

Sound Systems



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MIXERS Mi SERIES



The **Mi Series** has been created by PROEL in order to offer very compact mixers with a **high input density** and a **superior audio quality** at a very affordable price.

The series includes **3 models** with 6, 10 and 12 channels, featuring in a **very compact package** a high number of inputs and a full set of **intelligent functions**, able to satisfy most of the sound reinforcement applications.

Designed and engineered in Italy by PROEL R&D, Mi mixers are hosted in an ultra-rugged stylish metal case, providing extended durability for a stage-proof use.

The smallest model of the series, **Mi6**, offers in a ultra-compact format the performance of large professional consoles, delivering a **clean and accurate sound** and full mixing capability.

With respectively 10 and 12 inputs, **Mi10** and **Mi12** feature one of the finest digital effects of its class, the **PROEL 24bit PROFEX DSP**, providing 256 studio-grade presets (including mono and stereo TAP DELAY and TAP DELAY + REVERB) with a convenient LCD display for the effect selection.



*La Serie Mi è stata creata da PROEL per rispondere all'esigenza di mixer compatti con un **elevato numero di ingressi** ed una **qualità audio superiore** ad un prezzo alla portata di tutti.*

*La serie comprende **3 modelli** con 6, 10 e 12 canali che includono, in **dimensioni ridotte**, un gran numero di ingressi ed un set completo di **funzioni 'intelligenti'** in grado di soddisfare la maggior parte delle applicazioni.*

***Ideati e progettati in Italia** dal Dipartimento Ricerca e Sviluppo PROEL, i mixer Mi sono alloggiati in eleganti case in metallo ultra-resistenti, in grado di garantire un utilizzo prolungato senza problemi.*

*Il modello più piccolo della serie, l'**Mi6**, offre in un formato ultra-compacto, il suono e la qualità delle grandi consolle professionali, garantendo la **massima precisione e pulizia** nel missaggio.*

*Dotati rispettivamente di 10 e 12 ingressi, **Mi10** e **Mi12** includono uno dei migliori processori di effetti della categoria, il **DSP PROFEX a 24 bit**, in grado di fornire 256 presets di qualità superiore (inclusi mono e stereo TAP DELAY e TAP DELAY + REVERB) con un comodo display LCD per la selezione.*



Mi SERIES

Mi6



- Ultra-compact 6-channel 2-bus mixer
- 2 MIC/LINE input channels with high-headroom, low-noise MIC preamps, 2-band EQ and PHANTOM power
- 2 STEREO inputs with balance control
- Stereo HEADPHONES / C. ROOM output

- 2-TRACK output
- Electronically balanced MAIN MIX outputs
- Two 4-LED VU-METERS
- Applications: home recording and rehearsal, ultra-small PA systems for schools, gyms and meeting rooms, personal mixer for musicians

Mi10



- Compact 10-channel 2-bus mixer
- 2 MIC/LINE inputs with high-headroom, low-noise MIC preamps, 3-band EQ, LO-CUT and PHANTOM power
- 4 STEREO LINE inputs with balance control and effect send
- 1 AUX send
- 2-TRACK, HEADPHONES and CONTROL ROOM outputs

- 24bit studio-grade PROFEX DSP with 256 effects, TAP delay and LCD display
- Electronically balanced MAIN MIX outputs
- Two 4-LED VU-METERS
- Applications: small live bands (2 to 4 people), home and multimedia applications, rehearsal rooms, small fixed installations

Mi12



- Compact 12-channel 2-bus mixer
- 4 MIC/LINE inputs with high-headroom, low-noise MIC preamps, 3-band EQ, LO-CUT and PHANTOM power
- 4 STEREO LINE inputs with balance control, monitor and effect send
- 2 AUX sends
- 2-TRACK, HEADPHONES and CONTROL ROOM outputs

- 24bit studio-grade PROFEX DSP with 256 effects, TAP delay and LCD display
- Electronically balanced MAIN MIX outputs with 45mm fader
- Two 4-LED VU-METERS
- Applications: small live bands (3 to 5 people), home and multimedia applications, rehearsal rooms, small fixed installations

MIXERS M SERIES



After providing for years thousands of satisfied users with the best mixing tools, we have decided to renovate our **M Series** with an assortment of novelties. The M compact mixers have been updated with **improved features** and repacked into a **new stylish package**.

While keeping the superior audio quality, the full set of features and the **highest number of MIC inputs in the category** that have been the hallmarks of our M Series, we have added extra 'intelligent' functions, such as **USB routing** and **channel COMPRESSORS**. All the models feature the new **PROEL 24bit PROFEX DSP**, one of the finest digital effect of its class, providing 256 studio-grade algorithms (including mono and stereo TAP DELAY and TAP DELAY + REVERB) and a convenient LCD display.

Designed and engineered in Italy by PROEL R&D, M mixers are hosted in an ultra-rugged stylish metal case with ABS sides, providing extended durability for a stage-proof use. As a unique feature in the category, all the models include as standard both a **padded carrying bag** and **metal brackets for 19" rack mounting**.

The ultra-portable **M602FX** with 2 mono and 2 stereo channels provides the most demanding performers with all the functions necessary to mix a limited number of signals with **utmost accuracy**.

The 8-in, 6-mic **M822USB** now includes a versatile **USB routing section**, for a complete control of the signals to and from the PC and a built-in universal power supply.

M1622USB, offering 16 inputs and 12 microphone channels, now features **4 AUX** sends, the **USB routing** and also one-knob intelligent **COMPRESSORS** on the MONO channels.



Dopo aver fornito per anni a migliaia di utilizzatori soddisfatti i migliori strumenti di missaggio, abbiamo deciso di rinnovare la nostra **Serie M** con un ampio assortimento di novità. I mixer compatti Series M sono stati aggiornati con **caratteristiche avanzate** e dotati di un **nuovo raffinato design**.

Oltre a mantenere la qualità audio superiore, il set completo di funzioni e il **numero di ingressi MIC più elevato della categoria**, che sono stati i punti di forza della serie precedente, abbiamo introdotto una serie di funzioni 'intelligenti' aggiuntive, tra cui il **routing USB** ed i **COMPRESSORI** sui canali di ingresso. Tutti i modelli includono uno dei migliori processori di effetti della categoria, il **DSP PROFEX a 24 bit di PROEL**, in grado di fornire 256 presets di qualità superiore (inclusi mono e stereo TAP DELAY e TAP DELAY + REVERB) con un comodo display LCD.

Ideati e progettati in Italia da PROEL, i mixers Serie M sono alloggiati in eleganti case in metallo ultra-resistenti con fianchi in ABS, in grado di garantire un utilizzo prolungato senza problemi. Caratteristica unica nella categoria, tutti i modelli includono di serie sia la **borsa imbottita per il trasporto** che **gli adattatori per il montaggio in rack standard da 19"**.

Il super-portatile **M602FX**, con due canali mono e due canali stereo, fornisce all'utilizzatore più esigente tutte le funzioni necessarie per mixare un numero limitato di canali con la **massima accuratezza**.

L'**M822USB**, con 8 ingressi di cui 6 microfonici, ora include una versatile sezione di **USB routing**, per il controllo totale dei segnali da e per il PC, così come un nuovo alimentatore switching interno.

M1622USB, con 16 ingressi di cui 12 microfonici, ora offre **4 mandate AUX**, l'**USB routing** ed anche **COMPRESSORI** intelligenti a singolo controllo sui canali MONO.



M SERIES



M602FX

- Compact 6-channel 2-bus mixer
- 2 MIC/LINE inputs and 2 MIC/LINE STEREO inputs with 4 high-performance, low-noise MIC preamps
- 3-band EQ with musical filtering frequencies
- 1 AUX send
- 24bit studio-grade PROFEX DSP with 256 effects, footswitch controllable TAP delay and LCD display



- 2-TRACK IN & OUT with level control
- PHONES and C.ROOM outputs
- Balanced MAIN MIX output with 45mm fader
- Two 8-LED VU-METERS
- Padded carrying bag and 19" rack adapters included
- Applications: small live bands (2 to 4 people), home and multimedia applications, small fixed installations, rehearsal rooms



M822USB

- Compact 8-channel 4-bus mixer
- 4 MIC/LINE inputs and 2 MIC/LINE STEREO inputs with 6 high-performance, low-noise MIC preamps and
- 3-band EQ with musical filtering frequencies and LO-CUT filter (MONO channels)
- 2 AUX sends (MON + FX)
- 24bit studio-grade PROFEX DSP with 256 effects, footswitch controllable TAP delay and LCD display
- 2-TRK IN & OUT with dedicated level control
- ALT 3-4 additional bus



- PHONES and C.ROOM (with fader) outputs
- USB interface with ROUTING (output can be taken from MIX L&R or AUX 1&2, input can be fed to MIX L&R or to CH 7/8)
- 45mm faders
- Balanced MAIN MIX output with XLR connectors on top panel
- Two 8-LED VU-METERS
- Padded carrying bag and 19" rack adapters included
- Built-in switching power supply.
- Applications: small live bands (4 to 6 people), home and multimedia applications, small fixed installations, rehearsal rooms



M SERIES

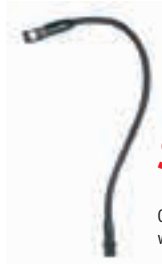


M1622USB

- Compact 16-channel 4-bus mixer
- 8 MIC/LINE inputs and 4 MIC/LINE STEREO inputs with 12 high-performance, low-noise MIC preamps
- 3-band EQ with musical filtering frequencies plus LO-CUT filter and INSERT point on all MONO channels
- "One-knob" COMPRESSORS for an accurate and easy-to-use dynamic processing of vocals and instruments
- 4-band EQ with musical filtering frequencies on STEREO channels
- 4 AUX sends and 2 GROUPS
- 24bit studio-grade PROFEX DSP with 256 effects, footswitch controllable TAP delay and LCD display
- 2-TRK IN & OUT with dedicated level control
- PHONES and C.ROOM outputs
- 60mm faders
- Balanced MAIN MIX output with XLR connectors on top panel and INSERT point
- 7-band GRAPHIC EQ assignable to MIX L&R or to AUX 1&2
- USB interface with ROUTING (output can be taken from MIX L&R or AUX 1&2, input can be fed to MIX L&R or to CH 7/8)
- STANDBY function
- Two 8-LED VU-METERS
- Padded carrying bag and 19" rack adapters included
- BNC connector for 12VDC lamp
- Built-in switching power supply.
- Applications: full live bands, large multimedia applications, fixed installations in large conference room, clubs and theaters



OPTIONAL ACCESSORIES



SDC670

Optional lamp
with BNC connector

GF29

Optional
footswitch



Technical Specifications

		Mi6	Mi10	Mi12	M602FX	M822USB	M1622USB	Connectors
MONO INPUT CHANNEL								
Mic Input	sensitivity	from -10 to -50 dB	from -10 to -50 dB	from -10 to -50 dB	from -10 to -50 dB	from 0 to -60 dB	from 0 to -60 dB	Balanced XLR-F
	impedance	2 Kohm	2 Kohm	2 Kohm	2 Kohm	2 Kohm	2 Kohm	
Line Input	sensitivity	from +20 to -20 dB	from +20 to -40 dB	from +20 to -40 dB	from +20 to -20 dB	from +20 to -40 dB	from +20 to -40 dB	Balanced JACK
	impedance	10 Kohm	10 Kohm	10 Kohm	10 Kohm	10 Kohm	10 Kohm	
Lo cut			75Hz, 18dB/oct.	75Hz, 18dB/oct.		75Hz, 18dB/oct.	75Hz, 18dB/oct.	
EQ	HIGH (shelving)	±15 dB @ 12KHz	±15 dB @ 12 KHz	±15 dB @ 12 KHz	±15 dB @ 12KHz	±15 dB @ 12 KHz	±15 dB @ 12 KHz	
	MID (peaking)	±15 dB @ 2.5KHz	±15 dB @ 2.5 KHz	±15 dB @ 2.5 KHz	±15 dB @ 2.5KHz	±15 dB @ 2.5 KHz	±15 dB from 100 Hz to 8 kHz	
	LOW (shelving)	±15 dB @ 80Hz	±15 dB @ 80 Hz	±15 dB @ 80 Hz	±15 dB @ 80Hz	±15 dB @ 80 Hz	±15 dB @ 80 Hz	
Compressor							CH 1-8, 1 control	
STEREO INPUT CHANNEL								
Mic Input	sensitivity				from -0 to -40dB	from -0 to -40dB	from -0 to -40dB	Balanced XLR-F
	impedance				2 Kohm	2 Kohm	2 Kohm	
Line Input	sensitivity	-10 dB	+4 / -10 dB	+4 / -10 dB	from +20 to -20 dB	from +20 to -20 dB	from +20 to -20 dB	Balanced JACK
	impedance	10 Kohm	10 Kohm	10 Kohm	10 Kohm	10 Kohm	10 Kohm	
EQ	HIGH (shelving)				±15 dB @ 12KHz	±15 dB @ 12 KHz	±15 dB @ 12 KHz	
	MID (peaking)				±15 dB @ 2.5KHz	±15 dB @ 2.5 KHz		
	HI-MID (peaking)						±15 dB @ 3 KHz	
	LO-MID (peaking)						±15 dB @ 500 Hz	
	LOW (shelving)				±15 dB @ 80Hz	±15 dB @ 80 Hz	±15 dB @ 80 Hz	
MASTER SECTION								
MAIN MIX	nom. out level	+4 dBu	+4 dBu	+4 dBu	+4 dBu	+4 dBu	+4 dBu	Balanced JACK Balanced XLR-M
MAIN MIX insert	nom. out level						0 dBu	TRS JACK
Graphic EQ							7-band	
C. ROOM output	nom. out level		0 dBu	0 dBu	0 dBu	0 dBu	0 dBu	Unbalanced JACK
ALT 3 - 4 output	nom. out level					0 dBu	0 dBu	Unbalanced JACK
GROUP output	nom. out level						+4 dBu	Balanced JACK
AUX output	nom. out level		0 dBu	0 dBu	0 dBu	0 dBu	0 dBu	Unbalanced JACK
2TRK	nom. out level	0 dBu	0 dBu	0 dBu	0 dBu	0 dBu	0 dBu	Unbalanced RCA
	nom. in level	0 dBu	0 dBu	0 dBu	0 dBu	0 dBu	0 dBu	Unbalanced RCA
HEADPHONES	min. impedance	32 ohm	32 ohm	32 ohm	32 ohm	32 ohm	32 ohm	
	max. out level	(2x) 193 mW	(2x) 193 mW	(2x) 193 mW	(2x) 193 mW	(2x) 193 mW	(2x) 193 mW	Stereo JACK
USB						Stereo IN/OUT 16-bit converter, 48 KHz sample rate	Stereo IN/OUT 16-bit converter, 48 KHz sample rate	Type B
PROFEX DIGITAL EFFECT PROCESSOR (not available for Mi6)								
Effects		256 (16 presets x 16 variations): HALL, ROOM, VOCAL and PLATE reverbs; STEREO and MONO TAP DELAY; REV + DELAY, REV + TAP DELAY, REV + CHORUS						
A/D and D/A converters		24 bit						
DSP resolution		24 bit						
Controls		2-DIGIT display, DIAL, PEAK LED, MUTE and TAP DELAY switch, MUTE and TAP DELAY footswitch (not available for Mi Series)						
GENERAL SPECIFICATIONS								
Maximum level	all outputs	+22 dBu						
Crosstalk	meas. at 1 KHz	> 82 dBu						
HUM & Noise	unweighted	< -93 dBu						
THD + Noise	at +4dB, 1kHz	< 0,008 %						
Dimensions (WxHxD)		173x222x60 mm	200x266x60 mm	254x302x60 mm	240 x 85 x 272 mm	315 x 91 x 363 mm	465 x 91 x 462 mm	
Weight		1.00 kg	1.50 kg	2.00kg	1,80 kg	3,40 kg	6,50 kg	
POWER REQUIREMENTS								
Supply		18 VAC 500 mA (use only supplied AC/AC ADAPTER)				Internal power supply		
Mains Supply Voltage:		110-120 VAC (±10%) 50 / 60 Hz (US plug) 230-240 VAC (±10%) 50 / 60 Hz (EU plug) 240 VAC (±10%) 50 / 60 Hz (UK plug)				110-240 VAC (±10%) 50 / 60 Hz available with Europe mains cord (Shucko plug), US mains cord (NEMA 5-15P plug), UK mains cord (BS1363 plug)		
Consumption		17 W	32 W	32 W	32 W	45 W	75 W	

STAGE GEAR DB SERIES



D.I. Boxes (Direct Injection Boxes) are part of the essential set of tools required for any professional live sound situation or any application where the audio devices feature different levels, impedance and connections. Transforming audio signals from unbalanced to **balanced**, D.I. Boxes **reduce the possibility of electrical disturbances** on the line - especially over long cable runs such as from a musical instrument to the FoH mixing console.

The DB series includes **three different models of high-performance D.I. boxes**: a single channel active (**DB1A**), a single channel passive (**DB1P**) and a dual channel active (**DB2A**). The circuitry of each model has been designed with the maximum care, using carefully **selected electronic components**, such as isolation transformers (DB1A, DB1P) and low-distortion ICs. This guarantees a **clean, hum-free signal transmission** from the instrument to the mixing consoles, even on very long cables, without impedance matching problems. On the front panels, a **wide choice of connectors** is available (XLR, JACK and RCA, depending on the model), allowing easy connection from a wide range of sources, including keyboards and samplers, guitars and basses, PC audio cards and any type of music player.



The ACTIVE versions can be **powered** by 48 V phantom power from the mixing console, by a 9 V battery or, in large applications using many DI BOXES, by an external 9 V power adapter that can be daisy-chained using the double power connector on the rear panel.

The **innovative mechanical design** of the three models includes an aluminum shell and rubber corners, which provide maximum protection in the toughest situations. When the two rubber corners are removed, two guides are exposed, allowing the coupling of two DI units, which can then be **mounted in a 19" standard rack** (rack ears included). This unique feature is extremely convenient for engineers who need to use a large number of DI BOXES in the same application.

Le **D.I. Box (Direct Injection Box)** sono strumenti indispensabili per i tecnici del suono in situazioni complesse, quali i concerti live, e in tutte le applicazioni che prevedono il collegamento di apparecchiature audio con differenti tipologie di livello, impedenza e connessione. Essendo in grado di trasformare i segnali audio da sbilanciati a **bilanciati** e renderli **insensibili ai disturbi elettrici**, sono utilizzate specialmente per linee lunghe, come il trasporto del segnale di uno strumento musicale fino a un mixer distante anche decine di metri.

Fanno parte della serie DB un modello di D.I. Box attiva ad un canale (**DB1A**), una D.I. Box passiva ad un canale (**DB1P**) ed un modello di D.I. Box attiva a due canali (**DB2A**). La circuizione di ciascuno dei tre modelli è stata curata nei minimi particolari, utilizzando componenti elettronici, come i trasformatori d'isolamento (nei modelli DB1A e DB1P) ed i circuiti integrati a bassa distorsione, **rigorosamente selezionati**. Questo per garantire una **trasmissione del segnale dallo strumento al mixer fedele, "pulita" e senza problemi di livello, impedenza o rumore**.

Sui pannelli frontali è presente un'ampia scelta di connettori d'ingresso (XLR, JACK e RCA, a seconda del modello), che consentono la connessione di una vasta gamma di sorgenti, tra cui tastiere e campionatori, chitarre, bassi e relativi amplificatori, schede audio di computer e riproduttori musicali di ogni genere.

Le versioni ATTIVE possono essere **alimentate** a scelta tramite l'alimentazione PHANTOM del mixer, con batteria da 9V oppure, nel caso di setup con un numero elevato di DI BOX, utilizzando un alimentatore esterno collegabile in cascata a più unità, grazie al doppio connettore di alimentazione.

L'**innovativo design** dei tre modelli include un guscio in alluminio con angolari in gomma, per garantire la massima resistenza negli utilizzi più estremi. Rimuovendo gli angolari, si rendono disponibili due guide laterali per accoppiare due unità nonché montarle in **rack standard da 19"**, grazie a flange metalliche fornite di serie. Si tratta di una funzionalità molto preziosa per quanti abbiano la necessità di utilizzare un elevato numero di DI BOX nella stessa applicazione, evitando problemi di posizionamento, ingombro e cablaggio.



DB SERIES



DB1A

- Single channel active D.I. Box
- MU-METAL core isolation transformer for full isolation between the musician's gear and the sound reinforcement system
- Low-noise ICs for balancing the signal, able to guarantee audio integrity and to handle very low-impedance loads.
- High dynamic headroom with minimum phase and harmonic distortion
- Input JACK and XLR connectors with link possibility (all the connections on the same side)
- -10 dB, -20 dB, -30 dB PAD
- CLIP and SIGNAL LED
- Phase reverse switch
- Powering options: 9V battery, +48V, external AC/DC adaptor supply
- 19" rack mountable (ears included)
- Designed to be used by professional musicians and sound engineers for rental, touring, studio and installation applications



DB2A

- Dual channel active D.I. Box
- STEREO configuration: one unit can be used for a stereo device
- High dynamic headroom with minimum phase and harmonic distortion
- High input impedance reduces loading
- Very good electronic performance thanks to SMD components and low noise IC
- Very efficient ground lift circuitry
- Input JACK, RCA and XLR connectors with link possibility (all the connections on the same side)
- -20 dB, -30 dB PAD
- Powering options: 9V battery, +48V, external AC/DC adaptor supply
- 19" rack mountable (ears included)
- Particularly suited for use with stereo keyboards, DJ equipment and PC-based audio systems



DB1P

- Single channel passive D.I. Box
- MU-METAL core isolation transformer for full isolation between the musician's gear and the sound reinforcement system
- Specially-designed MAKE-UP filter at 4 kHz is for cutting any hiss or buzz noise coming from acoustic or electric guitars and basses
- High dynamic headroom with minimum phase and harmonic distortion
- Input JACK and XLR connectors with link possibility (all the connections on the same side)
- -20 dB, -40 dB, -60 dB PAD
- 19" rack mountable (ears included)
- Designed for applications where it is not possible or practical to power the unit

Technical Specifications

	DB1A	DB2A	DB1P
System Type	1-channel active DI BOX	2-channel active DI BOX	1-channel passive DI BOX
Input Section			
Input Impedance	1M Ohm (pad at 0 dB) 47k Ohm (pad at -20 dB) 44k Ohm (pad at -30 dB)	200K Ohm (pad at 0 dB) 47k Ohm (pad at -20 dB) 47k Ohm (pad at -30 dB)	120K Ohm (pad at 0 dB) 47k Ohm (pad at -20 dB) 47k Ohm (pad at -40 dB)
Max Input Level	+5 dBu (pad at 0 dB) +25 dBu (pad at -20 dB) +35 dBu (pad at -30 dB)	+5 dBu (pad at 0 dB) +25 dBu (pad at -20 dB) +35 dBu (pad at -30 dB)	+15 dBu (pad at 0 dB) +35 dBu (pad at -20 dB) +55 dBu (pad at -40 dB)
Connectors	Two Parallel 1/4" jack connectors and a parallel XLR connector (unbalanced) Jack: Tip Hot / Sleeve Ground XLR female: Pin 2 Hot / Pin 1 & 3 Ground	Two Parallel 1/4" jack connectors and a parallel RCA connector (unbalanced) Jack: Tip Hot / Sleeve Ground	Two Parallel 1/4" jack connectors and a parallel RCA connector (unbalanced) Jack: Tip Hot / Sleeve Ground
Output Section			
Output	Transformer Balanced (fully isolated)	Active discrete devices (transformer less)	Transformer Balanced (isolated with shielding)
Max. Output Level	into 600 Ohms or greater +3 dBu (for 0.1% THD at 50 Hz) +5 dBu (for 0.1% THD at 1k Hz)	into 600 Ohms or greater +5 dBu (for 0.1% THD at 50 Hz) +5 dBu (for 0.1% THD at 1k Hz)	into 1K Ohms or greater -5 dBu (for 0.1% THD at 50 Hz) +5 dBu (for 0.1% THD at 1k Hz)
Connector	XLR male: Pin 2 Hot / Pin 3 Cold / Pin1 Ground	XLR male: Pin 2 Hot / Pin 3 Cold / Pin1 Ground	XLR male: Pin 2 Hot / Pin 3 Cold / Pin1 Ground
System Performance			
Insertion loss	< 1 dB	< 1 dB	20 dB
CMR	> 60 dB	> 50 dB	> 100 dB
Phase distortion	+11° at 20 Hz, -6° at 20k Hz	+20° at 20 Hz, -30° at 20k Hz	0° at 20 Hz, 0° at 20k Hz
Distortion THD 20÷20k Hz OdBu	< 0.007 %	< 0.007 %	< 0.007 %
Noise	< -105 dBu unweighted	< -105 dBu unweighted	< -105 dBu unweighted
Frequency Response	10 Hz to 100 kHz, +0dB/-1 dB	10 Hz to 40 kHz, +0dB/-1 dB	10 Hz to 100 kHz, +0dB/-1 dB
Controls	On/off, Pad -10, Pad -20, Gnd Lift, Ø inv	On/off, Pad -20, Pad -30, Gnd Lift	Pad -20, Pad -40, Gnd Lift, Filter (12" emulator)
Indicators	On, signal, clip	On	-
General			
Phantom Power	+24 volts DC to +48 volts DC	+24 volts DC to +48 volts DC	-
External AC/DC adaptor	+9 volts DC	+9 volts DC	-
Standalone/Standby	9 volt PP3 type, battery preferably alkaline	9 volt PP3 type, battery preferably alkaline	-
Current consumption	less than 8 mA	less than 8 mA	-
Dimensions (W x H x D)	215 x 50 x 125 mm	215 x 50 x 125 mm	215 x 50 x 125 mm
Weight (excluding batteries)	1.08 kg (2.38 lb)	1.06 kg (2.34 lb)	1.04 kg (2.29 lb)

STAGE GEAR 100 SERIES



PROEL has added to the STAGE GEAR family a Series of 8 exciting models.

The **100 Series** includes a range of accessories and useful **tools**, ranging from D.I. Boxes and Headphone Amps to Signal Splitters, Tube Preamps and Power Supply Units, designed to complement audio systems in **stage applications, recording studios and fixed installations.**

Hosted in a stylish extruded and stackable **aluminum shells** or in sturdy metal chassis, the 100 Series products are meant to deliver **sound quality, versatility and stage-proof reliability** in a very affordable package.

PROEL arricchisce la famiglia Stage Gear con una serie di 8 interessanti modelli.

La **Serie 100** comprende una gamma di accessori e utili **strumenti** che spazia da D.I. Boxes ed amplificatori per cuffie fino a splitters di segnale, pre-amplificatori a valvole ed alimentatori, progettati come complemento ai sistemi audio in **applicazioni live e recording e nelle installazioni fisse.**

Racchiusi in eleganti e sovrapponibili **gusci di alluminio** o in resistenti box metallici, i prodotti della Serie 100 offrono **qualità audio, versatilità ed affidabilità** ad un prezzo molto competitivo.



