

# PM Series

Brings "State Of The Art"  
Performance Within The Reach  
Of Every Performing Musician.

The PM Series brings the advanced technology that EAW's director of engineering Kenton Forsythe has developed over the past 20 years designing touring concert sound systems to lower cost systems designed for the everyday performing musician. This achievement in price / performance ratio results from a combination of high tech manufacturing to reduce costs and advanced acoustical engineering for superior sonic definition. This enables every musician to own sophisticated stage systems at a cost no more than that of garden variety MI type systems.

Every effort was made to retain as much as possible of the reliability that EAW's larger professional full range systems are world famous for. The wood used to construct the PM Series systems is a domestic high density plywood with birch surface-plys. While not as strong as the imported cross-grain-laminated birch used in our concert systems, it has a much greater strength to weight ratio than the carpet covered particle board or cheap plywood used in competitive systems. In fact, some other manufacturers' concert sound systems are built from the same material as the PM Series.

Advanced EAW and RCF drivers are utilized throughout the PM Series bringing new levels of quality and durability to the performing musician stage system market. A good example of this is the RCF N252F high frequency horn and driver used in the PM212B and PM315B, utilizing space age magnetic damping fluid in the voice coil gap and a polymer film diaphragm. Another example of "state of the art" driver technology is the RCF N280 compression driver diaphragm's molded reinforcing ribs for higher power handling without sacrificing bandwidth.

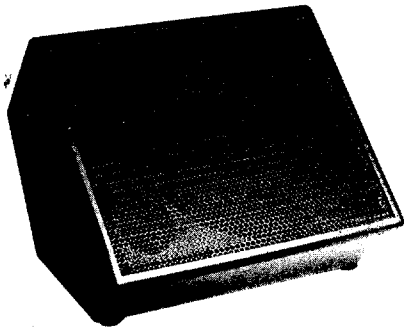
The crossover is the heart of any loudspeaker system and this is where EAW's design leadership really sets the PM Series apart sonically from the competition. Not only are the PM Series crossovers more sophisticated, providing overall time and phase equalization, but they will handle considerably higher power levels without distortion than most systems costing twice as much.

Discussions of the technology behind the PM Series are useful to understand why they sound better, but you only have to listen to them to hear the difference.

**Professional Musician Series**

By Eastern Acoustic Works, Inc.

## PM121SX Coax Slant Stage Monitor System

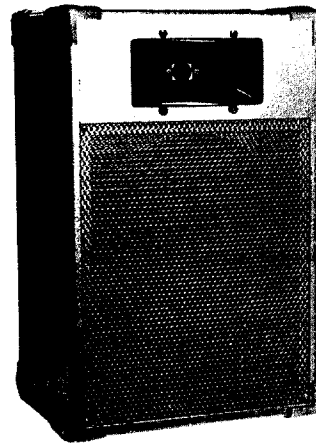


- **True Horn Loaded Coax Design** for improved point source imaging and high definition.
- **Exceptionally Flat Frequency Response** particularly throughout the vocal range for more usable gain before feedback without the need for complex equalization.
- **Compact Slant Cabinet Design** features excellent sight lines ideal for smaller tight stages.
- **High Tech High Frequency Driver** utilizing magnetic damping fluid for greater heat dissipation and polymer film diaphragm for extended high frequency response.

The PM121SX is the lowest cost EAW stage monitor system. It uses a unique RCF L12/CX2 coaxial driver to achieve better response accuracy and more gain before feedback than most competitively priced systems that use a 12 inch driver and tweeter. Its small size and versatile angles make it ideal for a small club stage.

The advanced Forsythe designed crossover network combined with the high pressure die cast coax driver provide smooth extended response that is required to reproduce fully the depth available with modern electronic keyboards.

