

PROFESSIONAL AUDIO EQUIPMENT



general catalogue 2013•2014

-  PWM Amplifier
-  Class G Amplifier
-  Switch Mode Power Supply
-  Neodymium Woofer
-  Digital Processor
-  Analog Processor
-  Tone Controls
-  Lightweight
-  Floor Monitor
-  Hardware for permanent installations

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Since 1963, FBT designs and builds sound in Recanati, a small city located in the centre of Italy, a city of Poetry, of Art, of Music - from immemorial time the soundtrack for entire generations.

In FBT every department is a company
in the company whose aim is to make
quality within the energy of sound.



A technological know-how that extends from research to
planning, from electronics to design, from wood to metal,
from plastics to painting. A highly innovative product
and a manufacturing process determined by a strict final
electronic testing.

A strong well-established brand, a leader in modulation which goes from loudspeakers to amplifiers, from mixers to installations of PA systems through the distribution of Professional Audio Equipment and Audio Contractor lines of product and of the brands Qube, Cicognani and Kempton.

Moreover big brands such as Pearl, Sabian, JTS, Crafter, Hardcase and Phonic rely on FBT Musical Instruments Distribution for the marketing of their products.



The energy and power of FBT sound run through Europe, America, Africa, Asia up to Oceania, thanks to the cooperation with highly professional branches and distributors.



History, experience and innovation in tradition.
All made in Italy.



MITUS Sound Reinforcement Systems

A comprehensive range of both powered and passive line arrays, 2-way speakers, subwoofers and low profile stage monitors.

The **MITUS 206LA** is the flagship model of the MITUS range. Featuring **2 x 6.5" B&C woofers** (with 1.7" high excursion voice coils) and a B&C neodymium magnet **1.4" HF compression**

driver with a 64 mm (2.5") voice coil and a 35 mm (1.4") exit throat coupled to a waveguide, the 206LA compact line array is engineered to respect the physical criteria of the ideal cylindrical wave source for the entire audio range. The cabinet features **2 x 6.5" woofers** coupled to a waveguide.

Mitus 206LA
600 + 300W

Mitus 206L
500 + 150W

Mitus 212FSA
1200W

Mitus 212FS
1000W

Mitus 218SA
2000W

Mitus 218S
4000W

Mitus 121SA
1200W

Mitus 121S
2000W



The finest sound reproduction for live sound touring and permanent installations

MITUS 212FSA is a 2 x 12" compact and flyable subwoofer, to extend the low frequencies of the MITUS 206LA when combined together in ground-stacked or flying arrays.

Along with this model, the **MITUS 118SA**, the new **MITUS 218SA** and the **MITUS 121SA**, respectively 18", double 18" and 21" subwoofers, which perfectly integrate for live or permanent applications where rich and high SPL bass frequencies need to be emphasized.

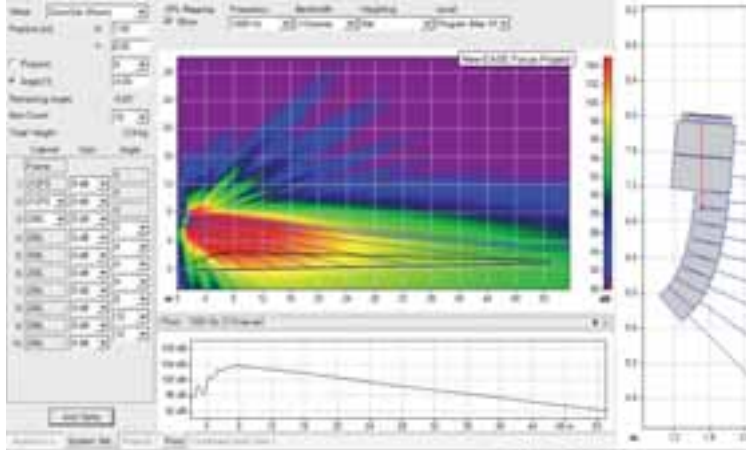
MITUS 152A, 215A, 115A, 112A and the new **114A** are 2-way FOH speaker systems to provide for a wide range of applications, especially when matched along with the MITUS subs.

With a discreet low profile enclosure design, the **MITUS 210MA** is undoubtedly the most advanced stage monitor of its type delivering maximum high fidelity monitoring, making it an ideal choice for all musical performances as well as TV studio broadcasts.

