH-
FUL REPRODUCTION. FINISHED IN FINE
HARDWOODS.**

Fully horn loaded, the BELLE KLIPSCH has the advantages of high efficiency with resultant low diaphragm excursions. This gives it less than one tenth the total modulation distortion of direct radiator speakers of comparable size and equal output. Tonal quality is thus preserved whether it is played at whispering low levels or ear splitting high levels. Bass extends solidly down to 45 Hz with usable response to 40 Hz. This quality is achieved with small bulk. Depth has been minimized to a mere 18 $\frac{3}{8}$ inches and the woofer horn occupies only eight cubic feet. Yet the response, range, and efficiency are equal or superior to that of much larger systems. The smoothness, dispersion, and minimal distortion match that of the KLIPSCHORN. The bass cutoff, however, is 20 Hz higher.

The BELLE KLIPSCH is designed for a large number of applications where high performance, small size and smart appearance are paramount. It is ideally suited as center speaker between flanking KLIPSCHORNS or in any location in multi-speaker arrays with Klipsch speakers, or as the single speaker in a monophonic system.

With exponential horn loading throughout its operating spectrum, it maintains low diaphragm amplitudes and velocities necessary for low modulation distortion, a characteristic of all Klipsch speakers. High frequency drivers have rugged phenolic diaphragms. Response is from 45 to 17,500 Hz \pm 5 dB.



UNUSUALLY SMOOTH RESPONSE.
MINIMAL DISTORTION. ACCURATE REPRO-
DUCTION. 45-17,500 Hz RANGE. HIGH
EFFICIENCY. 70 WATT CAPACITY.
ALL HORN CONSTRUCTION.

KLIPSCH AND ASSOCIATES, INC.

P. O. Box 280 • Hope, Arkansas 71801 • Phone 501 — 777-6751

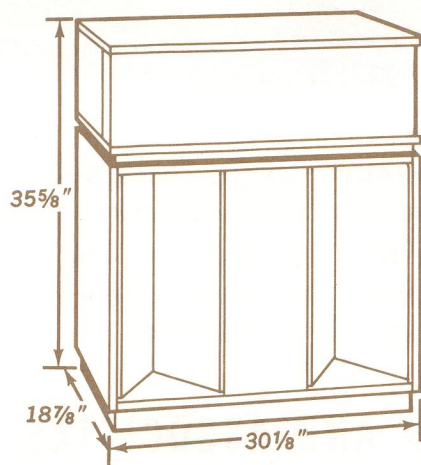
SPECIFICATIONS

Power Input 70 watts (Program)

Total Modulation Distortion is expressed as RMS amplitude of modulation side-bands in percent of amplitude of the modulated frequency. It is a function of the total power output and is therefore expressed at a specified sound pressure output.

	Total Modulation Distortion (Max) %	at Sound Pressure Level dB at 2 Feet
BELLE KLIPSCH	1.0	100

Frequency Response ± 5 dB	40-17.5 kHz
Sound pressure level	104 dB for 1 watt ref. .0002 dyne/cm ² 107 with flat network measured at 4 feet
Impedance	16 ohms
Drive Components	Klipsch K-33 Woofer, Klipsch K-55-V Mid range driver and Klipsch K-77 Tweeter
Network	Type A A, 400/6000 Hz with Zener diode protector for tweeter.
Dimensions	30 $\frac{1}{8}$ " wide x 35 $\frac{5}{8}$ " high x 18 $\frac{7}{8}$ " deep
Weight	125 lbs. max. 150 lbs. shipping wt.
Finish	Walnut with choice of grille cloth



KLIPSCH & ASSOCIATES, INC.

POST OFFICE BOX 280 HOPE, ARKANSAS



The mark of integrity in loudspeaker systems

KLIPSCH

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K-457 Loudspeaker

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The speaker shall be of the horn type with separate but integrally joined bass and treble horn systems of quality to conform to highest theater and home use standards. The response shall be within peak-trough limits of 10 dB from 40 to 17,500 Hz and not more than 5 dB farther down at 40 and 19,000. The efficiency shall be at least 104 dB at 4 feet with one watt input (54 dB EIA rating) with HF unit attenuated 3 dB for "normal" balance.

The high frequency system shall comprise straight axis horns; horns employing bends will not be acceptable due to inherent response errors. The horn shall provide a coverage of 80° horizontal, 30° vertical, with less than 10 dB loss at the stated extreme angles.

The low frequency horn shall be of the folded type with a single 15 inch driver unit and a tightly enclosed back air chamber. Non-folded types and ported back air chambers will not be acceptable under this specification because of inherent bass loss and excessive cone motion causing frequency modulation distortion.

The crossover frequencies shall be 400 Hz and 6000 Hz, and the power input capacity shall be as tabulated. The speaker output capacity shall be 100 dB SPL at 2 feet with less than 1% total modulation distortion.

Balance of HF system relative to LF system is normally set at -3 dB but may be varied from zero dB to -9 dB.

The loudspeaker shall be KLIPSCH Model K-457.