



KEY FEATURES

- 2" "SlingShot" compression driver
- Customized horn with 55x45 degree dispersion
- Customized 15" 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 M15T is a powerful full-range speaker designed for applications where the use of a subwoofer is not practical, such as sport centres, arenas etc. The horn is specifically designed for the 2" compression driver and features the Mach WaveShaper technology which reduces eddy current at the flare exit and improves throw and clarity. The 55x45 degree horn offers excellent dispersion control and features a special composite material which combines stiffness with high inner damping and reduces resonance to inaudible levels. The 2" driver features a special Mylar suspension which enables it to produce a linear response up to 20 kHz. Extraordinarily high power handling and low power compression has been achieved by developing a special flat aluminum voice coil. The customized woofer has a linear excursion of +/-11 mm, enabling it to maintain solid full-range bass at high sound pressure. The cabinet is made of 18mm, 13 ply Finnish birch, cut on CNC machines, assembled by trained Danish carpenters and treated with SafeCoat, a highly scratch resistant, UV stable polyurethane/polyurea. The M15T is equipped with a modular passive crossover which can be switched to active mode. A special low-current crossover technology ensures superb performance 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. With a 15 degree trapezoidal shape, clusters are easily designed. The M15T features an integrated top-hat adapter.

SPECIFICATIONS

Passive mode:

Power rating IEC268:	490 watt
Power rating peak:	1960 watt
Sensitivity 1w/1m:	97 dB
Max SPL, calculated long term:	125 dB
Max SPL, peak:	131 dB
Frequency range +/-3dB:	47 Hz – 20 kHz
Nominal impedance:	8 ohm
Recommended amplifier:	700 watt in 8 ohm

Drive units:

<u>Woofer:</u>	15" 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:

Nominal impedance:	3" diaphragm, 2" throat
Power handling AES:	16 ohm
Sensitivity 1w/1m:	140 watt
Maximum SPL, calculated:	108 dB
Maximum SPL, peak:	130 dB
Recommended amplifier:	136 dB
	200 watt in 16 ohm

Weight & Measurements:

Dimensions (HxWxD):	790x590x570mm (31x23x22.5in)
Net weight:	42 kg (92.5 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:	35mm (1.4in)
Rigging hardware:	Double Stud & Ring 93944004

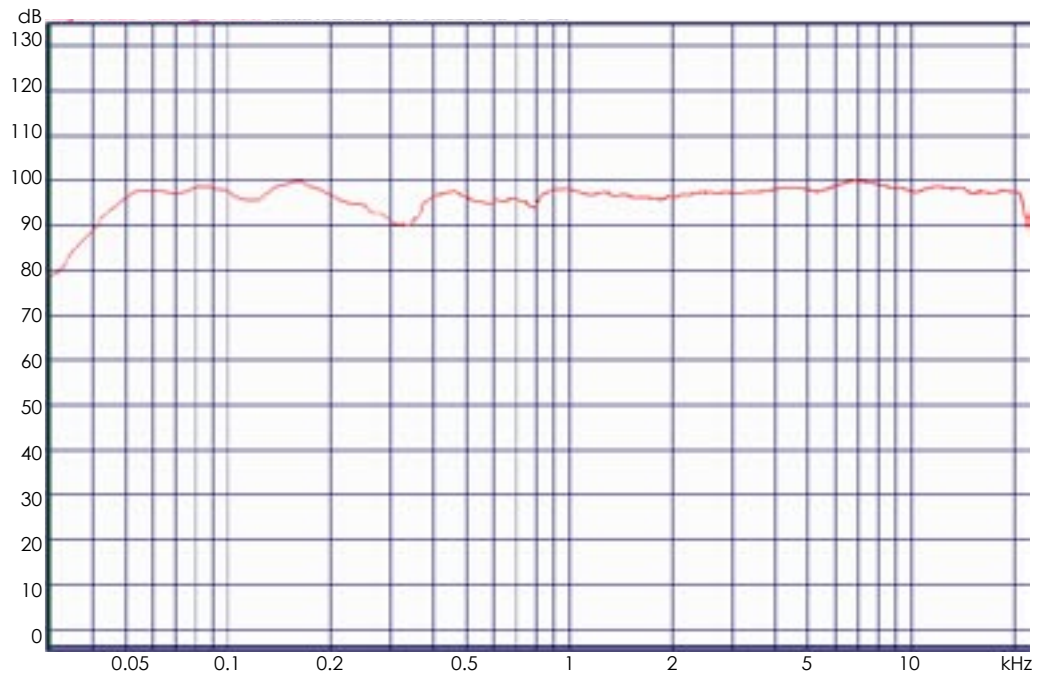
ARCHITECTURAL SPECIFICATIONS

The loudspeaker system shall be a two-way, reflex-tuned, full-range box with an IEC268 power handling of 490 watt and a frequency response from 47Hz-20kHz with a crossover point at 1.3 kHz and a 55x45 degree dispersion pattern. The loudspeaker system shall have a sensitivity of 97 dB and a maximum continuous output of 125 dB. The loudspeaker shall also have a built-in, modular, switchable passive crossover with double protection circuit. The loudspeaker system shall have one 15" woofer and one 2" compression driver with a titanium diaphragm with 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 790mm (31in) high, 590mm (23in) wide and 570mm (22.5in) deep with a weight of 42kg (92.5lbs). The loudspeaker system shall be the Mach M15T.

