

# CT 115

## TWO-WAY, FULL-RANGE SPEAKER SYSTEM



The CT 115 is a passive, extended-range speaker cabinet that can be switched between passive mode and biamp mode. Its dual-function housing allows it to serve as a FOH speaker as well as a stage monitor. The hallmarks of the CT 115 are its speech intelligibility, extraordinary phase linearity, and considerable dynamic range. Its BEM-optimized HF horn offers precise directivity and optimal clustering without phase cancellations. The CT 115 was developed principally for applications requiring excellent voice and music reinforcement and richly detailed audio resolution at high SPL for short-to-medium-throw distances. The CT 115 is available in left and right versions (CT 115 L, CT 115 R). For applications demanding enhanced bass response the HK AUDIO subwoofer CT 118 Sub is recommended.

The CT 115 may be operated in passive or biamp mode with or without a controller. For best audio results, we recommend using the HK AUDIO DSM 2060 Controller, or the HK AUDIO Digital Field Controller (DFC) in combination with a DFC network.



## TECHNICAL SPECIFICATIONS

Power-handling nominal: 600 W RMS  
 Power-handling program: 1200 W  
 Power-handling nominal peak: 2400 W  
 Recommended amplifier power: 1200 W RMS / 4 Ohms

Frequency response - 10 dB: 55 Hz – 19 kHz  
 Frequency response +/- 3 dB: 65 Hz – 16 kHz

Coverage: 60° x 40° / 40° x 60° CD Horn, rotatable  
 Sensitivity 1W@1m 1): 106 dB  
 Max. SPL calculated 1): 140 dB 2)  
 Max. SPL peak 1): 138 dB  
 Max. SPL 1): 134 dB @ 10% THD (200 Hz- 5 kHz)  
 Nominal impedance: 8 Ohms

Low/ mid woofer: 15" neodymium  
 High frequency driver: 1.4", 3" voice coil  
 Crossover frequency: 850 Hz, 12 dB/ octave  
 Crossover modes: Bi-amp/ passive, externally switchable  
 Crossover Shapes: FOH, Monitor

Connectors: 2x Speakon® NL 4  
 Enclosure: 18 mm (3/4"), 13-ply birch plywood  
 Angles up: 47° + 18° (monitor application)  
 Finish: Black acrylic lacquer  
 Grille: Metal grille with acoustic foam  
 Handles: 4x Ergonomic handle  
 Rigging hardware: 2x Aeroquip fly tracks, 2x M10 threaded bushing  
 Pole mount: HK AUDIO TripleTilt™, diameter 35 mm  
 Mounting angle: +5°, -3°, -10°

Weight: 33 kg / 72.6 lbs.  
 Dimensions (w x h x d): 45 cm x 69.6 cm x 39.6 cm  
 17-3/4" x 27-3/8" x 15-5/8"

Optional accessories: Mounting yoke, M10 eyebolt, Protective cover, Touring flightcase (2x CT 115)

1) Based on half space conditions  
 2) Based upon peak power capacity

Specifications subject to change without notice -  
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**Enclosure details:** The CT 115 enclosure is constructed of 18-mm, 13-ply birch plywood, and is shaped to serve dual functions. It is 45 cm wide, 69.6 cm high, 39.6 cm deep, and weighs 33 kg. The surface is finished in black water-repellent acrylic lacquer. The front of the cabinet is protected by a steel grille. For rigging, the enclosure is equipped with a total of three Aeroquip fly tracks and two threaded M10 bushings.

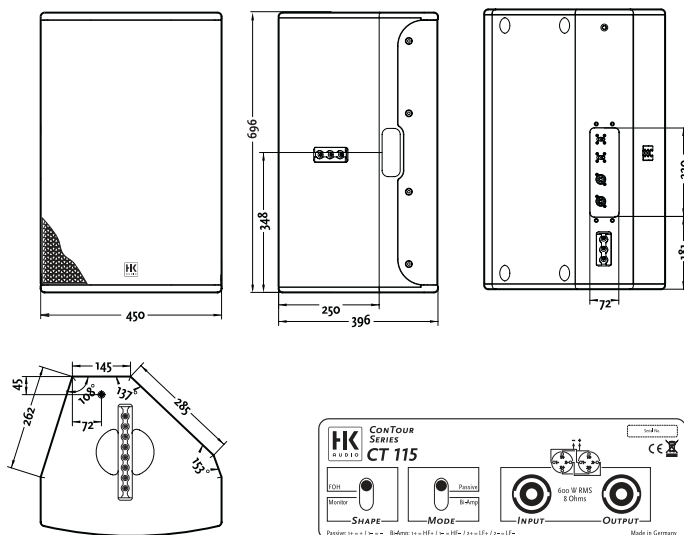
An optionally available mounting yoke attaches to the Aeroquip track on the top panel to rig and fly the cabinet. Recessed handles are located on the top and bottom of the housing. An HK AUDIO TripleTilt™ pole-mount adapter is on the bottom panel; it allows the cabinet to be mounted on a tripod at three different tilt angles (+5°, -3° or -10°).

