

M12T



KEY FEATURES

- 2" "SlingShot" compression driver
- Customized horn with 55x45 degree dispersion
- Customized 12" woofer with 4" voice coil
- Modular crossover switchable between Passive and Active mode
- Highly durable SafeCoat coating
- "SlingShot" flying system
- Speakon® NL4 with Link

DESCRIPTION

The M12T is a full-range speaker designed specifically for AV production companies. It offers a solid bass response despite the compact cabinet and excels with regard to speech intelligibility. The custom designed horn has been developed specifically for the 2" driver and features the Mach WaveShaper technology which reduces eddy current at the flare exit and improves throw and clarity. The 55x45 degree dispersion pattern is highly controlled and ensures excellent performance when multiple M12T's are used in clusters. A special composite material was developed for the hornflare. It combines stiffness with high inner damping and reduces resonance to inaudible levels. The cabinets are made of the finest 18mm, 13 ply Finnish birch, cut on CNC machines, assembled by trained Danish carpenters and treated with the Mach SafeCoat, a highly scratch resistant, UV stable polyurethane/polyurea coating. All medium throw Touring models come with our modular passive crossover which can be switched to active mode. Impedance relation between crossovers and drivers has been carefully designed and the special low current technique ensures superb performance and reliability at maximum SPL. The crossover is mounted directly behind the Speakon terminal for easy access and features a thermal protection circuit. The 2mm steel grille is designed to be part of the structural strength of the cabinets and has the Mach logo discretely engraved in each corner. The cabinet features integrated handles and a fast and flexible flying system made of black anodized aircraft alloy. The 15 degree trapezoidal shape of the top-boxes facilitates easy design of clusters and arrays. M12T features an integrated top-hat adapter.

SPECIFICATIONS

Passive mode:

Power rating IEC268:	420 watt
Power rating, peak:	1680 watt
Sensitivity 1w/1m:	97 dB
Max SPL, calculated long term:	125 dB
Max SPL, peak:	131 dB
Frequency range +/-3dB:	57 Hz - 20 kHz
Nominal impedance:	8 ohm
Recommended amplifier:	600 watt in 8 ohm

Drive units:

Woofer:	12" with 4" voice coil
Nominal impedance:	8 ohm
Power handling AES:	600 watt
Sensitivity 1w/1m:	97 dB
Maximum SPL, calculated:	125 dB
Maximum SPL, peak:	131 dB
Recommended amplifier:	600 watt in 8 ohm
Compression driver:	3" diaphragm, 2" throat
Nominal impedance:	16 ohm
Power handling AES:	140 watt
Sensitivity 1w/1m:	108 dB
Maximum SPL, calc. long term:	130 dB
Maximum SPL, peak:	136 dB
Recommended amplifier:	200 watt in 16 ohm

Weight & Measurements:

Dimensions (HxWxD):	61x46x36 cm (24x18x14in)
Net weight:	34 kg (75 lbs)
Flying system:	Flying tracks accept double stud
Finish:	Black SafeCoat coating
Grille:	2 mm steel with foam backing
Input connectors:	2 x Speakon® NL 4
Top-hat adapter:	35 mm. diameter
Rigging hardware:	Double Stud & Ring part no. 93944004