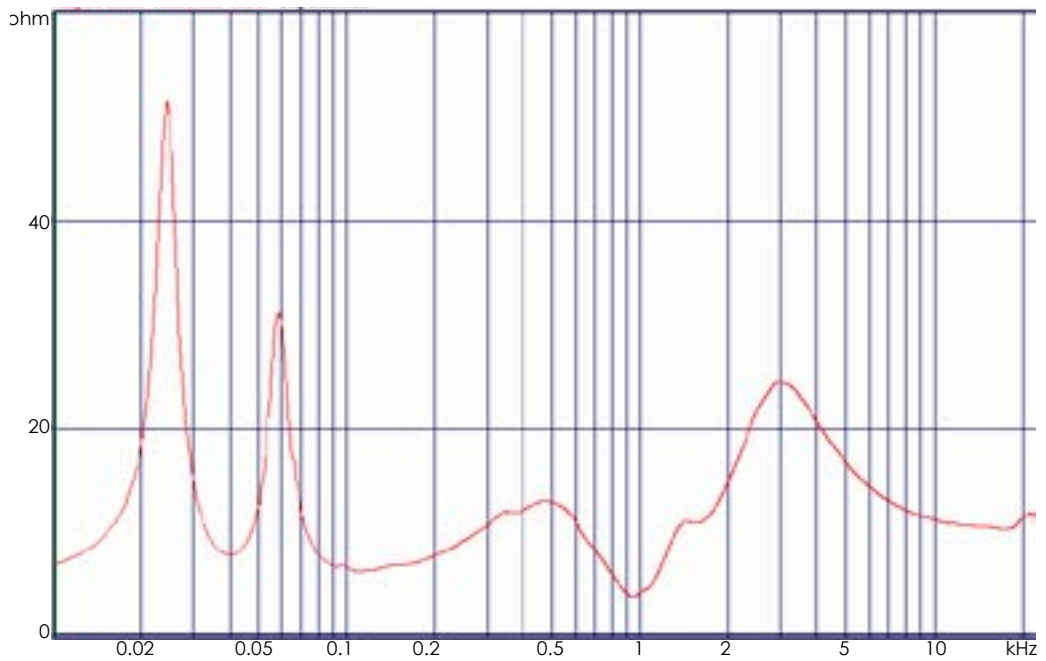
NOTE: Mach is continually working on research and production improvements, which can be introduced into existing products without notice. The products will always equal or exceed the original design specifications unless otherwise stated.

