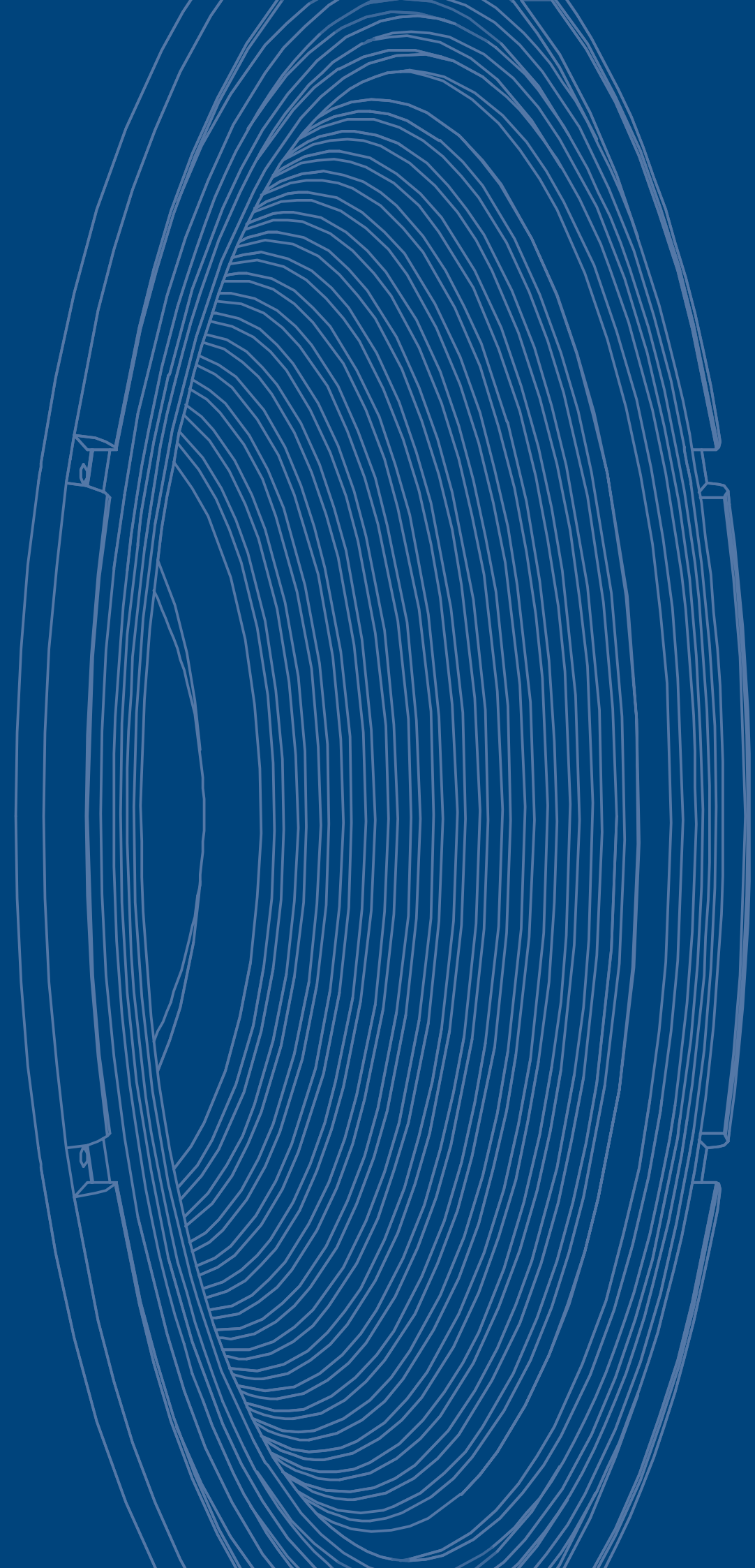
RCFACUSTICA

INSTALLED SOUND SPEAKER SYSTEMS

2006

the rules of sound

RCF



RCF

Established in 1949, RCF has prided itself on carrying out the design and production of its own products. The history of the company started with a parallel development of microphone technology as well as loudspeakers; the early microphone products were highly advanced ‘Ribbon’ designs manufactured exclusively for some very prominent American Audio companies. This initial development soon followed a natural progression to start the design and manufacture of innovative loudspeaker transducer technology.

Unlike most loudspeaker companies who outsource the supply of transducers, we have always preferred to design and construct completely all of our own components. Many years dedicated to studying and building audio transducers and electronics have resulted in some notable milestones. RCF was the first company to build a 300 watt commercial amplifier in the mid sixties and, in the same period, the first in Europe to have a high level Research Centre studying loudspeakers, horns and compression drivers. During this period we built the first of 3 anechoic chambers that represent the focal point of our history.

Our research and engineering faculty can today offer innovative projects with finite control of each detail, from the loudspeaker voice coil wire to the highly efficient extended dynamic amplifier topology. There are many different ingredients that go into creating quality products and systems. These include computer aided simulation software to assist the understanding of transducer behaviour and amplifier operation and the relationship of dynamics and transient response. RCF utilise over thirty state of the art software packages to identify magnetic circuits, voice coil dynamics, suspension linearity, horn dispersion simulation, crossover filters, amplifier thermal behaviour etc. However it is the vast technical and practical experience that our Research and Engineering team posses that ensures the quality of our products plus placing RCF as the market leaders in Loudspeaker Technology and transducer development.

RCF ACUSTICA

RCF ACUSTICA represents a new prominent chapter in the long history of RCF Installed Sound Systems.
Whether a speaker system is designed for portable PA situations or for permanent installed sound applications in café or theme bars, retail outlets, places of worship, theatres, live venues, dance clubs or major sporting stadia the paying customer now expects a level of audio fidelity and intelligibility of such a standard unsurpassed by previous generations.
This requirement has fostered the need for Audio Professionals to be able to offer a range of speaker systems combined with dedicated Processing and Amplification Technologies that are superior in Acoustic Performance and Control Technology.

RCF ACUSTICA is evolving into a complete portfolio to satisfy all these needs.
From extremely compact near and medium field 'two way systems' through to 'large format' arrayable systems for stadia and long throw sound reinforcement applications.
The individual product families within RCF ACUSTICA offers dedicated controlled horn directivity, RCF Precision Woofers and Compression Drivers, RCF Exclusive 'LICC' Crossover Systems, matching amplification and control systems to fully optimise the high performance and long term reliability RCF is renowned for.
RCF ACUSTICA speakers offer 'CMD' Coverage Matching Design, providing consistent horizontal and vertical pattern control through the usable frequency range.

RCF is one of only a few loudspeaker manufacturers worldwide who completely manufactures transducers, speaker systems and amplification and control electronics.
Our 50 plus years heritage in Audio combined with our state of the art research and development and manufacturing processes is providing us the goal of offering a dedicated matching line up of systems within RCF ACUSTICA.

TECHNOLOGIES

PURE TITANIUM DIAPHRAGMS

RCF has developed an oxygen free process of moulding pure titanium ultra thin films in high quality, finely controlled shaped diaphragms. Our process offers superior sonic quality, extended to the highest audible frequencies which guarantee consistent power handling and reliability.

VOICE COIL – POWER COMPRESSION

Power Compression is the neglected factor in many professional audio system designs. In woofers and subwoofers the power compression at maximum rated power can vary from 3-4 dB for good designs and up to 6-7 dB for poorly vented or small coil designs. This will affect not only the final achievable sound pressure level (SPL) but also the transducer Thiele-Small parameters, dramatically changing the high power curve response and sound characteristics. For this reason all our woofer and subwoofer designs are equipped with large sized, properly vented inside/outside voice coils.
This guarantees the long term reliability and life of the product.

INSIDE/OUTSIDE VOICE COILS

RCF has developed a unique voice coil, combining the advantages of inside/outside technology to the superior quality of polyimide-imide materials (wire resins and former resins).
The inside/outside coil offers many advantages:

- the dissipation surface is doubled;
- the adhesion area to the former is doubled;
- during thermal expansion the former is squeezed between inside and outside layers offering the best mechanical resistance.

Our former is made from polyimide - imide fibreglass and the area between the coil and the cone is a triple layer of nomex - fibreglass - nomex for maximum stiffness and accurate sound transfer.

DIRECT DRIVE VOICE COIL ASSEMBLY

Our voice coil assemblies are designed using high strength high temperature Nomex® voice coil Formers with rectangular profile copper clad aluminium wire, which are assembled using advanced specially formulated adhesives. Proprietary curing processes ensure optimal assembly strength and safe operation even under extreme thermal conditions. The top of the Former is bent and bonded directly to the edge of the titanium diaphragm resulting in a Direct Drive configuration.
Direct Drive guarantees optimal transfer of energy between the voice coil and the dome assembly, providing smoother, extended frequency response beyond 10 KHz, reducing break up modes and lowering distortion. This assembly delivers high power handling along with excellent mechanical and thermal properties that make RCF Precision Series compression drivers robust and reliable.

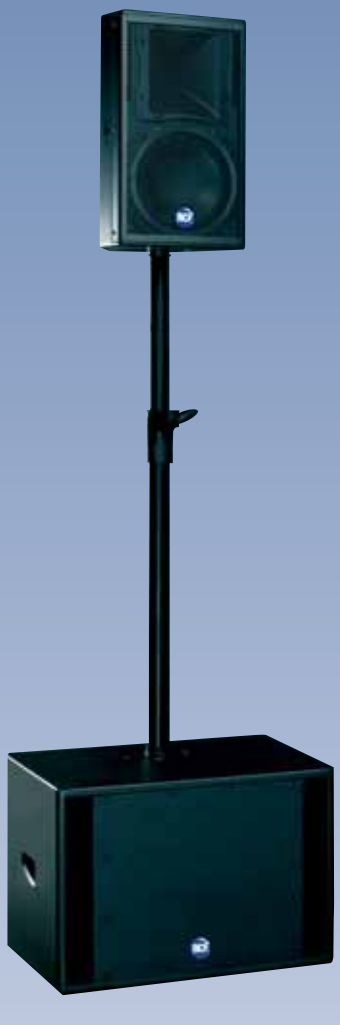
NEODYMIUM MAGNETS

Our Precision Compression Drivers and Woofers are equipped with high thermal performance with high performance lightweight Neodymium magnets, offering advantages in system portability and high frequency clarity (due to the force of magnetic flux in the gap exceeding 2 Kilogauss).
Specific attention has been paid to magnetic circuit polarization for optimum thermal immunity.

LICC LOW IMPEDANCE COMPENSATED CROSSOVERS

All our passive speakers are equipped with high power handling low impedance crossover designs.
The low impedance compensated crossover is an RCF first, and a breakthrough in crossover design.
Conventional passive crossovers have an approximate 180 degree phase shift between the woofer and tweeter at the crossover point. Such a system cannot reproduce transients correctly, causing negative effects on sound accuracy that are particularly noticeable with violin, trumpet, piano and vocals.
Very low inductance values are used in the LICC, thus providing an excellent transient response and drastically reducing phase shifts between woofer and tweeter. As a result, LICC provides well-defined natural and open sound - across the entire audio bandwidth.

RCFACUSTICA COMPACT SERIES

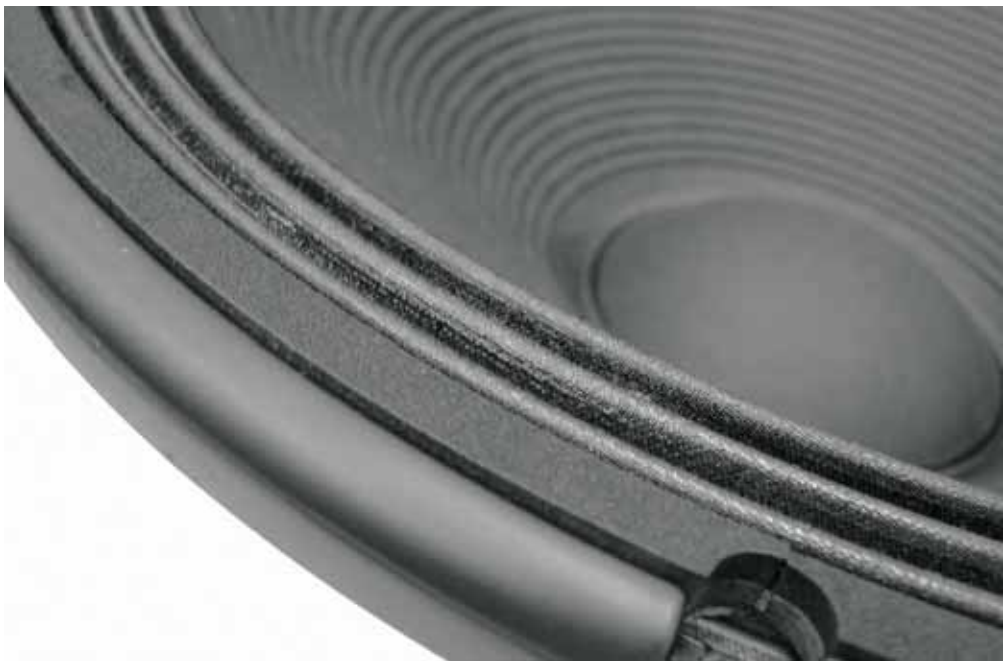


The RCFACUSTICA Compact Series is a highly advanced line up of compact near field ‘two way direct radiating’ loudspeaker systems offering dedicated models with focused horn directivity, designed for both portable and permanent installation applications. The several mounting points, the pole mount and handles simplify installation and portable applications.

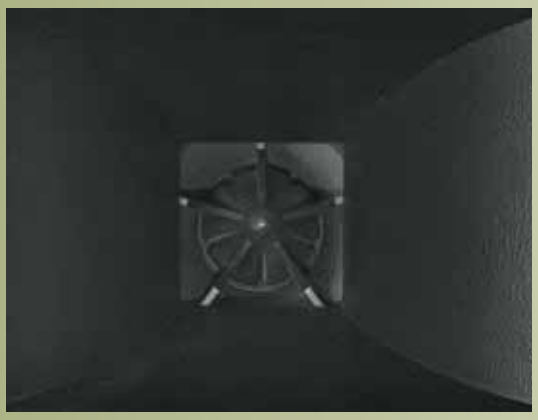
RCFACUSTICA Compact Series represent a no compromise design and construction, offering a very natural sound in live situations and recorded music. The two way designs within the Compact Series offer RCF Exclusive 'CMD' Technology. (Coverage Matching Design), this helps guarantee the smooth transition between the high frequency horns polar responses and low frequency transducers directivity.
The compression drivers used in the Compact Series designs are the very latest in neodymium magnetic circuit technology, reaching levels that exceed 2 Kilogauss in the gap. The “pure titanium” diaphragms are able to reproduce transparent and accurate high frequencies, true to all the audio range. This is due to RCF’s proprietary high-pressure oxygen free moulding technology. The low frequency drivers used in the Compact Series can withstand peak power of up to 6 times the nominal power. These mid bass woofers have been designed for superior reproduction of acoustic signals up to the crossover frequency. Specific attention has been dedicated to speaker cones; the devices feature high temperature polyimide voice coil assemblies that undergo multiple baking and curing processes. Thus assisting long term reliability. Our edge wound copper clad aluminium voice coils are designed for maximum efficiency. RCF’s inside/outside copper clad aluminium voice coil offers outstanding reliability and reference levels at the forefront of loudspeaker cone and coil technology.

All Compact Series Speakers are equipped with high power handling low impedance crossover designs. The low impedance compensated crossover is an RCF first, and a breakthrough in crossover design. Conventional passive crossovers have an approximate 180-degree phase shift between the woofer and tweeter at the crossover point. Such a system cannot reproduce transients correctly, causing negative effects on sound accuracy that are particularly noticeable with violin, trumpet, piano and vocals.

Very low inductance values are used in the LICC™, thus providing an excellent transient response and drastically reducing phase shifts between woofer and tweeter. As a result, LICC™ provides well-defined natural and open soundacross the entire audio bandwidth.
All Compact Series cabinets are in Baltic birch, heavy duty painted. Free from spurious vibrations, they offer a strong construction at the highest levels in the professional market.



