NX M15-A MK II

TWO WAY ACTIVE SPEAKER

APPLICATIONS

- Compact live sound reinforcement system
- Foreground/background music, infi ll/delay
- Portable PA, retail, clubs, ballrooms, corporate AV, live theatre, houses of worship, theme parks
- Stage monitoring

FEATURES

- 1,75" voice coil, 1" compression driver
- 3,5" voice coil, 15" 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 fl oor monitor applications
- Optimized EQ for monitor or front-of-house applications
- DSP processing
- Electronic equalization, phase alignment, limiter and protection
- PFC power factor correction
- Professional XLR line and ¼" inputs (Combo) with loop through
- Powercon Input/Output
- 6 x fly-tracks

The NX M15-A is a self-powered with a multiway DSP section, lightweight two-way multipurpose
loudspeaker system. The NX M15-A provides high power output, low distortion and consistent polar response in a compact enclosure. The NX M15-is designed as main PA for smaller venues, including houses of worship, auditoriums/theaters, A/V systems, hotel ballrooms, and meeting rooms. Offering extraordinary fi delity and power with tightly controlled, symmetrical coverage, the NX M15-A is suitable for a wide variety of applications including distributed or fi ll purposes in larger venues, houses of worship, auditorium/theaters, arenas, stadiums, nightclubs, and themed-entertainment complexes

An extremely smooth and predictable 90-degree horizontal x 40-degree vertical conical horn, coupled to a 1,75" diaphragm 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. This innovative design is powered from a high flux ferrite magnet offering a very open and natural midrange sound with extreme precision in high frequency reproduction.

A robust 3,5" voice coil,15-inch 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.

Total RMS power output is 750 watts. Phase-corrected electronics assure fl at phase and amplitude response, resulting in exceptional system impulse response and precise imaging.

The Dsp takes care of low noise crossover, equalisations, soft-limiters, rms limiters, large signals compression and protection functions.

The enclosure is constructed of quality plywood.

The front grille is lined with an acoustically transparent foam to provide additional driver protection and for pleasing aesthetics.

The amplifi er input panel offers XLR or ¼ inch jack compatibility witch provides extra fl exibility, 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:	132 dB
Horizontal coverage angle:	90°
Vertical coverage angle:	40°
Compression driver:	1.0" , 44 mm voice coil
Midrange:	-
Woofer:	15" , 89 mm voice coil

INPUT SECTION

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

PROCESSOR SECTION

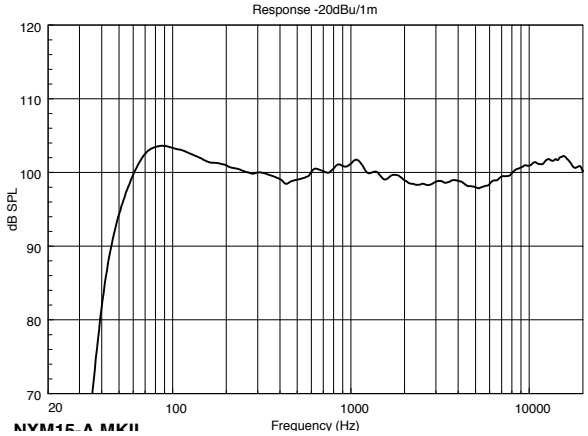
Crossover frequencies:	1700 Hz
Protections:	thermal, rms
Limiter:	soft peak limiter
Controls:	volume, side/floor, contour

