ART 712-A

TWO WAY ACTIVE SPEAKER



APPLICATIONS

- Nearfield & portable PA
- Foreground/background PA, distributed PA, frontfill and sidefill
- Houses of worship, video monitoring, retail, clubs, performance theatre, theme parks
- Compact voice reinforcement systems
- Stage monitoring

FEATURES

- 750 Watt digital bi-amplification, 500 Watt Low Frequency and 250 Watt High Frequency Power
- 129 dB max spl
- Wide dispersion 90 x 60 constant directivity horn
- 12" High power neodymium woofer, 3" voice coil
- 1" Titanium dome, neodymium high frequency driver
- Electronic equalization, soft limiter and protection
- Xlr/jack combo input, xlr signal output
- 2 side handles and 1 ergonomic top handle for easy transportation and positioning

RCF ART 712-A is equipped with a new generation of 750 Watt Digital Amplifier, 500 Watt for the woofer and 250 Watt for the compression driver. The result of this is very high output, extremely low distortion and an incredible natural sound. The amplifier presents both XLR/jack (Combo) balanced inputs, XLR output link, volume and a switchable EQ Mode (Flat/ Boost). The amplifier features a solid mechanical aluminium structure which not only stabilize the amplifier during transportation but also assist in the heat dissipation.

All the transducers in the Art 7 Series speakers feature light weight neodymium magnets in order to guarantee a better performance and make for easier transportation. The compression driver uses a 1" throat diameter titanium dome featuring a vented suspension and is powered from a massive high flux neodymium magnet and an edge wound 1,7" aluminium voice coil. This top class driver offers a high output, transparent midrange sound and clarity in high frequencies reproduction.
RCF ART 712-A features a 12" inch woofer that, with a 3" inside-outside aluminium coil and a powerful magnetic structure, guarantees a fast and accurate mid-bass frequency range.
The new loudspeaker design looks aggressive whilst retaining familiar Art ergonomics and is the result of extensive combined functional and acoustic research. The Art 7 Series two-way system cabinets are moulded in a special polypropylene composite material and are designed to dampen down vibrations even at maximum volume settings. The reflex porting has been resized to offer a better efficiency.

ACOUSTICAL SPECIFICATIONS

Frequency response:	50 Hz- 20 Khz
Max SPL:	129 dB
Horizontal coverage angle:	90°
Vertical coverage angle:	60°
Compression driver:	1.0" neo, 44 mm voice coil
Midrange:	-
Woofer:	12" neo, 76 mm voice coil

INPUT SECTION

Input signal (Impedance):	bal/unbal
Input/Output connector:	combo xlr-jack/xlr
Input sensitivity:	+ 4 dBU

PROCESSOR SECTION

Crossover frequencies:	1700 Hz
Protections:	thermal, hf
Sensitivity control:	yes
Limiter:	fast limiter
High pass:	-
Controls:	flat/boost

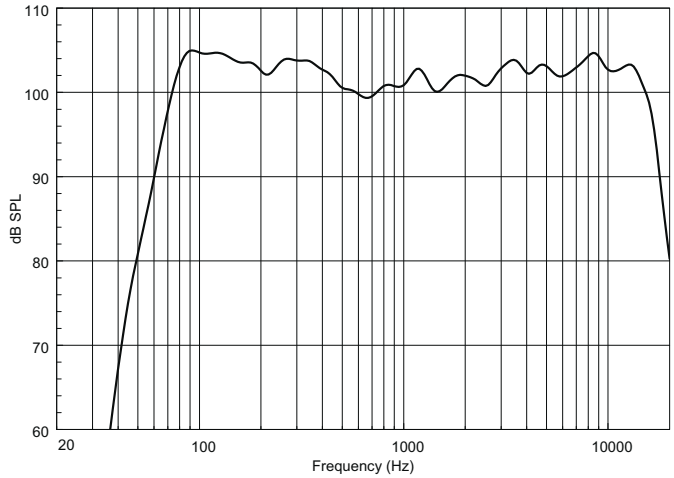
AMPLIFIER

Power supply:	switching 750 Watt
High frequencies:	D / 250 Watt
Mid frequencies:	-
Low frequencies:	D / 500 Watt
Cooling:	convenction/forced
Connection:	VDE