DIRECT100A

- Active Direct Injection Box
- High quality isolation transformer for ultra-flat frequency response
- Low-noise OP amps with high-quality sound performance
- XLR-F and 1/4" JACK input connectors + 1/4" JACK link



- XLR-M balanced output
- 20dB PAD and GND lift switch
- Stackable aluminum shell



DIRECT100P

- Passive Direct Injection Box
- High quality isolation transformer for ultra-flat frequency response
- High quality electronic components
- 1/4" JACK input and link connectors



- XLR-M balanced output
- 20dB & 40dB PAD and GND lift switch
- Stackable aluminum shell

100 SERIES



PHANTOM100

- Phantom Power Supply
- Provides clean and hum-free +48V power supply for all condenser microphones
- Suitable for all applications where +48V power supply is not available

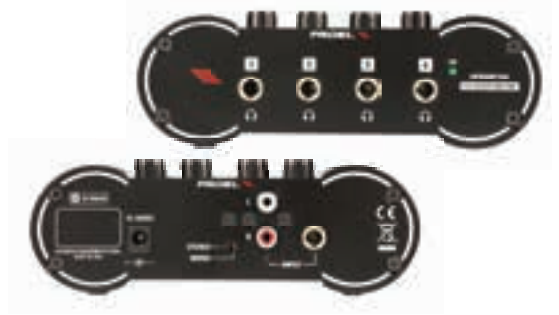
- from mixing console (direct recording to PC, use of devices with no phantom power, fixed installations, etc.)
- Powered by DC adaptor (included)
- Stackable aluminum shell



SPLIT100

- Signal Splitter
- Splits a microphone or line input signal into two outputs equal to the original
- High-quality isolation transformer for a complete separation between

- the two output signals
- GND LIFT switch for each output
- XLR-F input + XLR-M link connectors, 2 x XLR-M output connectors
- Stackable aluminum shell



HPAMP104

- 4-CH Headphone Amplifier
- Very compact and portable package
- 1/4" JACK + RCA stereo/mono input
- 4 x 1/4" JACK stereo headphone outputs with individual level controls

- 2 x 45mW @ 100 ohm max output level
- 16 ohm minimum output impedance (per channel)
- Powered by DC adaptor (included)
- Stackable aluminum shell

100 SERIES



HPAMP106

- 6-ch Headphone Amplifier
- 6 independent high-power amplifier sections suitable for virtually any type of headphones
- 4 selectable main stereo/mono inputs with 1/4" JACK connectors (REAR panel)
- 6 stereo headphone outputs with individual level controls, input selector and 1/4" JACK connectors (FRONT panel)
- 2 x 193mW max output level at 32 ohm (per channel)
- 16 ohm minimum output impedance (per channel)
- Built-in power supply with shielded transformer and voltage selector.
- 19" rack mountable metal chassis



TUBE100USB

- TUBE microphone preamp with USB
- 12AX7 tube preamp section for adding warmth to microphones and instruments
- Built-in low-noise +48V phantom power
- PHASE reverse switch, adjustable LO-CUT filter, VOCAL EQ, built-in LIMITER circuit
- Input and output GAIN controls plus SATURATION function
- Accurate dual LEVEL METER
- Microphone (XLR-F) and instrument (1/4" JACK) inputs
- XLR-M and 1/4" JACK balanced outputs
- USB 1.1 compliant, compatible with Windows XP/Vista/7 and Mac OS 9.1 and newer



PSU110

- 10-Out Power Supply
- Universal high-performance power supply for pedal effects
- 8 x 9VDC outputs, 1 x 12VDC output, 1 x 12VAC output
- Output 7 and 8 with fine power adjustment
- Dip switches for individual adjustment of the 9VDC outputs
- Total output power 2000mA
- Complete isolation and short-circuit protection for each output
- Superior quality power transformer for hum-free operation
- Full cable set included

100 SERIES

Technical Specifications

	DIRECT100A	DIRECT100P
System Type	1 channel active DI	1 channel passive DI
Input Section		
Input Impedance	>250 Kohm	>250 Kohm
Max Input Level	+6 (PAD at 0) / +26 (PAD at 20) dBu	+10 (PAD at 0) / +30 (PAD at 20) / +50 (PAD at 40) dBu
Connectors	1 x XLR-F + 1 x 1/4" jack unbalanced	1 x 1/4" jack unbalanced
Link	1 x 1/4" jack unbalanced	1 x 1/4" jack unbalanced
Output Section		
Output	Transformer Balanced (fully isolated)	Transformer Balanced (isolated with shielding)
Insertion Loss	0 dB	26 dB
Load Impedance	600 Ohms or greater	600 Ohms or greater
Connector	XLR male	XLR male
System Performance		
Distortion THD 50÷20k Hz 0dBu	< 0.005 %	< 0.007 %
Noise	< -105 dBu unweighted	-
Frequency Response	10 Hz to 40 kHz (-3 dB)	40 Hz to 20 kHz (-3 dB)
General		
Controls	ON/OFF, PAD -20, GND LIFT	PAD 0 / -20 / -40, GND LIFT
Indicators	Power ON	-
Phantom Power	+18 volts DC to +48 volts DC	-
Battery	9 volt PP3 type alkaline	-
Dimensions (W x H x D)	152 x 50 x 134 mm	134 x 50 x 105 mm
Weight (excluding batteries)	0,70 Kg	0,55 Kg

	HPAMP104	HPAMP106
System Type	4-channel headphone amplifier	6-channel headphone amplifier
Input Section		
Inputs	1 stereo	4 stereo
Input Impedance	500 Kohm	47 Kohm
Max Input Level	+15 dBu	+25 dBu
Connectors	1/4" jack stereo, 2 x RCA	2 x 1/4" jack unbalanced (each input)
Output Section		
Outputs	4 stereo	6 stereo
Maximum output	(2x) 45mW @ 100 ohm (each)	(2x) 193 mW @ 32 ohm (each)
Load Impedance	minimum 16 ohm per channel	minimum 16 ohm per channel
Max gain	+20 dB each channel	+13 dB each channel
Connector	1/4" jack stereo (each output)	1/4" jack stereo (each output)
System Performance		
Distortion (THD)	0.02 %	0.02 %
Noise	< -98 dBu unweighted	< -98 dBu unweighted
Frequency Response	20 Hz - 20 KHz (-3 dB)	20 Hz - 20 KHz (-3 dB)
General		
Controls	OUTPUT LEVEL, INPUT STEREO/MONO	OUTPUT LEVEL, INPUT SELECTOR
Indicators	Power ON	Power ON
Power supply	12-18 VDC (adapter included)	Selectable 100-120 VAC, 220-240 VAC, 50-60 Hz
Dimensions (W x H x D)	152 x 50 x 72 mm	480 x 44 x 210 mm
Weight	0,8 Kg	3,9 Kg

	PHANTOM100
System Type	48V Phantom Power Supply
Input Connector	1 x XLR-F
Output Connector	1 x XLR-M
Output Phantom Power	48V DC +/-2V
Frequency Response	20 Hz - 20 KHz (-3 dB)
Controls	ON/OFF switch
Indicators	Power ON
Power supply	9V DC (adapter included)
Dimensions (W x H x D)	134 x 50 x 72 mm
Weight	0,7 Kg

	SPLIT100
System Type	Signal Splitter
Input Connector	1 x XLR-F
Link Connector	1 x XLR-M
Output Connectors	2 x XLR-M
Max Input Level	+4 dBu (at 50Hz)
Distortion	0.002% (0 dBu, 1 KHz)
Frequency Response	20 Hz - 20 KHz (-3 dB)
Insertion loss	-2.5 dB into 600 ohm load
Controls	2 x GND LIFT
Dimensions (W x H x D)	134 x 50 x 123 mm
Weight	0,6 Kg

	TUBE100USB
System Type	Tube Mic Preamp with USB
Microphone Input	
Impedance	2.5 Kohm
Sensitivity	from 0 to -60 dBu
Connectors	XLR-F (balanced)
Instrument Input	
Impedance	>1 Mohm
Sensitivity	from +10 to -50 dBu
Connector	1/4" jack (unbalanced)
Insert	
Impedance send	100 ohm
Impedance return	10 Kohm
Nominal out Level	0 dBu
Connectors	1/4" jack (unbalanced)
Analog Output	
Impedance	60 ohm
Nominal out level	+4 dBu
Maximum out level	+21 dBu
Connectors	XLR-M and 1/4" jack (balanced)
USB Output	
Type	USB 1.1 and 2.0 (type B)
Converter	16 bit
Sampling rate	48 KHz
System Performance	
Noise	< 95 dB unweighted
Distortion (THD)	0.008 % (at 1 KHz +4 dBu)
Frequency response	20 Hz - 20 KHz (-0.5 dB)
General	
Controls	MIC/INSTR selector, INPUT GAIN, 48V, PHASE REV, LOW CUT, LOW CUT FREQUENCY, VOCAL EQ, SATURATION, LIMIT, ENHANCE, OUT LEVEL, REC MUTE, ON/OFF switch
Indicators	INPUT VU-METER, 48V, VU METER, USB, MUTE
Supply	18 VAC 1000 mA (adapter included)
Mains Supply Voltage	100-120 VAC or 220-240 VAC, 50-60 Hz
Consumption	32 W
Dimensions (W x H x D)	200 x 56 x 140 mm
Weight	1,8 Kg

	PSU110
System Type	10-Out Power Supply
Output 1-4	9V DC (adjustable to 12V DC by DIP switch)
Output 5-6	9V DC (adjustable to 15V DC by DIP switch)
Output 7-8	9V DC (adjustable from 4 to 9V DC by knob)
Output 9	12V DC
Output 10	12V AC
MAX total power output	2000 mA
Power supply	Selectable 100-120 VAC, 220-240 VAC, 50-60 Hz
Dimensions (W x H x D)	169 x 68 x 107 mm
Weight	1,6 Kg

PROCESSORS PC SERIES



The **PC260** digital loudspeaker controller is based on the **CORE DSP platform** and feature state-of-the-art signal processing, advanced functions and a very intuitive UI, with a direct access to all the editing functions and remote control capability. The **40bit floating point resolution** and the 24bit AD/DA converters ensure a perfect signal integrity with a dynamic range in excess of 110dB, for a superior sonic performance.

The **PC260** includes a full set of functions and has 2 inputs (with the choice of **AES digital input**) and 6 outputs. Each INPUT features 5 bands of full PARAMETRIC EQ (including parametric, shelving, notch, res. HP and LP, allpass and bandpass), 28 bands of GRAPHIC EQ and 3 bands of an extremely versatile and powerful **DYNAMIC EQ**. A fully programmable COMPRESSOR/LIMITER and up to 600ms of delay are also available. The OUTPUTS include any kind of crossover filters with slope up to 48dB per octave, together with 5 bands of PEQ, fully programmable COMPRESSOR/LIMITER and up to 600ms of delay. Additional features include a 1/3 oct. **RTA** with dedicated MIC input with phantom power and a GROUPING function.

The **SPL Manager**, specifically designed for the application in fixed installations, is a very powerful tool that allows to schedule, in 4 different scenes, 16 events on each input and output, including MUTE, level change, COMPRESSOR threshold change and PRESET change. These events can be then performed automatically according to the internal clock of the unit.

PC260 can be remotely controlled with **PRONET software** through the USB port on the front panel and it can be included in a PRONET network using the two RJ-45 connectors on the rear panel (with the optional USB2CAN converter).

*Il processore digitale per diffusori **PC260** è basato sulla **piattaforma DSP CORE** ed offre un **processamento del segnale allo stato dell'arte**, funzioni avanzate e un'interfaccia di controllo estremamente intuitiva, con accesso diretto a tutti i parametri e possibilità di **controllo remoto**. La **risoluzione a 40bit floating point** ed i convertitori AD/DA a 24bit assicurano una perfetta integrità del segnale con un range dinamico di oltre 110dB, per prestazioni acustiche superiori.*

***PC260** è dotato di un set completo di funzioni e presenta 2 ingressi (con possibilità di selezionare anche un **ingresso digitale AES**) e 6 uscite. Ciascun INGRESSO include un EQ PARAMETRICO a 5 bande (con la scelta di parametric, shelving, notch, res. HP e LP, allpass e bandpass), un EQ GRAFICO a 28 bande ed un potente e versatile **EQ DINAMICO** a 3 bande. Un COMPRESSOR/LIMITER programmabile ed un DELAY fino a 600ms sono altresì disponibili. Le USCITE includono filtri di CROSSOVER di ogni tipo con pendenza massima fino a 48dB per ottava, un EQ PARAMETRICO a 5 bande, un COMPRESSOR/ LIMITER programmabile e un DELAY fino a 600ms. Sono disponibili inoltre un analizzatore di spettro (**RTA**) a 1/3 di ottava con ingresso MIC dedicato e la funzione di raggruppamento (GROUPING).*

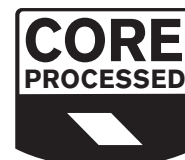
*L'**SPL Manager**, specificatamente progettato per l'utilizzo in installazioni fisse, è uno strumento potente che consente di programmare in 4 differenti scene fino a 16 eventi su ingressi ed uscite, tra cui MUTE, LIVELLO, soglia del COMPRESSORE e cambio PRESET. Questi eventi possono essere poi richiamati automaticamente tramite l'orologio interno.*

***PC260** può essere controllato da PC tramite il **software PRONET** utilizzando la porta USB sul pannello frontale e può essere incluso in una **rete PRONET** tramite i due connettori RJ-45 sul pannello posteriore (utilizzando il convertitore opzionale USB2CAN).*

PC260

- 40bit floating point resolution CORE DSP
- 24bit AD/DA converters
- 110dB dynamic range
- 5 bands of full PARAMETRIC EQ on each INPUT and OUTPUT, including peaking, shelving, notch, resonating HP and LP, allpass and bandpass
- 28 bands of GRAPHIC EQ on each INPUT
- 3 bands of DYNAMIC EQ on each INPUT
- Fully programmable COMPRESSOR/LIMITER on each INPUT and OUTPUT

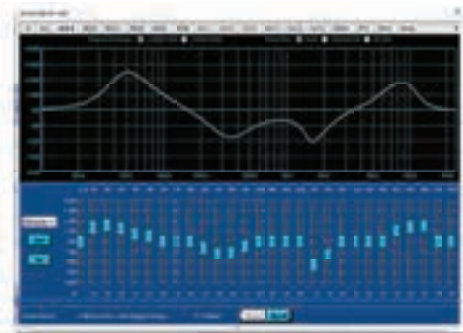
- Up to 600ms delay time on each INPUT and OUTPUT
- Full METERING on each INPUT and OUTPUT
- RTA with dedicated MIC input
- GROUPING function
- SPL manager
- AES digital input
- PRONET remote control thru USB and network capability



PC SERIES

Technical Specifications

PC260	
Input Section	
Inputs	2 electronically balanced
Input Impedance	> 10k ohms
Maximum Input Level	+20dBu (-6dB pad)
Input gain	+6 dB to -30 dB in 0.2 dB steps
Input Connector	XLR F - XLR M to link
Digital Input	AES/EBU
Output Section	
Outputs	6
Maximum Output Level	+20dBu
Output Gain	+15 dB to -30 dB in 0.2 dB steps and mute
Output Connector	XLR M
Crossover Filters	
Slopes	6/12/18/24/48dB per octave
Type	Bessel / Butterworth / Linkwitz-Riley
Delays	
Max Delay time	600 ms on all In and Out
Delay Step	21 μ s
Parametric EQ.filters	
Maximum number of filters	5 Per input / 5 per output
EQ Type	Parametric, Notch, Shelf, Bandpass, resonant HP/LP, Allpass
EQ Gain	+15 dB to -15 dB in 0.2 dB steps
Q (bandwidth)	0.4 to 28.85 (3 to 0.05, 1/20 oct. steps)
EQ freq	15.6 Hz - 22.62 kHz (1/20 oct. steps)
Shelving gains	$\pm$ 15 dB in 0.2 dB steps
Dynamic EQ filters	
Maximum number of filters	3 per input
EQ Type	Parametric, Shelf 6
EQ Gain	+15 dB to -15 dB in 0.2 dB steps
Q (bandwidth)	0.4 to 28.85 (3 to 0.05, 1/20 oct. steps)
EQ freq	15.6 Hz - 22.62 kHz (1/20 oct. steps)
Shelving gains	$\pm$ 15 dB in 0.2 dB steps
Graphic EQ.	
Maximum number of EQ.	1 per input
EQ Type	28 band 1/3 oct.
EQ freq	31.5Hz - 16kHz 1/3 oct.
EQ Gain	+15 dB to -15 dB in 0.2 dB steps
Extra Features	
RTA range	20Hz-20kHz 1/3oct.
RTA mic input	15V phantom power
SPLM	4 scene /16 events for each scene
Process \ Conversion	
AD/DA conversion	24 bit
AD/DA latency	1.68 ms (analogue in - analogue out @ 48 kHz)
Sampling frequency	48 KHz
Internal processing	40 bit floating point
General Performance (filters out)	
Frequency response	+1/2 dB 20 Hz - 20 kHz
Dynamic range	>110 dB 20 Hz - 20 kHz unwt'd
Distortion (THD)	< 0.015% @ 1kHz, +18dBu
Display	192x32 LCD Graphic Display
Input metering LED	2 x 4 LED
Output Metering LED	6 x 4 LED
Remote control	USB, RJ45 PRONET In/Out
General	
Dimensions	44 x 482 x 295 mm
Weight	4.1 kg (9 lb)
AC Power	80 to 250V $\pm$ 15% @ 50/60 Hz



POWER AMPLIFIERS HPX SERIES



HPX is a series of power amplifiers designed to provide entertainers and audio professionals with **quality performance** and **maximum portability** at a very affordable price.

Combining rock-solid CLASS AB and CLASS H power stages to extremely efficient **SWITCH MODE power supplies**, the HPX amplifiers delivers from 900W to 6000W of pure power to your speaker system in **2-ohm operation**, providing clear and defined highs together with extremely punchy lows. Thanks to the **SMPS** light-weight technology and to the efficient cooling systems, the HPX come in a very compact and portable package, yet sturdy enough to provide the maximum protection and durability over the years.

In the models from 900 to 2800, a **built-in selectable LPN** (Low-Pass Notch) filter enhances the amplifier response at the low frequencies, providing an increased punch while protecting the speakers from over-exursion and increasing the headroom.

The two biggest models of the series, **HPX4600** and **HPX6000**, feature a **3-tier CLASS H power stage**, providing very high power level in a high density structure. With an overall efficiency higher than 75% and a comprehensive set of controls, including a 3-position GAIN selector and switchable SOFT CLIP LIMITERS, they represent a cost-effective solution also for large sound reinforcement systems requiring very high power levels combined to top quality performance.

The front panel, with very comfortable die-cast handles and **removable dust filters**, features a comprehensive set of LED indicators together with detented level controls. The connections include XLR, 1/4" JACK and RCA for the inputs, SPEAKON and binding post for the outputs.

HPX è una serie di amplificatori di potenza progettati per fornire a musicisti e professionisti **prestazioni di qualità e massima trasportabilità** ad un prezzo conveniente.

La combinazione di robusti stadi di potenza in CLASSE AB e CLASSE H ed **alimentatori SWITCH MODE** estremamente efficienti consente agli amplificatori HPX di fornire ai vostri diffusori da 900W a 6000W di potenza complessiva su **2 ohm**, con acuti chiari e definiti e bassi profondi ed estesi. Grazie alla tecnologia leggera **SMPS** e all'efficiente sistema di raffreddamento, gli HPX si presentano in un formato compatto e facilmente trasportabile, ma allo stesso tempo sufficientemente robusto e resistente da offrire la massima protezione e durata nel corso degli anni.

Nei modelli dal 900 al 2800 è disponibile un **filtro LPN** (Low-Pass Notch) in grado di enfatizzare la risposta dei diffusori alle basse frequenze e, allo stesso tempo, proteggerli dalle sovra-escursioni.

I due modelli di punta della serie, **HPX4600** e **HPX6000**, utilizzano uno **stadio di potenza in CLASSE H a 3 livelli** in grado di fornire potenze molto elevate in una struttura ad alta densità. Con un'efficienza superiore al 75% ed un set completo di controlli, incluso selettore di GUADAGNO a 3 posizioni e SOFT CLIP LIMITERS escludibili, essi rappresentano una soluzione efficace per sistemi di sound reinforcement anche di grandi dimensioni, che richiedono livelli di potenza molto elevati uniti a prestazioni di alto livello.

Il pannello frontale, con comode maniglie in pressofusione e **filtri anti-polvere rimovibili**, comprende una serie completa di indicatori LED insieme a controlli di livello a scatti. Le connessioni includono XLR, JACK da 1/4" e RCA per gli ingressi, SPEAKON e binding post per le uscite.



HPX SERIES

- HPX900: 900W TOTAL POWER at 2ohm in less than 7kg
- HPX1200: 1200W TOTAL POWER at 2ohm in less than 7kg
- HPX2400: 2400W TOTAL POWER at 2ohm in less than 10kg
- HPX2800: 2800W TOTAL POWER at 2ohm in less than 10kg
- HPX4600: 4600W TOTAL POWER at 2ohm in less than 14kg
- HPX6000: 6000W TOTAL POWER at 2ohm in less than 14kg
- Ultra-efficient SWITCH MODE POWER SUPPLY
- Integrated CLIP LIMITERS (user-defeatable in 4600 and 6000)
- Selectable LPN filter (Low-Pass Notch - 900 to 2800)
- STEREO/PARALLEL/BRIDGE mode
- 2- or 3-position GAIN selector
- XLR, 1/4" JACK and RCA input connectors (900 to 2800)
- SPEAKON and binding post output connectors
- AC, DC, thermal and short-circuit protection
- FRONT-TO-BACK ventilation system with variable speed fan and removable dust filters
- Compact chassis with die-cast handles



HPX900



HPX2800



HPX1200



HPX4600



HPX2400



HPX6000

Technical Specifications

	HPX900	HPX1200	HPX2400	HPX2800	HPX4600	HPX6000
Power 8 ohm*	200	300	450	600	850	1200
Power 4 ohm*	300	450	800	1000	1400	2000
Power 2 ohm**	450	600	1200	1400	2300	3000
Power BRIDGE 8 ohm*	600	900	1600	2000	2800	4000
Power BRIDGE 4 ohm**	900	1200	2400	2800	4600	6000

* W RMS per channel, both channel driven, 1KHz THD 1%, ** 40ms burst

Output Stage	Class AB		Class H			
Frequency Response	20 Hz - 20 kHz					
Input Impedance	10 kΩ unbalanced 20 kΩ balanced					
Damping Factor	>100	>200				
Slew Rate	>20v/us					
S/N Ratio (Unweighted)	>85 dB	>90 dB			>80 dB	
Input Connectors	XLR M, 1/4" JACK, RCA				NEUTRIK Combo and XLR M	
Output Connectors	SPEAKON and Binding Post					
Controls	Detented INPUT LEVEL control, GAIN selector, STEREO/BRIDGE/PAR MODE selector, LOW-PASS NOTCH (LPN - 900 to 2800), GND lift, SOFT CLIPPING (4600, 6000)					
LED Indicators	STANDBY, ON, PARALLEL, BRIDGE, SIGNAL, LIMIT, PROTECT					
Cooling	Variable speed DC fan					
Protections	AC low power, DC, thermal, short circuit, VHF, CLIP limiter					
Power Supply	230 VAC 50 Hz or 120 VAC 60 Hz					
Dimensions (W x H x D)	483 x 89 x 335		483 x 89 x 395		483 x 89 x 505	
Weight	6.0 kg (13.2 lb)	6.9 kg (15.2 lb)	9.2 kg (20.3 lb)	9.2 kg (20.3 lb)	13.0 kg (28.7 lb)	13.6 kg (29.9 lb)

POWER AMPLIFIERS HPD SERIES



HPD2004 and **HPD4004** are high-performance professional 4-channel amplifiers employing PROEL **DA modules**, a new generation of digitally controlled Class D power amplifiers with Switch Mode Power Supply (SMPS) featuring an innovative technology.

Unlike most of the competitors in this range, which use a fixed switching frequency, the PWM (Pulse Width Modulation) output stage of DA modules uses a **variable switching frequency** according to the input signal level. Thanks to a sophisticated hardware and software structure, this system offers performances far above most of the products currently available on the market: **better sound definition**, high-fidelity reproduction of any frequency of the audio range, **higher dynamics** at any signal level with low distortion even at very high powers. The superior sound quality can be compared with top-of-the-range AB-class analog systems, while DA modules thanks to the use of SMPS and Class D feature very compact size and light weight, efficiency above 90% and negligible heat dissipation.

The **very high efficiency** levels result also in a significant reduction in the energy waste associated with large installations, a noticeable reduction in operating costs and a direct benefit to the environment. Featuring high power levels in a lightweight and compact chassis, the HPD amplifiers are much easier and more economical to transport than conventional models and this, in turn, makes them even more **environmentally friendly**.

HPD amplifiers include an input section with the choice of different **filtering options** (FLAT / BI-AMP / HPF) and feature an ergonomic and functional design with **removable dust filters**, for an easy maintenance in all conditions of use and therefore extensive durability. The protection system includes thermal protection, short circuit protection, high frequency protection and CLIP LIMITER circuit.

***HPD2004** e **HPD4004** sono amplificatori professionali a 4 canali ad elevate prestazioni che utilizzano i **moduli DA**, una nuova generazione di amplificatori di potenza in Classe D a controllo digitale con alimentazione Switching (SMPS), dotati di una tecnologia innovativa.*

*A differenza di gran parte dei competitors, i quali usano una frequenza di commutazione fissa, lo stadio di uscita PWM (Pulse Width Modulation) dei moduli DA utilizza una **frequenza di commutazione variabile** a seconda del livello del segnale. Grazie ad una sofisticata struttura hardware e software, questo sistema offre prestazioni ben al di sopra della maggior parte dei prodotti analoghi: **migliore definizione del suono**, riproduzione ad alta fedeltà di tutte le frequenze della banda audio, **dinamica superiore** a qualunque livello di segnale con bassa distorsione anche a potenze molto elevate. La qualità audio superiore può essere paragonata a quella di sistemi top di gamma in classe AB, mentre i moduli DA, grazie all'uso di SMPS e Classe D, offrono dimensioni e pesi molto ridotti, un'efficienza superiore al 90% e dissipazione di calore trascurabile.*

*Gli **elevati livelli di efficienza** hanno come risultato una notevole riduzione degli sprechi di energia associati all'utilizzo di grandi impianti di amplificazione, con un beneficio diretto per l'ambiente ed un sensibile risparmio sui costi di esercizio. In più, grazie alla possibilità di concentrare elevati livelli di potenza in dimensioni e pesi estremamente contenuti, il trasporto degli amplificatori risulta molto più economico e a **minor impatto ambientale** rispetto a modelli convenzionali.*

*La sezione d'ingresso di entrambi i modelli offre la scelta fra diverse **opzioni di filtraggio** (FLAT/BI-AMP/ HPF), mentre il design ergonomico e funzionale, che include **filtri anti-polvere rimovibili**, assicura una facile manutenzione in qualsiasi condizione d'uso e una lunga durata nel tempo. Il sistema di protezioni include protezione termica, protezione sul corto circuito, protezione in alta frequenza e circuito di CLIP LIMITER.*



HPD SERIES

HPD2004 • HPD4004

- HPD2004: 4 x 500W on 4 ohm, 2 x 1000W on 8 ohm
- HPD4004: 4 x 1000W on 4 ohm, 2 x 2000W on 8 ohm
- Less than 12kg in 2 rack units for up to 4000W
- DA digitally controlled Class D power modules with SWITCH MODE power supply (SMPS)
- PWM (Pulse Width Modulation) output stages with variable switching frequency for a superior sound definition and very high dynamics at any signal level
- Very efficient Switch Mode Power Supply for a reduced power consumption
- Extensive protection system for maximum reliability
- Several filtering options available in the amplifier's input section (FLAT/BI-AMP/HPF)
- Aluminum front panel with removable dust filters
- Made in Italy



Technical Specifications

	HPD2004	HPD4004
Power 8 ohm	4x250	4x500
Power 4 ohm	4x500	4x1000
Power BRIDGE 8 ohm	2x1000	2x2000
<i>W RMS, all channel driven, 1kHz THD 1%</i>		
Frequency Response	20 Hz - 20 kHz	
Input Sensitivity	0 dB / 40 x	
Voltage Gain	35 dB / 32 dB	38 dB / 32 dB
Input Impedance	10 kΩ unbalanced - 20 kΩ balanced	
Damping Factor	>500 @ 8 Ω	
S/N Ratio (Unweighted)	>105 dB	
Input Connectors	Combo and XLR M	
Output Connectors	Speakon	
Cooling	variable speed DC fan	
LED Indicators	protect, signal, bridge, limit	
Filtering options	FLAT, HPF (100 Hz selectable High-Pass Filter), BI-AMP (100 Hz 24 dB/octave Crossover Filter)	
Protections	DC, thermal, soft start, short circuit, CLIP limiter	
Power Supply	230 VAC 50 Hz or 120 VAC 60 Hz	
Rated 1/8 power output	800 VA	1350 VA
Max Power Consumption	2450 VA	4900 VA
Dimensions (W x H x D)	483 x 89 x 383	
Weight	11 kg (24.3 lb)	

LOUDSPEAKERS WAVE Series



In response to the increasing request for compact, lightweight and easy-to-use portable PA systems, PROEL introduces the **WAVE series**, a new range of active speakers featuring multiple inputs and a versatile MP3 player with **BLUETOOTH** connectivity at an unbeatable price point.

Hosted in lightweight yet ultra-durable polypropylene cabinets, WAVE systems combine **selected HF and LF transducers** with **state of the art electronics**, including a sophisticated pre-amp section with active filtering and dual CLIP LIMITERS and efficient **Class D** power amplifiers for the LF section.

The MEDIA PLAYER you can find on-board is able to play **MP3 files** not only from an **SD card** or a **USB MEMORY STICK**, but also thru a **BLUETOOTH** connection. You only need to pair your smartphone or your tablet with a WAVE speaker for playing music without the need of any cable. Thanks to the built-in **2-channel mixer** you can connect a microphone or an additional external source to your PA and mix your sound with independent level controls and a **2-band EQ**. Setting and using a PA system has never been so easy.

The **three models** of the **WAVE series** can be used in a variety of applications, ranging from **speech diffusion** and **music playback** to **live music** and **DJ sets**. The extremely versatile cabinets can be mounted on standard speaker poles, laid on the side for the use as stage monitors and even suspended using the built-in flying points.

All the models are also available in **PASSIVE version** for the use in fixed installations or in systems with existing power amplifiers.

*In risposta alla crescente richiesta di sistemi di diffusione compatti, leggeri e facili da utilizzare, PROEL introduce la serie **WAVE**, una nuova gamma di diffusori attivi con ingressi multipli e un versatile lettore MP3 dotato di connettività **BLUETOOTH**.*

*Alloggiati in cabinet in polipropilene leggeri e allo stesso tempo robusti, i sistemi WAVE combinano **altoparlanti per alte e basse frequenze selezionati** con un'**elettronica allo stato dell'arte**, che include una sofisticata sezione di pre-amplificazione con filtri attivi e DUAL LIMITER ed efficienti amplificatori in **Classe D** per le basse frequenze.*

*Il MEDIA PLAYER che trovate a bordo è in grado di riprodurre **files MP3** non solo da una card **SD** o da una chiavetta di memoria **USB**, ma anche attraverso una connessione **BLUETOOTH**. E' sufficiente accoppiare il diffusore WAVE i con il vostro smartphone o tablet per riprodurre musica senza bisogno di nessun cavo. Grazie al **mixer a due canali** incorporato potete collegare un microfono o un'altra sorgente esterna al vostro sistema e mixare il vostro sound con i controlli di livello indipendenti e l'**equalizzatore a 2 bande**.*

*I **tre modelli** della serie **WAVE** possono essere utilizzati in una varietà di applicazioni, dalla **diffusione vocale** e la riproduzione di **musica registrata alla musica dal vivo** ed i **DJ sets**. I versatili cabinets possono essere installati su supporto standard per diffusori, appoggiati su un lato per l'utilizzo come monitor ed anche sospesi utilizzando i flying points.*

*Tutti i modelli sono disponibili anche in **versione PASSIVA**, per l'utilizzo in installazioni fisse oppure in sistemi già dotati di amplificatori.*



WAVE Series



WAVE10A WAVE10P

NEW

- Bi-amplified 2-way system
- 1" compression driver with 1" VC
- 10" woofer with 2" voice coil
- 260 W total peak power - 30 W class AB + 100 W class D continuous power
- 2-input built-in mixer with 2-band EQ
- Built-in MEDIA PLAYER with USB port, SD slot and BLUETOOTH audio connection, LCD display and IR remote control
- Passive version with 150W AES power handling
- Lightweight polypropylene cabinet with slanted shape for monitor use
- 1 top handle, 2 M8 flying points



WAVE12A WAVE12P

NEW

- Bi-amplified 2-way system
- 1" compression driver with 1.35" VC
- 12" woofer with 2" voice coil
- 400 W total peak power - 50 W class AB + 150 W class D continuous power
- 2-input built-in mixer with 2-band EQ
- Built-in MEDIA PLAYER with USB port, SD slot and BLUETOOTH audio connection, LCD display and IR remote control
- Passive version with 200W AES power handling
- Lightweight polypropylene cabinet with slanted shape for monitor use
- 1 top + 2 side handles, 4 M10 flying points



WAVE15A WAVE15P

NEW

- Bi-amplified 2-way system
- 1" compression driver with 1.35" VC
- 15" woofer with 2.5" voice coil
- 400 W total peak power - 50 W class AB + 150 W class D continuous power
- 2-input built-in mixer with 2-band EQ
- Built-in MEDIA PLAYER with USB port, SD slot and BLUETOOTH audio connection, LCD display and IR remote control
- Passive version with 200W AES power handling
- Lightweight polypropylene cabinet with slanted shape for monitor use
- 1 top + 2 side handles, 4 M10 flying points

Technical Specifications

ACTIVE	WAVE10A	WAVE12A	WAVE15A
System type	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure
High Frequency Device	1" compression driver with 1" VC	1" compression driver with 1.35" VC	1" compression driver with 1.35" VC
Low Frequency Device	10" woofer with 1.5" voice coil	12" woofer with 2" voice coil	15" woofer with 2.5" voice coil
Angular Coverage	90° H x 60° V	90° H x 60° V	90° H x 60° V
Total peak power	260 W	400 W	400 W
HF Amplifier Continuous Power	30 W Class AB	50 W Class AB	50 W Class AB
LF Amplifier Continuous Power	100 W Class D	150 W Class D	150 W Class D
Frequency Response	70 Hz - 20 kHz	60 Hz - 20 kHz	50 Hz - 20 kHz
Max SPL	122	123	125
Connectors	MIC/LINE IN: XLR-F + 1/4" JACK, LINE IN: XLR-F + 2xRCA LINE OUT: XLR-M	MIC/LINE IN: XLR-F + 1/4" JACK, LINE IN: XLR-F + 2xRCA LINE OUT: XLR-M	MIC/LINE IN: XLR-F + 1/4" JACK, LINE IN: XLR-F + 2xRCA LINE OUT: XLR-M
Controls	MIC/LINE/LINE/MASTER LEVEL, LINE/MIC selector, LOW EQ, HIGH EQ, MEDIA PLAYER LEVEL + NAVIGATION	MIC/LINE/LINE/MASTER LEVEL, LINE/MIC selector, LOW EQ, HIGH EQ, MEDIA PLAYER LEVEL + NAVIGATION	MIC/LINE/LINE/MASTER LEVEL, LINE/MIC selector, LOW EQ, HIGH EQ, MEDIA PLAYER LEVEL + NAVIGATION
Power Supply	230 VAC or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 VAC or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 VAC or 120 VAC 50/60 Hz with LINE VOLTAGE selector
Weight	14 kg (30.8lb)	17 kg (37.4lb)	21 kg (46.3lb)
PASSIVE	WAVE10P	WAVE12P	WAVE15P
Nominal Impedance	8 Ω	8 Ω	8 Ω
Power Rating (continuous)	150W	200 W	250 W
Power Rating (peak)	300 W	400 W	500 W
Frequency Response	70 Hz - 20 kHz	60 Hz - 20 kHz	50 Hz - 20 kHz
Sensitivity	93 dB @ 1 W/1 m	94 dB @ 1 W/1 m	95 dB @ 1 W/1 m
Connectors	2 x SPEAKON linked	2 x SPEAKON linked	2 x SPEAKON linked
Weight	11 kg (24.2 lb)	14 kg (30.8lb)	18 kg (36.4 lb)
GENERAL SPECIFICATIONS			
Flying System	2 x M8 - bottom	4 x M10 - top/bottom	4 x M10 - top/bottom
Construction	Polypropylene	Polypropylene	Polypropylene
Mounting Pole	1 x bottom	1 x bottom	1 x bottom
Dimensions (W x H x D)	320 x 500 x 290 mm	390 x 620 x 350 mm	480 x 740 x 430 mm

LOUDSPEAKERS V SERIES



V Series is the new generation of PROEL powered loudspeakers delivering **absolute value** in terms of **performance, engineering and design**.

