FORSYTHE SERIES

JF Series

High Definition Full Range Systems

Compact Systems With Unique Capabilities

JF Series systems have been engineered for a diverse set of applications that share certain key requirements. Among these are flat power response and consistent dispersion, high output with minimal distortion, compact, unobtrusive packaging, and exceptional power handling.

Combining high output, linear response and consistent dispersion is difficult enough when size is not a factor. When the total package must be as small as 7.5" x 9" x 14.5", the challenges become enormous. In developing the JF Series, EAW engineers integrated new ideas from such acclaimed products as the KF300 Virtual Array™ system, the SM200 high-definition stage monitor, and the MS63 Ultimate Fidelity Nearfield system. They have also developed new approaches to minimize enclosure volume. Proprietary waveguides and purpose-designed woofers optimize power response across the operating bandwidth. Complex crossovers incorporate driver protection and up to five bands of parametric equalization for linear response in both passive and bi-amped operation. Wide conical coverage allows vertical or horizontal mounting. A comprehensive hardware system facilitates stand-mounting, flying or hanging.

The result of this comprehensive engineering effort is a group of systems that set new standards of performance and versatility. Compatible with EAW subwoofers for extended bass output, JF Series systems offer advanced solutions for a wide range of portable and permanent applications. Their advanced construction technology was developed for world renowned EAW concert touring systems. With materials such as exterior-grade cross-grain laminated hardwood, water-resistant glue joints, recessed hardware, vinyl-coated perforated steel grills and exterior finishes chosen for durability, these systems are designed for long trouble-free operating life.

EAW

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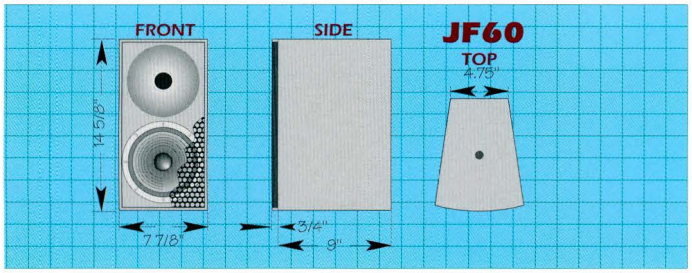
JF60 Ultra-Compact System



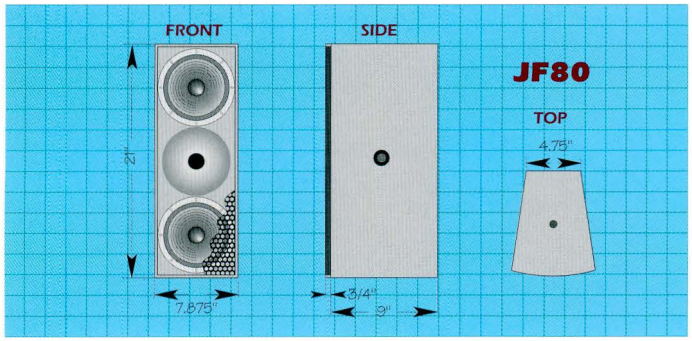
The JF60 combines a single 6.5" carbon fiber cone woofer with a WGP™ waveguide-coupled soft dome tweeter in an enclosure that measures only 7.9" x 9" x 14.7". Exceptionally stiff, the carbon fiber mid/bass cone functions as a true piston for minimal distortion at maximum output levels. Carbon fiber is inherently resistant to damage from water and UV radiation.

The soft dome tweeter exhibits higher internal damping and lower inherent ringing than metal domes. This allows accurate reproduction without ear-fatiguing "sizzle" from bell mode resonance distortion.

The JF60 crossover's transfer function is optimized for phase-coherent summing at the crossover point. Driver protection circuitry and parametric equalization are also integrated into the complex network.

The JF60 tweeter is coupled to the air using a specially designed WGP™ waveguide. This unique loading technique produces the consistent coverage of an exponential horn, without the throat distortion typically found in such devices. The result is stunningly natural and open reproduction.

