

H1315

THREE WAY HORN LOADED SPEAKER SYSTEM

H1315 WP

THREE WAY INDOOR/OUTDOOR HORN LOADED SPEAKER SYSTEM

The RCFACUSTICA H1315 and H 1315WP are three-way full range loudspeaker systems that incorporate a 15" LF transducer, a 10" cone MF transducer and a 1.4" exit titanium compression driver. The difference between the two models is just relevant to the cabinet and components finishing, treatment and other details so to install the WP version in environments with high humidity or even outdoor. The speaker system is very compact and provides very high output and accurate voice and sound reproduction.

- Permanent Installations
- Sound Reinforcement in medium to large spaces
- AV Presentations
- Flown Clusters
- Club Systems
- Main PA in mid to large-size systems

H 1315 p.n. 130.00.084

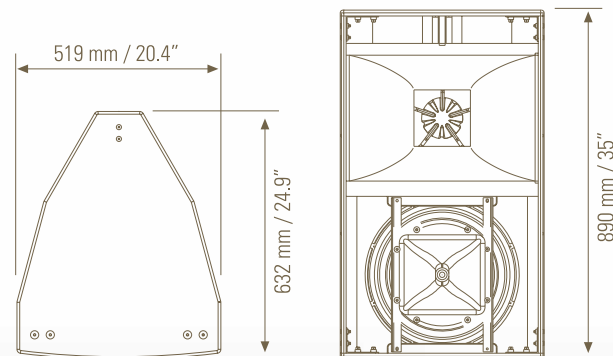
H 1315 WP p.n. 130.00.266



- Compact Arrayable 3-way System
- Fully Horn-loaded LF/MF/HF (60° x 40° directivity)
- Fully equipped with Neodymium Transducers
- Bi-amp system (passive crossover MF/HF included)
- Active Mosfet Compression Driver Protection
- Rotable HF Horn
- Recessed handles

The LF driver, equipped with a 4" voice coil and a state of the art neodymium motor, is mounted in a vented enclosure with optimised front loading. The MF cone driver is a unique RCF sealed basket design and is loaded into a exponential, Baltic birch 60° x 40° midrange horn. The 3" coil MF driver is acoustically equalized thanks to a unique RCF complex phase-plug design. The HF titanium compression driver is loaded on a constant directivity rotatable horn with a coverage of 60° x 40°.

The internal crossover network between midrange and compression driver offers a unique Compression Driver Protection thanks to a an Active MOSFET Circuit. The system is driven in bi-amped mode, is able of producing a Max SPL higher than 136 dB and handles 900 Watts AES (LF) + 400 Watt AES (MF/HF). The loudspeaker enclosure shape is multi-trapezoidal and allow a double coupling angle each side. The cabinet of the H 1315 is constructed of multi-ply Baltic birch plywood and finished in a very resistant, textured, polyurethane black paint. The H1315 WP cabinet is treated inside-outside with polyurea black paint.



The cabinet includes 2 recessed handles for transportation and positioning and a total of six double M10 fixing point for flown applications and extensive internal metal bracing. The front steel grille is epoxy powder coated for H 1315 version and equipped with two layers of weather-resistant open-cell fibres and water repellent woven fabric backing for WP version. The transducer cones as well carry a special additional treatment to resist against critical environmental conditions. While standard version uses a SPEAKON connector, the H 1315 WP is equipped with an IP 67 removable Amphenol terminal.

CSI PRODUCT SPECIFICATIONS FOR DESIGNERS, SPECIFIERS, AND CONSULTANTS (ALSO KNOWN AS "A&E SPECIFICATIONS")

The following are "Part 2 Products" CSI-type specifications. It is assumed that "Part 1 General – Administrative and Procedures" and "Part 3 Execution – Installation and Maintenance" are part of an overall audio system or project specification.

PART 2 PRODUCTS

2.01 Approved Manufacturer/Product

A. RCF, Via Raffaello 13, 42124, Reggio Emilia, Italy. B. Model number: H1315 - H1315 WP

2.02 Design

Configuration: Compact 3 way horn loaded speaker. LF Sub-section 15" mid-bass, 4" voice coil. MF Sub-section 10" midrange, 3" voice coil. HF Sub-section 1.4" neodymium, 3" aluminium voice coil.

2.03 Acoustical Properties

Nominal dispersion angle: Horizontal: 60° - Vertical: 40°. Axial frequency range: 50 Hz - 20 kHz
Axial sensitivity: 100 dB LF, 108 dB MF/HF, 1W @ 1m. Power handling: Applicable power 900 W RMS LF, 400 Watt RMS MF/HF. Musical power 1800 W LF, 800 Watt MF/HF. Peak power 3600 W LF, 1600 Watt MF/HF. Nominal impedance: 8 Ohm LF, 8 Ohm MF/HF.

2.04 Physical Properties

Enclosure: Double trapezoidal, 15 mm birch plywood construction. Rigging inserts: 12 x M10 inserts (4 top, 4 rear and 4 bottom). Color: Black, scratch resistant paint (H1315 WP inside-outside polyurea black paint). Grille: Custom perforated steel grille with open-cell poly fibre backing (H1315 WP epoxy powder coated, weather-resistant open-cell fibres and water repellent woven fabric backing). Input Connectors: 2 X Speakon® NL4 (H1315 WP Amphenol ecomat IP67). Dimensions (H x W x D): 890 x 520 x 632 mm.