## PM212B Compact Full Range Stage System

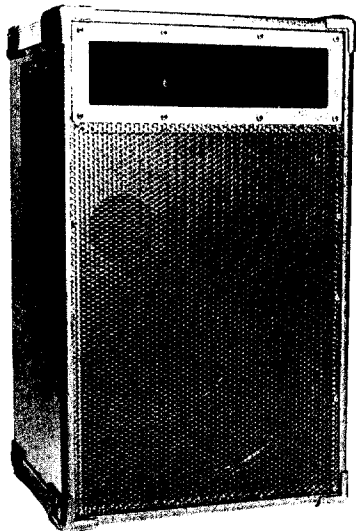


- **Very Compact Package** makes transport easy, will fit into the back seat of most sub-compact size cars.
- **Rugged Construction And Finish** identical to the larger PM Series systems enabling the PM212B to continue to perform long after lesser systems have been retired to the scrap pile.
- **Bi-Frequency Vent Design** for high output, extended low frequency response down to the 50 Hz region from small (2.2 cubic foot) box.
- **Wide Horizontal Coverage** due to the high tech RCF N252F high frequency reproducer.

The PM212B is unique in offering a combination of high output and wide bandwidth from a system measuring only 2.2 cubic feet in volume. This combination of sonic performance and small size makes it the ideal system for small club and lounge sound reinforcement, or any application that requires a very portable, high definition loudspeaker system.

In addition to sound quality, the PM212B's excellent durability sets it apart from all competitively priced systems. From the cast frame 12 inch low frequency driver to the birch faced plywood construction, the PM212B is built to be substantially more reliable than typical MI systems.

## PM215B High Output Full Range Stage System

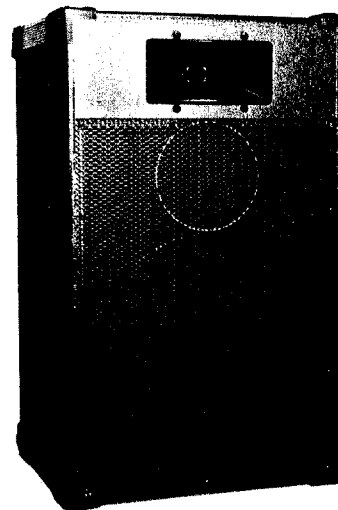


- **High Output Capabilities** of greater than 126 dB SPL long term, more than enough for most club stage reinforcement use.
- **Optimized Directivity In The Critical Mid Band** enables your vocals to cut through higher ambient noise.
- **High Technology RCF N280 Compression Driver** utilizes molded ribs to strengthen the 38 mm (1.5-in) diaphragm for a combination of extended frequency response and high power handling.
- **Equalized Forsythe Designed Crossover Network** uses asymmetrical slopes for ideal driver alignment at crossover.

The PM215B is a two-way full range system designed for high output nearfield reinforcement applications where vocal penetration is the key objective. In the PM215B, EAW has updated the classic "15 and a horn system" with advanced technology including an equalized third order crossover network, high tech compression driver and constant horizontal coverage high frequency horn.

The RCF L15/854 15 inch low frequency driver's exceptionally high efficiency and low distortion enables the PM215B to require less power for a given volume level than most competitive systems. The N280 high frequency compression driver makes use of a proprietary RCF technique to mold ribs into the composite material diaphragm for greater reliability without sacrificing high frequency bandwidth.

## PM315B Wide Coverage Full Range Stage System



- **High Tech Poly-Laminated Mid Range Driver** operating in the mid band for seamlessly smooth vocals and new standards of distortion free output.
- **Flat Power Response Over 130 Degree** horizontal angle as a result of the true three-way design enables every seat in the house to get great sound.
- **Very Low Distortion** due to the use of a cone mid range results in a more natural sound character.
- **Wide Bandwidth And Flat Frequency Response** make it ideal for use with modern advanced keyboard instruments.

