

# OUR COMPANY



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 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.





During the last ten years RCF transitioned into the forefront of active loudspeaker technology, from the introduction of the original ART series to many prominent active products conceived and designed in our laboratories. We have over the years grown to understand the best ways to use the extra degree of freedom that an active system offers and in interpreting how this technology affects the transducer design. 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 possess that ensures the quality of our products plus placing RCF as the market leaders in True Active Loudspeaker Technology and transducer development.

#### RCF THE TRANSDUCER INNOVATORS

The RCF loudspeaker line incorporates a vast range of transducers covering the entire audio spectrum. We design our transducers to optimise the relationship between the purity of sound, combining the absence of distortion and the ability to withstand high power levels over a long period of time.

RCF develops advanced transducer technology including the application of high-tech materials such as carbon fibre, damped titanium, Kevlar® and Mylar® hybrids. With over 50 years of design and manufacturing experience in the market, RCF have been instrumental in technological inventions such as: - "carbon fibre cone moulding", "double silicon spiders", "inside/outside" voice coil winding and compression driver topology, "edge wound" voice coil manufacturing and pure titanium diaphragm forming. Our latest developments have resulted in utilising state of the art Neodymium magnetic materials and Direct Drive Voice Coil Assembly.

RCF active and passive speaker systems take advantage of our proprietary transducer technologies, achieving the optimum blend between state of the art components and innovative, specific designed electronics.



## Pure Titanium DIAPHRAGM

### PURE TITANIUM DIAPHRAGM

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.



### 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.



### 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.



### VOICE COIL

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.



### 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.

# OUR



### LICC LOW IMPEDANCE COMPENSATED CROSSOVER

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.



# ARTSERIES

*For natural sound and clarity, nothing comes close  
– when you come to audition an ART you will know  
why we moved heaven and earth to get the perfect sound –  
so that you can.*

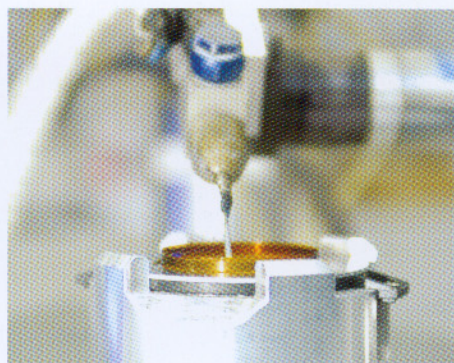
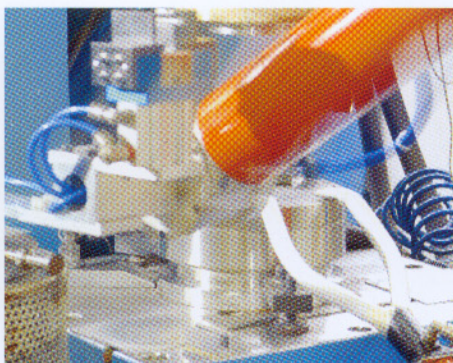
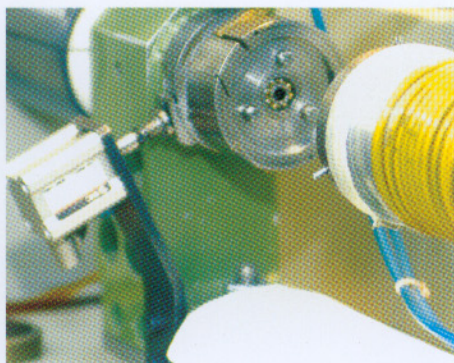
## THE PHILOSOPHY OF ART

ART was originally conceived way back in 1996. The brief was a tough one. To create perfect sound. Moreover, the speaker enclosures were to be portable, lightweight and strong enough to withstand every day use. Using the latest "Advanced Resource Technology".

The brief remains the same but with even more exacting challenges. Portable and even lighter in weight systems were a must, plus the demands from Musicians for improved vocal clarity and definition.

To achieve this RCF has taken the numerous new technological advances in our own transducer developments along with designing new high efficiency "True Active Extended Dynamics" TAED amplifier technology. Our new RCF Precision Series of light in weight Neodymium compression drivers with advanced phase plug technology and high power ceramic woofers provide this goal.





