

# M30T



## KEY FEATURES

- 2" „SlingShot“ compression driver
- Customized horn with 55x45 degree dispersion
- Customized dual 15" mid-units 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 M30T is a powerful top-box with very high output designed for medium-throw applications in combination with the M182T. The custom designed 15" mid/high unit features low hysteresis and low loss in the surround and spider for ultimate reproduction of nuances and detail. It has a conical diaphragm with excellent linearity from 90 Hz to 2 kHz. Efficient heat management is taken care of by a double cooling system which enables the unit to maintain clarity at maximum output while minimizing power compression. The 15" mid/high unit is built around a strong road proven die-cast chassis. The custom designed horn features the Mach WaveShaper which reduces eddy current at the flare exit and improves throw and clarity. The 55x45 degree dispersion pattern is highly controlled. A special composite material developed for the hornflare combines stiffness with high inner damping and reduces resonance to inaudible levels. 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 coating. The M30T features a modular passive crossover which can be switched to active mode. 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 cabinet and has the Mach logo discretely engraved in each corner. In addition, the cabinets feature integrated handles and a flexible flying shape system made of black anodized aircraft alloy. The 15 degree trapezoidal shape for the top-boxes facilitates easy design of clusters and arrays. A transport dolly is available for the M30T.

## SPECIFICATIONS

### Passive mode:

Power rating IEC268:	840 watt
Power rating peak:	3360 watt
Sensitivity 1w/1m:	103 dB
Max SPL, calculated long term:	134 dB
Max SPL, peak:	140 dB
Frequency range +/-3dB:	62 Hz - 20 kHz
Nominal impedance:	4 ohm
Recommended amplifier:	1200 watt in 4 ohm

### Drive units:

Low/mid unit:	2x15" with 4" voice coil
Nominal impedance:	4 ohm (2 pcs)
Power handling AES:	900 watt (2 pcs)
Sensitivity 1w/1m:	103 dB
Maximum SPL, calculated:	133 dB
Maximum SPL, peak:	139 dB
Recommended amplifier:	1300 watt into 4 ohm
Compression driver:	3" diaphragm, 2" throat
Nominal impedance:	16 ohm
Power handling AES:	140 watt
Sensitivity 1w/1m:	108 dB
Maximum SPL, calculated:	130 dB
Maximum SPL, peak:	136 dB
Recommended amplifier:	200 watt into 16 ohm

### Weight & Measurements:

Dimensions (HxWxD):	1090x590x570mm (43x23x22.5 in)
Net weight:	70 kg (154 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
Rigging hardware:	Double Stud & Ring 93944004