These **ultra-portable** speakers combine, in carefully engineered and light-weight cabinets, the clearest and most accurate **PROEL sound** with **Class D amplifier technology** and **Switch Mode Power Supply**, offering an unbeatable PA solution at its price point.

All the models feature an extremely efficient amplifier module capable of delivering **600 W or 400 W of robust power** to the transducers. Thanks to the use of **SMPS** technology, this power comes in an **ultra-lightweight package**, making the V models the **most portable PROEL speakers ever**. The power module is hosted in a **fully sealed aluminum box**, which provides protection, perfect insulation of the cabinet from the outside and extremely efficient cooling.

Thanks to the carefully selected speakers and to the **sophisticated active electronics**, including dual **CLIP LIMITERS** for an undistorted sound even at the loudest level, the sound of the V Series has been precisely tuned in every details, in order to provide **unheard performance in this price range**.

The V series cabinets, expression of the **most advanced Italian design**, include a super-comfortable luggage-style top handle for an effortless portability. The **slanted shape** allows the V speakers to be laid on their side and used also as stage monitors.



*La **Serie V** è la nuova generazione di diffusori amplificati PROEL in grado di offrirvi il **massimo valore** possibile in termini di **prestazioni, innovazione e design**.*

*Questi diffusori **ultra-portatili** uniscono, in cabinets leggeri e accuratamente progettati, il **suono PROEL** più dettagliato alla **tecnologia in Classe D con Switch Mode Power Supply** per gli amplificatori, offrendo una soluzione per la diffusione acustica imbattibile in questa categoria di prezzo.*

*Tutti i modelli includono un modulo di amplificazione estremamente efficiente, in grado di fornire ai trasduttori **600 W o 400 W di potenza totale**. Grazie all'utilizzo della tecnologia **SMPS**, questa potenza viene generata da un dispositivo **ultra-leggero**, facendo dei modelli V i **diffusori PROEL più portatili di sempre**. I moduli di potenza sono alloggiati in **box di alluminio totalmente sigillati**, che forniscono la massima protezione, un isolamento perfetto del cabinet dall'esterno e un sistema di raffreddamento particolarmente efficiente.*

*Grazie agli altoparlanti selezionati e alla **sofisticata elettronica attiva**, che include un doppio circuito di **LIMITER** per un suono indistorto anche ai massimi livelli, il suono della serie V è stato accuratamente definito in modo da offrire una **performance sorprendente per questa fascia di prezzo**.*

*I cabinets della serie V, espressione del **più avanzato design Italiano**, includono una super-comoda maniglia superiore in stile valigetta per un trasporto senza sforzi. Il **profilo inclinato** ne consente l'utilizzo anche su un fianco come monitor da palco.*

V SERIES



V8A

NEW

- Bi-amplified 2-way system
- 1" high-definition neodymium compression driver on a wide-dispersion 90° x 60° constant coverage horn
- 8" long-excursion woofer with 1.5" voice coil
- 400 W total peak power amplifier hosted in a fully sealed aluminum box
- 50 W continuous class AB amplifier for the high frequencies
- 150 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- Selectable MIC /LINE input with 2-band EQ
- Integrated active processor with dual CLIP LIMITER for maximum control and protection
- FRONT LED with ON or SIGNAL/CLIP selection
- SPL MAX 121 dB
- Frequency response 70 Hz - 20 kHz
- Lightweight polypropylene cabinet with extensive framing system
- Asymmetrical shape for the use also as a stage monitor
- 1 super-comfortable luggage-style top handle for effortless portability
- 4 x M8 flying points for fixed installation
- 7 kg TOTAL WEIGHT



V10A

- Bi-amplified 2-way system
- 1" high-definition neodymium compression driver on a wide-dispersion 90° x 60° constant coverage horn
- 10" long-excursion woofer with 2" voice coil
- 600 W total peak power amplifier hosted in a fully sealed aluminum box
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- Selectable MIC /LINE input with 2-band EQ
- Integrated active processor with dual CLIP LIMITER for maximum control and protection
- FRONT LED with ON or SIGNAL/CLIP selection
- SPL MAX 123 dB
- Frequency response 60 Hz - 20 kHz
- Lightweight polypropylene cabinet with extensive framing system
- Asymmetrical shape for the use also as a stage monitor
- 1 super-comfortable luggage-style top handle for effortless portability
- 4 x M10 flying points for fixed installation
- 10 kg TOTAL WEIGHT



V SERIES



V12A

- Bi-amplified 2-way system
- 1" high-definition neodymium compression driver on a wide-dispersion 90° x 60° constant coverage horn
- 12" long-excursion woofer with 2.5" voice coil
- 600 W total peak power amplifier hosted in a fully sealed aluminum box
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- Selectable MIC /LINE input with 2-band EQ
- Integrated active processor with dual CLIP LIMITER for maximum control and protection
- FRONT LED with ON or SIGNAL/CLIP selection
- SPL MAX 124 dB
- Frequency response 60 Hz - 20 kHz
- Lightweight polypropylene cabinet with extensive framing system
- Asymmetrical shape for the use also as a stage monitor
- 1 super-comfortable luggage-style top handle for effortless portability
- 4 x M10 flying points for fixed installation
- 13 kg TOTAL WEIGHT



V15A

- Bi-amplified 2-way system
- 1" high-definition neodymium compression driver on a wide-dispersion 90° x 60° constant coverage horn
- 15" long-excursion woofer with 2.5" voice coil
- 600 W total peak power amplifier hosted in a fully sealed aluminum box
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- Selectable MIC /LINE input with 2-band EQ
- Integrated active processor with dual CLIP LIMITER for maximum control and protection
- FRONT LED with ON or SIGNAL/CLIP selection
- SPL MAX 126 dB
- Frequency response 50 Hz - 20 kHz
- Lightweight polypropylene cabinet with extensive framing system
- Asymmetrical shape for the use also as a stage monitor
- 1 super-comfortable luggage-style top handle for effortless portability
- 4 x M10 flying points for fixed installation
- 18 kg TOTAL WEIGHT



OPTIONAL ACCESSORIES



KPTNX04

Universal Wall Mount for Brackets
KPTV8 - KPTV10 - KPTV12 - KPTV15



COVERV8 COVERV10 COVERV12 COVERV15



KPTV8



KPTV10



KPTV12



KPTV15

Brackets for V8A -V10A- V12A - V15A

Technical Specifications

	V8A	V10A	V12A	V15A
System type	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure
High Frequency Device	1" neodymium compression driver	1" neodymium compression driver	1" neodymium compression driver	1" neodymium compression driver
Low Frequency Device	8" woofer with 1.5" voice coil	10" woofer with 2" voice coil	12" woofer with 2.5" voice coil	15" woofer with 2.5" VC
Angular Coverage	90° H x 60° V	90° H x 60° V	90° H x 60° V	90° H x 60° V
Total peak power	400 W	600 W	600 W	600 W
HF Amplifier Continuous Power	50 W Class AB	50 W Class AB	50 W Class AB	50 W Class AB
LF Amplifier Continuous Power	150 W Class D	250 W Class D	250 W Class D	250 W Class D
Power Supply	SMPS	SMPS	SMPS	SMPS
Processing	Analog	Analog	Analog	Analog
Frequency Response	70 Hz - 20 kHz	60 Hz - 20 kHz	50 Hz - 20 kHz	45 Hz - 20 kHz
Max SPL	121	123	124	126
Connectors	IN: COMBO, LINK: XLR M	IN: COMBO, LINK: XLR M	IN: COMBO, LINK: XLR M	IN: COMBO, LINK: XLR M
Controls	LEVEL, LINE/MIC selector, LOW EQ, HIGH EQ, GND LIFT, FRONT LED selector	LEVEL, LINE/MIC selector, LOW EQ, HIGH EQ, GND LIFT, FRONT LED selector	LEVEL, LINE/MIC selector, LOW EQ, HIGH EQ, GND LIFT, FRONT LED selector	LEVEL, LINE/MIC selector, LOW EQ, HIGH EQ, GND LIFT, FRONT LED selector
Monitor Taper	45°	45°	44°	44°
Flying System	4 x M8- top/bottom	4 x M10 - top/bottom	4 x M10 - top/bottom	4 x M10 - top/bottom
Construction	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Cabinet Colour	Black	Black	Black	Black
Handles	1 x top	1 x top	1 x top	1 x top, 2 x sides
Mounting Pole	1 x bottom	1 x bottom	1 x bottom	1 x bottom
Power Supply	230 VAC or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 VAC or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 VAC or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 VAC or 120 VAC 50/60 Hz with LINE VOLTAGE selector
Dimensions (W x H x D)	280 x 422 x 252 mm	330 x 512 x 280 mm	380 x 600 x 328 mm	440 x 712 x 400 mm
Weight	7 kg	10 kg	13 kg	18 kg

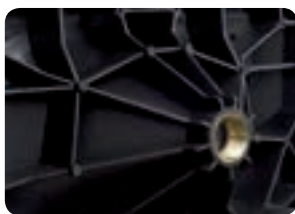


LOUDSPEAKERS FLASH SERIES



For years PROEL **FLASH** loudspeakers have provided thousands of users all around the world with the finest **sound** in its class together with **versatility**, **portability** and stylish **design**. Now the whole series has been renovated introducing **major upgrades** in performance, features and design.

The STANDARD FLASH models now becomes **V2** and are powered by brand new amplifier modules combining the high efficiency of **Class D output stages** with the light-weight and compact size of **Switch Mode Power Supply**: this gives FLASH V2 a massive punch and a consistent reserve of power while making them **lighter and extremely portable**. The **built-in 2-channel mixer** with independent LINE and MIC inputs and 2-band EQ can turn any FLASH V2 system into an instant PA system. The use of **carefully selected speakers**, including a new high-definition CELESTION compression driver, together with a sophisticated **active signal processor** and a dual clip limiter, provide an accurate acoustic response and an amazing sound pressure level with very low distortion.



With the introduction of new Class D SMPS amplifier modules with a massive power-per-size ratio and to the use of the powerful **40-bit 96KHz CORE DSP**, PREMIUM FLASH models becomes **HDA**. Thanks to the sophisticated signal processing provided by the CORE DSP, which includes also a versatile Dynamic EQ, and to the **high-grade CELESTION speakers**, FLASH HDA delivers an outstanding **sound definition** and a dynamic performance typical of top-end professional systems. The **4 EQ PRESETS** selectable from the amplifier panel (FLAT, DJ, SPEECH, MONITOR) make these systems perfectly adaptable to any kind of application.

All the models include the classic FLASH features, such as light weight polypropylene cabinets with extended internal **ribbing** and trapezoidal shape, **constant-coverage** (90° x 60°) high frequency horns for a uniform and coherent dispersion, convenient transport handles and built-in flying points for the use in fixed installation.

All the models in the FLASH Series can be combined with the powerful PROEL **SW sub-woofers**, which provide the perfect low extension for creating high-power multi-way systems, to be used also in large sound reinforcement applications.



Per diversi anni i diffusori **FLASH** di PROEL hanno fornito a migliaia di utilizzatori in tutto il mondo il miglior **suono** della loro categoria insieme a **versatilità**, **portabilità** e **stile**. Ora l'intera serie è stata rinnovata con l'introduzione di **importanti miglioramenti** nelle performances, nelle funzioni e nel design.



I modelli FLASH STANDARD diventano **V2** e sono pilotati da nuovi moduli di amplificazione che combinano l'elevata efficienza degli **stadi di uscita in Classe D** alla leggerezza e alla compattezza degli **alimentatori SMPS**: questo fornisce alle FLASH V2 una notevole 'spinta' ed una considerevole riserva di potenza mentre le rende **estremamente leggere e trasportabili**. Il **mixer a due canali**, con ingressi LINE e MIC indipendenti ed equalizzatore a 2 bande, è in grado di trasformare facilmente ogni FLASH V2 in un sistema P.A. completamente autonomo. L'utilizzo di **altoparlanti accuratamente selezionati**, incluso un nuovo driver a compressione CELESTION ad alta definizione, insieme ad un sofisticato **processore di segnale attivo** e ad un doppio circuito di limiter, forniscono un'accurata risposta timbrica ed una sorprendente pressione sonora con totale assenza di distorsione.

Con l'introduzione di nuovi moduli di amplificazione in Classe D con SMPS dotati di un elevato rapporto dimensioni/potenza e con l'utilizzo del potente **processore digitale CORE a 40-bit e 96 KHz**, i modelli FLASH PREMIUM diventano **HDA**. Grazie al sofisticato processamento fornito dal DSP CORE, che include anche un versatile Equalizzatore Dinamico, e agli **altoparlanti CELESTION ad elevate prestazioni**, le FLASH HDA offrono una **definizione del suono** sorprendente ed una performance dinamica tipica di sistemi professionali di altissimo livello. I **4 PRESETS di equalizzazione** selezionabili dal pannello dell'amplificatore (FLAT, DJ, SPEECH, MONITOR) rendono questi diffusori perfettamente adattabili a qualunque tipo di applicazione.

Tutti i modelli includono le classiche caratteristiche della serie FLASH, tra cui i leggeri cabinet in polipropilene con esteso sistema di **nervature** interne e profilo trapezoidale, le trombe per le frequenze alte ad **ampio angolo di copertura** costante (90°x60°) per una diffusione uniforme del suono, le comode maniglie per il trasporto ed i punti di sospensione per l'installazione fissa.

Tutti i modelli della serie FLASH possono essere combinati con i potenti **subwoofer SW**, i quali forniscono una perfetta estensione alle basse frequenze per formare sistemi multi-via di grande potenza, in grado di garantire una diffusione sonora di elevata qualità ed efficienza anche in applicazioni di grande portata.

FLASH SERIES



FLASH8AV2 FLASH8PV2

- Bi-amplified 2-way system
- 1" CELESTION compression driver on a 90° x 60° constant coverage horn
- 8" CELESTION woofer with 1.8" voice coil
- 600 W total peak power
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- MIC and LINE inputs with independent level control and NEUTRIK connectors
- 2-band EQ
- Dual CLIP LIMITER
- SPL MAX 122 dB
- Frequency response 70 Hz - 20 kHz
- Passive version with 150W AES power handling
- Lightweight polypropylene cabinet with extensive framing system
- Asymmetrical shape for the use also as a stage monitor
- 1 top handle
- 4 x M8 flying points



FLASH12AV2 FLASH12PV2

- Bi-amplified 2-way system
- 1" CELESTION compression driver on a 90° x 60° constant coverage horn
- 12" woofer with 2" voice coil
- 600 W total peak power
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- MIC and LINE inputs with independent level control and NEUTRIK connectors
- 2-band EQ
- Dual CLIP LIMITER
- SPL MAX 124 dB
- Frequency response 60 Hz - 20 kHz
- Passive version with 200 W AES power handling
- Lightweight polypropylene cabinet with extensive framing system
- Symmetrical trapezoidal shape for the use also as a stage monitor
- 1 top handle and 2 aluminum side handles
- 4 x M10 flying points



FLASH15AV2

- Bi-amplified 2-way system
- 1" CELESTION compression driver on a 90° x 60° constant coverage horn
- 15" woofer with 2.5" voice coil
- 600 W total peak power
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- MIC and LINE inputs with independent level control and NEUTRIK connectors
- 2-band EQ
- Dual CLIP LIMITER
- SPL MAX 127 dB
- Frequency response 50 Hz - 20 kHz
- Lightweight polypropylene cabinet with extensive framing system
- Symmetrical trapezoidal shape for the use also as a stage monitor
- 1 top handle and 2 aluminum side handles
- 4 x M10 flying points



FLASH SERIES

FLASH12HDA

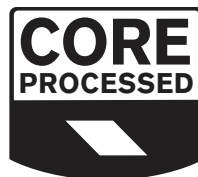


- Active processed 2-way loudspeaker systems
- 1" CELESTION compression driver with 1.75" VC on a constant coverage 90° x 60° horn
- 12" CELESTION woofer with 3" VC
- 1200 W peak power
- 100 W continuous class AB amplifier for the high frequencies
- 500 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP with Dynamic EQ (DEQ)
- LINE/MIC input
- 4 EQ PRESETS (FLAT, DJ, SPEECH, MONITOR)
- SPL MAX 128 dB
- Frequency response 50 Hz - 20 kHz
- Lightweight polypropylene cabinet with extensive framing
- Symmetrical trapezoidal shape for the use also as a stage monitor
- 1 top handle and 2 aluminum side handles
- 4 x M10 flying points

FLASH15HDA



- Active processed 2-way loudspeaker systems
- 1" CELESTION compression driver with 1.75" VC on a constant coverage 90° x 60° horn
- 15" CELESTION woofer with 3" VC
- 1200 W peak power
- 100 W continuous class AB amplifier for the high frequencies
- 500 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP with Dynamic EQ (DEQ)
- LINE/MIC input
- 4 EQ PRESETS (FLAT, DJ, SPEECH, MONITOR)
- SPL MAX 129 dB
- Frequency response 45 Hz - 20 kHz
- Lightweight polypropylene cabinet with extensive framing
- Symmetrical trapezoidal shape for the use also as a stage monitor
- 1 top handle and 2 aluminum side handles
- 4 x M10 flying points



FLASH5A FLASH5P



- Bi-amplified 2-way system
- Studio-grade dome tweeter on elliptical waveguide
- 5" woofer with PP cone
- 200W total peak power
- 20W class AB amplifier for the high frequencies
- 80W class D amplifier for the low frequencies
- XLR, 1/4" JACK and dual RCA connectors
- 2 active EQ presets available (MIDFIELD / NEARFIELD)



- Dual CLIP LIMITER
- SPL MAX 114 dB
- Frequency response 70 Hz - 20 kHz
- Passive version with 80W AES power handling, available in BLACK (FLASH5P) and WHITE (FLASH5PW)
- Lightweight polypropylene cabinet with extensive framing system
- Symmetrical trapezoidal shape for the use also as a stage monitor
- 1 top handle
- 3 x M6 flying points



SNWH
ABS installation bracket
for FLASH5PW (white)



SNBK
ABS installation bracket
for FLASH5P (black)

OPTIONAL ACCESSORIES



KPTNX04

Universal Wall Mount for Brackets
FLASH5 - FLASH8 - FLASH12 - FLASH15



COVERFL8

COVERFL12

COVERFL15



KPTFL5 • KPTFL5W

Brackets for
FLASH5 BLACK and WHITE



KPTFL8 • KPTFL12 • KPTFL15

Brackets for
FLASH8 - FLASH12 - FLASH15

Technical Specifications

ACTIVE	FLASH5A	FLASH8A V2	FLASH12A V2	FLASH15A V2	FLASH12HDA	FLASH15HDA
System type	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure
High Frequency Device	Soft dome tweeter on elliptical waveguide	1" compression driver with aluminum voice coil	1" compression driver with aluminum voice coil	1" compression driver with aluminum voice coil	1" compression driver with 1.75 VC	1" compression driver with 1.75 VC
Low Frequency Device	5 woofer with PP cone	8 woofer with 1.8 VC	12 woofer with 2 VC	15 woofer with 2.5 VC	12 woofer with 3 VC	15 woofer with 3 VC
Angular Coverage	90° H x 60° V	90° H x 60° V	90° H x 60° V	90° H x 60° V	90° H x 60° V	90° H x 60° V
Total Peak Power	200 W	600 W	600 W	600 W	1200 W	1200 W
HF Amplifier Continuous Power	20 W Class AB	50 W Class AB	50 W Class AB	50 W Class AB	100 W Class AB	100 W Class AB
LF Amplifier Continuous Power	80 W Class D	250 W Class D	250 W Class D	250 W Class D	500 W Class D	500 W Class D
Power Supply	Linear	SMPS	SMPS	SMPS	SMPS	SMPS
Processing	Analog	Analog	Analog	Analog	96 KHz, 40 bit floating point CORE DSP	96 KHz, 40 bit floating point CORE DSP
Frequency Response	70 Hz - 20 kHz	60 Hz - 20 kHz	50 Hz - 20 kHz	45 Hz - 20 kHz	50 Hz - 20 kHz	45 Hz - 20 kHz
Max SPL	114	122	124	127	128	129
Connectors	IN/LINK: XLR F, 1/4 JACK, 2 x RCA	IN: Combo, XLR F MIX OUT: XLR M	IN: Combo, XLR F MIX OUT: XLR M	IN: Combo, XLR F MIX OUT: XLR M	IN: XLR F LINK: XLR M	IN: XLR F LINK: XLR M
Controls	LEVEL, NEARFIELD/MIDFIELD, GND LIFT	MIC LEVEL, LINE LEVEL, LOW EQ, HIGH EQ, GND LIFT	MIC LEVEL, LINE LEVEL, LOW EQ, HIGH EQ, GND LIFT	MIC LEVEL, LINE LEVEL, LOW EQ, HIGH EQ, GND LIFT	LEVEL, MIC/LINE SELECTOR, PRESET (FLAT/DJ/SPEECH/MON), GND LIFT	LEVEL, MIC/LINE SELECTOR, PRESET (FLAT/DJ/SPEECH/MON), GND LIFT
Power Supply	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz
Weight	3.6 kg (7.9 lb)	8.5 kg (18.7 lb)	16.5 kg (36.4 lb)	23.5 kg (51.8 lb)	19.4 kg (42.7 lb)	26.5 kg (58.6 lb)

PASSIVE	FLASH5P	FLASH8P V2	FLASH12P V2
Nominal Impedance	16 Ω	8 Ω	8 Ω
Power Rating (continuous)	80 W	150 W	200 W
Power Rating (peak)	160 W	300 W	400 W
Frequency Response	80 Hz - 20 kHz	70 Hz - 20 kHz	60 Hz - 20 kHz
Sensitivity	91 dB @ 1 W/1 m	96 dB @ 1 W/1 m	98 dB @ 1 W/1 m
Crossover Frequency	3000 Hz	3000 Hz	2000 Hz
Connectors	Push terminals	2 x SPEAKON linked	2 x SPEAKON linked
Weight	2.5 kg (5.5 lb)	8 kg (17.6 lb)	16.5 kg (36.4 lb)

GENERAL SPECIFICATIONS						
Monitor Taper	42°	42°	42°	42°	42°	42°
Flying System	3 x M6 - top/bottom	4 x M8 - top/bottom	4 x M10 - top/bottom	4 x M10 - top/bottom	4 x M10 - top/bottom	4 x M10 - top/bottom
Construction	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Mounting Pole	-	1 x bottom	1 x bottom	1 x bottom	1 x bottom	1 x bottom
Dimensions (W x H x D)	175 x 265 x 176.5 mm	270 x 420 x 260 mm	390 x 630 x 360 mm	470 x 730 x 400 mm	390 x 630 x 360 mm	470 x 730 x 400 mm



LOUDSPEAKERS LITE SERIES



The new **LITE Series** by PROEL is an extended range of active and passive speaker systems with plywood cabinet offering the renowned **PROEL sound** and a **high-level performance** in a reliable and affordable package.

For the construction of the cabinets we have used **plywood**, a very lightweight and durable material that makes moving and installing these speakers very quick and easy. Strong, **anti-scratch paint** and **steel grilles with an internal foam layer** provide proper protection for years of service. The **dual-angle pole holder** featured in 8", 10", 12" and 15" models offers the possibility to obtain a more uniform coverage of the audience.

For the high frequency reproduction of LITE Series we have designed **wide-dispersion horns**, able to provide constant coverage for large audiences and detailed response with low distortion. The **high-excursion woofers**, together with carefully tuned vented cabinets, offers an extended response with deep and tight basses.

The **LITE Series** includes **6 active models** ranging from 6.5" to dual 15" woofers, plus **1 satellites + subwoofer system**. The extremely lightweight power modules used in the active models feature the **latest technologies for amplification**, such as Switch Mode Power Supply and CLASS D output stages, which provides a massive amount of power with a reduced weight. The power modules are hosted in fully-sealed **die-cast aluminum boxes** that provides protection, perfect insulation of the cabinet from the outside and extremely efficient cooling. Each module includes a **sophisticated pre-amp section** with up to 24 dB/oct. phase aligned crossover filters and active EQ filters for the system's fine tuning. The **DUAL LIMITER circuit** ensures an undistorted sound even at the loudest level and a total loudspeaker protection.

4 passive models are also available, featuring carefully designed crossover filters with HF electronic protection. The choice of **black or white cabinet**, built-in **flying points** and a wide range of **accessories** make them suitable for any kind of fixed installation.

The LT loudspeaker systems can be combined with the **SW sub-woofers**, available in 5 models and capable of providing the perfect low frequency extension for each model of the series.

La nuova **serie LITE** di PROEL è un'ampia gamma di diffusori attivi e passivi in legno multistrato in grado di offrire la qualità del **suono PROEL** e **performances** elevate in prodotti affidabili e convenienti.

Per la realizzazione dei cabinets abbiamo utilizzato **legno multistrato**, un materiale estremamente leggero e resistente in grado di rendere il trasporto e l'installazione di questi diffusori molto semplici e rapidi. Una resistente **vernice anti-graffio** e **griglie metalliche** rivestite internamente da uno strato di **spugna protettiva** assicurano anni di utilizzo senza problemi. La flangia per stativo a **doppio angolo di inclinazione** (modelli da 8", 10", 12" e 15") offre la possibilità di ottenere una diffusione sonora più uniforme.

Per la riproduzione delle alte frequenze della serie LITE abbiamo progettato **trombe ad ampia dispersione**, in grado di fornire una copertura uniforme anche per l'utilizzo in ambienti di grandi dimensioni. I **woofers a lunga escursione**, insieme ai cabinet accuratamente accordati, offrono una risposta estesa con bassi profondi e incisivi.

La **serie LITE** include **6 modelli attivi** che spaziano da 6.5" ad 2 x 15", oltre a un sistema sub + satelliti. I leggerissimi moduli di potenza utilizzano **le più avanzate tecnologie nel campo dell'amplificazione**, come alimentazione SMPS (Switch Mode Power Supply) e stadi di uscita in CLASS D, in grado di fornire livelli di potenza molto elevati con pesi ridotti. Gli amplificatori sono alloggiati in **box in pressofusione di alluminio** che garantiscono protezione, totale isolamento dall'esterno ed una efficiente dissipazione del calore. Ciascun modulo include una **s sofisticata sezione di pre-amplificazione** con filtri di crossover a fase lineare fino a 24 dB/ott. e filtri di EQ attiva per la messa a punto acustica. Il **doppio circuito di LIMITER** assicura un suono indistorto anche a livelli molto elevati e la completa protezione degli altoparlanti.

Sono disponibili anche **4 modelli passivi**, equipaggiati con filtri di crossover con protezione HF accuratamente progettati. La scelta del **colore nero o bianco** per il cabinet ed una **ampia gamma di accessori** li rende perfetti per qualunque tipo di installazione fissa.

I diffusori della serie LITE possono essere abbinati con i **subwoofer SW**, disponibili in 5 versioni diverse e in grado di fornire una perfetta estensione alle basse frequenze per ciascuno dei modelli LT.