# TECHNOLOGIES



## TAED AMPLIFIER TECHNOLOGY

RCF True Active Extended Dynamic amplifier technology is a result of nearly ten years at the forefront of active speaker design and manufacture. The result is the perfect match of amplifier to transducer, RCF is able to achieve this because quite simply we design and manufacture directly ALL the ingredients.

If you are able to increase the effective dynamic range of a loudspeaker system this will immediately provide improved sonic accuracy, voice clarity, depth and resolution of the audio signals.

Our new generation of active amplifier modules are designed with a new "Double Wave" Limiting System that apart from giving improved transducer protection - guarantees the full use of the true dynamic range of the power amplifier.

This in turn dramatically reduces distortion levels being delivered to the systems transducers.

## PRODUCT DESCRIPTION ICONS

To improve the understanding of our catalogue and help our customer in easier and immediate choice of the right product, we have created easy description icons that represent the main features of our products.



**CAR, VAN, TRUCK ICON:** helps you in understanding size and portability of the product.



**WATT ICON:** represents the total amplifier power for active speakers or power handling for passive speakers.



**SPEAKER VISUAL ICON:** describe the number of ways and size of transducers.



**BALTIC BIRCH (PP COMPOSITE) ICON:** describes the cabinet material, Baltic birch or polypropylene composite plastic.



**POLE MOUNT ICON:** represents if the product is pole mountable or if the subwoofer has a pole cap.



**FLYING HARWARE ICON:** represents if the product offers standard flying hardware.







# ART 312A

SERIES →

**ART 312-A is the optimum choice for live sound situations where an exceptional full range, outstanding bass reproduction and accurate high frequency delivery is required. The ART 312-A is also suitable for monitoring applications.**

RCF ART 312-A is an active, wide dispersion 2 way sound reinforcement speaker. It integrates a high power 350 Watt amplifier, a complete electronic processor section and RCF low distortion, high power transducers. The result is a compact, high power accurate system, unique in its class for clarity and low distortion.

The new 12" inch woofer is the result of the latest refinement in years of RCF experience in compact 2 way speakers, resulting in a fast and accurate reproduction of the midbass frequency range and controlled deep bass.

The compression driver uses a new 1.5" titanium dome in front of a low compression, optimised geometry and radial phase plug. This innovative design is powered from a high flux neodymium magnet and offers a very open and natural midrange sound and extreme precision in high frequencies reproduction.

A generous 2 step class H design is used to power the low frequencies and the compression driver amplifier is a warm and clear class AB design.

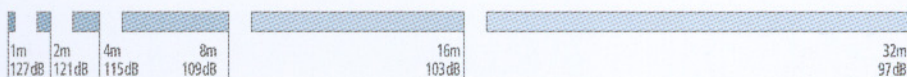
The input section presents a XLR and Jack input connector that is switchable from microphone to line levels. A master volume control plus a useful XLR loop-through link guarantees the best versatility. The processor section includes active crossover, system equalization, transducer phase alignment and limiter and protection functions. The system is visually controlled from 4 status LEDs.

All components are housed in a strong, lightweight, polypropylene composite enclosure. The woofer and compression driver throat are protected from a strong, powder coated, metal grille. The cabinet shape is perfect for monitoring applications. The cabinet features four M10 threaded fly points, a 35 mm internal pole mount facility, two side handles and a ergonomic top handle design.



## FEATURES

- ▀ 350 watt Monolithic bi-amplification, 300 watt low frequency and 50 watt high frequency power
- ▀ 127 dB max SPL
- ▀ Wide dispersion, 90 x 60 low distortion, constant directivity horn
- ▀ 12" high power woofer, 64mm edge wound aluminium coil
- ▀ 1" neodymium, titanium dome, high frequency driver
- ▀ Electronic equalization, phase alignment, limiter and protection
- ▀ Mic/Line XLR and Jack input, XLR signal output
- ▀ 2 side handles and 1 comfort designed top handle for easy transportation and positioning
- ▀ Four M10 fly points and built in pole mount adaptor
- ▀ Optional Infrared remote control for volume, mute and Eq adjustment