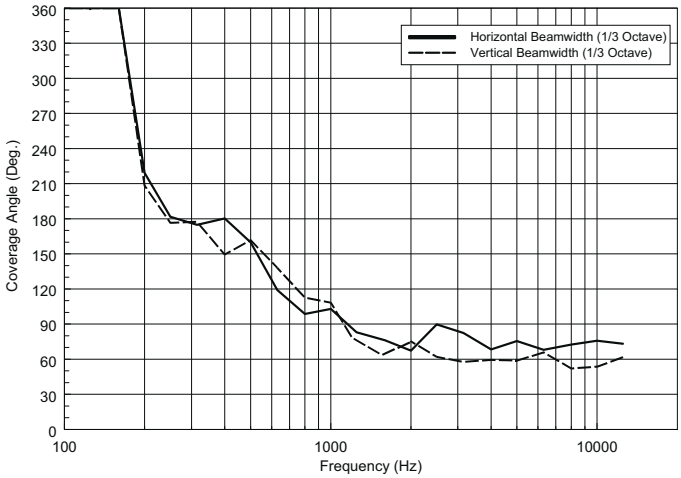
PHYSICAL

Height:	637 mm (25,07")
Width:	384 mm (15,11")
Depth:	363 mm (14,29")
Weight:	17,2 kg (37,91 lbs)
Cabinet:	Composite PP
Hardware:	2 x flying p., pole mount
Handles:	1 top, 2 on side
Pole mount cap	yes
Colour:	Black

