

MACH CM18



KEY FEATURES

- Horizontal and vertical flying
- Speakon terminal with link option and barrier strip terminals
- 19mm MDF cabinet
- 3mm extruded aluminum profiles
- Rotatable 90 x 55 degree horn with controlled dispersion pattern
- 2 x 12" woofer with low power compression
- 2" compression driver
- Modular crossover switchable between passive and active mode

DESCRIPTION

The CM18 is a dedicated top-box designed to be supported by a subwoofer. It is ideal for installation applications in large live or playback venues as the compact size of the enclosure makes it particularly suitable for very high output venues with low overhead fixing points. The trapezoidal shape of the cabinet requires minimal space when flown horizontally. As a special feature, the CM18 is equipped with a rotatable horn, allowing it to be flown horizontally. The CM18 is equipped with two high power 12" low/mid devices and a 2" compression driver with a smooth frequency response and low distortion mounted on a 2" horn with a dispersion angle of 90 x 55 degrees. The crossover is placed directly behind the input terminal and can easily be switched between active and passive mode. It features a thermal protection circuit in passive mode. The cabinet is made of Medium Density Fibre with very high inner damping and excellent surface finish. The black aluminum profiles and the tough moisture resistant steel grille underline the rugged yet stylish design of the CM18. The speaker is available in black as standard with any RAL code color choice as optional.

SPECIFICATIONS

Passive mode:

Power rating IEC268:	700 watt
Power rating peak:	2800 watt
Sensitivity 1w/1m:	102.5 dB
Max SPL, calc. long term:	131 dB
Max SPL, peak:	137 dB
Frequency response +/-3dB:	75 Hz-20 kHz
Dispersion angle:	90 x 55 degree rotatable horn
Nominal impedance:	4 ohm
Recommended High Pass filter:	100Hz (24dB/octave)
Recommended controller:	Mach M20.06
Recommended amplifier:	1000 watt in 4 ohm

Drive units:

<u>Woofer:</u>	2 x 12" with an interleaved sandwich voice coil
Nominal impedance:	4 ohm (2 pcs)
Powerhandling AES:	700 watt (2 pcs)
Sensitivity 1w/1m:	102.5 dB
Max SPL, calc. long term:	131 dB
Max SPL, peak:	137 dB
Recommended amplifier:	1000 watt in 4 ohm

Compression driver:

3" diaphragm, 2" throat	
Nominal impedance:	16 ohm
Power handling AES:	150 watt
Sensitivity 1w/1m:	110 dB
Max SPL, calc. long term:	132 dB
Max SPL, peak:	138 dB
Recommended High Pass filter:	100 Hz (24dB/octave) or higher
Recommended crossover freq:	1500Hz/24dB/oct
Recommended controller:	Mach M20.06
Recommended amplifier:	200 watt in 16 ohm

Weight & Measurements:

Dimensions (HxWxD):	106x43x35 cm (41.7x17x14 inches)
Net weight:	45 kg (99 lbs)
Finish:	Black SafeCoat coating with other colors optional
Grille:	2 mm steel with foam backing
Input connectors:	2 x Speakon® NL4 and barrier strip terminals
Rigging hardware:	Included eyebolts