Pure Titanium  
DIAPHRAGM

TAED

NEODYMIUM  
MAGNET



350  
W

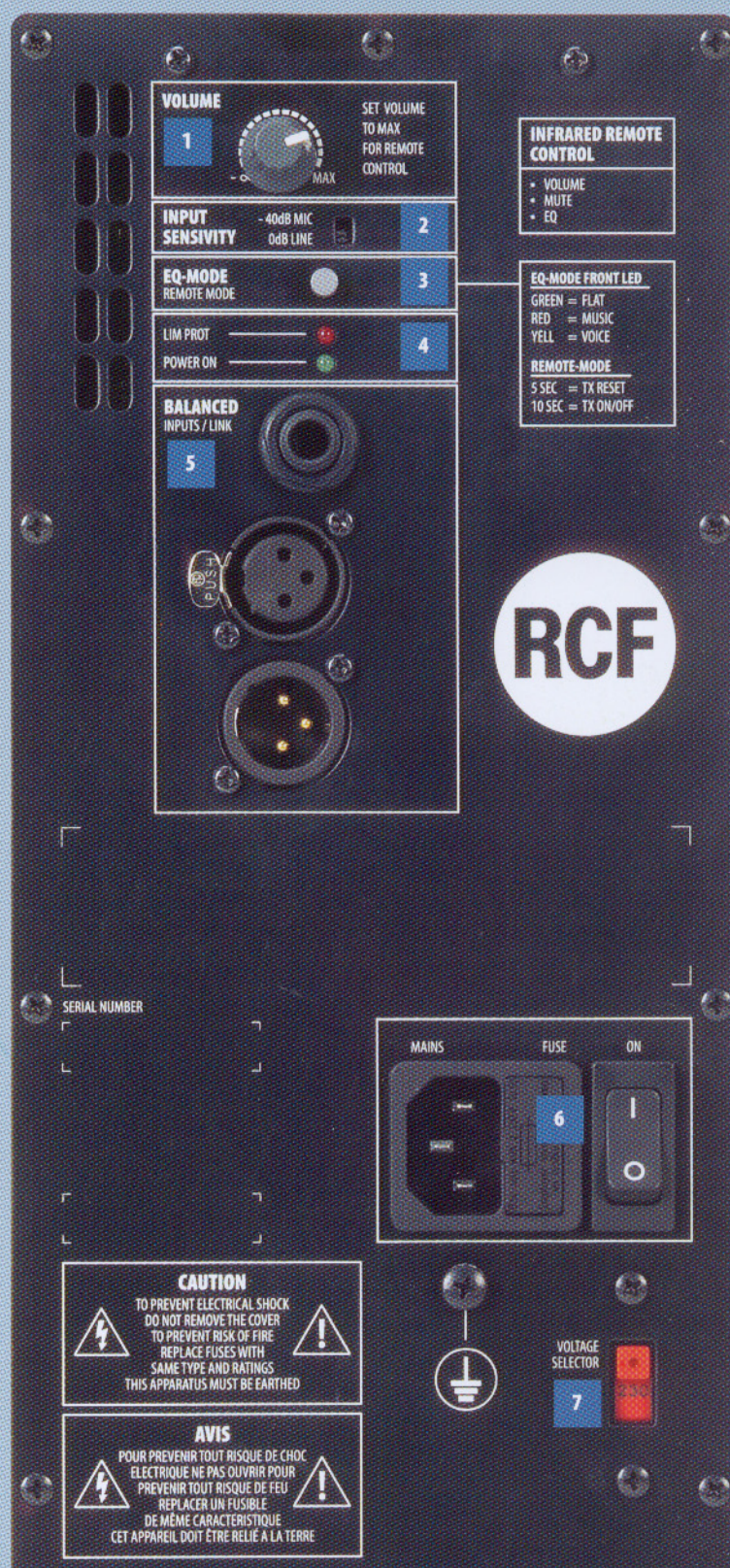
1"  
12"





The new Art amplifier input panel:

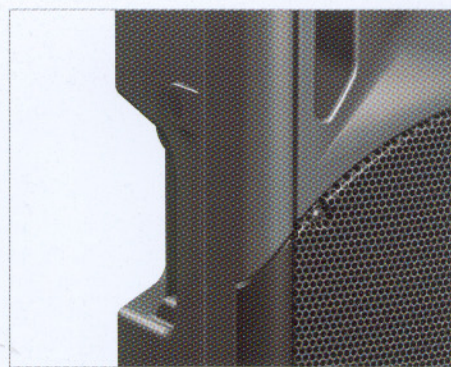
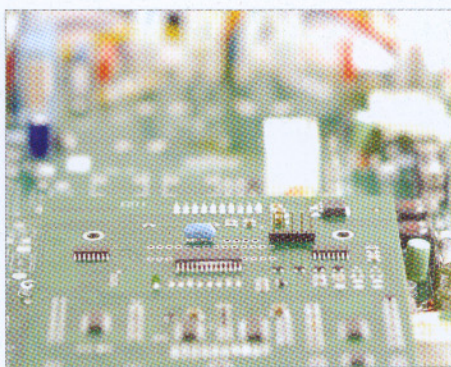
- 1 MIC AND LINE LEVEL CONTROL
- 2 SAFE RECESSED MIC/LINE SWITCH
- 3 GREEN-RED-YELLOW EQUALIZATION MODE LED
- 4 POWER ON AND LIMITER LEDS
- 5 JACK AND FEMALE XLR INPUTS (BAL/UNBAL)  
MALE XLR SIGNAL OUTPUT
- 6 AC LINE CORD CONNECTION  
AND POWER MAIN SWITCH
- 7 AC LINE VOLTAGE SELECTOR



PRODUCT	WOOFER	C. DRIVER	POWER	DIRECTIVITY	MAX SPL
ART 312-A	12"	1"	350 W	90 X 60	127 dB
ART 315-A	15"	1"	350W	90 X 60	128 dB
ART 322-A	12"	2"	400 W	90 X 60	128 dB
ART 325-A	15"	2"	400 W	90 X 60	129 dB
ART 500-A	15"	2"	500 W	80 X 60	129 dB
ART 315	15"	1"	300 W	90 X 60	128 dB
ART 705-AS	15"	—	800 W	—	130 dB



# ART THE NEXT GENERATION



## COMPONENTS

The woofers used in the new Art 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 applied to the speaker cones, all are optimized for shape and pulp composition.

Our edgewound copper clad aluminium voice coils provide maximum efficiency and high speed for accurate transient response. "Inside /Outside" copper clad aluminium voice coils provide maximum reliability. Our massive magnets offer superior bass control and mid-bass voice presence.

Our state of the art compression drivers are made from neodymium magnetic circuit technology, reaching levels that exceed 2 Kilogauss in the gap. Thanks to RCF's "pure titanium" diaphragms and proprietary high pressure oxygen free moulding technology, we are able to reproduce transparent and accurate high frequencies true in all the audible range.

## AMPLIFIERS

All the new ART models are designed using newly created RCF True Active Extended Dynamics TAED Active Amplifier Technology. Based around 350 watt low and 50 watt high Bi- Amplified monolithic modules, each amplifier has a specific input board and is set-up to optimize the performance in conjunction to the specific transducers in each model.

Each amplifier will give you: Jack and XLR balanced inputs, XLR Output link, Mic/Line selectable Input, switchable Eq Mode (Voice/Music), Optional Remote Control for Volume, Mute and Equalization.



The new Art RC-01 remote control

## CABINETS

Art's polynomial constant directivity horn has virtually the same physical area as the woofer. This means that the driver is perceived to achieve the same output power as the low section with minimum diaphragm excursion, resulting in a well defined, natural and open sound.

The shape of the horn is a unique design able to provide exceptional constant directivity with both the 1" and 2" compression drivers.

Art's bass reflex cabinet is moulded in a special polypropylene composite material resulting from years of experience in plastic cabinet designs, which provide superior stiffness for the weight and excellent low frequency damping.

Each cabinet is equipped with ergonomically designed handles on each side and a comfortable top handle for easy manoeuvrability in every situation.

Four M10 threaded inserts are provided for optional mounting hardware in Installed Sound Applications.





# ART 322A

SERIES

With the perfect blend of the fast, high efficiency transducers, ART 322-A offers an extremely linear response and precise, deep low frequency control. The ideal cabinet for main front of house PA and monitoring, ART 322-A is the perfect solution where the power of a 2" compression driver is required for longer throw applications in larger venues.

