NX M10-A

TWO WAY ACTIVE SPEAKER

APPLICATIONS

- Nearfield & distributed PA
- Foreground/background music, fill/delay
- Portable and installed audio-visual systems
- Conference centers, presentations, ballrooms and houses of worship
- Compact voice reinforcement systems
- Stage monitoring

FEATURES

- 1,75" voice coil, 1" neodymium compression driver
- 3" voice coil, 10" neodymium woofer
- 90°x 40° constant directivity coverage angle, rotatable horn
- 750W digital amplifier: lightweight, compact, multi channel
- Dual angle enclosure for both front-of-house and floor monitor applications
- Optimized EQ for monitor or front-of-house applications
- High quality analog input board, crossover, dynamic limiting transducers protection
- Professional XLR line and ¼" inputs (Combo) with loop through
- Powercon Input/Output
- 6 x fly-tracks

NX M10-A is the most compact and versatile speaker in the NX Series. It has been designed to deliver the most performance for its weight and size as both a stage monitor and a front of house main PA.
The NX M10-A is a self-powered, lightweight two-way multipurpose loudspeaker system. The NX M10-A provides high power output, low distortion and consistent polar response in a compact enclosure. Offering extraordinary fidelity and power with tightly controlled, symmetrical coverage, the NX M10-A is suitable for a wide variety of applications including center clusters for nightclub or theatrical reinforcement, and delayed fill systems
An extremely smooth and predictable 90-degree horizontal x 40-degree vertical conical horn, coupled to a 1,75" diaphragm neodymium compression driver, reproduces high frequencies. The result of intensive research, the RCF horn's pattern remains consistent within close tolerances in both the horizontal and vertical planes, with minimal side lobing. A robust 3" voice coil,10-inch neodymium woofer in a vented enclosure reproduces low-mid frequencies.
All is driven by a multichannel RCF Class-D digital power amplifier with a fully featured input section, providing user selectable system EQ for stage monitoring and PA applications, protection, crossover functionality, dynamic limiting and discrete component optimization.
The enclosure is constructed of quality plywood and a foam-backed grille hide the drivers from view for pleasing aesthetics.
The amplifier input panel offers XLR or ¼ inch jack compatibility witch provides extra flexibility, making it possible to connect any sound source. Signal present and overload lights indicate the system status and assist in setting the optimum level, via the level control knob.

ACOUSTICAL SPECIFICATIONS

Frequency response:	50 Hz- 20 Khz
Max SPL:	129 dB
Horizontal coverage angle:	90°
Vertical coverage angle:	70°
Compression driver:	1.0" neo, 44 mm voice coil
Midrange:	-
Woofer:	10" neo, 64 mm voice coil

INPUT SECTION

Input connector:	combo xlr-jack/xlr
Output connector:	xlr
Input sensitivity:	-2 dBu / +4 dBu

PROCESSOR SECTION

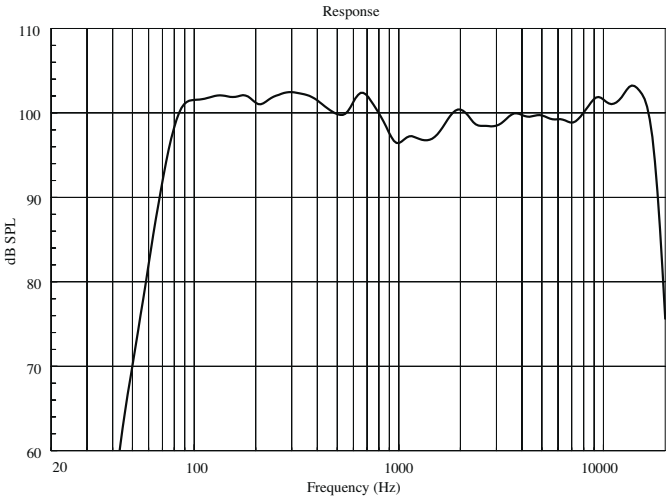
Crossover frequencies:	1700 Hz
Protections:	thermal, rms
Limiter:	soft peak limiter
Controls:	volume, side/floor, contour