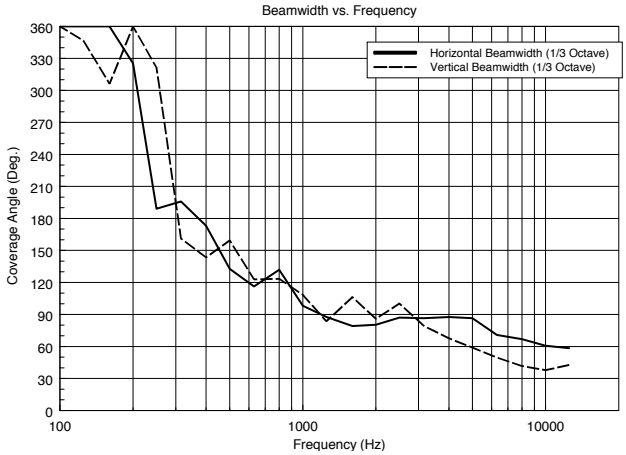
AMPLIFIER

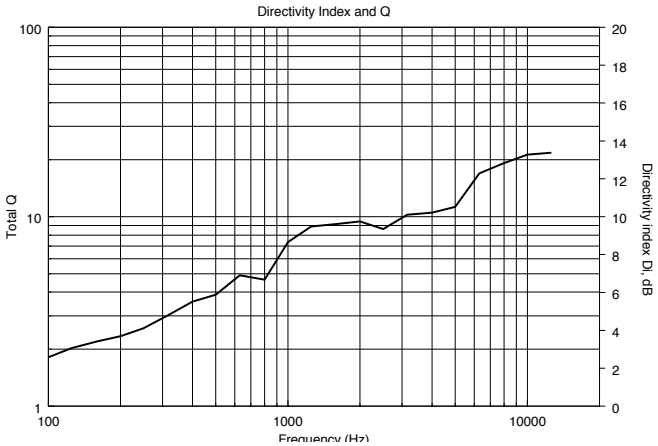
Power supply:	750 Watt
High frequencies:	250 Watt
Mid frequencies:	-
Low frequencies:	500 Watt
Cooling:	convenction/forced
Connection:	powercon in/out

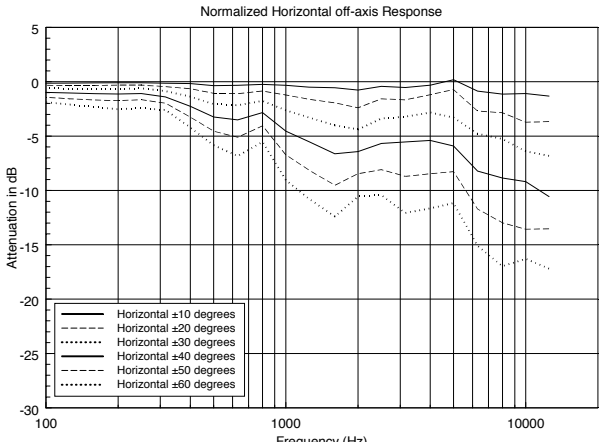
PHYSICAL

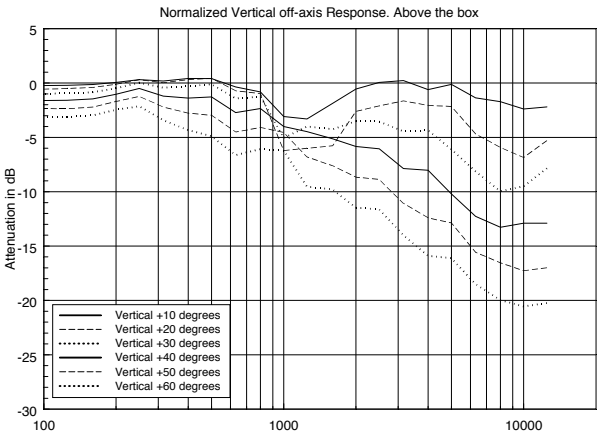
Height:	736 mm (28.97")
Width:	430 mm (16.92")
Depth:	395 mm (15.55")
Weight:	29 kg (63.93 lbs)
Cabinet:	baltic birch
Hardware:	6 x fly tracks
Handles:	2 side
Pole mount cap	yes
Colour:	Black

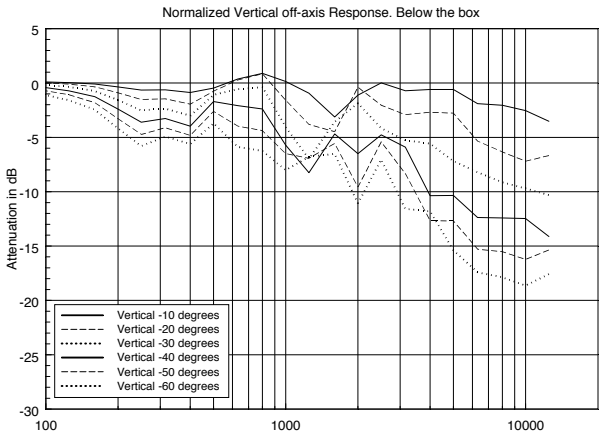

Response -20dBu/1m
dB SPL
Frequency (Hz)


Beamwidth vs. Frequency
Horizontal Beamwidth (1/3 Octave)
Vertical Beamwidth (1/3 Octave)
Coverage Angle (Deg.)
Frequency (Hz)