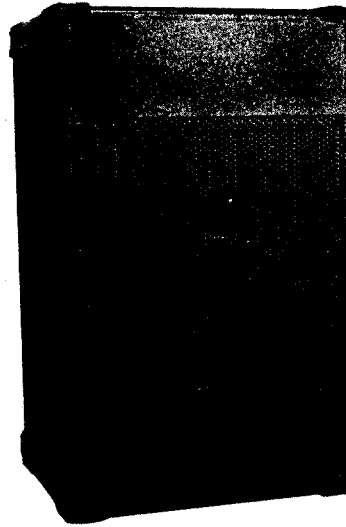
The PM315B is a true three-way system using an advanced EAW MF160, 160 mm (6.2-in) driver for the 450 to 4,500 Hz band, eliminating the problem of placing a crossover within the critical vocal range. Additionally, the PM315B's cone mid range has significantly lower distortion than any competitive system using a horn type driver.

Covering the entire mid range band with a single driver enabled EAW's engineers to optimize the low frequency and high frequency drivers for maximum performance at both ends of the frequency spectrum.

The RCF L15/854 15 inch low frequency driver provides smooth response down to the 40 Hz region for impressive bass output. At the top end the RCF N252F compression tweeter is crossed over high enough to permit crystal clear overtones.

**PM115B  
Vented Bass  
Guitar System**

The PM115B is a vented low frequency system designed for bass guitar reproduction. The RCF L15/854 15 inch driver's advanced European cone enables less distortion at high sound pressure levels than competitive systems. As a result, the PM115B sounds "cleaner" while retaining the "fat" classic bass guitar sound. Its high power handling 400 watts AES and high efficiency 101 dB SPL enable it to produce over 127 dB SPL long term output.



**Specifications**

Model:	PM121SX	PM212B	PM215B	PM315B	PM115B
Frequency Response					
- 10 dB:	65 -19,000 Hz	50 -19,000 Hz	38 - 17,000 Hz	38 -19,000 Hz	38 -6,000 Hz
+ - 3 dB:	75 -17,000 Hz	58 -17,000 Hz	48 - 15,000 Hz	48 -17,000 Hz	48 -2,500 Hz
Sensitivity (1w@1m):	97 dB SPL	99 dB SPL	101 dB SPL	101 dB SPL	101 dB SPL
Impedance:	8Ω	8Ω	8Ω	8Ω	8Ω
Power Handling					
AES:	250 watts	250 watts	350 watts	400 watts	400 watts
Maximum Output:	123 dB SPL	124 dB SPL	126 dB SPL	127 dB SPL	127 dB SPL
Nominal Coverage Angles					
Horizontal:	80 degrees	130 degrees	100 degrees	130 degrees	N/A
Vertical:	80 degrees	50 degrees	40 degrees	50 degrees	N/A
Driver Data					
LF Driver:	RCF L12/CX2 300mm (12-in)	RCF L12/565 300mm (12-in)	RCF L15/854 380mm (15-in)	RCF L15/854 380mm (15-in)	RCF L15/854 380mm (15-in)
MF Driver:	N/A	N/A	N/A	EAW MF160 160mm (6.2-in)	N/A
HF Driver:	Coax	RCF N252F Compression Tweeter	N280/H3709 Compression Driver/Horn	RCF N252F Compression Tweeter	N/A
Crossover Frequencies:	2500 Hz	3,300 Hz	1,500 Hz	450, 4,000 Hz	N/A
Crossover Slope:	18dB/ Octave	18dB/ Octave	18dB/ Octave	18dB/ Octave	N/A
Enclosure Type:	0.9 ft3 vented	2.2 ft3 vented	4.2 ft3 vented	4.2 ft3 vented	4.2 ft3 vented
Input Connectors:	1/4 Inch Phone Jacks				
Enclosure Material:	Birch Faced Plywood				
Dimensions					
Height:	15.75 -in	24.25-in	30-in	30-in	30-in
Width:	19 -in	15.75-in	18.38-in	18.38-in	18.38-in
Depth:	11.75 -in	11.75-in	15.75-in	15.75-in	15.75-in

**Eastern Acoustic Works, Inc.**

59 Fountain Street  
Framingham, MA 01701  
(617) 620 - 1478

