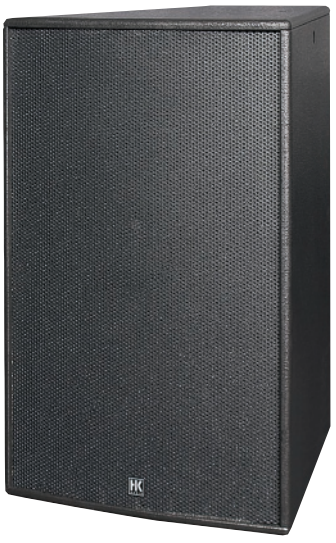
Installation Line

IL 15.1



Fullrange cabinet featuring extended low end response and high load-handling for high-quality sound reinforcement for public address and music bars, live clubs, smaller dance clubs, theaters and similar venues and applications. The IL 15.1 may be deployed either as a fullrange cabinet or as a mid/high-range cabinet in combination with the HK AUDIO subwoofers IL 115 Sub, IL 118 Sub and IL 218 Sub.

Offering plenty of punch and able to render speech and music with amazing clarity, this is the ideal enclosure for short-to-medium-throw applications. Passive crossover on board.

Description

The **IL 15.1** is a two-way, fullrange speaker cabinet designed to be driven via an internal passive crossover. The enclosure is loaded with a direct-radiating 15" cone loudspeaker in a bass reflex housing and a 1" high-frequency driver with a rotatable 60° x 40° CD horn. This speaker array delivers the kind of low frequency response it takes to render speech and background music accurately, even without an additional subwoofer.
The HK AUDIO IL 115 Sub, IL 118 Sub and IL 218 Sub subwoofers come highly recommended for applications requiring enhanced low frequency response.

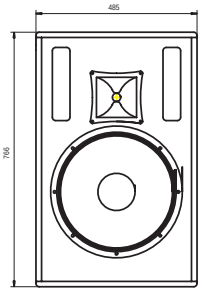
Next to natural-sounding, musical response and high-resolution audio, the **IL 15.1** delivers excellent speech intelligibility and enhanced low end response. It is ideally suited for sound reinforcement applications demanding enhanced low end response for coverage up to a distance of some 20 meters, depending on the given sound pressure requirements.

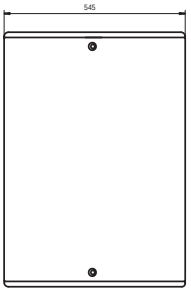
The **IL 15.1** may be operated with or without a controller. The HK Audio Digital Field Controller (DFC) is recommended for larger and more complex application scenarios.

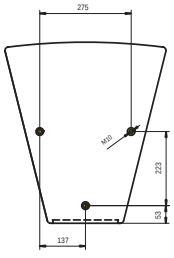
Enclosure design and dimensions

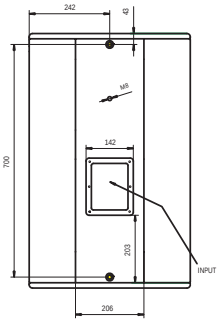
The **IL 15.1**'s housing is made of 16 mm MDF coated with acrylic paint. Cabinets ship in the standard colors black or white.
The housing is trapezoidal in shape. This angled array is designed to facilitate setup, installation and alignment. Covering its front baffle is an impact-resistant steel grille padded with glued-on acoustic foam rubber.

Weighing 34 kg, the **IL 15.1** measures 48.5 cm in width, 76.6 cm in height, and 54.5 cm in depth. On the housing's panels are located a total of twelve countersunk M10 threaded bushings. These are designed to take fittings enabling the cabinet to be mounted in various ways and configured in clusters.









Connectors

Located on the back of the **IL 15.1** is a countersunk connector panel with a four-pin Speakon port. Pin assignments are as follows:
pin 1+ / pin 1-.

The **IL 15.1** is also equipped with binding posts allowing the use of speaker cables that are not fitted with connectors. The red terminal is connected in parallel to the Speakon connector's pin 1+, and the black terminal to the Speakon connector's pin 1-.



Electrical and acoustic data

The **IL 15.1** is loaded with a 15" conical chassis speaker and a 1" B&C high-frequency driver. Both drivers are arrayed twin axially and driven by an internal passive crossover. The crossover frequency is 2 kHz at a slope of 12 dB per octave.
The **IL 15.1**'s nominal power handling capacity is 400 watts RMS at an impedance of 8 ohms. It produces a sound pressure level of 106 dB (1W/ 1m), measured under half-space conditions. Maximum SPL measured under the same conditions at a distance of one meter is 131 dB at 10% THD.