M15T

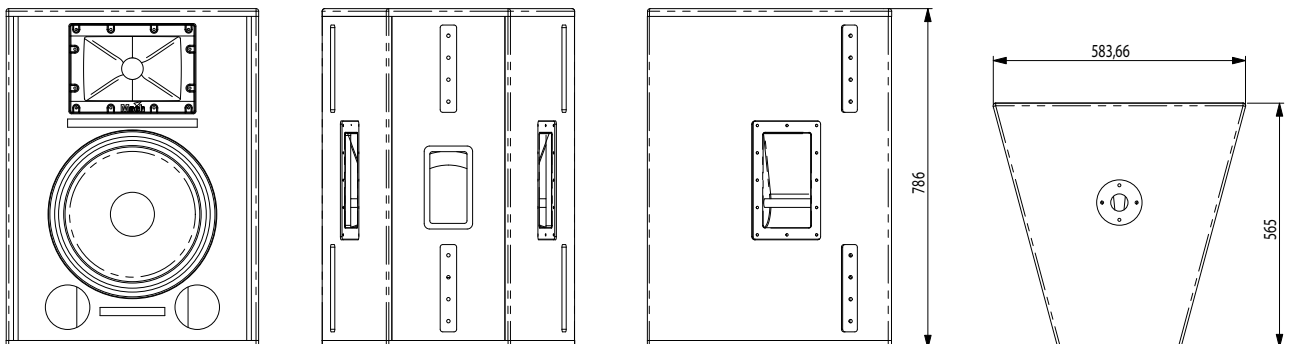
Frequency Response



Impedance Response

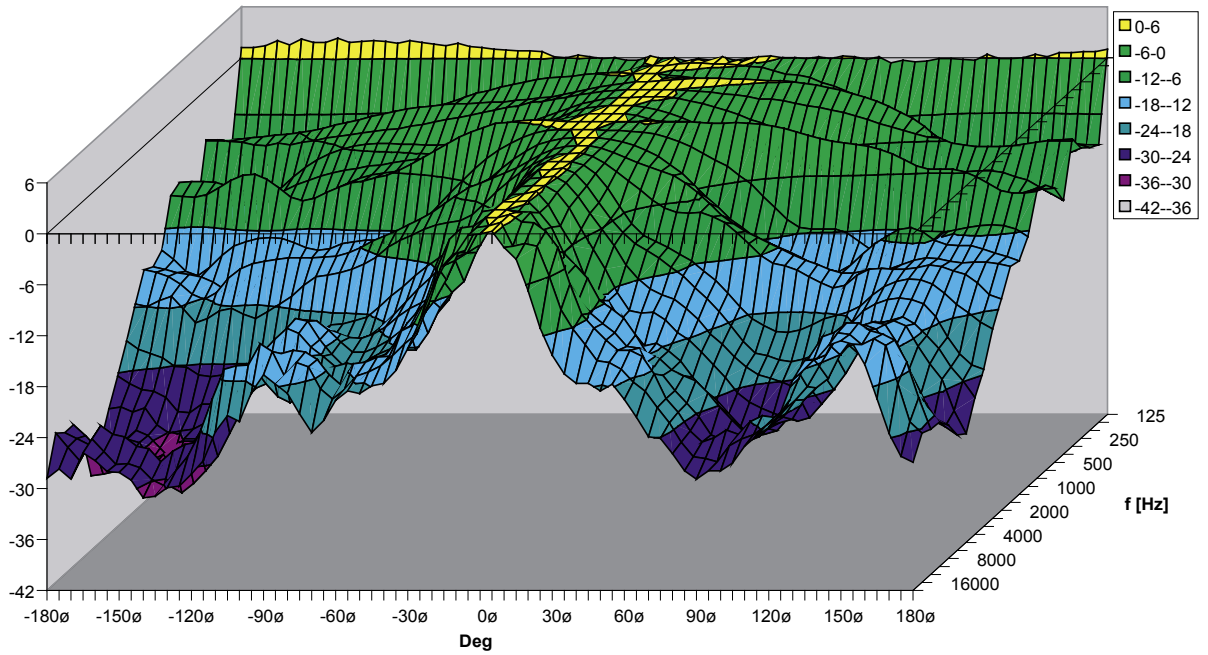


Size and Shape



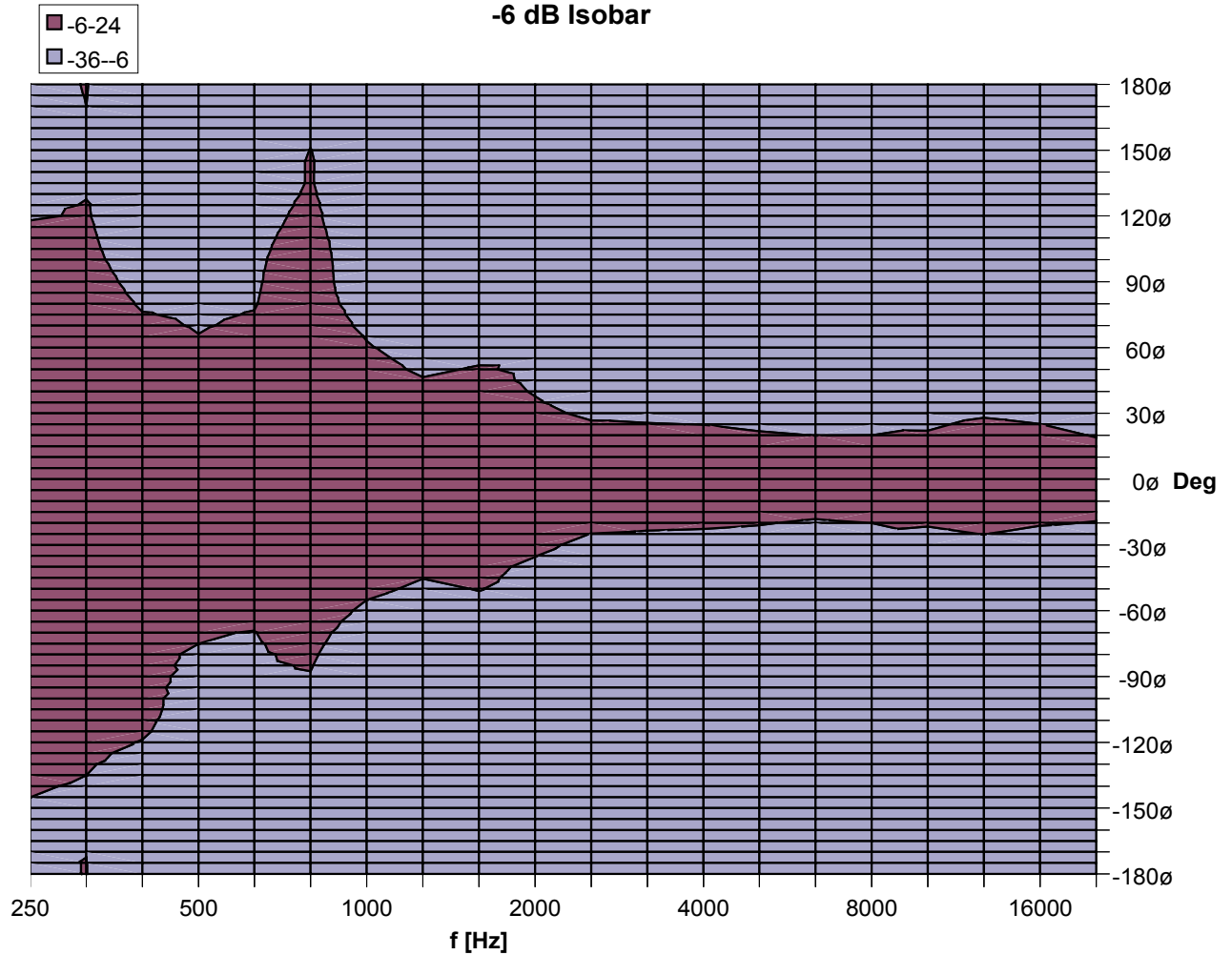
M15T

3D Directivity Plot



