MQ 100L

3 WAY COLUMN SPEAKER

DESCRIPTION

MQ 100L is a 3 way column loudspeaker providing natural hi-fidelity sound of both speech and music, suitable for sound system having fixed loudspeakers where the environment is acoustically critical or with architectural constraints. The wide horizontal coverage angle (180°) and the vertical dispersion (60°) allow the correct sound reproduction in a wide space, in order to limit feedback and improve the sound directivity which is important, for instance, in halls having a long reverberation time.
It includes a transformer inside for the connection to (100 – 70 V) constant voltage lines, yet it can also be set to 16 Ω (low impedance connection). When connected to a 100 V line, its power can be selected among the values 40 W, 20 W , 10 W or 5 W through a rotary switch (thanks to internal transformer taps).
MQ 100L is available in white (MQ 100L-W) or black (MQ 100L-B) colour

MAIN APPLICATIONS

- Music applications
- Audio visual applications
- Shopping malls
- Restaurants
- Pubs
- Hotels
- Office building

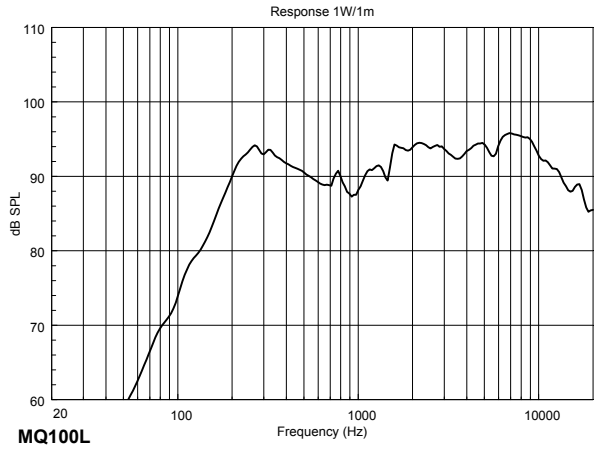
MAIN FEATURES

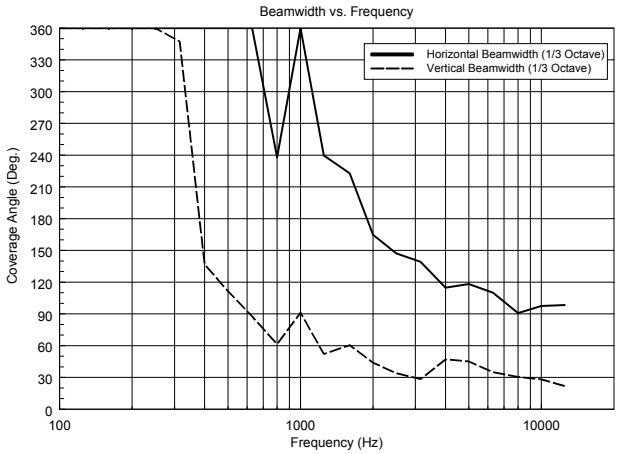
- 2 rubber surround 3.5" woofers, 2 fabric surround 3.5" woofers
- 2 cloth coated 0.75" dome tweeters
- 80 / 160 Watt (RMS/Music Power)
- 130 Hz ÷ 20 kHz
- 120 dB (1 m / POWER MAX) max. SPL
- Incl. 100V transformer multitap
- Power rotary switch
- Crossover frequency: 2000 Hz
- Type of filter 6/6/6 dB/oct
- Direct connection to Low-Z speaker lines
- Easy to install
- Simple power settings