JF80 Ultra-Compact System



The JF80 packs a pair of 6.5" carbon fiber midbass cones and a 1" compression driver on a WGP™ waveguide into a package that measures only 7.5" x 9" x 21".

The JF80's unique HF subsystem combines the sweet and open high end of a dome tweeter with the increased output capability of a traditional horn and compression driver. The use of dual carbon fiber woofers doubles power handling capacity, while the use of a compression driver increases total system sensitivity. The end result is a 6 dB increase in maximum SPL in an enclosure that is nearly as compact as the JF60.

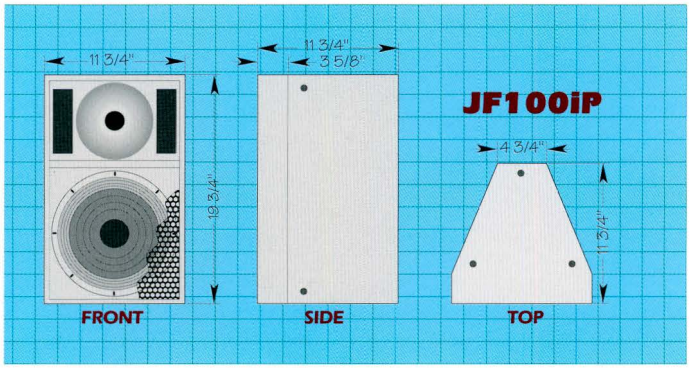
EAW's proprietary WGP™ subsystem produces a wide conical coverage pattern that is consistent over the system's extended operating bandwidth. Optimum power response helps to maintain the reflected energy in correct frequency balance, producing a more natural sound.

JF60/JF80 Applications

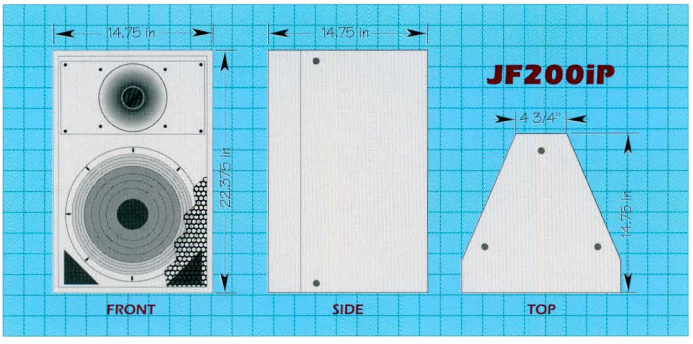
Virtually invisible yet able to cover large areas, these systems are ideal wherever the sound system must avoid obscuring architectural details. Versatile hardware includes fittings for Omnimount 75 Series and stand mounts. The JF80's unique yoke mount allows angled mounting on a wide range of stands . Applications include:

- theatrical production
- underbalcony and delay fills
- high-output distributed systems
- stage lip systems
- high-quality background/foreground music systems.

JF100i/JF200i High Definition Full Range Systems



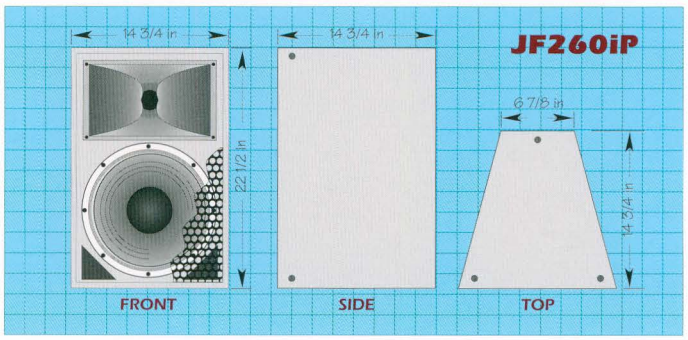
The JF100i is only 11.75" x 11.75" x 19.125", yet produces 124 dB SPL from its 10" vented woofer and 1" compression driver, mounted on EAW's proprietary WGP™ waveguide. The JF200i is only 14.75" x 14.75" x 22.5", yet produces peak SPLs of 126 dB from a 12" vented woofer and 2" compression driver, coupled to the air using a new larger version of EAW's proprietary WGP™ high frequency device. Complex crossover networks produce linear response in either full passive or bi-



amped operation. EAW CCEP™ processors are recommended for optimum bi-amped performance (see below for options).

