ART 422-A

TWO-WAY SYSTEM



DESCRIPTION

RCF ART 422-A is an active, wide dispersion 2 way sound reinforcement speaker. It integrates a high power 400 watt digital amplifier, a complete electronic processor section and RCF low distortion, high power neodymium transducers. The system is unique in its class for output and vocal intelligibility.
All the transducers used for the ART 4 Series feature light weight neodymium magnets to guarantee better performances and make for easier transportation. The new 12" neodymium woofer is the result of the latest refinement in year of RCF experience in compact 2 way speakers. Features a 2,5 " voice coil, very high efficiency and controlled bass reproduction.
The new 2" neodymium compression driver with a pure titanium dome developed for the ART 422-A features a complex geometry suspension and direct drive coil offering a transparent midrange sound and extreme fidelity in high frequencies reproduction.
RCF ART 422-A is equipped with a new generation of 400 Watt Digital Amplifier. The result of this is very high output, extremely low distortion and an incredible natural sound. Each amplifier presents both XLR In/Out connectors and a Jack input for the maximum connection versatility. An easy to reach volume knob on the back allows to set the overall volume of the speaker according to its application. A switchable EQ Mode make it easier to select among two different equalisation presets: Extended response switch, which slightly emphasizes the bass response for playback music and low volume applications or Linear response switch, for using the speaker to amplify a live mix. 3 status LEDs – Power / Signal / Status are provided for monitoring the system.
An integrated DSP manages crossover, Eq., soft limiter, compressor and dynamic bass boost.
ART 4 cabinets are moulded on a special polypropylene composite material and are designed to dampen down vibrations even at maximum volume settings. The cabinet shape allows every ART 4 speaker to be used also in stage monitor configuration At the bottom of the speakers a rugged stainless steel pole mount has been provided for deploying the speakers on stands or on subwoofers
The woofer is protected from a strong, powder coated, metal grille. The cabinet features 2 M10 threaded fly points and an ergonomic top handle for easy transportation.

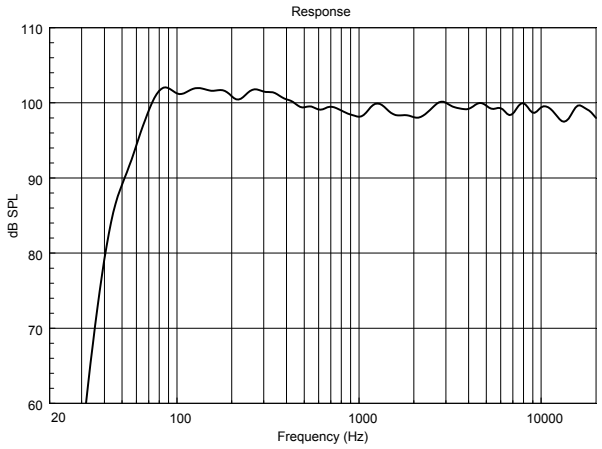
MAIN APPLICATIONS

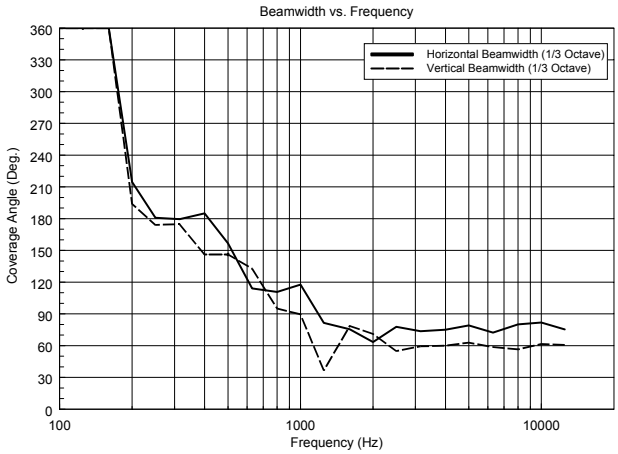
- Live sound reinforcement
- Portable PA
- Frontfill and sidefill
- Houses of worship, auditoriums, retail, clubs, ballrooms, corporate AV, live theatre, theme parks
- Main vocal monitor