RCF ART 322-A is an active, wide dispersion 2 way sound reinforcement speaker. It integrates a high power 400 Watt amplifier, with a complete electronic processor section and RCF Precision Series low distortion, high power transducers. The result is a compact, high power accurate system, incredible for linearity and vocal intelligibility.

This new high power 12" inch woofer is the result of the latest refinement in years of RCF experience in compact 2 way speaker manufacturing, resulting in a fast and accurate reproduction of the midbass frequency range and tight deep bass. Features a 3" inside/outside voice coil to minimize power compression and extend the life of this product.

The compression driver uses a 0.05 mm pure titanium dome featuring a complex geometry suspension and Direct Drive coil. This innovative design is powered from a massive high flux neodymium magnet and an edge wound 64 mm aluminium voice coil. This unique driver offers a

transparent midrange sound and extreme fidelity in high frequencies reproduction.

A generous 2 step class H TAED amplifier design is used to power the low frequencies and the compression driver amplifier is a warm and clear class AB design. The input section offers a XLR and Jack input connector that is switchable from microphone to line levels. A master volume knob and a useful XLR loop-through link guarantee the best versatility. The processor section includes active crossover, system equalization, transducer phase alignment, limiter and protection functions. The system is visually monitored from 4 status LEDs.

All components are housed in a strong, lightweight, polypropylene composite enclosure. Woofer and compression driver throat are protected from a strong, powder coated, metal grille. The cabinet shape is perfect for monitoring applications. The cabinet features four M10 threaded fly points, a 35 mm pole mount adaptor, two side handles and an ergonomic top handle.



## FEATURES

- 400 watt Monolithic bi-amplification, 350 watt low frequency and 50 watt high frequency power
- 128 dB max SPL
- Wide dispersion, 90 x 60 low distortion, constant directivity horn
- 12" high power woofer, 75mm inside/outside aluminium coil
- 2" neodymium, titanium dome, high frequency driver
- Electronic equalization, phase alignment, limiter and protection
- Mic/Line XLR and Jack input, XLR signal output
- 2 side handles and 1 ergonomic top handle for easy transportation and positioning
- Four M10 fly points and built in pole mount adaptor
- Optional Infrared remote control for volume, mute and Eq adjustment



Pure Titanium  
DIAPHRAGM

TAED

NEODYMIUM  
MAGNET

IN | OUT  
TECHNOLOGY

DIRECT  
DRIVE





# ART 315A

SERIES →



## FEATURES

- 350 watt Monolithic bi-amplification, 300 watt low frequency and 50 watt high frequency power
- 128 dB max SPL
- Wide dispersion, 90 x 60 low distortion, constant directivity horn
- 15" high power woofer, 64mm edge wound aluminium coil
- 1" neodymium, titanium dome, high frequency driver
- Electronic equalization, phase alignment, limiter and protection
- Mic/Line XLR and Jack input, XLR signal output
- 2 side handles and 1 comfortable top handle for easy transportation and positioning
- Four M10 fly points and built in pole mount adaptor
- Optional Infrared remote control for volume, mute and Eq adjustment



RCF ART 315-A is an active, wide dispersion 2 way sound reinforcement speaker. It integrates a high power 350 Watt amplifier, a complete electronic processor section and RCF low distortion, high power transducers. The result is a compact, high power accurate system, unique in his class for clarity and low distortion.

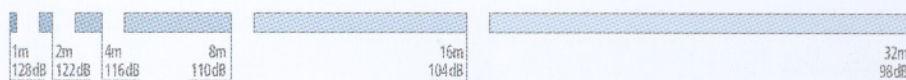
The new 15" inch woofer is the result of the latest refinement in years of RCF experience in compact 2 way speakers, resulting in an accurate reproduction of the midbass frequency range and a tight punchy bass.

The compression driver uses a new 1.5" titanium dome in front of a low compression, optimised geometry, radial phase plug. This innovative design is powered from a high flux neodymium magnet offering a very open and natural midrange sound with extreme precision in high frequency reproduction.

A generous 2 step class H design is used to power the low frequencies and the compression driver amplifier is a warm and clear class AB design.