- High quality B&C neodymium magnet woofers, custom manufactured for FBT
- The latest generation of B&C compression drivers

- High efficiency Class D power amp modules with switch mode power supplies, fixed to a die-cast aluminum chassis. This provides maximum protection of the electronics from dust, prevents air loss through the input control panel, and it maximizes heat dissipation. All this has allowed the realization of a 3.2 Kg lightweight power amp module that delivers 1200W RMS!
- DSP with A/D-D/A low noise converters providing 8 selectable presets to customize the sound program for various applications, or simply to taste of the user through a setup selection.
- Neutrik Powercon IN and LINK OUT power connectors
- Aluminum die-cast carrying handles with rubber inserts
- A wide range of accessories
- Heavy duty metal grille with anti-resonance spacers and exclusive synthetic cloth to protect the drivers from dust and moisture, without modifying the acoustic fidelity. Unlike widely used conventional foam linings, our FBT synthetic cloth will not break down or disintegrate over time.

The **MITUS 206 LA** is a truly innovative **line array** speaker system enriched by FBT's highly skilled engineering and technological advancements such as power, performance, weight, flexibility and ease of use. These are the credentials of this new line array, advancing the concept of line arrays in terms of power, performance, weight, flexibility and ease of use. The modularity of the MITUS 206 LA, makes it extremely flexible for a wide range of applications, from a small 2 cabinet P.A. system to an elaborate line array system consisting of up to 12 MITUS



Mitus 118SA
1200W

Mitus 118S
1000W

Mitus 210MA
600 + 300W

Mitus 210M
800W

Mitus 215A
1100 + 250W

Mitus 215
1600W

Mitus 152A
1100 + 250W

Mitus 152
800W

Mitus 115A
600 + 300W

Mitus 115
800W

Mitus 114A
600 + 300W

Mitus 114
700W

Mitus 112A
600 + 300W

Mitus 112
700W



Mitus
Sound Reinforcement Systems

Superb sound fidelity for the best performance with a low profile enclosure design

206LA cabinets along with multiple MITUS 212FSA subs for large concert events. The waveguide, optimized by BEM finite element simulation, offers 100° horizontal dispersion.

The MITUS 206 LA cabinets coupling hardware is internally integrated and allows the suspension of 12 arrays with a 10:1 safety factor. The cabinets can be easily angled from 0° to 10°, adjustable in 2° steps by simple pin adjustments on the cabinets' integrated fly ware. The Class D (PWM) amplifier module with switch mode power supply provides 600W RMS LF + 300W RMS HF. The amp module is contained inside an aluminum die-cast chassis, which also acts as the framework for suspending the system and

angle adjustment inclination of the cabinets. The digital signal processor has 8 selectable equalization presets making the **MITUS 206LA** configurable according to the array curve and the number of speaker units utilized. To increase low frequency SPL, the **MITUS 212FSA** active subwoofer is a perfect match for use with **MITUS 206LA** line arrays. It can be used along with the other ground stackable subwoofers in the MITUS Series, the **MITUS 218SA, 118SA** and **121SA**. For such applications these subs feature an "INFRA" mode preset. Through the use of the FBT aiming software program for PC it is possible to simulate the SPL distribution and frequency response of the listening area.





MIT-F206
Flying Bar
MITUS 206LA/L



MT-S206
Cluster bracket for 2
Mitus 206 LA mounted
on Mitus 212 FSA



MT-J206
Joint Bar
MITUS 212FSA/FS
with 206LA/L



MT-F212
Flying Bar
MITUS 212FSA/FS



MT-B206
Metal Base to ground
206LA array or stack
on 118SA/S or 121SA/S



Mitus 206LA

Precision coverage vertical active array
600W + 300W RMS - 134dB SPL

- **2 x 165 mm (6.5") B&C neodymium** woofers with **44 mm (1.7")** coil
- **36 mm (1.4")** exit **B&C neodymium** driver with **64 mm (2.5")** coil
- Frequency response from 68Hz to 20kHz
- Latest class D built-in amplifiers, **600W RMS to the LF and 300W RMS to the HF** with switch mode power supply
- **DSP on-board** with **8 EQ presets**, **+/- 5db HF level** control for accurate amplitude shading
- Control panel with XLR input and link, volume, presets, HF level, HP-filter, ground-lift
- **100°** horizontal waveguide with very low distortion and near flat wavefront up to 18Khz
- High impact **polypropylene gas-injected enclosure** with integrated rigging hardware adjustable with **0° to 10°** angle between cabinets at **2° step**
- Ideal for small to medium sized application, from single pole mounted loudspeakers with 100°H x 10°V coverage to multiple cabinet full sized line array, the MITUS 206LA maybe used also in outdoor applications where the system is not directly exposed to the elements
- Wide range of hardware accessories for flying and ground stacked configurations
- **Very lightweight**, only 14Kg / 30.8Lb