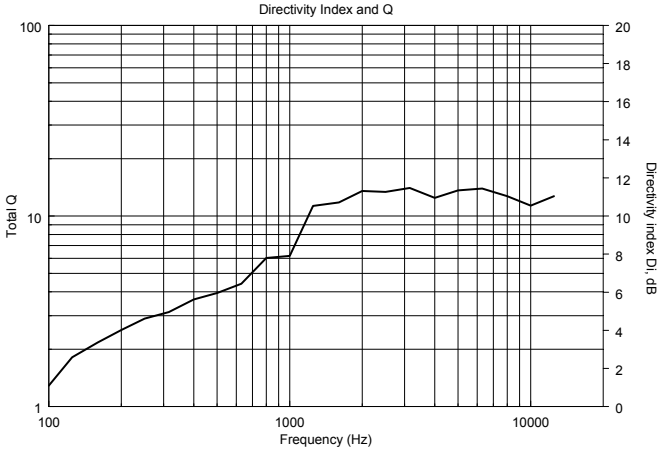
MAIN FEATURES

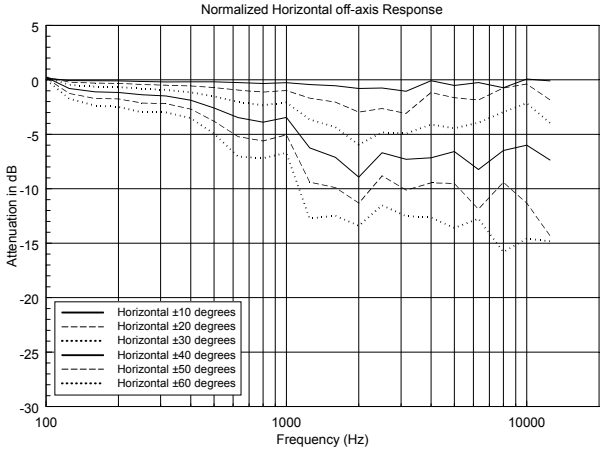
- 400 Watt digital bi-amplification, 300 Watt Low Frequency and 100 Watt High Frequency Power
- 128 dB max spl
- Wide dispersion 90 x 60 constant directivity horn
- 12" High power neodymium woofer, 3" voice coil
- 2" neodymium high frequency driver , 2.5" voice coil
- Electronic equalization, soft limiter and protection
- Xlr/jack combo input, xlr signal output
- 2 side handles and 1 ergonomic top handle for easy transportation and positioning

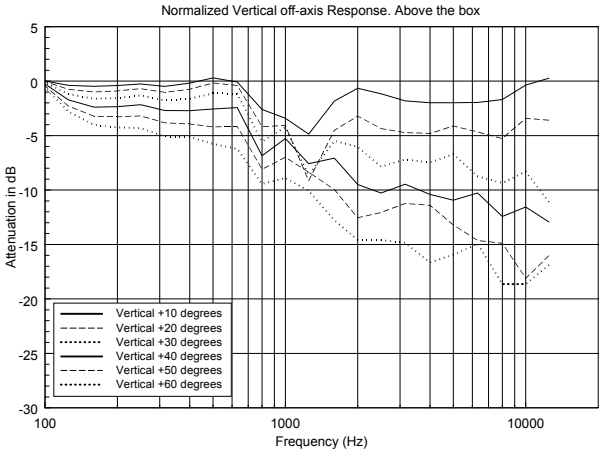
ART 422-A

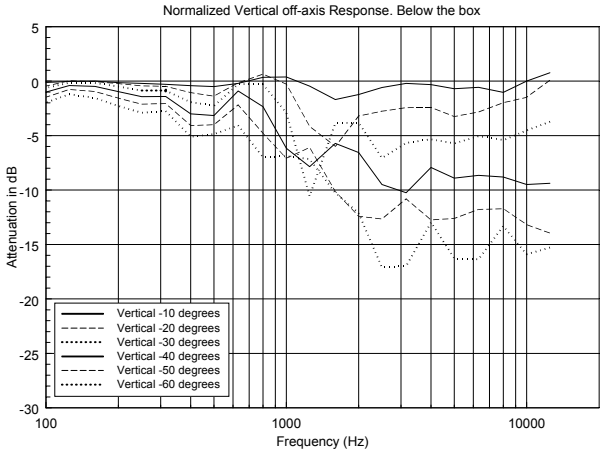

Response
dB SPL
Frequency (Hz)
110
100
90
80
70
60
20
100
1000
10000


Beamwidth vs. Frequency
Horizontal Beamwidth (1/3 Octave)
Vertical Beamwidth (1/3 Octave)
Coverage Angle (Deg.)
Frequency (Hz)
360
330
300
270
240
210
180
150
120
90
60
30
0
100
1000
10000


Directivity Index and Q
Total Q
Directivity index DI, dB
Frequency (Hz)
100
10
1
20
18
16
14
12
10
8
6
4
2
0
100
1000
10000

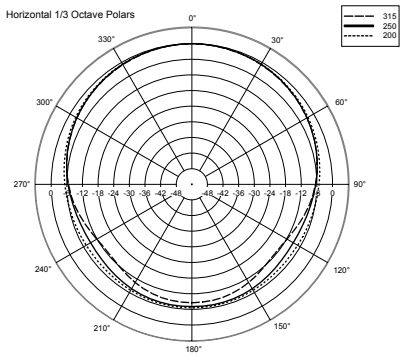

Normalized Horizontal off-axis Response
Attenuation in dB
Frequency (Hz)
Horizontal ±10 degrees
Horizontal ±20 degrees
Horizontal ±30 degrees
Horizontal ±40 degrees
Horizontal ±50 degrees
Horizontal ±60 degrees
5
0
-5
-10
-15
-20
-25
-30
100
1000
10000