The input section presents a XLR and Jack input connector that is switchable from microphone to line levels. A master volume control and a useful XLR loop-through link guarantee the best versatility. The processor section includes active crossover, system equalization, transducer phase alignment, limiter and protection functions. The system is visually monitored from 4 status LEDs.

All components are housed in a strong, lightweight, polypropylene composite enclosure. Woofer and compression driver throat are protected from a strong, powder coated, metal grille. The cabinet features four M10 threaded fly points, a 35 mm stand adaptor plus two side handles and an ergonomic top handle.



Pure Titanium  
DIAPHRAGM

TAED

NEODYMIUM  
MAGNET





# ART 500A

SERIES →

**ART 500-A is the milestone in ART series evolution. The careful acoustic design, no compromise transducers and a unique, patent pending, composite cabinet make ART 500-A the preferred tool of many professionals. Perfect in live sound reinforcement and reliable installed situations.**

RCF ART 500-A is a 2 way active system offering substantial power for a variety of professional applications that include primary sound reinforcement and supplementary fill for larger systems. It integrates a high power 500 Watt amplifier, a complete electronic processor section and a premium RCF low distortion, high power transducer. The result is a compact, high power accurate system, unique in his class for clarity and low distortion.

The 15" inch woofer, thanks to its 3" edge wound aluminium coil and a massive magnetic structure guarantee a fast and accurate midbass frequency range a powerful bass reproduction.

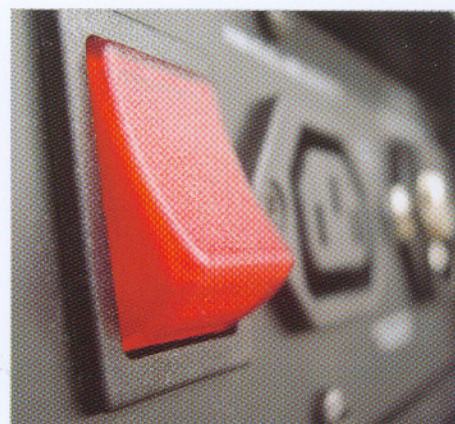
The compression driver uses a 0.05 mm titanium dome featuring a vented suspension and is powered from a massive high flux ceramic magnet and an edge wound 75 mm aluminium voice coil. This top class driver offers a high output, transparent midrange sound and clarity in high frequencies reproduction. The polynomial horn features a ring-mode

suppression design to deliver controlled coverage at the highest sonic purity.

A 2 step class H Amplifier design is used to power the low frequencies and the compression driver amplifier is a powerful and clear class AB design.

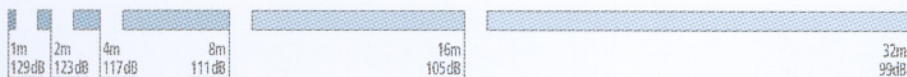
The input section offers an XLR input connector that is switchable from microphone to line levels. A master volume control and a useful XLR loop-through link guarantee the best versatility. The processor section includes active crossover, system equalization, transducer phase alignment, limiter and protection functions.

All components are housed in a rigid polypropylene composite enclosure that is further reinforced with two internal 15 mm thick plywood panels. The woofer is protected by a powder coated, metal grille. The cabinet features four M10 threaded fly points, a 35 mm pole mount adaptor and two side handles.



## FEATURES

- 500 watt Monolithic bi-amplification, 400 watt low frequency and 100 watt high frequency power
  - 129 dB max SPL
  - Wide dispersion, 80 x 60 low distortion, constant directivity horn
  - 15" high efficiency woofer, 75mm edge wound aluminium coil
  - 2" titanium dome, high frequency driver
  - Electronic equalization, phase alignment, limiter and protection
  - Mic/Line XLR input, XLR signal output
  - 2 side handles for easy transportation and positioning
  - Four M10 fly points and pole mount adaptor
- Wood reinforced polypropylene enclosure



Pure Titanium  
DIAPHRAGM

3"  
VOICE COIL



500  
W

2"  
15"





