

T10A T12A T15A

2 and 3-way, bi-amplified, active speaker systems



We designed T10A, T12A and T15A pursuing a simple but elusive goal: to achieve the maximum acoustic efficiency in a remarkably compact and lightweight enclosure.

These bi-amplified systems are capable of extremely high sound pressure levels and enhanced bass relative to their compact dimensions.

Precise and detailed acoustic image is guaranteed by exceptionally linear frequency and phase responses. T10A, T12A and T15A meet both the musician's and the sound company's requirements. Their versatility makes them the ideal choice for those who constantly work both in small and medium/large venues.

Available also as passive versions T10P, T12P, T15P.

- construction and components are conform to the highest professional standards for maximum reliability
- complete synergy of acoustic and electronic design elements. Dedicated power amplifiers and control electronics ensure extraordinary performance, improving speakers drive while protecting them from over-excursion under high peak power conditions
- high sound pressure levels without distortion
- precise and detailed acoustic image
- neodymium-based components (B&C), custom designed to Montarbo specifications, combine high performance with weight savings
- compact, strong and sturdy cabinet from high grade birch multiply with highly resistant polyurethane paint finish and 1,5 mm thick steel protection grid
- trapezoidal shape for optimal sound diffusion and more flexible installation
- suitable for a wide variety of applications: compact voice reinforcement systems, piano-bars, night clubs, houses of worship, theatrical sound reinforcement, audio-visual systems, conference centers, presentations, ballrooms, small to medium/large-sized main sound reinforcement systems.

Montarbo





rotatable horn (Montarbo design)

ergonomically designed handles

stand adaptor



Bi-amplified. T10A, T12A and T15A incorporate:

- 2, class AB, Mosfet amplifiers, each one fitted with our exclusive loudspeaker protection circuitry
- 2 independent active dynamic processors, featuring independent time constants and operating thresholds that are sensitive to line voltage, limiting any excessive voice coil movement while also drastically diminishing the effects of power compression under the most demanding operating conditions. Unimpeded operation is guaranteed even when the system is subjected to extreme line voltage excursions
- high slope active electronic crossover (24dB/oct. Linkwitz-Riley) guaranteeing phase coherency and perfect addition of acoustic emissions of the transducers in the crossover region
- a "soft-start" circuit to reduce the peak current drain at switch-on.

•The NEODYMIUM-based custom designed woofers combine high performance with great weight savings:

- T10A utilizes one 10" neodymium magnet woofer (2,5" voice coil) for the bass section and a 1" compression driver (2" voice coil) coupled with a rotatable constant directivity horn for the mid-high section.
- T12A utilizes one 12" neodymium magnet woofer (3" voice coil) for the bass section, a 6" midrange for the mid section and a 1" compression driver (2" voice coil) coupled with a rotatable constant directivity horn for the high section.
- T15A utilizes one 15" neodymium magnet woofer (3" voice coil) for the bass section, a 6" midrange for the mid section and a 1" compression driver (2" voice coil) coupled with a rotatable constant directivity horn for the high section.