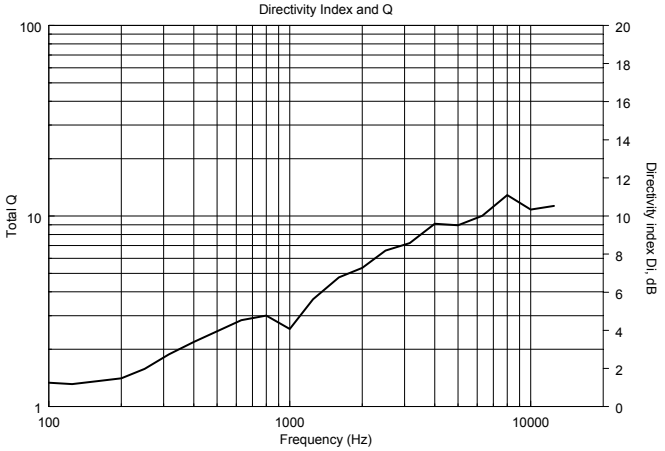
SPECIFICATIONS

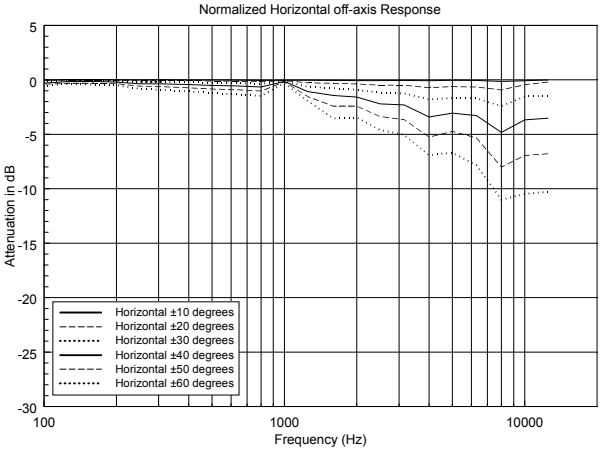
Loudspeaker	Woofer 3.5" neodymium magnet, 0.75" dome tweeter
Power (on 8 Ohm load)	80 / 160 W (RMS / Music power)
Power	40 W - 20 W - 10 W – 5 W (100V)
Sensivity	93 dB (1 W / 1 m)
Mx. SPL (6 W / 1 m)	120 dB(A) (1 m / POWER MAX)
Frequency Response	130 Hz – 20 kHz
Angle of coverage	270° / 150° / 110° @ 1 / 2 / 4 kHz (hor.)
Connector	Euroblock 2 pole
Body colour	White / Silver
Main body material	Auto-extinguishing high-density polystyrene
Grill material	Steel
Dimensiones (HxWxD)	510 mm x 120 mm x 130 mm
Installation	Orientable support included
Max ceiling thickness	36 mm
Net weight	3 kg
Operating temperature	-25° to +55°
Relative humidity	90% non condensing

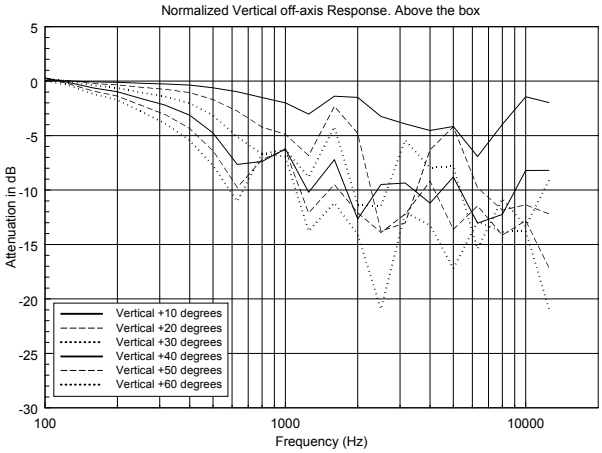
MQ 100L

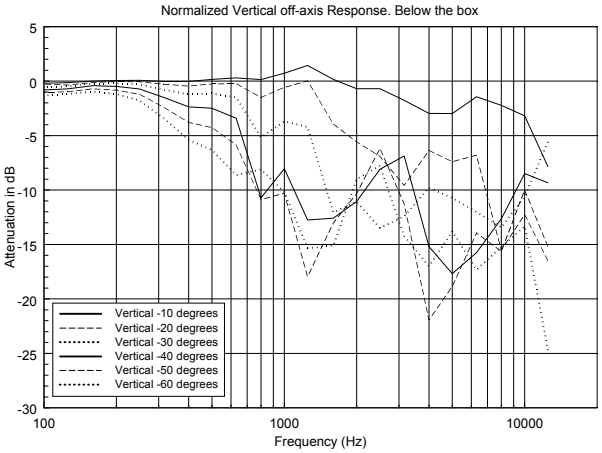

Response 1W/1m
dB SPL
Frequency (Hz)
MQ100L


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
Frequency (Hz)

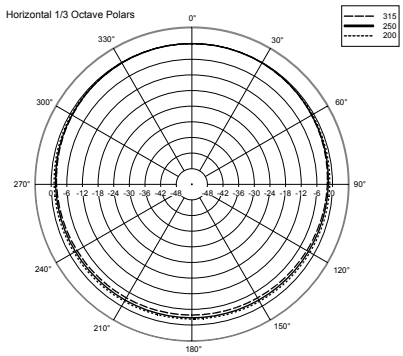

Normalized Horizontal off-axis Response
Horizontal ±10 degrees
Horizontal ±20 degrees
Horizontal ±30 degrees
Horizontal ±40 degrees
Horizontal ±50 degrees
Horizontal ±60 degrees
Attenuation in dB
Frequency (Hz)