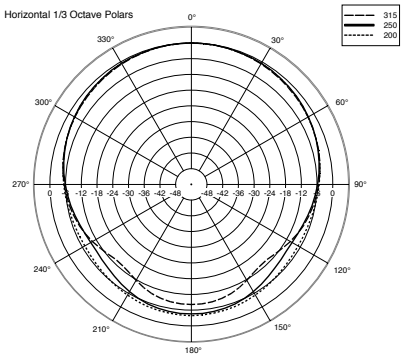

Directivity Index and Q
Total Q
Directivity index Di, dB

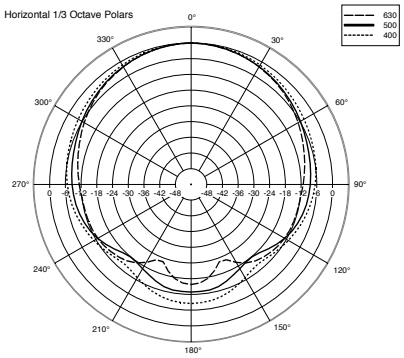

Normalized Horizontal off-axis Response
Attenuation in dB
Horizontal ±10 degrees
Horizontal ±20 degrees
Horizontal ±30 degrees
Horizontal ±40 degrees
Horizontal ±50 degrees
Horizontal ±60 degrees

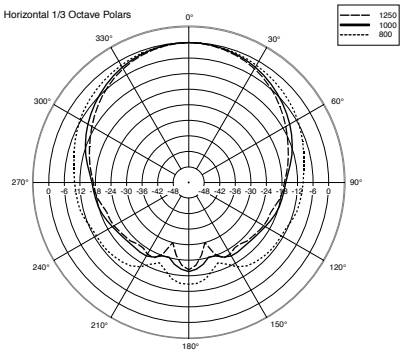

Normalized Vertical off-axis Response. Above the box
Attenuation in dB
Vertical +10 degrees
Vertical +20 degrees
Vertical +30 degrees
Vertical +40 degrees
Vertical +50 degrees
Vertical +60 degrees

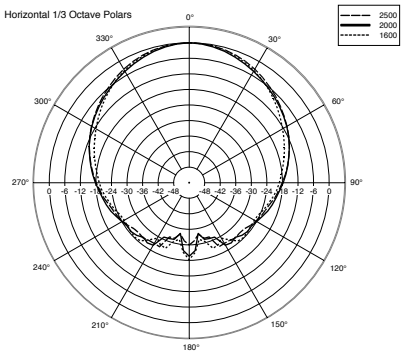

Normalized Vertical off-axis Response. Below the box
Attenuation in dB
Vertical -10 degrees
Vertical -20 degrees
Vertical -30 degrees
Vertical -40 degrees
Vertical -50 degrees
Vertical -60 degrees