LITE SERIES



LT6A

LT6P



NEW

- Active 2-way loudspeaker systems
- 1" neodymium tweeter
- 6.5" woofer with 1" VC
- 150 W peak power
- 75 W continuous class AB amplifier
- LINE/MIC input
- SPL MAX 110 dB
- Frequency response 75 Hz - 20 kHz
- MDF cabinet
- 3 x M4 flying points
- Speaker stand adapter included (except LT6P white)
- LT6P: passive version with 75W continuous power rating, available in BLACK and WHITE



LT8A

LT8P



NEW

- Active 2-way loudspeaker systems
- 1" compression driver with 1" VC on a constant coverage 60° x 40° horn
- 8" woofer with 1.5" VC
- 400 W peak power
- 50 W continuous class AB amplifier for the high frequencies
- 150 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- LINE/MIC input
- SPL MAX 121 dB
- Frequency response 70 Hz - 20 kHz
- Lightweight plywood cabinet
- 1 rear handle
- 4 x M10 flying points
- LT8P: passive version with 150W continuous power rating, available in BLACK and WHITE



LT10A

LT10P



NEW

- Active 2-way loudspeaker systems
- 1" compression driver with 1" VC on a constant coverage 90° x 60° horn
- 10" woofer with 2" VC
- 600 W peak power
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- LINE/MIC input
- SPL MAX 123 dB
- Frequency response 60 Hz - 20 kHz
- Lightweight plywood cabinet
- 1 rear handle
- 4 x M10 flying points
- LT10P: passive version with 200W continuous power rating, available in BLACK and WHITE



LITE SERIES



LT12A
LT12P



NEW

- Active 2-way loudspeaker systems
- 1" compression driver with 1.35" VC on a constant coverage 90° x 60° horn
- 12" woofer with 2.5" VC
- 600 W peak power
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- LINE/MIC input
- SPL MAX 124 dB
- Frequency response 50 Hz - 20 kHz
- Lightweight plywood cabinet
- 2 metal handles
- 4 x M10 flying points
- LT12P: passive version with 300W continuous power rating, available in BLACK and WHITE



LT15A

NEW

- Active 2-way loudspeaker systems
- 1" compression driver with 1.35" VC on a constant coverage 90° x 60° horn
- 15" woofer with 2.5" VC
- 600 W peak power
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- LINE/MIC input
- SPL MAX 126 dB
- Frequency response 45 Hz - 20 kHz
- Lightweight plywood cabinet
- 2 metal handles
- 4 x M10 flying points



LT215A

NEW

- Active 3-way loudspeaker systems
- 1" compression driver with 1.35" VC on a constant coverage 90° x 60° horn
- 2x15" woofer with 2.5" VC
- 1200 W peak power
- 100 W continuous class AB amplifier for the high frequencies
- 500 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- LINE/MIC input
- SPL MAX 132 dB
- Frequency response 40 Hz - 20 kHz
- Lightweight plywood cabinet
- 3 metal handles and 2 wheels
- 4 x M10 flying points



LITE SERIES



LT812A

- 3-way SAT + SUB active loudspeaker system
- SAT: 1" compression driver + 8" woofer with 1.5" VC
- SUB: 12" woofer with 3" VC
- 1600W peak power
- SAT: 2x200W RMS CLASS AB
- SUB: 400W RMS CLASS D
- Switch Mode Power Supply (SMPS)
- SUB LEVEL control
- SPL MAX 121dB + 124dB
- Frequency response 45 Hz - 20 kHz
- Plywood cabinets with anti-scratch paint
- SAT cabinet with dual-angle speaker stand adapter
- SUB cabinet with 4 wheels and space for transporting the satellites on top
- 1 rear handle (SAT), 2 aluminum side handles (SUB)
- Two SPEAKON power cables included

NEW

	LT812SAT	LT812SUB
System type	2-way vented enclosure	Vented sub-woofer
High Frequency Device	1" compression driver with 1" VC	-
Low Frequency Device	8" woofer with 1.5" VC	12" woofer with 3" voice coil
Angular Coverage	60° H x 40° V	-
Max SPL	121	124
System Frequency Response	45 Hz - 20 kHz	
Amplifier Total Peak Power	1600 W	
Amplifier Continuous Power	SAT: 2 x 200 W Class AB - SUB: 400 W Class D	
Power Supply	SMPS	
Processing	Analog	
Controls	SUB LEVEL, GND LIFT	
Connectors	1 x SPEAKON	IN: 2 x COMBO, LINK: 2 x XLR M OUT: 2 x SPEAKON
Cabinet construction	Plywood with anti-scratch paint	Plywood with anti-scratch paint
Cabinet Colour	Black	Black
Handles	1 x rear	2 x sides
Mounting Pole	1 x bottom, dual angle	1 x top
Power Supply	230 VAC or 120 VAC 50/60 Hz with LINE VOLTAGE selector	
Dimensions (W x H x D)	220 x 442 x 260 mm	475 x 462 x 610 mm
Weight	7.5 kg / 16.5 lbs.	34 kg / 74.9 lbs.



OPTIONAL ACCESSORIES



KPTNX04

Universal Wall Mount for Brackets
LT6/LT8/LT10/LT12



KPTLTTP

Bracket for
LT PASSIVE



KPTLT12 • KPTLT10 • KPTLT8 • KPTLT6

Brackets for
LT6/LT8/LT10/LT12

Technical Specifications

ACTIVE	LT6A	LT8A	LT10A	LT12A	LT15A	LT215A
System type	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure	2-way vented enclosure	3-way vented enclosure
High Frequency Device	1" neodymium tweeter	1" compression driver with 1" VC	1" compression driver with 1" VC	1" compression driver with 1.35" VC	1" compression driver with 1.35" VC	1" compression driver with 1.35" VC
Low Frequency Device	6.5" woofer with 1" VC	8" woofer with 1.5" VC	10" woofer with 2" voice coil	12" woofer with 2.5" voice coil	15" woofer with 2.5" VC	2x15" woofer with 2.5" VC
Angular Coverage	60° H x 40° V	60° H x 40° V	90° H x 60° V	90° H x 60° V	90° H x 60° V	90° H x 60° V
Total Peak Power	150 W	400 W	600 W	600 W	600 W	1200 W
HF Amplifier Continuous Power	75 W	50 W Class AB	50 W Class AB	50 W Class AB	50 W Class AB	100 W Class AB
LF Amplifier Continuous Power		150 W Class D	250 W Class D	250 W Class D	250 W Class D	500 W Class D
Power Supply	LINEAR	SMPS	SMPS	SMPS	SMPS	SMPS
Processing	Analog	Analog	Analog	Analog	Analog	Analog
Frequency Response	75 Hz - 20 kHz	70 Hz - 20 kHz	60 Hz - 20 kHz	50 Hz - 20 kHz	45 Hz - 20 kHz	40 Hz - 20 kHz
Max SPL	110 dB	121	123	124	126	132
Connectors	IN: COMBO, 2xRCA LINK: XLR M	IN: COMBO, LINK: XLR M	IN: COMBO, LINK: XLR M	IN: COMBO, LINK: XLR M	IN: COMBO, LINK: XLR M	IN: COMBO, LINK: XLR M
Controls	LEVEL, LINE/MIC selector	LEVEL, LINE/MIC selector LOW EQ, HIGH EQ, GND LIFT FRONT LED selector	LEVEL, LINE/MIC selector LOW EQ, HIGH EQ, GND LIFT FRONT LED selector	LEVEL, LINE/MIC selector LOW EQ, HIGH EQ, GND LIFT FRONT LED selector	LEVEL, LINE/MIC selector LOW EQ, HIGH EQ, GND LIFT FRONT LED selector	LEVEL, LINE/MIC selector LOW EQ, HIGH EQ, GND LIFT FRONT LED selector
Power Supply	230 VAC or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 or 120 VAC 50/60 Hz with LINE VOLTAGE selector	230 or 120 VAC 50/60 Hz with LINE VOLTAGE selector
Weight	5.9 kg / 13 lbs	8.5 kg / 18.7 lbs.	12.5 kg / 27.6 lbs.	16.5 kg / 36.4 lbs.	21 kg / 46.3 lbs.	34 kg / 74.9 lbs.

PASSIVE	LT6P	LT8P	LT10P	LT12P
Nominal Impedance	8 ohm	8 ohm	8 ohm	8 ohm
Power Rating (continuous)	75 W	150 W	200 W	300 W
Power Rating (peak)	150 W	300 W	400 W	600 W
Frequency Response	75 Hz - 20 kHz	70 Hz - 20 kHz	60 Hz - 20 kHz	50 Hz - 20 kHz
SPL (1w / 1m)	88 dB	92 dB	94 dB	96 Db
Crossover Frequency	3000 Hz	3000 Hz	2000 Hz	2000 Hz
Connectors	2 x SPEAKON, 2 x JACK	2 x SPEAKON	2 x SPEAKON	2 x SPEAKON
Weight	4.9 kg / 10.8 lbs.	7.5 kg / 16.5 lbs.	11.5 kg / 25.4 lbs.	15.5 kg / 34.2 lbs.

GENERAL SPECIFICATIONS

Flying System	1 x M4 top / 2 x M4 bottom 2 x M5 rear (only passive)	4 x M10 top/bottom 3 x M5 rear (only passive)	4 x M10 top/bottom 3 x M5 rear (only passive)	4 x M10 top/bottom 3 x M5 rear (only passive)	4 x M10 - top/bottom	4 x M10 - top/bottom
Cabinet construction	Plywood with anti-scratch paint	Plywood with anti-scratch paint	Plywood with anti-scratch paint	Plywood with anti-scratch paint	Plywood with anti-scratch paint	Plywood with anti-scratch paint
Cabinet Colour	Black (active) Black or White (passive)	Black (active) Black or White (passive)	Black (active) Black or White (passive)	Black (active) Black or White (passive)	Black	Black
Handles		1 x rear	1 x rear	2 x sides	2 x sides	1 x top, 2 x sides
Mounting Pole		1 x bottom, dual angle	1 x bottom, dual angle	1 x bottom, dual angle	1 x bottom, dual angle	1 x bottom
Dimensions (W x H x D)	204 x 295 x 223 mm	220 x 442 x 260 mm	340 x 515 x 310 mm	380 x 595 x 360 mm	448 x 670 x 410 mm	448 x 1060 x 450 mm

LOUDSPEAKERS SW SERIES



The **SW Series** is a range of sub-woofers designed to complement PROEL full-range passive or active speakers. The **variety of size, power and SPL** offered by the five SW models provides the perfect low extension solution for any speaker model available in the PROEL range.

All the SW models feature **large VC woofers** and band-pass configuration, which provide **very 'punchy' and dynamic lows**, or vented design for a **deep and extended low frequency response**.

The **CLASS D amplifier modules** with **SMPS** (Switch Mode Power Supply) can generate a massive amount of continuous power in a compact, lightweight and reliable package. All the modules include a **STEREO pre-amp** section, **24dB/oct. crossover filters** with selectable frequency and **PHASE reverse switch**. The cabinets are built with 15/18mm **plywood** and feature 2 or 3 metal handles and sturdy 75mm **wheels** for an easy transport (except SW110).

*La serie SW è una linea di sub-woofer progettata come complemento per i diffusori full-range PROEL attivi e passivi. La **varietà di dimensioni, potenze e SPL** offerte dai cinque modelli della serie è in grado di fornire la perfetta estensione in bassa frequenza per qualunque modello di diffusore presente nel catalogo PROEL.*

*Tutti i modelli SW utilizzano **woofer con bobine mobili di grandi dimensioni** in configurazione band-pass, in grado di produrre **bassi veloci e dinamici**, o vented, per una **risposta alle basse frequenze estesa e profonda**.*

*I **moduli di amplificazione in CLASSE D** compatti e affidabili sono in grado di generare elevati livelli di potenza continua con pesi e dimensioni estremamente contenuti. Tutti gli amplificatori includono una **sezione di ingresso STEREO**, filtri di crossover a **24dB/ott.** e selettore di FASE. I cabinets sono costruiti in legno **multistrato** da 15/18mm e includono due o tre maniglie e ruote da 75mm per il trasporto (escluso SW110).*



SW118HAV2

- Active band-pass sub-woofer
- 18" die-cast CELESTION woofer with 4"VC for an extended response and very deep bass
- 2000 W peak power
- Light-weight 1000 W continuous Class D amplifier with SMPS
- STEREO input, link and output
- 24 dB/oct. STEREO crossover filter with selectable frequency
- PHASE REVERSE switch
- SPL MAX 131 dB
- Frequency response 34 Hz - 140 Hz
- Plywood cabinet with three metal handles and four 75mm wheels



SW115HAV2

- Compact active band-pass sub-woofer
- 15" CELESTION woofer with 3"VC for a very high pressure level and tight lows
- 1000 W peak power
- Light-weight 500 W continuous Class D amplifier with SMPS
- STEREO input, link and output
- 24 dB/oct. STEREO crossover filter with selectable frequency
- PHASE REVERSE switch
- SPL MAX 128 dB
- Frequency response 37 Hz - 160 Hz
- Compact plywood cabinet with two metal handles and four 75mm wheels



SW SERIES



SW118A

- Compact active vented sub-woofer
- 18" woofer with 3" VC for a deep and extended response
- 1000 W peak power
- Light-weight 500 W continuous Class D amplifier with SMPS
- STEREO input, link and output
- 24 dB/oct. STEREO crossover filter with selectable frequency
- PHASE REVERSE switch
- SPL MAX 129 dB
- Frequency response 36 Hz - 140 Hz
- Passive version available (SW118P)
- Plywood cabinet with two metal handles and four 75mm wheels



SW115AV2

NEW

- Compact active sub-woofer in BPS configuration (series-loaded band-pass)
- 15" woofer with 3" VC for a quick and dynamic response
- 700 W peak power
- Light-weight 350 W continuous Class D amplifier with SMPS
- STEREO input, link and output
- 24 dB/oct. STEREO crossover filter with selectable frequency
- PHASE REVERSE switch
- SPL MAX 126dB
- Frequency response 40 Hz - 160 Hz
- Passive version available (SW115P)
- Plywood cabinet with two metal handles and four 75mm wheels



SW110AV2

NEW

- Very compact active band-pass sub-woofer for portable systems and fixed installations
- 10" woofer with 2 x 2.5" VC for a high output level and punchy lows
- 500 W peak power
- Light-weight 250 W continuous Class D amplifier with SMPS
- STEREO input, link and output
- 24 dB/oct. STEREO crossover filter with selectable frequency
- PHASE REVERSE switch
- SPL MAX 122dB
- Frequency response 46 Hz - 160 Hz
- Plywood cabinet with one handle

Technical Specifications

ACTIVE	SW110A	SW115A	SW118A	SW115HAV2	SW118HAV2
System type	Bandpass enclosure subwoofer	BPS enclosure subwoofer	Vented enclosure subwoofer	BPS enclosure subwoofer	Bandpass enclosure subwoofer
Loudspeaker	10 woofer with 2x2.5 VC	15 woofer with 3 VC	18" woofer with 3 VC	15 woofer with 3 VC	18" woofer with 4 VC
Amplifier Continuous Power	250 W	350 W	500 W	500 W	1000 W
Frequency Response	46 Hz - 160 Hz	40 Hz - 160 Hz	36 Hz - 140 Hz	37 Hz - 160 Hz	34 Hz - 140 Hz
Max SPL	116 dB	126 dB	129 dB	128 dB	131 dB
Connectors	IN: 2 x NEUTRIK COMBO OUT: 2 x NEUTRIK XLR-M LINK: 2 x NEUTRIK XLR-M	IN: 2 x NEUTRIK COMBO OUT/LINK: 2 x JACK ¼", 2 x XLR-M	IN: 2 x NEUTRIK COMBO OUT: 2 x NEUTRIK XLR-M LINK: 2 x NEUTRIK XLR-M	IN: 2 x NEUTRIK COMBO OUT: 2 x NEUTRIK XLR-M LINK: 2 x NEUTRIK XLR-M	IN: 2 x NEUTRIK COMBO OUT: 2 x NEUTRIK XLR-M LINK: 2 x NEUTRIK XLR-M
Controls	Volume, GND lift X-over Frequency, Phase	Volume, Stereo/Mono, Flat Out GND lift, X-over frequency, Phase	Volume, GND lift X-over Frequency, Phase	Volume, GND lift X-over Frequency, Phase	Volume, GND lift X-over Frequency, Phase
Power Supply	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz
Weight	14 kg (30.8lb)	27.5 kg (60.6 lb)	35.5 kg (78.3 lb)	29.5 kg (65 lb)	51 kg (70.6 lb)
PASSIVE		SW115P	SW118P		
Nominal Impedance		8 Ω	8 Ω		
Power Handling (continuous)		350 W	500 W		
Power Handling (peak)		700 W	2000 W		
Frequency Response		40 Hz - 160 Hz	36 Hz - 170 Hz (without filter)		
Sensitivity		97 dB @ 1 W/1 m	98 dB @ 1 W/1 m		
Crossover Frequency		160 Hz, 12 dB/oct LP - 6 dB/oct HP	suggested 120 Hz		
Connectors		2 x NEUTRIK SPEAKON (IN/OUT)	2 x NEUTRIK SPEAKON (IN/LINK)		
Weight		29 kg (63.9 lb)	34 kg (74.9 lb)		
GENERAL SPECIFICATIONS					
Cabinet	15/18 mm plywood Black anti-scratch paint 1 handle 1 x pole holder	15/18 mm plywood Black anti-scratch paint 1.5 mm metal grille 2 x steel handles 1 x pole holder 4 x 75 mm wheels	15/18 mm plywood Black anti-scratch paint 1.5 mm metal grille 2 x steel handles 1 x pole holder 4 x 75 mm wheels	15/18 mm plywood Black anti-scratch paint 1.5 mm metal grille 2 x steel handles 1 x pole holder 4 x 75 mm wheels	15/18 mm plywood Black anti-scratch paint 1.5 mm metal grille 3 x steel handles 1 x pole holder 4 x 75 mm wheels
Dimensions (W x H x D)	520 x 330 x 350 mm	430 x 550 x 600 mm	520 x 660 x 640 mm	430 x 550 x 600 mm	595 x 700 x 700 mm

LOUDSPEAKERS WD SERIES



The **WEDGE Series** is a complete range of **active stage monitors** designed to offer not only to professional musicians and rental companies, but also to amateur musicians and nonprofessional users, a **highly valuable monitoring solution** at a very affordable price. The WEDGE stage monitors provide a **perfect sound intelligibility** and a **high SPL** in an extremely **light-weight and portable** enclosure.

The **coaxial transducers**, designed under PROEL specifications, represent the best choice for stage monitors, not only because they fit into more compact cabinets, but also for the fact that they provide a perfect alignment in the emission of high and low frequencies and a controlled directivity for a perfect listening from any position.

The lightweight **CLASS D** amplifier modules with **SMPS**, coupled to a sophisticated **analog processing**, provide an impressive sound pressure level, with an extremely detailed response, particularly in the **vocal range**, and a remarkable **resistance to feedback**. Two tailored **EQ PRESETS** are available for the use of the speaker not only for stage monitoring (**MONITOR**), but also as a **MAIN SOUND SYSTEM (FOH)**.

The **low-profile**, stylish and unobtrusive cabinet, with recessed handles and scratch-resistant polyurethane painting, fits perfectly on any stage.

The three models available offer the perfect solution for different monitoring situations. The **ultra-compact WD10A** offers a high-performance monitoring also on small stages or venues with a limited space and it's the ideal solution for speech, vocals and keyboards. **WD12A**, with its high SPL and its **full-range response**, is the favorite choice for vocals, guitar, horns and electronic instruments or as a high-power monitor for DJs. Finally **WD15A**, with its **full extension** and powerful and deep response at the low frequencies, is the ideal monitor for bass and drums players. The **horn-loaded HF section** and the powerful amplifier make it the perfect solution for monitoring also in very large stages.

La serie WEDGE è una linea completa di monitor da palco attivi, studiata per offrire non solo ai service ed ai professionisti ma anche ai musicisti non professionisti, una soluzione efficace per il monitoraggio ad un prezzo particolarmente vantaggioso. I monitor da palco WEDGE garantiscono una perfetta intelligibilità ed una elevata pressione sonora, in un cabinet leggero e compatto.

Gli altoparlanti coaxiali, costruiti secondo specifiche PROEL, rappresentano la scelta ottimale per il monitoraggio, non solo poiché consentono di minimizzare le dimensioni del diffusore, ma anche perché sono in grado di offrire un ottimo allineamento acustico delle due vie ed una dispersione angolare ottimale da qualunque posizione.

I leggeri amplificatori in Classe D con SMPS, abbinati ad un sofisticato processamento analogico, consentono il raggiungimento di elevati livelli di pressione sonora, oltre ad una riproduzione accurata su tutta la gamma, specialmente quella vocale, ed una considerevole resistenza al feedback. Due preset di equalizzazione sono disponibili per utilizzo come monitor (MONITOR) o come sistema principale (FOH).

Il cabinet a basso profilo, discreto e personale, con maniglie incassate e finitura poliuretana anti graffio, si adatta alla perfezione a qualunque tipo di palco.

I tre modelli disponibili offrono la soluzione di monitoraggio più adatta per le diverse esigenze. Il modello ultra-compatto WD10A offre elevate prestazioni anche laddove lo spazio disponibile è scarso; esso rappresenta la scelta ideale per cantanti e tastieristi. WD12A, con il suo elevato SPL e la sua estesa risposta in frequenza, è la scelta ottimale per cantanti, chitarristi, strumenti a fiato ed elettronici, oppure come monitor personale per DJ. WD15A, con la sua elevata potenza, estensione ed eccezionale risposta alle basse frequenze, è il monitor ideale per bassisti e batteristi. Il driver per le alte frequenze caricato a tromba ed il potente amplificatore integrato ne fanno la soluzione perfetta per palcoscenici anche di grandi dimensioni.



WD SERIES



WD10A

- Active 2-way coaxial stage monitor
- 1" neodymium compression driver with 1" VC
- 10" woofer with 2" VC
- 500 W total peak power
- 50 W continuous class AB amplifier for the high frequencies
- 250 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- Dual LIMITER circuit
- 2 optimized EQ PRESETS for MONITOR or FOH (Front-Of-House) use
- SPL MAX: 123dB
- Frequency response: 60 Hz - 20 kHz
- Lightweight plywood cabinet with black anti-scratch polyurethane paint
- Reinforced metal grille
- Recessed connection panel for added protection
- Two recessed handles for easy transport
- Pole adapter



WD12A

- Active 2-way coaxial stage monitor
- 1" compression driver with 1.35" VC
- 12" woofer with 2.5" VC
- 700 W total peak power
- 50 W continuous class AB amplifier for the high frequencies
- 300 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- Dual LIMITER circuit
- 2 optimized EQ PRESETS for MONITOR or FOH (Front-Of-House) use
- SPL MAX: 124dB
- Frequency response: 50 Hz - 20 kHz
- Lightweight plywood cabinet with black anti-scratch polyurethane paint
- Reinforced metal grille
- Recessed connection panel for added protection
- Two recessed handles for easy transport
- Pole adapter



WD15A

- Active 2-way coaxial stage monitor
- 1" compression driver with 1.35" VC on a waveguide
- 15" woofer with 3" VC
- 900 W total peak power
- 50 W continuous class AB amplifier for the high frequencies
- 400 W continuous class D amplifier for the low frequencies
- Switch Mode Power Supply (SMPS)
- Dual LIMITER circuit
- 2 optimized EQ PRESETS for MONITOR or FOH (Front-Of-House) use
- SPL MAX: 126dB
- Frequency response: 45 Hz - 20 kHz
- Lightweight plywood cabinet with black anti-scratch polyurethane paint
- Reinforced metal grille
- Recessed connection panel for added protection
- Two recessed handles for easy transport
- Pole adapter

Technical Specifications

	WD10A	WD12A	WD15A
System type	2-way coaxial vented enclosure	2-way coaxial vented enclosure	2-way coaxial vented enclosure
High Frequency Device	1" neo compression driver with 1"VC	1" compression driver with 1"VC	1" compression driver with 1.35"VC
Low Frequency Device	10" woofer with 2"VC	12" woofer with 2.5"VC	15" woofer with 3"VC
Angular Coverage	80° H x 80° V	80° H x 80° V	60° H x 60° V
Total Peak Power	500 W	700 W	900 W
HF Amplifier Continuous Power	50 W Class AB	50 W Class AB	50 W Class AB
LF Amplifier Continuous Power	200 W Class D	300 W Class D	400 W Class D
Power Supply	Linear	SMPS	SMPS
Processing	Analog	Analog	Analog
Frequency Response	60 Hz - 20 kHz	50 Hz - 20 kHz	45 Hz - 20 kHz
Max SPL	123 dB	124 dB	126 dB
Connectors	IN: Combo LINK: XLR M	IN: Combo LINK: XLR M	IN: Combo LINK: XLR M
Controls	LEVEL, PRESET selector (MONITOR, FOH), GND lift	LEVEL, PRESET selector (MONITOR, FOH), GND lift	LEVEL, PRESET selector (MONITOR, FOH), GND lift
Power Supply	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz	230 VAC or 120 VAC 50/60 Hz
Monitor Taper	36°	36°	36°
Construction	Plywood with black anti-scratch polyurethane paint	Plywood with black anti-scratch polyurethane paint	Plywood with black anti-scratch polyurethane paint
Mounting Pole	1 x side	1 x side	1 x side
Handles	2 x side	2 x side	2 x side
Dimensions (W x H x D)	480x300x420 mm	510x340x500 mm	610x365x545 mm
Weight	11 kg (24.25 lb)	15 kg (33 lb)	18 kg (43 lb)



CPWD10 • CPWD12 • CPWD15

WEDGE SERIES FLIGHT CASE (for 2 units)

LOUDSPEAKERS NEOS AXS SERIES



NEOS AXS series represents the highest expression of PROEL Research & Development applied in loudspeaker systems and incorporates the **latest technologies developed by PROEL in advanced sound reinforcement systems** able to provide premium sound, maximum performance and up-to-date features.

NEOS AXS is a complete range of self-powered loudspeaker systems combining **cutting-edge transducers** with **CLASS D amplifiers** and **digital processors**, thus ensuring the best integration between acoustics and electronics for an optimal performance. NEOS AXS are designed for the use both as **high-performance mobile systems** for live applications and as versatile and remotely controllable systems for **advanced fixed installations**.

All full-range models in the NEOS AXS Series are provided with a **dual-angle pole holders** (0° or -7.5°), which allows a tilted vertical position for optimal coverage of the listening area and with an **asymmetric HF horn** that can be rotated to change the dispersion angle when the speaker sits horizontally. All the models, also available in passive versions (PX), are housed in rugged in 15/18mm birch plywood cabinets, featuring die-cast handles and multiple flying points. A wide range of accessories is available for suspension in permanent installations or live applications.

La serie NEOS AXS rappresenta la massima espressione della Divisione Ricerca e Sviluppo di PROEL applicata ai sistemi di altoparlanti e racchiude **le più recenti tecnologie sviluppate da PROEL per il sound reinforcement**, in grado di offrire un suono senza compromessi insieme a performance di altissimo livello e funzionalità avanzate.

NEOS AXS è una serie completa di diffusori amplificati che unisce **trasduttori avanzati con amplificatori in CLASSE D e processamento digitale**, assicurando così la perfetta integrazione tra acustica ed elettronica per prestazioni ottimali. I diffusori NEOS AXS sono progettati per un utilizzo sia come **sistemi mobili ad alte prestazioni** per applicazioni live che come sistemi versatili a controllo remoto per **installazioni fisse di livello avanzato**.

Tutti i modelli full-range della serie NEOS AXS sono equipaggiati con una **flangia per stativo a doppia angolazione** (0° o -7.5°), che permette una posizione verticale inclinata per una copertura ottimale dell'area da sonorizzare, e con una **tromba a dispersione asimmetrica** che può essere ruotata per variare l'angolo di dispersione angolare quando i diffusori vengono utilizzati in posizione orizzontale. Tutti i modelli, disponibili anche in versione passiva (PX), si avvalgono di robusti cabinet in multistrato di betulla da 15/18mm, dotati di maniglie in pressofusione e flying points multipli. E' disponibile un'ampia gamma di accessori per la sospensione in installazioni permanenti o applicazioni live.

NEOS AXS SERIES

All the models are **powered by DA power modules**, a new generation of **CLASS D** power amplifiers with **SWITCH MODE** power supply, able to provide an exceptional sound definition together with very high dynamics and low distortion in an ultra-compact package.

The onboard control electronics are based on the **96 kHz, 40bit floating point CORE DSP platform**, able to optimize further the system performances through the use of sophisticated EQ, crossover and dynamics algorithms. The CORE processing provides also **network functionality** through the PRONET control software based on CANBUS communication protocol (USB2CAN converter needed). The **PRONET control software** provides access to the major processing features, including full **PARAMETRIC** and **DYNAMIC EQ**, advanced **COMPRESSOR/LIMITERS** and **DELAY**, together with the real time control of parameters such as temperature, supply voltage and protections. Setting created by the user can be saved in **user presets** that can be recalled through the control software or from the unit's interface.

Tutti i modelli sono **alimentati con i moduli di potenza DA**, una nuova generazione di amplificatori in **CLASSE D** con alimentazione **SWITCH MODE**, in grado di offrire un suono eccezionalmente definito unito ad una elevata dinamica e a bassi livelli di distorsione, in un package ultra-compacto.

L'elettronica di controllo è basata sulla **piattaforma DSP a 96 kHz e 40bit floating point CORE**, in grado di ottimizzare le performance del sistema attraverso l'uso di sofisticati algoritmi di EQ, crossover e dinamica. Il processore CORE offre inoltre la possibilità di **networking** tramite il software di controllo PRONET, che utilizza il protocollo di comunicazione CANBUS (necessario il convertitore USB2CAN). Il **software di controllo PRONET** consente l'accesso alle principali funzioni di processamento, tra cui equalizzatori **PARAMETRICI** e **DINAMICI**, **COMPRESSOR/LIMITERS** avanzati e linee di **DELAY**, insieme al controllo in tempo reale di parametri come la temperatura, la tensione di alimentazione e le protezioni dell'amplificatore. Le regolazioni impostate dall'utente possono essere salvate in **presets** che è possibile richiamare attraverso il software di controllo oppure dall'interfaccia del sistema.



The **NEOS AXS COMPACT** models are available in **three different full-range models** (10", 12" and 15") that, thanks to their asymmetrical profile, can also be used as stage monitors. A **compact 18" sub-woofer** allows multi-way systems of various output power and frequency response to be created when combined with any of the satellites. All the models are available also in **passive version**, including precisely designed built-in crossover filters. Size and weight of the NEOS AXS COMPACT have been contained as much as possible in order to make their use very easy both in **portable and installed systems**.

I modelli **NEOS AXS COMPATTI** sono disponibili in **tre diverse configurazioni full-range** (10", 12" e 15") ed il profilo asimmetrico del cabinet ne permette l'utilizzo anche come monitor da palco. In combinazione con i satelliti, il **sub-woofer compatto da 18"** consente di formare sistemi multi-via di svariate potenze e risposte in frequenza. Tutti i modelli sono disponibili anche in **versione passiva**, dotata di un filtro di crossover accuratamente progettato. Dimensioni e pesi dei modelli NEOS compatti sono stati ridotti al minimo per renderne semplice ed efficace l'utilizzo sia come **sistemi portatili** che in **installazioni fisse**.

The **NEOS AXS HIGH-PERFORMANCE** models provide the highest level of performance and are intended for the use in the **most demanding applications**. The **two full-range models** (12" and 15") feature woofers with neodymium magnets and large voice coils, capable of handling extremely high power levels, and compression drivers with exceptional linearity and efficiency. Both models are fitted with an advanced suspension system featuring **FLY TRACK** flying points, which allow to form multiple clusters in absolute safety. The speakers used in the **two sub-woofers** offer the **latest in transducer technology**,



such as die-cast baskets with double ventilation, **ISV** (Interleaved Sandwich Voice Coil), **DSS** (Double Silicon Spider) and **DDR** (Double Demodulating Rings). The enclosure **innovative design** provides the high output level and dispersion control of a horn-loaded system, plus the damping and deep bass of a bass-reflex system with a symmetrical, exponential-profile tuning port.