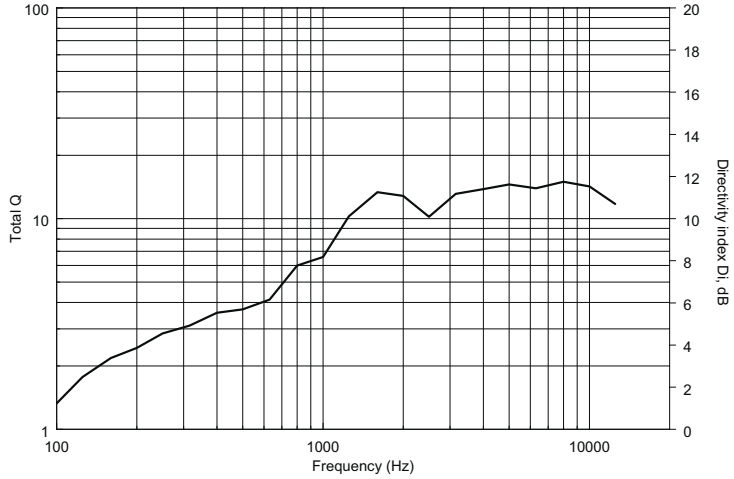
Response



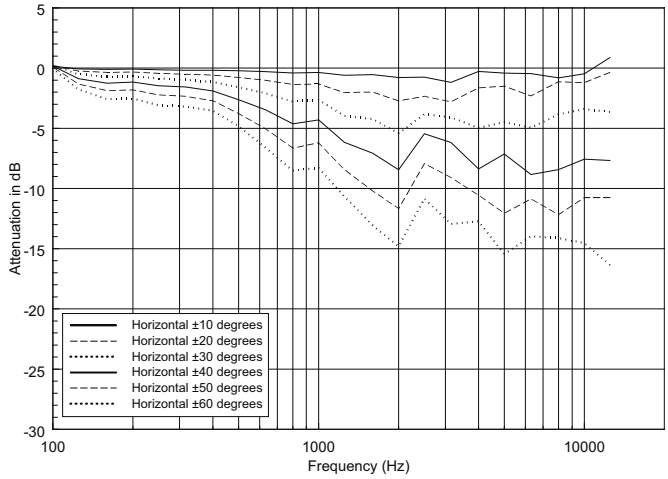
Beamwidth vs. Frequency



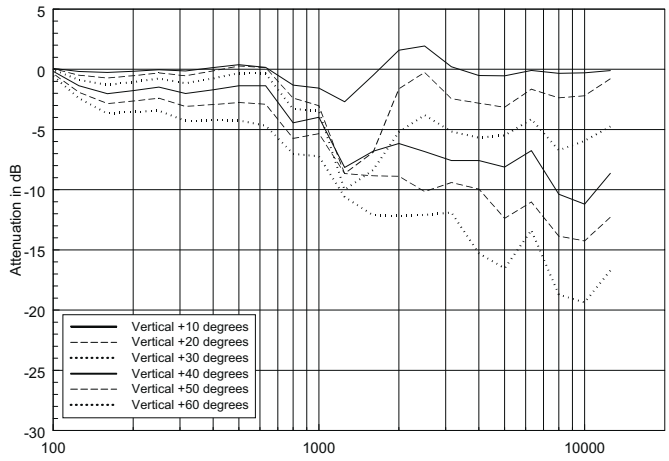
Directivity Index and Q



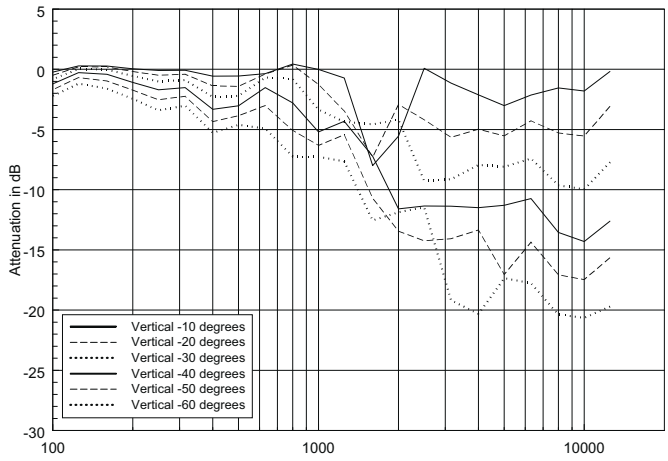
Normalized Horizontal off-axis Response



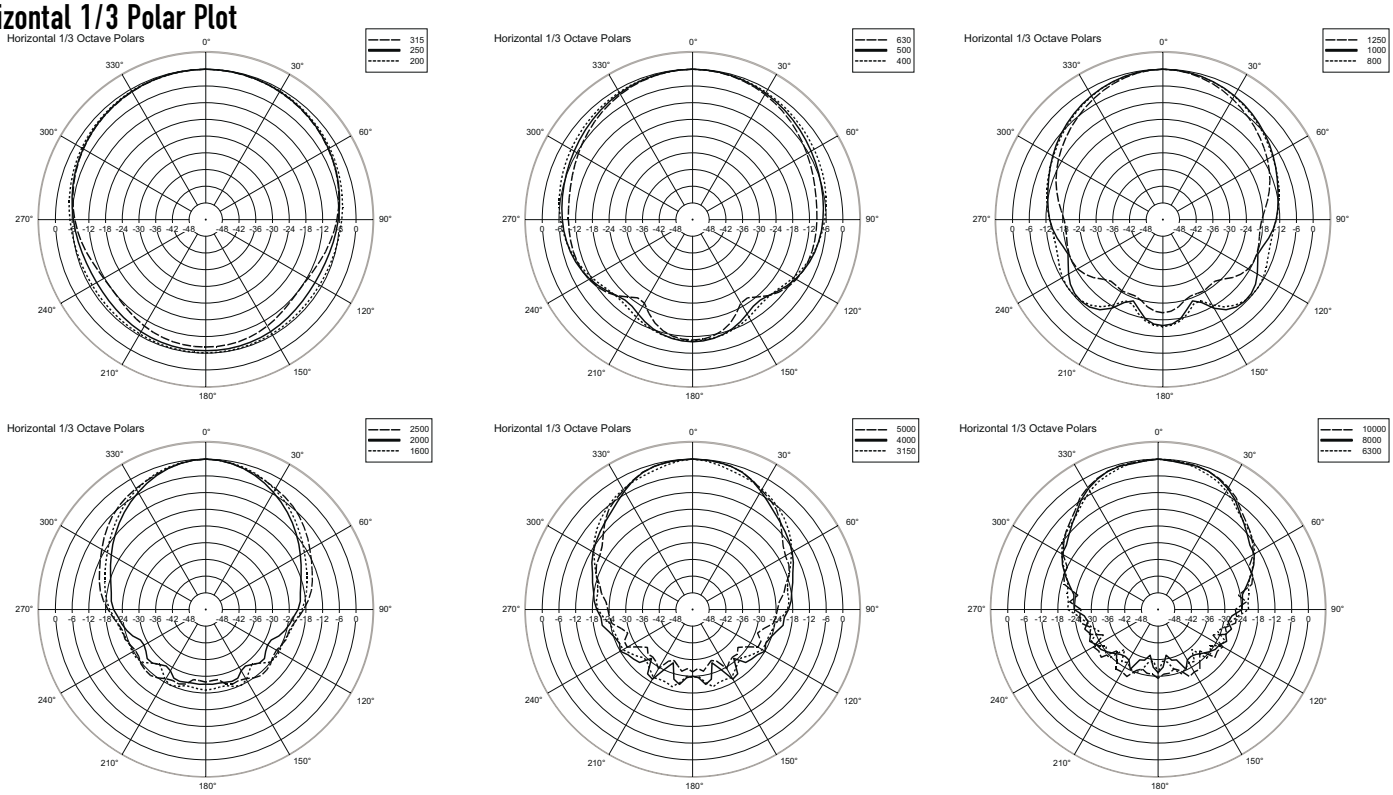
Normalized Vertical off-axis Response. Above the box



