



Install Sound



IL 12.2

Tuned for voice and music applications, this fullrange cabinet offers extraordinary phase linearity, highest speech intelligibility, and considerable dynamic range.

The IL 12.2 may be deployed as a fullrange or mid-/high-range cabinet in configurations with a subwoofer such as the IL 115 Sub, IL 118 Sub

The IL 12.2 is a two-way, fullrange speaker cabinet driven by an internal passive crossover. It is loaded with a direct-radiating 12" conical speaker in a bass reflex housing and a 2" high-frequency driver with a pivoting CD horn. This speaker array delivers the low-frequency response it takes to render speech and background music accurately, even without an additional subwoofer. Subwoofers such as the HK AUDIO® IL 115 Sub are available for applications

or IL 218 Sub. It is the consummate cab for voice and music applications demanding high sound pressure levels. Passive crossover on board.

requiring enhanced low-frequency response.

Alongside natural-sounding voice reinforcement, the IL 12.2's hallmark qualities are its extraordinary phase linearity and considerable dynamic range. It is ideally suited for medium- to long-throw sound reinforcement applications.

The IL 12.2 may be operated with or 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 cabinet shall incorporate one 12" bass/mid-range speaker and one 2" high-frequency driver. The bass/mid-range speaker shall be mounted in a trapezoidal enclosure constructed of 16 mm-thick MDF and painted with either black or white acrylic enamel. The high-frequency driver shall be coupled to a constant directivity horn capable of being rotated to yield a dispersion pattern of either 60° x 40° or 40° x 60°. An alternative constant directivity horn capable of being rotated to yield a dispersion pattern of either 90° x 60° / 60° x 90° shall be made available as an option. These components shall be protected by an impact-resistant steel grille backed with glued-on acoustic foam.

The cabinet shall include two flush-mounted M10 threaded bushings each on the back, left and right sides, as well as three flush-mounted M10 threaded bushings each on the front and base for the attachment of mounting accessories.

The enclosure's internal electronics shall include a passive crossover having a crossover frequency of 900 Hz and a slope of 12 dB per octave, and phase and frequency response correction.

The frequency response shall extend from 95 Hz to 19 kHz (+/- 3 dB). Axial sensitivity shall measure 107 dB @ 1W/1m under half-space conditions. Maximum sound pressure level shall be 133 dB at 10% THD under half-space conditions. The cabinet shall have a nominal power-handling capacity of 300 watts RMS and an impedance of 8 ohms.

There shall be two types of input connectors: one Neutrik NL 4 Speakon® connector, and one pair of binding posts. The exterior dimensions shall be 42 cm wide x 64 cm tall x 41 cm deep, and the unit shall weigh 30 kg (66 lbs.)

The following accessories shall be available: 100 V transformer, high-frequency 90° x 60° horn conversion kit, wall-mount bracket, M10 eyebolt.

The cabinet shall be the HK AUDIO model **IL 12.2**.

- black: G 181203
- white: G 181213

Enclosure design and mechanical appointments

The IL 12.2's housing is made of 16-mm MDF coated with acrylic enamel. Cabinets ship in the standard colors black or white. The housing is trapezoidal, angled specifically to facilitate setup, alignment, and cluster configurations comprising several IL 12.2s. Covering its front baffle is an impact-resistant steel grille backed with laminated acoustic foam rubber.

The IL 12.2 weighs 30 kg. It is 42 cm wide, 64 cm high and 41 cm deep. Located on the housing's

panels are a total of twelve countersunk M10 threaded bits. These accept optional fittings enabling the cabinet to be mounted in various ways and configured in clusters. Connectors are located on a countersunk panel on the back of the IL 12.2. This panel offers a four-pin Speakon® port. The IL 12.2's pin assignments are pin 1+ / pin 1-

The IL 12.2 is also equipped with binding posts enabling direct connection of speaker cords lacking plugs. The red binding post is wired in parallel to the Speakon® connector's 1+ pin; the black binding post to the 1- pin.

Electrical and acoustical data

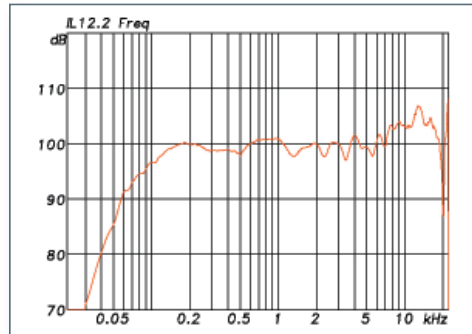
The IL 12.2 features a 12" conical chassis speaker and a 2" B&C high-frequency driver. The two drivers are configured in a twin axial array and addressed by an internal passive crossover. The crossover frequency is 900 Hz at a slope of 12 dB per octave.