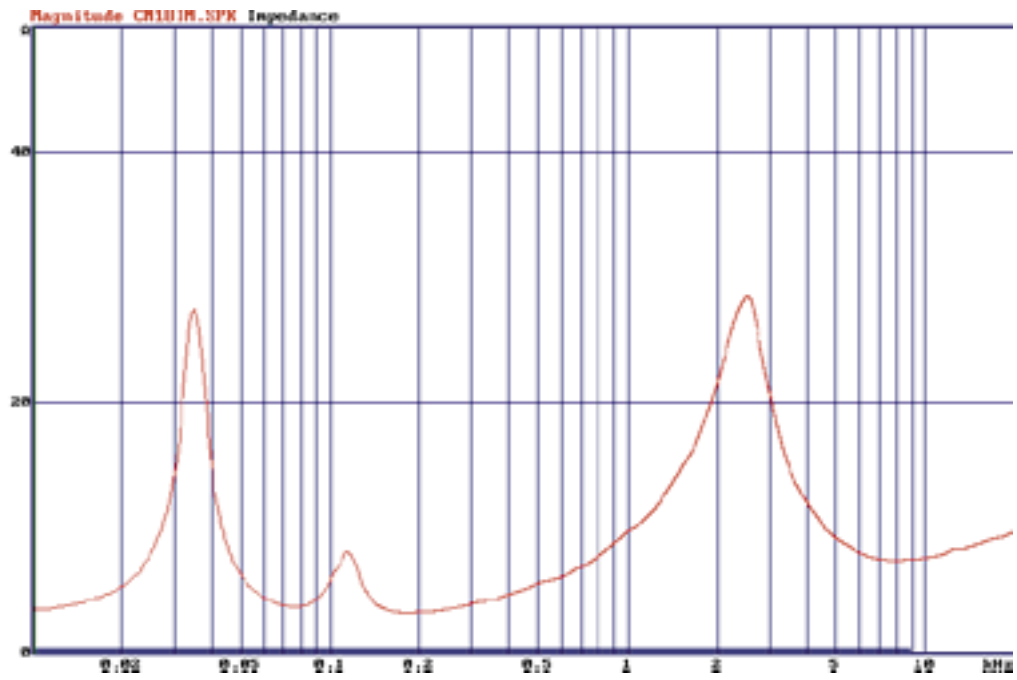
ARCHITECTURAL SPECIFICATIONS

The loudspeaker system shall be a two-way reflex loaded top-box with an IEC268 power handling of 700 watt and a frequency response from 75 Hz-20 kHz with crossover frequencies at xx kHz. The loudspeaker system shall have a sensitivity of 102.5 dB and a maximum output of 137 dB. The loudspeaker system shall also have two " low/mid units and a 2" compression driver. The modular crossover shall be switchable between active and passive mode. The loudspeaker shall also have 18 flying points protected with the SafeCoat surface. The speaker shall be constructed of 19mm Medium Density Fibre, built around an aluminum profile, trapezoidal in shape with a 15 degree angle and shall be 106cm (41.7in) high, 43 cm (17in) wide and 35 cm (14in) deep with a weight of 45 kg (99 lbs). The loudspeaker system shall be the Mach CM18.

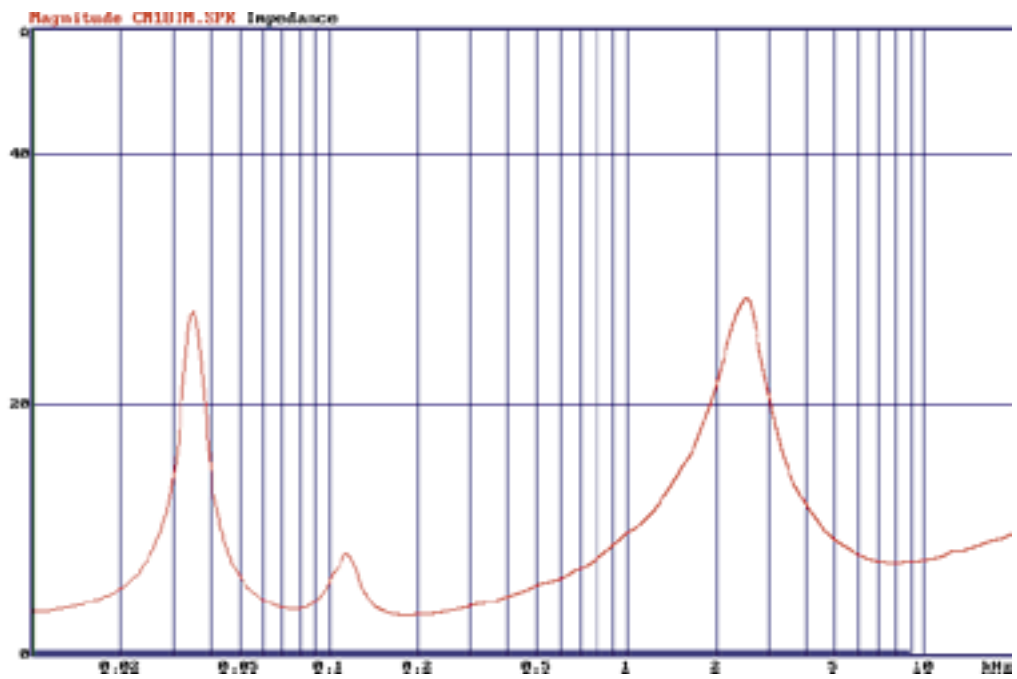
NOTE: Mach is continually working on research and production improvements, which can be introduced into existing products without notice. The products will always equal or exceed the original design specifications unless otherwise stated.

