MONITOR SERIES

COMPACT FULL-RANGE SPEAKER

44T / 44WT

Careful acoustic design and the use of advanced materials contribute to the exceptional music fidelity and speech intelligibility exhibited by the RCF Monitor 44T (black) and Monitor 44/WT (white) two-way speaker systems. The carbon fiber diaphragm remains extremely rigid at high power levels, producing a more linear response and lower distortion. The cone is fitted with a durable foam surround and treated to resist moisture. The high-frequency section features a constant directivity horn with a built-in mechanical phase equalizer. The horn is driven by a Ferrofluid® cooled, 0.5" mylar dome tweeter. The system is nominally crossed over at 4 kHz by a 12 dB/octave network, which uses markedly lower (than conven-tional) inductance values in series with the woofer. This design reduces sound delays associated with high inductance values and provides excellent low fre-quency transient response. The high-pass section is corrected for optimum perfor-mance of the CD horn and is protected with a circuit based on a low-value/low-mass filament resistor that smoothly limits the power sent to the tweeter driver. All components are housed in a vented enclosure formed from semi-expanded polystyrene foam that is extremely strong, lightweight and weather resis-tant. Threaded metal sockets are molded into the cabinet to facilitate quick, safe deployment of the Monitor 44T, as a single unit or in arrays, using specially designed accessory mounting hardware. The Monitor 44T is a part of RCF's Monitor Series, which includes two-way constant directivity, compact speakers in easily installed enclosures. Available in black (Monitor 44T) or white (Monitor 44/WT).

Applications

- Foreground/Background Music
- Distributed Speech Reinforcement
- AV Production/Playback
- Near-field Monitoring

Features

- 5" high-efficiency carbon fiber woofer CD horn loaded, 0.5" dome tweeter
- Built-in, multi-tap constant voltage transformer
- Built-in, low-inductance passive crossover with high-frequency dynamic protection
- Lightweight, UV/weather resistant, trapezoidal shaped enclosure for multiple applications and minimum visual intrusion
- Integrated mounting points for use with optional mounting hardware
- Articulated surface mount hardware included.

SYSTEM

Freq. Range (–10 dB):	75Hz–21kHz
Freq. Response (–3 dB):	160Hz–18kHz
Horz. Coverage Angle (–6 dB):	120° averaged 800Hz to 16kHz
Vert. Coverage Angle (–6 dB):	100° averaged 800Hz to 16kHz
Directivity Factor; Q (DI):	5.6 (7.5) averaged 800Hz to 16kHz
System Sensitivity[1]:	89 dB, 1W @ 1m
Rated Maximum SPL:	108 dB, @ 1m
System Nominal Impedance:	4 Ω(bypassed)
System Input Power Rating[2]:	60W IEC, 240W Peak
Recommended Amplifier[3]:	250W
Constant Voltage:	25V, 50V, 70V, 100V and Bypass
Power Taps:	1W, 5W, 10W, 20W, 30W and Bypass
Crossover:	4.0 kHz

TRANSDUCERS

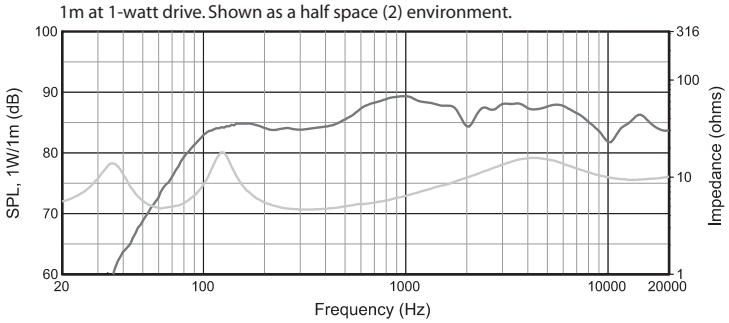
Low-Frequency:	5" (127mm) carbon fibre woofer
High-Frequency:	0.5" (13mm) Mylar dome tweeter

PHYSICAL

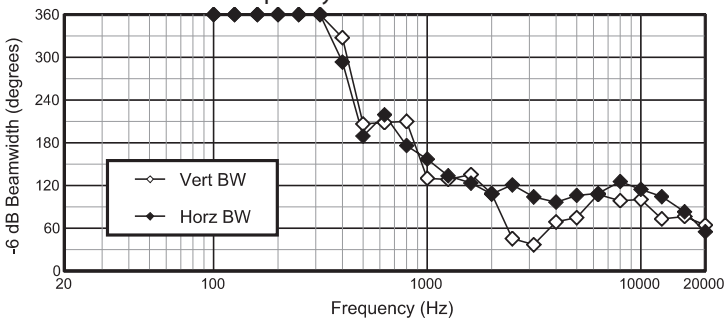
Enclosure:	45° back angles, high density polystyrene
Attachment Inserts:	2 points M6 threaded inserts on back 2 points M6 threaded inserts on top and bottom
Grille:	Matching perforated steel grille
Input Connectors:	Push connector plate
Dimensions (HxWxD):	10.31"x7.16"x6.57" (262x182x167 mm)
Net Weight:	7.94 lb. (3,6 kg)