The IL 12.2's nominal power handling capacity is 300 watts RMS at 8 ohms impedance. It delivers 107 dB (1W/ 1m) SPL, measured under half-space conditions. Maximum SPL measured under the same conditions at a distance of one meter is 133 dB at 10% THD.

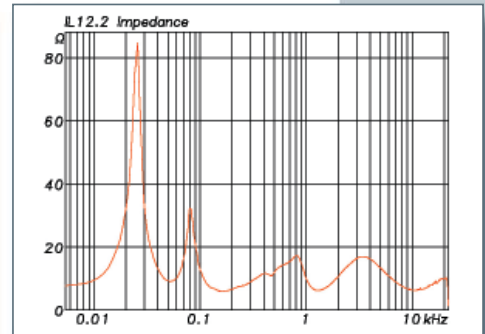
The IL 12.2's high-frequency horn's horizontal radiation angle is 60°; its vertical radiation angle is 40°. A horn radiating at a 90° horizontal angle and a 40° vertical angle is optionally available for the IL 12.2. Courtesy of their housings' foursquare design, both CD horns may be rotated 90°, which changes the horizontal radiation angle to 40° and the vertical radiation angle to 60° or 90°. The cabinet's directivity is 8.65 dB; the Q factor is 10.43 (averaged from 100 Hz to 10 kHz).

The IL 12.2's frequency response ranges from 65 Hz to 22 kHz. Consequently, the IL 12.2 is able to provide audio reinforcement for speech and music without requiring an additional subwoofer.