T10A

300 W continuous
420 W peak



T12A

500 W continuous
670 W peak



T15A

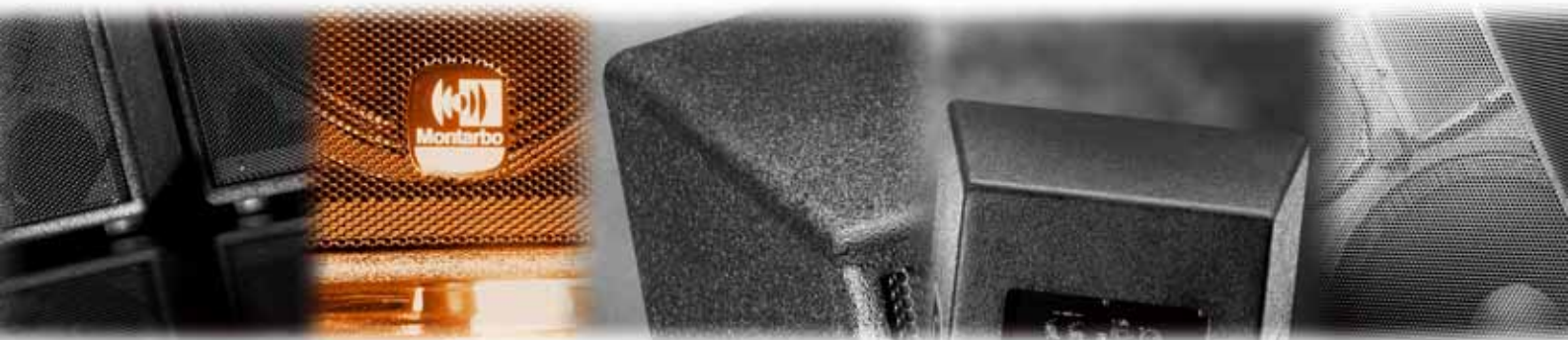
500 W continuous
670 W peak

low turbulence tuning ports

highly resistant antiscratch
polyurethane paint

trapezoidal shape

1,5mm steel grill



Biamplicati. T10A, T12A and T15A incorporano:

- 2 amplificatori a MosFet, classe AB, entrambi dotati di un esclusivo circuito di protezione attiva dei trasduttori
- 2 processori dinamici attivi indipendenti con costanti di tempo indipendenti e soglie di intervento sensibili alla tensione di alimentazione, che impediscono eccessive escursioni delle bobine mobili e riducono drasticamente gli effetti della "power compression" nelle condizioni più severe, garantendo così il corretto funzionamento in presenza di forti escursioni della rete di alimentazione
- crossover elettronico attivo (24dB/oct. Linkwitz-Riley) che garantisce l'allineamento di fase e la perfetta sovrapposizione dell'emissione nella zona d'incrocio
- circuito "soft-start" per ridurre i picchi di corrente all'accensione.

- L'utilizzo di woofer con magneti al NEODIMIO offre la più elevata qualità in un peso estremamente ridotto:
- T10A è dotato di 1 woofer da 10" con magnete al neodimio (bobina da 2,5") per la sezione bassi e di 1 driver a compressione da 1" (bobina da 2") accoppiato ad una tromba a direttività costante per la sezione medio-alti.
- T12A è dotato di 1 woofer da 12" con magnete al neodimio (bobina da 3") per la sezione bassi, 1 midrange da 6" per la sezione medi e di 1 driver a compressione da 1" (bobina da 2") accoppiato ad una tromba a direttività costante per la sezione alti.
- T15A è dotato di 1 woofer da 15" con magnete al neodimio (bobina da 3") per la sezione bassi, 1 midrange da 6" per la sezione medi e di 1 driver a compressione da 1" (bobina da 2") accoppiato ad una tromba a direttività costante per la sezione alti.

- The rear panel of the active versions (T10A, T12A and T15A) is fitted with:
 - Balanced input (using a Neutrik Combo® combined jack-XLR connector).
 - Balanced XLR output (link) allows parallel connection of other active systems.
 - Master volume control.
 - Volume control for the high frequencies in the model T10A and for the mid/high frequencies in the models T12A and T15A.

- I pannelli posteriori delle versioni attive T10A, T12A e T15A dispongono di:
 - Ingresso bilanciato su presa Neutrik Combo® (accetta sia XLR che Jack).
 - Uscita (link) bilanciata su presa XLR per il collegamento in parallelo di un altro sistema.
 - Controllo di volume generale.
 - Controllo di volume delle frequenze alte nel sistema T10A e medio/alte per i sistemi T12A e T15A.







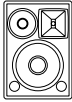
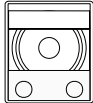

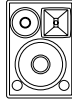
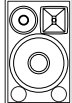
- In the situations requiring an extension of the low frequency range, they combine perfectly with the Montarbo active subs SW540, 119SA, 112SA all with stereo electronic cross-over.