RCFACUSTICA H SERIES



The new RCF H Series is designed to provide the output and directivity required for larger scale installations. The systems offer a full range approach in arrayable configurations. With the new H Series, RCF have created designs capable of delivering high efficiency output and controlled directivity. Systems can be easily converted from vertical installation mode to space saving horizontal placement. The H Series feature finitely tuned compact horn loaded design parameters utilising new RCF Precision Transducers and horn technology. The mid bass horn loaded sections used in the H Series can withstand peak power of up to 6 times the nominal power. These mid bass woofers have been designed for superior reproduction of acoustic signals up to the crossover frequency. Specific attention has been dedicated to speaker cones; the devices feature high temperature polyimide voice coil assemblies that undergo multiple baking and curing processes. Thus assisting long term reliability.

Our edge wound copper clad aluminium voice coils are designed for maximum efficiency. New RCF Technology has been incorporated with the highly efficient midrange systems using a new sealed midrange neodymium transducer. Sensitivity of this new RCF device is up to 4dB higher than traditional designs. The rear sealed chamber is optimally tuned for the application, with the aluminium basket in direct contact to the magnetic circuit providing the best cooling ever found in a midrange transducer. To compliment this, extreme attention to detail has been researched in the high frequency neodymium transducers. Every detail of design and manufacture is under our control, from titanium forming and voice coil winding to phase plug machining and final assembly. Another RCF exclusive is the 'Direct Drive Voice Coil Technology' used in our high frequency devices. This guarantees optimal transfer of energy between the voice coil and the dome assembly providing smoother extended frequency response beyond 10KHz, dramatically reducing break up modes and lowering 2nd and 3rd harmonic distortion. This results in true extended dynamic range in the overall system. The Acustica H Series cabinets are constructed from the highest quality Baltic Birch Sustainable Plywood and finished in an extremely resistant polyurethane paint finish. The cabinets are a 'multi-trapezoid' which assists double coupling array configurations. Extensive fly-ware positions are provided for ease of installation.

RCFACUSTICA SUBWOOFER SERIES

Sound systems designed for almost any application benefit from the addition of extended low frequency or sub bass. True natural reproduction of music requires that the sound system's output should extend into the lowest octaves of the audible spectrum. Whether it is for the provision of subtle dynamic sound for A/V applications, the raw power of a 'bass drum kick' or an air moving club sub bass system - RCF has the solution.

The RCFACUSTICA Subwoofer Series is a highly advanced line up of compact subwoofers, offering dedicated models in various configurations (bass reflex, bandpass and horn loaded), designed for both portable and permanent installation applications.

C3108

130.00.030

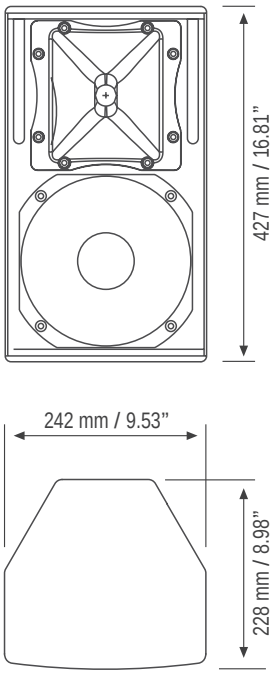
The C3108 is a full range extremely versatile wide-dispersion, low-profile, two-way loudspeaker system offering substantial power and efficiency for a variety of professional applications that include permanent installations, main reinforcement in small spaces, plus portable systems and supplementary fill for larger systems. Its compact size makes it ideal for low visibility side wall or under balcony mounting. The high-frequency section is a constant directivity CMD horn designed mathematically for Constant Matching Design in relation to the woofer system, loaded to a 1" RCF Precision Neodymium compression driver with a 1.50" diaphragm assembly for smooth, wide dispersion. The low-frequency transducer is an 8" RCF Precision woofer with a 2" voice coil.
The system includes a high-level crossover network that features markedly lower (than conventional) induction values in series with the woofer. We call this innovation LICC (Low Impedance Compensated Crossover). The benefit is delay reduction, reduced phase shift and superior transient response. Dynamic high-frequency driver protection is accomplished with a new RCF exclusive - Active Mosfet Compression Driver Protection System, (AMCDP) chosen to complement the power curve of the driver.

FEATURES

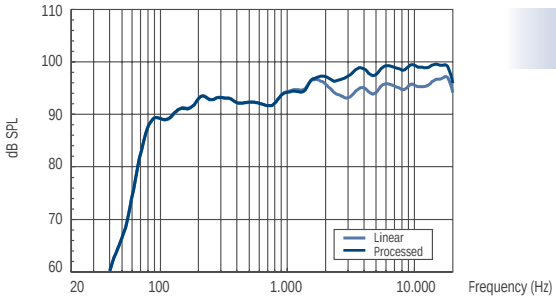
- Very high efficiency design
- One 8" high-output RCF Precision LF transducer
- One RCF Precision Neodymium 1" Compression Driver
- 90° x 70° CMD (Constant Matching Design) constant directivity horn
- Linear/HF boost switch
- Rotatable Horn System for horizontal cabinet mounting applications
- Hexagonal enclosure for array and close wall/ceiling configurations
- HF driver AMCDP (Active Mosfet Compression Driver Protection)
- LICC (Low Impedance Compensated Crossover) network
- 10 mm birch plywood construction
- 4 Suspension points (M10)
- Omnimount™ 75 Plate fixing positions on rear of cabinet
- 35 mm standard internal pole mount

APPLICATIONS

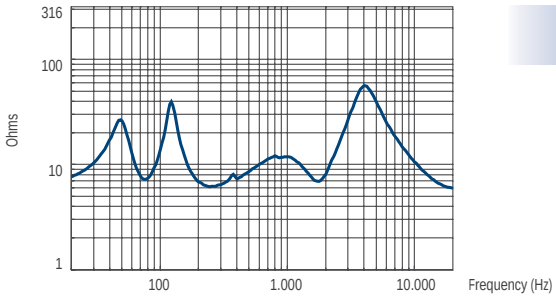
- Permanent Installations
- Main Reinforcement in small spaces
- Portable Systems AV Presentations
- Zone Delay and Fill Systems
- Under Balcony Applications



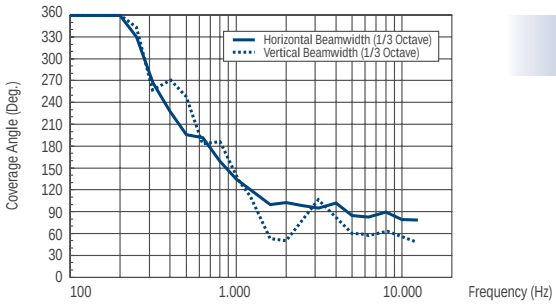
RESPONSE 1W/1m



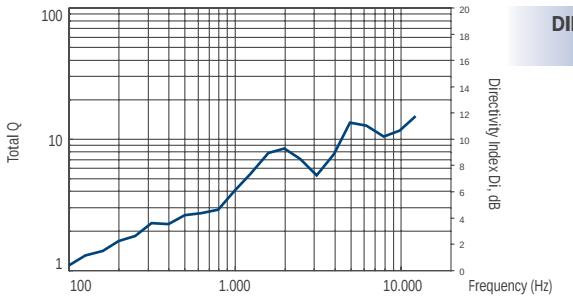
IMPEDANCE



BEAMWIDTH vs. FREQUENCY



DIRECTIVITY INDEX AND Q



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, 42010 Mancasale, Reggio Emilia, Italy.- B. Model number: C3108

2.02 Design

Configuration Compact 2 way speaker - LF Sub-section 8" mid-bass, 2" voice coil - HF Sub-section 1" neodymium, 1,5" aluminium voice coil.

2.03 Acoustical Proprieties

Nominal dispersion angle: Horizontal: 90° - Vertical: 70° - Axial frequency range: 60 Hz-20 kHz - Axial sensitivity: 94 dB, 1W @ 1m - Power handling: Applicable power 300 W RMS - Musical power 600 W - Peak power 1200 W - Nominal impedence: 8 Ohm.

2.04 Physical Properties

Enclosure: Trapezoidal, 15° side angles 10 mm birch plywood construction - Rigging inserts: 3 x M10 inserts (1 top, 2 side), 4 X M5 inserts (rear for bracket omni mount), 2 X M6 inserts (rear) + pole mount or with optional accessory AC C08 H-BR 1 M10 inserts (bottom) - Color: Black, scratch resistant paint - Grille: Custom perforated steel grille - Input Connectors: 2 X Speakon® NL4 - Dimensions (H x W x D): 16.81"x 9.53"x 8.98" - 427 x 242 x 228 mm - Weight: 22 lb - 10Kg.

2.05 Accessories

AC C08 H-BR Pair of bracket for mounting C3108 speakers on the wall. Adjustable inclination horizontal. Colour black.

AC C08 V-BR Pair of bracket for mounting C3108 speakers on the wall. Adjustable inclination vertical. Colour black.

SYSTEM

FREQ. RANGE (-10 dB): 60 Hz - 20 kHz

FREQ. RANGE (-3 dB): 100 Hz - 18 kHz

HORIZ. COVERAGE ANGLE (-6 dB): 90°

VERTICAL COVERAGE ANGLE (-6 dB): 70°

DIRECTIVITY FACTOR; Q: 9.4

SYSTEM SENSITIVITY: 94 dB , 1W @ 1m *(1)*

RATED MAXIMUM SPL: 120 dB, @ 1m

SYSTEM NOMINAL IMPEDANCE: 8 Ohm

SYSTEM INPUT POWER RATING RMS: 300 W *(2)*

SYSTEM INPUT POWER RATING PEAK: 1200 W

RECOMMENDED AMPLIFIER: 600 W *(3)*

HF PROTECTION: Dynamic

CROSSOVER: 2,1 kHz

TRANSDUCERS

LOW FREQUENCY: 8" (203 mm) woofer with 2" (50 mm) coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 200 W AES ; 400 W Peak

SENSITIVITY: 94 dB, 1W @ 1m

HIGH FREQUENCY: 1"(25mm) throat, 1.5" (35,5mm) coil diaphragm assembly

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 25 W AES ; 50 W Peak

SENSITIVITY: 109 dB, 1W @ 1m

PHYSICAL

ENCLOSURE: Trapezoidal, 15° side angles
10 mm birch plywood construction

RIGGING INSERTS: 3 x M10, 4 X M5, 2 X M6 inserts + pole mount

COLOR: Black, scratch resistant paint

GRILLE: Custom perforated steel grille

INPUT CONNECTORS: Speakon® NL4

DIMENSIONS (H x W x D): 16.81"x 9.53"x 8.98"- 427 x 242 x 228 mm

WEIGHT: 22 lb - 10 Kg

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.

C3110

130.00.043

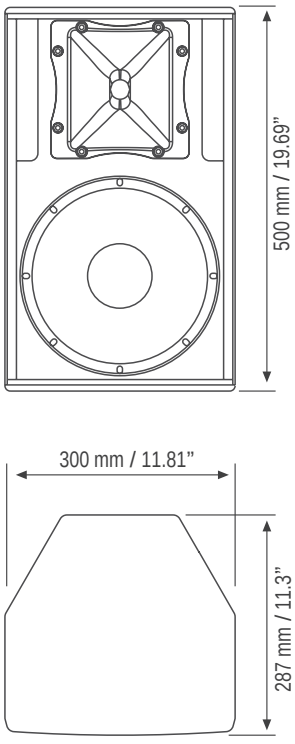
The C3110 is a full range extremely versatile wide-dispersion, low-profile, two-way loudspeaker system offering substantial power and efficiency for a variety of professional applications that include permanent installations, main reinforcement in small spaces, plus portable systems and supplementary fill for larger systems. Its compact size makes it ideal for low visibility side wall or under balcony mounting. The high-frequency section is a constant directivity CMD horn designed mathematically for Constant Matching Design in relation to the woofer system, loaded to a 1" RCF Precision Neodymium compression driver with a 1.50" diaphragm assembly for smooth, wide dispersion. The low-frequency transducer is a 10" RCF Precision woofer with a 2" voice coil. The system includes a high-level crossover network that features markedly lower (than conventional) induction values in series with the woofer. We call this innovation LICC (Low Impedance Compensated Crossover). The benefit is delay reduction, reduced phase shift and superior transient response. Dynamic high-frequency driver protection is accomplished with a new RCF exclusive - Active Mosfet Compression Driver Protection System, (AMCDP) chosen to complement the power curve of the driver.

FEATURES

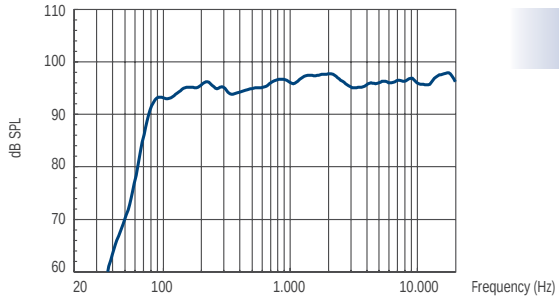
- Very high efficiency design
- One 10" high-output RCF Precision LF transducer
- One RCF Precision Neodymium 1" Compression Driver
- 90° x 70° CMD (Constant Matching Design) constant directivity horn
- Rotatable Horn System for horizontal cabinet mounting applications
- Hexagonal enclosure for array and close wall/ceiling configurations
- HF driver AMCDP (Active Mosfet Compression Driver Protection)
- LICC (Low Impedance Compensated Crossover) network
- 15 mm birch plywood construction
- 4 Suspension points (M10)
- 35 mm standard internal pole mount
- Three year limited warranty

APPLICATIONS

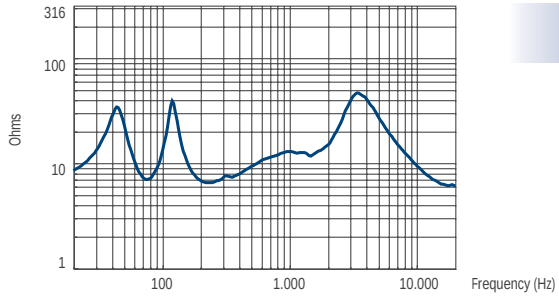
- Permanent Installations
- Main Reinforcement in small spaces
- Portable Systems AV Presentations
- Zone Delay and Fill Systems
- Under Balcony Applications



RESPONSE 1W/1m



IMPEDANCE



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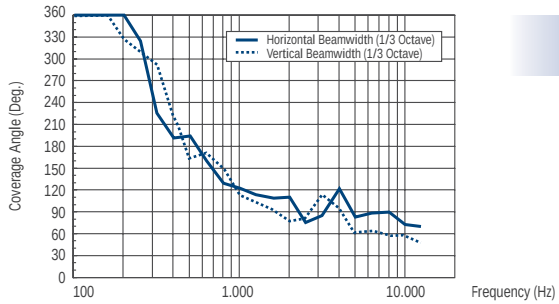
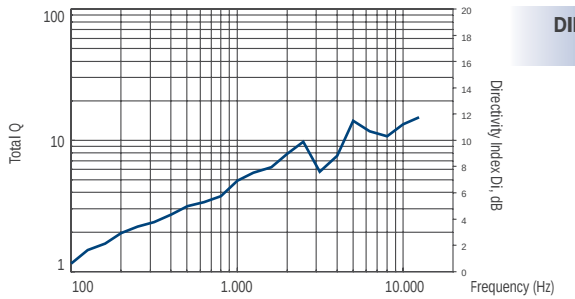


DIRECTIVITY INDEX AND Q



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, 42010 Mancasale, Reggio Emilia, Italy. - B. Model number: C3110

2.02 Design

Configuration Compact 2 way speaker - LF Sub-section 10" mid-bass, 2" voice coil - HF Sub-section 1" neodymium, 1,5" aluminium voice coil.

2.03 Acoustical Proprieties

Nominal dispersion angle: Horizontal: 90° - Vertical: 70° - Axial frequency range: 59 Hz - 20 kHz - Axial sensitivity: 94 dB, 1W @ 1m - Power handling: Applicable power 300 W RMS - Musical power 600 W Peak power 1200W - Nominal impedence: 8 Ohm.