MACH C^M18

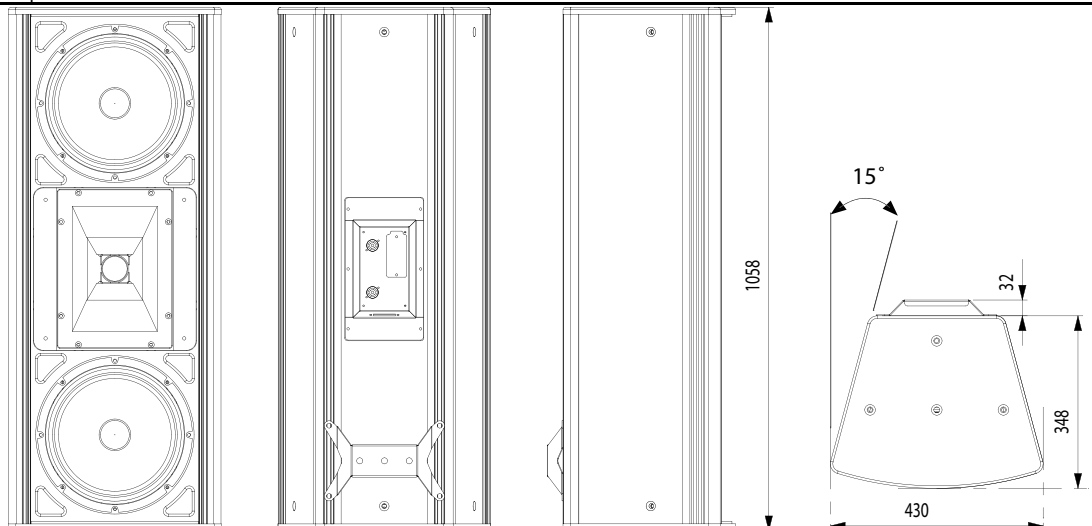
Frequency Response



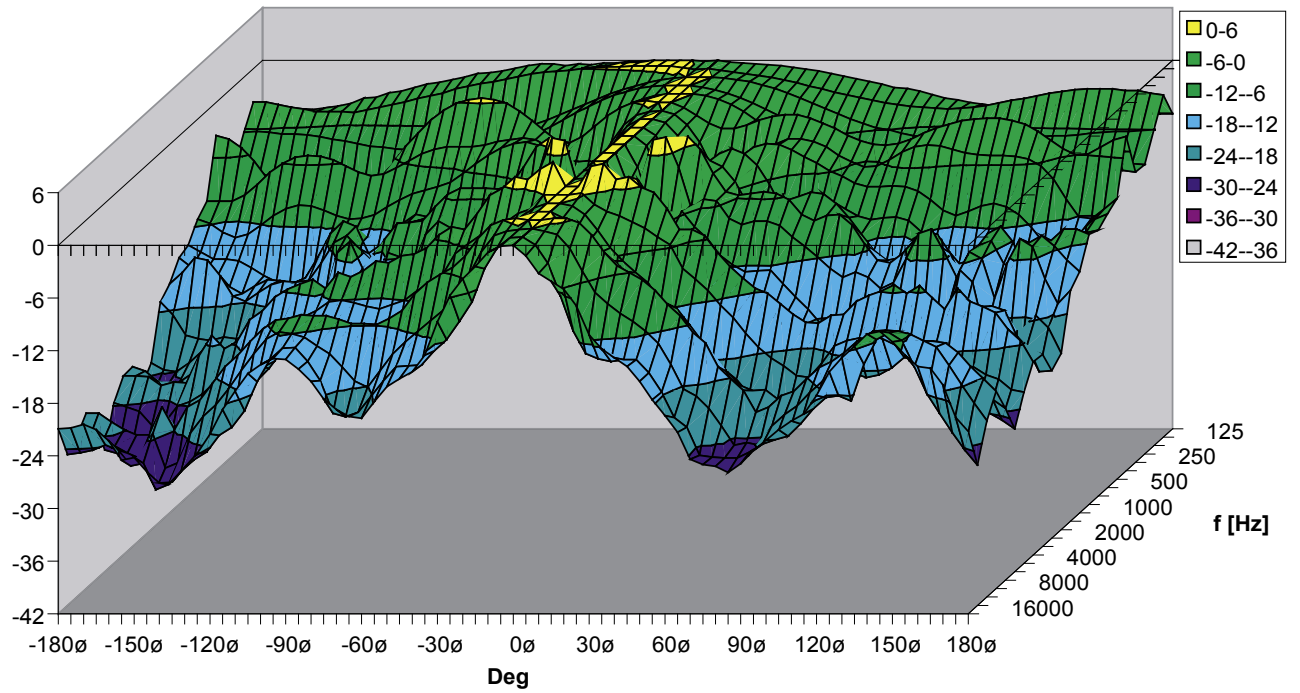
Impedance Response



