

W12A - W15A

biamped, 2-way speaker systems

Montarbo



The bi-amped systems W12A and W15A represent, as for their specifications, Montarbo's typical manufacturing philosophy: they may be very easily installed and meet both the musician's and the sound company's requirements. They are the ideal choice for those who constantly work both in large and small venues, and who require a versatile system. The two independent MosFet amps for the high and low frequencies, along with active processors and cross-overs, allow to optimize the frequency response and the sound performance even at low sound levels, as in a music club or in a piano bar, while ensuring clarity and power when higher volume is required, as in open places or large venues.

Outstanding performance in the most diverse situations, from the big open to the smallest club.



- Bass-reflex cabinets constructed from phenyl-glued birch multiply.

- Both LF and HF components are custom units built to our specifications:
 - for the basses W12A and W15A utilize respectively 12" and 15" woofers.
 - the HF sections of both models are equipped with a 2" driver coupled to a constant directivity horn.

- Each system is powered by 2 built-in, class A-B, MosFet power amplifiers (350 + 150W continuous, (550 + 220W peak), controlled by a 24dB/octave electronic cross-over and by 2 independent processors.

- The control and connection panels of both models are

fitted with balanced XLR and Jack input connectors, balanced XLR and jack output (link) connectors, master volume control, mid-high level control and ground-lift switch.

- Their trapezoidal design allows them to be easily integrated into more complex systems, suited to major live events.

W12A e W15A sono sistemi di immediata installazione idonei tanto alle necessità del musicista che a quelle di un service professionale. W12A, con woofer da 12", e W15A, con woofer da 15", rispondono alle esigenze di chi si muove costantemente tra piccoli e grandi spazi e necessita quindi di un sistema polivalente. Il design trapezoidale agevola inoltre la loro inclusione in sistemi più complessi e articolati e adatti ad eventi live importanti. L'impiego di due amplificatori MosFet separati per le alte e basse frequenze, in combinazione con due processori ed un cross-over elettronico, consente di ottimizzare la risposta in frequenza e la resa sonora anche a pressioni sonore ridotte, come può capitare in un music club o in un piano-bar, ma nel contempo permette di mantenere nitidezza e potenza quando i volumi devono salire, come in una piazza. Oltre ad un grande suono e prestazioni di livello assoluto, W12A e W15A garantiscono praticità di impiego e flessibilità di utilizzo in ogni applicazione.

- Cabinet di tipo bass-reflex in multistrato di betulla ad incollaggio fenolico.
- Componenti costruiti su nostre specifiche:
 - per i bassi, W12A e W15A montano rispettivamente un woofer da 12" ed un woofer da 15".
 - per i medio/alti entrambi i modelli sono dotati di un driver da 2" con tromba a direttività costante;
- Ciascun sistema incorpora due amplificatori di potenza a MosFet, in classe A-B, (350 + 150 W continui, 550 + 220 W di picco) controllati da un crossover elettronico (24dB/oct) e da 2 processori indipendenti.
- I pannelli di controllo di entrambi i modelli dispongono di: ingressi bilanciati XLR e Jack, uscite bilanciate XLR e Jack, volume generale, attenuatore medio-alti, commutatore ground-lift, interruttore di rete, presa di rete con fusibile incorporato.

Français

W12A et W15A sont des systèmes bi-amplifiés à installation rapide qui conviennent aussi bien aux exigences du musicien qu'à celles d'un montage professionnel. W12A, avec un woofer de 12", et W15A, avec un woofer de 15", satisfont aux exigences de ceux qui travaillent constamment dans des endroits les plus divers et de ceux qui ont besoin d'un système polyvalent. Leur design trapézoïdal permet l'intégration dans des systèmes plus complexes et articulés, tels que des manifestations live importantes. Les deux amplificateurs MosFet indépendants pour les fréquences hautes et graves, avec deux processeurs et cross-over actifs, permettent d'optimiser la réponse en fréquence et la performance sonore même avec des pressions sonores réduites, comme c'est le cas pour un music club ou un piano-bar; en même temps, ils permettent de garder la netteté et la puissance lorsqu'on augmente le volume, par exemple à l'extérieur. Outre un grand son et des prestations de niveau absolu, W12A et W15A sont d'emploi facile pour toutes les utilisations.