2.04 Physical Properties

Enclosure: Trapezoidal, 15° side angles 15 mm birch plywood construction - Rigging inserts: 3 x M10 inserts (1 top, 2 side), 2 X M6 inserts (rear) + pole mount or with optional accessory AC C10 H-BR 1 M10 inserts (bottom) - Color: Black, scratch resistant paint - Grille: Custom perforated steel grille - Input Connectors: 2 X Speakon® NL4 - Dimensions (H x W x D): 19.69"x 11.81"x 11.30"- 500 x 300 x 287 mm - Weight: 28.66 lb - 13 Kg.

2.05 Accessories

AC C10 H-BR Pair of bracket for mounting C3110 speakers on the wall. Adjustable inclination horizontal. Colour black.

AC C10 V-BR Pair of bracket for mounting C3110 speakers on the wall. Adjustable inclination vertical. Colour black.

SYSTEM

FREQ. RANGE (-10 DB): 59 Hz-20 kHz

FREQ. RANGE (-3 DB): 70 Hz-20 kHz

HORIZ. COVERAGE ANGLE (-6 DB): 90°

VERTICAL COVERAGE ANGLE (-6 DB): 70°

DIRECTIVITY FACTOR; Q: 9.4

SYSTEM SENSITIVITY: 96 dB 1W @ 1m *(1)*

RATED MAXIMUM SPL: 127 dB. @ 1m

SYSTEM NOMINAL IMPEDANCE: 8 Ohm

SYSTEM INPUT POWER RATING RMS: 300 W *(2)*

SYSTEM INPUT POWER RATING PEAK: 1200 W

RECOMMENDED AMPLIFIER: 600 W *(3)*

HF PROTECTION: Dynamic

CROSSOVER: 1.8 kHz

TRANSDUCERS

LOW FREQUENCY: 10" (254 mm) woofer with 2" (50 mm) coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 250 W AES ; 400 W Peak

SENSITIVITY: 96 dB. 1W @ 1m

HIGH FREQUENCY: 1"(25 mm) throat. 1.5" (35.5 mm) coil diaphragm assembly

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 25 W AES ; 50 W Peak

SENSITIVITY: 109 dB, 1W @ 1m

PHYSICAL

ENCLOSURE: Trapezoidal, 15° side angles
15 mm birch plywood construction

RIGGING INSERTS: 3 x M10, 2 x M6 inserts + pole mount

COLOR: Black, scratch resistant paint

GRILLE: Custom perforated steel grille

INPUT CONNECTORS: Speakon® NL4

DIMENSIONS (H x W x D): 19.69"x 11.81"x 11.30"- 500 x 300 x 287 mm

WEIGHT: 28.66 lb - 13 Kg

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.

C5212 W-L

C5212 (90x40) WIDE ANGLE • C5212 (60x40) LONGER THROW

C5212-L 130.00.045
C5212-W 130.00.044

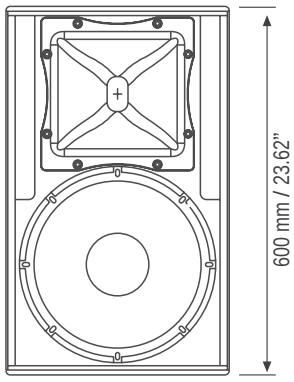
The C5212 is a full range extremely versatile wide-dispersion (model W) or narrow dispersion (model L), two-way loudspeaker system offering substantial power and efficiency for a variety of professional applications that include permanent installations, primary sound reinforcement, plus portable systems and supplementary fill for larger systems. The high-frequency section is a constant directivity CMD horn designed mathematically for Constant Matching Design in relation to the woofer system, loaded to a 2" RCF Precision Neodymium compression driver with a 2.50" diaphragm assembly for smooth, wide dispersion. The low-frequency transducer is a 12" RCF Precision woofer with a 3" voice coil. The system includes a high-level crossover network that features markedly lower (than conventional) induction values in series with the woofer. We call this innovation LICC (Low Impedance Compensated Crossover). The benefit is delay reduction, reduced phase shift and superior transient response.
Dynamic high-frequency driver protection is accomplished with a new RCF exclusive - Active Mosfet Compression Driver Protection System, (AMCDP) chosen to complement the power curve of the driver.
The C5212's crossover is easily bypassed for bi-amp or tri-amp (with the S8018 Subwoofer) via a recessed changeover switch.

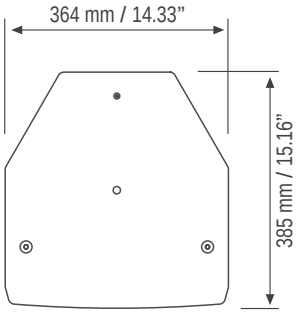
FEATURES

- Very high efficiency design
- One 12" high-output RCF Precision LF transducer with 3" voice coil
- One RCF Precision Neodymium 2" Compression Driver with 2.5" voice coil
- 60° x 40° CMD (Constant Matching Design) constant directivity horn – Model L
- 90° x 40° CMD (Constant Matching Design) constant directivity horn – Model W
- Dual-function design: built in passive crossover or external bi-amp
- Rotatable Horn System for horizontal cabinet mounting applications
- Hexagonal enclosure for array and close wall/ceiling configurations
- HF driver AMCDP (Active Mosfet Compression Driver Protection)
- LICC (Low Impedance Compensated Crossover) network
- 15 mm birch plywood construction
- 9 Suspension points (M10)
- 35 mm standard internal pole mount
- Integrated hand-carry locations

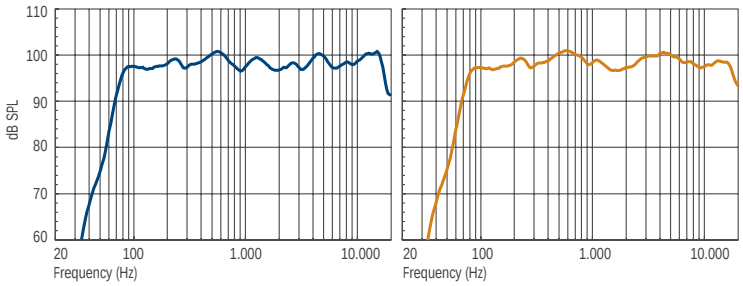
APPLICATIONS

- Permanent Installations
- Main Reinforcement in small and medium spaces
- High-Level AV Playback
- Cluster configurations
- Live Music Reinforcement
- Large speech systems
- 60° x 40° horn design offers higher sensitivity for longer distance applications

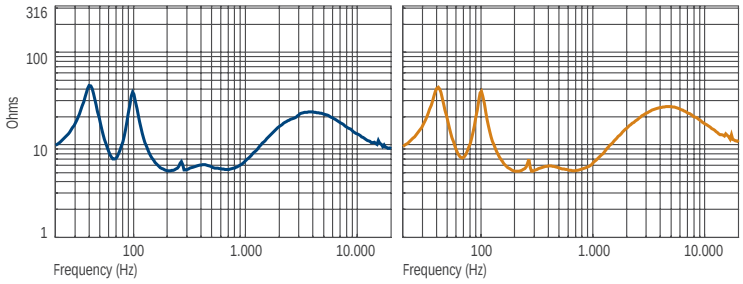




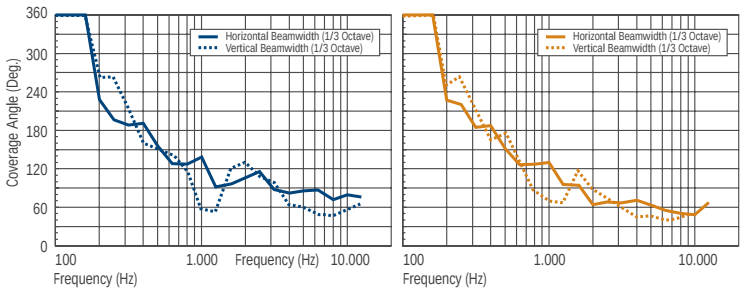
RESPONSE 1W/1m



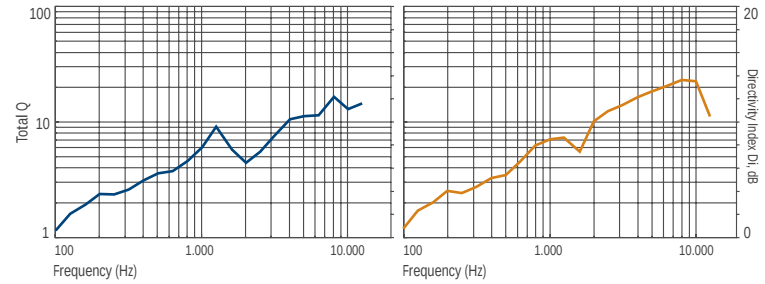
IMPEDANCE



BEAMWIDTH vs. FREQUENCY



DIRECTIVITY INDEX AND Q



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, 42010 Mancasale, Reggio Emilia, Italy. - B. Model number: C5212

2.02 Design

Configuration Compact 2 way speaker - LF Sub-section 12" mid-bass, 3" voice coil - HF Sub-section 2" neodymium, 2,5" aluminium voice coil.

2.03 Acoustical Proprieties

Nominal dispersion angle: Horizontal: 60° (L), 90° (W) - Vertical: 40° - Axial frequency range: 54Hz-20kHz - Axial sensitivity: 99 (W), 100 (L) dB, 1W @ 1m - Power handling: Applicable power 500 W RMS - Musical power 1000 W - Peak power 2000 W - Nominal impedence: 8 Ohm.

2.04 Physical Properties

Enclosure: Trapezoidal, 15° side angles 15 mm birch plywood construction - Rigging inserts: 9 x M10 inserts (3 top, 2 side, 2 rear and 2 bottom), + pole mount or with optional accessory AC C08 H-BR 1 M10 inserts (bottom) - Color: Black, scratch resistant paint - Grille: Custom perforated steel grille - Input Connectors: 2 X Speakon® NL4 - Dimensions (H x W x D): 27.16"x 16.06"x 17.72"- 690 x 408 x 450 mm - Weight: 66.13 lb - 30 Kg.

2.05 Accessories

AC C12 H-BR Pair of bracket for mounting C5212 speakers on the wall. Adjustable inclination horizontal. Colour black.

AC C12 V-BR Pair of bracket for mounting C5212 speakers on the wall. Adjustable inclination vertical. Colour black.

SYSTEM

FREQ. RANGE (-10 DB): 54 Hz-20 kHz

FREQ. RANGE (-3 DB): 65 Hz-20 kHz

HORIZ. COVERAGE ANGLE (-6 DB): 90° (W), 60° (L)

VERTICAL COVERAGE ANGLE (-6 DB): 40°

DIRECTIVITY FACTOR; Q: 10

SYSTEM SENSITIVITY: 99 dB (W), 100 dB (L), 1W @ 1m *(1)*

RATED MAXIMUM SPL: 132 dB (W), 133 dB (L), @ 1m

SYSTEM NOMINAL IMPEDANCE: 8 Ohm

SYSTEM INPUT POWER RATING RMS: 500 W *(2)*

SYSTEM INPUT POWER RATING PEAK: 2000 W

RECOMMENDED AMPLIFIER: 1000 W *(3)*

HF PROTECTION: Dynamic

CROSSOVER: 1,2 kHz

TRANSDUCERS

LOW FREQUENCY: 12" (304,8 mm) woofer with 3" (76,2 mm) coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 400W AES ; 800W Peak

SENSITIVITY: 98 dB, 1W @ 1m

HIGH FREQUENCY: 2" (50 mm) throat, 2.5" (64 mm) coil diaphragm assembly

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 100W AES ; 200W Peak

SENSITIVITY: 111 dB, 1W @ 1m

PHYSICAL

ENCLOSURE: Trapezoidal, 15° side angles
15 mm birch plywood construction

RIGGING INSERTS: 9 x M10 inserts + pole mount

COLOR: Black, scratch resistant paint

GRILLE: Custom perforated steel grille

INPUT CONNECTORS: Speakon® NL4

DIMENSIONS (H x W x D): 23.62"x 14.33"x 15.16"- 600 x 364 x 385 mm

WEIGHT: 50.7 lb - 23 Kg

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.

C5215 W-L

C5215 (90x40) WIDE ANGLE • C5215 (60x40) LONGER THROW

C5215-L 130.00.047
C5215-W 130.00.046

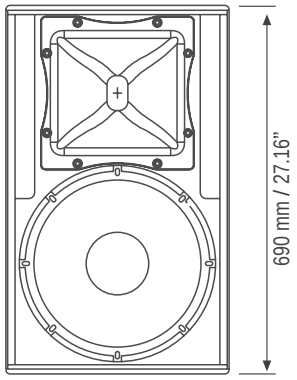
The C5215 is a full range extremely versatile controlled narrow-dispersion (model L) or wide dispersion (model W), two-way loudspeaker system offering substantial power and efficiency for a variety of professional applications that include permanent installations, primary sound reinforcement, plus portable systems and supplementary fill for larger systems. The high-frequency section is a constant directivity CMD horn designed mathematically for Constant Matching Design in relation to the woofer system, loaded to a 2" RCF Precision Neodymium compression driver with a 2.50" diaphragm assembly for smooth, controlled dispersion. The low-frequency transducer is a 15" RCF Precision woofer with a 3" voice coil. The system includes a high-level crossover network that features markedly lower (than conventional) induction values in series with the woofer. We call this innovation LICC (Low Impedance Compensated Crossover). The benefit is delay reduction, reduced phase shift and superior transient response. Dynamic high-frequency driver protection is accomplished with a new RCF exclusive - Active Mosfet Compression Driver Protection System, (AMCDP) chosen to complement the power curve of the driver. The C5215L's crossover is easily bypassed for bi-amp or tri-amp (with the S8018 Subwoofer) via a recessed changeover switch.

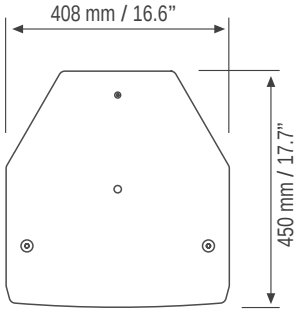
FEATURES

- Very high efficiency design
- One 15" high-output RCF Precision LF transducer with 3" voice coil
- One RCF Precision Neodymium 2" Compression Driver with 2.5" voice coil
- 60° x 40° CMD (Constant Matching Design) constant directivity horn – Model L
- 90° x 40° CMD (Constant Matching Design) constant directivity horn – Model W
- Dual-function design: built in passive crossover or external bi-amp
- Rotatable Horn System for horizontal cabinet mounting applications
- Hexagonal enclosure for array and close wall/ceiling confi gurations
- HF driver AMCDP (Active Mosfet Compression Driver Protection)
- LICC (Low Impedance Compensated Crossover) network
- 15 mm birch plywood construction
- 9 Suspension points (M10)
- 35 mm standard internal pole mount
- Integrated hand-carry locations

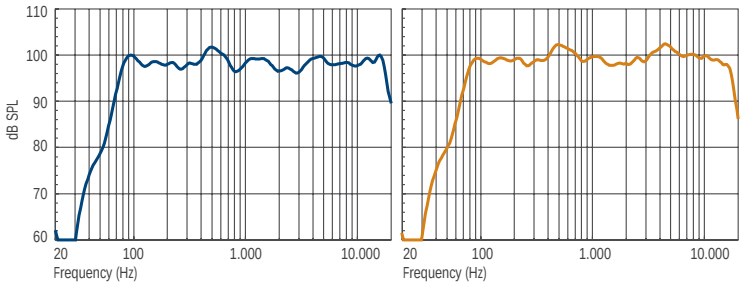
APPLICATIONS

- Permanent Installations
- Main Reinforcement in small and medium spaces
- High-Level AV Playback
- Cluster configurations
- Live Music Reinforcement
- Large speech systems
- 60° x 40° horn design offers higher sensitivity for longer distance applications

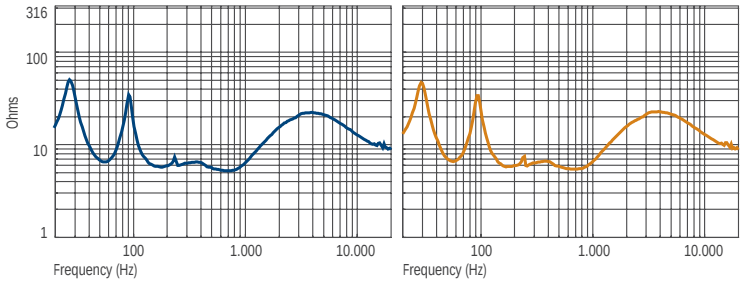




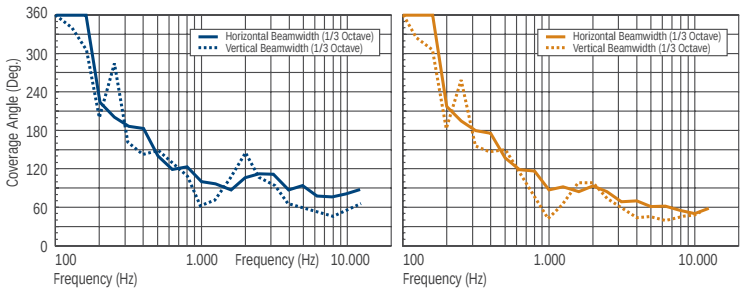
RESPONSE 1W/1m



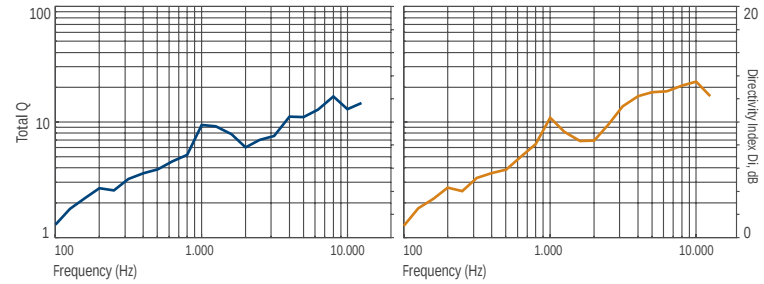
IMPEDANCE



BEAMWIDTH vs. FREQUENCY



DIRECTIVITY INDEX AND Q



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PART 2 PRODUCTS

2.01 Approved Manufacturer/Product

A. RCF, Via Raffaello 13, 42010 Mancasale, Reggio Emilia, Italy. - B. Model number: C5215

2.02 Design

Configuration Compact 2 way speaker - LF Sub-section 15" mid-bass, 3" voice coil - HF Sub-section 2" neodymium, 2,5" aluminium voice coil.