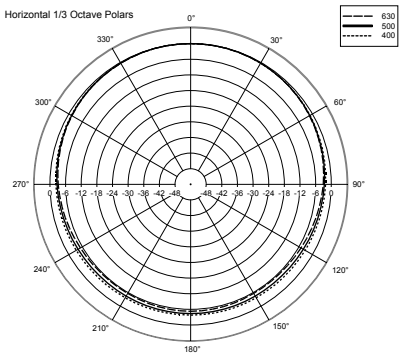

Normalized Vertical off-axis Response. Above the box
Vertical +10 degrees
Vertical +20 degrees
Vertical +30 degrees
Vertical +40 degrees
Vertical +50 degrees
Vertical +60 degrees
Attenuation in dB
Frequency (Hz)

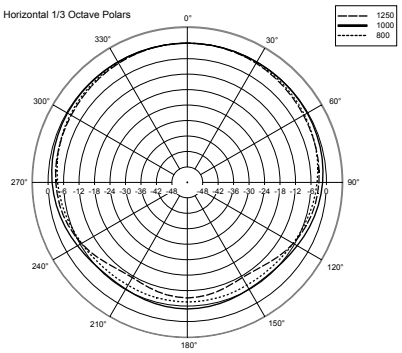

Normalized Vertical off-axis Response. Below the box
Vertical -10 degrees
Vertical -20 degrees
Vertical -30 degrees
Vertical -40 degrees
Vertical -50 degrees
Vertical -60 degrees
Attenuation in dB
Frequency (Hz)

