



# Install Sound



## IL 8.75

This horn-loaded, two-way, fullrange ceiling mount enclosure is a high-directivity cabinet tuned for remarkably natural-sounding voice reinforcement. It is ideal for public address in lecture halls and conference venues, and at fairs, airports and the like.

Passive crossover on board.

The IL 8.75 is a horn-loaded two-way, fullrange speaker cabinet driven by a built-in passive crossover. It is equipped with an 8" conical speaker in a horn bass reflex housing and a coaxially arrayed, front-loaded 3/4" high-frequency driver with CD horn. This speaker array delivers the low-frequency response it takes to render speech and background music accurately, even without an additional subwoofer.

Alongside natural-sounding voice reproduction, the IL 8.75's hallmark feature is excellent audio quality. Its directive effect commences in the low-to-mid-frequency range, ensuring considerable speech intelligibility even in "echoey" rooms with longer reverberation times.

The IL 8.75 may be operated without a controller. However, for the greatest operating safety, best performance and most convenient handling, we recommend using the HK AUDIO® Digital Field Controller (DFC).

## Architectural specifications

The professional two-way full-range loudspeaker system shall incorporate one 8" bass/mid-range loudspeaker and one 3/4" high-frequency driver in a coaxial arrangement. Both drivers shall be coupled to a single 60° x 60° constant-directivity horn mounted in a square bass-reflex housing constructed of 16 mm MDF painted with either black or white acrylic enamel. The front cover shall consist of grille cloth of a matching colour. Four flush-mounted M8 threaded bushings shall be flush-mounted in the back of the housing for the attachment of mounting accessories. An optional frame shall be made available as an accessory to permit mounting the cabinet into a 2' x 2' suspended ceiling grid.

The enclosure's internal electronics shall include a passive crossover having a crossover frequency of 2 kHz and a slope of 12 dB per octave, and phase and frequency response correction.

The frequency response shall extend from 100 Hz to 19 kHz (+/- 3 dB). The axial sensitivity shall measure 102 dB @ 1W/1m under half-space conditions. The maximum sound pressure level shall be 126 dB at 10% THD under half-space conditions. The cabinet shall have a power-handling capacity of 100 watts RMS and an impedance of 8 ohms.

The input connectors shall consist of one pair of binding posts. The exterior dimensions shall be 45 cm square x 21.8 cm deep, and the unit shall weigh 16 kg (35.2 lbs).

The following accessories shall be available: wall-mount bracket, M8 eyebolt, frame for mounting in a standard 2' x 2' suspended ceiling grid.

The cabinet shall be the HK AUDIO model **IL 8.75**.

**Item number:**

- black: G 182093
- white: G 183033

## Enclosure design and mechanical appointments

The IL 8.75's housing is made of 16-mm MDF coated with acrylic enamel. It is available in the standard colors black or white. The front baffle cover is a matching color grille cloth.

The IL 8.75 comes in a flat, square enclosure. It may be installed in suspended ceilings comprised of standard 62.5 cm x 62.5 cm panels using a special optional ceiling mounting frame. The IL 8.75 may also be suspended freely or installed into wall paneling.

The IL 8.75 weighs 16 kg. It is 45 cm wide, 45 cm high and 21.8 cm deep. On the back panel are a total of four M8 threaded bits. These accept optional fittings enabling the cabinet to be mounted in various ways.

Connectors are located on a countersunk panel on the back of the IL 8.75. It is equipped with a pair of binding posts enabling direct connection of speaker cords lacking plugs.

## Electrical and acoustical data

The IL 8.75 features an 8" HK AUDIO® Custom conical chassis speaker and a 3/4" high-frequency driver. The two drivers are configured in coaxial arrays and addressed via an internal passive crossover. The crossover frequency is 2 kHz at a slope of 12 dB per octave.

The IL 8.75's nominal power handling capacity is 100 watts RMS at 8 ohms impedance. It delivers 102 dB (1W/1m) SPL, measured under

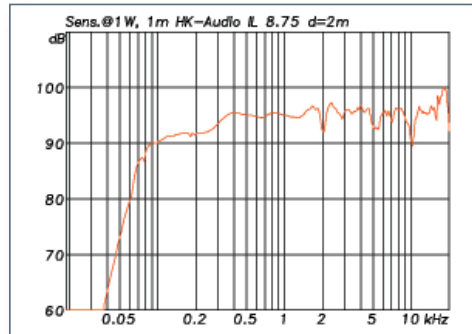
half-space conditions. Maximum SPL measured under the same conditions at a distance of one meter is 126 dB at 10% THD.