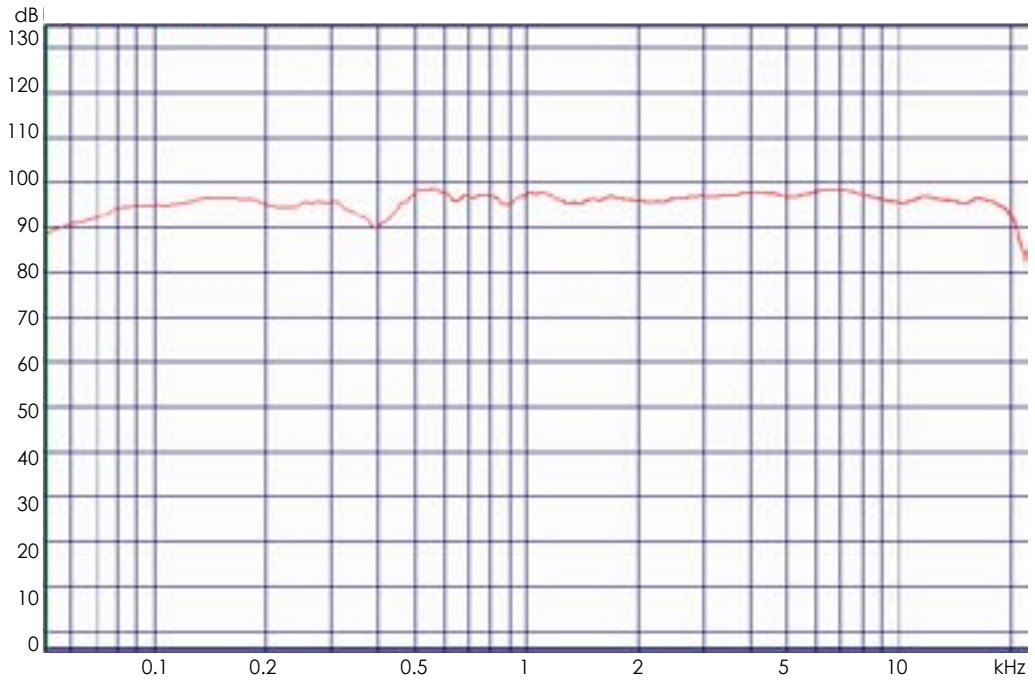
ARCHITECTURAL SPECIFICATIONS

The loudspeaker system shall be a two-way, reflex-tuned, full-range speaker with an IEC268 power handling of 420 watt and a frequency response from 57Hz-20kHz with a crossover point at 1.6 kHz and a 55x45 degree dispersion pattern. The loudspeaker system shall have a sensitivity of 97 dB and a maximum output of 125 dB. The loudspeaker shall also have a built-in, modular, switchable passive crossover with protection circuit. The loudspeaker system shall have one 12" woofer and one 2" compression driver with a titanium diaphragm and Mylar suspension. The woofer shall have an 8 ohm load. The compression driver shall have a 16 ohm load. The loudspeaker shall also have a three-point flying system, each with a documented load of 2145 kg. The cabinet shall be protected with the SafeCoat surface, constructed of 18mm Finnish plywood, trapezoidal in shape with a 15 degree angle and be 61cm(24in) high, 46cm(18in) wide and 36cm(15in) deep with a weight of 35kg(75lbs). The loudspeaker system shall be the Mach M12T.

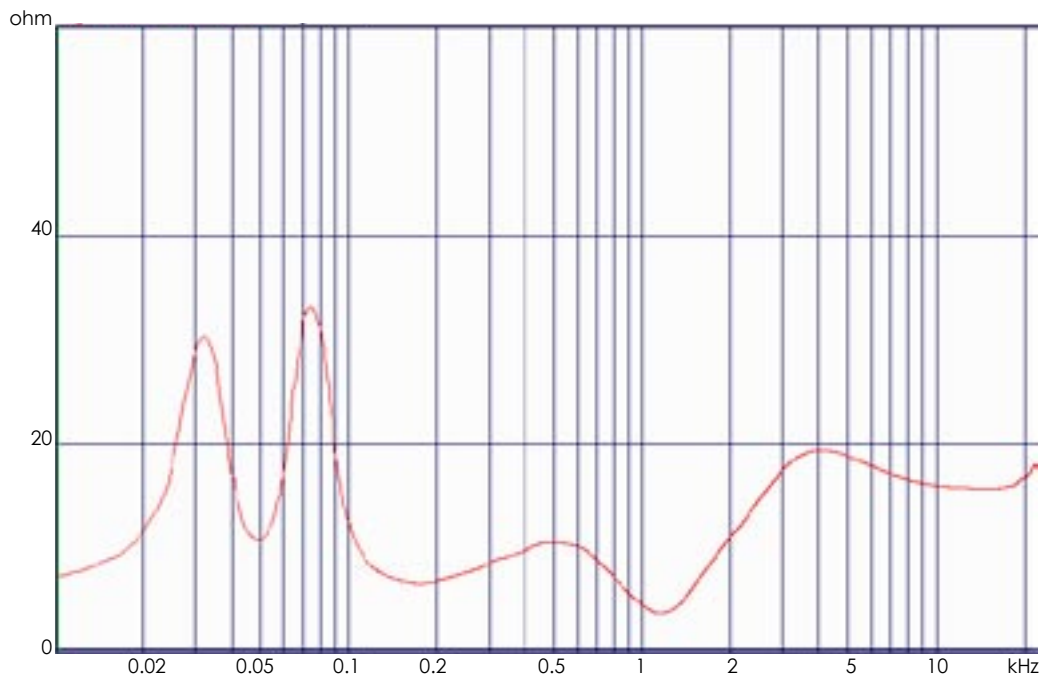
NOTE: Mach is continually working on research and production improvements, which can be introduced into existing products without notice. The products will always equal or exceed the original design specifications unless otherwise stated.