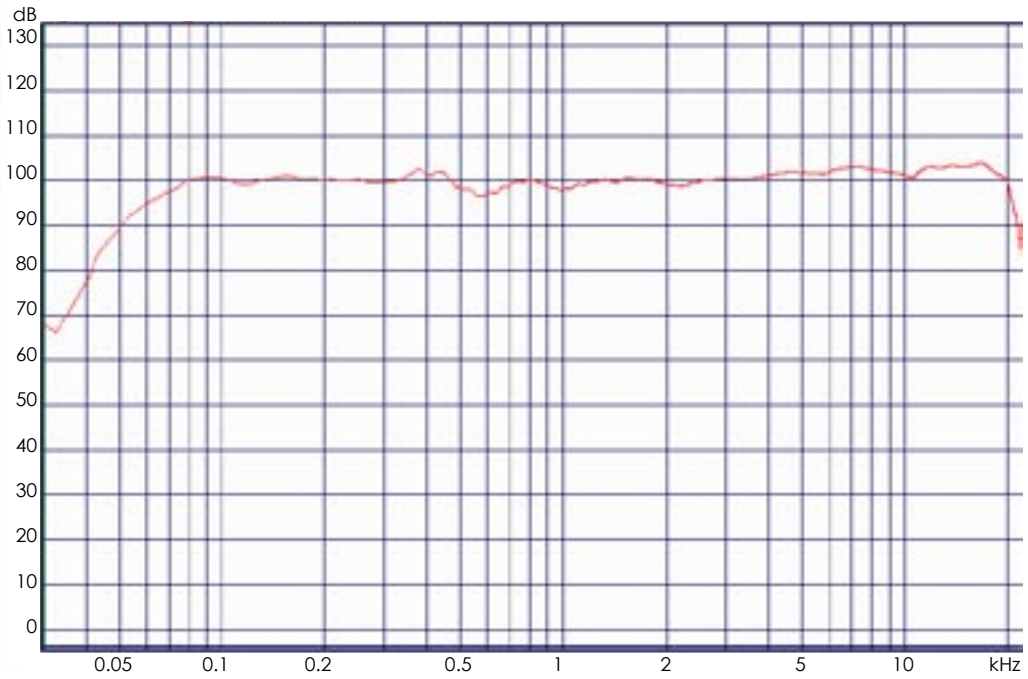
## ARCHITECTURAL SPECIFICATIONS

The loudspeaker system shall be a two-way, reflex-tuned, top-box with an IEC268 power handling of 840 watt and a frequency response from 62Hz-20kHz with a crossover point at 1.3 kHz and a 55x45 degree dispersion pattern. The loudspeaker system shall have a sensitivity of 103 dB and a maximum continuous output of 134dB. The loudspeaker shall also have a built-in modular, switchable passive crossover with double protection circuit. The loudspeaker system shall have two 15" low-mid units and one 2" compression driver with a titanium diaphragm with Mylar suspension. Each low-mid unit shall have an 8ohm load, the compression driver shall have a 16ohm 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 1090mm(43in) high, 590mm(23in) wide and 570mm(22.5in) deep with a weight of 70kg(154lbs). The loudspeaker system shall be the Mach M30T.

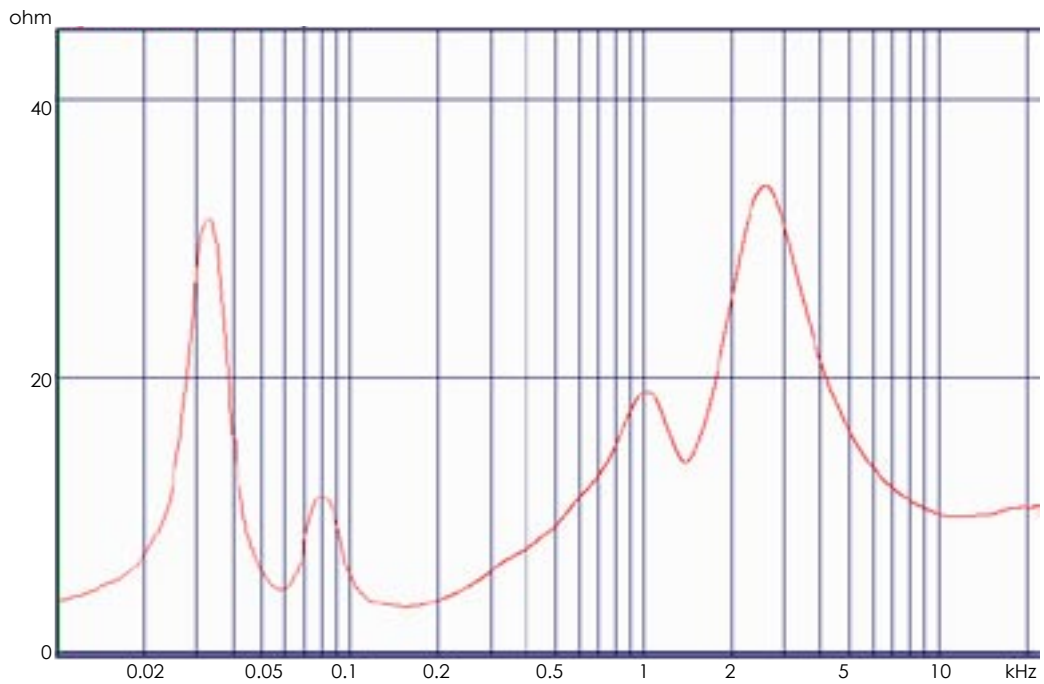
**NOTE:** Mach is continually working on research and production improvements, which can be introduced into existing products without notice. The products will always equal or exceed the original design specifications unless otherwise stated.