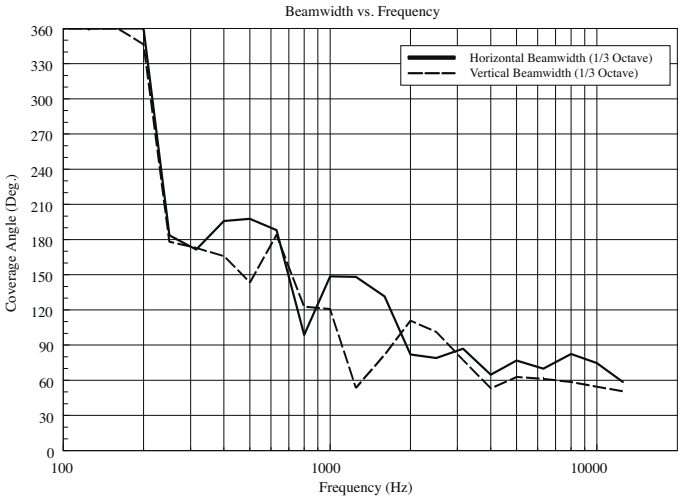
AMPLIFIER

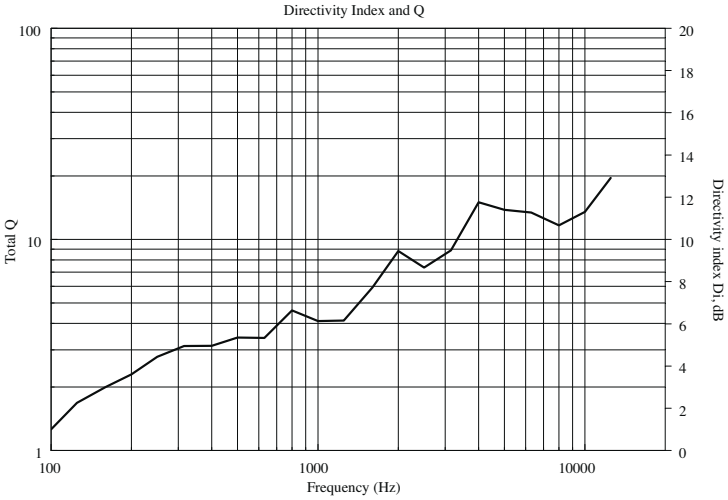
Power supply:	750 Watt
High frequencies:	250 Watt
Mid frequencies:	-
Low frequencies:	500 Watt
Cooling:	convenction/forced
Connection:	powercon in/out

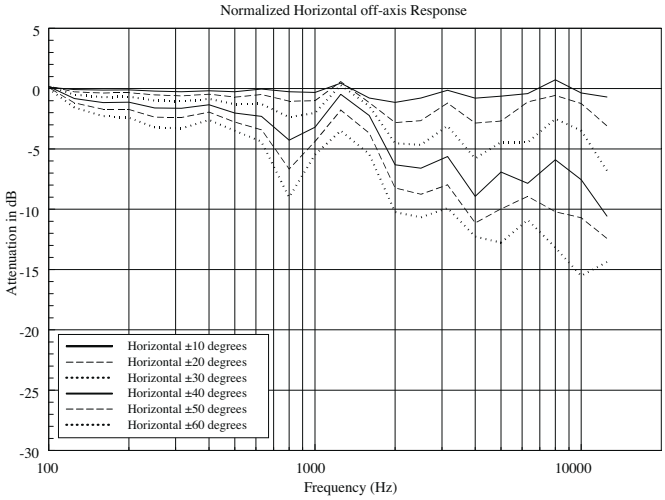
PHYSICAL

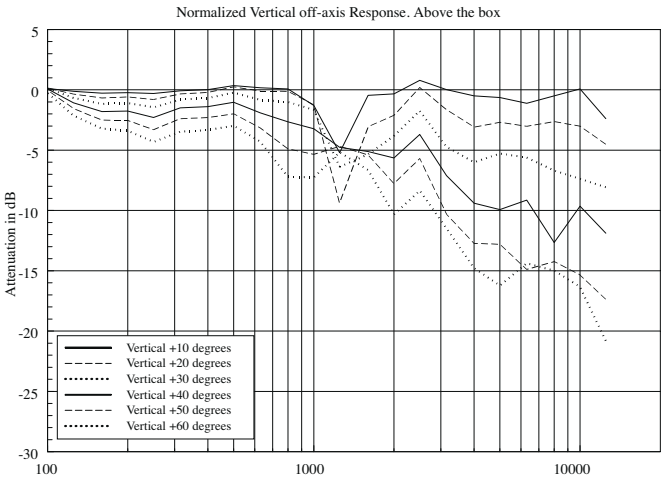
Height:	515 mm (20.27")
Width:	334 mm (13.14")
Depth:	337 mm (13.26")
Weight:	15.2 kg (33.51 lbs)
Cabinet:	baltic birch
Hardware:	3 x fly tracks
Handles:	2 side
Pole mount cap	yes
Colour:	Black