ACOUSTICAL SPECIFICATIONS

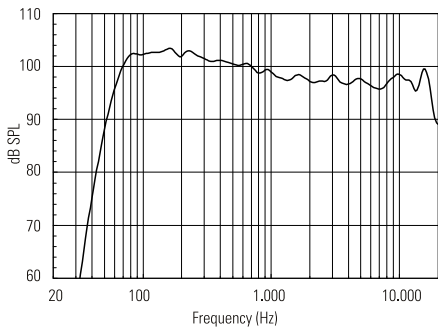
FREQ. RANGE (-10 dB)	50 Hz - 20 kHz
FREQ. RANGE (-3 dB)	65 Hz - 20 kHz
HORIZ. COVERAGE ANGLE (-6 dB)	60°
VERTICAL COVERAGE ANGLE (-6 dB)	40°
DIRECTIVITY FACTOR; Q	12
SYSTEM SENSITIVITY	LF 100 dB, HF/MF 108 dB 1W @ 1m ⁽¹⁾
RATED MAXIMUM SPL	136 dB, @ 1m
SYSTEM NOMINAL IMPEDANCE	8 Ohm
SYSTEM INPUT POWER RATING RMS	LF 900 W, HF/MF 400W ⁽²⁾
SYSTEM INPUT POWER RATING PEAK	LF 3600 W, HF/MF 1600W ⁽²⁾
RECOMMENDED AMPLIFIER	LF 1800 W, HF/MF 800W ⁽²⁾
HF PROTECTION	Active Mosfet compression driver
CROSSOVER	Recommended 300 Hz, internal MF/HF 1300 Hz

TRANSDUCERS

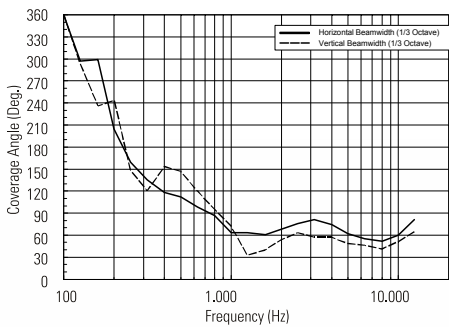
LOW FREQUENCY	neo 15" (381 mm) woofer 4" (100 mm) coil
NOMINAL IMPEDANCE	8 Ohm
INPUT POWER RATING	900 W AES
SENSITIVITY	100 dB, 1W @ 1m
MID FREQUENCY	neo 10" (254 mm) midrange 3" (76 mm) coil
NOMINAL IMPEDANCE	8 Ohm
INPUT POWER RATING	300 W AES
SENSITIVITY	109 dB, 1W @ 1m
HIGH FREQUENCY	neo 1,4" (35,5mm) throat, 3" (75mm) coil
NOMINAL IMPEDANCE	8 Ohm
INPUT POWER RATING	110 W AES
SENSITIVITY	109 dB, 1W @ 1m

PHYSICAL

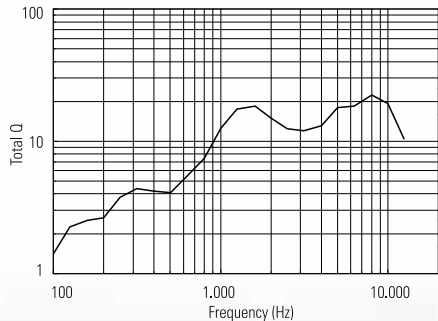
ENCLOSURE:	Double Trapezoidal, 15 mm birch plywood construction
RIGGING INSERTS:	12 x M10, rigging point
COLOR:	Black, scratch resistant paint (H1315WP inside-outside polyurea black paint)
GRILLE:	Custom perforated steel grille (H1315 WP epoxy powder coated, weather-resistant open-cell fibres and water repellent woven fabric backing)
INPUT CONNECTORS:	Speakon® NL4 (H1315 WP Amphenol ecomat IP67)
DIMENSIONS (H x W x D):	35.03" x 20.47" x 24.88" 890 x 520 x 632 mm
WEIGHT:	78.26 lb - 35.5 Kg



RESPONSE WITH DX4800 PROCESSOR



BEAMWIDTH vs. FREQUENCY

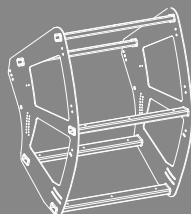


DIRECTIVITY INDEX AND Q

RELATED ACCESSORIES

AC CLST-H1315

AC CLST-H1315 (133.60.202)
Cluster Flybar for two x H1315



1) Measured on axis in the far field with 1 watt (2.83V RMS, 8 Ohm) input and referenced to 1 meter distance using the inverse square law. Listed sound pressure represents an average from 300 Hz to 3 kHz.
2) Using 20 Hz to 20 kHz, Pink Noise Spectrum, 2 hours, + 6 dB crest factor, with RMS voltage calculated on speaker minimum impedance.
3) Recommended Amplifier is a power capability value that should be taken as a guide.