2.03 Acoustical Proprieties

Nominal dispersion angle: Horizontal: 60° (L), 90° (W) - Vertical: 40° - Axial frequency range: 48Hz-20 kHz - Axial sensitivity: 100 (W), 101 (L) dB, 1W @ 1m - Power handling: Applicable power 500 W RMS - Musical power 1000W - Peak power 2000W - Nominal impedence: 8 Ohm.

2.04 Physical Properties

Enclosure: Trapezoidal, 15° side angles 15 mm birch plywood construction - Rigging inserts: 9 x M10 inserts (3 top, 2 side, 2 rear and 2 bottom), + pole mount or with optional accessory AC C08 H-BR 1 M10 inserts (bottom) - Color: Black, scratch resistant paint - Grille: Custom perforated steel grille - Input Connectors: 2 X Speakon® NL4 - Dimensions (H x W x D): 27.16"x 16.06"x 17.72"- 690 x 408 x 450 mm - Weight: 66.13 lb - 30 Kg.

2.05 Accessories

AC C15 H-BR Pair of bracket for mounting C5215 speakers on the wall. Adjustable inclination horizontal. Colour black.

AC C15 V-BR Pair of bracket for mounting C5215 speakers on the wall. Adjustable inclination vertical. Colour black.

SYSTEM

FREQ. RANGE (-10 DB): 48 Hz-20 kHz

FREQ. RANGE (-3 DB): 55 Hz-20 kHz

HORIZ. COVERAGE ANGLE (-6 DB): 90° (model W), 60° (model L)

VERTICAL COVERAGE ANGLE (-6 DB): 40°

DIRECTIVITY FACTOR; Q: 14

SYSTEM SENSITIVITY: 100 dB (model W), 101 dB (model L), 1W @ 1m *(1)*

RATED MAXIMUM SPL: 133 dB (model W), 134 dB (model L), @ 1m

SYSTEM NOMINAL IMPEDANCE: 8 Ohm

SYSTEM INPUT POWER RATING RMS: 500 W *(2)*

SYSTEM INPUT POWER RATING PEAK: 2000 W

RECOMMENDED AMPLIFIER: 1000 W *(3)*

HF PROTECTION: Dynamic

CROSSOVER: 1,2 kHz

TRANSDUCERS

LOW FREQUENCY: 15" (381 mm) woofer with 3" (76,2 mm) coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 400 W AES ; 800 W Peak

SENSITIVITY: 99 dB, 1W @ 1m

HIGH FREQUENCY: 2" (50 mm) throat, 2.5" (64 mm) coil diaphragm assembly

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 100 W AES ; 200 W Peak

SENSITIVITY: 111 dB, 1W @ 1m

PHYSICAL

ENCLOSURE: Trapezoidal, 15° side angles
19 mm birch plywood construction

RIGGING INSERTS: 9 x M10 inserts + pole mount

COLOR: Black, scratch resistant paint

GRILLE: Custom perforated steel grille

INPUT CONNECTORS: Speakon® NL4

DIMENSIONS (H x W x D): 27.16"x 16.06"x 17.72"- 690 x 408 x 450 mm

WEIGHT: 66.13 lb - 30 Kg

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.

H1312

130.00.083

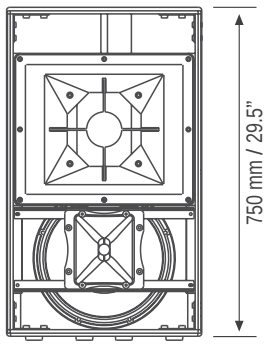
The RCFACUSTICA H1312 is three-way full range loudspeaker system that incorporate a 12” LF transducer, a 8” cone MF transducer and a 1” exit titanium compression driver. The system is very compact and provides very high output and accurate voice and sound reproduction. The system is equipped with the latest generation of RCF precision transducers, all of them with powerful neodymium motors. 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 low compression polystyrene midrange horn . The HF titanium compression driver is loaded on a constant directivity horn with a coverage of 90° x 60°. The compression driver Horn is rotatable.
The internal passive filter provides crossover and equalization between the midrange and the compression driver. The Crossover network offers Compression Driver Protection thanks to a unique design Active Mosfet Circuit.
The system is driven in bi-amped mode, is able of producing a Max SPL of 134 dB and handles 800 Watts AES (LF) + 300 Watt AES (MF/HF). The loudspeaker enclosure shape is multi-trapezoidal and offers a double coupling angle each side. The cabinet is constructed of multi-ply baltic birch plywood and finished in a very resistant, textured, polyurethane 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.

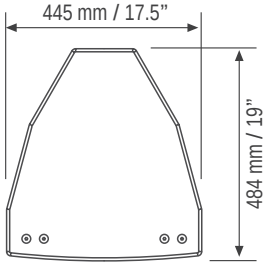
FEATURES

- Compact Arrayable 3-way System
- Fully Horn-loaded LF/MF/HF (90° x 60° directivity)
- Fully equipped with Neodymium Transducers
- 12”LF, 4” voice coil /8”MF, 3” voice coil/1”HF, 1,75” voice coil
- Bi-amp system (passive crossover MF/HF included)
- Active Mosfet Compression Driver Protection
- Rotable HF Horn
- Recessed handles
- Dedicated to permanent installation

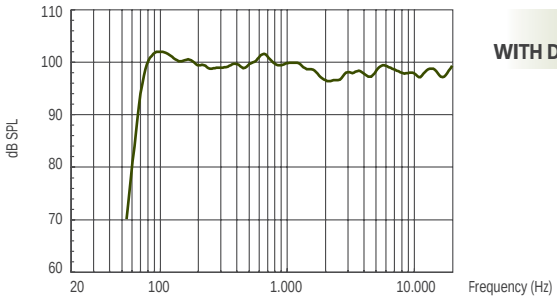
APPLICATIONS

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

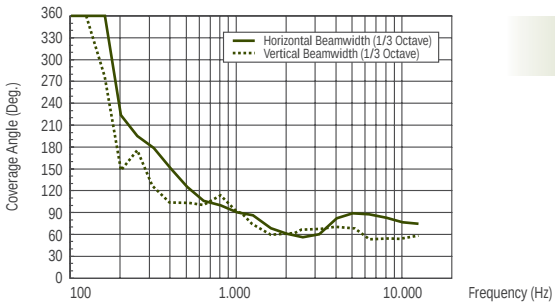




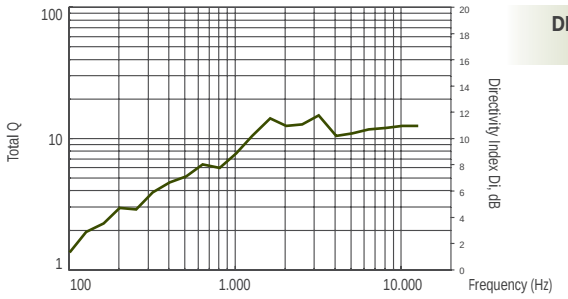
RESPONSE WITH DX4800 PROCESSOR



BEAMWIDTH vs. FREQUENCY



DIRECTIVITY INDEX AND Q



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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, 42010 Mancasale, Reggio Emilia, Italy.

B. Model number: H1312

2.02 Design

Configuration: Compact 3 way horn loaded speaker. LF Sub-section 12" mid-bass, 4" voice coil. MF Sub-section 8" midrange, 3" voice coil. HF Sub-section 2" neodymium, 3" aluminium voice coil.

2.03 Acoustical Proprieties

Nominal dispersion angle: Horizontal: 90° - Vertical: 60°. Axial frequency range: 60Hz-20kHz. Axial sensitivity: 98 dB LF, 107 dB MF, 109 HF, 1W @ 1m. Power handling: Applicable power 800 W RMS LF, 300 Watt RMS MF/HF. Musical power 1600 W LF, 600 Watt MF/HF. Peak power 3200 W LF, 1200 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. Grille: Custom perforated steel grille with open-cell poly fibre backing. Input Connectors: 2 X Speakon® NL4. Dimensions (H x W x D): 29,52"x17,51"x19,05" (750 x 445 x 484 mm). Weight: 78,26 lb (35,5 Kg).

SYSTEM

FREQ. RANGE (-10 dB): 60 - 20.000 Hz

FREQ. RANGE (-3 dB): 75 - 20.000 Hz

HORIZ. COVERAGE ANGLE: 90°

VERTICAL COVERAGE ANGLE: 60°

DIR FACTOR; Q: 11

SYSTEM SENSITIVITY: 98 dB LF, 106 dB MF/HF *(1)*

RATED MAX SPL: 134 DB

SYSTEM NOMINAL IMPEDANCE: 8 ohm LF, 8 ohm MF/HF

SYSTEM INPUT POWER RATING RMS: 800 Watt LF, 300 Watt MF/HF *(2)*

SYSTEM INPUT POWER RATING PEAK: 3200 Watt LF, 1200 Watt MF/HF

RECOMMENDED AMPLIFIER: 1600 Watt LF, 600 Watt MF/HF *(3)*

HF PROTECTION: Active Mosfet Compression Driver Protection

CROSSOVER: Recommended 500 Hz, Internal MF/HF 2000 Hz

TRANSDUCERS

LOW FREQUENCY: 12" woofer with 4" (100 mm) coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 800 Watt AES

SENSITIVITY: 98 dB

MID FREQUENCY: 8" midrange with 3" voice coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 250 Watt AES

SENSITIVITY: 107 dB

HIGH FREQUENCY: 1" compression driver, 44 mm coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 40 Watt AES

SENSITIVITY: 109 dB

PHYSICAL

ENCLOSURE: Double Trapezoidal, 15 mm birch plywood construction

RIGGING INSERTS: 12 x M10 rigging points

COLOR: Black, scratch resistant paint

GRILLE: Custom perforated steel grille

INPUT CONNECTORS: 2 x Speakon NL4

DIMENSIONS (H x W x D): 29,52"x17,51"x19,05" (750x445x484 mm)

WHEIGHT: 78,26 lb (35,5 Kg)

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.

H1315

130.00.084

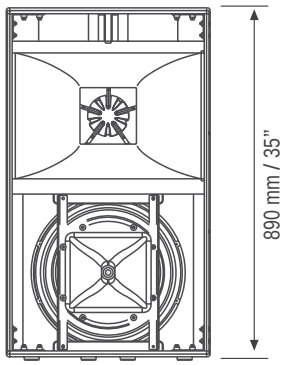
The RCFACUSTICA H1315 is three-way full range loudspeaker system that incorporate a 15” LF transducer, a 10” cone MF transducer and a 1.4” exit titanium compression driver. The system is very compact and provides very high output and accurate voice and sound reproduction. The system is equipped with the latest generation of RCF precision transducers, all of them with powerful neodymium motors.
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 horn with a coverage of 60° x 40°. The compression driver horn is rotatable.
The internal passive filter provides crossover and equalization between the midrange and the compression driver. The Crossover network offers Compression Driver Protection thanks to a unique design Active MOSFET Circuit. The system is driven in bi-amped mode, is able of producing a Max SPL of 136 dB and handles 900 Watts AES (LF) + 400 Watt AES (MF/HF). The loudspeaker enclosure shape is multi-trapezoidal and offers a double coupling angle each side. The cabinet is constructed of multi-ply baltic birch plywood and finished in a very resistant, textured, polyurethane 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.

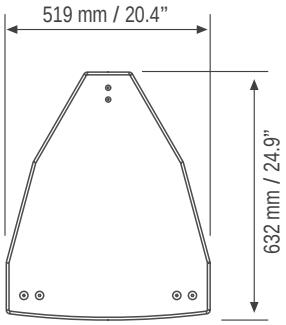
FEATURES

- Compact Arrayable 3-way System
- Fully Horn-loaded LF/MF/HF (60° x 40° directivity)
- Fully equipped with Neodymium Transducers
- 15”LF, 4” voice coil /10”MF, 3” voice coil/1.4”HF, 2.5” voice coil
- Bi-amp system (passive crossover MF/HF included)
- Active Mosfet Compression Driver Protection
- Rotatable HF Horn
- Recessed handles
- Dedicated to permanent installation

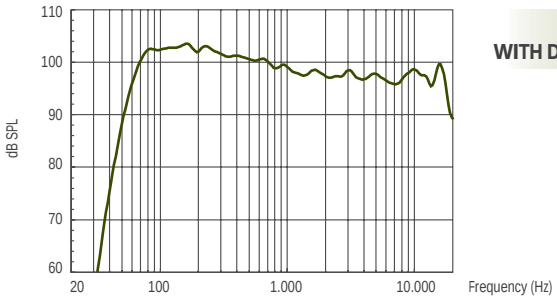
APPLICATIONS

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

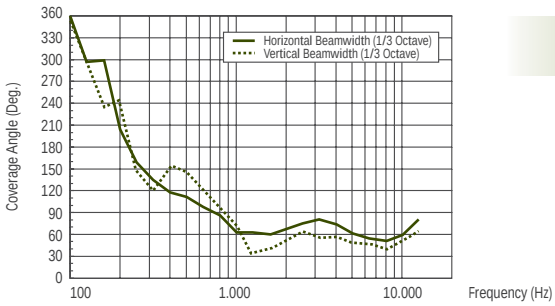




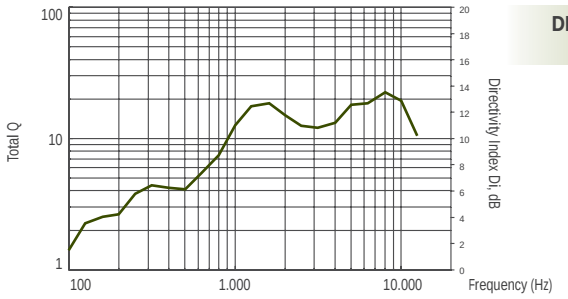
RESPONSE WITH DX4800 PROCESSOR



BEAMWIDTH vs. FREQUENCY



DIRECTIVITY INDEX AND Q



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, 42010 Mancasale, Reggio Emilia, Italy.

B. Model number: H1315

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 2" neodymium, 3" aluminium voice coil.