Mitus 206L

Precision coverage vertical passive array
500W + 150W RMS 16ohm
129dB SPL LF/133dB SPL HF

- Internal HF protection
- Neutrik Speakon NL- 4MDV connectors IN & LINK OUT
- External digital processor required



MITUS Series
is also available
in white colour





Mitus 212FSA

Processed Flyable Active Subwoofer
1200W RMS - 138dB SPL

- **Compact subwoofer in vented band pass design** sharing the same width and hardware suspension of the MITUS 206LA
- **320 mm (2 x 12") B&C neodymium** magnet high excursion subwoofers with 75 mm (3") voice coils
- Frequency Response from 45Hz to 120Hz
- **Class D** amplifier delivering **1200W RMS**
- Switch mode power supply
- **DSP with 8 EQ presets**, cardioid and infra configurations, delay
- Control panel with XLR input and link, volume, presets, delay, phase 0°-180°, ground-lift
- 15 mm (5/8") **birch plywood enclosure**, scratch resistant black textured paint
- Low frequency extension cabinet for the MITUS 206LA line array for flying or ground stacked configurations.
- M20 top mount stand socket

Mitus 212FS

Flyable Passive Subwoofer
1000W/8ohm -138dB SPL

- Neutrik Speakon NL- 4MDV connectors IN & LINK OUT
- External digital processor required





Active Mitus Sub

Perfect low-frequency extension for the MITUS range and an ideal companion for the MITUS 206LA line array for ground stack applications with optional MTB206 metal base

M20 top mount stand socket

Optional 4 swivel-mount casters 80 mm (3.15") on request

Control panel with XLR input and link, volume, presets, delay, phase 0°-180°, ground lift



Mitus 218SA

Processed Active Subwoofer
2000W RMS - 145dB SPL

- Large vented **bass-reflex subwoofer**
- **2 x 460 mm (18") custom B&C neodymium** high excursion subwoofers with 100 mm (3.9") coil
- Frequency Response from 30Hz to 100Hz
- Class D amplifiers delivering **2000W RMS** with switch mode power supply
- **DSP with 6 EQ presets**, cardioids and infra configurations, delay
- 18 mm (3/4") **birch plywood enclosure**, textured scratch resistant black paint
- Six FBT design aluminum handles
- Optional 4 swivel-mount casters 100 mm (3.9") on request

Mitus 218S

Passive Subwoofer
4000W/4ohm - 147dB SPL



Mitus 121SA

Processed Active Subwoofer
1200W RMS - 137dB SPL

- Large vented **bass-reflex subwoofer**, extremely deep low frequency extension
- **530 mm (21") custom B&C neodymium** high excursion subwoofers with 115 mm (4.5") coil
- Frequency response from 29Hz to 100Hz
- Class D amplifiers delivering **1200W RMS** with switch mode power supply
- **DSP with 8 EQ presets**, cardioids and infra configurations, delay
- 18 mm (3/4") **birch plywood enclosure** with large reflex vent free from turbulence, scratch resistant black paint
- Six FBT design aluminum handles

Mitus 121S

Passive Subwoofer
2000W/4ohm - 139dB SPL

Passive Mitus Sub

Neutrik Speakon NL4MD-V connectors IN & OUT

External digital processor required:
FBT DLM26 Digital Loudspeaker Management





Mitus 118SA

Processed Active Subwoofer
1200W RMS - 139dB SPL

- Compact vented **band pass subwoofer** design enclosure
- **460 mm (18") custom B&C neodymium** magnet high excursion woofer with 75 mm (3") voice coil
- Frequency response from 36Hz to 100Hz
- Class D amplifier delivering **1200W RMS** with switch mode power supply
- **DSP with 8 presets**, cardioids and infra configurations, delay
- 18 mm (3/4") **birch plywood enclosure**, scratch resistant black textured paint
- Eight M10 fly points and two FBT design aluminum handles