In all the active models the remote control of all the system parameters is available thru the PRONET software. For a correct filtering, EQ and alignment of the passive versions, we recommend the use of **PROEL PC260 digital processor** that provides the same high-performance processing as the built-in DSP in the active versions.



I modelli **NEOS AXS HIGH-PERFORMANCE** offrono prestazioni di altissimo livello e sono progettati per l'utilizzo nelle applicazioni più impegnative. I **due modelli full-range** utilizzano woofers con magneti in neodimio e bobine di grandi dimensioni, in grado di sostenere potenze molto elevate, e drivers a compressione dotati di un'ottima linearità ed una grande efficienza. In entrambi i modelli, il sistema di sospensione avanzato con punti di aggancio **FLY TRACK** consente la formazione di cluster multipli con facilità ed in assoluta sicurezza. Gli altoparlanti utilizzati nei **due sub-woofer** sono stati realizzati impiegando

le tecnologie più avanzate, quali cestello pressofuso con doppia ventilazione, bobine **ISV** (Interleaved Sandwich Voice Coil), sistema **DSS** (Double Silicon Spider), doppi anelli demodulanti **DDR** (Double Demodulating Ring). La **configurazione innovativa** utilizzata offre il livello d'uscita ed il controllo della dispersione dei sistemi a tromba e la profondità e lo smorzamento dei sistemi bass-reflex con condotto a profilo esponenziale e simmetrico.

Nelle versioni attive il controllo remoto di tutti i parametri dei sistemi è disponibile tramite il software PRONET. Per un corretto filtraggio, equalizzazione e allineamento della versione passiva raccomandiamo l'utilizzo del **processore digitale PROEL PC260**, in grado di offrire le stesse prestazioni di processamento del DSP delle versioni attive.

NEOS AXS SERIES

NEOS10AXS



- Bi-amplified digitally processed 2-way system
- 1" compression driver with titanium diaphragm on a 100°>80° x 60° asymmetrical horn
- 10" woofer with 2" voice coil
- 1000 W DA digital power amplifier with Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP
- Networking capability thru PRONET software with remote control of EQ, DYNAMICS and DELAY
- SPL MAX 124 dB
- Frequency response 70 Hz - 20 kHz
- Compact and lightweight birch plywood asymmetrical cabinet
- Dual-angle pole holder
- 1 aluminum side handle
- 4 x M10 flying points
- Passive version available with 250 W AES power handling (NEOS10PX)
- Made in Italy

NEOS12AXS



- Bi-amplified digitally processed 2-way system
- 1" compression driver with 1.75 VC on a 100°>80° x 60° asymmetrical horn
- 12" woofer with 2.5" voice coil
- 1000 W DA digital power amplifier with Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP
- Networking capability thru PRONET software with remote control of EQ, DYNAMICS and DELAY
- SPL MAX 127 dB
- Frequency response 55 Hz - 20 kHz
- Compact and lightweight birch plywood asymmetrical cabinet
- Dual-angle pole holder
- 2 aluminum side handles
- 4 x M10 flying points
- Passive version available with 350 W AES power handling (NEOS12PX)
- Made in Italy

NEOS15AXS



- Bi-amplified digitally processed 2-way system
- 1" compression driver with 1.75 VC on a 100°>80° x 60° asymmetrical horn
- 15" woofer with 2.5" voice coil
- 1000 W DA digital power amplifier with Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP
- Networking capability thru PRONET software with remote control of EQ, DYNAMICS and DELAY
- SPL MAX 128 dB
- Frequency response 55 Hz - 20 kHz
- Compact and lightweight birch plywood asymmetrical cabinet
- Dual-angle pole holder
- 2 aluminum side handles
- 4 x M10 flying points
- Passive version available with 400 W AES power handling (NEOS15PX)
- Made in Italy

NEOS118AXS



- Amplified digitally processed sub-woofer
- 18" woofer with 4" voice coil
- 1500 W DA digital power amplifier with Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP
- Networking capability thru PRONET software with remote control of EQ, DYNAMICS and DELAY
- SPL MAX 133 dB
- Frequency response from 33 Hz
- Compact and lightweight birch plywood cabinet
- Pole holder
- 2 aluminum side handles
- Passive version available with 1000 W AES power handling (NEOS118PX)
- Made in Italy

NEOS AXS SERIES

NEOS122AXS



- Bi-amplified digitally processed 2-way system
- 1.4" compression driver with 3" VC on a 100°>80° x 60° asymmetrical horn
- 12" neodymium woofer with 3" voice coil
- 1500 W DA digital power amplifier with Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP
- Networking capability thru PRONET software with remote control of EQ, DYNAMICS and DELAY
- SPL MAX 132 dB
- Frequency response 55 Hz - 20 kHz
- Compact and lightweight birch plywood asymmetrical cabinet
- Dual-angle pole holder
- 1 aluminum side handle
- 4 x FLYTRACK + 1 x M10 flying points
- Passive version available with 800 W AES power handling (NEOS122PX)
- Made in Italy

NEOS152AXS



- Bi-amplified digitally processed 2-way system
- 2" compression driver with 3" VC on a 90°>80° x 60° asymmetrical horn
- 15" neodymium woofer with 4" voice coil
- 2000 W DA digital power amplifier with Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP
- Networking capability thru PRONET software with remote control of EQ, DYNAMICS and DELAY
- SPL MAX 132 dB
- Frequency response 40 Hz - 20 kHz
- Compact and lightweight birch plywood asymmetrical cabinet
- Dual-angle pole holder
- 2 aluminum side handles
- 4 x FLYTRACK + 2 x M10 flying points
- Passive version available with 1000 W AES power handling (NEOS152PX)
- Made in Italy

NEOS215AXS



- Amplified digitally processed sub-woofer
- 2 x 15" woofer with 3" voice coil
- 1500 W DA digital power amplifier with Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP
- Networking capability thru PRONET software with remote control of EQ, DYNAMICS and DELAY
- SPL MAX 136 dB
- Frequency response from 40 Hz
- Compact and lightweight birch plywood cabinet
- Pole holder
- 4 aluminum side + top handles
- Passive version available with 1000 W AES power handling (NEOS215PX)
- Made in Italy

NEOS218AXS



- Amplified digitally processed sub-woofer
- 2 x 18" woofer with 4" voice coil
- 2000 W DA digital power amplifier with Switch Mode Power Supply (SMPS)
- 96 KHz, 40bit floating point CORE DSP
- Networking capability thru PRONET software with remote control of EQ, DYNAMICS and DELAY
- SPL MAX 137 dB
- Frequency response from 30 Hz
- Compact and lightweight birch plywood cabinet
- Pole holder
- 4 aluminum side + top handles
- 2 x 100mm wheels
- Passive version available with 2000 W AES power handling (NEOS218PX)
- Made in Italy

OPTIONAL ACCESSORIES



COVERNE10
COVERNE12
COVERNE15
COVERNE122
COVERNE152
COVERNE155
COVERNE185

NEOS10
NEOS12
NEOS15
NEOS122
NEOS152
NEOS115
NEOS118



KPTNEOS152



AC171
AC172
AC173
AC169A



AC172E



AC178

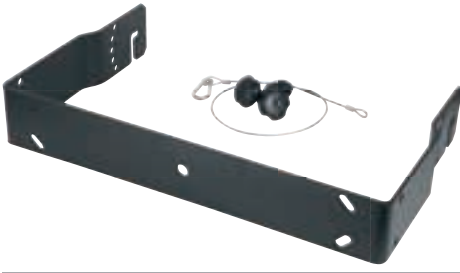
Technical Specifications

	NEOS10AXS/PX	NEOS12AXS/PX	NEOS15AXS/PX	NEOS118AXS/PX
System type	Full range 2-way, vented	Full range 2-way, vented	Full range 2-way, vented	Sub-woofer, vented
Low frequency driver	10" woofer - 2 VC	12" woofer - 2.5 VC	15" woofer - 2.5 VC	18" woofer - 4 VC
High frequency driver	1" compression driver - titanium diaphragm	1" compression driver - 1.75 VC	1" compression driver - 1.75 VC	
Frequency response	70 Hz - 20 kHz	55 Hz - 20 kHz	50 Hz - 20 kHz	from 30 Hz
Horn type	Asymmetrical rotatable horn	Asymmetrical rotatable horn	Asymmetrical rotatable horn	-
Coverage	100°>80° H x 60° V	100°>80° H x 60° V	100°>80° H x 60° V	-
Construction	15 and 18 mm birch plywood	15 and 18 mm birch plywood	15 and 18 mm birch plywood	15 and 18 mm birch plywood
Finish	Anti-scratch black paint	Anti-scratch black paint	Anti-scratch black paint	Anti-scratch black paint
Flying hardware	4 x M10 - top, bottom, rear	4 x M10 - top, bottom, rear	4 x M10 - top, bottom, rear	2 x M10 - top
Trapezoidal taper	10°	10°	10°	-
Monitor taper	42°	42°	42°	-
Pole holder	1 bottom dual angle (0° / 7.5°)	1 bottom dual angle (0° / 7.5°)	1 bottom dual angle (0° / 7.5°)	1 top
Dimensions (W x H x D)	355 x 520 x 310 mm	400 x 600 x 365 mm	465 x 688 x 430 mm	600 x 610 x 600 cm

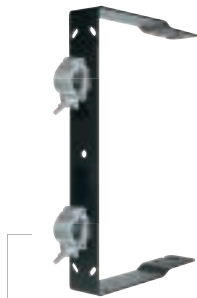
PASSIVE	NEOS10PX	NEOS12PX	NEOS15PX	NEOS118PX
Nominal impedance	8 ohm	8 ohm	8 ohm	8 ohm
Power handling continuous	250 W	350 W	400 W	1000 W
Power handling peak	500 W	700 W	800 W	2000 W
Sensitivity	97 dB @ 1 W/1 m	99 dB @ 1 W/1 m	99 dB @ 1 W/1 m	98 dB @ 1 W/1 m
Passive crossover frequency	2500 Hz	2000 Hz	2000 Hz	-
Suggested crossover frequency	-	-	-	80 Hz - 160 Hz
Weight	16 kg (35.2 lbs)	22 kg (48.5 lbs)	27 kg (59.5 lbs)	47 kg (103.5 lbs)

ACTIVE	NEOS10AXS	NEOS12AXS	NEOS15AXS	NEOS118AXS
Signal Processing	CORE processing 24 bit / 96 kHz	CORE processing 24 bit / 96 kHz	CORE processing 24 bit / 96 kHz	CORE processing 24 bit / 96 kHz
Amplifier type	DA Class D with SMPS	DA Class D with SMPS	DA Class D with SMPS	DA Class D with SMPS
Output power	500 + 500 W	500 + 500 W	500 + 500 W	1500 W
Max SPL	124 dB	127 dB	128 dB	133 dB
Connectors	IN - LINK: XLR M - XLR F NETWORK IN - OUT: ETHERCON® (NE8FAV) MAIN LINK: PowerCon® (NAC3MPB) MAIN: PowerCon® (NAC3MPA)	IN - LINK: XLR M - XLR F NETWORK IN - OUT: ETHERCON® (NE8FAV) MAIN LINK: PowerCon® (NAC3MPB) MAIN: PowerCon® (NAC3MPA)	IN - LINK: XLR M - XLR F NETWORK IN - OUT: ETHERCON® (NE8FAV) MAIN LINK: PowerCon® (NAC3MPB) MAIN: PowerCon® (NAC3MPA)	IN - LINK: 2 x XLR M - 2 x XLR F NETWORK IN - OUT: ETHERCON® (NE8FAV) MAIN LINK: PowerCon® (NAC3MPB) MAIN: PowerCon® (NAC3MPA)
Controls	LEVEL, PRESET (FLAT / HPF / MONITOR/ USER) TERMINATE, GND LIFT	LEVEL, PRESET (FLAT / HPF / MONITOR/ USER) TERMINATE, GND LIFT	LEVEL, PRESET (FLAT / HPF / MONITOR/ USER) TERMINATE, GND LIFT	LEVEL, PRESET (80 / 120 / USER) TERMINATE, GND LIFT
Cooling	Variable speed DC fan	Variable speed DC fan	Variable speed DC fan	Variable speed DC fan
Input Impedance	20 kohm balanced, 10 kohm unbalanced	20 kohm balanced, 10 kohm unbalanced	20 kohm balanced, 10 kohm unbalanced	20 kohm balanced, 10 kohm unbalanced
Input Sensitivity	+4 dBu / 1.25 V	+4 dBu / 1.25 V	+4 dBu / 1.25 V	+4 dBu / 1.25 V
Power Supply	230 VAC 50Hz or 120 VAC 60 Hz	230 VAC 50Hz or 120 VAC 60 Hz	230 VAC 50Hz or 120 VAC 60 Hz	230 VAC 50Hz or 120 VAC 60 Hz
Weight	18 kg (39.7 lbs)	24 kg (52.9 lbs)	29 kg (63.9 lbs)	49.5 kg (109 lbs)

OPTIONAL ACCESSORIES



**KPTTL10 KPTTL12 KPTTL15
NEOS10 NEOS12 NEOS15**



PLH300



**KPTFL10PB
KPTFL12PB
KPTFL15PB
KPTFL10PW
KPTFL12PW
KPTFL15PW**



USB2CAN converter

**NEOS10 (BLACK)
NEOS12 (BLACK)
NEOS15 (BLACK)
NEOS10 (WHITE)
NEOS12 (WHITE)
NEOS15 (WHITE)**

Technical Specifications

	NEOS122AXS/PX	NEOS152AXS/PX	NEOS 215AXS/PX	NEOS218AXS/PX
System type	Full range 2-way, vented	Full range 2-way, vented	Sub-woofer, vented	Sub-woofer, vented
Low frequency driver	12 neodymium woofer - 3 VC	15" neodymium woofer - 4 VC	2 x 15 woofer - 3 VC	2 x 18" woofer - 4 VC
High frequency driver	1.4 compression driver - titanium diaphragm - 3 VC	2" compression driver - titanium diaphragm - 3 VC		
Frequency response	40 Hz - 20 kHz	40 Hz - 20 kHz	from 40 Hz	from 30 Hz
Horn type	Asymmetrical rotatable horn	Asymmetrical rotatable horn	-	-
Coverage	100°>80° H x 60° V	90°>60° H x 50° V	-	-
Construction	15-18mm birch plywood with	15 and 18 mm birch plywood	15-18mm birch plywood	15, 18 and 24 mm birch plywood
Finish	Anti-scratch black paint	Anti-scratch black paint	Anti-scratch black paint	Anti-scratch black paint
Flying hardware	4 x fly tracks - side and 1 x M10 rear	4 x fly tracks - side and 2 x M10 rear	-	-
Trapezoidal taper	10°	10°	-	-
Monitor taper	42°	42°	-	-
Pole holder	1 bottom dual angle (0° / 7.5°)	1 bottom dual angle (0° / 7.5°)	1 top - 1 side	1 top - 1 side
Dimensions (W x H x D)	410 x 600 x 360 mm	450 x 770 x 490 mm	590 x 760 x 850 mm	590 x 990 x 790 mm

PASSIVE	NEOS 122PX	NEOS152PX	NEOS 215PX	NEOS218PX
Nominal impedance	8 ohm	8 ohm	8 + 8 ohm	8 + 8 ohm
Power handling continuous	800 W	1000 W	1000 W	2000 W
Power handling peak	1600 W	2000 W	2000 W	4000 W
Sensitivity	100 dB 1 W/1 m	99 dB @ 1 W/1 m	101 dB 1 W/1 m	101 dB @ 1 W/1 m
Passive crossover frequency	1200 Hz	1200 Hz	-	-
Suggested crossover frequency	-	-	80 Hz - 125 Hz	80 Hz - 125 Hz
Weight	24 Kg (52.9 lbs)	33 kg (72.7 lbs)	62.5 kg (137.7 lbs)	80.5 kg (177.3 lbs)

ACTIVE	NEOS 122AXS	NEOS152AXS	NEOS 215AXS	NEOS218AXS
Signal Processing	CORE processing 24 bit / 96 kHz	CORE processing 24 bit / 96 kHz	CORE processing 24 bit / 96 kHz	CORE processing 24 bit / 96 kHz
Amplifier type	DA Class D with SMPs	DA Class D with SMPs	DA Class D with SMPs	DA Class D with SMPs
Output power	750 + 750 W	1000 W + 1000 W	1500 W	2000 W
Max SPL	132 dB	132 dB	136 dB	137 dB
Connectors	IN - LINK: XLR M - XLR F NETWORK IN - OUT: ETHERCON® (NE8FAV) MAIN LINK: PowerCon® (NAC3MPB) MAIN: PowerCon® (NAC3MPA)	IN - LINK: XLR M - XLR F NETWORK IN - OUT: ETHERCON® (NE8FAV) MAIN LINK: PowerCon® (NAC3MPB) MAIN: PowerCon® (NAC3MPA)	IN - LINK: 2 x XLR M - 2 x XLR F NETWORK IN - OUT: ETHERCON® (NE8FAV) MAIN LINK: PowerCon® (NAC3MPB) MAIN: PowerCon® (NAC3MPA)	IN - LINK: 2 x XLR M - 2 x XLR F NETWORK IN - OUT: ETHERCON® (NE8FAV) MAIN LINK: PowerCon® (NAC3MPB) MAIN: PowerCon® (NAC3MPA)
Controls	LEVEL, PRESET (FLAT / HPF / MONITOR/ USER) TERMINATE, GND LIFT	LEVEL, PRESET (FLAT / HPF / MONITOR/ USER) TERMINATE, GND LIFT	LEVEL, PRESET (80 / 120 / USER) TERMINATE, GND LIFT	LEVEL, PRESET (80 / 120 / USER) TERMINATE, GND LIFT
Cooling	Variable speed DC fan	Variable speed DC fan	Variable speed DC fan	Variable speed DC fan
Input Impedance	20 kohm balanced, 10 kohm unbalanced	20 kohm balanced, 10 kohm unbalanced	20 kohm balanced, 10 kohm unbalanced	20 kohm balanced, 10 kohm unbalanced
Input Sensitivity	+4 dBu / 1.25 V	+4 dBu / 1.25 V	+4 dBu / 1.25 V	+4 dBu / 1.25 V
Power Supply	230 VAC 50Hz or 120 VAC 60 Hz	230 VAC 50Hz or 120 VAC 60 Hz	230 VAC 50Hz or 120 VAC 60 Hz	230 VAC 50Hz or 120 VAC 60 Hz
Weight	28 Kg (61.7 lb)	36 kg (79.4 lb)	65 kg (142.2 lbs)	83 kg (182.8 lbs)

LOUDSPEAKERS XEOS SERIES



XEOS is a series of **INSTALLATION speakers** including a selected number of surface-mount and ceiling models, designed for contractors and installers looking for a **wide choice of cost-effective, elegantly designed speakers with good quality sound.**

The elegant front baffle of the **three surface-mount models**, with a full protection grille and a new stylish and unobtrusive aluminium logo, allows these speakers (available in black or white) to **blend perfectly in any environment.** The **horn-loaded dome tweeters** and the **carefully designed crossover filters** provide a smooth and detailed response, suitable both for paging and background music applications. All the three models feature **built-in line transformers** and **C-shaped brackets** for an easy installation in vertical or horizontal position.

The **two square-shape 2-way ceiling models** provide hi-fidelity sound and feature a low impedance input, while the **round shape ceiling models** offer the choice of a versatile 5" full range or a high-quality 6.5" two-way solution.

***XEOS** è una serie di diffusori per INSTALLAZIONE, che include modelli per installazione a parete e a soffitto progettata per installatori e contractors che necessitano di un'ampia scelta di diffusori dal costo contenuto, dal design ricercato e con un'ottima qualità sonora.*

*Il design del pannello frontale dei **tre modelli da parete**, con griglia di protezione integrale ed un nuovo logo in alluminio gradevole e discreto, consente ai diffusori (disponibili in bianco e nero) di **integrarsi perfettamente in qualsiasi ambiente.** I **tweeter a cupola su guida d'onda** ed i **filtri crossover progettati in modo accurato** assicurano una risposta lineare e dettagliata, adatta sia per la riproduzione di annunci che per la diffusione di musica. Tutti i tre modelli includono **trasformatori di linea** e **staffe a C** per una facile installazione in posizione sia verticale che orizzontale.*

*I **due modelli da soffitto a 2 vie di forma quadrata** offrono un suono HI-FI ed includono anche un ingresso a bassa impedenza, mentre i **modelli di forma circolare** offrono la scelta di un versatile 5" full-range ed un modello da 6.5" a due vie di elevata qualità*

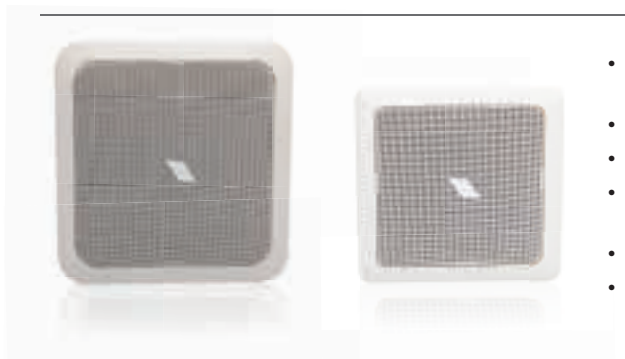
XE35T / XE55T / XE65T



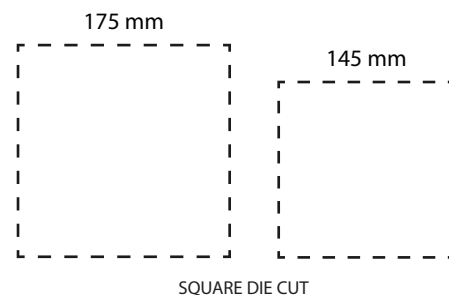
- 2 - way surface-mount systems
- 3.5", 5" and 6.5" polypropylene woofers
- Dome tweeter on elliptical waveguide
- Built-in 70V/100V line transformer with power taps
- Low impedance mode
- C-shape metal bracket
- Available in black or white

XEOS SERIES

XE65CTX / XE55CTX

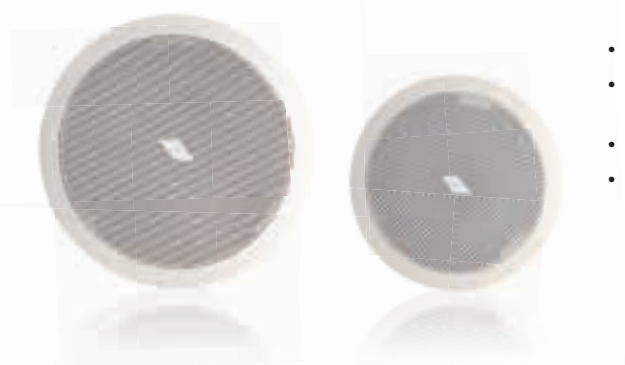


- Square shape 2-way coaxial ceiling systems
- 5" and 6.5" woofers
- Dome tweeter
- Built-in 70V/100V line transformer with power taps
- Low impedance mode
- Available in white

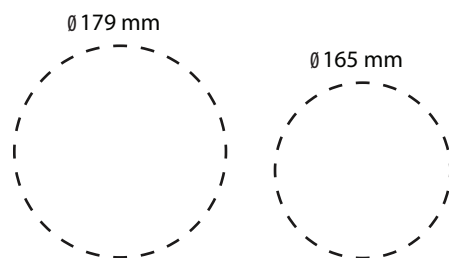


SQUARE DIE CUT

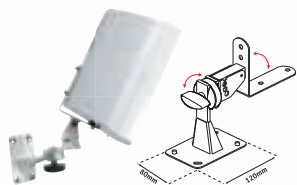
XE65CT / XE51CT



- Round shape ceiling systems
- 5" full-range and 6.5" 2-way coaxial
- Built-in 100V line transformer
- Available in white



HOLE DIE CUT



KPTSP01WH
KPTSP01BK
Available for XE55T and XE65T in white (KPTSP01WH) or black (KPTSP01BK) color.



COVER5X
COVER6X
Metal accessories for installation RAL 9010 color



SNWH
ABS installation bracket for XE55T (white)



SNBK
ABS installation bracket for XE55T (black)

Technical Specifications

	XE35T	XE55T	XE65T	XE55CTX	XE65CTX	XE51CT	XE65CT
System type	2-way system	2-way system	2-way system	2-way system	2-way system	Full-range system	2-way system
HF driver	1" dome tweeter horn loaded	1" dome tweeter horn loaded	1" dome tweeter horn loaded	1" coaxial tweeter	1" coaxial tweeter	-	1" coaxial tweeter
LF driver	3.5" woofer	5" woofer	6.5" woofer	5" woofer	6.5" woofer	5" full-range	6.5" woofer
Power							
Continuous	15 W	30 W	40 W	30 W	40 W	10 W	20 W
Peak	30 W	60 W	80 W	60 W	80 W	20 W	40 W
Nominal impedance	8 ohm	8 ohm	8 ohm	8 ohm	8 ohm	-	-
Line input	70/100 V	70/100 V	70/100 V	70/100 V	70/100 V	100 V	100 V
Connections	Screw terminals	Screw terminals	2 x binding post	Wire terminals	Wire terminals	Wire terminals	Wire terminals
Controls	70/100 V voltage tap selector 8 ohm - 1/2/4/7.5/15 W power tap selector	70/100 V voltage tap selector 8 ohm - 1/2/5/10/30 W power tap selector	70/100 V voltage tap selector 8 ohm - 2/5/10/20/40 W power tap selector	70/100 V voltage tap selector 8 ohm - 1/2/5/15/30 W power tap selector	70/100 V voltage tap selector 8 ohm - 2/5/10/20/40 W power tap selector	2.5/5/10 W power tap selector	2.5/5/10/20 W power tap selector
Frequency response (-10 dB)	70-20 kHz	70-20 kHz	50 - 20 kHz	50 - 20 kHz	50 - 20 kHz	100 - 20 kHz	70 - 20 kHz
SPL (1W/1m, 1 kHz)	85 dB	87 dB	87 dB	87 dB	87 dB	90 dB	87 dB
Weight (kg)	1.8	2.7	3.7	1.3	1.7	1	1.2
Dimensions (mm)	130x198x130	181x240x172	217x288x204	170x170x63	200x200x77	Ø 191.5 - H 78	Ø 204 - H 85
Mounting hole (mm)	-	-	-	145x145	175x175	Ø 165	Ø 179
Colour	black XE35TB white XE35TW	black XE55TB white XE55TW	black XE65TB white XE65TW	white	white	white	white

LOUDSPEAKERS XENIA SERIES

- 1 One-piece ABS cabinet for a better strength and acoustic rigidity
- 2 Aluminium weather-proof grille
- 3 Contemporary and stylish design
- 4 High-definition dome tweeter
- 5 High-efficiency woofer with polypropylene weatherproof cone
- 6 Crossover filter with selected components and high quality line transformers
- 7 Wall bracket with integral connections, 120° horizontal and vertical rotation and safety wire



XENIA is a series of speakers designed specifically for **high-profile installed sound applications** and featuring contemporary Italian styling and advanced technical solutions. All of the models in the XENIA range utilise high-definition neodymium dome tweeters and high-efficiency woofers, together with carefully designed crossover filters, providing high-fidelity, full-range sound for a wide scope of installations where **superior audio quality** is a key requirement. All models include as a standard feature a 70/100 V line transformer and multiple voltage taps for a perfect integration in large distributed systems.

All the surface-mount models are hosted in **injection moulded high-impact ABS cabinets** featuring an innovative cosmetic design, which allows the sound system to blend perfectly into any stylish environment or decor. The use of fully sealed cabinets, polypropylene woofer cones and aluminium grilles in the 3" and 5" models make them suitable for the installation in outdoor venues (**IP55**).

The **innovative wall bracket**, included as standard with X30T and X50T, **integrates the electrical connections** and it can be pre-installed in the venue and connected to the sound system before placing the speakers. When the whole installation is completed, the speakers can be placed and connected in a flash just 'plugging' them into the bracket terminal. The speakers can also be secured using the provided steel safety wire. The XENIA wall bracket allows a **120° horizontal or vertical rotation**, providing the optimal coverage for any position in the venue.

The **three surface-mount models** available suit any kind of installed sound system, offering a cost effective solution for paging and background music in small-size environments, full-range sound in bars, department stores and outdoor venues, or higher SPL systems in large areas such as shopping malls and airports. **One ceiling and one in-wall model**, featuring the same high-quality sound and stylish design, complete the series.



XENIA è una serie di diffusori concepiti in modo specifico per **installazioni di alto profilo** e dotati di un raffinato design Italiano unito a soluzioni tecniche avanzate. Grazie all'utilizzo di tweeter a cupola in neodimio ad alta definizione, woofer ad elevata efficienza e sofisticati filtri crossover, tutti i modelli della serie XENIA sono in grado di offrire un suono full-range estremamente definito e adatto ad un'ampia gamma di installazioni che hanno come requisito fondamentale la **qualità audio**. Tutti i modelli includono di serie un trasformatore da 70/100V e un selettore di potenza per una perfetta integrazione in sistemi distribuiti di grandi dimensioni.

I modelli per installazione a parete utilizzano resistenti **cabinets in ABS dal design innovativo**, che ne consentono l'integrazione in ambienti di qualunque stile o decoro. L'utilizzo di cabinets completamente sigillati, woofers con coni in polipropilene e griglie in alluminio nei modelli da 3" e 5" li rende adatti all'installazione in ambienti all'aperto (**IP55**).

L'**innovativa staffa da parete con connessioni elettriche integrate**, inclusa di serie con i modelli X30T e X50T, può essere pre-installata nell'ambiente e collegata al sistema audio prima di installare i diffusori. A completamento dell'installazione, i diffusori possono essere piazzati e connessi in un attimo, semplicemente inserendoli sui terminali della staffa. I diffusori possono anche essere assicurati utilizzando l'apposito cavo di sicurezza. La staffa da parete XENIA consente una **rotazione orizzontale e verticale di 120°**, in modo da fornire la copertura ideale per ogni posizione dell'ambiente.

I **tre modelli da parete** disponibili si adattano a qualunque tipo di installazione, offrendo una soluzione di valore elevato per la diffusione di annunci e musica di sottofondo in ambienti di piccole dimensioni, per un suono full-range in bar, grandi magazzini e ambienti all'aperto oppure per sistemi ad elevato SPL in centri commerciali e aeroporti.