2.03 Acoustical Proprieties

Nominal dispersion angle: Horizontal: 60°'b0 - Vertical: 40°. Axial frequency range: 50 Hz - 20 kHz Axial sensitivity: 100 dB LF, 109 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. Grille: Custom perforated steel grille. Input Connectors: 2 X Speakon® NL4. - Dimensions (H x W x D): 35,03"x20,47"x24,88" (890 x 520 x 632 mm). Weight: 99,20 lb (45 kg).

SYSTEM

FREQ. RANGE (-10 dB): 50 - 20.000 Hz

FREQ. RANGE (-3 dB): 65 - 20.000 Hz

HORIZ. COVERAGE ANGLE: 60°

VERTICAL COVERAGE ANGLE: 40°

DIR FACTOR; Q: 12

SYSTEM SENSITIVITY: 100 dB LF, 108 dB MF/HF *(1)*

RATED MAX SPL: 136 DB

SYSTEM NOMINAL IMPEDANCE: 8 ohm LF, 8 ohm MF/HF

SYSTEM INPUT POWER RATING RMS: 900 Watt LF, 400 Watt MF/HF *(2)*

SYSTEM INPUT POWER RATING PEAK: 3600 Watt LF, 1600 Watt MF/HF

RECOMMENDED AMPLIFIER: 1800 Watt LF, 800 Watt MF/HF *(3)*

HF PROTECTION: Active Mosfet Compression Driver Protection

CROSSOVER: Recommended 300 Hz, Internal MF/HF 1300 Hz

TRANSDUCERS

LOW FREQUENCY: 15" woofer with 4" (100 mm) coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 900 Watt AES

SENSITIVITY: 100 dB

MID FREQUENCY: 10" midrange with 3" voice coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 300 Watt AES

SENSITIVITY: 109 dB

HIGH FREQUENCY: 1,5" compression driver, 75 mm coil

NOMINAL IMPEDANCE: 8 Ohm

INPUT POWER RATING: 110 Watt AES

SENSITIVITY: 109 dB

PHYSICAL

ENCLOSURE: Double Trapezoidal, 15 mm birch plywood construction

RIGGING INSERTS: 12 x M10 rigging points

COLOR: Black, scratch resistant paint

GRILLE: Custom perforated steel grille

INPUT CONNECTORS: 2 x Speakon NL4

DIMENSIONS (H x W x D): 35,03"x20,47"x24,88" (890x520x632 mm)

WHEIGHT: 99,20 lb (45 Kg)

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.

S4012

130.00.048

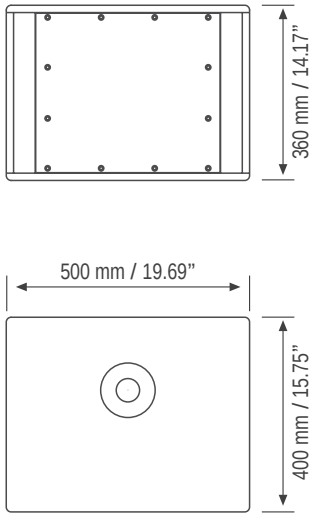
The S4012 high-efficiency Bandpass subwoofer is the ideal bass-frequency extension to complement the RCF Acustica Compact series two-way loudspeakers – C3108 & C3110 models. - The low-frequency transducer is an RCF Precision high-power 12” woofer with a 3” inside/outside voice coil to minimize power compression and extend the life of the product. This new woofer design is the result of the latest refinements in RCF experiences in compact active and passive subwoofer design, resulting in a fast and controlled reproduction of the bass frequency range. Using Bandpass loading to the transducer, the subwoofer design ensures an efficient acoustic response down to 45 Hz. The Baltic birch plywood enclosure is painted with black, heavy duty, textured epoxy. The front is protected from a strong powder coated metal grille. The cabinet features two Neutrik Speakon™ connectors in a recessed input plate. A 35 mm pole mount adaptor is provided in the top of the cabinet, along with integrated hand carry points in the cabinet sides.

FEATURES

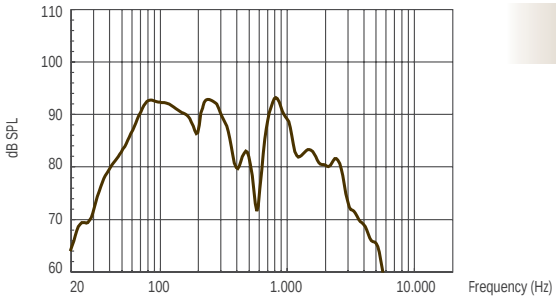
- 12” high-efficiency RCF Precision 3” voice-coil woofer with Inside/Outside Coil Technology
- Horn reflex loaded woofer
- 128dB maximum sound pressure level
- Response down to 45 Hz
- Rectangular box enclosure with protective metal grille
- 15 mm birch plywood construction
- 35 mm standard pole mount in top section of cabinet
- Integrated hand carry points

APPLICATIONS

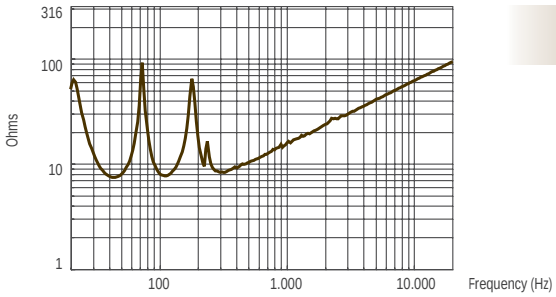
- Low Frequency Enhancement
- Music Enhancement
- Special Effects Reinforcement
- Entertainment Systems
- Live Music Reinforcement
- Small Club Sound Systems
- Infill Sub Bass Enhancement



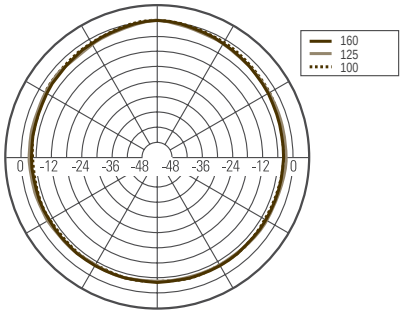
RESPONSE 1W/1m



IMPEDANCE



POLAR PLOT



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

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PART 2 PRODUCTS

2.01 Approved Manufacturer/Product

A. RCF, Via Raffaello 13, 42010 Mancasale, Reggio Emilia, Italy. - B. Model number: S4012.

2.02 Design

Configuration Bandpass subwoofer - LF Sub-section 12" woofer, 3" voice coil.

2.03 Acoustical Proprieties

Axial frequency range: 45 Hz - 200 Hz - Axial sensitivity: 96 dB, 1W @ 1m - Power handling: Applicable power 400 W RMS - Musical power 800 W - Peak power 1200 W - Nominal impedence: 8 Ohm.

2.04 Physical Properties

Enclosure: Rectangle, 15 mm birch plywood construction - Rigging inserts: Pole mount - Color: Black, scratch resistant paint - Grille: Custom perforated steel grille - Input Connectors: 2 X Speakon® NL4. Dimensions (H x W x D): 14.17"x 19.69"x 15.75" (360 x 500 x 400 mm). - Weight: 44 lb (20 kg)

SYSTEM

FREQ. RANGE: 45 Hz - 200 Hz

SYSTEM SENSITIVITY: 96 dB , 1W @ 1m *(1)*

RATED MAXIMUM SPL: 128 dB, @ 1m

SYSTEM NOMINAL IMPEDANCE: 8 Ohm

SYSTEM INPUT POWER RATING RMS: 400 W *(2)*

SYSTEM INPUT POWER RATING PEAK: 1200 W

RECOMMENDED AMPLIFIER: 800 W *(3)*

TRANSDUCERS

LOW FREQUENCY: 12" (304,8 mm) woofer with 3" (76,2 mm) inside/outside voice coil

NOMINAL IMPEDANCE: 8 Ohm

PROGRAM POWER: 900 W

POWER HANDLING CAPACITY: 450 W

SENSITIVITY: 97 dB, 1W @ 1m

PHYSICAL

ENCLOSURE: Rectangle, 15 mm birch plywood construction

RIGGING INSERTS: Pole mount

COLOR: Black, scratch resistant paint

GRILLE: Custom perforated steel grille

INPUT CONNECTORS: Speakon® NL4

DIMENSIONS (H x W x D): 14.17"x 19.69"x 15.75" (360 x 500 x 400 mm)

WEIGHT: 44 lb (20 Kg)

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.

S4022

130.00.082

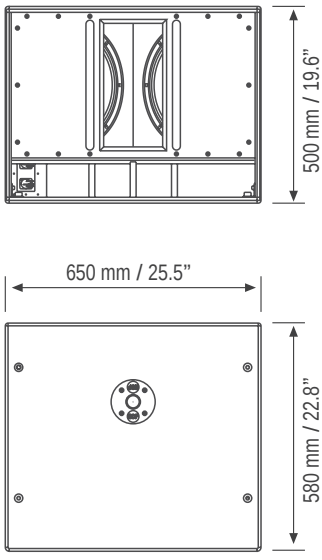
The S4022 is a compact, high-output band-pass subwoofer. The system is equipped with two advanced 12” RCF precision woofers mounted in a clam-shell internal chamber. The two transducers couple to achieve tight and maximised output. Each 12” features massive ceramic magnets and 3” copper voice coil.
The system is able of producing a Max SPL of 131 dB and handles 800 Watts AES.
The loudspeaker enclosure shape is rectangular and the cabinet is constructed of multi-ply baltic birch plywood and finished in a very resistant, textured, polyurethane black paint. It features a pole-mount receptacle, rubber feet, 2 x recessed handles and 8 x M10 mounting point plus extensive internal bracing for flown applications. The front steel grille is epoxy powder coated.

FEATURES

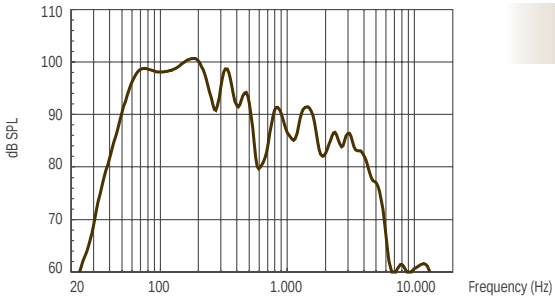
- Compact, arrayable, 2 x 12” bandpass subwoofer system
- 131 dB max SPL, 800 Watt AES
- Equipped with RCF high power 2 x 12”, 3” voice coil woofers
- Extensive internal bracing, 8 x M10 mounting points
- Recessed handles
- Epoxy powder coated front grille
- Dedicated to permanent installation

APPLICATIONS

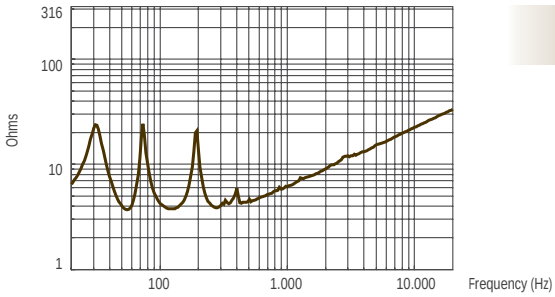
- Low Frequency Enhancement
- Music Enhancement
- Special Effects Reinforcement
- Entertainment Systems
- Live Music Reinforcement
- Small to Large Club Sound Systems
- Infill Sub Bass Enhancement
- Small Club Sound Systems



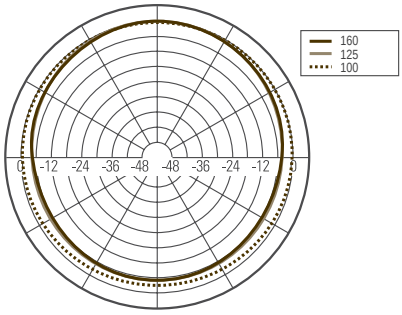
RESPONSE 1W/1m



IMPEDANCE



POLAR PLOT



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PART 2 PRODUCTS

2.01 Approved Manufacturer/Product

A. RCF, Via Raffaello 13, 42010 Mancasale, Reggio Emilia, Italy. - B. Model number: S4022

2.02 Design

Confi guration Bandpass subwoofer. LF Sub-section 2 X 12" woofer, 3" voice coil.

2.03 Acoustical Proprieties

Axial frequency range: 40 Hz - 200 Hz - Axial sensitivity: 97 dB, 1W @ 1m - Power handling: Applicable power 400 W RMS. Musical power 800W - Peak power 1200 W - Nominal impedence: 4 Ohm.

2.04 Physical Properties

Enclosure: Rectangle, 15 mm birch plywood construction - Rigging inserts: 8 X M10 Mounting Points, 2x Recessed Handles. Color: Black, scratch resistant paint - Grille: Custom perforated steel grille. Input Connectors: 2 X Speakon® NL4 - Dimensions (H x W x D): 19.68" x25.59"x 22.83" (500 x 650 x 580 mm) - Weight: 83.77 lb (38 Kg).

SYSTEM

FREQ. RANGE: 40 Hz - 200 Hz

SYSTEM SENSITIVITY: 97 dB , 1W @ 1m *(1)*

RATED MAXIMUM SPL: 131 dB, @ 1m

SYSTEM NOMINAL IMPEDANCE: 4 Ohm

SYSTEM INPUT POWER RATING RMS: 800 W *(2)*

SYSTEM INPUT POWER RATING PEAK: 2400 W

RECOMMENDED AMPLIFIER: 1600 W *(3)*

TRANSDUCERS

LOW FREQUENCY: 2 x 12" (304,8 mm) woofer with 3" (76,2 mm) inside/outside voice coil

NOMINAL IMPEDANCE: 8 Ohm

PROGRAM POWER: 800 W

POWER HANDLING CAPACITY: 400 W

SENSITIVITY: 97 dB, 1W @ 1m

PHYSICAL

ENCLOSURE: Rectangle, 15 mm birch plywood construction

RIGGING INSERTS: 8 x M10 Mounting Points, 2 x Recessed

COLOR: Black, scratch resistant paint

GRILLE: Custom perforated steel grille

INPUT CONNECTORS: 2 X Speakon® NL4

DIMENSIONS (H x W x D): 19.68"x 25.59"x 22.83" (500x650x580 mm)

WEIGHT: 83.77 lb (38 Kg)

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.

S8018

130.00.051

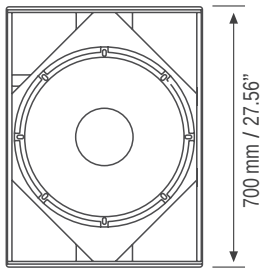
The S8018 high-efficiency subwoofer is the ideal bass-frequency extension to complement the RCF Acustica Compact series two-way loudspeakers. The low-frequency transducer is an RCF Precision high-power 18” woofer with a 4” inside/outside voice coil to minimize power compression and extend the life of the product. This new woofer design is the result of the latest refinements in RCF experiences in compact active and passive subwoofer design, resulting in a fast and controlled reproduction of the bass frequency range. Using horn-reflex loading to the transducer, the subwoofer design ensures an efficient acoustic response down to 40 Hz.
The Baltic birch plywood enclosure is painted with black, heavy duty, textured epoxy. The front is protected from a strong powder coated metal grille. The cabinet features two Neutrik Speakon™ connectors in a recessed input plate. A 35 mm pole mount adaptor is provided in the top of the cabinet, along with integrated hand carry points in the cabinet sides.