- Baffles bass-reflex en bouleau multiplis à collage phénolique.
- Composants spécialement fabriqués suivant les spécifications Montarbo:
 - pour les basses, W12A est équipée d'un woofer de 12" et W15A d'un woofer de 15".
 - les sections médiums-aigus des deux baffles sont dotées d'un driver de 2" avec trompe à directivité constante.
- Chaque système incorpore deux amplificateurs Mosfet, classe A-B, (350 + 150 W continus, 550 + 220 W de crête), contrôlés par un crossover électronique et 2 processeurs indépendants.
- Les panneaux de contrôle des deux baffles sont équipés de: entrées symétriques avec XLR et Jack, sorties symétriques (link), avec XLR et Jack, volume général, contrôle médium/aigus, sélecteur ground-lift, prise de courant (avec fusible incorporé) et interrupteur.

Diese äußerst flexiblen, sofort installierbaren Systeme bieten Leistungen auf höchstem Niveau bei jeglicher Anwendung und sind sowohl für die Bedürfnisse des Musikers als auch für den Profi-Service geeignet.

W12A und W15A, jeweils mit 12 und 15" Tieftöner, wurden speziell realisiert, um den Bedürfnissen jener gerecht zu werden, die ständig zwischen kleinen und großen Räumen wechseln und daher ein vielseitiges System brauchen. Das trapezförmige Design erleichtert außerdem ihre Integration in komplexere, gegliederte Systeme, die für wichtige Live-Events geeignet sind. Die Verwendung von zwei separaten MosFet Verstärkern für hohe und niedrige Frequenzen in Kombination mit Prozessoren und aktiven Frequenzweichen gestattet, Frequenzgang und Klangwiedergabe auch bei reduzierten Schalldrucken - wie zum Beispiel in einem Musikclub oder in einer Pianobar - zu optimieren, aber gleichzeitig ist da durch auch möglich, Klangreinheit und Leistung zu bewahren, wenn die Lautstärke angehoben werden muß, wie im Freien.

- Bassreflex-Boxen aus Mehrfach phenolverleimtes Birkenholz
- Die LF- und HF-Komponenten beider Boxen werden speziell nach unseren Angaben gefertigt:
 - für die Bässe verfügen W12A und W15A jeweils über 12" und 15" Hochleistungstieftöner.
 - für die Mitten/Höhen haben beide Modelle ein 2"-Treiber und ein Horn mit einem Abstrahlwinkel von 60°x 40°Grad.
- Die 2 MosFet-Verstärker in Klasse A-B (350 + 150 W Dauerleistung, 550 + 220 W Spitzenleistung), in jeder Box, werden von zwei unabhängigen Prozessoren und einer 24dB/Okt elektronischen Weiche betrieben.
- Die Anschlußfelder auf den Rückseiten beider Boxen verfügen über: symmetrische XLR- und Klinken-Buchsen für den Eingang, symmetrische XLR- und Klinken-Buchsen für den Ausgang (link), Master Volumenregler, Regler für Mitten/Höhen, Erdungsschalter, Netzschalter und Netzbuchse.

Deutsch

Español

W12A y W15A son sistemas bi-amplificados de instalación inmediata, ideales para músicos expertos o servicios profesionales. W12A, con woofer de 12", y W15A con woofer de 15" satisfacen las exigencias de quienes trabajan constantemente entre espacios pequeños y grandes y requieren un sistema polivalente. Gracias al diseño trapezoidal pueden incluirse en sistemas más complejos y articulados. Dos amplificadores MosFet separados, para las frecuencias altas y bajas, en combinación con procesadores y cross-over activos producen extraordinarias respuestas en frecuencia y ganancias de sonido, incluso con presiones más reducidas (por ej.: en locales pequeños) y manteniendo la misma nitidez y potencia cuando el volumen debe subir (por ej.: al aire libre). Además de un grande sonido y extraordinarias prestaciones, W12A y W15A aseguran la máxima simplicidad de utilización y la total flexibilidad en las mas diversas situaciones.

- Cajas bass-reflex de 2 vías en multicapa de abedul con cola fenólica.
- Componentes realizados según nuestras especificaciones:
 - para los bajos W12A y W15A montan respectivamente woofers de 12" y de 15".
 - para los medios/agudos las dos cajas son dotadas de un driver de 2" con bocina de orientación constante.
- Cada sistema incorpora dos amplificadores de potencia a MosFet en clase A-B (350 + 150 W continuos, 550 + 220 W de pico) controlados por un cross-over electrónico (24dB/oct.) y por dos procesadores independientes.
- Los paneles de controles disponen de entrada balanceada con tomas XLR y Jack, salida ('link') balanceada con tomas XLR y Jack, volumen general, volumen medios/altos, ground-lift, interruptor y toma de la red.