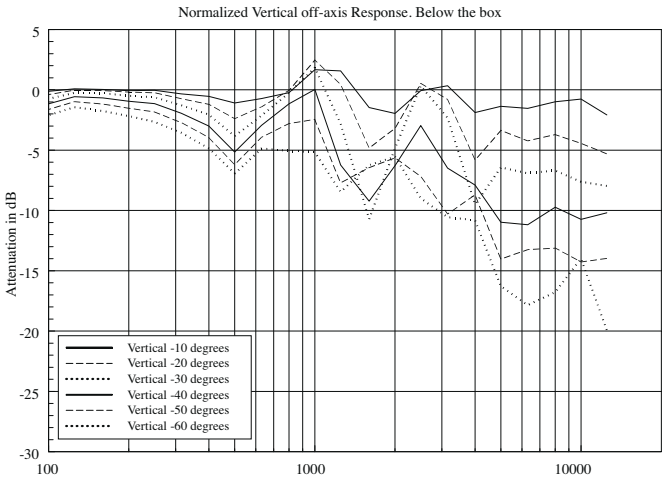

Response
dB SPL
110
100
90
80
70
60
20
100
1000
10000
Frequency (Hz)


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

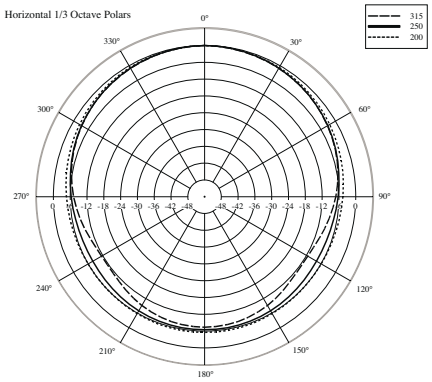

Directivity Index and Q
Total Q
100
10
1
Directivity index Di, dB
20
18
16
14
12
10
8
6
4
2
0
100
1000
10000
Frequency (Hz)

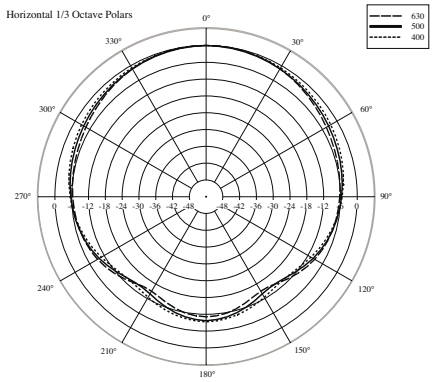

Normalized Horizontal off-axis Response
Attenuation in dB
5
0
-5
-10
-15
-20
-25
-30
Horizontal ±10 degrees
Horizontal ±20 degrees
Horizontal ±30 degrees
Horizontal ±40 degrees
Horizontal ±50 degrees
Horizontal ±60 degrees
100
1000
10000
Frequency (Hz)

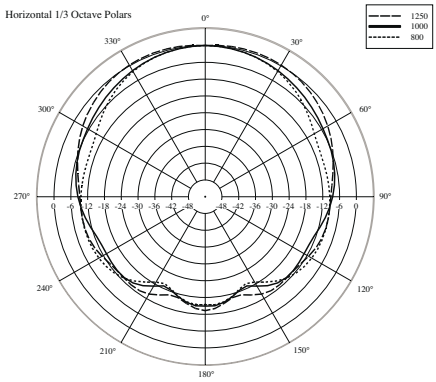

Normalized Vertical off-axis Response. Above the box
Attenuation in dB
5
0
-5
-10
-15
-20
-25
-30
Vertical +10 degrees
Vertical +20 degrees
Vertical +30 degrees
Vertical +40 degrees
Vertical +50 degrees
Vertical +60 degrees
100
1000
10000