-6 dB Isobar Horizontal

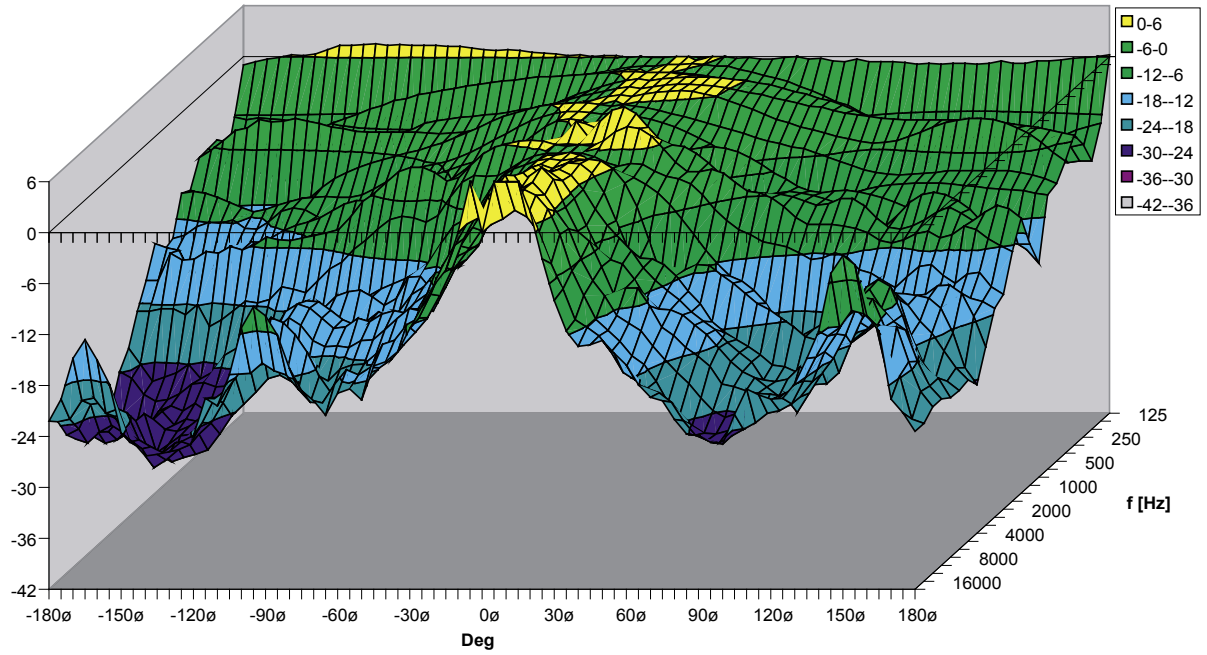
-6 dB Isobar



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3D Directivity Plot



-6 dB Isobar Vertical



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