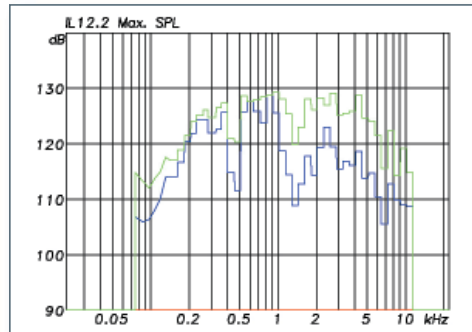
Measurement charts



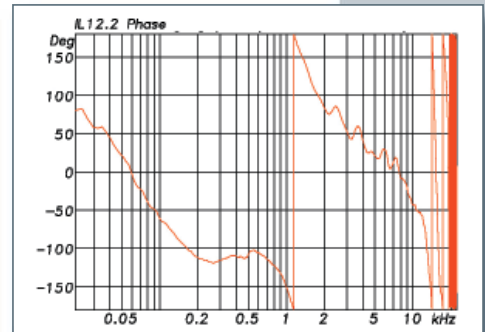
Frequency Response



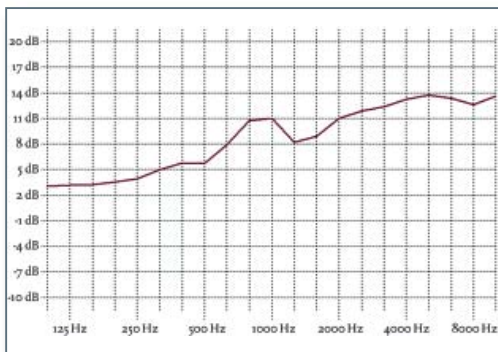
Impedance



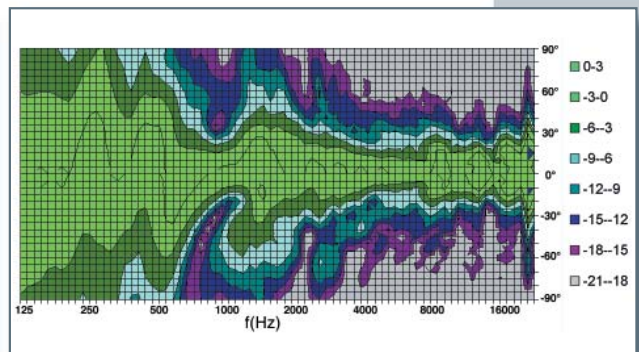
Max. SPL



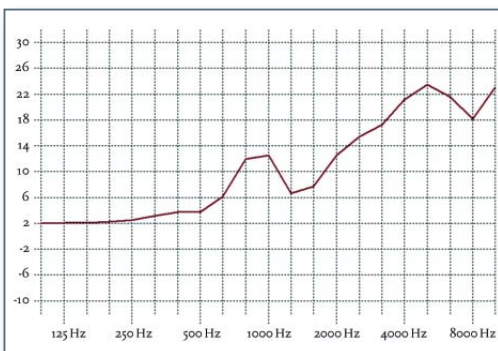
Phase Response



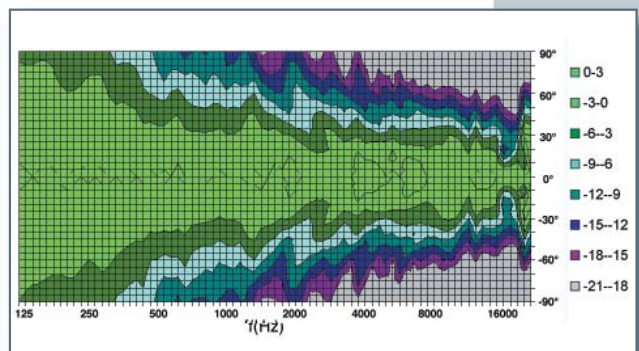
Directivity



Directivity vertical 2D

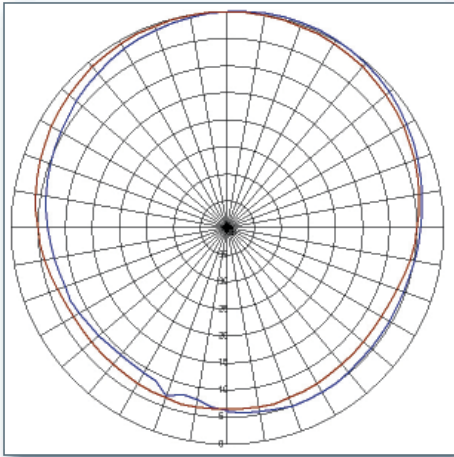


Q-Factor

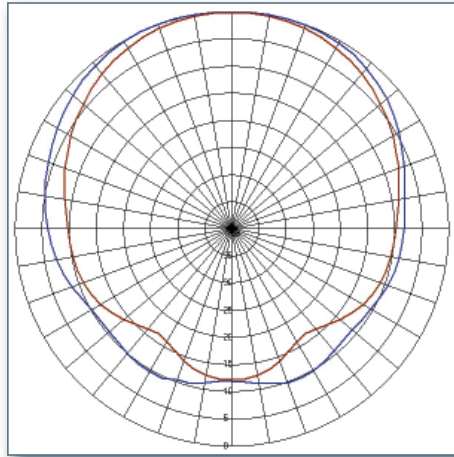


Directivity horizontal 2D

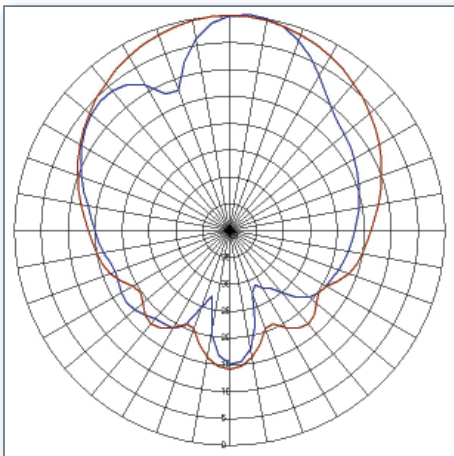
Polar diagrams



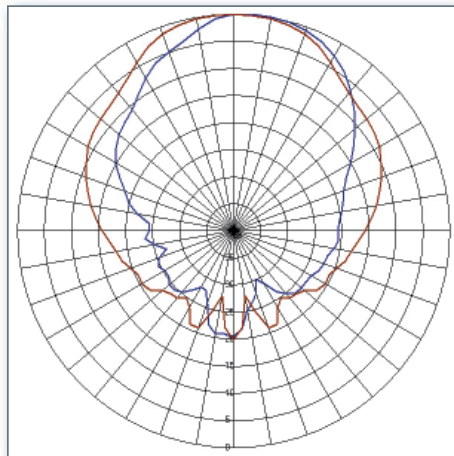
250 Hz



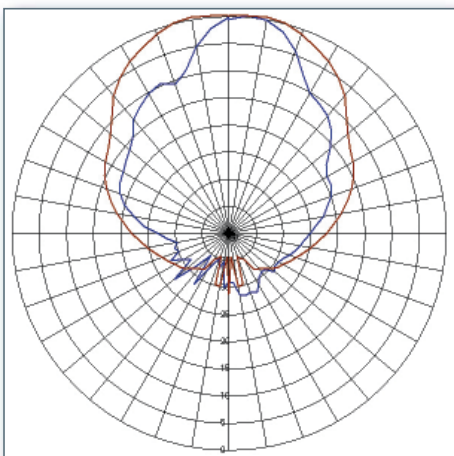
500 Hz



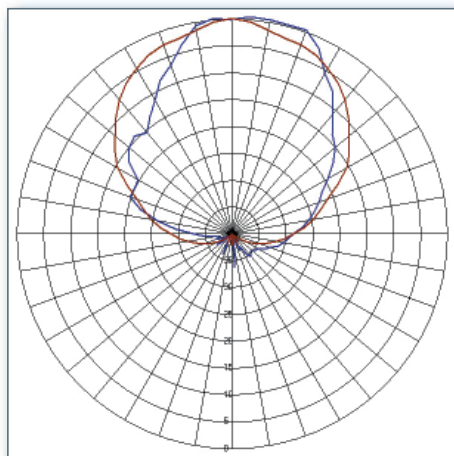
1000 Hz



2000 Hz

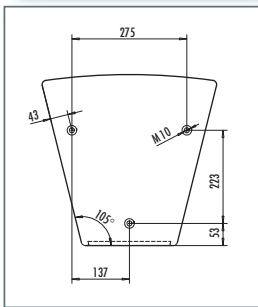
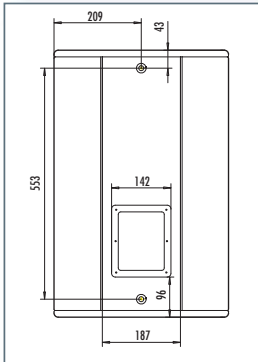
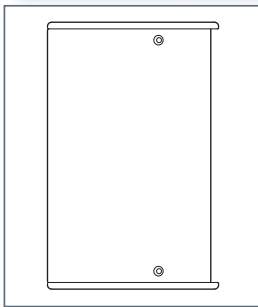
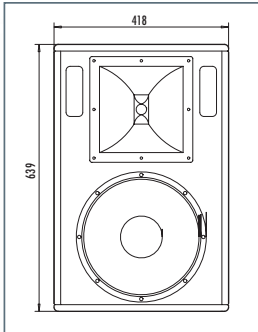


4000 Hz



8000 Hz

— = horizontal
— = vertical



Technical specifications

Loudspeakers

Power handling nominal (RMS):	300 W
Power handling (program):	600 W
Power handling (peak, 10 ms)	1200 W
Impedance:	8 ohms
Frequency response (± 3 dB):	95 Hz to 19 kHz
