

Mach

Touring Series



The Mach Touring Series

Mach's Touring series is developed for professional rental companies working with sound reinforcement in live or playback applications. The Touring series models have been designed to work in clusters and in combination with each other, whether for FOH, side-fill, near-field or delay applications.

Custom designed flying systems optimized by polar plot measurements are available for all models and the acoustic performance of individual boxes is fully documented.

Whether the application is large scale sound reinforcement or corporate A-V work, you will always be able to find a combination of loudspeakers to exactly fit your requirements within the Mach Touring series.

Long Throw



MS1262 - SlingShot

MS1262 is designed for long-throw applications in very large live or playback applications. The 3-way top-box features a 2", 6" and 12" unit each customized for optimum performance in the hornflare.

All drive units in the MS1262 operate more than an octave beyond the frequency range in which they are engaged. As a consequence, impulse and phase is ideal throughout the entire frequency range, and power compression is kept to an absolute minimum. The audible result of this approach is a top-box which remains unchanged regardless of output.



MS15X2

MS15X2 is designed for applications in which more directivity control or energy is needed in the critical mid-bass area. This dedicated low-mid unit offers extreme output and clarity with a uniform on- and off-axis response and directivity control down to 160 Hz.

The engine consists of two specially developed 15" low-mid devices with a 4" voice coil. The 15" unit features a conical diaphragm with excellent mid-range linearity, a single spider and a surround optimized for strong low-mid performance. Though typically crossed around 100 Hz, low mechanical loss in all moving parts ensures enough excursion to cool the coil and keep power compression to a minimum. Mounted in a cabinet similar to the MS1262, it is possible to rig both units in the same cluster.



Ballister Sub

The Ballister Sub is designed to work in long-throw applications together with very high output top-boxes such as large traditional arrays or line arrays. It is designed as a broadband subwoofer combining very high output with a low-Q design. The result is a highly nuanced, defined and musical sub-bass reproduction. Low weight and compact size has had high priority in the Ballister development process.

Built around a special 18" woofer, the Ballister sub features extraordinarily low power compression and a power handling of a solid 1kW AES.

The Ballister Sub is designed as a half horn. When paired with a second Ballister Sub, it forms a double-sided horn with extended sub frequency response and improved throw.

Medium Throw

M10T

M10T is a compact and very powerful full-range speaker specifically designed for AV production work, small scale touring applications or as front-fill or delay in combination with a SlingShot FOH array.

The 10" woofer is built around a 1" voice coil with a linear excursion of +/-11mm. With a -3 dB point at 57Hz, this enables solid bass reproduction from the compact cabinet.

A solid full-range reproduction, compact size and a sturdy construction makes the M10T the ideal solution for applications where space is limited and clarity with medium to high SPL is required.



M14T

Designed as a dedicated top-box, M14T is an ultra compact, loud and light weight speaker designed for high quality live sound reinforcement. It features a high output mid-bass driver with excellent output and clarity in the midrange as well as a 2" compression driver with a 3" diaphragm. The mid-bass driver has a 3" voice coil with windings on the inside and outside of the voice coil former. As a result the driver has a very balanced mass with excellent clarity and stability when driven hard.

The compression driver features a titanium diaphragm with a polymer fiber surround on a Kapton former, which enables the frequency response to extend to 20 kHz with very low distortion. Power compression is kept very low by the use of a flat wire copper voice coil. Weighing in at only 31 kg, the M14T is an easy one man lift and is designed to be used with the M181T or M218T subwoofer.



M181T

M181T is designed for applications in which very deep and clean bass performance is required. The 195 liter cabinet gives the unit a roll off at 37 Hz, ensuring sub-bass output below 30 Hz.

The woofer features a 5" voice coil with a linear excursion of +/- 9mm.

Furthermore the woofer contains a double spider system to ensure a controlled piston movement at maximum excursion. Very high power handling and low power compression is provided by an extremely efficient cooling system. M181T is prepared for top-hat mounting.