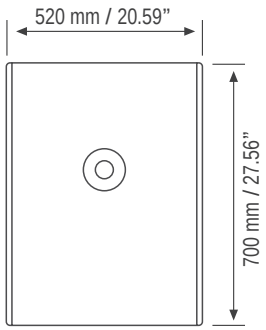
FEATURES

- 18” high-efficiency RCF Precision 4” voice-coil woofer with Inside/Outside Coil Technology
- Horn refl ex loaded woofer
- 134 dB maximum sound pressure level
- Response down to 40 Hz
- Rectangular box enclosure with protective metal grille
- 15 mm birch plywood construction
- 35 mm standard pole mount in top section of cabinet
- Integrated hand carry points
- Three year limited warranty

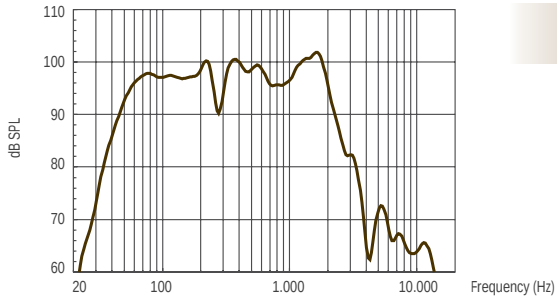
APPLICATIONS

- Low Frequency Enhancement
- Music Enhancement
- Special Effects Reinforcement
- Entertainment Systems
- Live Music Reinforcement
- Small to Large Club Sound Systems
- Infill Sub Bass Enhancement

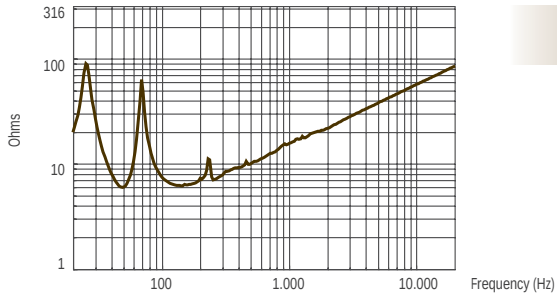




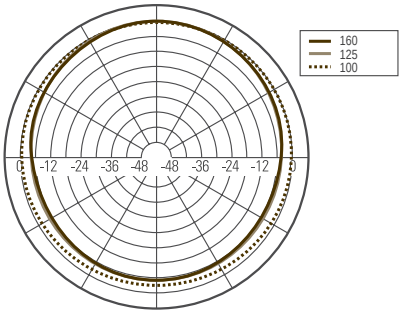
RESPONSE 1W/1m



IMPEDANCE



POLAR PLOT



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PART 2 PRODUCTS

2.01 Approved Manufacturer/Product

A. RCF, Via Raffaello 13, 42010 Mancasale, Reggio Emilia, Italy.

B. Model number: S8018

2.02 Design

Configuration Bass reflex subwoofer. LF Sub-section 18" woofer, 4" voice coil.

2.03 Acoustical Proprieties

Axial frequency range: 40 Hz - 200 Hz. Axial sensitivity: 98 dB, 1W @ 1m. Power handling: Applicable power 1000 W RMS. Musical power 2000 W. Peak power 4000 W. Nominal impedance: 8 Ohm.

2.04 Physical Properties

Enclosure: Rectangle, 15 mm birch plywood construction. Rigging inserts: 2x Recessed Handles. Color: Black, scratch resistant paint. Grille: Custom perforated steel grille.

Input Connectors: 2 X Speakon® NL4. Dimensions (H x W x D): 27.32"x 20.59"x 27.32"(700 x 520 x 700 mm). Weight: 105.82 lb (48 Kg).

SYSTEM

FREQ. RANGE: 40 Hz - 200 Hz

SYSTEM SENSITIVITY: 98 dB , 1W @ 1m *(1)*

RATED MAXIMUM SPL: 134 dB, @ 1m

SYSTEM NOMINAL IMPEDANCE: 8 Ohm

SYSTEM INPUT POWER RATING RMS: 1000 W *(2)*

SYSTEM INPUT POWER RATING PEAK: 3000 W

RECOMMENDED AMPLIFIER: 2000 W *(3)*

TRANSDUCERS

LOW FREQUENCY: 18" (457,2 mm) woofer with 4" (100,6 mm) inside/outside voice coil

NOMINAL IMPEDANCE: 8 Ohm

PROGRAM POWER: 1800 W

POWER HANDLING CAPACITY: 900 W

SENSITIVITY: 98 dB, 1W @ 1m

PHYSICAL

ENCLOSURE: Rectangle, 15 mm birch plywood construction

RIGGING INSERTS: Pole mount

COLOR: Black, scratch resistant paint

GRILLE: Custom perforated steel grille

INPUT CONNECTORS: Speakon® NL4

DIMENSIONS (H x W x D): 27.32"x 20.59"x 27.32" (700x520x700 mm)

WEIGHT: 105.82 lb (48 Kg)

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.

S8028

130.00.085

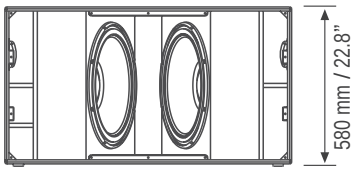
The S8028 is a compact, high-output bass reflex subwoofer. The system is equipped with two advanced neodymium 18" RCF precision woofers mounted in a clam-shell configuration. The two transducers couple to achieve tight and maximised output.
Each 18" features massive vented neodymium magnets and 4" copper voice coil and represents the state of the art of RCF precision transducers technology.
The system is able of producing a Max SPL of 136 dB and handles 2000 Watts AES.
The loudspeaker enclosure shape is rectangular and the cabinet is constructed of multi-ply baltic birch plywood and finished in a very resistant, textured, polyurethane black paint. It features 2x recessed handles and rubber feet. It is possible to use the system in horizontal or vertical configuration.
The front steel grille is epoxy powder coated.

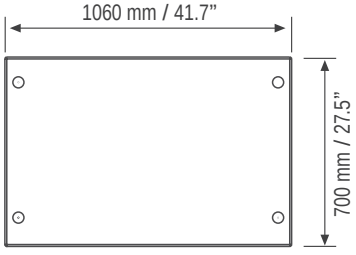
FEATURES

- Compact, bass reflex, 2 x 18" subwoofer system
- Very high output, response down to 35 Hz
- 136 dB max SPL, 2000 Watt AES
- Equipped with RCF high power 2 x18", 4" voice coil neodymium woofers
- Recessed handles
- Epoxy powder coated front grille
- Dedicated to permanent installation

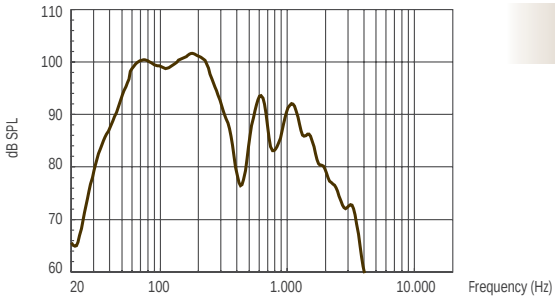
APPLICATIONS

- Low Frequency Enhancement
- Music Enhancement
- Special Effects Reinforcement
- Entertainment Systems
- Live Music Reinforcement
- Mid to Large Club Sound Systems
- Infill Sub Bass Enhancement

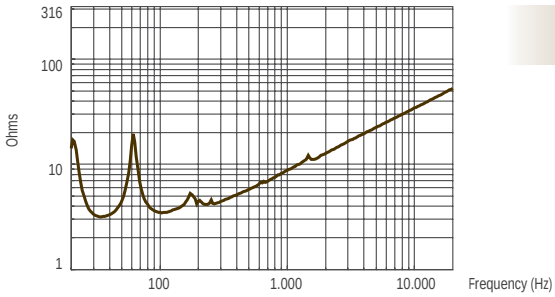




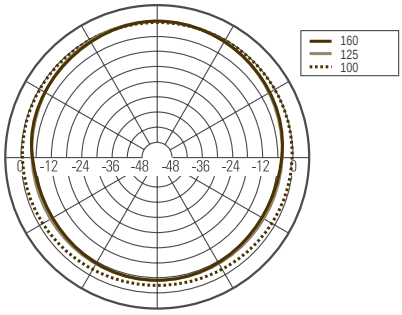
RESPONSE 1W/1m



IMPEDANCE



POLAR PLOT



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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, 42010 Mancasale, Reggio Emilia, Italy.
B. Model number: S8028.
2.02 Design
Configuration Bass reflex subwoofer. LF Sub-section 2 x 18" woofer, 4" voice coil.
2.03 Acoustical Proprieties
Axial frequency range: 35 Hz - 200 Hz. Axial sensitivity: 99 dB, 1W @ 1m. Power handling: Applicable power 3000 W RMS. Musical power 2000 W. Peak power 6000 W. Nominal impedance: 4 Ohm.
2.04 Physical Properties
Enclosure: Rectangle, 15 mm birch plywood construction. Rigging inserts: 2x Recessed Handles Color: Black, scratch resistant paint. Grille: Custom perforated steel grille. Input Connectors: 2 X Speakon® NL4. Dimensions (H x W x D): 22,83"x41,73"x27,55" (580 x 1060 x 700 mm). Weight: 141 lb (64 Kg).

SYSTEM

FREQ. RANGE (-10 dB): 35 - 200 Hz
SYSTEM SENSITIVITY: 99 dB *(1)*
RATED MAX SPL: 138 dB
SYSTEM NOMINAL IMPEDANCE: 4 Ohm
SYSTEM INPUT POWER RATING RMS: 2000 Watt *(2)*
SYSTEM INPUT POWER RATING PEAK: 6000 Watt
RECOMMENDED AMPLIFIER: 3000 Watt *(3)*
CROSSOVER: Reccommended 120 Hz

TRANSDUCERS

LOW FREQUENCY: 2 x 18" woofer with 4" (100 mm) coil
NOMINAL IMPEDANCE: 8 Ohm each
INPUT POWER RATING: 1000 Watt AES each

PHYSICAL

ENCLOSURE: Rectangular, 15 mm plywood
COLOR: Black, scratch resistant paint
GRILLE: Custom perforated steel grille
INPUT CONNECTORS: 2 x Speakon NL4
DIMENSIONS (H x W x D): 22,83"x41,73"x27,55" (580x1060x700 mm)
WEIGHT: 141 lb (64 Kg)

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.

EP5004 4 CHANNEL PROFESSIONAL POWER AMPLIFIER

121.35.044

APPLICATION ORIENTED

The EP5004 offers the System Engineer an incredible versatility. From small systems to more complex or larger situations, the EP5004 provides a very cost effective solution without compromising sound quality. The amplifier is the optimum choice in many situation, from a multi-zone installation to a multi-way monitoring system. In PA systems it is possible to use 2 channel for left and right signals and bridge the other two channels for subwoofer application. The use of dedicated equalization boards guarantee the optimised sonic quality for each speaker without adding the cost of expensive processors. Equalization boards fully dedicated for the RCF Acustica Series Speaker Systems are available. Muting and diagnosis are available from the back panel.

POWER AND DYNAMIC

Each single amplifier is fully independent and provides up to 550 Watt on a 4 Ohm load. Each pair of amplifiers can independently operate in bridge mode delivering up to 1100 Watt on an 8 Ohm load. Our clip reduction system is dynamically tracking the power supply rail values in order to prevent clipping distortion which assures the delivery of the maximum available power. Attack and release time constants are accurately calculated to prevent any “pumping” effect.

ANALOG AND DIGITAL

The signal path is fully analog for tighter bass and clean transparent highs; controls, protections and diagnosis are digital: a proper mix respecting sound quality.

PROTECTION AND DIAGNOSIS

The system’s protection provide safe operation in the most various and demanding situations. The output relays avoid transient situations at the speaker output; this system guarantees simultaneously the DC current protection and short circuit protection to the amplifier and speakers. The continuous and intensive use of the amplifier is guaranteed with continuous thermal monitoring; an optimised voltage controlled double fan cooling system acts when needed in a proportional way to the heat generated from the output transistors. The thermal controls act independently on the 4 amplifiers and on the power supply transformer.
4 status LED situated on the front panel is possible to monitor in real time each channels working condition.

FEATURES

- 4 Channel amplifier in 2U
- 4 x 550 Watt/4 Ohm (2 x 1100 Watt/8 Ohm)
- Flexible bridge mode operation
- 4 independent inputs, 4 independent outputs
- 4 independent amplifiers with centralized diagnosis
- Equalization boards option
- Thermal protection, DC protection, Short Circuit protection, Current protection
- Fast limiter Circuit
- Main Voltage diagnosis, in-out signal diagnosis
- Compact design, 2 rack units
- Dedicated to permanent installations

APPLICATIONS

- Theaters and auditoriums
- Arenas
- AV Presentations
- Stadiums
- Club Systems
- Houses of Worship
- Bars and restaurants
- Theme parks
- Cruise ships
- Sound Reinforcement in medium to large spaces

EQUALISATION MODULES

C3108 XEQ
123.20.029

C3110 XEQ
123.20.030

To add to the outstanding versatility of the EP 5004 amplifier, RCF offer a range of high quality analog equalisation boards tailored for the RCF Acustica range of Speaker Systems. Currently the options offer equalisation and crossover boards for the C3108 and C3110 models and respective crossover to the S4012 and S4022 subwoofers.
Facilities offered are:
- Full Range to either C3108 or C3110
- Hi Pass for satellite speakers C3108 or C311
- Lo Pass for subwoofers S4012 or S4022
- Stereo or mono operation

TECHNICAL SPECIFICATIONS

FREQUENCY RESPONSE			
	20 – 20.000 Hz		
MAX OUTPUT POWER			
	4 independent channels (8 Ohm)	350	W
	4 independent channels (4 Ohm)	550	W
	2 bridge channels (8 Ohm)	1100	W
DISTORTION			
	THD 20 - 20 KHz @ full power		0.07%
	THD 20 - 20 KHz @ - 1dB under CLIP		0.02%
INPUTS			
	Neutrik XLR & JACK		
	Sensitivity 4 dBu		
OUTPUTS			
	Neutrik SPEAKON (1+ 1- single channel, 2+ 1+ bridge)		
	Gain 32 dB		
FRONT PANEL			
	4 x gain controls		
	4 x status LED each channel		
	1 x equalisation board option		
REAR PANEL			
	Powercon AC connector		
	4 x XLR inputs		
	4 x Jack Inputs		
	4 x Speakon Outputs		
	Diagnosis board option		
OPTIONS			
	Standard diagnosis		
	RS485 diagnosis		
	Standard Flat equalisation board		
	Speaker dedicated equalisation boards		
DIMENSIONS			
88 H x 480 W 418 D (2 x 19” rack units)			
WEIGHT			
17 Kg			

DX4008 4 INPUT - 8 OUTPUT DIGITAL PROCESSOR

121.35.033

The DX 4008 is a complete 4 input - 8 output digital loudspeaker management system designed for the touring or fixed sound installation markets. The absolute latest in available technology is utilized with 32-bit (40-bit extended) floating point processors and high performance 24-bit Analog Converters. Sampling rate can be set to 96 kHz.

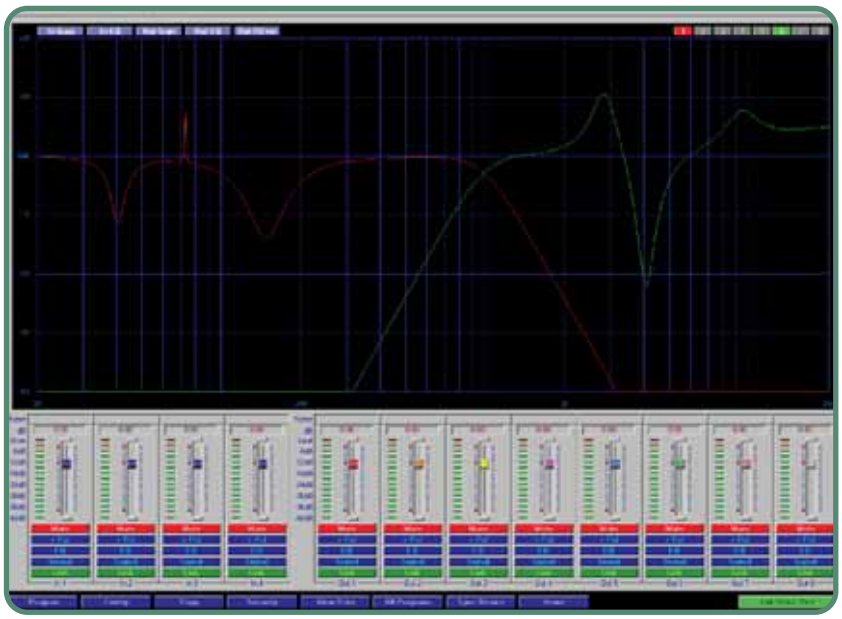
The high-bit DSP prevents noise and distortion induced by truncation errors of the commonly used 24-bit fixed-point devices. A complete set of parameters include I/O levels, delay, polarity, 6 bands of parametric EQ per channel, multiple crossover selections and full function limiters.
Precise frequency control is achieved with its 1 Hz resolution.
Inputs and outputs can be routed in multiple configuration to meet any requirements.