- Nelle applicazioni che richiedono un rinforzo della gamma grave, l'abbinamento ottimale è con i subwoofer attivi Montarbo SW540, 119SA, 112SA tutti con crossover elettronico stereo incorporato.



- T10A, T12A and T15A may be used as stand-alone unit or as satellite with an optional subwoofer.

Recommended combinations with Montarbo subwoofers:

<p>one 112SA +</p>  <p>12" / 450 Watts</p>	<p>T10A</p>  <p>1 or 2</p>		
<p>one SW540A +</p>  <p>15" / 550 Watts</p>	<p>T10A</p>  <p>2 or 1</p>	<p>T12A</p>  <p>1</p>	
<p>one 119SA +</p>  <p>18" / 600 Watts</p>	<p>T10A</p>  <p>2</p>	<p>T12A</p>  <p>1</p>	<p>T15A</p>  <p>1</p>

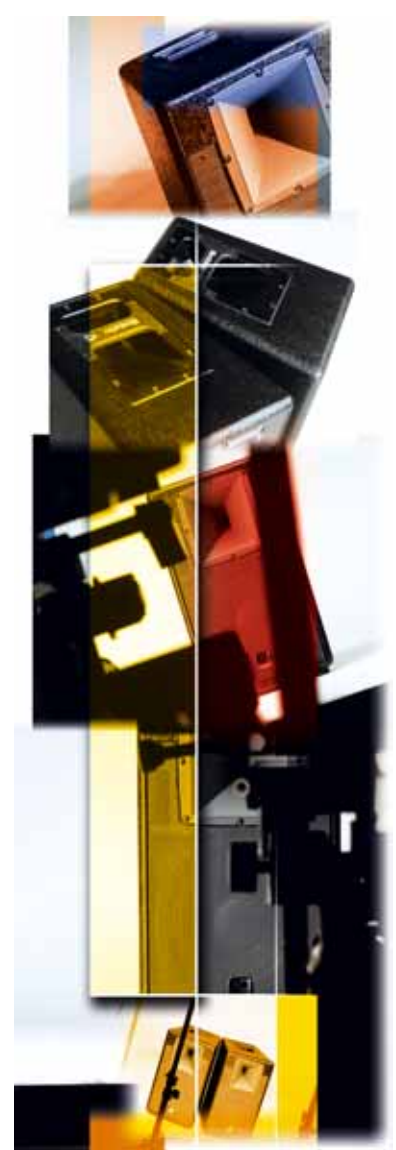
- a pole (SM4) that locks into SW540 and 119SA subwoofers to support the enclosure when used as satellite is available as optional accessory

PASSIVE VERSIONS

T10P
300 W
8 Ohms

T12P
400 W
8 Ohms

T15P
400 W
8 Ohms



Specifications T10P

- **Enclosure** 2-way bass reflex
- Frequency response: 48Hz ÷ 20kHz
bass 48Hz ÷ 1200Hz
mid/high 1200Hz ÷ 20kHz
- Sensitivity (1W/1m): 101 dB SPL
- Max SPL: 127 dB
- Components: bass 10" neodymium magnet woofer (2,5" voice coil)
mid 1" compression driver
high (2" voice coil) loaded by a 90° x 70° horn
- Passive cross-over: 1600Hz, 18dB/oct.
- Power handling: 300 W / 8 Ohms
- Connections: 2 Jack + 2 Neutrik Speakon® wired in parallel
- **Dimensions (wxhxd):** 31 x 50,5 x 33 cm
- **Weight:** 11 kg

T12P

- 3-way bass reflex
- 45Hz ÷ 20kHz
bass 45Hz ÷ 600Hz
mid 600Hz ÷ 3,5kHz
high 3,5kHz ÷ 20kHz
- 101 dB SPL
- 129 dB
- 12" woofer (3" voice coil)
6" midrange
1" compression driver (2" voice coil) loaded by a 90° x 70° horn
- 600Hz / 3,5kHz, 18dB/oct.
- 400 W / 8 Ohms
- 2 Jack + 2 Neutrik Speakon® wired in parallel
- **Dimensions (wxhxd):** 42 x 61,6 x 35 cm
- **Weight:** 19 kg

