

4012MH • 4012MH/A
2-way passive/active loudspeaker systems with Modelled Horn

FORTY series



DESCRIPTION

Extremely compact, full-range 2-way speakers with a very wide frequency response and excellent power handling capability (with a pressure generating capability of over 130 dB). Particularly suitable for use in dance clubs, amusement parks and multi-purpose halls. Thanks to their special geometric design, both models are perfect as floor-standing monitors.

COMPONENTS

The 4012MH and 4012MH/A models have a high-power 12" woofer with Neodymium magnet and treated with weatherproofing resins. The HF section consists of the Alluminum AWSH™ (Acoustic Wave Shaped Horn) with proprietary technology and a 90°x50° dispersion angle, coupled with a 1" Mylar driver. The electronic parts are made of high quality components (minimum phase rotation crossovers, copper coils with Kapton formers containing Ferrite powder) providing excellent power handling and remarkable sound quality.

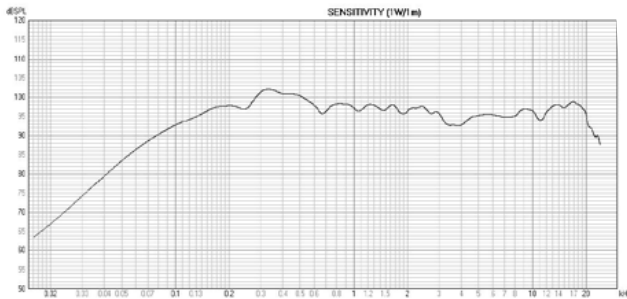
CABINET

The speaker cabinet in Baltic birch plywood is strong enough to withstand all kinds of mechanical oscillations without vibrating. The water-based coating technique with a textured mono-component paint has been expressly designed to protect the cabinet against abrasion, scratching, impact and high humidity levels. The particular shape of the back (angular surface - 114°) makes these systems perfect for stage monitor use.

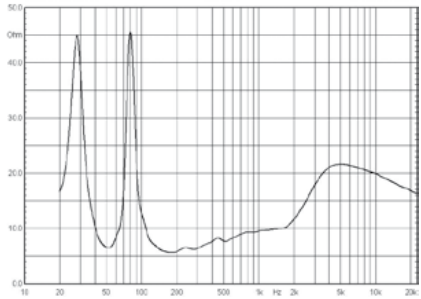
VERSIONS

An active version is available (4012MH/A); it is provided with a 500 W digital amplifier using switching technology and a DSP (Digital Signal Processor), with 2 different high-pass frequency cuts that the user can select through a proper switch located on the rear panel.

FREQUENCY RESPONSE



IMPEDANCE RESPONSE (4012MH)



TECHNICAL FEATURES

System configuration (4012MH)	2-way passive speaker
System configuration (4012MH/A)	2-way active speaker
Power handling RMS	450 W
Power handling Music	900 W
Power handling Peak	1800 W
Frequency response (-6 dB)	65÷20k Hz
Nominal impedance (4012MH)	8 Ω
Dispersion angle (-6 dB)	90° horizontal, 50° vertical
Axial sensitivity (1W@1m)	99.5 dB
Continuous SPL (@1m)	126 dB
Peak SPL (@1m) (4012MH)	132 dB
Peak SPL (@1m) (4012MH/A)	130 dB
Crossover frequency	1.8 kHz

AMPLIFIER DATA (4012MH/A)