M218T

As a dual 18" frontloaded subwoofer, the M218T is designed specially to support the M14T or M30T. To achieve excellent sub bass reproduction while maintaining clarity and impulse performance, M218T has been designed as a bass reflex cabinet. The woofers feature a 4" interleaved sandwich voice coil with windings on the outside as well as the inside of the voice coil former. The result is a balanced coil with uniform distribution of mass and motive energy that provides an extremely linear motor assembly. In addition the motor features the use of double demodulating rings which nearly eliminates intermodulation and harmonic distortion while improving impulse and transient response.

In order to achieve maximum strength and reliability, the diaphragm is reinforced with carbon fiber. The design of the basket and the double spider offer excellent heat dissipation and thereby very low power compression.



Specification

Long Throw

	MS1262			MS15x2	Ballister Sub
	12"	6.5"	2"		
Power rating AES	350 watt	125 watt	140 watt	900 watt (2 pcs.)	1000 watt
Power rating peak	1400 watt	500 watt	560 watt	3600 watt (2 pcs.)	4000 watt
Sensitivity 1w/1m	106 dB	106 dB	108 dB	105 dB	105 dB
Max SPL, calculated long term	135 dB			135 dB	135 dB
Max SPL, peak	141 dB			141 dB	141 dB
Frequency range ± 3 dB	160Hz–2kHz	600Hz–8kHz	800Hz–20kHz	90Hz–650Hz	49Hz–160Hz
Nominal impedance	8 Ω	8 Ω	16 Ω	4 Ω (2 pcs.)	8 Ω
Recommended Amplifier	700 watt, 8 Ω	250 watt, 8 Ω	280 watt, 16 Ω	1800 watt, 4 Ω	1400 watt, 8 Ω
Dispersion	55° x 35°			120° x 90°	–
Woofers	–			2x15" with 4" voice coil	18"
Dimensions (H x W x D)	820 x 590 x 725mm			820 x 590 x 725mm	936 x 590 x 830mm
Net weight	68kg (149 lbs)			68kg (149 lbs)	72kg (158 lbs)
Connectors	2 x Speakon NL–8			2 x Speakon NL–8	2 x Speakon NL–8
Order information	P/N 95101070			P/N 95101080	P/N 95101090

Medium Throw

	M10T	M14T	M181T	M218T
Power rating IEC268	250 watt	450 watt	600 watt (AES)	2000 watt (AES)
Power rating peak	500 watt	1800 watt	2400 watt	8000 watt
Sensitivity 1w/1m	97 dB	102 dB	98 dB	102 dB
Max SPL, calculated long term	121 dB	129 dB	127 dB	135 dB
Max SPL, peak	127 dB	135 dB	133 dB	141 dB
Frequency range ± 3 dB	80Hz – 20kHz	60Hz – 20kHz	37Hz – 250Hz	42Hz – 250Hz
Nominal impedance	8 Ω	8 Ω	8 Ω	4 Ω
Recommended Amplifier	400 watt , 8 Ω	650 watt , 8 Ω	1200 watt , 8 Ω	2850 watt , 4 Ω
Dispersion	45° x 45°	55° x 45°	–	–
Woofers	10" with 3" voice coil	15" with 3" voice coil	18" with 5" voice coil	2x18" with 4" voice coil
Compression driver	1" diaphragm	3" diaphragm, 2" throat	–	–
Dimensions (H x W x D)	480 x 358 x 295mm	670 x 450 x 400mm	590 x 590 x 730mm	1050 x 590 x 725mm
Net weight	16 kg (35 lbs)	32 kg (70.4 lbs)	37 kg (81.5 lbs)	76 kg (167 lbs)
Connectors	2 x Speakon NL–4	2 x Speakon NL–4	2 x Speakon NL–4	2 x Speakon NL–8
Order information	P/N 95101010	P/N 95101030	P/N 95101050	P/N 95101060

MACH Audio Ltd.

www.mach-audio.com

info@mach-audio.com