Mitus 118S

Passive Subwoofer
1000W/4ohm - 139dB SPL



Mitus 210MA

Processed Active Stage Monitor
600W + 300W RMS - 134dB SPL

- 2-way bi-amplified, bass-reflex design with **coaxial HF compression driver**
- **2 x 250 mm (2 x 10") B&C custom** neodymium magnet **speakers** with 64 mm (2.5") voice coil, one of them is **coaxial with 36 mm (1.4") exit titanium compression driver** and 64 mm (2.5") voice coil
- Frequency response from 60Hz to 20kHz
- Class D built-in amplifiers, **600W RMS to the LF and 300W RMS to the HF** with switch mode power supply
- **DSP with 8 EQ presets**
- Control panel with XLR input and link, volume, presets, HP-filter, ground-lift
- **70° conical dispersion**
- 15 mm (5/8") birch plywood enclosure, scratch resistant black textured paint finish
- 35 mm (1.38") stand socket and back side carrying handle
- Ideal for live sound stage monitoring applications, as well as a front of house main PA speaker
- **Very lightweight**, only 19Kg / 41.9Lb

Mitus 210M

Passive Stage Monitor
800W/8ohm- 132dB SPL

- **Passive version**, recommended amplifier of **800W RMS / 8ohm**
- Hi-grade passive internal crossover featuring "soft-trip" circuitry protection of LF and HF drivers





Mitus 215A

Processed Active Speaker
1100W + 250W RMS - 136dB SPL

- 2 x 380 mm (15") B&C neodymium magnet woofer with 75 mm (3") voice coil
- 50 mm (2") exit B&C HF driver with 64 mm (2.5") voice coil
- Frequency response from 42Hz to 20kHz
- Class D built-in amplifiers, **1100W RMS** to the LF and 250W RMS Class G to the HF
- **60°H x 40°V rotatable HF** horn
- DSP with 6 EQ presets

Mitus 215

Passive reinforcement speaker
1600W/4ohm - 138dB SPL



Mitus 152A

Processed Active Speaker
1100W + 250W RMS - 136dB SPL

- 380 mm (15") B&C neodymium magnet woofer with 75 mm (3") voice coil
- 50 mm (2") exit B&C HF driver with 64 mm (2.5") voice coil
- Frequency response from 45Hz to 20kHz
- Class D built-in amplifiers, **1100W RMS** to the LF and 250W RMS Class G to the HF
- **60°H x 40°V rotatable HF** horn
- 35 mm (1.38") speaker stand socket
- DSP with 6 EQ presets
- **Very lightweight**, only 36.5Kg / 80.46Lb

Mitus 152

Passive reinforcement speaker
800W/8ohm - 132dB SPL



Active Mitus Speakers

2-way, bi-amplified, bass-reflex design
Switch mode power supply
DSP with 8 EQ presets
Birch plywood enclosure, scratch resistant black paint finish
Control panel with XLR input and link, volume, presets, HP filter, ground-lift
12 x M10 fly points and two FBT design aluminium handles
Ideal for live sound reinforcement applications and permanent installations

Passive Mitus Speakers

Hi-grade passive internal crossover featuring "soft-trip" circuitry protection of LF and HF transducers
Speakon NL4MD-V connectors IN & LINK OUT



Mitus 115A

Processed Active Speaker
600W + 300W RMS - 133dB SPL

- 380 mm (15") B&C neodymium magnet woofer with 75 mm (3") voice coil
- 25 mm (1") exit B&C neodymium magnet HF driver with 44 mm (1.7") voice coil
- Class D built-in amplifiers, 600W RMS to the LF and 300W RMS to the HF, switch mode power supply
- Frequency response from 46Hz to 20kHz
- 80°H x 50°V rotatable HF horn
- 35 mm (1.38") speaker stand socket
- **Very lightweight**, only 28Kg / 61.7Lb



Mitus 114A

Processed Active Speaker
600W + 300W RMS - 135.5dB SPL

- 360 mm (14") B&C neodymium magnet woofer with 75 mm (3") voice coil
- 36 mm (1.4") exit B&C neodymium magnet HF driver with 64 mm (2.5") voice coil
- Class D built-in amplifiers, 600W RMS to the LF and 300W RMS to the HF, switch mode power supply
- Frequency response from 46Hz to 20kHz
- 70°H x 50°V rotatable HF horn
- 35 mm (1.38") speaker stand socket
- **Very lightweight**, only 24.9Kg / 54.8Lb