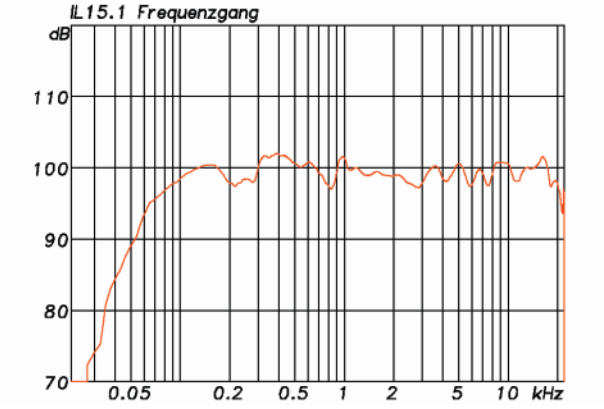
The **IL 15.1**'s high frequency horn projects at a horizontal angle of 60° and a vertical angle of 40°. A horn projecting at a horizontal angle of 90° and a vertical angle of 60° is optionally available.
The two horns' housings are identical for installation purposes.

The 90° horn can be installed in the place of the 60° horn without requiring the cabinet's crossover to be adjusted.

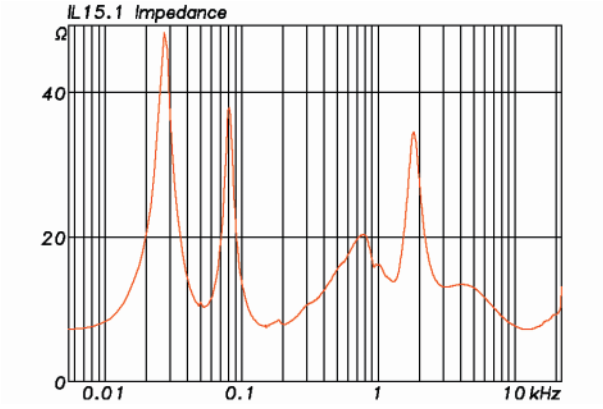
Owing to the square design of their housings, both CD horns may be rotated by 90°. This means that **IL 15.2** cabinets can be modified to project at four different angles: 60°x 40° or 40°x 60° and 90°x 60° or 60°x 90°.
The cabinet's directivity is 9.22 dB, while the Q factor is 11.5 (averaged from 100 Hz to 10 kHz).

The **IL 15.1**'s frequency response ranges from 68 Hz to 19 kHz (±3 dB). This means that the **IL 15.1** is able to provide sound reinforcement for speech and music without requiring additional subwoofers.