Size and Shape



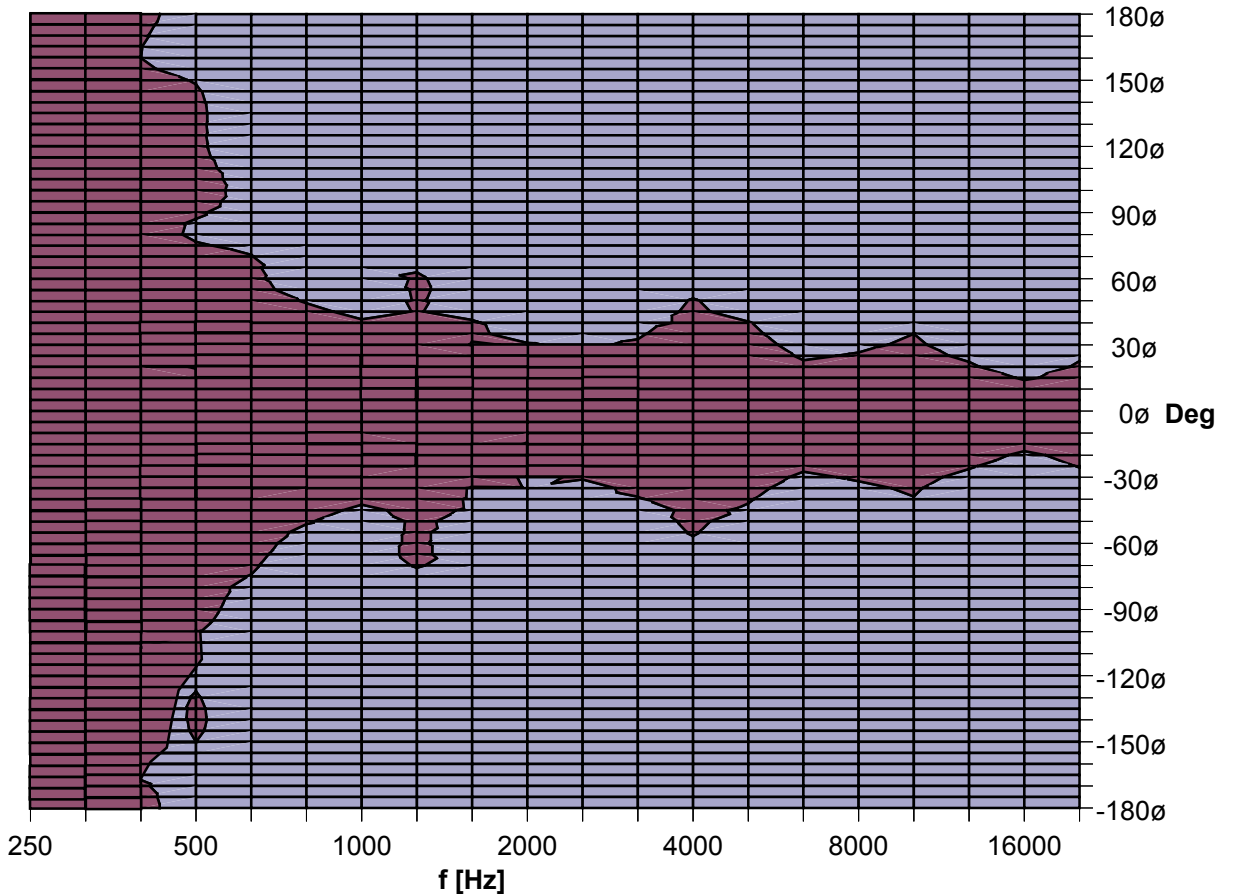
3D Directivity Plot



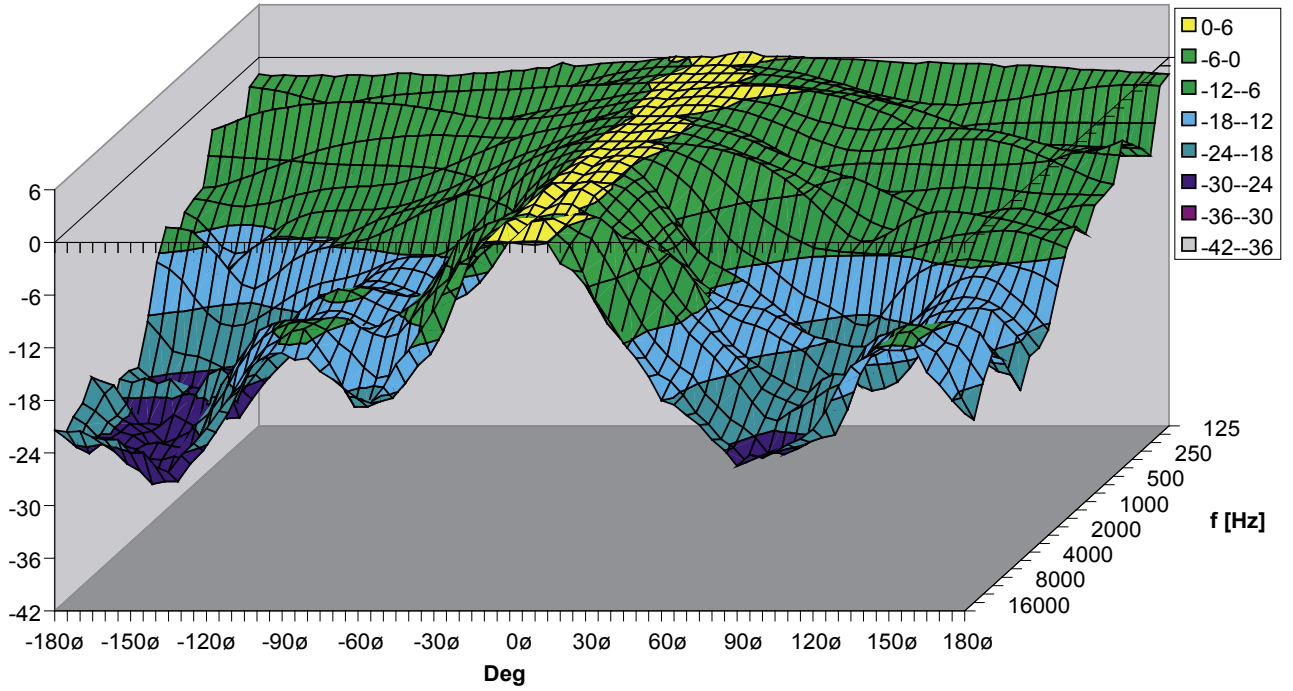
-6 dB Isobar Horizontal

- -6-24
- -36--6

-6 dB Isobaren



3D Directivity Plot



-6 dB Isobar Vertical

-6 dB Isobaren