Frequency response (-10 dB):	65 Hz to 22 kHz
Axial sensitivity (1W/1m, half-space):	107 dB
Maximum SPL (3 % THD, half-space):	126 dB
Maximum SPL (10% THD, half-space):	133 dB
Maximum SPL (calculated at peak):	138 dB
Speaker:	12" Precision Devices
High-frequency driver:	2" B&C
Corner frequency, passive crossover:	900 Hz / 12 dB per octave
Horizontal dispersion (-6 dB):	60 (90) degrees
Vertical dispersion (-6 dB):	40 degrees
Directivity:	8.65 dB
Q factor:	10.43

Connectors

Ports:	1 Speakon® NL4, 1 set of binding posts
Pin assignments:	Speakon®: 1+ / 1-

Housing

Material:	16 mm MDF
Coating:	black or white acrylic enamel
Front cover:	impact-resistant protective steel grille
Fittings:	12 M10 threaded bits for attaching mounting accessories

Weight:	30 kg / 66.2 lbs.
Dimensions (W x H x D):	42 cm x 64 cm x 41 cm 16 3/5" x 25 1/5" x 16 1/5"

Accessories

- HK AUDIO® TR 200: 100V Transformer with three power taps: 200 W, 100 W, 50 W
- HK AUDIO® Conversion Kit Horn 90° x 40°
- HK AUDIO® Wall-Mount
- HK AUDIO® M10 Ringbolt

Service items

- 12" speaker
- 2" driver
- 2" diaphragm



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