The JF100i and JF200i are available in portable Road versions for small band PA, A/V presentations, etc. Hardware includes recessed handles and internal stand mount sockets: Tee nuts for external stand mount brackets are also included. For fixed installations, Permanent configurations are available without handles or stand mounts, but with steel-reinforced hanging points on the top and sides, and tee nuts for Omnimount 100 Series (JF100i) or 300 Series (JF200i) brackets.

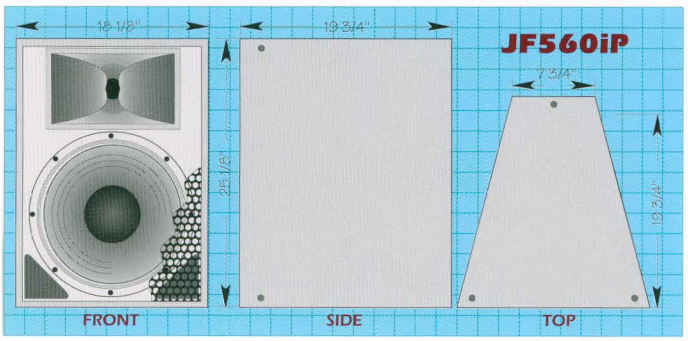
JF260 High Definition Full Range System



The ultra-compact JF260 is engineered for smaller and medium-range installations requiring the highest levels of definition in live and recorded sound reproduction at concert sound pressure levels.

The JF260 employs a purpose-designed 12" woofer and a 2" compression driver mounted on a 60° x 45° constant coverage horn. Performance is similar to the JF200i, but with somewhat greater maximum SPL and tighter directional control above 900 Hz. This combination helps preserve intelligibility in reverberant spaces without the need for large distributed systems. The complex crossover network includes rear-panel switching for bi-amp or full range passive operation. EAW CCEP™ processors are recommended for optimum bi-amped performance (see below for options).

JF560 High Definition Full Range System



Installations desiring exceptional fidelity in live and recorded sound reproduction at concert sound pressure levels find that the JF560 is an excellent choice. Performance is similar to the acclaimed JF200i, but with slightly higher overall output capability and tighter directional control above 900 Hz.

The JF560 employs a 2" compression driver mounted on a 60° x 45° constant coverage horn. The high-output 15" woofer is crossed over using a complex network equalized for optimal power response in bi-amped or passive modes. Bi-amped performance can be enhanced with the use of EAW CCEP™ processors (see below for options).

The JF260 and JF560 are available in Road configurations for portable applications, with recessed handles, internal stand mount sockets and tee nuts for external stand mounts. Permanent versions include steel-reinforced top and side hanging points and mounting hardware for Omnimount 300 Series brackets.

JF Series Processors & Subwoofers

Closely Coupled Electronic Processing™ is an integral element of EAW system design. Close Coupling™ adjusts parameters such as crossover frequency, slope and filter shape, driver protection thresholds, phase compensation and parametric equalization to each specific system. The results are maximum

linearity and phase coherence with minimal processor interaction. The MX200i processor is available in specific configurations for bi-amping the JF100i, JF200i, JF260 and JF560. A rear panel switch configures the internal crossover network for bi-amp or full range passive operation.

While they are designed for full range operation in passive or bi-amped modes, all JF Series systems require subwoofers for high-level reproduction of the lowest octaves. The JF Series has been engineered for smooth coupling with EAW SB Series subwoofers. Special MX200i configurations are available for powering the JF60 and JF80 with SB Series subwoofers. When using the JF100i, JF200i, JF260 and JF560 with subwoofers, special configurations of the MX300i CCEP™ processor provide optimum performance.