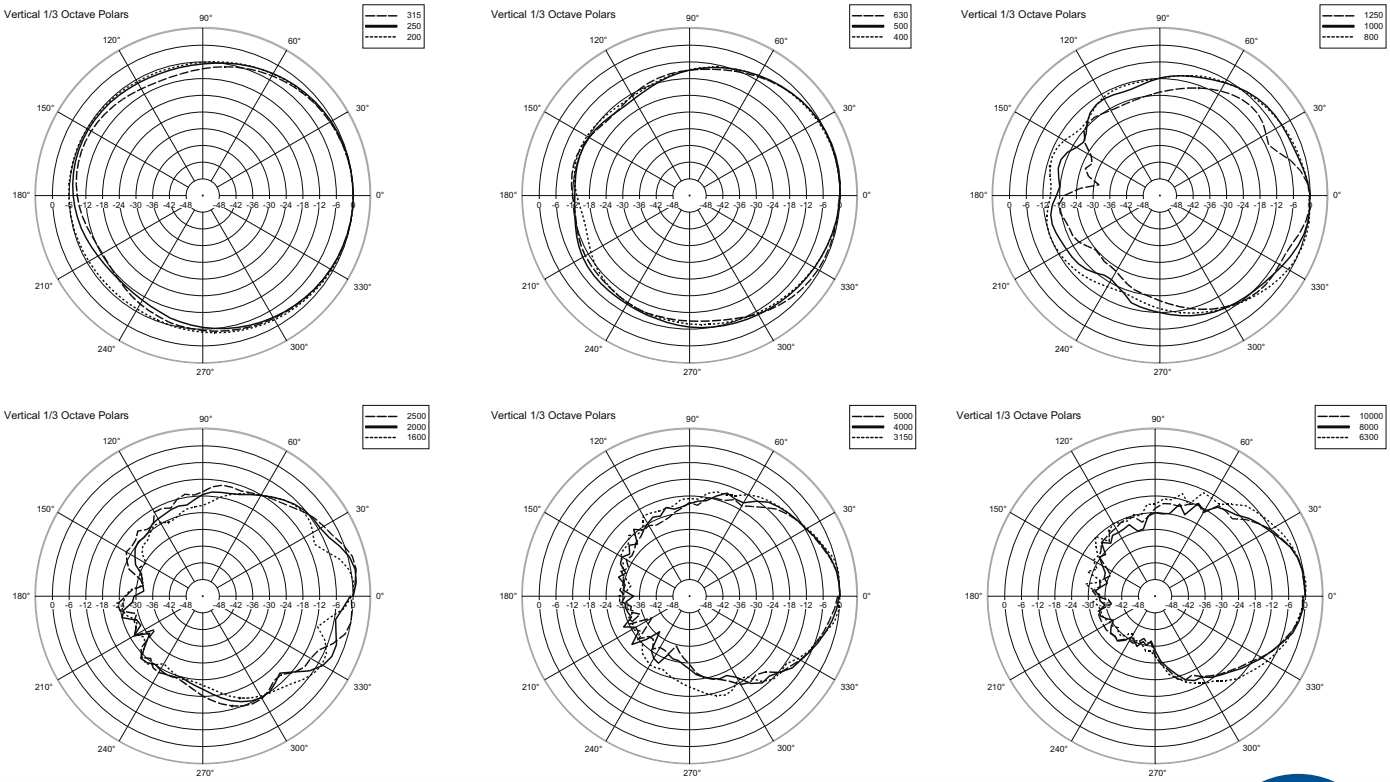
Normalized Vertical off-axis Response. Below the box