Mitus 112A

Processed Active Speaker
600W + 300W RMS - 133dB SPL

- 320 mm (12") B&C neodymium magnet woofer with 75 mm (3") voice coil
- 25 mm (1") exit B&C neodymium magnet HF driver with 44 mm (1.7") voice coil
- Class D amplifiers, 600W RMS to the LF and 300W RMS to the HF, switch mode power supply
- Frequency response from 50Hz to 20kHz
- 80°H x 50°V rotatable HF horn
- 35 mm (1.38") speaker stand socket
- **Very lightweight**, only 20Kg / 45Lb

Mitus 115

Passive reinforcement speaker
800W/8ohm - 132dB SPL

Mitus 114

Passive reinforcement speaker
700W/8ohm - 132dB SPL

Mitus 112

Passive reinforcement speaker
700W/8ohm - 131dB SPL





Model		206LA	212FSA	218SA	121SA	118SA	210MA	215A	152A	115A	114A	112A
Configuration	way	2	1	1	1	1	2	2	2	2	2	2
Built-in amplif. cont. LF/HF	W RMS	400/200	800	1600	800	800	400/200	700/200	700/200	400/200	400/200	400/200
Built-in amplif. max. LF/HF	W RMS	600/300	1200	2000	1200	1200	600/300	1100/250	1100/250	600/300	600/300	600/300
Built-in amplif. max. peak LF/HF	W	1200/600	2400	4000	2400	2400	1200/600	2200/500	2200/500	1200/600	1200/600	1200/600
Frequency response	@-6dB	68Hz - 20KHz	45Hz - 120Hz	30Hz - 100Hz	29Hz - 100Hz	36Hz - 100Hz	60Hz - 20KHz	42Hz - 20KHz	45Hz - 20KHz	46Hz - 20KHz	46Hz - 20KHz	50Hz - 20KHz
Low frequency woofer	inch	2x6.5 - 1.7 coil neodymium	2 x 12 - 3 coil neodymium	2x18- 4 coil	1x21 - 4.5 coil neodymium	1x18- 3 coil neodymium	2x10 - 2.5 coil neodymium	2x15 - 3 coil neodymium	1x15 - 3 coil neodymium	1x15 - 3 coil neodymium	1x14 - 3 coil neodymium	1x12 - 3 coil neodymium
High frequency driver	inch	1 x 1.4 - 2.5 coil neodymium	-	-	-	-	1 x 1.4 - 2.5 coil neodymium-coax	1 x 2 - 2.5 coil	1 x 2 - 2.5 coil	1 x 1 - 1.7 coil	1 x 1.4 - 2.5 coil	1 x 1 - 1.7 coil
Maximum SPL cont/peak	dB	125 / 134	134 / 138 half-space	139 / 145 half-space	133 / 137 half-space	135 / 139 half-space	127 / 134	133 / 136	129 / 136	127 / 133	127.5 / 135.5	126 / 133
Dispersion	H x V	100° x 10° max dependant upon n° of element	omnidirectional	omnidirectional	omnidirectional	omnidirectional	70° - conical	60° x 40°	60° x 40°	80° x 50°	70° x 50°	80° x 50°
Input impedance	kOhm	22	22	22	22	22	22	22	22	22	22	22
Crossover frequency	kHz	1.2	preset dependant	preset dependant	preset dependant	preset dependant	1.2	1.2	1.2	1.5	1.4	1.5
AC Power requirements	VA	640	640	1840	640	640	640	800	800	640	640	640
Input connectors		XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop
Power cord	m / ft	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4	5	5 / 16.4
Net dimensions (WxHxD)	mm inch	574x220x383 22.6x8.7x15.1	574x420x660 22.6x16.5x26	1000x594x730 39.4x23.4x28.7	590x780x760 23.2x30.7x29.9	574x594x730 22.6x23.4x28.7	574x290x402 22.6x11.4x15.8	493x1245x471 19.04x49x18.5	425x805x421 16.7x31.7x16.6	425x750x421 16.7x29.5x16.6	380x705x380 15x27.7x15	380x660x380 15x26x15
Net weight	Kg/Lb	14 / 30.8	36.5 / 80.5	90 / 198.41	58 / 127.8	47 / 103.6	19 / 41.9	52.5 / 115.74	36.5 / 80.46	28 / 61.7	24.9 / 54.8	20 / 45
Transport dimensions (WxHxD)	mm inch	655x455x280 25.8x17.9x11	780x710x520 30.7x28x20.5	1150x740x900 45.2x29x35.4	805x650x930 31.7x25.6x36.6	460x775x765 18.1x30.5x30.1	890x390x510 35x15.4x20.1	618x1355x610 24.3x53.3x24	550x915x560 21.6x36x22	550x560x860 21.7x22.1x33.9	480x770x455 18.1x30.3x17.9	485x495x750 19.1x19.5x29.5
Transport weight	Kg/Lb	15.7 / 34.6	41 / 90.4	102 / 224.87	66.5 / 146.6	56.2 / 123.9	21.1 / 46.5	58 / 127.86	58 / 127.86	40 / 88.18	26.9 / 59.3	22 / 48.5