M112T

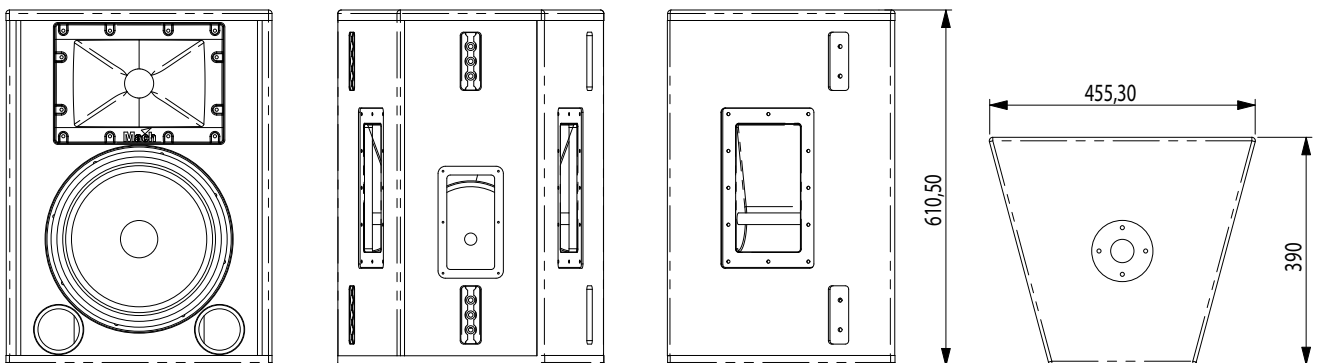
FREQUENCY RESPONSE



IMPEDANCE RESPONSE

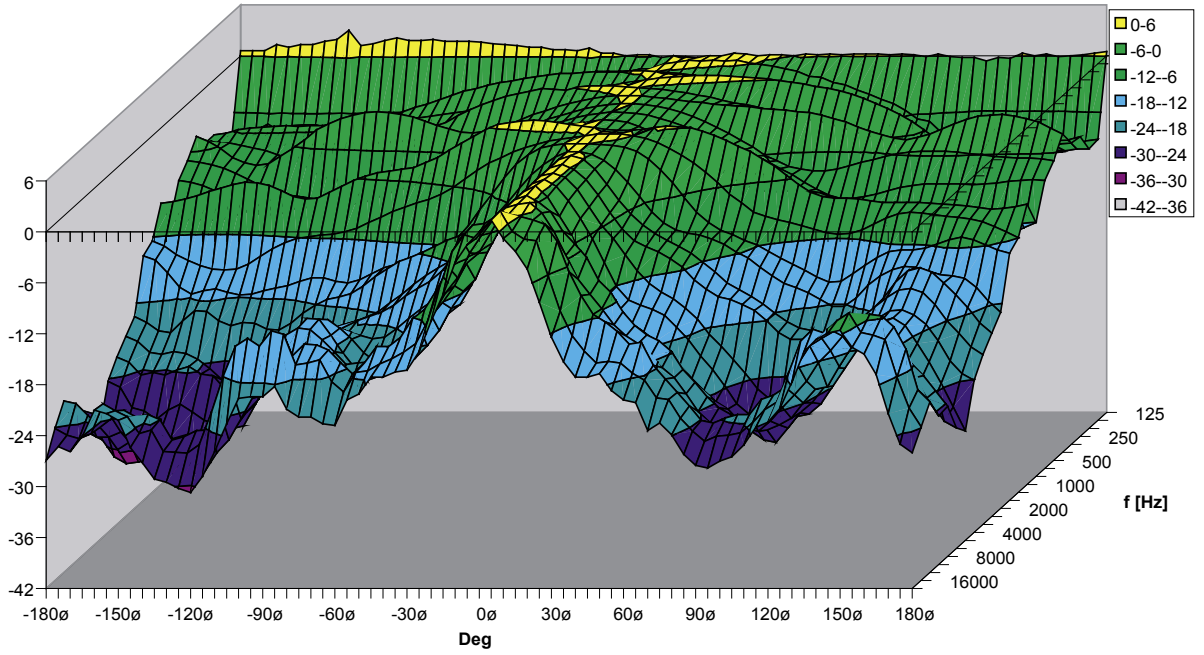