# ART 325A

SERIES



## FEATURES

- 400 watt Monolithic bi-amplification, 350 watt low frequency and 50 watt high frequency power
- 129 dB max SPL
- Wide dispersion, 90 x 60 low distortion, constant directivity horn
- 15" high power woofer, 75mm inside/outside aluminium coil
- 2" neodymium, titanium dome RCF Precision Series high frequency driver
- Electronic equalization, phase alignment, limiter and protection
- Mic/Line XLR and Jack input, XLR signal output
- 2 side handles and 1 ergonomic top handle for easy transportation and positioning
- Four M10 fly points and built in pole mount adaptor
- Optional Infrared remote control for volume, mute and Eq adjustment



ART 325-A is the reference speaker in the new ART series. Ideal in live sound and installed situations, it is remarkable for deep bass punch, clean midrange output and accurate high frequencies. Offering the ultimate intelligibility in vocal and Recorded Music, from live sound to playback, from monitoring to fixed installation applications.

RCF ART 325-A is an active, wide dispersion 2 way sound reinforcement speaker. It integrates a high power 400 Watt amplifier, a complete electronic processor section and RCF Precision Series low distortion, high power transducer. The result is a compact, high power accurate system, unique in its class for linearity and low distortion.

This new high power 15" inch woofer is the result of the latest refinement in years of RCF experience in compact 2 way speaker manufacturing, providing a fast and accurate reproduction of the midbass frequency range and tight punchy bass. Features a 3" inside/outside voice coil to minimize power compression and extend the life of this product.

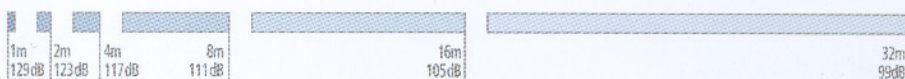
The compression driver uses a 0.05 mm pure titanium dome featuring a complex geometry suspension and Direct Drive coil. This innovative design is powered from a massive high flux neodymium magnet and an edge wound 64 mm aluminium voice coil. This unique driver offers a

transparent midrange sound and an extreme fidelity in high frequency reproduction.

A generous 2 step class H TAED design is used to power the low frequencies and the compression driver amplifier is a warm and clear class AB design.

The input section offers a XLR and Jack input connector that is switchable from microphone to line levels. A master volume control and a useful XLR loop-through link guarantee the best versatility. The processor section includes active crossover, system equalization, transducer phase alignment, limiter and protection functions. The system is visually monitored from 4 status LEDs.

All components are housed in a strong, lightweight, polypropylene composite enclosure. Woofer and compression driver throat are protected from a strong, powder coated, metal grille. The cabinet features four M10 threaded fly points, a 35 mm pole mount adaptor, two side handles and an ergonomic top handle.





# ART 315

SERIES →



## FEATURES

- » 300 watt power handling
- » 128 dB max SPL
- » Wide dispersion, 90 x 60 low distortion, constant directivity horn
- » 15" high power woofer, 64mm edge wound aluminium coil
- » 1" neodymium, titanium dome, high frequency driver
- » LICC low impedance compensated crossover, electronic driver protection
- » 2 x NL4 Speakon® connector
- » 2 side handles and 1 ergonomic top handle for easy transportation and positioning
- » Four M10 fly points and pole mount adaptor



ART 315, ideal for live sound situations, offer the same careful acoustic design and innovative transducers used in the active series. Very good punch in bass reproduction and extremely accurate high frequencies, ART 315 is the perfect solution for playback and installation situations where an external amplifier is required.

RCF ART 315 is a wide dispersion, 2 way sound reinforcement speaker. It integrates a high power LICC high level crossover network and RCF low distortion, high power transducers. The result is a compact, high power accurate system, unique in its class for clarity and low distortion.

The new 15" inch woofer is the result of the latest refinement in years of RCF experience in compact 2 way speaker manufacturing, resulting in an accurate reproduction of the midbass frequency range and a tight punchy bass.

The compression driver uses a new 1.5" titanium dome in front of a low compression, optimised geometry, radial phase plug. This innovative design is powered from a high flux neodymium magnet and offers a very open and natural midrange sound and extreme precision in high frequency reproduction.

Our LICC low impedance compensated crossover network featuring lower (than conventional) induction value in series with the woofer offer delay reduction, reduced phase shift and superior transient response. The compression driver is protected by a fast dynamic electronic circuit.