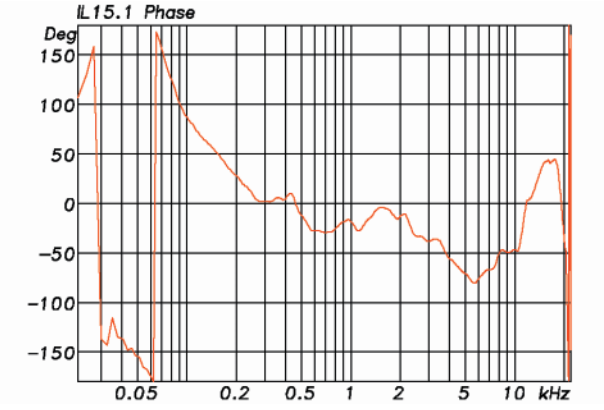
Measuring diagrams



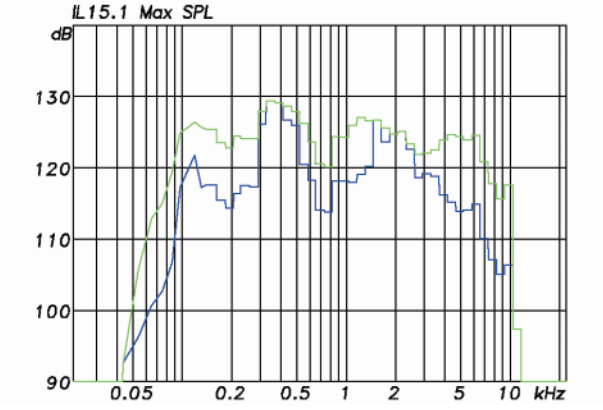
Frequency Response



Impedance



Phase Response

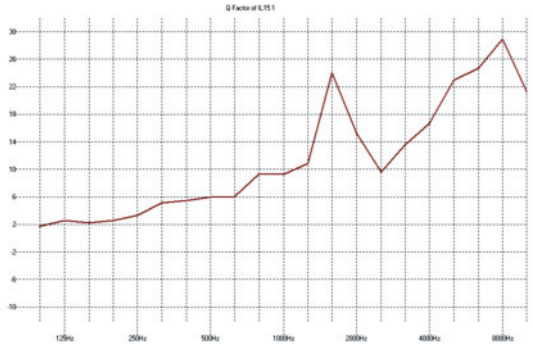


Max. SPL

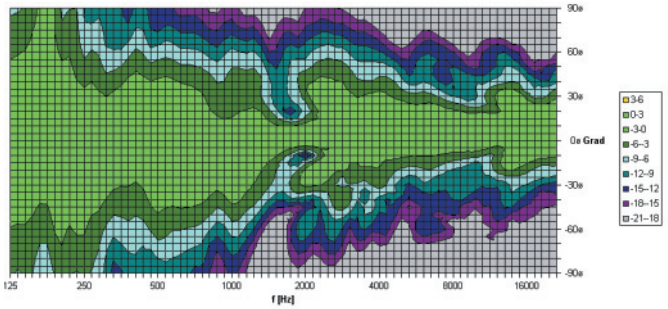
Measuring diagrams



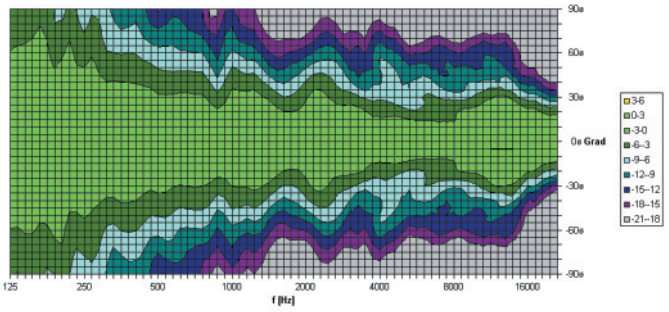
Directivity



Q-Factor

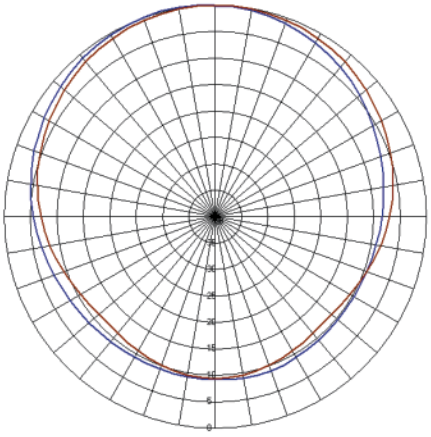


Directivity vertical 2D

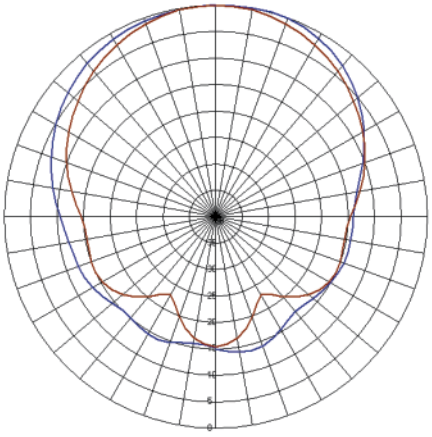


Directivity horizontal 2D

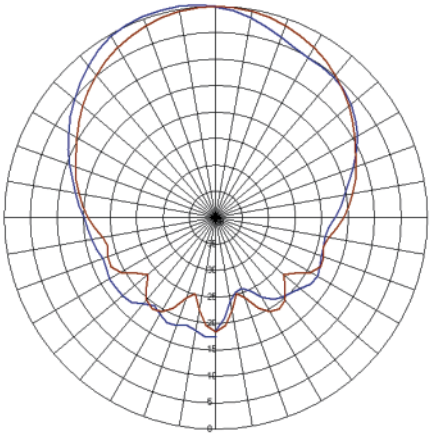
Polar diagrams version 60°x 40°



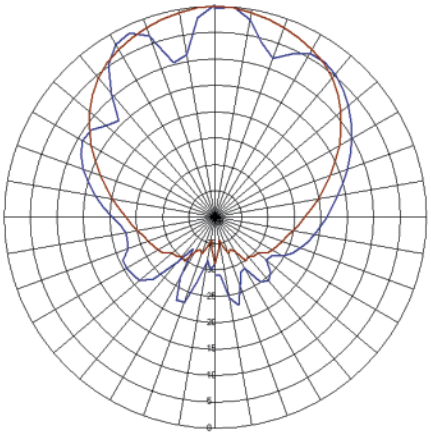
250 Hz



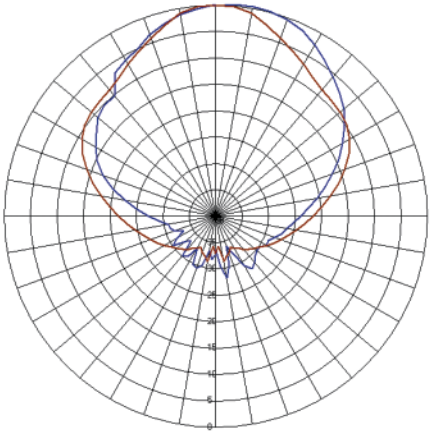
500 Hz



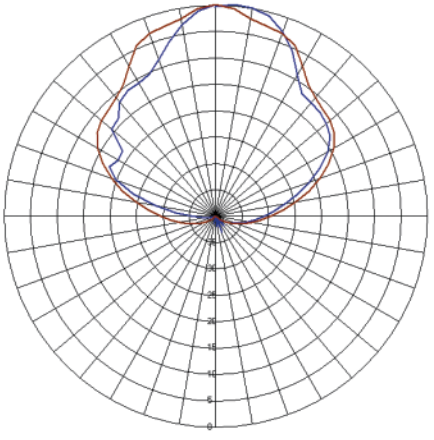
1000 Hz



2000 Hz



4000 Hz



8000 Hz

— horizontal
— vertical

available in:
BLACK
WHITE

Technical data

Loudspeakers

Power handling nominal (RMS):	400 W
Power handling (program):	800 W
Power handling (peak, 10 ms):	1600 W
Impedance:	8 ohms
Frequency response (± 3 dB):	68 Hz to 19 kHz
Frequency response (-10 dB):	50 Hz to 20 kHz
Axial sensitivity (1W/1m, half-space):	106 dB
Maximum SPL (3 % THD, half-space):	126 dB
Maximum SPL (10% THD, half-space):	131 dB
Maximum SPL (calculated peak):	135 dB
Bass / mid-range speaker:	15"
High frequency driver:	1" B&C
Crossover frequency:	2 kHz / 12 dB per octave
Horizontal dispersion (-6 dB):	60 (90) degrees
Vertical dispersion (-6 dB):	40 (60) degrees
Directivity:	9.22 dB
Q factor:	11.5

Connectors

Ports:	1 Speakon NL4, 1 binding post
Pin assignments:	Speakon: 1+ / 1-

Housing

Material:	16 mm MDF
Coating:	black or white acrylic paint
Front cover:	impact-resistant protective steel grille
Mounting fittings:	a total of 12 M10 threaded bushings for attaching mounting accessories
Weight:	34 kg
Dimensions (W x H x D):	48.5 cm x 76.6 cm x 54.5 cm

Accessories