High grade multiply birch (phenyl-glued, polyurethane painted)

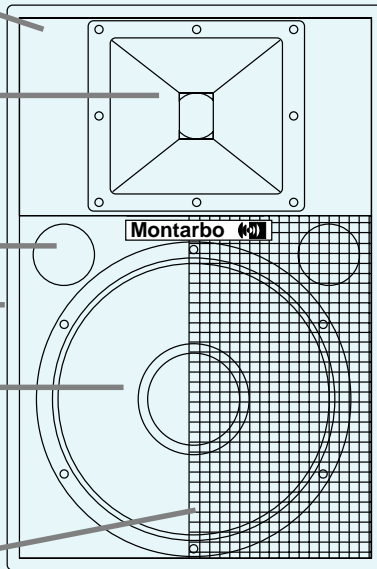
Controlled directivity high frequency horn
Dispersion: 60° x 40°

Tuning ports

Side recessed handles

12" custom designed high efficiency woofer
bandwidth: 40Hz±2kHz
sensitivity: 99 dB

Powder coated perforated steel grid

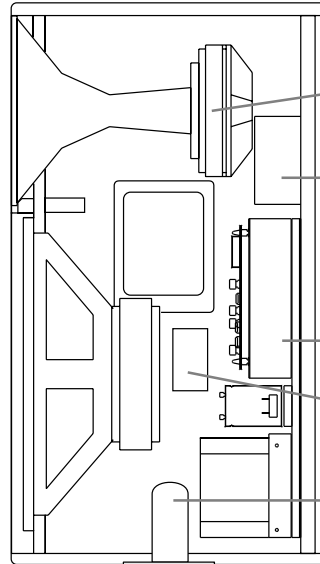


W12A

W12A - W15A

FEATURES

Cross sections



2" driver
voice coil Ø: 74,5mm
bandwidth: 0,5±20kHz
sensitivity: 108dB

Electronic x-over
frequency:1000Hz
slope:24dB/Oct

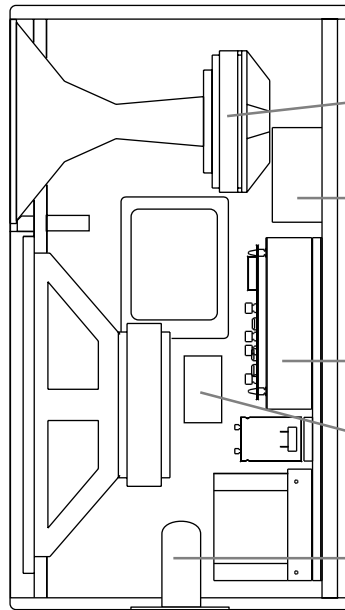
Control & connection panel

Amplifier section:
2 MosFet power amplifiers
with 2 independent processors.

Passive crossover

Speaker stand adaptor

W15A



2" driver
voice coil Ø: 74,5mm
bandwidth: 0,5±20kHz
sensitivity: 108dB

Electronic x-over
frequency:1000Hz
slope:24dB/Oct

Control & connection panel

Amplifier section:
2 MosFet power amplifiers
with 2 independent processors.

Passive crossover

Speaker stand adaptor

High grade multiply birch (phenyl-glued, polyurethane painted)

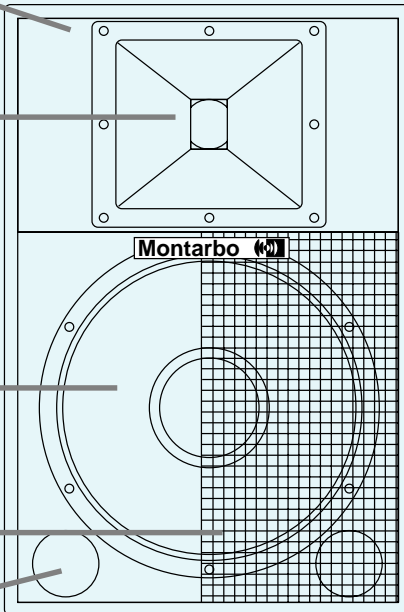
Controlled directivity high frequency horn
Dispersion: 60° x 40°

Side recessed handles

15" custom designed high efficiency woofer
bandwidth: 40Hz±2kHz
sensitivity: 99 dB

Powder coated perforated steel grid

Tuning ports



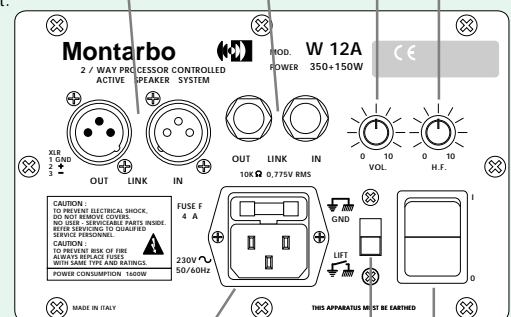
Controls & connections

Balanced XLR sockets (male + female) for the input and the 'link' output.

