



combining reinforcement and five M10 flying points. The M156i is the ultimate combination of unparalleled accuracy, reliability and high SPL performance in a rugged yet stylish enclosure.

SPECIFICATIONS

Passive mode:

Power rating IEC268:	840 watt
Power rating peak:	2400 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:

<u>Woofer:</u>	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:

<u>Compression driver:</u>	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):	114x53x59 cm (45x21x23 in)
Net weight:	77 kg / 170 lbs
Finish:	Black SafeCoat coating
Grille:	2 mm steel with foam backing
Input connectors:	2 x Speakon® NL 4
Rigging hardware:	Eyebolt part no. 93940002

KEY FEATURES

- Modular crossover switchable between passive and active mode
- 19 mm MDF cabinet with 2mm extruded aluminum profiles
- Service free thermal compression driver protection
- Dual 15" low/mid devices
- 2" compression driver
- Five integrated M10 flying points combined with internal steel bracing
- Polyurethane coated top- and bottom plates
- Speakon terminal with link option
- 2mm steel grille

DESCRIPTION

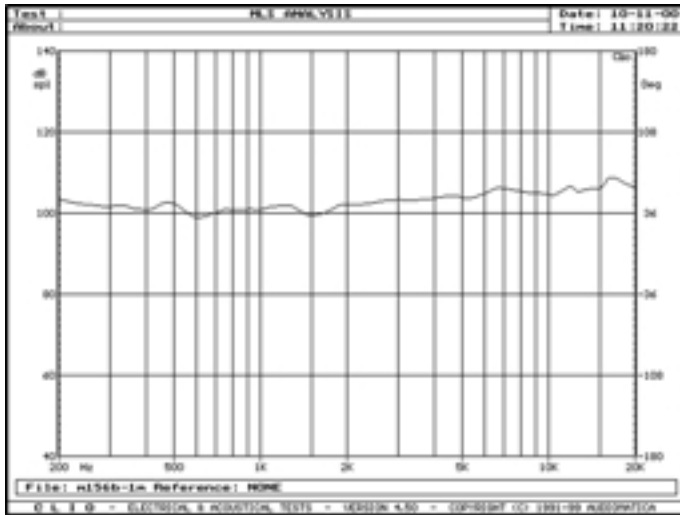
The M156i is the top-of-the-Mach-range speaker in the Installation Series specifically designed for very large nightclubs venues and large scale PA. It is a dedicated top-box, designed to work with the M182i subwoofer below 90 Hz. The 2-way speaker uses two 15" customized mid/high units with very high output. The mid/high unit have been especially optimized for excellent clarity and detail in the crucial midrange area. They feature a conical diaphragm with a linear response up to 2 kHz. Heat management is taken care of by a double cooling system which ensures a minimum of power compression. A special 2" compression driver with a 3" titanium diaphragm mounted behind a 55 x 45 degrees horn is featured in the M156i. The compression driver uses a special Mylar surround and a titanium diaphragm. The horn is designed especially for this unit and as a result, the frequency response is flat up to 19 kHz. The Mach WaveShaper technology is used in the horn design, ensuring a minimum of eddy current at the flare exit and thus highly controlled dispersion and clarity. A special composite material is used in the horn which combines stiffness with very high inner damping. The crossover is placed directly behind the Speakon terminal and can be switched between active and passive mode. It features a thermal protection circuit in active as well as passive mode. The trapezoidal shape of the cabinet facilitates easy design of clusters and arrays. The MDF cabinet is built around a solid steel frame,

ARCHITECTURAL SPECIFICATIONS

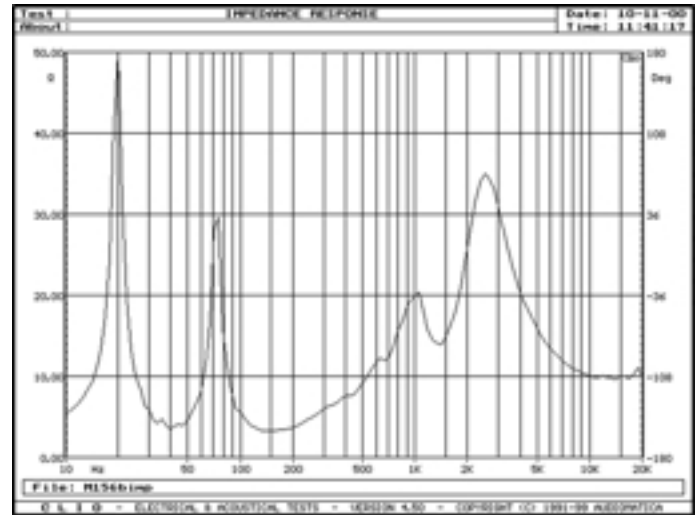
The loudspeaker system shall be a two-way reflex-tuned top-box with an IEC268 power handling of 840 watt and a frequency response from 65-20kHz with a crossover point at 1.3 kHz and a 55x45 degrees dispersion pattern. The loudspeaker system shall have a sensitivity of 103 dB and a maximum SPL of 134 dB. 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 devices and one 2" compression driver with a titanium diaphragm. Both woofers shall have an 8-ohm load, the compression driver shall have a 16-ohm load. The loudspeaker shall have two M10 flying points in the top and bottom plates, which shall be protected with the SafeCoat surface, and two rear mounted M10 attachment points. The enclosure shall be constructed of 19mm Medium Density Fiber, built around an aluminum frame, equipped with internal metal bracing, trapezoidal in shape with a 15 degree angle and shall be 114cm(45in) high, 53cm(21in) wide and 59cm(23in) deep with a weight of 77kg(170lbs). The loudspeaker system shall be the Mach M156i.

NOTE: Mach is continually working in 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.

FREQUENCY RESPONSE



IMPEDANCE RESPONSE



DISPERSION VS. FREQUENCY