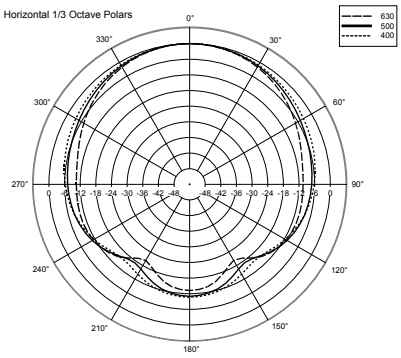

Normalized Vertical off-axis Response. Above the box
Attenuation in dB
Frequency (Hz)
Vertical +10 degrees
Vertical +20 degrees
Vertical +30 degrees
Vertical +40 degrees
Vertical +50 degrees
Vertical +60 degrees
5
0
-5
-10
-15
-20
-25
-30
100
1000
10000

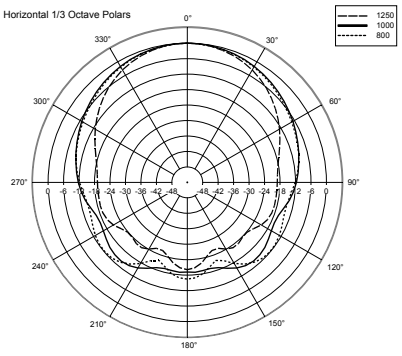

Normalized Vertical off-axis Response. Below the box
Attenuation in dB
Frequency (Hz)
Vertical -10 degrees
Vertical -20 degrees
Vertical -30 degrees
Vertical -40 degrees
Vertical -50 degrees
Vertical -60 degrees
5
0
-5
-10
-15
-20
-25
-30
100
1000
10000

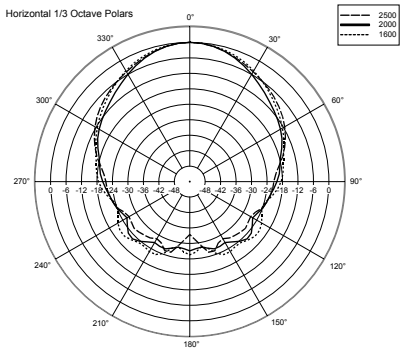
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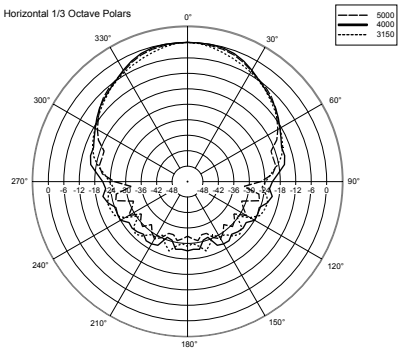
HORIZONTAL 1/3 POLAR PLOT