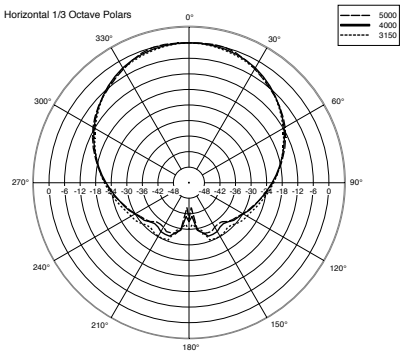
Horizontal 1/3 Polar Plot

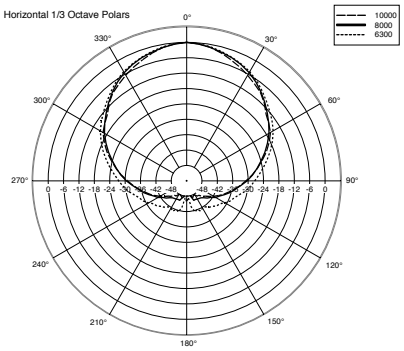




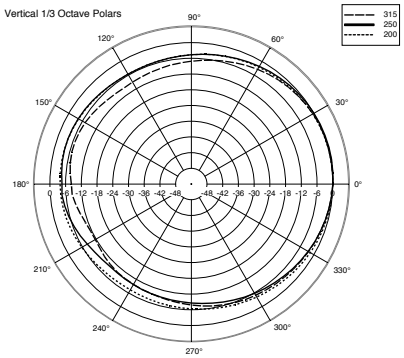


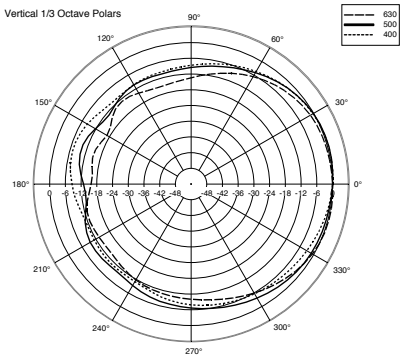


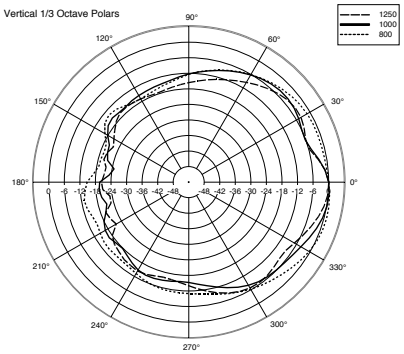


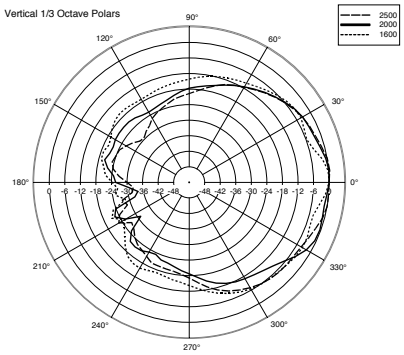


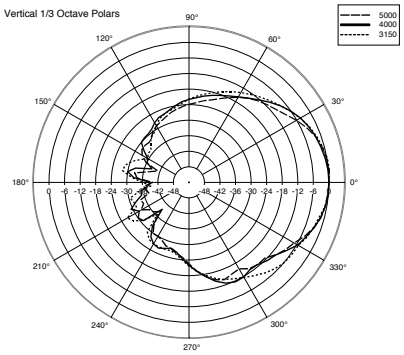
Vertical 1/3 Polar Plot

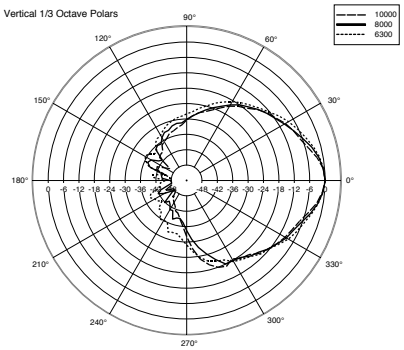












NX M15-A MK II

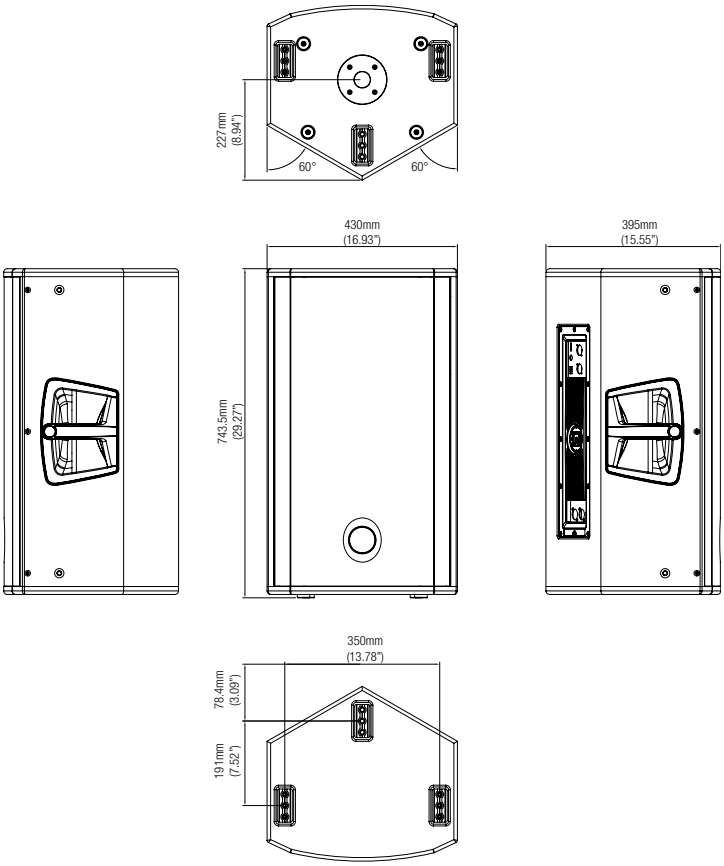
CSI PRODUCT SPECIFICATIONS FOR DESIGNERS, SPECIFIERS, AND CONSULTANTS (ALSO KNOWN AS "A&E SPECIFICATIONS")

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 M15-A MK II



2.02 Design

Configuration:	Two way active speaker
LF Sub-section:	15" woofer, 89 mm voice coil
MR Sub-section:	-
HF Sub-section:	1,0" , 44 mm voice coil

2.03 Acoustical Proprieties

Nominal dispersion angle:	90° x 40°
Axial frequency range:	50Hz-20kHz

2.04 Physical Properties

Cabinet:	Baltic birch
Rigging inserts:	6 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):	736 x 430 x 395 mm (28.97" x 16.92" x 15.55")
Weight:	29 kg (63.937 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 diame tro 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
AC PRO15 V-BR	Bracket for flying and wall mounting NX M15-A with adjustable inclination