Horizontal 1/3 Polar Plot



Vertical 1/3 Polar Plot



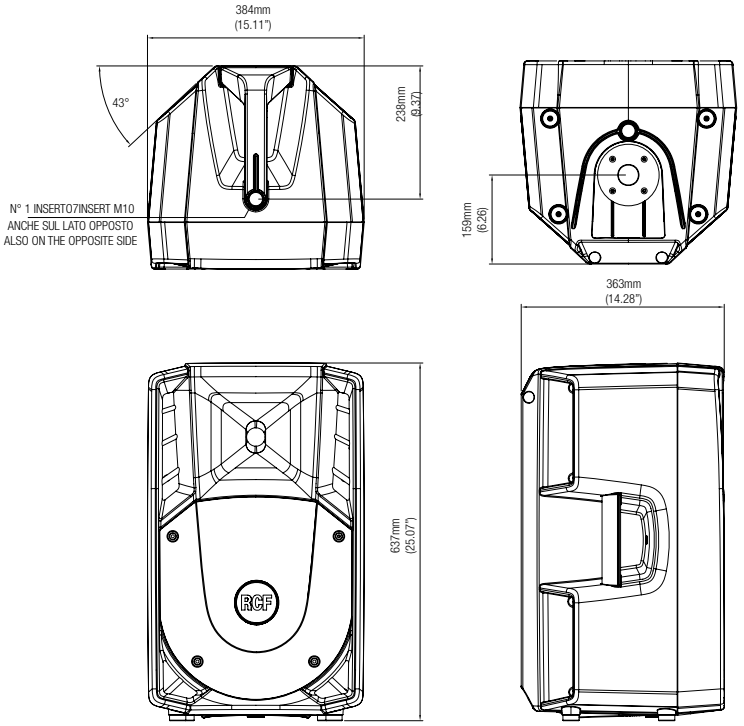
CSI PRODUCT SPECIFICATIONS FOR DESIGNERS, SPECIFIERS, AND CONSULTANTS (ALSO KNOWN AS "A&E SPECIFICATIONS")

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

PART 2 PRODUCTS

2.01 Approved Manufacturer/Product

A. RCF, Via Raffaello 13, 42124, Reggio Emilia, Italy.
B. Model number: ART 712-A



2.02 Design

Configuration:	Two way active speaker
LF Sub-section:	12" neodymium woofer, 76 mm voice coil
MR Sub-section:	-
HF Sub-section:	1,0" neodymium, 44 mm voice coil

2.03 Acoustical Proprieties

Nominal dispersion angle:	90° x 70°
Axial frequency range:	50Hz-20kHz

2.04 Physical Properties

Cabinet:	Composite PP
Rigging inserts:	2 x flying p., pole mount
Color:	Black
Grille:	Custom perforated steel grille with open-cell poly fiber backing
Input Connectors:	Combo xlr-jack
Dimensions (H x W x D):	637 x 384 x 363 mm (25,07" x 15,11" x 14,29")
Weight:	17,2 kg (37,91 lbs.)

2.05 Accessories

AC S260	Steel speaker floor stand with folding base and telescopic rod, tube diameter 35mm. Load capacity up to 60kg, Weight 7.8 Kg, H MIN/MAX 170cm/240cm. Length once folded 123cm
AC S140	Aluminium speaker floor stand with folding base and telescopic rod, tube diameter 35mm. Load capacity up to 40kg, Weight 2.7 Kg, H MIN/MAX 140cm/214cm. Length once folded 107cm
AC PRO-FS	Steel speaker floor stand with folding base and telescopic rod, tube diameter 35mm. Load capacity up to 50kg, Weight 4.5 Kg, H MIN/MAX 137cm/210cm. Length once folded 102cm
AC PRO-LF	Steel professional adapter sleeve for speaker floor stand, tube diametro 35 mm. Load capacity up to 50Kg, Weight 0.7 Kg, H 27.5 cm
AC PRO-PM	Steel pole mount accessory for a satellite speaker on a subwoofer, tube diametro 35 mm. Load capacity up to 35Kg, Weight 2.4 Kg, H MIN/MAX 95cm/137cm
AC EB4X	Kit including No. 4 shouldered 10mm eye bolts
AC PMA	Speaker pole mount
AC ART712 H-BR	Horizontal bracket for ART 712-A and ART 722-A
COVER ART 722	Art cover for ART 712-A, ART 722-A