1 Measured on axis in the far field with 1 watt (2.00 V RMS, 4) input and referenced to 1 meter distance using the inverse square law. Listed sound pressure represents an average from 300Hz to 3kHz.
2 IEC Spectrum, Peak for 2 hours with +4.5 dB crest factor.
3 Recommended Amplifier is a power capability value that should be taken as a guide.

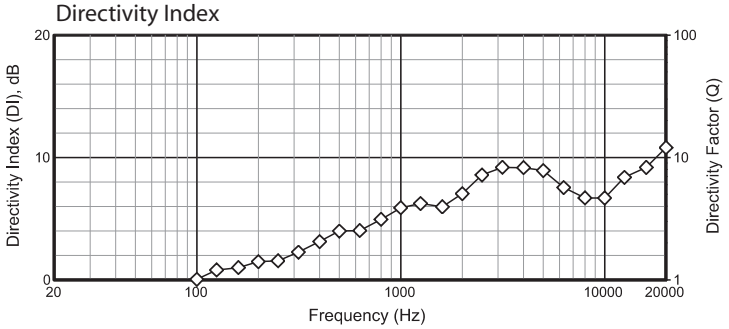
Frequency response is measured on-axis at a distance referenced back to 1m at 1-watt drive. Shown as a half space (2) environment.



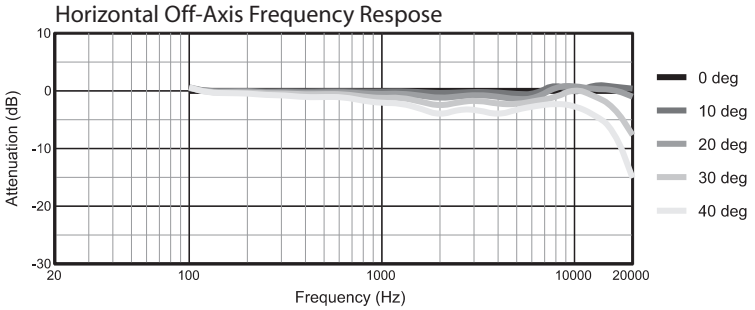
Beamwidth vs. Frequency



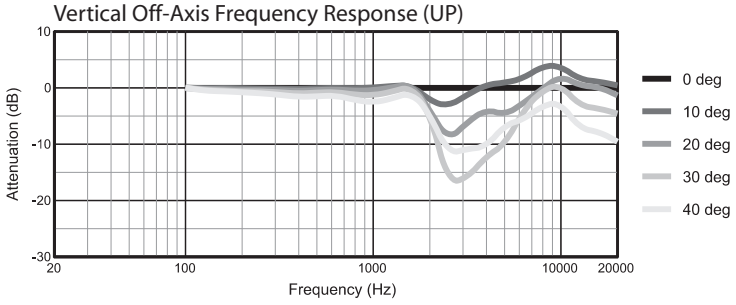
Directivity Index



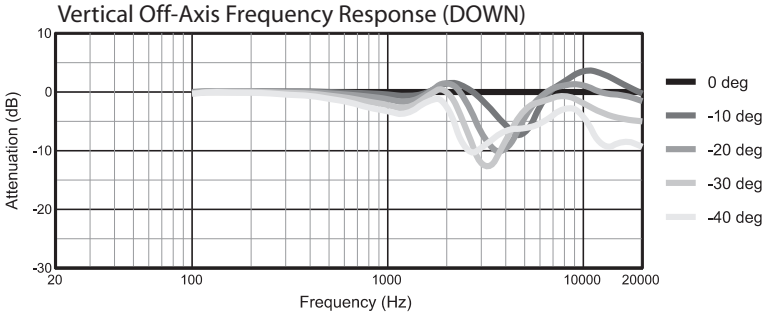
Horizontal Off-Axis Frequency Respose



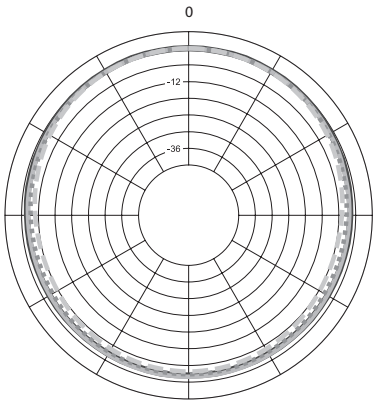
Vertical Off-Axis Frequency Response (UP)