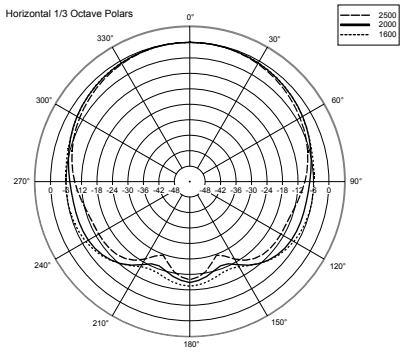
MQ 100L

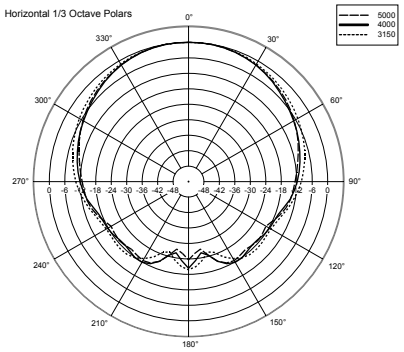
HORIZONTAL 1/3 POLAR PLOT

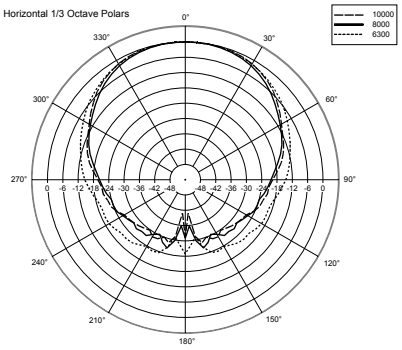




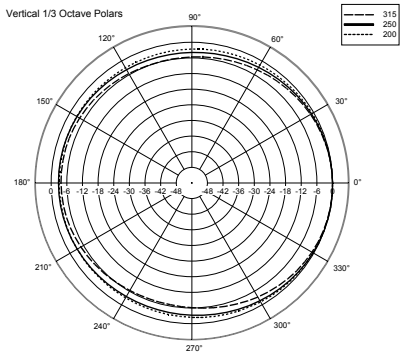


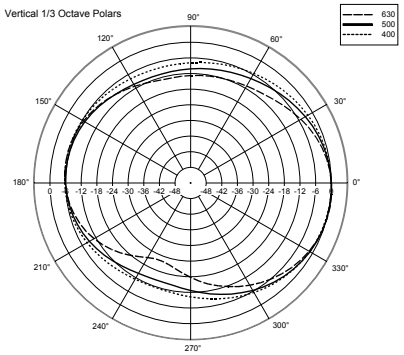


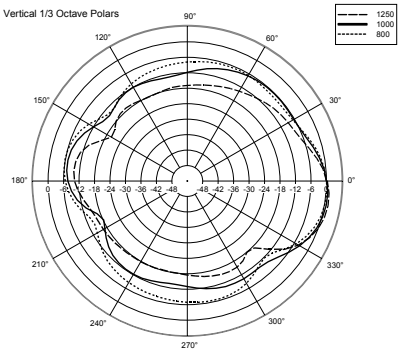


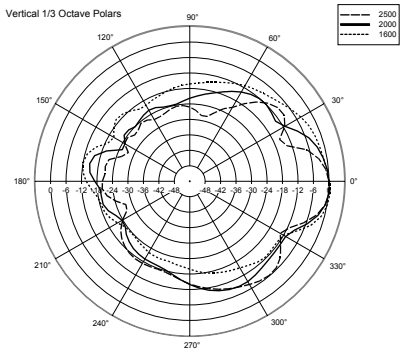


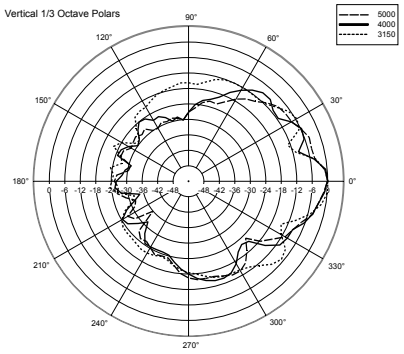
VERTICAL 1/3 POLAR PLOT

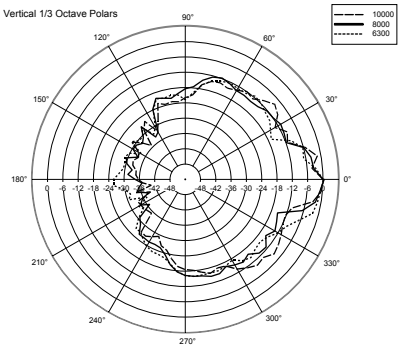












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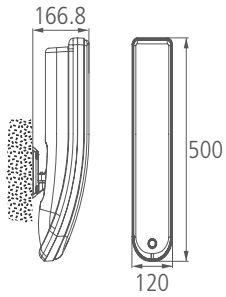
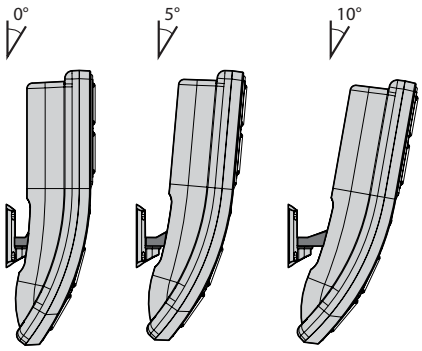
PART NUMBERS

13000096 - MQ 80P-W White
13000094 - MQ 80P-B Black
13000095 - MQ 80P-S Silver

DIMENSIONS (All data are in mm)

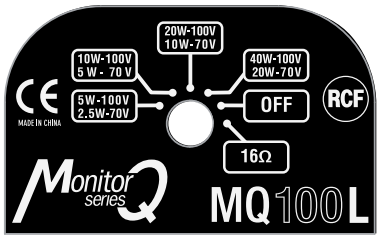


INSTALLATION



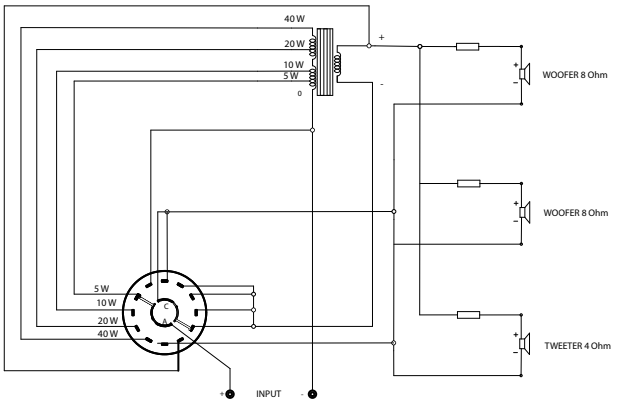
POWER SELECTION

Set the rotary switch to selected the chosen power value referring to the 100 V line (among 5 W – 10 W – 20 W – 40 W) so the correspondence impedance (among 2000 Ω – 1000 Ω – 500 Ω – 250 Ω) or to the 16 Ω position (for low impedance connection).



Note: if the rotary switch is set to the OFF position, the loudspeaker will be muted.

SCHEMATICS



CERTIFICATIONS AND APPROVALS

- CE comply with European Community Directive 73/23/EEC and 93768/EEC
- Self-Extinguishing plastic according to UL 94V0
- Environmental protection IP 40 homologation
- Speaker data according to IEC 268-5
- Safety according to IEC EN 60065:2002

ACCESSORIES (included)

- Safety steel wire
- Mounting bracket short, no tilt angle 0°
- Mounting bracket medium, tilt angle fixed to 5°
- Mounting bracket long, tilt angle fixed to 10°
- Connection Terminal
- Steel Grill

INSTALLATION NOTES

Installation of the MQ 100L is quick thanks to accessories are included. These have been engineered to keep the column as close as possible to the wall and simplify the installation. Its tilt angle can be chosen among 0° – 5° – 10°. The 60° vertical dispersion is asymmetric: it is the difference between 20° upwards and 40° downwards. The vertical dispersion axis is in fact already angled 10° downwards, making it unnecessary to tilt the sound column excessively. The power can be easily selected by using the Rotary switch present on the front panel; the knob is accessible using fingers. Connections to the loudspeaker line are made by using Euroblock connector. The enclosure is constructed of high density UV resistant self-extinguishing polystyrene with robust steel grill.

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