The DX 4008 can be controlled or configured in real time on the front panel or with the intuitive PC GUI accessed via the RS 232 interface. Software upgrade for CPU and DSP via PC keeps the device current with newly developed algorithms and functions once available. Multiple setup storage and system security complete this professional package.

PARAMETERS	MENU <<menu>>	FIELD <<cursor>>	MIN	MAX	STEPS	UNITS
Level	Signal	LEVEL	-40	+15	0,25	dB
Polarity	Signal	POL	+/-	+/-	+/-	+/-
Delay	Signal	DELAY	0	24,000	1	21 us step
EQ Number	EQ	EQ#	1	6	1	
EQ Level	EQ	LEVEL	-30	+15	0,25	dB
EQ Frequency	EQ	FREQ	20	20,000	1	Hz
EQ Bandwidth	EQ	BW	0.02	2.50	0.01	Octave
Crossover low	Xover	FTRL	Off / Butterworth / Linkwitz-Riley / Bessel			
Crossover low	Xover	FRQL	20	20,000	1	Hz
Crossover low	Xover	SLPL	6	48 (48 kHz) - 24 (96 kHz)	6	dB/octave
Crossover high	Xover	FTRH	Off / Butterworth / Linkwitz-Riley / Bessel			
Crossover high	Xover	FRQH	20	20,000	1	Hz
Crossover high	Xover	SLPH	6	48 (48 kHz) - 24 (96 kHz)	6	dB/octave
Out limit thresh	Limit	THRESH	-20	+20	0.5	dBu
Out Attack Time	Limit	ATTACK	0.3	100	0.1/1	ms
Out Release Time	Limit	RELEASE	2 / 4 / 8 / 16 / 32x Attack Time			
Source	Source	1,2,3,4	Off / On	Off / On	Off / On	Off / On
Channel Name	Ch-Name	NAME	6 characters	6 characters	6 characters	6 characters

DX4008 PC CONTROL SOFTWARE

The DX 4008 is shipped with a special PC Graphic User Interface (GUI) application - XLink. XLink gives the user an option to control the DX 4008 unit from a remote PC via the RS232 serial communication link. The GUI application makes it much easier to control and monitor the device, allowing the user to get the whole picture on one screen. Programs can be recalled and stored from/to PC's hard drive, thus expanding the storage to become virtually limitless.



TECHNICAL SPECIFICATIONS

INPUT AND OUTPUT

- Input Impedance: >10k Ohm
- Output Impedance: 50 Ohm
- Maximum Level: +20 dBu
- Type: Electronically balanced

AUDIO PERFORMANCE

- Frequency Response: +/- 0.1dB (20 to 20 kHz)
- Dynamic Range: 115 dB typ (unweighted)
- CMMR: > 60 dB (50 to 10 kHz)
- Crosstalk: < -100 dB
- Distortion: 0.001% (1 kHz @18 dBu)

DIGITAL AUDIO PERFORMANCE

- Resolution: 32-bit (40-bit extended)
- Sampling Rate: 48 kHz/96 kHz
- A/D - D/A Converters: 24-bit
- Propagation Delay: 3 ms

FRONT PANEL CONTROLS

- Display: 4 x 26 Character Backlit LCD
- Level Meters: 5 segment LED
- Buttons: 12 Mute Controls 12 Gain / Menu Controls 6 Menu Controls
- "DATA" control: Embedded Thumb Wheel (dial encoder)

CONNECTORS

- Audio: 3-pin XLR
- RS-232: Female DB-9
- Power: Standard IEC Socket

GENERAL

- Power: 115 / 230 VAC (50 / 60 Hz)
- Dimensions: 19" x 1.75" x 8" (483 x 44 x 203 mm)
- Weight: 10 lbs (4.6 kg)

PROFESSIONAL AMPLIFIERS

HC SERIES High Current Series Power Amplifiers

HC 1600 121.35.031

HC 2000 121.35.030

HC 3200 121.35.029

These professional stereo power amplifiers, working in class-H mode, provide from 2 x 800 W up to 1 x 3200 W respectively, at an efficiency of around 85%. A massive transformer based power supply and hand selected components make these power ratings possible with exceptional audio quality and absolute reliability, even in the 2 ohm mode. The output stages are fully protected against over-temperature, short circuit, RFI and equipped with soft start circuit and temperature-controlled fan cooling.
The integral soft clip limiter protects against damage to the connected loudspeakers. The activity of a protective circuit, signal and limiter is shown for each channel by LED's.

ED SERIES Extended Dynamic Power Amplifiers

ED 600
121.35.027

ED 1100
121.35.028

A new and unique Class-H circuitry technology allows their manufacture in SMD technology with a reduced number of components offering performance usually expected on top class products like slew rate 50 V/µs and high-end extended dynamic sound. The high efficiency of the ED series enables maximum efficiency with low heat generation.

PRODUCT	ED 600	ED 1100	HC 1600	HC 2000	HC 3200
Output (W) Stereo	2 x 300 / 4	2 x 550 / 4	800/2	1000/2	1600/2
per Channel @ Ohm	2 x 180 / 8	2 x 265 / 8	650/4	800/4	1100/4
			350/8	500/8	700/8
Output (W) bridged @ 8 Ohm	1 x 600 / 8	1 x 1100 / 8	1300	1000	2200
Output (W) bridged @ 4 Ohm			1600	2000	3200
Frequency response ±0,2 dB	1 x 310 / 4	1 x 570 / 4	20Hz - 20 KHz	20Hz - 20 KHz	20 Hz - 20 KHz
Frequency response ±3 dB	1 x 195 / 8	1 x 325 / 8	10Hz - 65 KHz	10Hz - 65 KHz	10 Hz - 65 KHz
THD + N	20 - 20.000 Hz	20 - 20.000 Hz	0,02 % at 1 KHz	0,02 % at 1 KHz	0,02 % at 1 KHz
	20 - 57.000 Hz	20 - 57.000 Hz	0,1 % to 20 KHz	0,1 % to 20 KHz	0,1 % to 20 KHz
Input sensitivity	0,05 % @ 1 KHz	0,05 % @ 1 KHz	0,775 V	0,775 V	0,775 V
Input impedance	0 dBm (0,775 V RMS)	0 dBm (0,775 V RMS)	20 kOhm bal./ 10 kOhm unbal.	20 kOhm bal./ 10 kOhm unbal.	20 kOhm bal./ 10 kOhm unbal.
Dampening factor			200:1 (8 Ohm)	200:1 (8 Ohm)	200:1 (8 Ohm)
Slew Rate	50V/µS	50V/µS	50V/µS	50V/µS	50V/µS
Input connection	2 x XLR bal., 6,3mm jack unbal.	2 x XLR bal., 6,3mm jack unbal.	2 x 6,3mm jack and XLR / bal.	2 x 6,3mm jack and XLR / bal.	2 x 6,3mm jack and XLR / bal.
Output connection	2 x Neutrik Speakon4	2 x Neutrik Speakon4	2 x Speakon-4	2 x Speakon-4	2 x Speakon-4
Protection	Thermal, direct current, RFI, short circuit, transformer protection	Thermal, direct current, RFI, short circuit, transformer protection	thermal, temerature, direct current, short circuit, RFI	thermal, temerature, direct current, short circuit, RFI	thermal, temerature, direct current, short circuit, RFI
Dimensions	88 x 482 x 350 mm	88 x 482 x 350 mm	19", 2 U rack 19"	19", 2 U rack 19"	19", 3 U rack 19"
Weight	12,5 kg/ 28 lbs	15 kg/ 33 lbs	17 kg/ 37 lbs	18 kg/ 40 lbs	29 kg/ 64 lbs

ACCESSORIES

133.60.013 **AC C08 H-BR**
Pair of bracket for mounting C3108 speakers on the wall - Adjustable inclination horizontal - Black

133.60.015 **AC C10 H-BR**
Pair of bracket for mounting C3110 speakers on the wal - Adjustable inclination horizontal - Black

133.60.021 **AC C12 H-BR**
Pair of bracket for mounting C5212W - 5212L speakers on the wall - Adjustable inclination horizontal - Black

133.60.023 **AC C15 H-BR**
Pair of bracket for mounting C5215w - 5215L speakers on the wall - Adjustable inclination horizontal - Black

133.60.014 **AC C08 V-BR**
Pair of bracket for mounting C3108 speakers on the wal - Adjustable inclination vertical - Black

133.60.016 **AC C10 V-BR**
Pair of bracket for mounting C3110 speakers on the wall - Adjustable inclination vertical - Black

133.60.022 **AC C12 V-BR**
Pair of bracket for mounting C5212W - 5212L speakers on the wall - Adjustable inclination vertical - Black

133.60.024 **AC C15 V-BR**
Pair of bracket for mounting C5215w - 5215L speakers on the wall - Adjustable inclination vertical - Black

133.60.035 **AC S260**
Steel speaker floor stand with folding base and telescopic rod, tube diameter 35mm. - Equipped with damping system and safety plug; central die-cast joint - Load capacity up to 60 kg - Weight 7,8 Kg - H MIN/MAX 170 cm / 240 cm - Max base opening 130 cm diameter - Length once folded 123 cm.

133.60.036 **AC S140**
Aluminium speaker floor stand with folding base and telescopic rod, tube diameter 35mm. - Equipped with damping system and safety plug - Load capacity up to 40 kg - Weight 2,7 Kg - H MIN/MAX 140 cm / 214 cm - Max base opening 130 cm diameter - Length once folded 107 cm.

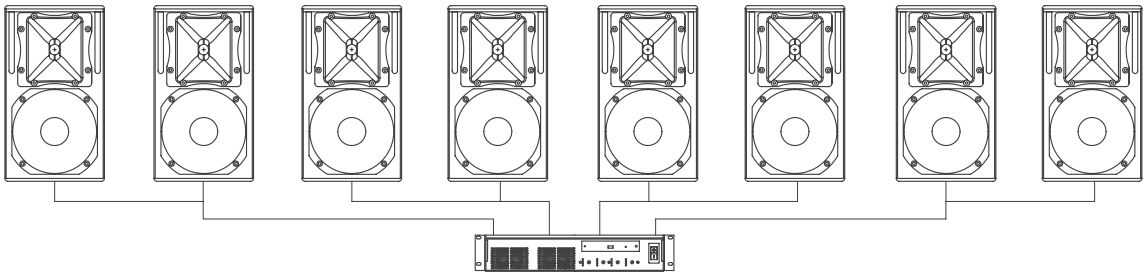
133.60.034 **AC PMA**
Aluminium pole mount stand with telescopic rod, tube diameter 35mm. - Load capacity up to 40 kg.

133.60.031 **AC EB4X**
Kit including No. 4 shouldered 10mm eye bolts.

133.60.033 **AC NL4F 4X**
Kit including No. 4 Neutrik Speakon NL4F connectors.

SYSTEM CONFIGURATIONS

1 PUBLIC AREAS, BACKGROUND / FOREGROUND MUSIC, MUSIC PUBS, BARS

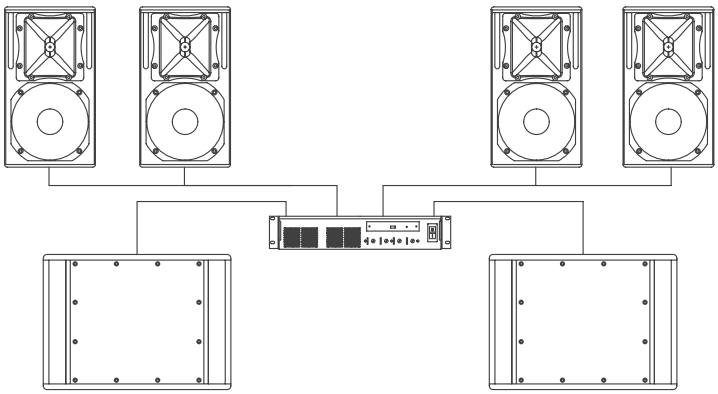


SPEAKERS
8 x C3108

ELECTRONIC
1 x 4 channel power amplifier,
digital processor, model **EP5004**

COVERAGE	8 speakers 90° x 70°
TYPICAL DISTANCE	near field, 10 m
TOTAL POWER HANDLING	2400 W RMS
TOTAL POWER DELIVERY	2200 W (@ 4 Ohm)

2 BACKGROUND/FOREGROUND MUSIC, MUSIC PUBS, BARS, SMALL CLUBS, AV PRESENTATIONS, DRAMA STUDIOS

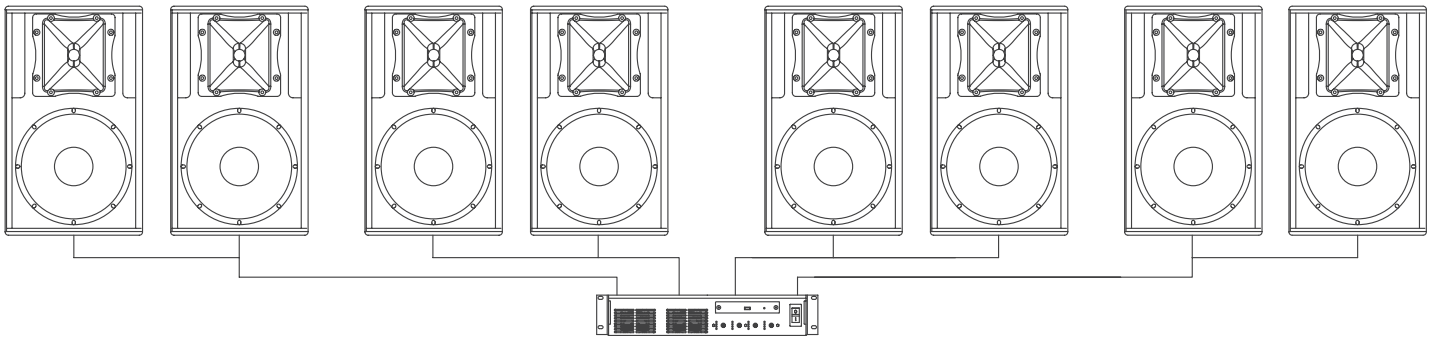


SPEAKERS
4 x C3108 - 2 x S4012 subwoofers

ELECTRONIC
1 x 4 channel power amplifier,
digital processor, model **EP5004**

COVERAGE	120° x 70°
TYPICAL DISTANCE	near field, 10 - 15 m
TOTAL POWER HANDLING	2000 W RMS
TOTAL POWER DELIVERY	2200 W (@ 4 Ohm)

3 PUBLIC AREAS, BACKGROUND/FOREGROUND MUSIC, MUSIC PUBS, BARS

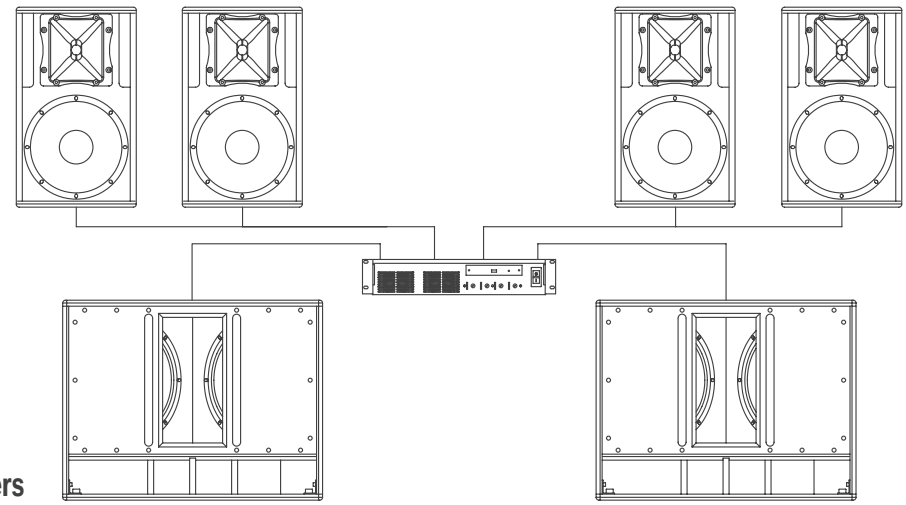


SPEAKERS
8 x C3110

ELECTRONIC
1 x 4 channel power amplifier,
digital processor, model **EP5004**

COVERAGE	8 speakers 90° x 70°
TYPICAL DISTANCE	near field, 10 - 15 m
TOTAL POWER HANDLING	2400 W RMS
TOTAL POWER DELIVERY	2200 W (@ 4 Ohm)