SIZE AND SHAPE



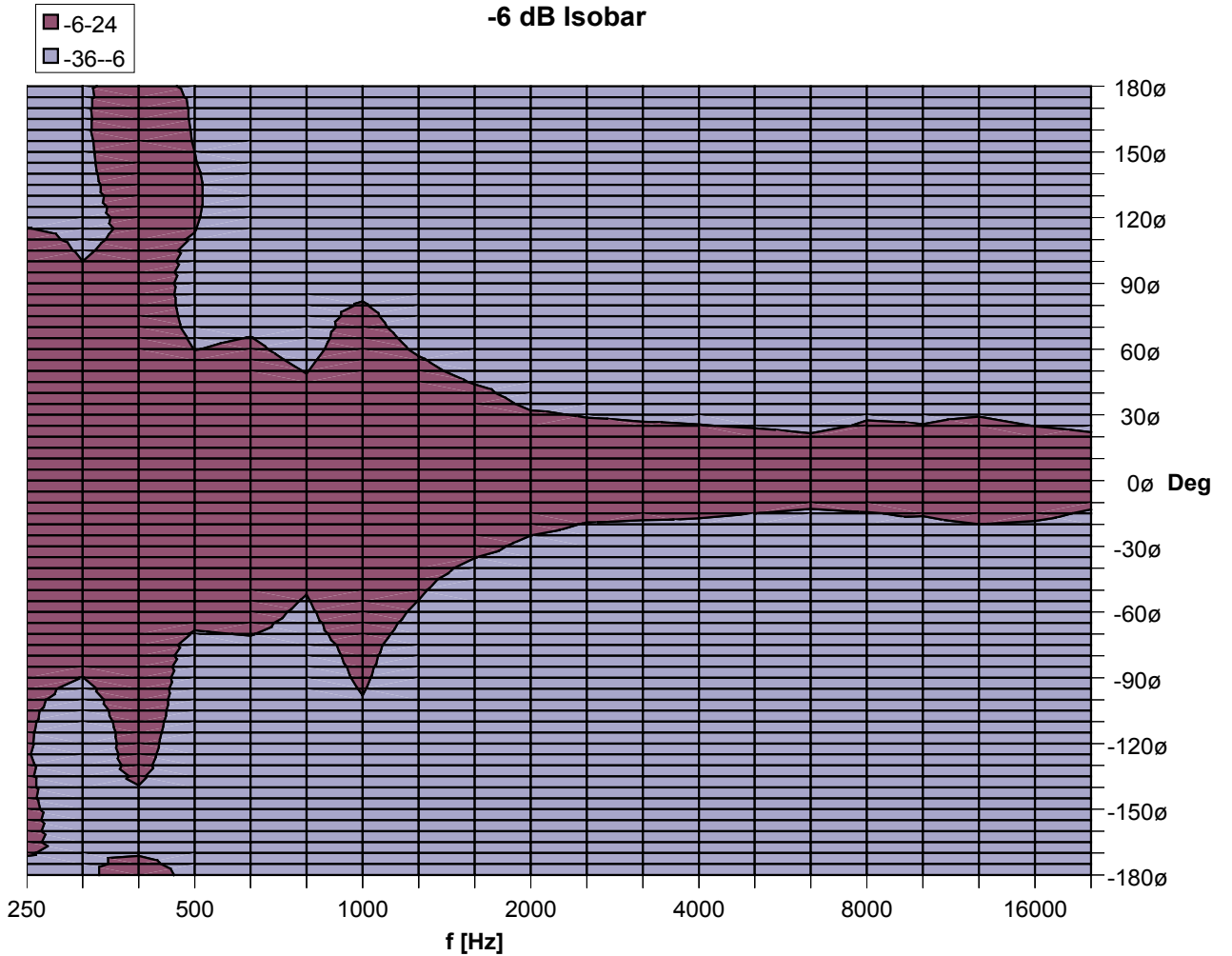
M12T

3D Directivity Plot



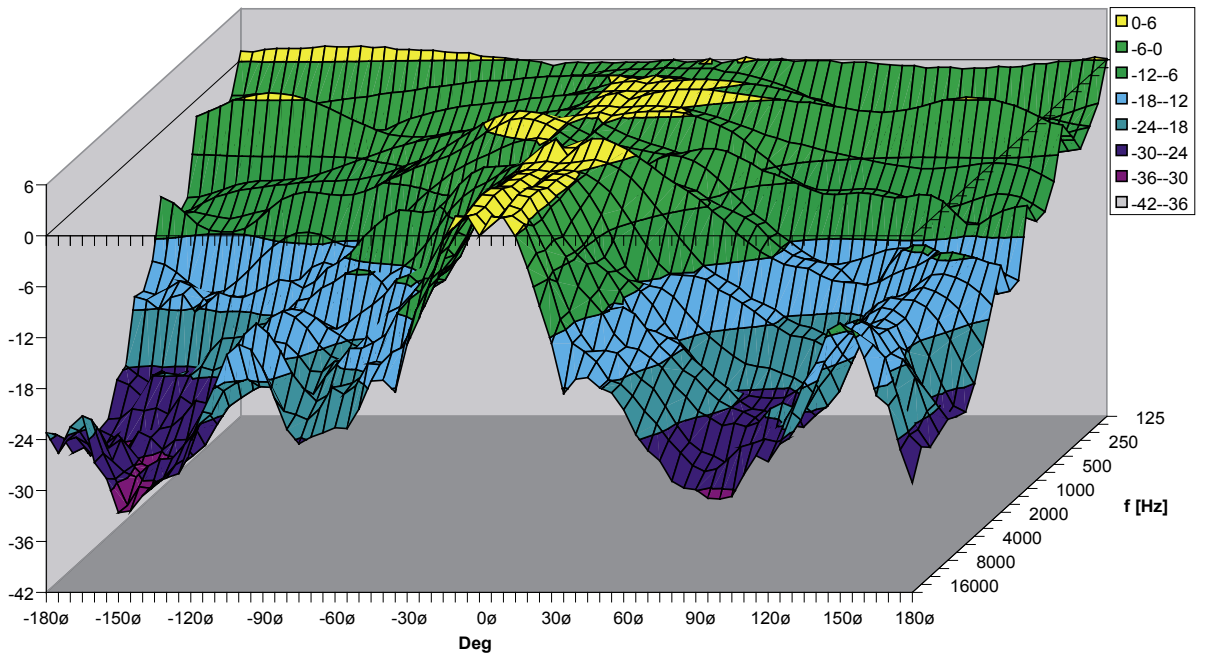
-6 dB ISOBAR HORIZONTAL

-6 dB Isobar



Mach

3D Directivity Plot



-6dB ISOBAR VERTICAL

-6 dB Isobar