The IL 8.75's high-frequency horn's horizontal radiation angle is 60°; its vertical radiation angle is 40°. Courtesy of the housings' foursquare design, the horn may be rotated 90°.

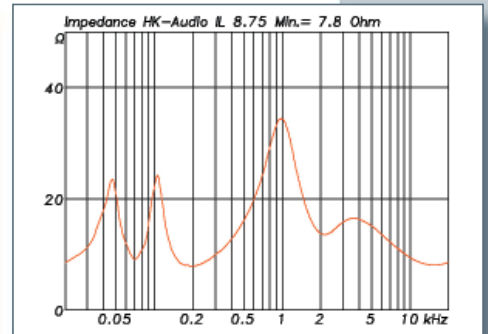
The IL 8.75's directivity is 7.77 dB; the Q factor is 8,39 (averaged from 100 Hz to 10 kHz). Frequency response

ranges from 68 Hz to 22 kHz ( $\pm 3$  dB). Consequently, the IL 8.75 is able to provide audio reinforcement for speech and music without requiring a subwoofer for enhanced low-end response (background sound reinforcement).

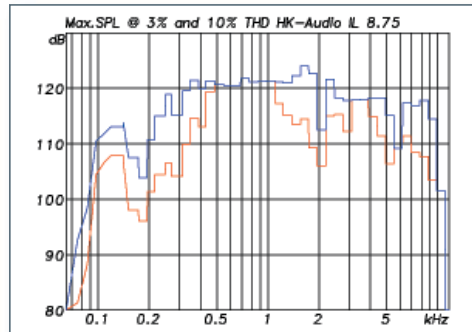
# Measurement charts



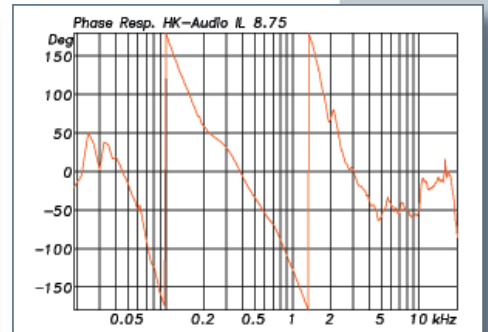
Frequency Response



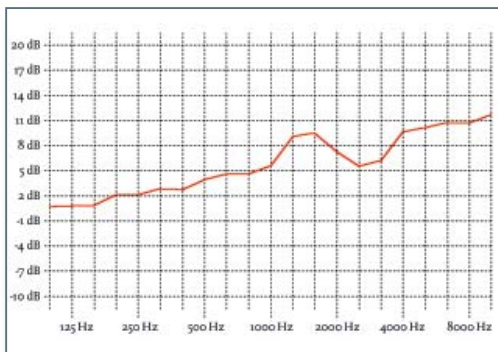
Impedance



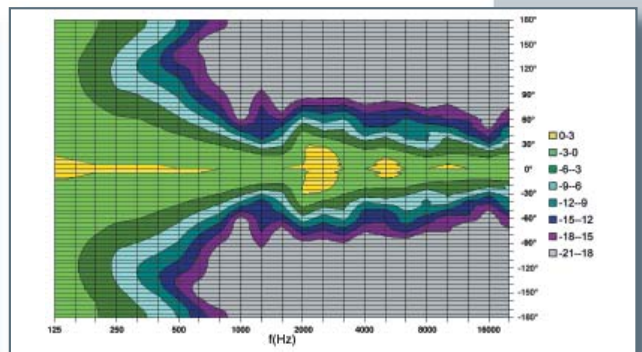
Max. SPL



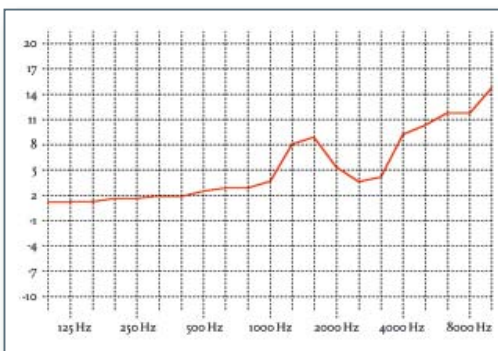
Phase Response



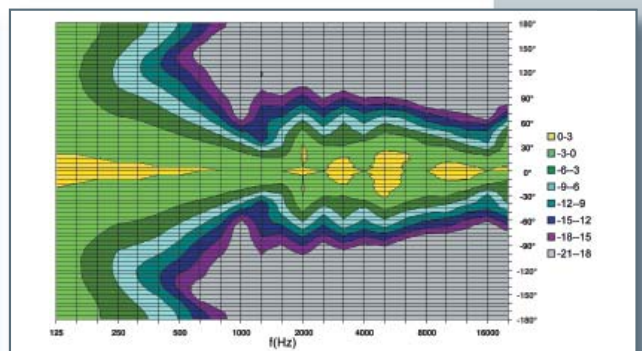
Directivity



Directivity vertical 2D