# M30T

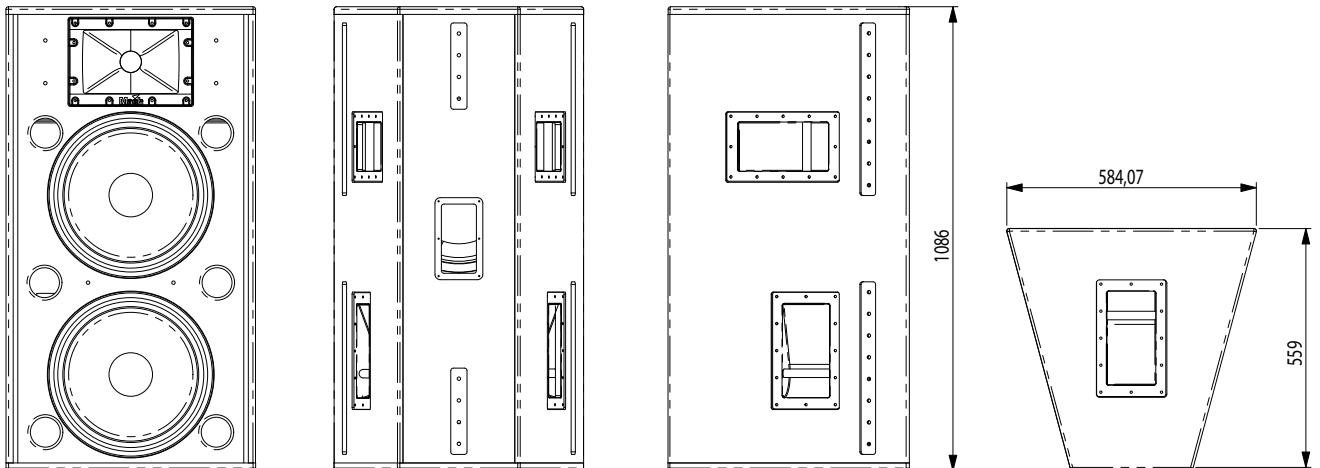
## Frequency Response



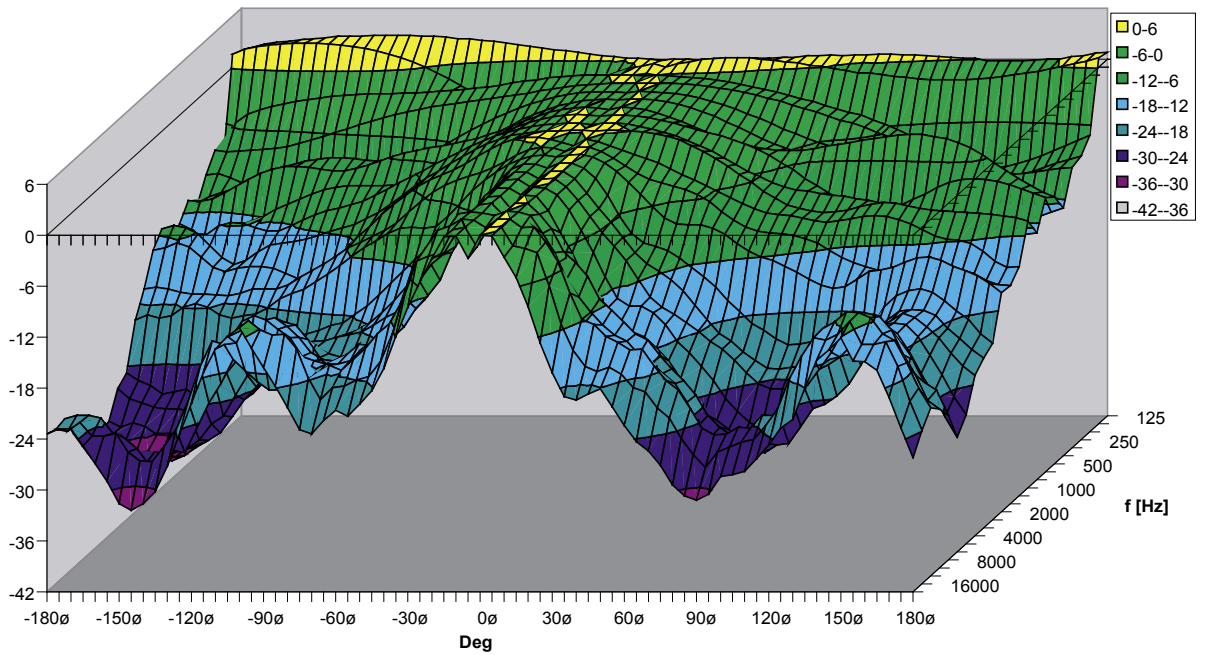