T15P

- 3-way bass reflex
- 40Hz ÷ 20kHz
bass 40Hz ÷ 600Hz
mid 600Hz ÷ 3,5kHz
high 3,5kHz ÷ 20kHz
- 102 dB SPL
- 130 dB
- 15" woofer (3" voice coil)
6" midrange
1" compression driver (2" voice coil) loaded by a 90° x 70° horn
- 600Hz / 3,5kHz, 18dB/oct.
- 400 W / 8 Ohms
- 2 Jack + 2 Neutrik Speakon® wired in parallel
- **Dimensions (wxhxd):** 45 x 72,6 x 40 cm
- **Weight:** 24 kg

Specifications

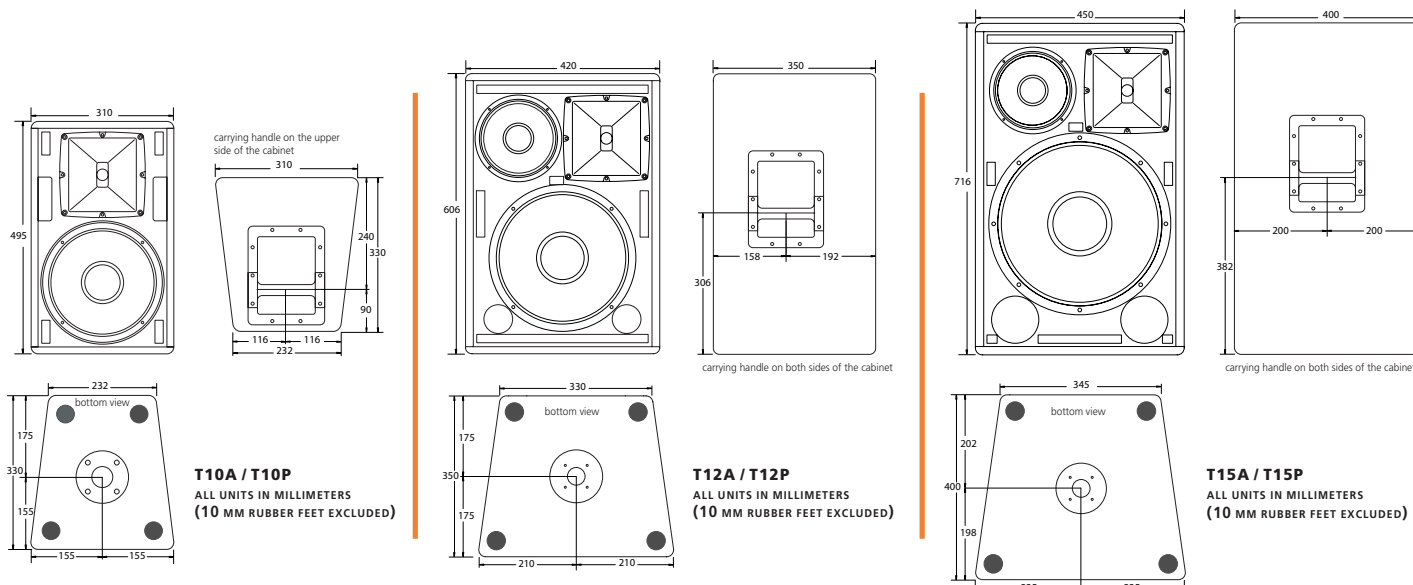
T10A

T12A

T15A

• Enclosure	2-way vented box, low turbulence ports	3-way vented box, low turbulence ports	3-way vented box, low turbulence ports
Components:	custom designed to our specifications	custom designed to our specifications	custom designed to our specifications
- bass	1 x 10" neodymium magnet, high efficiency B&C woofer (2,5" voice coil)	1 x 12" neodymium magnet, high efficiency B&C woofer (3" voice coil)	1 x 15" neodymium magnet, high efficiency B&C woofer (3" voice coil)
- mid		6" midrange	6" midrange
- high	1" compression driver (B&C) , constant directivity horn (90°H x 70V°)	1" compression driver (B&C) , constant directivity horn (90°H x 70V°)	1" compression driver (B&C) , constant directivity horn (90°H x 70V°)
Impedance	8 ohm	8 ohm	8 ohm
Frequency response:	48Hz ÷ 20kHz bass 48Hz ÷ 1,2kHz mid/high 1,2kHz ÷ 20kHz	45Hz ÷ 20kHz bass 45Hz ÷ 600Hz mid 600Hz ÷ 3,5kHz high 3,5kHz ÷ 20kHz	40Hz ÷ 20kHz bass 40Hz ÷ 600Hz mid 600Hz ÷ 3,5kHz high 3,5kHz ÷ 20kHz
Sensitivity:	101 dB SPL @ 1W/1m on axis	101 dB SPL @ 1W/1m on axis	102 dB SPL @ 1W/1m on axis
Max. SPL:	127 dB	129 dB	130 dB
• Active electronic x-over	24dB/oct Linkwitz-Riley filter	24dB/oct Linkwitz-Riley filter	24dB/oct Linkwitz-Riley filter
Crossover frequency:	1,2kHz	600Hz	600Hz
• Built-in amplifiers:	2 class AB, MosFet amplifiers 2 independent dynamic processors	2 class AB, MosFet amplifiers 2 independent dynamic processors	2 class AB, MosFet amplifiers 2 independent dynamic processors