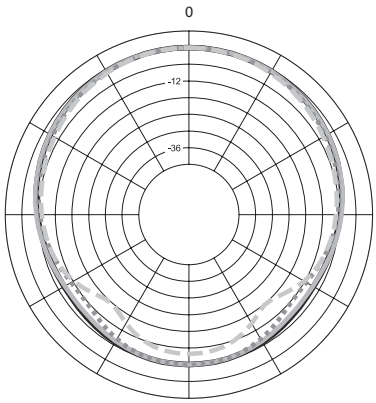
Vertical Off-Axis Frequency Response (DOWN)



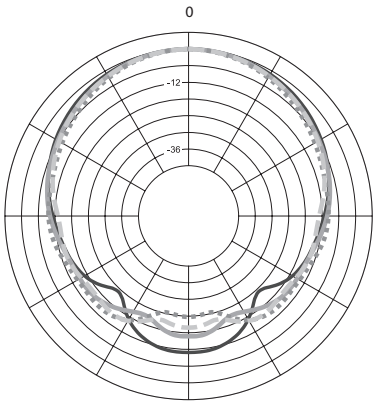
Horizontal 1/3 Polar Plot



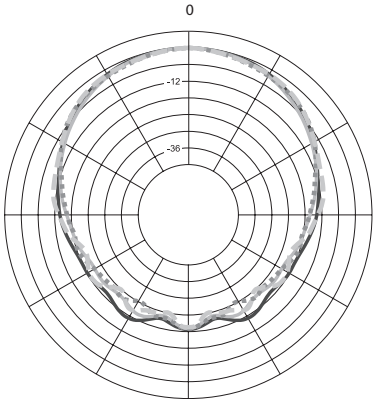
200Hz
250Hz
315Hz
400Hz



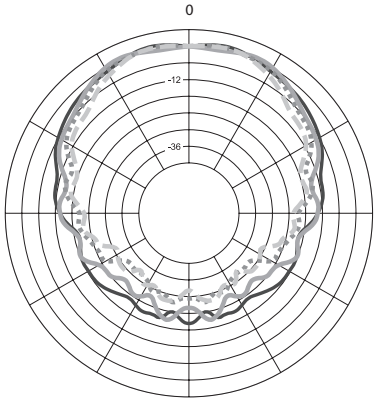
500Hz
° 30Hz
800Hz
1kHz



1.25kHz
1.° kHz
2kHz
2.5kHz

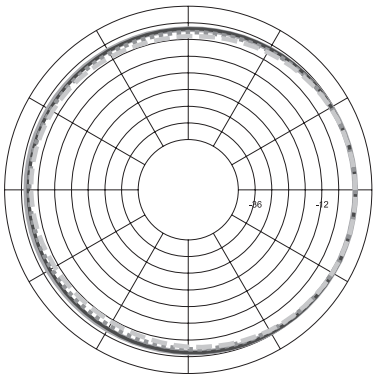


3.15kHz
4kHz
5kHz
° .3kHz

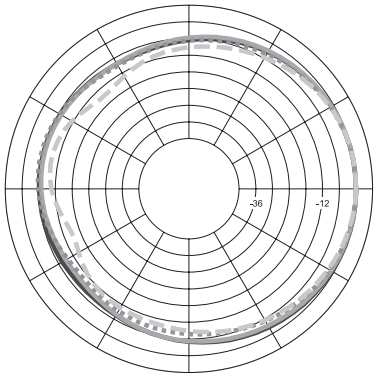


8kHz
10kHz
12.5kHz
1° kHz

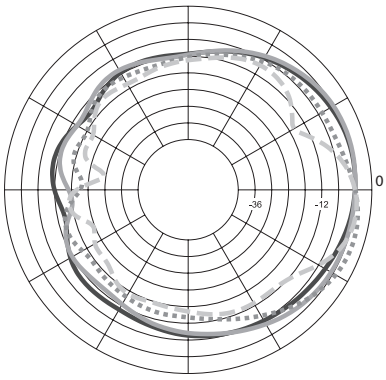
Vertical 1/3 Polar Plot



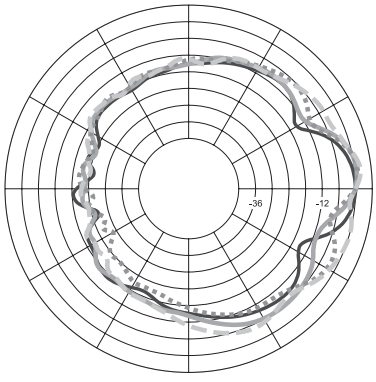
200Hz
250Hz
315Hz
400Hz



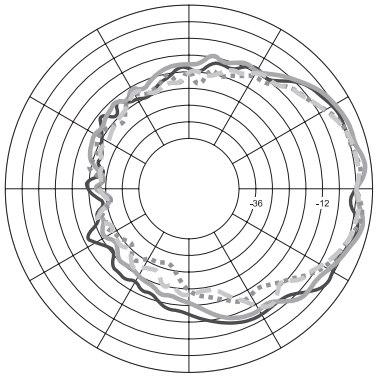
500HZ
° 30HZ
800HZ
1KHZ



1.25kHz
1.° kHz
2kHz
2.5kHz



3.15kHz
4kHz
5kHz
° .3kHz



8kHz
10kHz
12.5kHz
1° kHz

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, 42010 Mancasale, Reggio Emilia, Italy.