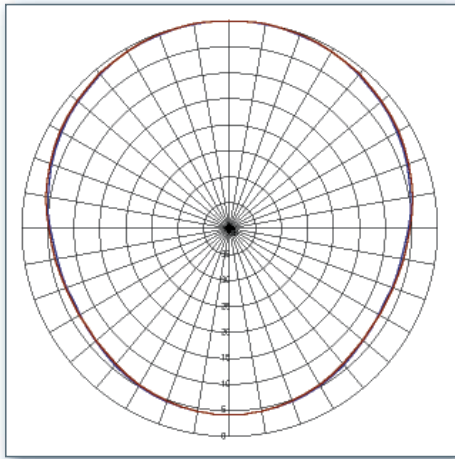


Q-Factor

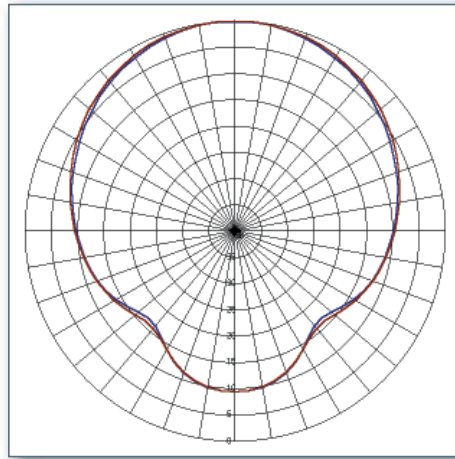


Directivity horizontal 2D

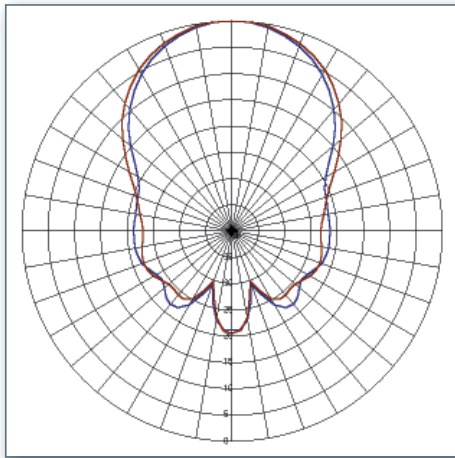
## Polar diagrams



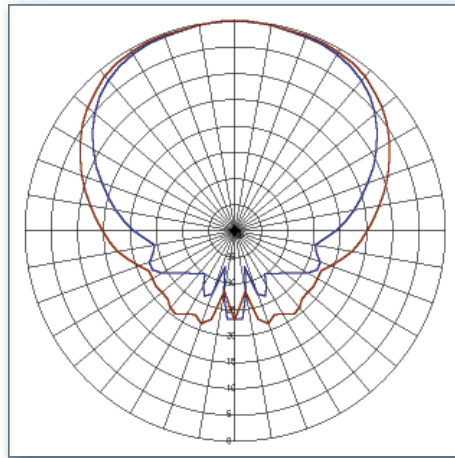
250 Hz



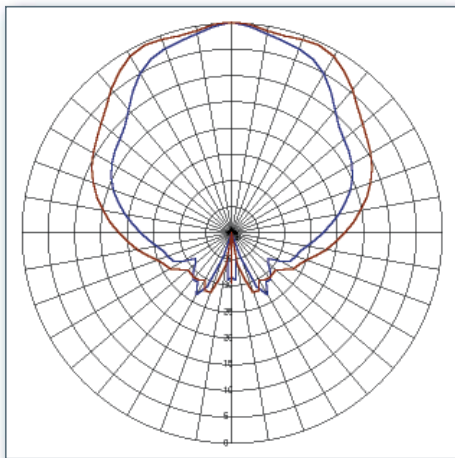
500 Hz



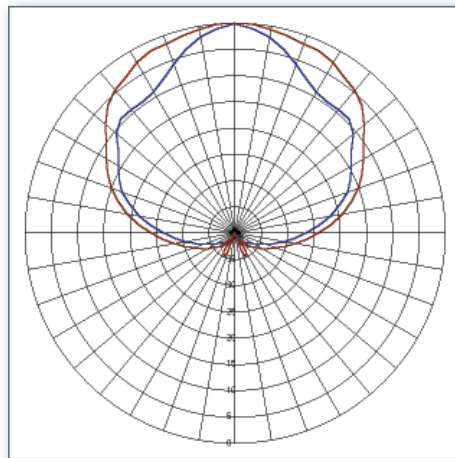
1000 Hz



2000 Hz

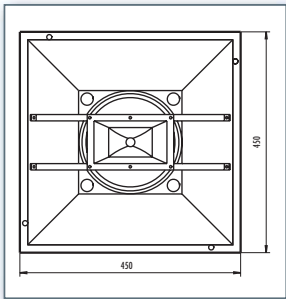
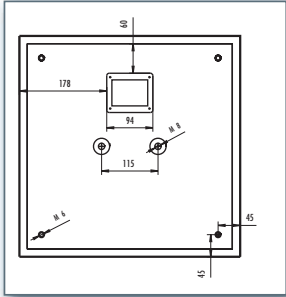
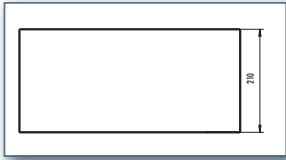


4000 Hz



8000 Hz

■ = horizontal  
■ = vertical



## Technical specifications

### Loudspeakers

Power handling nominal (RMS):	100 W
Power handling (program):	200 W
Power handling (peak, 10 ms)	400 W
Impedance:	8 ohms
Frequency response ( $\pm 3$ dB):	100 Hz to 19 kHz
Frequency response (-10 dB):	68 Hz to 22 kHz
Axial sensitivity (1W/1m, half-space):	102 dB
Maximum SPL (3 % THD, half-space):	121 dB
Maximum SPL (10% THD, half-space):	126 dB
Maximum SPL (calculated at peak):	128 dB
Low/mid frequency driver:	8" HK AUDIO® Custom
high-frequency driver:	3/4" high-frequency driver
Corner frequency, passive crossover:	2 kHz / 12 dB per octave
Horizontal dispersion (-6 dB):	60 degrees
Vertical dispersion (-6 dB):	60 degrees
Directivity:	7.77 dB
Q factor:	8,39

### Connectors

Ports:	1 pair of binding posts
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### Housing

Material:	16 mm MDF
Coating:	black or white acrylic enamel
Front cover:	matching color grille cloth
Fittings:	a total of 4 M8 threaded bits for attaching mounting accessories
Weight:	16 kg / 35.3 lbs.
Dimensions (W x H x D):	45 cm x 45 cm x 21.8 cm 17 6/8" x 17 6/8" x 8 5/8"

### Accessories

- HK AUDIO® TR 50: 100 V transformer with 3 power taps: 50 W, 25 W, 12.5 W
- HK AUDIO® Wall-Mount
- HK AUDIO® Ceiling Mounting Frame 62.5 cm x 62.5 cm
- HK AUDIO® M8 Ringbolt

### Service items

- 8" speaker
- 3/4" driver
- diaphragm



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