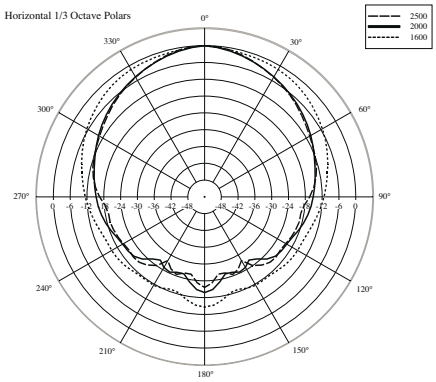

Normalized Vertical off-axis Response. Below the box
Attenuation in dB
5
0
-5
-10
-15
-20
-25
-30
Vertical -10 degrees
Vertical -20 degrees
Vertical -30 degrees
Vertical -40 degrees
Vertical -50 degrees
Vertical -60 degrees
100
1000
10000

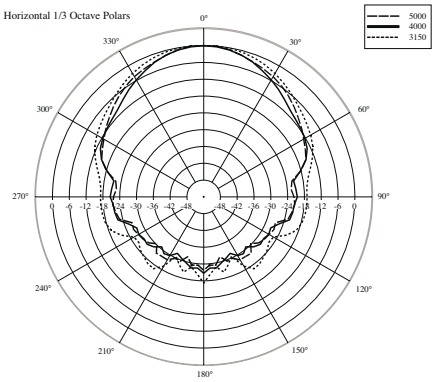
Horizontal 1/3 Polar Plot

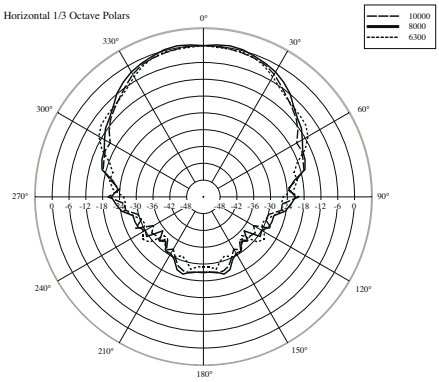




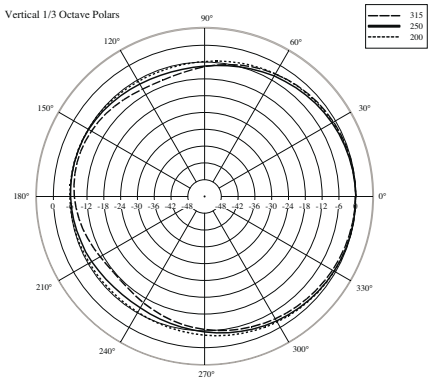


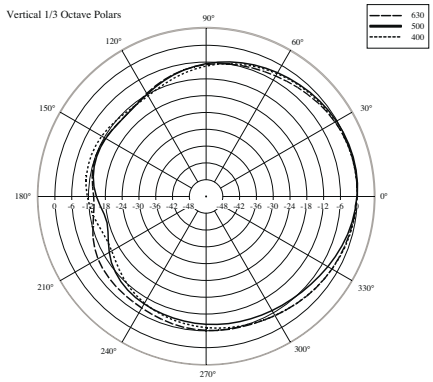


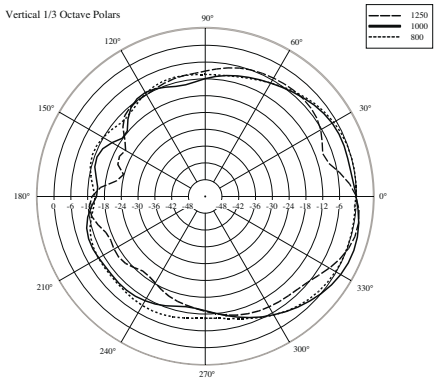


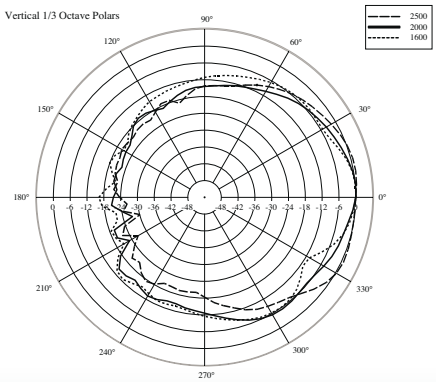


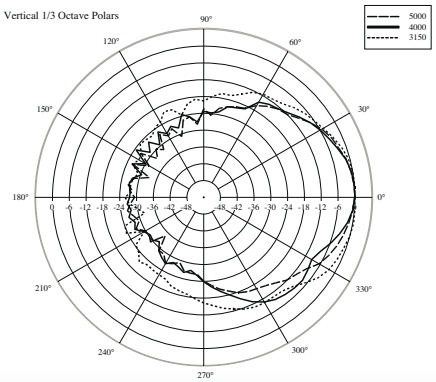
Vertical 1/3 Polar Plot

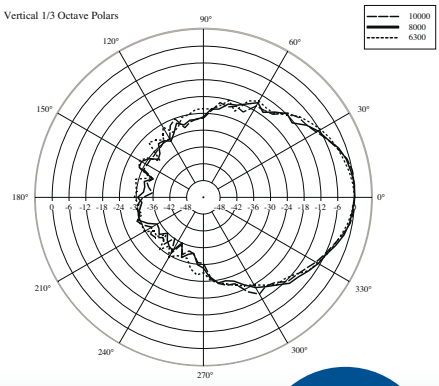












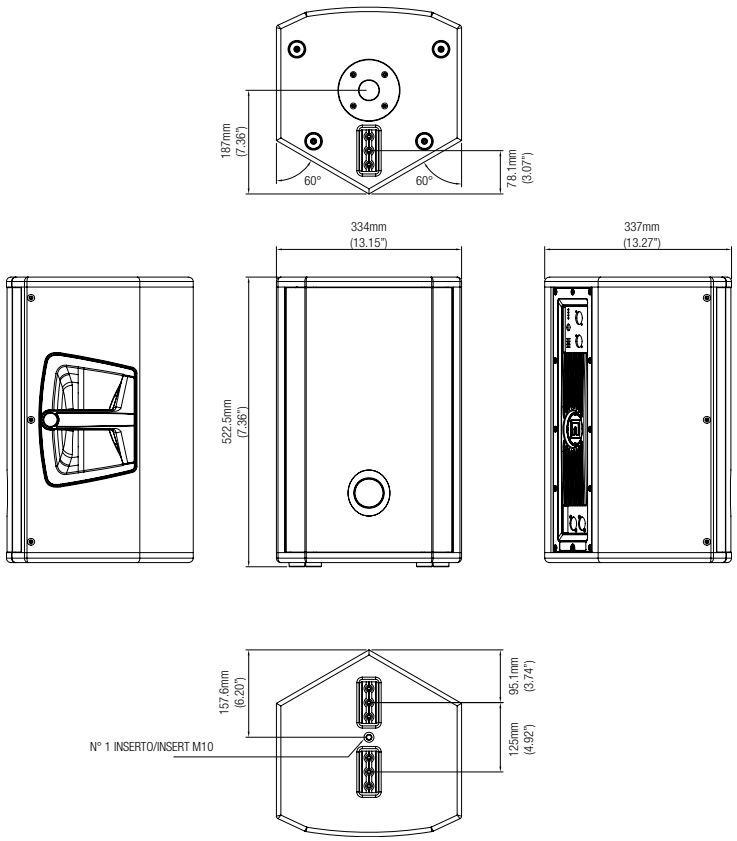
CSI PRODUCT SPECIFICATIONS FOR DESIGNERS, SPECIFIERS, AND CONSULTANTS (ALSO KNOWN AS "A&E SPECIFICATIONS")

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: NX M10-A



2.02 Design

Configuration:	Two way active speaker
LF Sub-section:	10" neodymium woofer, 64 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:	Baltic birch
Rigging inserts:	3 x fly tracks
Color:	Black
Grille:	Custom perforated steel grille with open-cell poly fiber backing
Input Connectors:	Combo xlr-jack
Dimensions (H x W x D):	515 x 334 x 337 mm (20.27" x 13.14" x 13.26")
Weight:	15.2 kg (33.51 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 DS4X	Kit including No. 4 double stud track connector with ring
AC PMA	Speaker pole mount