Un modello da soffitto ed uno per installazione a parete, con la stessa qualità acustica e lo stesso design raffinato, completano la serie.



XENIA SERIES

X30T



- Passive two-way, wall-mount loudspeaker system
- High-definition dome tweeter on elliptical waveguide
- 3" woofer with PP cone
- Ultra-compact ABS cabinet with aluminum grille
- Built-in 70V / 100V line transformer
- 30W power handling
- 7W/15W/30W/8ohm power tap selector
- Wall bracket with 120° horizontal/vertical rotation and integral connections
- Available in black and white color
- Weather-proof IP55
- For paging and background music in environments (shops, restaurants, offices, etc.) requiring unobtrusive, small size speakers able to provide a good SPL and a high-quality sound

X50T



- Passive two-way, wall-mount loudspeaker system
- High-definition dome tweeter on elliptical waveguide
- 5" woofer with PP cone
- Compact ABS cabinet with aluminum grille
- Built-in 70V / 100V line transformer
- 60W power handling
- 12W/25W/50W/8ohm power tap selector
- Wall bracket with 120° horizontal/vertical rotation and integral connections
- Available in black and white color
- Weather-proof IP55
- Ideal for applications requiring a full-range sound in a limited space: bars, pubs, department stores and outdoor venues. Delivers an extended response with deep lows and clean, well-defined highs

X80T



- Passive two-way, wall-mount loudspeaker
- High-definition dome tweeter on elliptical waveguide
- 8" woofer
- ABS cabinet with aluminum grille
- Built-in 70V / 100V line transformer
- 100W power handling
- 25W/50W/100W/8ohm power tap selector
- C-shape metal wall bracket included
- Available in black and white color
- Able to provide a high SPL and an amazing extension at the low frequencies, is perfect for large areas such as shopping malls, stadiums, airports or for high-power music installations

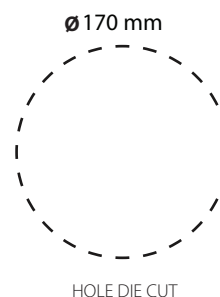


XENIA SERIES

X50CT



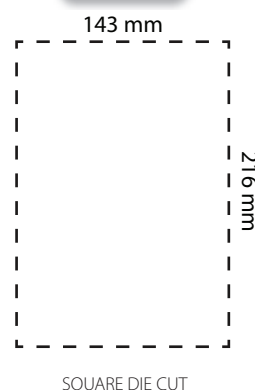
- Passive two-way coaxial ceiling loudspeaker system
- 1/2" high-fidelity tweeter
- 5" woofer
- ABS cabinet
- Built-in 100V line transformer
- 20W power handling
- 2.5W/5W/10W power tap selector
- Available in white color
- For high-quality paging and background music diffusion



X50IWT



- Passive two-way in-wall mount loudspeaker system
- High-definition dome tweeter on elliptical waveguide
- 5" woofer with PP cone
- ABS cabinet
- Built-in 100V line transformer
- 40W power handling
- 8W/15W power tap selector
- Available in white color
- Optional INWALL05P plastic box available for flush-mounting, provides a quick and easy mounting system and a closed rear cabinet for an improved sonic performance
- For top performance and high quality sound with a minimal visual impact



Technical Specifications

	X30T	X50T	X80T	X50IWT	X50CT
Speakers					
HF	1" neodymium soft dome horn loaded tweeter			1" neodymium soft dome tweeter	1/2" tweeter
LF	3" woofer	5" woofer	8" woofer	5" woofer	5" woofer
Power					
nominal	15W	30W	50W	20 W	10W
max	30W	60W	100W	40 W	20W
Nominal impedance	8 ohm	8 ohm	8 ohm	-	-
Line input	70/100 V	70/100 V	70/100 V	100 V	100 V
Connections	Integral connections included in the bracket (wire terminals)	Integral connections included in the bracket (wire terminals)	2 x binding post	wire terminals	wire terminals
Controls	70/100 V voltage tap selector 8ohm - 8/15/30W power tap selector	70/100 V voltage tap selector 8ohm - 12/25/50W power tap selector	70/100 V voltage tap selector 8ohm - 25/50/100W power tap selector	8/15W power tap selector	2.5/5/10W power tap selector
Frequency response (-10 dB)	100-20k Hz	80-20k Hz	75-20k Hz	85-20k Hz	95-20k Hz
SPL (1W/1m, 1 kHz)	87 dB	90 dB	91 dB	90 dB	91 dB
Dimensions (mm)	12.5x19.3x12	17x28x17.5	25x42x25	17x24x8	Ø 190 - H 8
Weight (kg)	1.3	2.3	4.6	1,7	1,3
Mounting Hole (mm)	-	-	-	143x216	Ø 170
Colour	black X30TB white X30TW	black X50TB white X50TW	black X80TB white X80TW	-	-

ACCESSORIES

AMP120XL



- Constant voltage output power amplifier
- 4 MIC/LINE inputs + 3 AUX inputs
- Dual band tone control
- Priority function on MIC 1
- 120W rated output power
- 100V/70V/50V/ 4 ohm output
- 24V emergency power supply
- 19" rack mount kit included

AUP240R



- Constant voltage output power amplifier
- 1 MIC input + 1 LINE input + 1 TELEPHONE input
- 2-band EQ
- 240W rated output power
- 100V/70V/25V/16ohm/8ohm/4ohm output
- 24V emergency power supply
- 19" rack mountable

TRL



- Constant voltage (70V/100V) transformers
- Allow installation of constant voltage speakers in applications using constant voltage diffusion
- To be inserted between the amplifier outputs and the speaker line
- 19" rack mountable
- TRL150.4: four auto-transformers with 150 W input power each
- TRL300.2: two auto-transformers with 300 W input power each
- T2W1000: two auto-transformers with 1000 W input power each

ASO25



- 2-way stereo + mono low analog crossover
- Designed to optimize the performance of systems combining subwoofers and satellites
- Two inputs, two HIGH outputs, two LOW outputs, one MONO LOW output
- 24dB/oct. Linkwitz-Riley crossover with internally selectable frequency (80 Hz, 125 Hz, or 160 Hz)
- Subsonic filter, adjustable limiter, delay lines (0, 300 μ s, 600 μ s)
- 10 kHz "air" shelving tone control internally selectable
- Optional board for user-customized parametric filters.

PORTABLE SOUND SYSTEMS FREEPASS



FREEPASS6



FREEPASS6 is a **combo sound system** including a speaker, an amplifier and a 5-input mixer in an **ultra-compact and portable package**.

The **2-way speaker system** includes a **1" neodymium tweeter** and a **6.5" woofer**, able to provide an **extended** and detailed frequency response.

The built-in **amplifier** delivers to the speakers **75W of RMS power**. In addition, it can power an external speaker with another 75W thru the **POWER OUT connector**.

The system includes a **high-quality 5-input mixer** featuring 2-band CHANNEL EQ, 3-band MAIN MIX EQ, MONITOR output and a sophisticated **DIGITAL EFFECT** with 16 presets.

FREEPASS6 is hosted in a compact and rugged MDF cabinet finished with a durable anti-scratch black paint, which provides **maximum portability** and **road-proof operation**. Two M4 threaded inserts on the bottom and on the side of the cabinet allow the **included metal adapter** to be used for installing the system **on a standard speaker stand**, both in vertical and horizontal position.

FREEPASS6 is a **cost-effective, ultra-compact, all-in-one system** for **mobile musicians, vocal P.A. and indoor sporting, religious or business events**. The 5 inputs available in the built-in mixer allows a variety of signals to be connected, while the possibility to double the power **connecting a second speaker** allows the system to be used also in outdoor application where a **higher SPL** is required.

FREEPASS6 è un **sistema audio combinato** formato da un diffusore, un amplificatore ed un mixer da 5 canali in un **formato ultra compatto e portatile**.

Il **diffusore a due vie** utilizza un **tweeter al neodimio da 1"** ed un **woofer da 6.5"**, in grado di fornire una risposta in frequenza **estesa** e dettagliata.

L'**amplificatore** incorporato eroga agli altoparlanti **75 W di potenza RMS** e, grazie ad un **connettore POWER OUT**, è in grado di alimentare anche un secondo diffusore.

Il sistema include un **mixer a 5 canali di elevata qualità**, con EQ di canale a 2 bande, EQ per il MAIN MIX a 3 bande, uscita MONITOR e un sofisticato **EFFETTO DIGITALE** a 16 presets.

FREEPASS6 è alloggiato in un cabinet in MDF robusto e compatto, rifinito con una resistente vernice anti-graffio, che assicura la **massima portabilità e protezione** per ogni tipo di utilizzo. Due inserti filettati M4 sul fondo e su un fianco del cabinet consentono l'applicazione di un **adattatore metallico fornito di serie** per l'installazione del sistema su **supporto standard per diffusori**, in posizione sia verticale che orizzontale.

FREEPASS6 è un **sistema di completo ultra-compatto ed estremamente conveniente** per **musicisti live, diffusione vocale ed eventi al chiuso di tipo religioso, sportivo o commerciale**. I 5 ingressi disponibili nel mixer incorporato consentono di collegare una grande varietà di segnali, mentre la possibilità di raddoppiare la potenza **collegando un secondo diffusore** rende possibile utilizzare il sistema anche in applicazione all'aperto in cui è richiesta una **maggiore pressione sonora**.

FREEPASS6

NEW

- All-in-one portable sound system
- 2-way speaker system with 1" neodymium tweeter and 6.5" woofer for an accurate sound reproduction
- 150W peak power - 75W RMS built-in amplifier
- 75W RMS power output for an external speaker
- Built-in 5-input mixer with PHANTOM POWER
- 2 MONO MIC/LINE channels + 1 STEREO LINE channel with 2-band EQ

- MONITOR output
- DIGITAL EFFECT PROCESSOR with 16 presets
- MAIN MIX 3-band EQ
- Compact MDF cabinet with durable black anti-scratch painting and metal grille
- 4 x M4 threaded inserts for applying a speaker stand adapter (included)

FREEPASS



Technical Specifications

MIXER Section

MONO inputs	(3) MIC/LINE IN (COMBO)
STEREO inputs	(1) STEREO LINE IN (2xRCA)
Input EQ	HIGH: +/-15dB 10 kHz, LOW: +/- 15dB 100 Hz
PHANTOM power	+ 48 V (CH 1-3)
Internal Effect	ECHO (CH 1-4)
Outputs	16-PRESETS 24bit DIGITAL MULTIEFFECT
Main EQ	MONITOR OUT (1xJACK), REC OUT (2xRCA), SPEAKER OUT (1xJACK)
Metering	3-band EQ (HIGH, MID & LOW)

AMPLIFIER Section

Continuous Power	75 W (1 KHz, 1% THD)
Maximum Power	150 W (1 KHz, 1% THD)
Power Output	75 W @ 8 ohm

LOUDSPEAKER Section

Loudspeaker System	2-way system vented
High Frequency Device	1" neodymium tweeter
Low Frequency Device	6.5" woofer with 1" VC
Angular Coverage	90° H x 60° V
Impedance	4 ohm
Frequency Response	75 Hz - 20 kHz (-6 dB)
SPL 1W 1m	88 dB
Construction	MDF with black anti-scratch paint, metal grille
Pole Holder	4xM4 threaded inserts (bottom + side) for optional pole adapter

GENERAL Specifications

Dimensions	20x32x22 cm
Weight	6.2 kg / 13.67 lbs.
Power Supply	230/115 VAC (switchable) 50/60 Hz
Power consumption	180 W



PORTABLE SOUND SYSTEMS FREEPASS



FREEPASS10USB

FREEPASS8USB and **FREEPASS10USB** are **all-in-one sound systems** combining in an **ultra-portable, easy-to-use package** everything musicians and other PA users need for playing: a full-featured **mixer**, a versatile **MP3 player**, a powerful **CLASS D amplifier**, two full-range **speakers** and high-quality connection **cables**.

FREEPASS8USB and **FREEPASS10USB** are complete PA systems that, even if compact in size, quick to setup and simple to use, are packed with a **full set of features** and delivers an unexpected **sound quality** for this kind of systems. The **8-channel, 2x250W powered mixer** fits perfectly in one of the two speakers and it can be used as it is or detached with a simple operation. The second speaker includes a convenient and large compartment that can contain all the connection cables and other accessories. Two **high-quality PROEL speaker cables** with ultra-durable 1/4" metal jack connectors are also provided.

The two speakers, hosted in lightweight PP cabinets, feature a **horn-loaded 1.35" VC compression driver** and a **8" or 10" woofer**, able to provide a clean and powerful **full-range sound** with high SPL. A large handle on top of the cabinet and a pole holder on the bottom make transport and installation quick and easy.

Thanks to their versatility and portability, **FREEPASS8USB** and **FREEPASS10USB** can be used in a variety of applications, such as **live gigs** for singers or small bands, **education and sporting events, seminars and presentations**.

FREEPASS8USB e **FREEPASS10USB** sono **sistemi audio completi** che uniscono, in un **formato estremamente compatto e portatile**, tutto ciò di cui il musicista o l'utente necessitano: un **mixer** completo, un versatile **lettore MP3**, un potente **amplificatore**, due **diffusori** a due vie e i **cavi** di collegamento.

Benché di dimensioni ultra-compatte, veloce da allestire e facile da utilizzare, i sistemi **FREEPASS8USB** e **FREEPASS10USB** offrono un **set completo di funzioni** ed una **qualità sonora** sorprendente per sistemi audio di questo tipo. Il **mixer 8 canali, amplificato con 2x250 watt** e dotato di connettore **USB** per la riproduzione di files MP3, è alloggiato nel vano posteriore di uno dei due diffusori e può essere facilmente rimosso per un classico utilizzo desktop. L'altro diffusore include un capiente scomparto che può contenere i cavi di connessione ad altri accessori. I due **cavi PROEL ad alta qualità** forniti con il sistema sono dotati di robusti connettori a jack in metallo.

I diffusori in polipropilene a due vie con **driver a compressione da 1,35" caricato a tromba** e **woofer da 8" o da 10"** offrono un **suono full-range** definito e nitido oltre ad un elevato livello di pressione sonora. Una comoda maniglia sul lato superiore e l'alloggiamento per il supporto agevolano trasporto ed installazione.

Grazie alla loro portabilità e versatilità **FREEPASS8USB** e **FREEPASS10USB** possono essere utilizzati in una moltitudine di applicazioni, come **esibizioni dal vivo** di cantanti o piccoli gruppi, **eventi sportivi o didattici e presentazioni** di vario genere.

FREEPASS8USB **FREEPASS10USB**

NEW

- All-in-one systems with two speakers and detachable power mixer
- 4 MIC/LINE MONO inputs with phantom power
- 2 LINE STEREO inputs
- 2-band channel EQ
- ECHO / DELAY effect
- MUSIC/SPEECH main EQ
- Built-in MP3 player with USB port
- 7-LED VU-METER
- 2-TRACK and MONITOR out
- Dual 250W CLASS D power amplifier with SMPS
- 2-way speakers with 1" horn-loaded compression driver and 8" or 10" woofer
- 2 x 7.5mt. PROEL power cables with metal 1/4" JACK
- Convenient accessory compartment



FREEPASS8USB

FREEPASS



Technical Specifications

FREEPASS8USB		FREEPASS10USB	
MIXER Section			
MONO inputs		(4) MIC IN (XLR-F) + LINE IN (JACK)	
STEREO inputs		(2) LINE IN (2xJACK / 2xRCA)	
Input EQ		HIGH: +/-15dB 10 kHz, LOW: +/- 15dB 100 Hz	
PHANTOM power		+ 15 V (CH 1-4)	
Internal Effect		ECHO (CH 1-4)	
Outputs		MONITOR OUT (2xJACK), SUB OUT (1xJACK), SPEAKER OUT (2xJACK)	
Main EQ		VOICE / MUSIC selector	
Metering		2x6-LED VU-METER	
MULTIMEDIA Section			
Player Type		USB	
Compatible File Formats		MP3	
Control Interface		Control buttons	
AMPLIFIER Section			
Amplifier Type		Class D with SMPS (Switch Mode Power Supply)	
Maxium Output Power		2 x 250 W @ 4 ohm (1 KHz, 1% THD)	
Frequency Response		MUSIC: 20 Hz - 20 KHz, VOICE: 80 Hz - 20 KHz	
LOUDSPEAKER Section			
Loudspeaker System		2-way system vented	
High Frequency Device		1" compression driver 1.35" VC - horn loaded	
Low Frequency Device		8" woofer with 2" VC	10" woofer with 2" VC
Angular Coverage		90° H x 60° V	
Impedance		4 ohm	
Frequency Response		65 Hz - 20 kHz (-10 dB)	
SPL 1W 1m		95 dB	
Construction		Black polypropylene, metal grille	
Handles		1 top	
Pole Holder		1 bottom	
GENERAL Specifications			
Dimensions		Speaker: 45x27.5x25 cm / Mixer: 32x18x9 cm	Speaker: 50x32x29 cm / Mixer: 32x18x9 cm
Weight		System: 20 kg / Speaker: 8.6 kg / Mixer: 2.4 kg	System: 25 kg / Speaker: 10.6 kg / Mixer: 2.4 kg
Power Supply		230 VAC / 120 VAC (switchable) 50/60 Hz	
Power consumption		400 W	



PORTABLE SOUND SYSTEMS FREEPACK



FREEPACK812

FREEPACK65 and FREEPACK812 are **all-in-one, luggage-style sound systems** combining in an **ultra-portable, easy-to-use package** everything musicians and other PA users need for playing: a full-featured **mixer with digital effect and MP3 player**, a powerful **CLASS D amplifier**, two full-range **speakers** and high-quality connection **cables**.

FREEPACK are complete PA systems that, even if compact in size, quick to setup and simple to use, are packed with a **full set of features** and deliver an unexpected sound quality for this kind of systems. The **fully featured powered mixer**, including a **MP3 player with BLUETOOTH connection**, is coupled perfectly with the two speakers in a stylish luggage-style package, making transport and installation quick and easy. A convenient and large compartment on the back of the mixer can contain all the connection cables and other accessories. Two **high-quality PROEL speaker cables** with ultra-durable 1/4" metal jack connectors are also provided.

The two speakers, hosted in lightweight PP cabinets, feature selected transducers and carefully designed crossover filters, which can provide a clean and defined sound together with an **extended response and a high sound pressure**.

Thanks to its versatility and portability, **FREEPACK65 and FREEPACK812** can be used in a variety of applications, such as **live gigs** for singers or small bands, **education and sporting events, seminars and presentations**.

FREEPACK65 e FREEPACK812 sono **sistemi audio completi in stile "valigetta"** che uniscono in un **formato estremamente compatto e portatile**, tutto ciò di cui il musicista o l'utente necessitano: un **mixer completo con effetti digitali e lettore MP3**, un potente **amplificatore**, due **diffusori** e i **cavi** di collegamento.

Benché di dimensioni compatte, veloce da allestire e facile da utilizzare, i sistemi **FREEPACK** offrono un **set completo di funzioni** ed una qualità sonora sorprendente per sistemi audio di questo tipo. Il **mixer amplificato** con un set completo di funzioni e **lettore MP3 con connessione BLUETOOTH** è abbinato ad una coppia di diffusori integrabili con il mixer stesso in un unica valigetta, il che rende semplicissimo il trasporto ed il montaggio. Il mixer include anche un capiente scomparto che può contenere i cavi di connessione ad altri accessori. I due **cavi PROEL ad alta qualità** forniti con il sistema sono dotati di robusti connettori a jack in metallo.

I diffusori, alloggiati in cabinet leggeri in polipropilene, utilizzano altoparlanti selezionati e filtri crossover accuratamente progettati, in grado di offrire una riproduzione definita e nitida oltre ad una **risposta in frequenza estesa e lineare** e ad una **elevata pressione sonora**.

Grazie alla loro portabilità e versatilità **FREEPACK65 e FREEPACK812** possono essere utilizzati in una grande varietà di applicazioni, come **esibizioni dal vivo** di cantanti o piccoli gruppi, **eventi sportivi o didattici** e **presentazioni di vario genere**.

FREEPACK812



NEW

- All-in-one luggage-style sound system with two speakers, power mixer and media player
- 6 MIC/LINE MONO inputs
- 2 LINE STEREO inputs
- 2-band channel EQ
- 16-preset DIGITAL MULTIEFFECT
- MP3 player with USB/SD slot, BLUETOOTH and LCD display
- 2x10-LED VU-METER
- AMP INSERTS and SUB OUT
- Dual 500W CLASS D power amplifier with SMPS
- 2-way speakers with 1" horn-loaded compression driver and 8x12" elliptical woofer
- 2 x 7.5mt. PROEL power cables with metal 1/4" JACK
- Convenient accessory compartment

FREEPACK65



- All-in-one luggage-style sound system with two speakers, power mixer and media player
- 7 MIC/LINE MONO inputs
- 1 LINE STEREO input
- 2-band channel EQ
- 16-preset DIGITAL MULTIEFFECT
- MP3 player with USB/SD slot and LCD display
- 2x9-LED VU-METER
- 2-TRACK and PRE-AMP out
- Dual 250W CLASS D power amplifier with SMPS
- 3-way speakers with 1" compression driver, 2x3" midrange and 2x6.5" woofer
- 2 x 7.5mt. PROEL power cables with metal 1/4" JACK
- Convenient accessory compartment

FREEPACK



FREEPACK65

Technical Specifications

	FREEPACK65	FREEPACK812
MIXER Section		
MONO inputs	(7) MIC IN + LINE IN (COMBO)	(6) MIC IN + LINE IN (COMBO)
STEREO inputs	(1) LINE IN (mini-jack / 2xRCA)	(2) LINE IN (JACK or ST. JACK + 2xRCA)
Input EQ	HIGH: +/- 15dB 10 kHz, LOW: +/- 15dB 100 Hz	HIGH: +/- 12dB 10 kHz, LOW: +/- 12dB 100 Hz
Internal Effect	16 presets DIGITAL multieffect with 1 parameter	16 presets DIGITAL multieffect with 1 parameter
Outputs	PRE-AMP OUT (2xJACK), REC OUT (2xRCA) SPEAKER OUT (4xJACK MAIN + MON)	PRE-AMP OUT (2xJACK), REC OUT (2xRCA) SPEAKER OUT (4xJACK MAIN + MON)
Metering	2x6-LED VU-METER	2x10-LED VU-METER
MULTIMEDIA Section		
Player Type	USB / SD memory slot	USB / SD memory slot/BLUETOOTH
Compatible File Formats	MP3 / WAVE	MP3
Control Interface	LCD display	LCD display
AMPLIFIER Section		
Amplifier Type	Class D with SMPS (Switch Mode Power Supply)	Class D with SMPS (Switch Mode Power Supply)
Maximum Output Power	2 x 250 W @ 4 ohm (1 KHz, 1% THD)	2 x 500 W @ 4 ohm (1 KHz, 1% THD)
Frequency Response	20 Hz - 20 KHz	20 Hz - 20 KHz
LOUDSPEAKER Section		
Loudspeaker System	3-way system vented	2-way system vented
High Frequency Device	1" dome tweeter 1" VC	1" horn-loaded compression driver
Mid Frequency Device	2x3" midrange with 0.75" VC	
Low Frequency Device	2x6.5" woofer with 1.35" VC	8x12" elliptical woofer
Angular Coverage	100° H x 80° V	90° H x 60° V
Impedance	8 ohm	8 ohm
Frequency Response	75 Hz - 20 kHz (-10 dB)	50 Hz - 20 kHz (-10 dB)
SPL 1W 1m	90 dB	96 dB
Construction	Black polypropylene, metal grille	Black polypropylene, metal grille
Handles	1 top	1 top
Pole Holder	1 bottom	1 bottom
GENERAL Specifications		
Dimensions	System: 73x21.5x55.5 cm / Speaker: 27.5x21.5x53.5 cm Mixer: 36x21.5x55.5 cm	System: 81x24.5x61 cm / Speaker: 31x24.5x57.5 cm Mixer: 41x24.5x61 cm
Weight	System: 22.5 kg / Speaker: 8 kg / Mixer: 6.5 kg	System: 28 kg / Speaker: 9 kg / Mixer: 10 kg
Power Supply	230 VAC / 120 VAC (switchable) 50/60 Hz	230 VAC / 120 VAC (switchable) 50/60 Hz
Power consumption	300 W	700 W

PORTABLE SOUND SYSTEMS FREE



PROEL **FREE** systems gives you the freedom to perform your music or play your sound **anywhere** without worrying about where to plug the power cord, how to connect your MP3 player or how to set your microphone.

FREE10LT and **FREE8LT** are **battery powered combo sound systems** with a full set of features and the sound you don't expect from this kind of products. They include a versatile **MP3 player with USB port, SD slot and BLUETOOTH connection**, featuring a large LCD and remote control.

FREE10LT is hosted in a compact and road-proof PP cabinet that provides **maximum portability and protection**, while **FREE8LT** features a **rugged MDF cabinet** with black PVC finishing. Both models includes a built-in **retractable handle** and **roller wheels**, allowing the systems to be taken everywhere. They are also fitted with an adapter for standard speaker stand.

With a **horn-loaded compression driver** coupled to a 10" woofer and a **120W** power amplifier, **FREE10LT** is an **all-in-one multi-purpose mobile system for indoor and outdoor applications** requiring **high quality sound and advanced features**. The **WIRELESS** module included provides a clean and hassle-free wireless connection with the included handheld microphones for the maximum freedom of movement. An **additional wireless module**, with the choice of handheld (**FREE10LTKITH**) or bodypack transmitter with headset microphone (**FREE10LTKITH**), is available as optional. The **two rechargeable 12V batteries** provide up to 3-4 hours of mains-free continuous operation.

With his 2-way configuration featuring a **high-efficiency 3" tweeter**, **FREE8LT** is the **perfect combo system for mobile musicians, vocal P.A.** and a **wide range of indoor or outdoor events**. It provides maximum portability, quality sound and good coverage in an **extremely versatile and affordable package**. The **rechargeable 12V battery** provides up to 2-3 hours of mains-free continuous operation.

I **sistemi FREE** di PROEL vi offrono la possibilità di suonare la vostra musica o amplificare il vostro suono **in libertà**, senza preoccuparvi di dove collegare il cavo di alimentazione, di come collegare il lettore MP3 o di come regolare il microfono.

FREE10LT e **FREE8LT** sono **sistemi di amplificazione combinati alimentati a batteria**, con un set completo di funzioni ed un suono inaspettato per questo tipo di prodotto. Includono un **lettore MP3 con porta USB, slot SD e connessione BLUETOOTH**, dotato di ampio display e controllo remoto.

FREE10LT è alloggiato in un cabinet in PP compatto e resistente, che fornisce la **massima portabilità e protezione**, mentre il cabinet di **FREE8LT** è costruito in **robusto MDF** rifinito con PVC nero. Entrambi i modelli includono una **maniglia telescopica** e **due ruote** per la massima libertà di movimento e sono dotati di **flangia** per l'installazione su supporto standard per diffusori.

Con un **driver a compressione** accoppiato ad un woofer da 10" ed un **amplificatore da 120W**, **FREE10** rappresenta il perfetto sistema multiuso all-in-one per **applicazioni indoor e outdoor**, in cui sono richiesti un **suono di qualità e funzionalità avanzate**. Il **modulo WIRELESS** incluso fornisce un collegamento pulito e senza problemi con il microfono a mano fornito di serie, per la massima libertà di movimento. Un **modulo wireless supplementare** con la scelta di microfono a mano (**FREE10LTKITH**) o bodypack con microfono headset (**FREE10LTKITH**) è disponibile come optional. Le due batterie ricaricabili da 12V forniscono fino a 3-4 ore di operatività senza collegamento alla rete.

Con la sua configurazione a 2 vie che utilizza un tweeter da 3" ad elevata efficienza, **FREE8LT** è il **sistema combinato perfetto per musicisti on-the-road, diffusione vocale ed una vasta gamma di eventi al chiuso o all'aperto**. Offre la massima portabilità, un suono di qualità ed una buona copertura in un formato **estremamente versatile e conveniente**. La batteria ricaricabile da 12V fornisce fino a 2-3 ore di funzionamento senza alimentazione di rete.

FREE8LT



NEW

- All-in-one battery powered sound system
- Built-in MEDIA PLAYER with USB port, SD slot and BLUETOOTH audio connection, LCD display and IR remote control
- 2 MIC/LINE + 1 STEREO LINE inputs
- HIGH + LOW EQ controls
- Built-in EFFECT
- 20W RMS built-in amplifier
- 3" tweeter and 8" woofer
- 3/4 hours working time
- Compact MDF cabinet with durable PVC coating and ABS + STEEL protection corners.
- Adapter for standard speaker stand
- Two wheels, one retractable handle and one fixed handle for maximum portability

FREE10LT



NEW

- All-in-one battery powered sound system
- License-free UHF PLL wireless module (863-865 MHz) with IR SYNC and handheld microphone
- Built-in MEDIA PLAYER with USB port, SD slot and BLUETOOTH audio connection, LCD display and IR remote control
- 2 MIC/LINE + 1 STEREO LINE inputs, 1 LINE output
- HIGH + LOW EQ controls
- Built-in EFFECT
- 120W built-in amplifier
- 1" horn loaded compression driver and 10" woofer
- 3/4 hours working time
- Compact and light-weight PP cabinet for maximum portability, with two wheels and one retractable handle, adapter for standard speaker stand
- Compartment for two wireless microphones

FREE



Technical Specifications

	FREE10LT	FREE8LT
MIXER Section		
MONO inputs	1 x MIC IN (COMBO)	1 x MIC IN (COMBO) + 1 x INST/MIC IN (JACK)
STEREO inputs	1 x LINE IN (2xRCA + mini-jack)	1 x LINE IN (2xRCA + mini-jack)
Internal Effect	ECHO	ECHO
Outputs	MONO LINE OUT (JACK)	
Main EQ	2-band EQ (HIGH + LOW)	2-band EQ (HIGH + LOW)
WIRELESS section		
Wireless Receiver	FR2R	
Handheld Transmitter	FR2H	
Bodypack Transmitter	FR2B (optional)	
Headset microphone	HS2 (optional)	
Modulation Mode	FM	
Frequency Range	UHF 863-865MHz	
Audio bandwidth	60 Hz - 16 KHz	
S/N ratio	>100dB	
HANDHELD RF output	10mW	
BODYPACK RF output	10mW	
THD	<1%	
MULTIMEDIA Section		
Player Type	USB / SD / BLUETOOTH player	USB / SD / BLUETOOTH player
Compatible File Formats	MP3	MP3
Control Interface	LCD display, REMOTE control	LCD display, REMOTE control
AMPLIFIER Section		
Continuous Power	80W RMS (DC), 120W RMS (AC)	20W RMS
LOUDSPEAKER Section		
Loudspeaker System	2-way system	2-way system
High Frequency Device	1" horn loaded compression driver	3" tweeter
Low Frequency Device	10" woofer	8" woofer
Frequency Response	55Hz - 18KHz	65Hz - 15KHz, -3dB
Construction	Polypropylene cabinet, metal grille, 2 wheels	MDF with black PVC finishing, 2 wheels
Handles	1 rear retractable	1 top, 1 rear retractable
Pole Holder	1 bottom	1 bottom
GENERAL Specifications		
Dimensions	36x56x31 cm	46.5x51x37.5 cm
Weight	19 kg / 41.9 lbs	12 kg / 26.45 lbs
Recharge Battery	2 x 12V / 5A	1 x 12V / 5A
Battery Recharging Time	10-12 hours	7-10 hours
Battery Working Time	3-4 hours	2-3 hours
Power Supply	230/115 VAC (switchable) 50/60 Hz	230/115 VAC (switchable) 50/60 Hz



CONDENSER MICROPHONES

Thanks to the high standards reached by acoustic engineering and electronic technology applied to audio reproduction, sound reinforcement systems nowadays can offer high fidelity as well as top quality performance. The use of **condenser microphones** becomes more and more widespread as, in most cases, they are the **ideal solution for audio acquisition**.