B. Model number: Monitor 44T

2.02 Design

Configuration	Compact 2-Way Speaker
LF Sub-section	5 in. carbon fibre cone low-frequency driver
HF Sub-section	0.5 in. Mylar dome high-frequency driver

2.03 Acoustical Proprieties

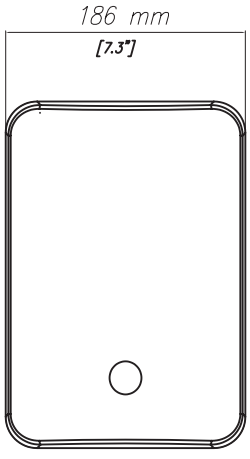
Nominal dispersion angle (–6 dB points):	Horizontal: 120° averaged 800 Hz to 16 kHz - Vertical: 100° averaged 800 Hz to 16 kHz
Axial Frequency Response (–3 dB points):	160 Hz – 18 kHz
Axial Frequency Range (–10 dB points):	75 Hz – 21 kHz
Axial Sensitivity (dB SPL/1 W @ 1 m):	89 dB
System Input Power Rating[2]:	60W IEC; 240W Peak
Power Taps:	1, 5, 10, 20, 30 watts, and Bypass
Constant Voltage Taps:	25, 50, 70, 100 volts, and Bypass
Nominal impedence:	4 Ω (bypassed)

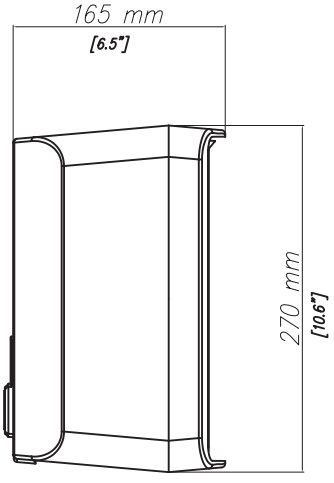
2.04 Physical Properties

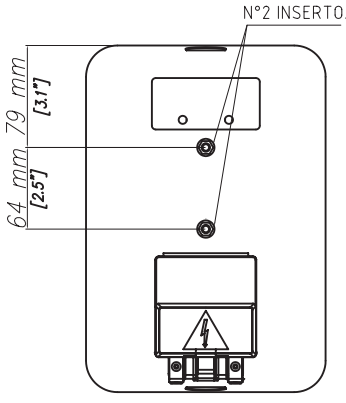
Enclosure Shape:	45° back angles
Enclosure Material:	High density polystyrene
Enclosure Finish:	Black (or white), scratch resistant paint
Connectors:	Spring-loaded terminals
Mounting/Suspension Hardware:	4 reinforced threaded metal sockets (3/8” and M6) for attaching optional mounting hardware
Grille:	Matching perforated steel grille
Dimensions (H x W x D):	10.31”x7.16”x6.57” (262x182x167 mm)
Weight:	7.94 lb. (3,6 kg)

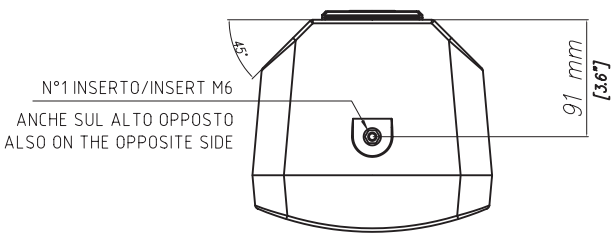
2.05 Accessories

MA 5B - MA 5W	“U” brackets for wall mounting MR 44T (MA 5B black colour) and MR 44WT (MA 5W white colour)









RCF SpA Italy:
tel. +39 0522 274 411
fax +39 0522 232 428
www.rcfaudio.com
e-mail: info@rcf.it

RCF UK Sales Office:
tel. +44 7005 402181
e-mail: info@rcfaudio.co.uk

RCF France Sales Office:
tel. +33 6 07501800
e-mail: rcffrance@aol.com

RCF Germany Sales Office:
tel. +49 2203 925370
e-mail: germany@rcf.it

RCF USA Sales Office:
tel. +1 (603) 926-4604
e-mail: rcf-usa@adelphia.net