



F S E R I E S

# F1



## FEATURES

- Two box tour sound and installation system
- Switchable bi-amp/tri-amp facility
- Triple point flying system fully compatible with the F2 System
- High output 18" bass horn
- Proprietary mid and high horns designed for centre weight coverage profile and lateral constant directivity
- 1.4" exit compression driver selected for extended and precise high end

## APPLICATIONS

- Live sound amplification
- Stage side monitor
- Drumfill monitor
- Fixed installations of all types
- Discotheque and club installations
- "Nearfield" coverage for flown F2 system

The F1 is a two box sound reinforcement system specifically developed for professional applications. It is a three-way system designed to be used bi or tri-amplified, without the need for a separate sub-bass. The F1 is fully compatible with the Martin Audio F2 System.

The extremely high output coupled with low distortion and an extended frequency response make the system ideal for use in all high power sound reinforcement situations.

The system uses three point flying hardware developed for the Martin Audio F2. It can be hung and arrayed in clusters to suit varying dispersion requirements. The compatibility with the F2 allows the two systems to be used in the same array. The system is extremely efficient, utilising new horn loading techniques to ensure maximum output from compact cabinet dimensions. The F1 is designed to be used in conjunction with the Martin Audio MX4 system controller which provides crossover and limiting functions in a dedicated package.

The F1 Bass Box is a high power bass horn designed to be used in an F1 or F2 system or as a stand alone bass system. It is of extremely compact dimensions and has an extended frequency response. The high power 18" cone transducer is equipped with a 4" coil and engineered to provide extremely high long term power handling and reliability in all applications. Retrofittable flying fittings are available and it is compatible with the F2 System. The small physical dimensions of the enclosure make it suitable for all types of fixed installations both ground stacked in single or multiple units or flown in conjunction with other F Series cabinets.

The F1 Mid High cabinet is a two-way loudspeaker system that can be used bi-amplified or with an internal passive crossover. A very high performance mid range horn with a custom built 12" transducer is employed to ensure that the F1 is capable of extremely high power handling. A 1.4" exit compression driver is coupled with a centre weighted constant coverage horn pattern to ensure smooth and even arraying in all situations. Retrofittable flying options are available making the system compatible with the F2.

# ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The loudspeaker system shall be a flyable two box system with an 18" horn loaded bass bin and a two-way top box, comprising a proprietary 12" horn loaded mid-range compression unit and a 1.4" exit compression driver mounted on a high frequency horn. The loudspeaker system shall operate with a separate electronic system controller in either two or three-way mode.

The bass bin shall consist of an 18", 4" voice coil low frequency transducer loaded with a hyperbolic horn flare including an integrated phase correction device mounted in a plywood enclosure. The bass bin cabinet shall be three point flyable.

The performance of the loudspeaker shall meet or exceed the following criteria:

Frequency response measured 1 metre on axis shall be 50 - 220Hz +/- 3dB

The power handling shall be 350W R.M.S., 700W programme  
The maximum SPL measured at 1 metre on axis shall be 130dB continuous 136dB peak

Nominal impedance shall be 8 Ohms

Dimensions 572mm x 813mm x 790mm (22.5ins x 32ins x 30ins)

Weight 74kg (163lbs)

The mid/high loudspeaker system shall be of a three point flyable two-way type, with user switchable active or passive operation via the integrated 1.5kHz passive frequency network. The mid and high horn flares integrated with their transducers shall be of uniform coverage type, time coherently mounted and internally supported in a plywood enclosure. The high frequency unit shall in active mode be internally protected for frequencies below its intended frequency passband, via the integrated power and frequency matching network.

The performance of the loudspeaker system shall meet or exceed the following criteria:

Frequency response measured 1 metre on axis shall be 220 - 18000Hz +/- 3dB

The power handling shall be 150W R.M.S. 300W programme mid-range, 50W R.M.S. 100W programme high, 200W R.M.S. 400W programme with integrated network

The maximum SPL measured at 1 metre on axis shall be 133dB continuous, 139dB peak

Nominal impedance shall be 8 Ohms mid-range, 16 Ohms high

Dimensions 572mm x 647mm x 597mm (22.5ins x 25.5ins x 23.5ins)

Weight 60kg (132lbs)

## SPECIFICATIONS

<b>TYPE</b>	Bi-amp/tri-amp two box sound reinforcement system
<b>BANDWIDTH</b>	50Hz - 18kHz +/- 3dB via MX4 controller
<b>DRIVERS</b>	1 x 18", 4" voice coil, 12" mid, horn loaded, 1.4" exit compression driver horn loaded
<b>RATED POWER</b>	LF: 350W R.M.S., 700W programme MF: 150W R.M.S., 300W programme HF: 50W R.M.S., 100W programme
<b>RECOMMENDED AMPLIFIER</b>	LF: 800-1000W into 4 Ohm MF-HF: 400-550W into 4 Ohm
<b>SENSITIVITY (1)</b>	LF: 106dB 1 Watt/1 metre MF: 108dB 1 Watt/1metre HF: 110dB 1 Watt/1metre
<b>MAXIMUM SPL (2)</b>	LF: 130dB continuous, 136dB peak MF-HF: 133dB continuous, 139dB peak
<b>NOMINAL IMPEDANCE</b>	LF: 8 Ohm, MF: 8 Ohm, HF: 16 Ohm
<b>DISPERSION (-6dB POINTS)</b>	65 degs horizontal 35 degs vertical uniform coverage
<b>CROSSOVER</b>	220Hz, 1.5kHz via MX4 controller

<b>ENCLOSURE</b>	18mm birch plywood construction
<b>FINISH</b>	Textured black paint
<b>PROTECTIVE GRILLE</b>	Perforated steel, black with 48% free air flow
<b>CONNECTORS</b>	3-pin XLR, 3 male, 3 female
<b>FLYING POINTS</b>	Triple point F2 system, 3 points top and bottom
<b>DIMENSIONS (W x H x D)</b>	Bass: 572mm x 813mm x 790mm M/H : 572mm x 647mm x 597mm
<b>WEIGHT</b>	Bass: 74kg (163lbs) M/H: 60kg (132lbs)
<b>SHIPPING DIMENSIONS</b>	Bass: 590mm x 830mm x 800mm M/H: 590mm x 660mm x 610mm
<b>SHIPPING WEIGHT</b>	Bass: 76kg (167lbs) M/H: 62kg (136lbs)
<b>ACCESSORIES</b>	F2 Flying Kit, F1 Flying Option

### NOTES

1. Sensitivity figures are measured in half space conditions at 1 metre with 1W input, using band limited pink noise
2. Measured at 1 metre using band limited pink noise

Trade Descriptions Act: Due to Martin Audio's policy of continuing improvement, we reserve the right to alter these specifications without prior notice. Martin Audio is committed to refining the state of the art sound reinforcement combining in-depth product and field applications research with advanced manufacturing techniques. Every Martin product is built to the highest manufacturing standards and rigorously tested to ensure that it meets the performance criteria specified in the design.



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