4 BACKGROUND/FOREGROUND MUSIC, MUSIC PUBS, BARS, SMALL CLUBS, DJS, LARGER AV PRESENTATIONS

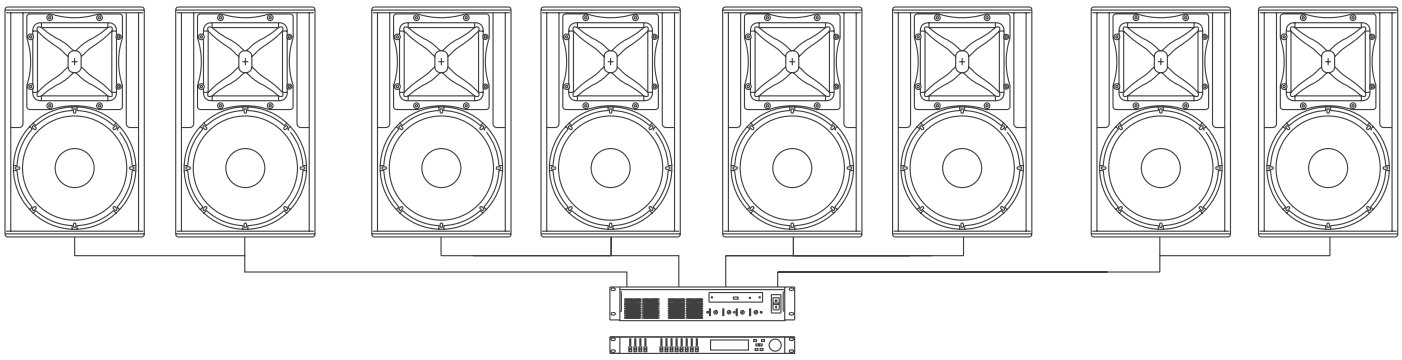


SPEAKERS
4 x C3110 - 2 x S4022 subwoofers

ELECTRONIC
1 x 4 channel power amplifier,
digital processor, model **EP5004**

COVERAGE	120° x 70°
TYPICAL DISTANCE	near field, 15 m
TOTAL POWER HANDLING	2800 W RMS
TOTAL POWER DELIVERY	2200 W (@ 4 Ohm)

5 PUBLIC AREAS, BACKGROUND/FOREGROUND MUSIC, MUSIC PUBS, BARS, SMALL CLUBS, THEATRES.

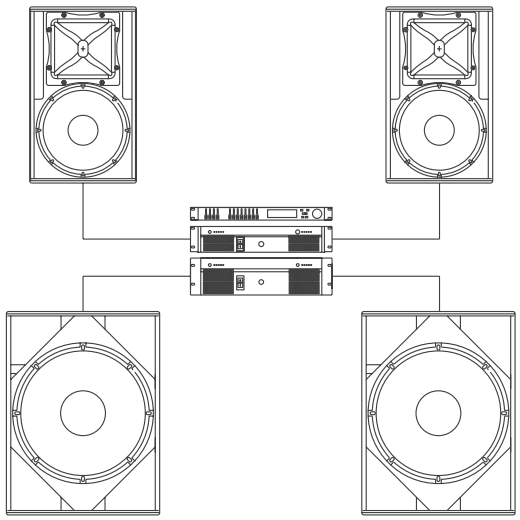


SPEAKERS
8 x C5212

ELECTRONIC
1 x digital crossover 4 in 8 out, equalizer, delay line, limiter, model **DX4008**
1 x 4 channel power amplifier, digital processor, model **EP5400**

COVERAGE	8 speakers 90° x 70°
TYPICAL DISTANCE	near field, 15 - 20 m
TOTAL POWER HANDLING	4000 W RMS
TOTAL POWER DELIVERY	2200 W (@ 4 Ohm)

6 MUSICIANS, CLUBS, DANCE FLOORS, SMALL FOH, THEATRES

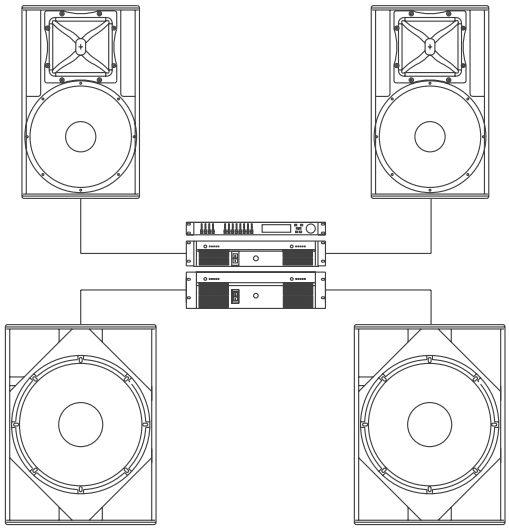


SPEAKERS
2 x C5212 - 2 x S8018 subwoofers

ELECTRONIC
1 x digital crossover 4 in 8 out, equalizer, delay line, limiter, model **DX4008**
1 x stereo power amplifier, model **HC2000**
1 x stereo power amplifier, model **HC3200**

COVERAGE	90° x 40° (W), 60° x 40° (L)
TYPICAL DISTANCE	near field, 15 - 20 m
TOTAL POWER HANDLING	3000 W RMS
TOTAL POWER DELIVERY	3800 W (@ 4 Ohm)

7 MUSICIANS, LIVE BANDS, DANCE FLOORS, CORPORATE EVENTS, SMALL FOH, THEATRES

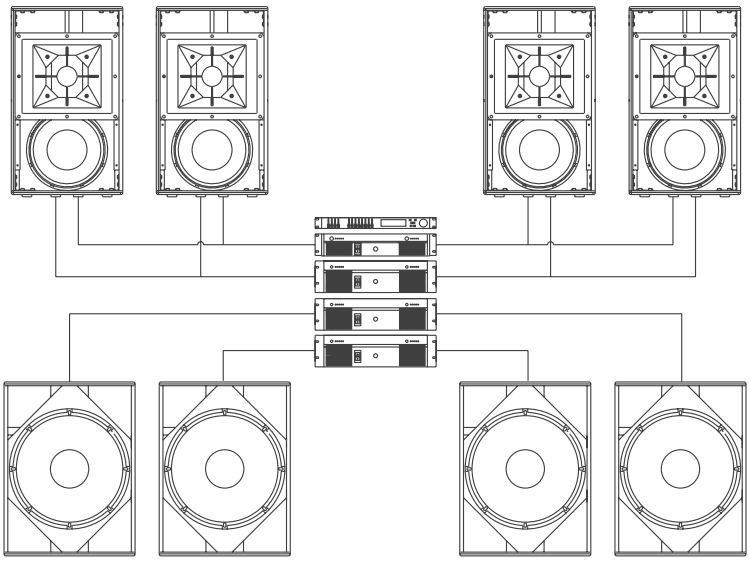


SPEAKERS
2 x C5215 - 2 x S8018 subwoofers

ELECTRONIC
1 x digital crossover 4 in 8 out, equalizer, delay line, limiter, model **DX4008**
1 x stereo power amplifier, model **HC2000**
1 x stereo power amplifier, model **HC3200**

COVERAGE	90° x 40° (W), 60° x 40° (L)
TYPICAL DISTANCE	near field, 15 - 20 m
TOTAL POWER HANDLING	3000 W RMS
TOTAL POWER DELIVERY	3800 W (@ 4 Ohm)

8 LIVE BANDS, LIVE CLUBS, DANCE FLOORS, FOH, THEATRES

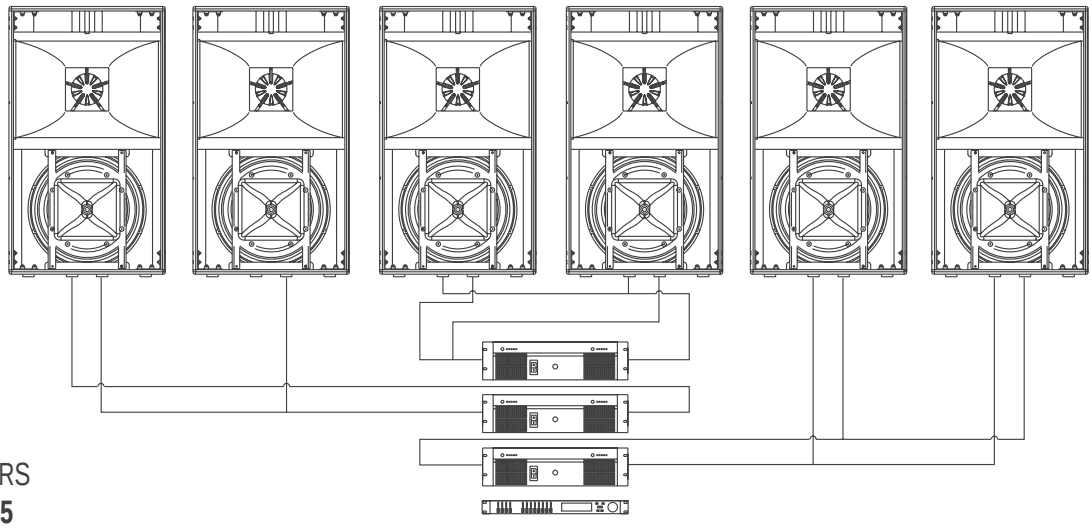


SPEAKERS
4 x H1312 - 4 x S8018 subwoofers

ELECTRONIC
1 x digital crossover 4 in 8 out, equalizer, delay line, limiter, model **DX4008**
1 x stereo power amplifier, model **HC2000**
3 x stereo power amplifiers, model **HC3200**

COVERAGE	120° x 60°
TYPICAL DISTANCE	mid field, 25 – 35 m
TOTAL POWER HANDLING	7600 W RMS
TOTAL POWER DELIVERY	8200 W (@ 4 Ohm)

9 ARENAS, SPORT HALLS, CENTRAL CLUSTERS

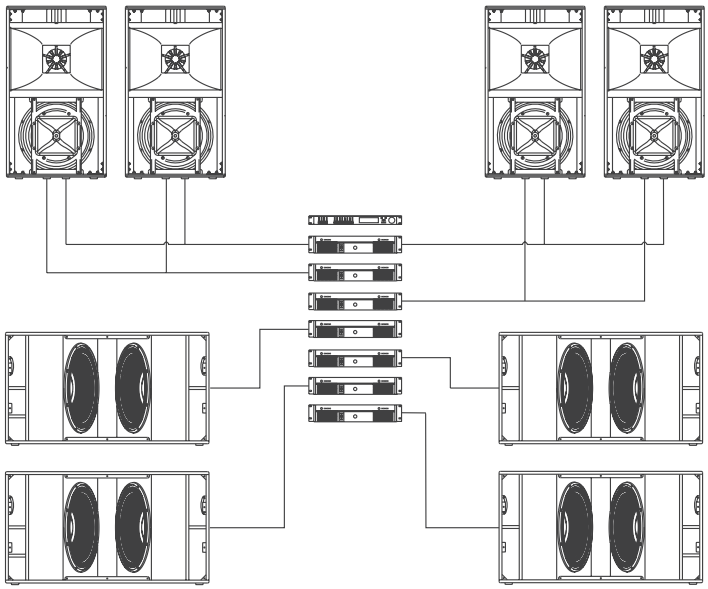


SPEAKERS
6 x H1315

ELECTRONIC
1 x digital crossover 4 in 8 out, equalizer,
delay line, limiter, model **DX4008**
3 x stereo power amplifiers, model **HC3200**

COVERAGE	360° x 40°
TYPICAL DISTANCE	mid - long field, 30 - 45 m
TOTAL POWER HANDLING	7800 W RMS
TOTAL POWER DELIVERY	6600 W (@ 4 Ohm)

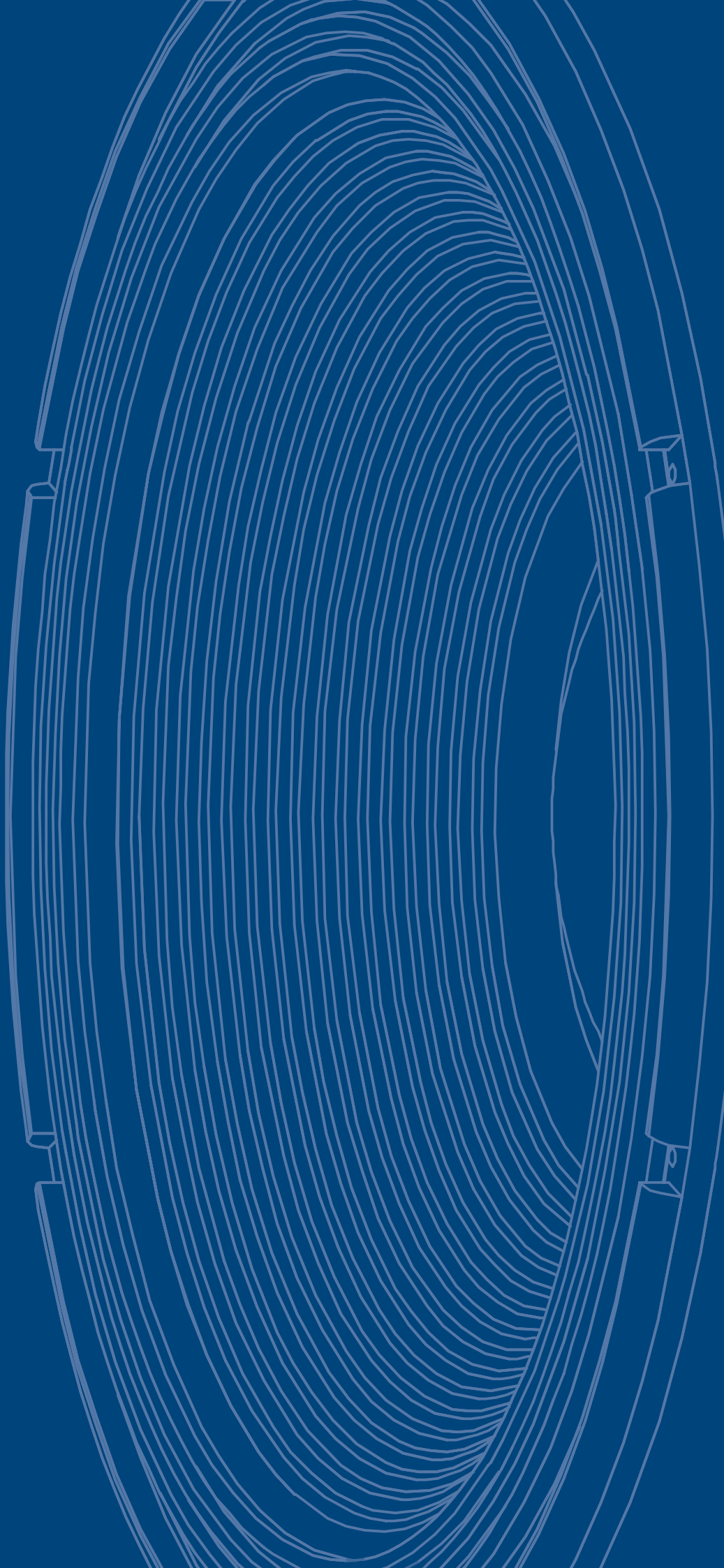
10 FOH FOR CONCERTS, LARGE DANCE FLOORS



SPEAKERS
4 x H1315 - 4 x S 8028 subwoofers

ELECTRONIC
1 x digital crossover 4 in 8 out, equalizer,
delay line, limiter, model **DX4008**
7 x stereo power amplifier, model **HC2000**

COVERAGE	120° x 40°
TYPICAL DISTANCE	mid - long field, 30 – 45 m
TOTAL POWER HANDLING	11200 W RMS
TOTAL POWER DELIVERY	14000 W (@ 4 Ohm)



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