Preliminary Specifications

Model	JF60	JF80	JF100	JF200	JF260	JF560
Frequency Response						
19.125" x +-2 dB:	90 Hz to 19 k Hz	90 Hz to 18 k HZ	70 Hz to 18 k Hz	70 Hz to 18 k Hz	70 Hz to 18 k Hz	65 Hz to 18 k Hz
- 10 dB:	55 Hz	50 Hz	55 Hz	55 Hz	60 Hz	55 Hz
Axial Sensitivity (dB SPL 1W @ 1M)						
LF / Full Range:	92 dB SPL	94 dB SPL	97 dB SPL	98 dB SPL	98 dB SPL	98 dB SPL
HF:	NA	NA	103 dB SPL	106 dB SPL	106 dB SPL	106 dB SPL
Nominal Impedance						
Full Range / LF:	4 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω
HF:	NA	NA	8 Ω	8 Ω	16 Ω	16 Ω
Power Handling						
LF AES:	200 W	400 W	400 W	500 W	500 W	750 W
LF 100H Sine Wave:	80 W	160 W	150 W	200 W	200 W	300 W
HF AES:	NA	NA	125 W	200 W	200 W	200 W
HF 100H Sine Wave:	NA	NA	50 W	80 W	80 W	80 W
Maximum Output						
LF Long Term:	111 dB SPL	116 dB SPL	118 dB SPL	121 dB SPL	121 dB SPL	122 dB SPL
LF Peak:	115 dB SPL	120 dB SPL	123 dB SPL	125 dB SPL	125 dB SPL	126 dB SPL
HF Long Term:	NA	NA	120 dB SPL	125 dB SPL	125 dB SPL	125 dB SPL
HF Peak:	NA	NA	124 dB SPL	129 dB SPL	129 dB SPL	129 dB SPL
Nominal Coverage Angles (-6 dB)						
Horizontal:	120°	90°	90°	90°	60°	60°
Vertical:	120°	90°	90°	90°	45°	45°
General Information						
HF Subsystem:	33mm Soft Dome WGP™	1-in Exit Compression Driver On WGP™	1-in Exit Compression Driver On WGP™	2-in Exit Compression Driver On WGP™	2-in Exit Compression Driver On CD Horn	2-in Exit Compression Driver On CD Horn
LF Subsystem:	1x 6.5-in Vented	2x 6.5-in Vented	1x 10-in Vented	1x 12-in Vented	1x 12-in Vented	1x 15-in Vented
Crossover Data						
Type:	Fourth Order Equalized Network					
Mode:	Passive	Passive	Switchable Bi-amp or Fullrange Passive	Switchable Bi-amp or Fullrange Passive	Switchable Bi-amp or Fullrange Passive	Switchable Bi-amp or Fullrange Passive
MX200 for Biamp:	NA	NA				
MX300 Biamp + Sub:	NA	NA				
Additional Descriptive Data						
Finish:	Black catalyzed polyurethane Coating					
Grill:	Vinyl Coated Perforated Steel					
Tee-nut For Omni Mount:	75	75	100	300	300	300
Configurations:	i	i	P or R	P or R	P or R	P or R
i Configurqation:	2 pin Barrier Strip and NL4 Connector, Reinforced Hang Points (Yoke Mounts on JF80 only)					
R Configuration:	NL4 Connector, Recessed Handles, Hang Points on Top, Bottom & Sides					
P Configuration:	NL4 Connector, Hang Points on Top, Bottom & Sides					
Preliminary Dimensions & Weights						
Height:	14.5 in	21 in	19 3/4 in	22 3/8 in	22 1/2 in	25 1/8 in
Width:	7 7/8 in	7 7/8 in	11 3/4 in	14 3/4 in	14 3/4 in	18 in
Depth:	9 in	9 in	11 3/4 in	14 3/4 in	14 3/4 in	19 3/8 in
Net Weight:	17 lbs	25 lbs	52 lbs	81 lbs	90 lbs	95 lbs