## Impedance Response



## Size and Shape



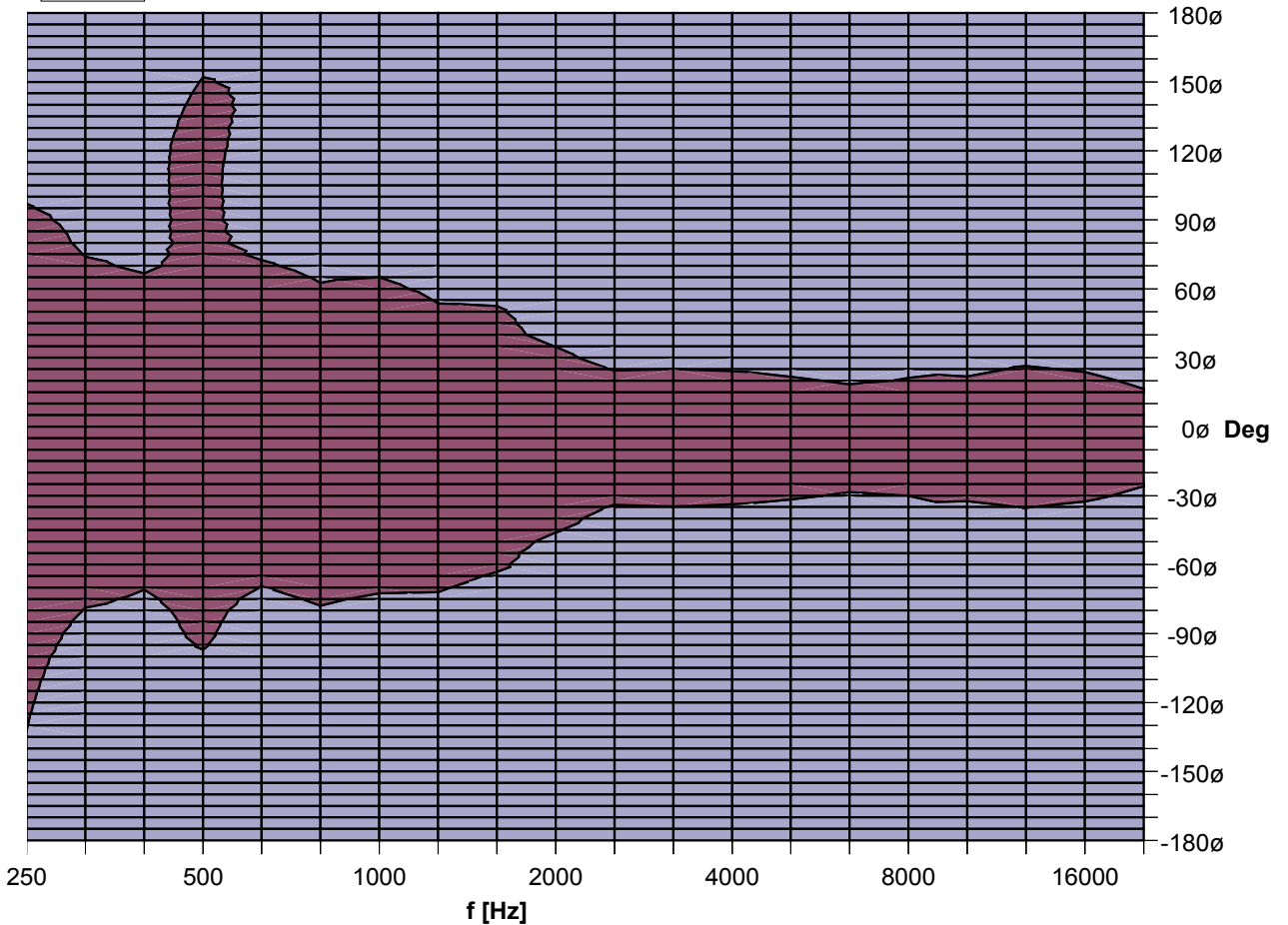
3D Directivity Plot