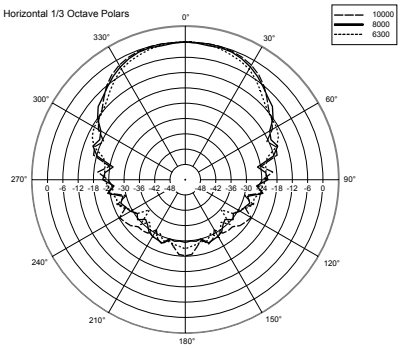




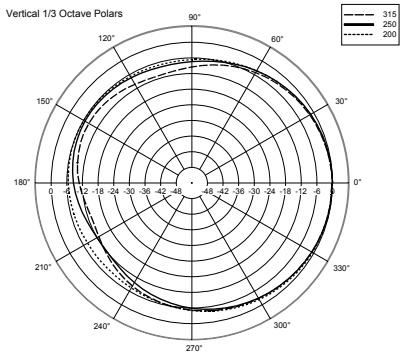


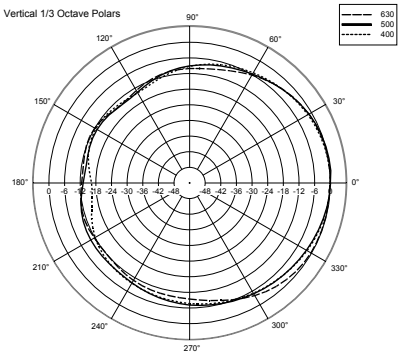


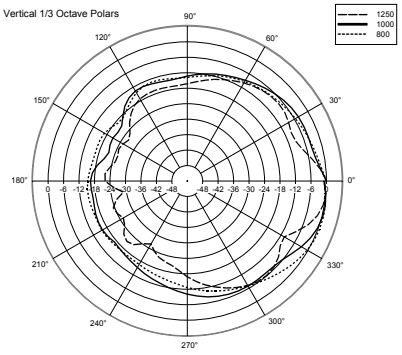


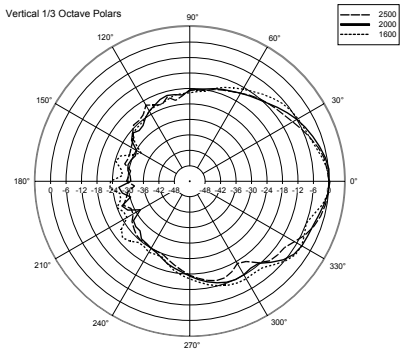


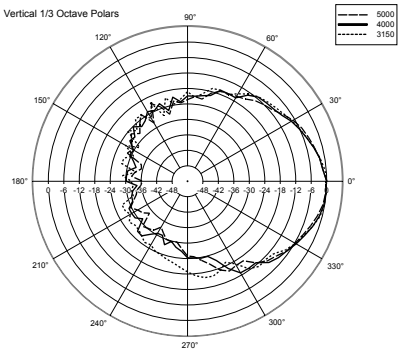
VERTICAL 1/3 POLAR PLOT

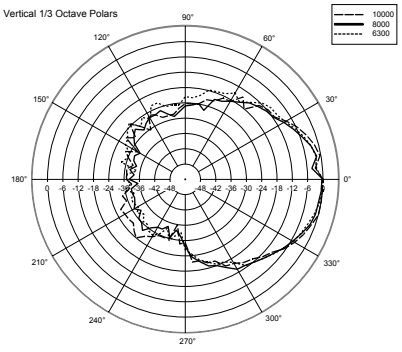












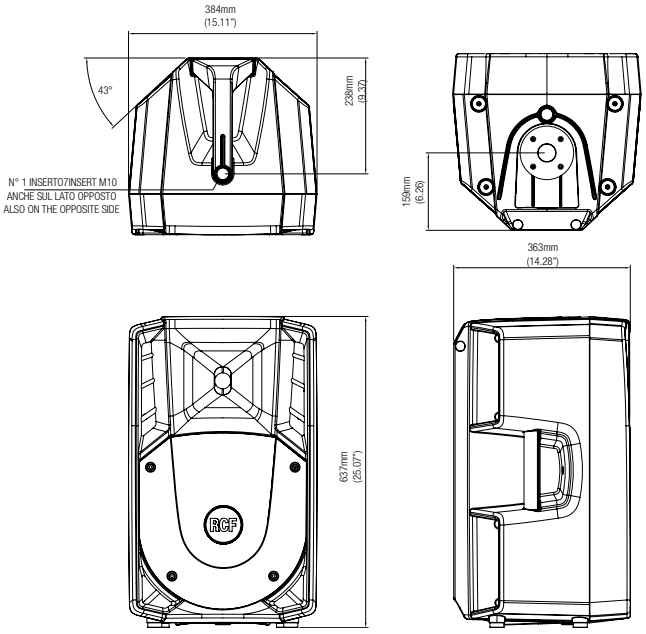
ART 422-A

PART NUMBERS

13000215 - 230VOLT

13000216 - 115 VOLT

DIMENSIONS (All data are in mm)



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 ART722 H-BR	Horizontal bracket for ART 412-A, ART 422, ART 712-A and ART 722-A
Cover ART 722	Art cover for ART 412-A, ART 422, ART 712-A and ART 722-A

1.0-J-F

ACOUSTICAL SPECIFICATIONS

Frequency response:	45 Hz- 20 Khz
Max SPL:	128 dB
Horizontal coverage angle:	90°
Vertical coverage angle:	60°
Compression driver:	2.0" neo, 2.5" voice coil
Midrange:	-
Woofer:	12" neo, 3" voice coil

INPUT SECTION

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

PROCESSOR SECTION

Crossover frequencies:	1300 Hz
Protections:	Themel, HF
Sensitivity control:	yes
Limiter:	soft limiter
High pass:	-
Controls:	flat/boost

AMPLIFIER

Power supply:	switching 400 Watt
High frequencies:	D / 100 Watt
Mid frequencies:	-
Low frequencies:	D / 300 Watt
Cooling:	convection
Connection:	Xlr/jack input, xlr signal output

PHYSICAL

Height:	637 mm (25.07")
Width:	384 mm (15.23")
Depth:	363 mm (14.29")
Weight:	16.4 kg (36.15 lbs)
Cabinet:	Composite PP
Hardware:	pole mount
Handles:	1 top, 2 side
Pole mount cap	yes
Colour:	Black

RCF products are continually improved. All specifications are therefore subject to change without notice.