Max. output power:	300 W continuous / 420 W peak	500 W continuous / 670 W peak	500 W continuous / 670 W peak
- bass	200 W continuous (8 ohms / 0.1% THD) 270 W peak	350 W continuous (8 ohms / 0.1% THD) 450 W peak	350 W continuous (8 ohms / 0.1% THD) 450 W peak
- mid/high	100 W continuous (8 ohms / 0.1% THD) 150 W peak	150 W continuous (8 ohms / 0.1% THD) 220 W peak	150 W continuous (8 ohms / 0.1% THD) 220 W peak
Frequency response:	35Hz ÷ 25kHz +0/-1dB	10Hz ÷ 40kHz +0/-1dB	10Hz ÷ 40kHz +0/-1dB
Input impedance:	10KOhms (balanced)	10KOhms (balanced)	10KOhms (balanced)
Input sensitivity:	0dB (775mV)	0dB (775mV)	0dB (775mV)
Noise referred to input:	-108dB (A weighted)	-110dB (A weighted)	-110dB (A weighted)
• Connections:	balanced Neutrik Combo® (XLR + jack) input 1 balanced XLR output (link)	balanced Neutrik Combo® (XLR + jack) input 1 balanced XLR output (link)	balanced Neutrik Combo® (XLR + jack) input 1 balanced XLR output (link)
• Dimensions:	W 31 x H 50,5 x D 33 cm	W 42 x H 61,6 x D 35 cm	W 45 x H 72,6 x D 40 cm
• Weight:	16 kg	19 kg	24 kg

All models come supplied with: 10-meter screened signal cable (XLR-XLR); 2-meter power supply cable



Elettronica Montarbo srl
40057 Cadriano Granarolo Emilia Bologna (Italy)
phone: +39 051 766437 fax: +39 051 765226
e-mail: mail@montarbo.com internet: www.montarbo.com

Designed and manufactured in Italy by:

Montarbo



The contents of this publication are ©2005 by Elettronica Montarbo srl. Data, text and pictorial material may not be reproduced in any manner without prior written permission of Elettronica Montarbo srl. All rights reserved. Printed in Italy. The information contained in this data sheet has been carefully drawn up and checked, however no responsibilities will be assumed for any inexactitude. Specifications and features are subject to change without prior notice. The trademarks Neutrik Combo® and Power Con® are property of Neutrik.