On the rear of the cabinet is a Shape switch for reconfiguring the passive crossover, enabling the cabinet to be used as an FOH speaker or as a monitor. When the switch is set to the "Monitor" position, the 1.4" driver's damping factor is reduced to ensure the speakers cuts through on loud stages

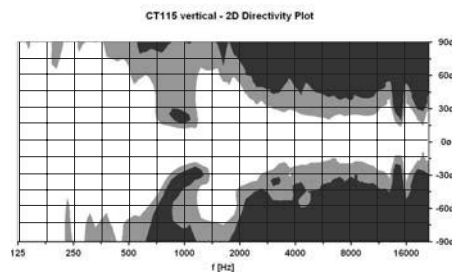
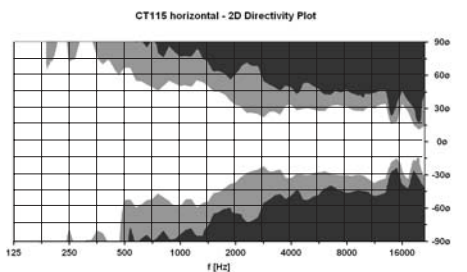
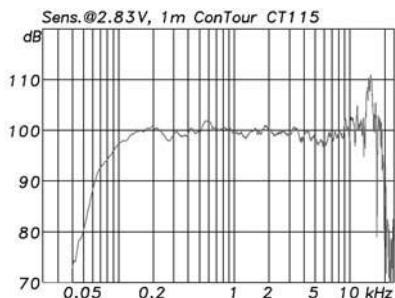
**Electrical and acoustical data:** The CT 115 features a direct-loaded 15" neodymium speaker and a 1.4" B&C high-frequency driver with a 60° x 40° CD horn. The horn is designed to fit a square opening and can be rotated a quarter turn for an alternative coverage pattern of 40° x 60°. The CT 115's frequency response extends from 65 Hz to 16 kHz (+/- 3 dB). Nominal power handling is 600 watts RMS at 8 Ohms. Axial sensitivity is 106 dB measured under half-space conditions at 1 watt @ 1 metre. Maximum SPL at a distance of one meter is 134 dB, also in half-space.

**Connectors:** All connectors, the Passive/Biamp switch and the Shape switch are located on the back of the CT 112 on a recessed panel for better protection. Included are two Speakon NL 4 jacks, both of which are wired in parallel.

Pin assignments in passive mode are pin 1+ = mid/high +, 1- = mid/high -, 2+ = sub +, 2- = sub 2-. In biamp mode, the HF signal is routed via pin 1+ / 1-, and the LF/MF signal is routed via pin 2+ / 2-.



**Directivity, CT 115:** The following charts depict horizontal and vertical directivity at various frequencies using -6 dB and -12 dB sound pressure isobars.



**Architectural Specifications, CT 115**

The professional two-way speaker system shall incorporate a BEM-optimized HF horn for precise directivity and optimal clustering without phase cancellations. The system shall be capable of serving both as a full-range speaker and as a mid/high unit in combination with the CT 118 Sub or HK AUDIO COHEDRA™ subwoofers. It shall be loaded with a 15" neodymium woofer mounted in a precision-tuned bass reflex enclosure, and with a 1.4" high-frequency driver with a 3" voice coil connected to a pivoting 60° x 40° / 40° x 60° constant-directivity horn. The housing shall be finished in black acrylic lacquer and constructed of 18-mm birch plywood in such a way that it can be positioned at angles of 47° and 18° for monitor applications. It shall be equipped with a 35-mm 3-way pole mount adapter offering tilt angles of +5°; -3° and -10°, two Aeroquip fly tracks, and two threaded M10 bushings for attaching optional single-pick-point rigging equipment or other mounting accessories. An impact-resistant steel grille backed with acoustic foam shall protect the front baffle. The enclosure shall include four recessed handles, one each on the top, bottom, left and right sides.

An internal passive crossover shall divide the signal at 850 Hz with a slope of 12 dB per octave; an external switch shall reconfigure the system for biamping. System frequency response shall vary no more than +/- 3 dB from 65 Hz to 16 kHz. The system shall be capable of producing a sound pressure level of 106 dB on axis at a distance of 1 metre with a power input of 1 watt (under half-space conditions) and a maximum SPL of 134 dB at 10% THD (also in half-space). Power-handling capacity shall be 600 watts RMS with a nominal impedance of 8 Ohms.

The two-way speaker system shall be the HK AUDIO CT 115.

**Connectors:** 2x Neutrik NL 4 Speakon®

**Dimensions (W x H x D):** 45 x 69,6 x 39,6 cm

**Weight:** 33 kg

**Accessories:** Rigging Yoke, cover, M10 eyebolts, touring flightcase (2x CT 115).

**Typ:** HK Audio® CT 115