



MARTIN AUDIO
LONDON

RS-1200 "ALL IN ONE" HORN FLYING SYSTEM

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RS-1200 HORN LOADED P.A SYSTEM

The RS-1200 is intended for system operators who want all the performance advantages of full horn loading, but also want the convenience of a full range cabinet. As the most effective alternative to our F-1 modular flying system, it features rapid rigging and tear down, for on-the-deck or flown use.

The RS-1200 has several specific advantages when compared to a modular flying system. It is equally adaptable to both small and large systems and may readily be flown on a temporary or permanent basis in clubs having a restricted ceiling height, or used as a potent side monitor. Since the options for stacking it are more limited than with the modular system, and are easily defined, performance variations caused by individual operators adopting dissimilar stacking configurations are minimised.

Whilst it is considered that some sonic compromises are inevitable in multiple "all in one" cabinet systems, these are countered by great flexibility of application and use.

DESIGN CONSIDERATIONS. At the design stage we set out these main goals:-

- (i) It had to pack efficiently in U.S. and European trailers.
- (ii) The bass horn to be compatible with previous Martin bass horns and to equal or outperform our existing designs.
- (iii) Single driver midrange for optimum use of available horn mouth area.
- (iv) 65° horizontal dispersion in upper mid and treble for increased output and minimised mutual interference in multiple arrays.
- (v) Space to accommodate any feasible supertweeters or EHF horns to customers choice.
- (vi) Performance considerations would dictate the final weight, the only stipulation being that this should be under 400lbs.

It is axiomatic that a solid low end cannot be derived from a horn which is too short: we therefore adopted a truck compatible front to back dimension of 30", into which was fitted a rearranged 215MKIII. Identical performance resulted. The midrange problem was solved by allowing its mouth to intrude a small distance into that of the bass horn, which occupies fully three fifths of the available frontal area. The use of a single mid horn enables the space between it and the HF horn to be used for the addition of an EHF horn or supertweeters, whilst two vertically mounted slot radiators can be positioned in the upper mouth of the bass horn.

The RS-1200 is a clean, articulate performer of very high acoustic output, with a mid range sound characterised as slightly "drier" than the larger mid horn of the F-1 system. Sufficient low bass output is present in most concert situations to avoid the need to use additional sub bass.¹

¹ for additional information, see comments relating to F- System.

SPECIFICATION

Type	full horn loaded, all in one flying system
Frequency Response	35 - 18KHz
Crossover Frequencies	300Hz, 1.5KHz
Drivers (Bass)	2x38cm (15") Martin L1540
(Mid)	1x30cm (12") Martin M1230
(High)	1x5cm (2") throat JBL 2445 compression driver
(Super High)	2xJBL 2402 H ring radiators (optional)
Impedance (Bass)	4 ohms
(Mid)	8 ohms
(High)	16 ohms
Power Handling (Bass)	1000 W programme (HP filter set 38Hz)
(Mid)	400 W programme
(High)	150 W programme (JBL rating)
Rated Dispersion	65° horizontal x 35° vertical (mid & high)
Sensitivity (LF) ¹	104dB/1 W/1 M average 50-300Hz (107dB 2 cabinets)
(MF)	107dB/1 W/1 M average 300Hz-1.5KHz
(HF)	112dB/1 W/1 M average 1.5KHz-5KHz
Short Term Max. SPL (LF) ²	129.5dB
(MF)	128.5dB
(HF)	128.5dB
Size (Max. WxHxD)	114cmx84cmx76cm (45"x33"x30") add 16cm (6.3") to height for wheel board
Weight	170Kg (375lbs) without wheel board 183.5Kg (404lbs) with wheel board

¹ half space measurement

² calculated from ref. SPL, allowing 1½dB power compression after 20 secs. of continuous pink noise at half programme rated power.