- HK Audio TR 200: 100V Transformer with three power taps: 200 W, 100 W, 50 W
- HK Audio High Frequency 90° X 60° Horn Conversion Kit
- HK Audio MB 5 Wall-Mount Bracket
- HK Audio EB 10 Eyebolt M10

Service articles

- 15“ Woofer
- 1" Driver
- 1" Diaphragm



Architectural specifications

Professional two-way, fullrange cabinet loaded with a 15" bass/mid-range speaker and 1" high frequency driver offering extraordinary phase linearity and natural-sounding, highly intelligible speech reproduction. The bass/mid-range speaker is mounted in a precision-tuned enclosure, and the high frequency driver is connected to a rotatable 60° x 40° / 40° x 60° constant directivity horn. A rotatable 90° x 60° / 60° x 90° constant directivity horn is optionally available.

Trapezoidal housing made of 16 mm MDF coated in black or white acrylic paint. Equipped with two each countersunk threads on the rear, left and right side panels, as well as three each countersunk threads on the lid and base, designed to take accessory fittings. Impact-resistant protective steel grille padded with glued-on acoustic foam rubber.

Internal passive crossover with a crossover frequency of 2 kHz (12 dB / octave) as well as phase and frequency response correction. Frequency response from 68 Hz to 19 kHz (+/- 3 dB). 106 dB axial sensitivity in main direction of throw @ 1W / 1m under half-space conditions, 131 dB maximum SPL at 10% THD under half-space conditions. 400 watts RMS nominal power handling. 8 ohms impedance.
Connectors: 1 Neutrik NL 4 Speakon and 1 binding post.

Dimensions (W x H x D): 48.5 x 76.6 x 54.5 cm
Weight: 34 kg
Accessories: 100 V Transformer, High Frequency 90° X 60° Horn Conversion Kit, Wall-Mount Bracket, M10 Eyebolt

Model: HK AUDIO IL 15.1

HK AUDIO Installation Line

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