...with Jacks wired in parallel

Main volume

HF level control output.



Power supply socket with built-in fuse

Ground lift switch

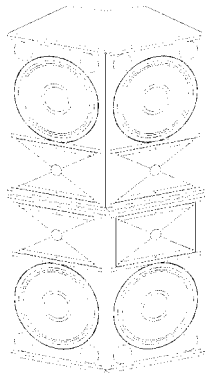
Mains power switch

RECOMMENDED COMBINATIONS:

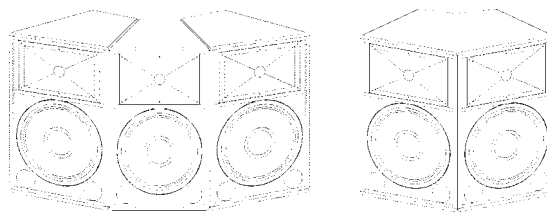
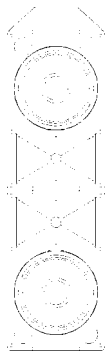
In the applications requiring an extension of the low frequency range, the W12A and the W15A combine perfectly with the Montarbo self-powered subwoofers 115SA, 119SA, 215SA and 218SA with built-in **stereo** electronic X-OVER.

Trapezoidal-shaped enclosures offer practical advantages in comparison to rectangular-shaped cabinets:

- sound coverage of a two-or more-speaker array remains constant and predictable within precise limits
- interferences between enclosures in multiple-speaker arrays, usually originating comb-filtering effects, are reduced to a bare minimum, thus helping linearity in frequency response all over the covered area.



Multiple enclosure arrays can be assembled for long throw



Multiple enclosure arrays can be assembled for wide dispersion

Montarbo 

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Specifications and features are subject to change without prior notice.

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SPECIFICATIONS	W12A	W15A
• Enclosure		
Type	2-way bass reflex	2-way bass reflex
Components	Custom designed to our specifications:	Custom designed to our specifications:
bass	12" high efficiency woofer	15" high efficiency woofer
mid/high	2" driver coupled with a constant directivity horn (60° horizontal x 40° vertical)	2" driver coupled with a constant directivity horn (60° horizontal x 40° vertical)
Construction & finish	Birch multiply; polyurethane paint; steel protection grid	Birch multiply; polyurethane paint; steel protection grid
Impedance	4 Ω (bass); 8 Ω (mid/high)	4 Ω (bass); 8 Ω (mid/high)
Frequency response	42Hz ÷ 20kHz ± 3dB	40Hz ÷ 20kHz ± 3dB
bass	42Hz ÷ 1000Hz	40Hz ÷ 1000Hz
mid/high	1000Hz ÷ 20kHz	1000Hz ÷ 20kHz
Sensitivity (1W, 1m)	101 dB SPL @ 1W/1m	101 dB SPL @ 1W/1m
Max. SPL	128 dB	129dB
• Built-in crossover		
Crossover frequency	1kHz	1kHz
Slope	24dB/oct.	24dB/oct.
• Built-in amplifiers		
	2, MosFet, AB class, controlled by 2 independent processors	2, MosFet, AB class, controlled by 2 independent processors
Max. output power		
bass	350 W continuous (4Ω / 0.1% THD) 550 W peak	350 W continuous (4Ω / 0.1% THD) 550 W peak
mid/high	150 W continuous (4Ω / 0.1% THD) 220 W peak	150 W continuous (4Ω / 0.1% THD) 220 W peak
Frequency response	35 Hz ÷ 25 kHz +0/-1dB	35 Hz ÷ 25 kHz +0/-1dB
Input impedance	10KΩ	10KΩ
Input sensitivity	0dB (775mV)	0dB (775mV)
Connections	Balanced input and output (link), wired in parallel, each with XLR and Jack.	Balanced input and output (link), wired in parallel, each with XLR and Jack.
• Dimensions	39,5 x 66 x 40 cm (w x h x d)	47 x 71,5 x 40 cm (w x h x d)
• Weight	34 kg	39 kg