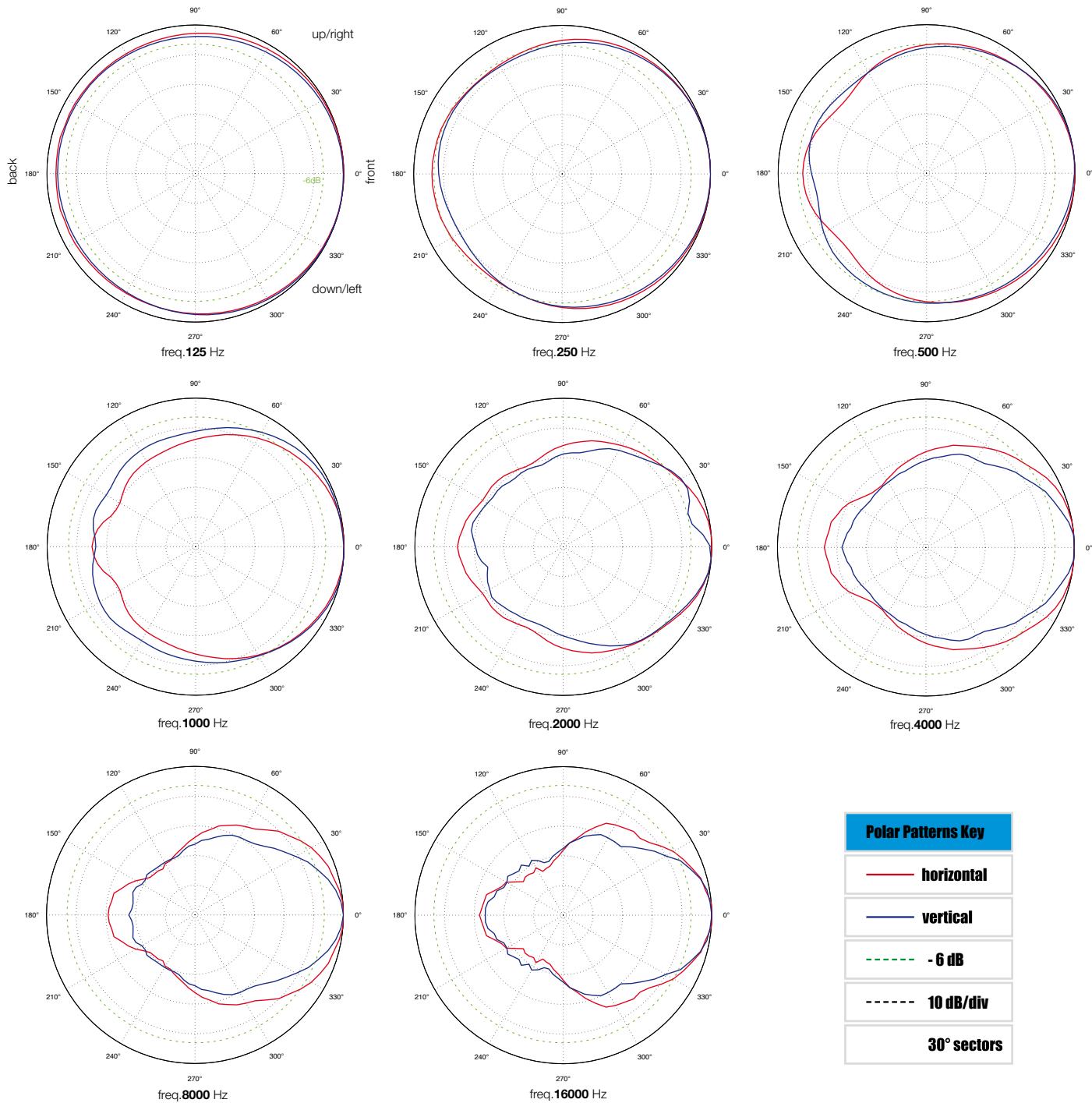
Audio input	XLR with loop through - max +10 dBu
Panel indicators	LED: power, signal, limit
Panel controls	Mode A (full range)/Mode B (HPF) switch, level control
DSP processing	24 bit/96 kHz (2 sel. presets)
Amplification power	500 W - class D
Efficiency	> 90% typical
Protection systems	over current, temperature, brownout, soft start
Power supply	switching technology
AC power connector	Neutrik® powerCON
AC power operating range	automatic 115/230 VAC ± 10%, 45/65 Hz

TRANSDUCERS

LF sub system	1x12" - neodymium magnet
Nominal impedance	8 Ω
Nominal power handling (AES)	400 W
Sensitivity (1W@1m)	100 dB
HF sub system	1x1" - mylar membrane
Diaphragm	DOMe, mylar
Voice coil	1.4", aluminium
Throat diameter	1"
Nominal impedance	8 Ω
Nominal power handling (AES)	50 W
Sensitivity (1W@1m)	105 dB
Horn	AWSH™
Material	aluminium
Manufacturing process	die casting

All measurements have been taken in Sound Corporation R&D laboratories

4012MH POLAR PATTERNS (normalized, ref on axis, passive X-over)



Polar Patterns Key

horizontal

vertical

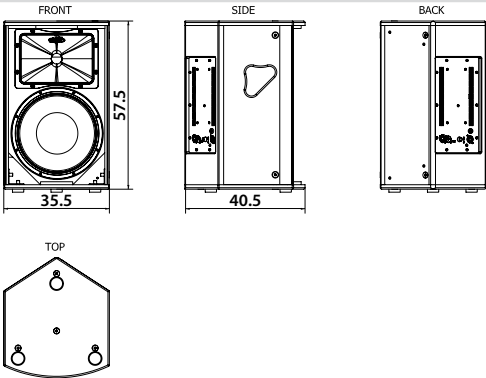
- 6 dB

10 dB/div

30° sectors

PHYSICAL

Cabinet	birch plywood
Colour	black
Input connectors (4012MH)	2 x NL4 Neutrik® speakON
Grille	perforated steel (Ø 6 mm, 7.2 mm step) with acoustically transparent foam
Suspension accessories	STD-4012, STD-WALL, PS-OC6
Dimensions (WxHxD)	35.5 x 57.5 x 40.5 cm
Net weight (4012MH)	18 kg
Net weight (4012MH/A)	19 kg



SOUND REINFORCEMENT

CONTROLLED RADIATION

ACOUSTIC RESEARCH