Such an evolution in this field has created new condenser microphone user profiles, featuring very similar choice criteria. At the top of the list of the indispensable features we find **transparency, durability** and **high quality/price ratio**, the very elements at the base of our condenser microphone design, meant to meet either the needs of professional stage use or of home recording.

Grazie agli altissimi livelli raggiunti dall'ingegneria acustica e dalla tecnologia elettronica nel campo della riproduzione audio, oggi gli impianti usati per l'amplificazione sono arrivati ad offrire prestazioni di grande fedeltà e qualità. L'utilizzo di **microfoni a condensatore** è sempre più diffuso in ambito musicale in quanto rappresentano spesso la **soluzione ideale per la ripresa sonora**.

Una tale evoluzione in questo campo ha generato nuovi profili tra gli utenti dei microfoni a condensatore, caratterizzati da criteri di scelta molto simili. Tra questi criteri troviamo **trasparenza, robustezza** ed **elevato rapporto qualità/prezzo**, tre caratteristiche alla base della progettazione dei microfoni a condensatore PROEL, ideali sia per uso live che per la registrazione.



LDF410

- 1" diaphragm, externally polarized condenser capsule
- Cardioid polar pattern
- Compact design for stage use on drums, guitar cabinets, cymbals and brass instruments
- Excellent multi-use microphone for the recording studio



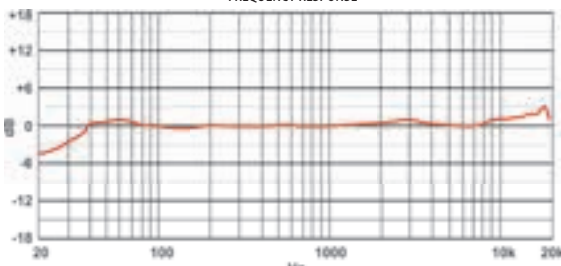
CM602

- Permanently polarized condenser capsule (back electret)
- Cardioid polar pattern
- Light and rugged construction
- High applicable SPL for close miking on stage
- Particularly suited as overhead for drums and percussion, for the hi-hat, wood wind and brass instruments, guitar

Technical Specifications

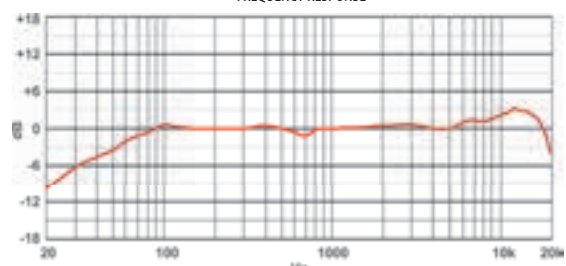
	LDF410	CARDIOD
Transducer type	single-diaphragm pressure gradient 34 mm	
Polar pattern	cardioid	
Frequency response (+/- 3dB)	20 - 20000 Hz	
Sensitivity 1 KHz	-38 dB +/- 2dB	
Maximum SPL for 1% THD	130 dB	
Equivalent noise Level	20 dB (A weighted)	
S/N ratio	70 dB	
Impedance	200 Ohm	
Recommended Load Impedance	1000 Ohm	
Powering	+ 48 vdc Phantom	
Connector	3 pin Male XLR	
Weight	224 g	
Dimensions	H.133mm x Ø 50,2 mm	

FREQUENCY RESPONSE



	CM602	UNI-DIRECTIONAL
Transducer type	back electret condenser	
Polar pattern	Uni-directional	
Frequency response (+/- 3dB)	50 - 18000 Hz	
Sensitivity 1 KHz	-45 dB +/- 3dB	
Maximum SPL for 1% THD	130 dB	
Equivalent noise Level	<22 dB (A weighted)	
S/N ratio	>70 dB	
Impedance	250 Ohm	
Recommended Load Impedance	1000 Ohm	
Powering	+ 48 vdc Phantom	
Connector	3 pin Male XLR	
Weight	240 g	
Dimensions	H.135 mm x Ø23 mm	

FREQUENCY RESPONSE



CONDENSER MICROPHONES



LDU147



- 1" diaphragm externally polarized condenser capsule
- Cardioid polar pattern
- FET output stage
- Internally selectable 100 Hz, -6 dB/oct. low-cut filter
- Adjustable metal suspension included
- For general use in home-studio applications



LDF320



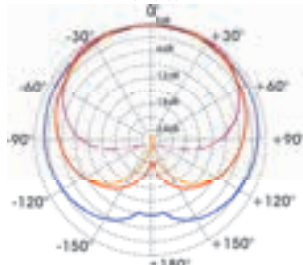
- Permanently polarized condenser microphone
- Cardioid polar pattern
- High gain with clear and natural sound
- Light-weight and rugged construction
- Designed for overhead applications in churches and concert halls

Technical Specifications

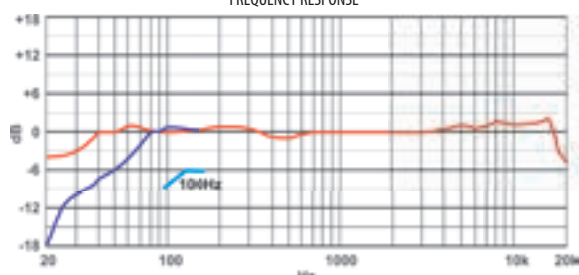
LDU147

Transducer type	single-diaphragm pressure gradient 32 mm
Polar pattern	cardioid
Frequency response (+/- 3 dB)	20 - 20000 Hz
Sensitivity 1 KHz	-40 dB +/- 2dB (14 mv/Pa)
Maximum SPL for 1% THD	140 dB
Filter	HPF -6dB at 100 Hz internally switchable
Equivalent noise Level	24 dB (A weighted)
S/N ratio	76 db
Impedance	200 Ohm
Recommended Load Impedance	1000 Ohm
Powering	+ 48 vdc Phantom
Connector	3 pin Male XLR
Weight	326 g
Dimensions	H.152 mm x Ø45 mm

CARDIOD



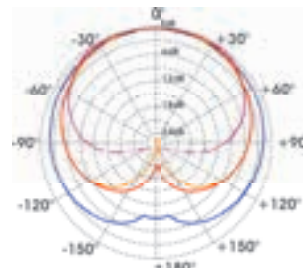
FREQUENCY RESPONSE



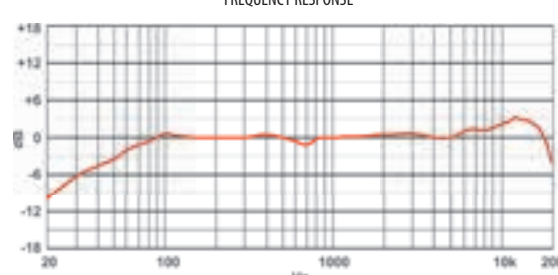
LDF147

Transducer type	Back electret condenser
Polar pattern	Cardioid
Frequency response (+/- 3 dB)	20 - 20000 Hz
Sensitivity 1 KHz	-40 dB
Maximum SPL for 1% THD	130 dB
S/N ratio	>65 db
Impedance	75 Ohm
Powering	+ 48 vdc Phantom; 1,5 Volt
Connector	3 pin Male XLR
Weight	110 g
Dimensions	H.170 mm x Ø30 mm

CARDIOD



FREQUENCY RESPONSE



DYNAMIC MICROPHONES

For many applications there is no substitute for the **extreme durability** and **high feedback rejection** of a **dynamic microphone**: the concert stage where sound levels can be extremely high, the karaoke bar where the person holding the mic often doesn't know that pointing it at the speakers can be a bad thing. Even in the recording studio, dynamic microphones are still found in front of guitar cabinets, inside bass drums and for close miking snare drums and tom-toms. PROEL has been keeping these applications in mind when designing this series of dynamic microphones.

In molti casi, non c'è sostituto alla **robustezza** e alla **flessibilità** di un **microfono dinamico**: il palco da concerto dove i livelli sonori possono essere elevatissimi, il karaoke dove il microfono spesso si trova in mano a persone inesperte. Anche negli studi di registrazione i microfoni dinamici si prestano ad essere impiegati in più occasioni: per la ripresa degli amplificatori per chitarra, della cassa della batteria o posizionati sul rullante o sui tom. Queste ultime sono le applicazioni cui si è principalmente pensato durante la fase di sviluppo di questi modelli.



DM580

- Professional microphone with Humbucking dynamic capsule
- High applicable SPL
- Cardioid polar pattern and reduced sensitivity for the use with high stage monitor levels
- Frequency response and natural bass roll-off for close vocal miking and reducing handling noise
- Particularly tailored for female vocal applications



DM585

- High-sensitivity, professional microphone with dynamic capsule
- High applicable SPL
- Cardioid polar pattern particularly resistant to feedback
- Particularly tailored for vocal applications



DM581USB

- XLR and USB connections
- Integrated A/D converter
- Metal body
- Driver installation not required
- Supplied with USB cable



USB CONNECTOR

NEW

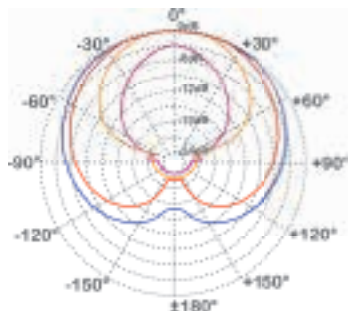


Technical Specifications

DM580

Transducer type	Moving Coil
Polar Pattern	Cardioid
Frequency response (±3dB)	50 Hz - 16 kHz
Sensitivity 1kHz	-52 dBv +/- 3dB
SPL for 1% THD	137dB
Impedance	400Ω
Recommended Load Impedance	1.5kΩ
Connector	3 Pin Male XLR
Weight	301 g
Dimensions	H.164 mm x Ø51 mm

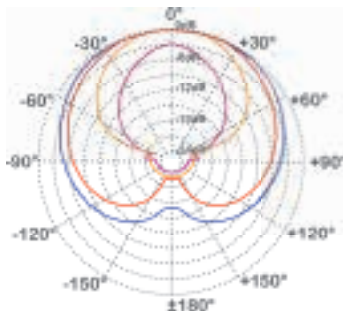
CARDIOD



DM585

Transducer type	Moving Coil
Polar Pattern	Cardioid
Frequency response (±3dB)	50 Hz - 17 kHz
Sensitivity 1kHz	-52 dBv +/- 3dB
SPL for 1% THD	135dB
Impedance	400 ohm
Connector	3 Pin Male XLR
Weight	320 g
Dimensions	H.180 mm x Ø44 mm

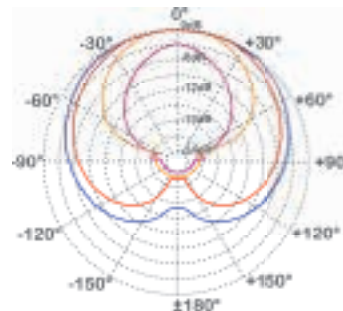
CARDIOD



DM581USB

Transducer type	Moving coil
Polar Pattern	Cardioid
Frequency response	60 - 14,000 Hz
Sensitivity 1kHz	-53 dBv +/- 3dB Analog output -28 dBv +/- 3dB Digital output
SPL for 1% THD	120dB
Impedance	600 ohm
A/D converter	16 bit at 48 KHz sampling rate
Connector	3 pin xlr
Connection standard	USB 1.1, USB 2.0
Weight	290 g
Dimension	H.185 mm x Ø 51 mm

CARDIOD



DYNAMIC MICROPHONES



DM580LC

- Dynamic Cardioid Microphone
- Particularly tailored for vocal applications
- Uniform cardioid pattern for isolating the main sound source and avoiding feedbacks
- Durable metal construction
- On/off switch for on-stage control
- Steel mesh ball grille with integral filter for reducing wind noise
- 4.5 mt XLR cable included



DM226

- Vocal microphone with dynamic capsule
- Cardioid polar pattern
- Exceptional transparency at mid-bass frequencies
- Flat and extended frequency response
- Ergonomic barrel design



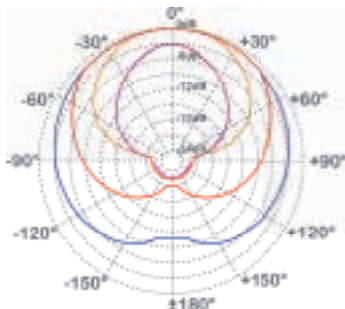
DM220

- Vocal microphone with dynamic capsule
- Cardioid polar pattern
- Flat and extended frequency response.
- ON/OFF switch
- Exceptional transparency at mid-bass frequencies,
- Ergonomic barrel design

Technical Specifications

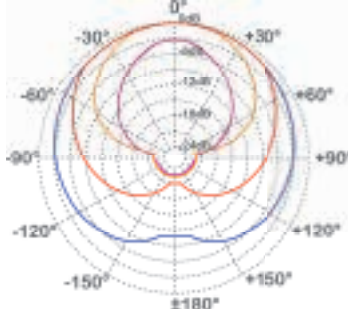
	DM580LC
Transducer type	Moving coil
Polar pattern	Cardioid
Frequency response (+/- 3 dB)	70 - 14000 Hz
Sensitivity 1 KHz	-55 dB +/- 3dB
Maximum SPL for 1% THD	135 dB
S/N ratio	74 dB
Impedance	600 Ohm
Connector	3 pin XLR male
Weight	275 g
Dimensions	H.195 mm x Ø50 mm

CARDIOD



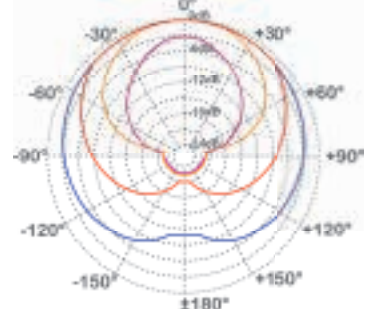
	DM226
Transducer type	Moving coil
Polar pattern	Cardioid
Frequency response (+/- 3 dB)	50 - 15000 Hz
Sensitivity 1 KHz	-53 dB +/- 3dB
Maximum SPL for 1% THD	135 dB
S/N ratio	74 dB
Impedance	600 Ohm
Recommended Load Impedance	1500 Ohm
Connector	3 pin XLR male
Weight	360 g
Dimensions	H.180 mm x Ø45 mm

CARDIOD



	DM220
Transducer type	Moving coil
Polar pattern	Cardioid
Frequency response (+/- 3 dB)	50 - 15000 Hz
Sensitivity 1 KHz	-53 dB +/- 3dB
Maximum SPL for 1% THD	135 dB
Impedance	600 Ohm
Recommended Load Impedance	1500 Ohm
Connector	3 pin XLR male
Weight	360 g
Dimensions	H.180 mm x Ø45 mm

CARDIOD



DYNAMIC MICROPHONES



DM55

- Satin chrome-plated die-cast casing for pure vintage look and feel.
- Cardioid polar pattern
- Frequency response tailored for vocals and instrumental music
- Internal shock mount for reduced handling noise
- On-off switch
- Self-tensioning swivel mount



DM800

- Dynamic Capsule
- Cardioid polar pattern
- Flat and extended frequency response
- ON/OFF switch
- Designed for optimal warmth and clarity
- Excellently accurate pickup pattern provides optimal gain before feedback.



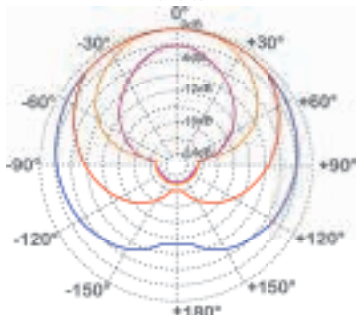
DM800KIT

- Kit made of three DM800 dynamic microphones
- Includes three microphone clamps
- Padded plastic case for storage and transport

Technical Specifications

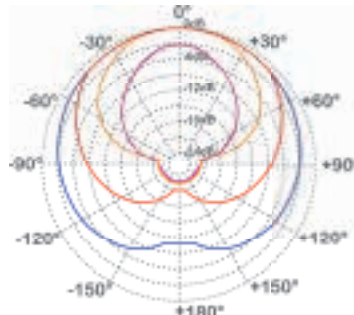
	DM55
Transducer type	Moving coil
Polar Pattern	Cardioid
Frequency response	50-16Khz
Sensitivity	-52,5 dB +/-3dB
Maximum SPL per 1%THD	130 db (at 1Khz ≤1% T.H.D)
S/N Ratio	>65 db
Impedance	300 Ohm
Recommended Load Impedance	1000 ohm
Connector	3 pin xlr male gold plated pins
Weight	485 g
Dimensions	H.185 mm x L.56 mm x W.67 mm

CARDIOD



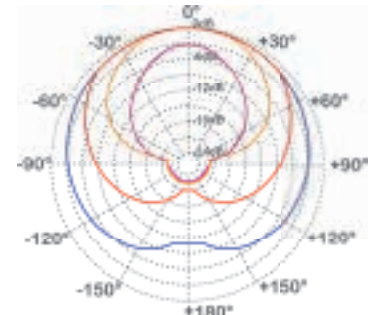
	DM800
Transducer type	Moving coil
Polar pattern	Cardioid
Frequency response (+/- 3 dB)	60 - 14000 Hz
Sensitivity 1 Khz	-53 dB +/-3dB
Maximum SPL for 1% THD	130 dB
Impedance	600 Ohm
Connector	3 pin XLR male
Weight	360 g
Dimensions	H.180 mm x Ø45 mm

CARDIOD



	DM800KIT
Transducer type	Moving coil
Polar pattern	Cardioid
Frequency response (+/- 3 dB)	60 - 14000 Hz
Sensitivity 1 Khz	-53 dB +/-3dB
Maximum SPL for 1% THD	130 dB
Impedance	600 Ohm
Connector	3 pin XLR male
Weight	360 g
Dimensions	H.180 mm x Ø45 mm

CARDIOD



DYNAMIC MICROPHONES



DM1

- Professional dynamic drum microphone
- Cardioid polar pattern for an accurate sound reproduction without unnecessary back ground noise
- Frequency response tailored for percussions, snare drums, toms and other instruments
- High gain before feedback
- Internal shock mount for reduced handling noise
- Compact design reduces stage clutter
- Hardened steel mesh grille



DM12

- Professional dynamic instrument microphone
- Super-cardioid polar pattern
- Fast transient response
- Low frequency extension
- Designed to be used with bass drums, bass guitar cabs, tubas and other low frequency instruments.
- Internal shock mount for reduced handling noise
- Durable metal construction with hardened steel mesh grille



Package for miking up a 8-piece drumset includes a convenient ABS carrying case

DMH8XL

- 8pcs drum kit
- Includes:

DM12	1pc
DM1	4pcs
CM602	3pcs
APM47	4pcs
- ABS carrying case

DMH5XL

- 5pcs drum kit
- Includes:

DM12	1pc
DM1	3pcs
CM602	1pcs
APM47	3pcs
- ABS carrying case

INSTALLATION MICROPHONES

PROEL installation microphones have been designed to meet the most common requirements in **installed sound applications**. The series includes a low-profile unidirectional microphone, a gooseneck microphone and a high-quality, battery-powered microphone with two polar patterns, which can also be used for interviews. The range is completed by two microphone bases.

*I microfoni di questa serie sono stati progettati per rispondere alle esigenze più comuni nel campo delle **installazioni**. La serie include un microfono unidirezionale a basso profilo, un microfono a collo d'oca ed infine un microfono di alta qualità dotato di 2 schemi polari con alimentazione a batteria, utilizzabile anche come microfono per interviste. Completano la gamma due basi microfoniche.*



MFC81

- Shotgun style condenser microphone
- Permanently polarized condenser capsule
- Switchable cardioid / uni-directional polar pattern
- Switchable sensitivity for shotgun or handheld applications (switch OFF/NORMAL/TELE)
- Phantom / battery powering
- Combines the advantages of a half shotgun with those of a handheld interview microphone



MIC62W

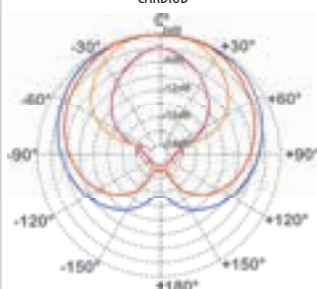
- Low-profile condenser microphone
- Permanently polarized condenser capsule
- Hemispherical directional polar pattern
- Integral phantom power adapter
- Recommended for conference tables, podiums, ticket windows and theater stages

Technical Specifications

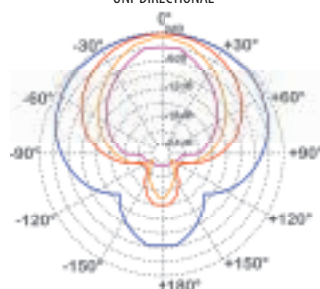
MFC81

Transducer type	Back electret
Polar Pattern	Cardioid / Uni-directional
Frequency response ($\pm 3\text{dB}$)	100 Hz - 20 kHz
Sensitivity 1kHz	-45 dBV $\pm 3\text{ dB}$; -38 dBV $\pm 3\text{ dB}$
SPL for 1% THD	130dB
Impedance	1000 ohm
Recommended Load Impedance	2300 ohm
Connector	3 Pin Male XLR
Weight	120 g
Dimensions	H. 360 mm x $\varnothing$ 21 mm

CARDIOD



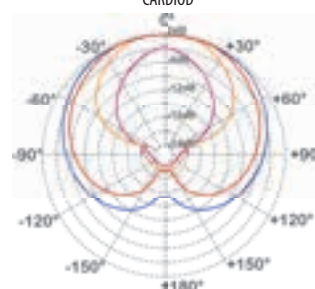
UNI-DIRECTIONAL



MIC62W

Element	Back electret condenser
Polar pattern	Cardioid
Frequency response	60 Hz - 16 KHz
Sensitivity	-48 dB $\pm 3\text{ dB}$ (0 dB = 1VPa @ 1 KHz)
Output impedance	600 Ω
Max input	SPL 105 dB (at 1 KHz < 1% THD)
S/N Ratio	67 dB (1 KHz @ 1 Pa)
Operate voltage	9V - 48V DC
Cable length	10 mt
Weight (Kg)	0,25 (without cable)
Dimension	H. 20 mm x L. 75 mm x W. 100 mm
Color	White

CARDIOD



INSTALLATION MICROPHONES



MGN24

- Gooseneck condenser microphone
- Cardioid polar pattern
- High-pass filter
- 50cm gooseneck with one flexible section
- Ideal applications include conference rooms, altars and podiums



BMG2

- Die-cast zinc base
- Uni-directional polar pattern
- Phantom power supply
- Flexible stem
- Ring light
- On/off switch

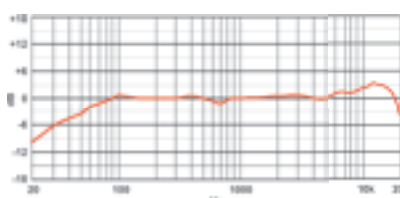


Technical Specifications

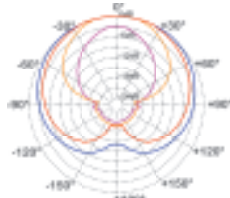
MGN24

Transducer type	Pre-Polarized back plate electret condenser
Polar pattern	Cardioid
Frequency response (+/- 3 dB)	50 - 16000 Hz
Sensitivity 1 KHz	-45 dB +/- 3dB
Maximum SPL for 1% THD	132 dB
Equivalent noise level	<18 dB (A weighted)
S/N ratio	> 60 dB
Impedance	250 Ohm
Recommended Load Imp.	1000 Ohm
Powering	+ 48 vdc Phantom
Connector	3 pin XLR male
Weight	125 g
Dimensions	H.499 mm x Ø21 mm

FREQUENCY RESPONSE



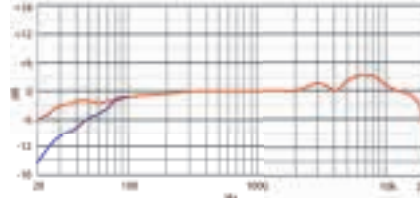
CARDIOD



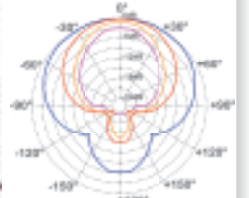
BMG2

Element back	Back electret condenser
Polar pattern	Uni-directional
Frequency response	40 Hz - 16 KHz
Sensitivity	-40 dB ± 3 dB (0 dB = 1VPa @ 1 KHz)
Output impedance	75Ω
Power supply	Phantom power 48 V DC/ DC3 V battery
Microphone length	445 mm.
Weight (Kg)	0,73
Base dimension	H.30 mm x L.140 mm x W.115mm
Colour	Black

FREQUENCY RESPONSE



UNI-DIRECTIONAL



BM103T



- Universal desktop console for gooseneck microphones.
- Scratch-proof plastic housing
- ON/OFF button
- Requires phantom power

- Can be used with any PROEL mixer or integrated amplifier
- XLR-3P input connector and standard XLR output connector

HEADSET & LAVALIER MICROPHONES

The progress in microphone technology has brought to a gradual reduction of transducer dimensions, thus microphones can now be so small that it is difficult to spot them. Our Lavalier and Headset Series mics are the ideal solution for use with either PROEL or any other manufacturer's wireless systems.

I progressi della tecnologia hanno permesso di ridurre sempre più le dimensioni dei trasduttori rendendo quasi invisibili i microfoni. La serie Lavalier ed Headset presenta caratteristiche che ne fanno la soluzione ideale per l'uso con sistemi wireless Proel e di altri costruttori.

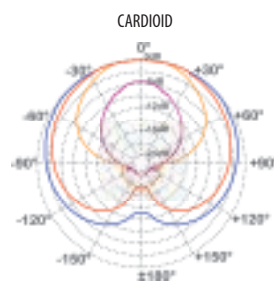
HCM10V2

- Permanently polarized condenser capsule
- Cardioid polar pattern
- 3 adaptors included (AD4SH-AD3SE-AD3AK)
- Replaceable cable
- Designed to be used by singers, actors and showmen in applications where the microphone must be 'invisible'



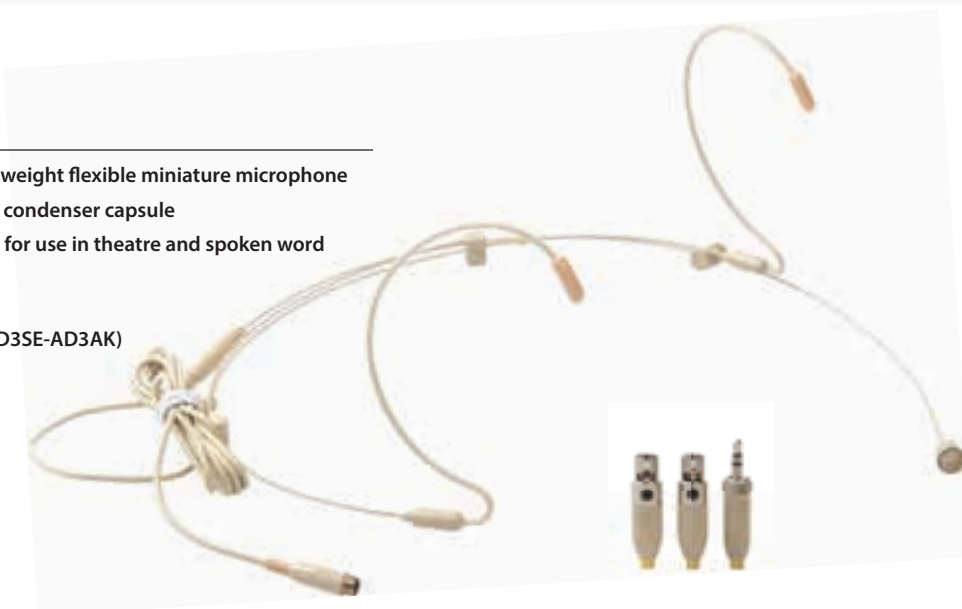
HCM10V2

Transducer type	Back electret condenser
Polar pattern	Cardioid
Frequency response	20-20Khz
Sensitivity	-35db+- 3db
Maximum SPL per 1%THD	130 db
Equivalent Noise Level	20db-A
Impedance	2000 Ohm
Recommended load impedance	2000 ohm
Powering	1,5 -10 V D.C
Connector	mini XLR 4-pin, mini JACK 3.5 mm, mini XLR 3-pin
Weight	25 g



HCM08PRO

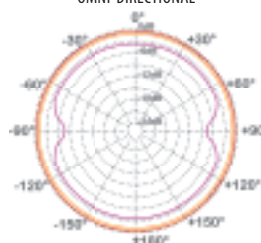
- Very small size and super light-weight flexible miniature microphone
- 3.5 mm permanently polarized condenser capsule
- Double vent protection system for use in theatre and spoken word applications
- Comfortable and secure fit
- 3 adaptors included(AD4SH-AD3SE-AD3AK)



HCM08PRO

Transducer type	Back electret condenser
Polar pattern	Omni-directional
Frequency response	20Hz- 20KHz
Sensitivity	-45dB± 3dB
Output impedance	1500Ω± 30%
Max Input SPL	130dB
S/N Ratio	>70dB
Power supply	1.5V-10V
Cable	Ø1.5*1.2M
Dimension	Ø3mm
Accessories	Metal Windscreen
Connectors(Changeable)	3.5mm plug · 3-pin mini XLR · 4-pin mini XLR
Weight	25 g

OMNI-DIRECTIONAL



HEADSET & LAVALIER MICROPHONES

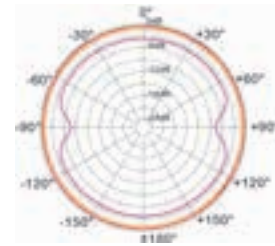
HCM23

- Very small size and super light-weight flexible miniature microphone
- 5 mm permanently polarized condenser capsule
- omni-directional polar pattern
- Double vent protection system for use in theatre and spoken word applications
- Comfortable and secure fit with fixed bi-aural headband
- Anti-pop screen
- Available either with 3.5 mm jack (code HCM23SE), 4-pin mini-XLR (code HCM23) or with 3-pin mini-XLR (code HCM23AK)



	HCM23
Transducer type	Back electret condenser
Polar pattern	Omnidirectional
Frequency response	20Hz- 20KHz
Sensitivity	-45dB± 3dB
Output impedance	1500Ω± 30%
Max.Input SPL	130dB
Power supply	1.5V-10V
Cable	Ø1.5*1.2M
Dimension	Ø5mm
Available Connectors	3.5mm plug (HCM23SE)-3-pin mini XLR (HCM23AK)-4-pin mini XLR (HCM23)
Weight	25 g

OMNI-DIRECTIONAL



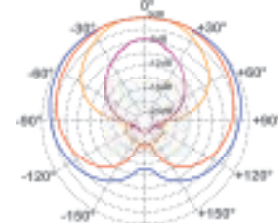
HCM38

- Light but sturdy high-quality condenser headset microphone
- Permanently polarized condenser capsule
- Cardioid polar pattern
- Perspiration-resistant
- Ideal for singers, MCs, and aerobics instructors
- Available either with 3.5 mm jack (code HCM38SE) or with 4-pin mini-XLR (code HCM38)



	HCM08PRO
Transducer type	Back electret condenser
Polar Pattern	Cardioid
Frequency response	80-14Khz
Sensitivity	-65db+- 3db
Maximum SPL per 1%THD	135 db
Equivalent Noise Level	18db-A
Impedance	680 Ohm
Recommended Load Impedance	2000 ohm
Powering	1,5 -3 V D.C
Connector	mini jack 3,5mm. (hcm38se) mini xlr 4 pole (hcm38)
Weight	51 g

CARDIOID



HEADSET & LAVALIER MICROPHONES

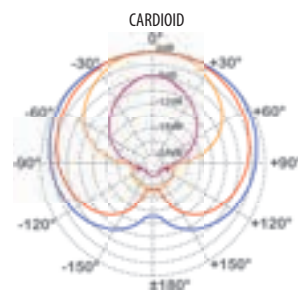
HCS20

- Miniature condenser microphone
- 8 mm permanently polarized condenser capsule.
- Cardioid polar pattern
- Phantom adapter
- Built-in windscreen (additional external windscreen included)
- Designed for on-stage use with instruments, specifically saxophone, clarinet, trombone, trumpet.