-6 dB Isohar Horizontal

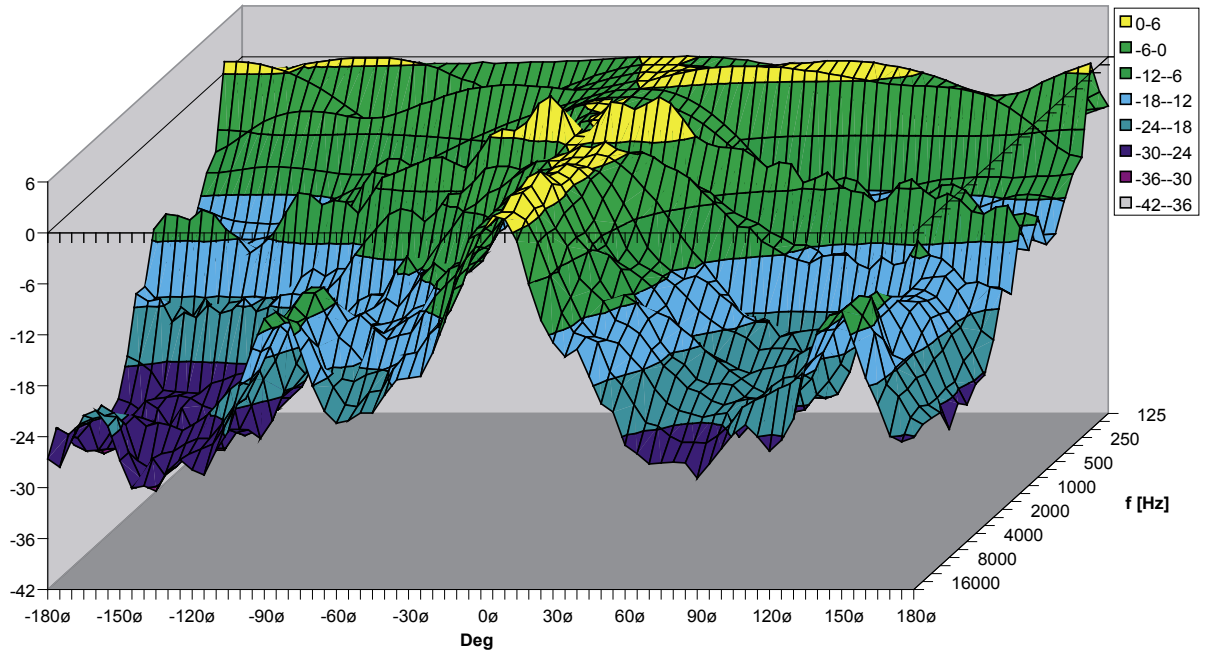
-6 dB Isohar

- 6-24
- 36--6

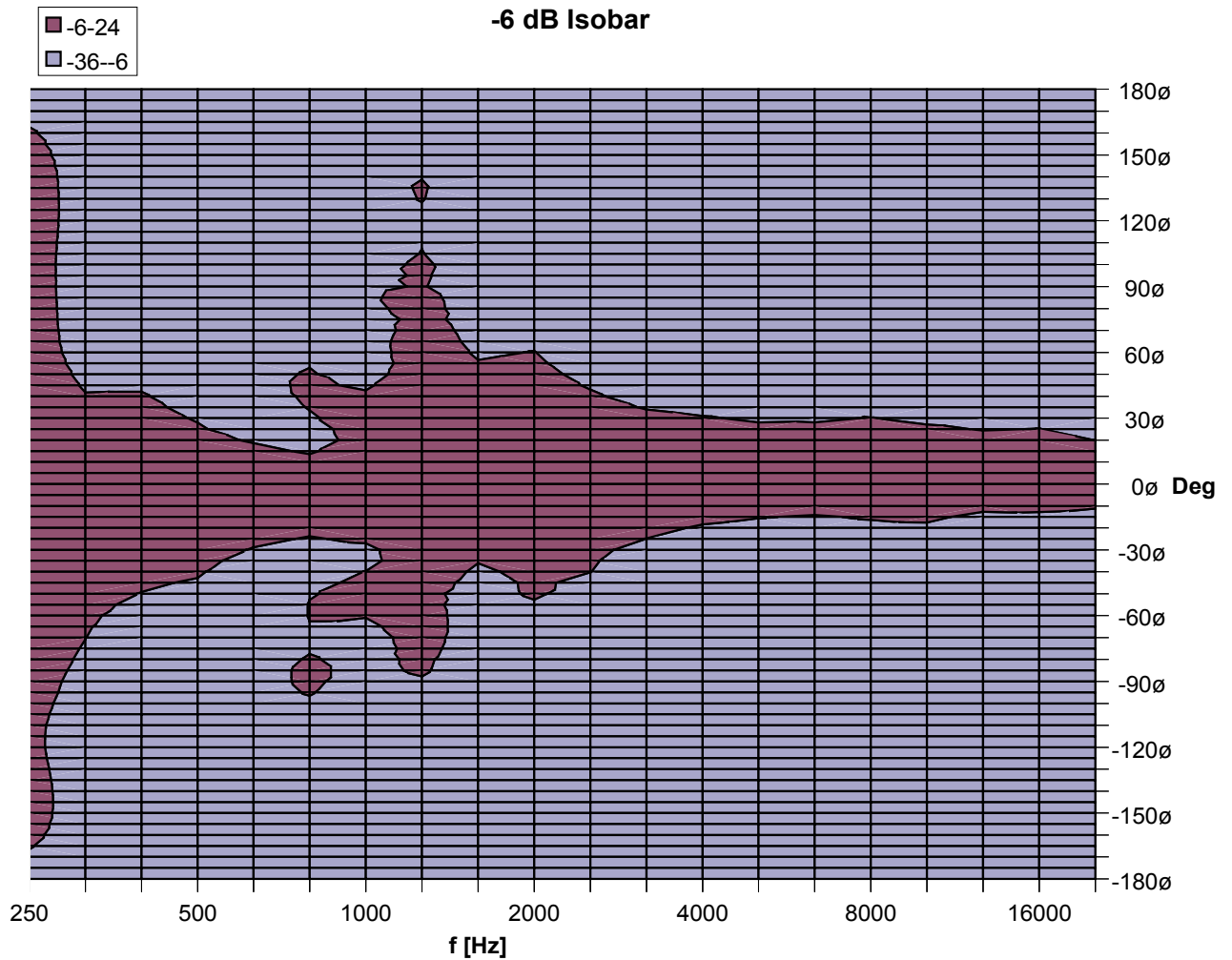


M30T

3D Directivity Plot



-6 dB Isobar Vertical



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