The input section presents 2 x NL4 Speakon® connectors offering an easy loop-through link.

All components are housed in a strong, lightweight, polypropylene composite enclosure. Woofer and compression driver throat are protected from a strong, powder coated, metal grille. The cabinet features four M10 threaded fly points, a 35 mm pole mount adaptor two side handles and an ergonomic top handle.



Pure Titanium  
DIAPHRAGM

NEODYMIUM  
MAGNET

LICC LOW IMPEDANCE  
COMPENSATED CROSSOVER



# ART 705AS

## SERIES

The ART 705-AS is an extremely compact high output active subwoofer system. RCF's Research and Development engineers have developed a totally new "High Current Capacity" Monolithic amplifier alongside a totally new RCF 15" high power woofer.

The ART 705-AS delivers tight, fast controlled bass response at very high efficiency levels. Offering increased dynamic range. The system re-defines audio subwoofer performance standards.

RCF engineers have developed a new High Current 800 watt class H two step ultra efficient topology amplifier to provide the critical performance demanded by True Active Subwoofers. This design delivers high efficiency and generates minimum thermal losses therefore simplifying the cooling system. The reason for ensuring our amplifier can generate very high current operation is to properly maintain complete control of the woofer especially under "phase shift" conditions.

The ART 705-AS's woofer technology is using new RCF woofer design parameters. We have utilised high temperature polyimide voice coil assemblies with state of the art curing processes plus advanced magnetic structures and efficient cooling systems. The RCF Precision "Inside/ Outside" voice coils assure long term reliability and vastly reduced power compression.

Applications include:

- Small to medium-sized Live and Playback
- Portable PA Systems for Speech and Multimedia
- Mobile DJ
- Fixed Installations

The ART 705-AS is designed to compliment all ART Active and Passive models. It can also be used as an "add-on" to any existing active or passive PA Speaker System.



The new subwoofers stereo input panel:

- 1 COMBO JACK/XLR FEMALE INPUT CONNECTORS (BAL/UNBAL)
- 2 MALE XLR OUTPUT LINK CONNECTORS
- 3 MALE XLR STEREO CROSSOVER OUTPUTS
- 4 RECESSED LINE LEVEL CONTROL
- 5 RECESSED PHASE CONTROL SWITCH
- 6 SELECTABLE CROSSOVER NETWORK CONTROL SWITCH
- 7 4 SYSTEM STATUS LED:





The ART 705-AS is an extremely compact high output active subwoofer system. RCF's Research and Development engineers have developed a totally new "High Current Capacity" Monolithic amplifier alongside a totally new RCF 15" high power woofer.

RCF ART 705-AS active subwoofer integrates a high current 800 Watt amplifier, a complete electronic processor section and RCF low distortion, high power woofer. The result is a compact, high power system, unique in its class for output and low distortion.

This new high power 15" inch woofer is the result of the latest refinement in years of RCF experience in compact active subwoofers design and manufacture, resulting in a fast and controlled reproduction of the bass frequency range. Features a 3" inside/outside voice coil to minimize power compression extending the life of this product.

A 2 step class H TAED amplifier design is used to power the system. This high current model provides the correct amount of deliverable power in conjunction with a massive transformer and a multiple bank of capacitors is able to achieve perfect

control of the woofer mass at very high output levels.

The input section presents mono/stereo combo XLR/Jack input connectors and XLR high pass output connectors. A recessed master volume, the phase switch and the selectable crossover frequency switch guarantee outstanding versatility. The processor section includes active system equalization, limiter and protection functions. The system is visually monitored from 4 status LEDs.

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 M10 threaded points for optional speaker kart, a 35 mm pole mount socket, two ergonomic side handles.

## FEATURES

- High current 800 watt class H amplifier
- 130 dB max SPL
- 15" high power woofer, 75mm inside/outside copper coil
- Response down to 40 Hz
- Selectable crossover and high pass outputs, phase switch
- Electronic equalization, limiter and protection
- Mono/Stereo combo XLR/Jack input,
- Mono/Stereo XLR signal output
- Baltic birch compact enclosure and 2 side handles for easy transportation
- Built in pole mount, two M10 points for optional speaker kart



800  
W

15