HCS20

Transducer type	Back electret condenser
Polar Pattern	Cardioid
Frequency Response	50Hz- 16KHz
Sensitivity	-45dB± 3dB
Output Impedance	250Ω± 30%
Max.Input.SPL	130dB
S/N Ratio	>70dB
Power Supply	Phantom 48V
Cable	Ø2x1M
Color	Black
Accessories	Windscreen



HCS30

- Miniature condenser clip microphone
- Cardioid polar pattern
- High gain before feedback
- Open and natural sound
- Wireless compatible
- Designed to be used with most of the acoustic instruments
- Available clip mounts for different acoustic instruments (optional):
HCSA: cello - HCSD: guitar



HCSA

HCSD

Clip mount for cello

Clip mount for guitar



HCSB
Clip mount for violin

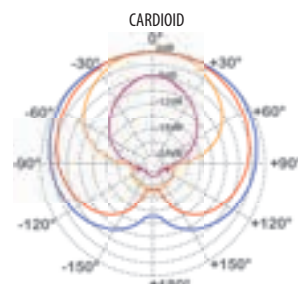
HCSC
Clip mount for sax

HCS30 (HCSB and HCSC included)



HCS30

Transducer type	Back electret condenser
Polar Pattern	Cardioid
Frequency Response	50Hz- 16KHz
Sensitivity	-45dB± 3dB
Output Impedance	2000 ohm ± 30%
Max.Input.SPL	130dB
S/N Ratio	>70dB
Power Supply	Phantom 48V
Cable	Ø2x1M
Color	Black
Accessories	Windscreen



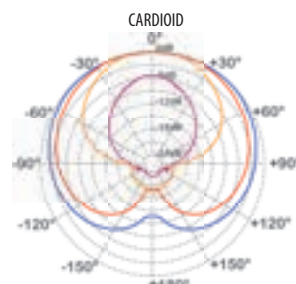
HEADSET & LAVALIER MICROPHONES

LCH370

- High-quality miniature broadcast lavalier microphone
- Flat frequency response and wide dynamic range
- 6.5 mm permanently polarized condenser capsule
- Cardioid polar pattern
- 3 standard adaptors (AD45H-AD35EAD3AK) for use with most of the professional wireless systems currently available
- Anti-pop screen



LCH370	
Transducer type	Back electret condenser
Polar Pattern	Cardioid
Frequency response	20-20Khz
Sensitivity	-45db+- 3db
Maximum SPL per 1%THD	130 db
S/N Ratio	>70db
Impedance	1500 Ohm
Recommended Load Impedance	2000 ohm
Powering	1,5 -10 V D.C
Connector	mini jack 3,5mm mini xlr 4 pole mini xlr 3 pole
Weight	15 g

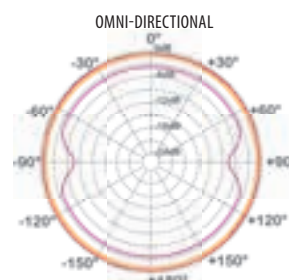


LCH200

- Omni-directional miniature lavalier microphone's
- 5 mm permanently polarized condenser capsule
- Omni-directional polar pattern
- Tie-clip microphone
- Anti-pop screen
- Available with 4-pin mini-XLR connector
- Particularly suited for actors and MCs in combination with wireless systems of the RMW Series



LCH200	
Transducer type	Back electret condenser
Polar pattern	Omni-directional
Frequency response	20-20Khz
Sensitivity	-40db+- 3db
Maximum SPL per 1%THD	130 db
Equivalent noise level	19 db-A
Impedance	1000 ohm
Recommended load impedance	2000 ohm
Powering	1,5 -9 V D.C
Connector	mini xlr 4 pole
Weight	10 g

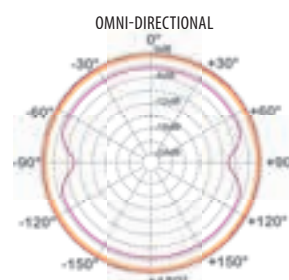


LCM1

- Omni-directional lavalier microphone
- Permanently polarized condenser capsule
- Omni-directional polar pattern
- Ideal for MCs or worship leaders.



LCM1	
Transducer type	Back plate electret Condenser
Polar pattern	Omni-directional
Frequency response (±3dB)	80Hz-16kHz
Sensitivity	-52db+- 3db
Maximum SPL for 1% THD	128dB
Impedance	680Ω
load impedance	≥3k ohm
Powering	1.5-7V DC
Connector	3.5mm threaded MiniJack
Weight	5g
Dimensions	10mm Ø x 25mm



WIRELESS MICROPHONES RMW1000



- PLL UHF Wireless Microphone System
- Available frequency ranges: 638 - 662 Mhz
606 - 630 MHz
863 - 865 MHz
- 50 meter / 160 feet range
- 50 Hz - 15 KHz frequency response
- -105 dB signal / noise ratio
- 99 selectable channels
- Diversity antenna
- Up to 5 systems usable in the same location
depending on the circumstances
- Automatic channel scan
- IR sync
- ABS carrying and storage case



	RMWM		RMW1000		RMWH
Transmitter type	PLL synthesized	Receiver type	PLL synthesized	Transmitter type	PLL synthesized
Frequency range	UHF	Frequency range	UHF	Frequency range	UHF
Frequency stability	0,01%	Frequency stability	0,01%	Frequency stability	0,01%
Modulation Method	FM (3)	Modulation Method	FM (3)	Modulation Method	FM (3)
Audio Frequency response	50 Hz – 15 KHz	Audio Frequency response	50 Hz – 15 KHz	Audio Frequency response	50 Hz – 15 KHz
Thd	< 1%	Thd	< 0,8%	Thd	< 1%
Dynamic range	≥ 100 dB	Dynamic range	≥ 100 dB	Dynamic range	≥ 100 dB
S/N ratio	≥ 90 dB	sensitivity	-105 dB for 12dB SINAD	S/N ratio	≥ 90 dB
RF output power	10 mW	Output level	-13 dBV Balanced -2dBV	RF output power	10 mW
Current drain	160 mA		unbalanced ¼ jack	Current drain	160 mA
Tone pilot frequency	30 ~ 33 KHz	Power supply	Dc 12-18 Volt 150 mA	Tone pilot frequency	30 ~ 33 KHz
Mic capsule	Dynamic	Dimension	197(L) x 134(D) x 42(H) mm	Microphone	Condenser
Battery	2 x 1,5 Volt "AA" type	Weight	0,820 Kg	Headset	
Autonomy	8 hours			Battery	2 x 1,5 Volt "AA" type
Dimension	250 (H) x 35 (Dia.) mm			Autonomy	8 hours
Weight	0,29 Kg			Dimension	64 (L) x 19(D) x 108 (H) mm
				Weight	0,10 Kg

RMW1000 SYSTEMS



RMW1000M



RMW1000



RMW1M



RMW1000H



RMW1000



RMW1H



WIRELESS MICROPHONES WM240

- Wireless Microphone System
- 2.4GHz ISM range
- GFSK digital modulation / demodulation
- Digital Diversity
- Up to 25 meters / 100 feet range
- 50 Hz - 15 KHz frequency response
- Low-profile desktop receiver with foldable antenna
- Intelligent frequency hopping
- ABS carrying and storage case
- Up 2 systems usable in the same location depending on the circumstances



The new series of wireless microphones in the **2.4 GHz frequency range** takes advantage all the PROEL experience in the wireless technology for audio applications, in order to offer good performances and the maximum reliability.

The new systems are the perfect tool for wireless audio applications in small and medium size environments, combining performances, reliability and sturdiness and avoiding all the problems related to the interferences of digital TV.

*La serie nuova serie di radiomicrofoni digitali in **banda 2.4 GHz** sfrutta tutta l'esperienza PROEL nella tecnologia wireless per applicazioni audio, per offrire la massima affidabilità e prestazioni di livello.*

I nuovi sistemi sono lo strumento ideale per applicazioni audio wireless in ambienti di piccole e medie dimensioni, combinando prestazioni, affidabilità e robustezza e superando le problematiche dovute all'interferenza delle trasmissioni della TV digitale.



WM240 SYSTEMS



	WM24M		WM240		WM24B
Frequency Range	2.404 - 2.476 GHz	Frequency Range	2.404 - 2.476 GHz	Frequency Range	2.404 - 2.476 GHz
Transmitting Power	10dBm Max Effective Radiated Power	RF Sensitivity	-78db	Transmitting Power	10dBm Max Effective Radiated Power
Transmission Distance	Up to 25 mt (open space)	Audio Frequency response	50Hz - 15Khz (16bit -38.4 Khz)	Transmission Distance	Up to 25 mt (open space)
Audio Frequency response	50Hz - 15Khz (16bit -38.4 Khz)	THD	<0.05% @ 1KHz	Audio Frequency response	50Hz - 15Khz (16bit -38.4 Khz)
THD	<0.05% @ 1KHz	S/N ratio	>89db	THD	<0.05% @ 1KHz
S/N ratio	>89db	Transmission delay	18 ms	S/N ratio	>89db
Transmission delay	18 ms	Output Connector	Unbalanced 1/4" jack	Transmission delay	18 ms
Power Supply	AA * 2	Power Supply	DC 12 V 200mA	Power Supply	AA * 2
Battery Life	Up to 20 hours	Dimensions	L.215mm xW.115mm xH.48mm	Battery Life	Up to 20 hours
Dimensions	H. 287mm x Ø 47mm			Dimensions	L.62mm xW.22mm xH.85mm

NEW



WM240



WM24M



WM240M

NEW



WM240



WM24B



WM240B

WIRELESS MICROPHONES WM600

- PLL UHF Wireless Microphone System
- 863 - 865 Mhz frequency range
- 30 meter / 100 feet range
- 50 Hz - 15 KHz frequency response
- -105 dB signal / noise ratio
- Low-profile desktop receiver with two foldable antennas
- 4 selectable frequency channels
- Up to 4 systems usable in the same location
- ABS carrying and storage case



	WM6M	WM600	WM6H
RF Frequency Band	863~865 Mhz	PLL UHF 4 channel	863~865 Mhz
Frequency Stability	0,00002	UHF 863~865 Mhz	0,00002
Modulation Method	FM(F3E)	RF Frequency Stability	FM(F3E)
RF Max deviation	± 40 Khz	RF Image / Spurious Rej.	RF Max deviation
Audio Frequency response	50 Hz ~ 15KHz	>70db	± 40 Khz
Spurious Emission	Under limits EN 300422	RF Interference Reject.	50 Hz ~ 15KHz
RF Power	< 10 dbm	RF Sensibility	Spurious Emission
Power Supply	2 x 1,5 V Alkaline bat.	Audio Frequency response	Under limits EN 300422
Dimensions	23,5 (W) x 5 (D) x 5 (H)	THD	RF Power
		<1%	< 10 dbm
		Dynamic Range	Power Supply
		> 100db	2 x 1,5 V Alkaline bat.
		S/N ratio	Dimensions
		>105db	10 (W) x 6,5 (D) x 3 (H)
		Output Connector	
		Balanced XLR	
		Unbalanced 1/4" jack	
		Power Supply	
		DC 13-15 V DC / 300mA	
		Dimensions	
		17,5(W) x 13,5(D) x 4,5(H)	

WM600 SYSTEMS



WM600



WM6M

WM600M



WM600



WM6H



LWM1

HWM1

WM600H



WIRELESS MICROPHONES WM600D



- PLL UHF Dual Channel Wireless Microphone System
- 863 - 865 Mhz frequency range
- 30 meter / 100 feet range
- 50 Hz - 15 KHz frequency response
- -105 dB signal / noise ratio
- Low-profile desktop receiver with two foldable antennas
- 4 selectable frequency channels
- Up to 2 systems usable in the same location
- ABS carrying and storage case



	WM6M	WM600D	WM6H
RF Frequency Band	863~865 Mhz	PLL UHF 4 channel	863~865 Mhz
Frequency Stability	0,00002	UHF 863~865 Mhz	0,00002
Modulation Method	FM(F3E)	Receiver Type	FM(F3E)
RF Max deviation	± 40 Khz	Frequency Range	RF Max deviation
Audio Frequency response	50 Hz ~ 15KHz	RF Frequency Stability	± 40 Khz
Spurious Emission	Under limits EN 300422	RF Image / Spurious Rej.	Audio Frequency response
RF Power	< 10 dbm	RF Interference Reject.	Spurious Emission
Power Supply	2 x 1,5 V Alkaline bat.	RF Sensibility	RF Power
Dimensions	23,5 (W) x 5 (D) x 5 (H)	Audio Frequency response	Dimensions
		THD	
		Dynamic Range	
		S/N ratio	
		Output Connector	
		Power Supply	
		Dimensions	

WM600D SYSTEMS



WM600D



WM6M

WM600DM



WM600D



WM6H



LWM1

HWM1

WM600DH



WM600D



WM6H



WM6M



LWM1

HWM1

WM600DKIT

WIRELESS MICROPHONES WM202

- Diversity UHF Channel Wireless Microphone System
- 863 - 865 Mhz frequency range
- 30 meter / 100 feet range
- 50 Hz - 15 KHz frequency response
- -105 dB signal / noise ratio
- Low-profile desktop receiver with two foldable antennas
- Up to 3 systems usable in the same location
- ABS carrying and storage case



	WM2M	WM202	WM2H
RF Frequency Band	863~865 Mhz	UHF BAND	863~865 Mhz
Frequency Stability	0,00002	UHF 863~865 Mhz	0,00002
Modulation Method	FM(F3E)	RF Frequency Stability	FM(F3E)
RF Max deviation	± 40 Khz	RF Image /Spurious Rej.	RF Max deviation
Audio Frequency response	50 Hz ~ 15KHz	>70db	± 40 Khz
Spurious Emission	Under limits EN 300422	RF Interference Reject.	50 Hz ~ 15KHz
RF Power	< 10 dbm	RF Sensibility	Spurious Emission
Power Supply	2 x 1,5 V Alkaline bat.	Audio Frequency response	Under limits EN 300422
Dimensions	23,5 (W) x 5 (D) x 5 (H)	THD	RF Power
		<1%	< 10 dbm
		Dynamic Range	Power Supply
		> 100db	2 x 1,5 V Alkaline bat.
		S/N ratio	Dimensions
		>105db	10 (W) x 6,5 (D) x 3 (H)
		Output Connector	
		Balanced XLR	
		Unbalanced 1/4" jack	
		Power Supply	
		DC 13-15 V DC / 300mA	
		Dimensions	
		17,5(W) x 13,5(D) x 4,5(H)	

WM202 SYSTEMS



WM202



WM2M

WM202M



WM202



WM2H



LWM1

HWM1

WM202H



WM202



WM2M



WM2H



LWM1

HWM1

WM202KIT

WIRELESS MICROPHONES WM202D

- Diversity UHF Dual Channel Wireless Microphone System
- 863 - 865 Mhz frequency range
- 30 meter / 100 feet range
- 50 Hz - 15 KHz frequency response
- -105 dB signal / noise ratio
- Low-profile desktop receiver with two foldable antennas
- Up to 2 systems usable in the same location
- ABS carrying and storage case



	WM2M	WM202D	WM2H
RF Frequency Band	863~865 Mhz	UHF DUAL CHANNEL	863~865 Mhz
Frequency Stability	0,00002	UHF 863~865 Mhz	0,00002
Modulation Method	FM(F3E)	RF Frequency Stability	FM(F3E)
RF Max deviation	± 40 KHz	RF Image /Spurious Rej.	RF Max deviation
Audio Frequency response	50 Hz ~ 15KHz	>70db	± 40 KHz
Spurious Emission	Under limits EN 300422	RF Interference Reject.	50 Hz ~ 15KHz
RF Power	< 10 dbm	RF Sensibility	Spurious Emission
Power Supply	2 x 1,5 V Alkaline bat.	Audio Frequency response	Under limits EN 300422
Dimensions	23,5 (W) x 5 (D) x 5 (H)	THD	RF Power
		<1%	< 10 dbm
		Dynamic Range	Power Supply
		> 100db	2 x 1,5 V Alkaline bat.
		S/N ratio	Dimensions
		>105db	10 (W) x 6,5 (D) x 3 (H)
		Output Connector	
		Balanced XLR	
		Unbalanced 1/4" jack	
		Power Supply	
		DC 13-15 V DC / 300mA	
		Dimensions	
		17,5(W) x 13,5(D) x 4,5(H)	

WM202D SYSTEMS



WM202D



WM2M

WM202DM



WM202D



WM2H



LWM1

HWM1

WM202DH



WIRELESS MICROPHONES WM100

- VHF Wireless Microphone System
- 175 - 216 Mhz frequency range
- 30 meter / 100 feet range
- 50 Hz - 15 KHz frequency response
- 95 dB audio dynamic range
- Low-profile desktop receiver with two foldable antennas
- Up to 6 systems usable in the same location depending on the circumstances
- ABS carrying and storage case



	WM1M	WM100	WM1H
RF Frequency Band	174~216 Mhz	VHF BAND	174~216 Mhz
Frequency Stability	0,00002	VHF 174~216 Mhz	0,00002
Modulation Method	FM(F3E)	RF Frequency Stability	FM(F3E)
RF Modulation	> 30 KHz	RF Image Rejection	> 30 KHz
Audio Frequency response	50 Hz ~ 15KHz	RF Interference Reject.	50 Hz ~ 15KHz
Spurious Emission	Under limits EN 300422	RF Sensibility	Under limits EN 300422
RF Power	< 10 dbm	Audio Frequency response	< 10 dbm
Power Supply	2 x 1,5 V Alkaline bat.	THD	2 x 1,5 V Alkaline bat.
Dimensions	28,3(W) x 5(D) x 5(H)	Dynamic Range	10(W) x 6,5(D) x 3(H)
		S/N ratio	
		Output Connector	
		Balanced XLR	
		Unbalanced 1/4" jack	
		Power Supply	
		DC 13-15 V DC / 200mA	
		Dimensions	
		17,5(W) x 13,5(D) x 4,5(H)	

WM100 SYSTEMS



WM100



WM1M

WM100M



WM100



WM1H



LWM1

HWM1

WM100H



WM100



WM1M



WM1H



LWM1

HWM1

WM100KIT

IN/EAR MONITOR RM3000



RM3000

- ½ rack unit transmitter in a metal chassis
- 8 selectable frequencies (PLL synthesized)
- Audio level indicators (L&R)
- Channel selector and display
- Headphone output
- Audio input level control
- Combo inputs (Jack or XLR)
- Selectable mono or stereo mode



RM3000R

- Bodypack receiver
- LCD display plus RF and AF indicators
- Battery level indicator
- Headphone output 2x100 mW @ 16 ohm
- Selectable limiter
- Selectable mono or stereo mode
- >6 hours of use from 2 x 1 V battery
- EB10 earphones included



EB10

- Comfortable, form-fitting expansion foam completely isolates the ear from external sound
- Extended frequency response

	RM3000		RM3000R		EB10
Frequency Range	uhf 540~790 ; 863~865 mhz	Frequency Range	uhf 540~790 ; 863~865 mhz	Frequency/Response	10 Hz- 20kHz ± 3dB
Channel	16 selectables	Bandwidth	24mhz	Sensitivity	112dB/mW
Oscillation Mode	pll synthesized	Channel	16 selectables	Impedance	16 ohm
Maximum Deviation Range	70khz	Oscillation Mode	pll synthesized	Distortion	<0.3%
Frequency Stability	±0.005% (0°C~+60°C)	Maximum Deviation Range	70khz	Cable	1.2m
Modulation Mode	fm stereo modulation	Frequency Stability	±0.005% (0°C~+60°C)	Plug Diameter	from 3.5 mm to 6.5 mm
Transmission Power	low:<10mw,middle:<50mw,high:<100mw (depending on national rules)	Modulation Mode	fm stereo modulation	Weight	7g
Spurious Rejection	<4nw	Receiving Mode	single receiving		
Frequency Response	50hz~15khz(±3db)	Rf Receiving Sensitivity	-110dbm(s/n:12db)		
T.H.D.	<1% (at 1khz, max. deviation)	Squelch Level	unchangeable		
Audio Input	line level×2, xlr/6.3mmø phone combo socket	T.H.D.	<0.5% @ 1khz		
Audio Output	xlr phone jack×2	Maximum S/N Ratio	90dba(a weighted)		
Earphone Output	6.3mmø stereo phone jack with adjustable volume	Frequency Response	50hz~15khz(±3db)		
Earphone Output Impedance	16 ohm	Stereo Separation	>45db @ 1khz		
Output Power (32Ω)	2×100mw @ 1khz (thd 3%)	Output Jack	3.5mmø stereo earphone jack		
Amplifier Gain	low/high:-10db	Output Power (32Ω)	2×100mw @ 1khz (thd 3%)		
Antenna Connector	trnc (50 ohm impedance)	Earphone Impedance	16 ohm		
Power Supply	dc 12~18v	Power Supply	2aa batteries		
		Operating Time	8 hours (under moderate volume)		



RM3000TR



RM3000



RM3000R



EB10



RM3000R



EB10

RM3000R

MICROPHONES ACCESSORIES



UHFSPLIT AL

This professional active antenna splitter / booster splits the signal received from the two main "master" antennas to four diversity channels. Combined with two antennas (UHFGP or ANT700) and four RMW1000 multi-frequency receivers, it forms a high-sensitivity four-channel receiving system. The splitter has four 12VCD outputs for direct power supplying of the 4 wireless receivers.

UHFSPLIT AL	
Frequency band:	600 -740 MHz
Output Connectors:	INPUT: 2x TNC OUTPUT: 8x TNC
Dimension:	483 x 44 x 250 1U Rack
Input Impedance:	50 ohm
Output Impedance:	50 ohm
Power Supply:	12 -18Vdc Power supply
Notes:	INPUT/OUTPUT GAIN: + 3dB



ANT700

Wideband design for use with RMW1000 System. Improves RF signal gain by 4db.

ANT700	
Frequency Range :	470 ~ 700Mhz
Effective Working Angle:	70 degree
Antenna Impedance:	50Ω
Antenna Gain :	4db
Connector:	TNC
Weight:	400g
Dimensions:	L 295 mm. X 260 mm. X 5 mm



RMADRK2

Rackmount kit (1U) for 1 PROFESSIONAL SERIES wireless receiver.



RMADRK1

Rackmount kit (1U) for 2 PROFESSIONAL SERIES wireless receivers.



HCMBAG



XLR4P



WS3BE



HEADPHONES



Music is our passion and we demonstrate it every day in the care we use for making our sound systems. The collaboration between our R&D department and a group of professional musicians has allowed us to design a line of headphones that can make you feel at the center of the music. Deep and defined lows, clear and transparent highs, will make you savor every single detail of your music, be it jazz, pop, rock or classical.

La musica è la nostra passione e questo lo dimostriamo ogni giorno nella cura con cui realizziamo i nostri sistemi audio. La collaborazione tra il nostro dipartimento R&D ed un gruppo di musicisti professionisti ha permesso di progettare una linea di cuffie capaci di farvi sentire al centro della musica. Bassi profondi ed articolati, alti chiari e trasparenti vi faranno assaporare ogni singolo dettaglio della vostra musica che sia jazz, pop, rock o classica.

HEADPHONES

HF157

NEW

Professional monitor headphones designed specifically for studio applications, offer a flat and extended frequency response combined with long wearing listening comfort.



HF157

Type	Circumaural headphones, Closed-back
Driver size	57 mm
Frequency range	20 - 25000 Hz
Sound pressure level (SPL)	102 dB
Power handling capability	200mw
THD, total harmonic distortion	0,1 %
Nominal impedance	32 Ω
Jack plug	3,5/6,3 mm stereo
Cable length	2 m
Weight w/o cable	289 g

HFJ600

NEW

The design with foldable and swivelling earpieces makes these headphones suitable both for professional DJs or for the use with hi-fi sets. Fitted with a 2mt cable, it provides an excellent freedom of movement.



LCH370

Type	Circumaural headphones , closed-back
Driver size	50 mm
Frequency range	20 - 22000 Hz
Sound pressure level (SPL)	105 dB
Power handling capability	200mw
THD, total harmonic distortion	0,1 %
Nominal impedance	32 Ω
Jack plug	3,5/6,3 mm stereo
Cable length	2 m
Weight w/o cable	261 g

HEADPHONES

HFD50

Enhanced-bass close-back dynamic monitor headphones ideal for use with drums, bass and other low-frequency sound source.



HFD50

Type	Circumaural headphones, closed-back
Driver size	50 mm
Frequency range	20 - 22000 Hz
Sound pressure level (SPL)	105 dB
Power handling capability	200mw
THD, total harmonic distortion	0,1 %
Nominal impedance	32 Ω
Jack plug	3,5/6,3 mm stereo
Cable length	2 m
Weight w/o cable	262 g

HFC60

The HFC60 headphones provides a smooth bass response and an outstanding audio performance, while the closed around-the-ear earpiece design isolates against ambient noise. The HFC60 headset is compatible with any model of smartphone and tablet.



HFC60

Type	Circumaural headphones, Closed-back
Driver size	40 mm
Frequency range	20 - 20000 Hz
Sound pressure level (SPL)	106 dB
Power handling capability	200mw
THD, total harmonic distortion	0,1 %
Nominal impedance	32 Ω
Jack plug	3,5/6,3 mm stereo
Cable length	2 m
Weight w/o cable	268 g

HEADPHONES

HFC25

NEW

Lightweight and comfortable, HFC25 allows for fatigue-free listening for extended lengths of time. A snug fit and smaller diameter creates sound isolation and ensures better dynamic range.



HFC25

Type	Closed, supraaural headphones
Driver size	40 mm
Frequency range	20 - 20000 Hz
Sound pressure level (SPL)	106 dB
Power handling capability	200mw
THD, total harmonic distortion	0,1 %
Nominal impedance	32 Ω
Jack plug	3,5 mm stereo
Cable length	2 m
Weight w/o cable	197 g

HFC16

NEW

These headphones are lightweight, comfortable and also perform exceptionally well in high-noise environments, offering a high attenuation of background noise.



HFC16

Type	Closed, supraaural headphones
Driver size	40 mm
Frequency range	20 - 20000 Hz
Sound pressure level (SPL)	106 dB
Power handling capability	200mw
THD, total harmonic distortion	0,1 %
Nominal impedance	32 Ω
Jack plug	3,5mm
Cable length	2 m
Weight w/o cable	178 g

HEADPHONES

EH600

NEW

High Definition dynamic Earphone



EH600

Speaker Dimension	10 mm
Frequency range	100 - 20000 Hz
Sensitivity	95 dB $\pm$ 3 dB at 1 kHz
Nominal impedance	22 Ω $\pm$ 10%
Jack plug	3,5 mm stereo
Cord length	1,2 m

EH1000

NEW

Professional dynamic Earphone



EH1000

Speaker Dimension	10 mm
Frequency range	20 - 20000 Hz
Sensitivity	104 dB $\pm$ 3 dB at 1 kHz
Nominal impedance	32 Ω $\pm$ 10%
Jack plug	3,5 mm stereo
Cord length	1,2 m

EH1028

NEW

Fashion dynamic Earphone



EH1028

Speaker Dimension	10 mm
Frequency range	20 - 20000 Hz
Sensitivity	102 dB $\pm$ 3 dB at 1 kHz
Nominal impedance	32 Ω $\pm$ 10%
Jack plug	3,5 mm stereo
Cord length	1,2 m

ICON LEGEND



OMNIDIRECTIONAL

Equally sensitive to sound from all directions.



CARDIOID

Picks up the most sound in front of the microphone and some from the sides.



HYPERCARDIOID

Provides maximum isolation from ambient noise and adjacent sound.



DYNAMIC

Simple, rugged diaphragm/coil. Handles extreme volume levels without distortion.



CONDENSER

Lightweight, sensitive diaphragm. Precisely and smoothly captures sound nuances. Powered by battery or phantom power supply.



VOCAL

Microphone suitable for singing.



SPEAK

Microphone suitable for vocal applications.



PERCUSSIONS INSTRUMENTS

Microphone suitable for drums and percussions.



BRASS INSTRUMENTS

Microphone suitable for wind instruments.



BLUETOOTH



USB

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