Model		206L	212FS	218S	121S	118S	210M	215	152	115	114	112
Configuration	way	2	1	1 reflex	1 reflex	1 band-pass	2	2	2	2	1 reflex	2
Recommended amplifier	W RMS	500LF / 150HF	1000	4000	2000	1000	800	1600	800	800	700	700
Long term power	W	250LF / 70HF	500	2000	1000	500	400	800	400	400	350	350
Short term power IEC 268-5	W	1000LF / 300HF	2000	8000	3600	2000	1600	2800	1400	1400	1400	1200
Nominal impedance	Ohm	16LF / 16HF	8	4	4	4	8 (8 LF/8 HF)	4 (4 LF/8 HF)	8 (8 LF/8 HF)	8 (8 LF/8 HF)	8	8 (8 LF/8 HF)
Frequency response	@-6dB	75Hz - 20KHz	50Hz - 120Hz	30Hz - 250Hz	29Hz - 250Hz	36Hz - 400Hz	65Hz - 20KHz	47Hz - 20KHz	47Hz - 20KHz	50Hz - 18KHz	50Hz - 18KHz	55Hz - 18KHz
Low frequency woofer	inch	2x6.5 - 1.7 coil neodymium	2 x 12 - 3 coil neodymium	2x18 - 4 coil	1x21 - 4.5 coil neodymium	1x18- 3 coil neodymium	2x10 - 2.5 coil neodymium	2x15 - 3 coil neodymium	1x15 - 3 coil neodymium	1x15 - 3 coil neodymium	1x14 - 3 coil neodymium	1x12 - 3 coil neodymium
High frequency driver	inch	1 x 1.4 - 2.5 coil neodymium	-	-	-	-	1 x 1.4 - 2.5 coil	1 x 2 - 2.5 coil	1 x 2 - 2.5 coil	1 x 1 - 1.7 coil	1 x 1.4 - 2.5 coil	1 x 1 - 1.7 coil
Sensitivity (@1W/1m)	dB	97LF / 108HF	99	102	99	101	100	103	100	100	100	99
Maximum SPL cont/peak (Bi-Amp)	dB	125/129LF - 129/133HF	134/138 half-space	141 / 147 half-space	136 / 139 half-space	136 / 139 half-space	128 / 132	134 / 138	128 / 132	128 / 132	128 / 132	127 / 131
Dispersion	H x V	100° x 10° max dependant upon n° of element	omnidirectional	omnidirectional	omnidirectional	omnidirectional	70° conical	60° x 40°	60° x 40°	80° x 50°	70° x 50°	80° x 50°
Crossover frequency	kHz	external active	external active	external active	external active	external active	1.3	1.2	1.2	1.6	1.4	1.6
Recommended HP filter		65hz - 24dboct	40hz - 24dboct	25hz - 24dboct	25hz - 24dboct	32hz - 24dboct	50hz - 24dboct	40hz - 24dboct	40hz - 24dboct	40hz - 24dboct	40hz - 24dboct	40hz - 24dboct
Recommended external filter		Digital management with FBT presets	Digital management with FBT presets	Digital management with FBT presets	Digital management with FBT presets	Digital management with FBT presets	-	-	-	-	-	-
Input connectors		2 x Speaker NL4MD-V in & thru	2 x Speaker NL4MD-V in & thru	2 x Speaker NL4MD-V in & out	2 x Speaker NL4MD-V in & thru	2 x Speaker NL4MD-V in & thru	2 x Speaker NL4MD-V in & thru	2 x Speaker NL4MD-V in & thru	2 x Speaker NL4MD-V in & thru	2 x Speaker NL4MD-V in & thru	2 x Speaker NL4MD-V in & thru	2 x Speaker NL4MD-V in & thru
Net dimensions (WxHxD)	mm inch	574x220x383 22.6x8.7x15.1	574x420x660 22.6x16.5x26	1000x594x730 39.4x23.4x28.7	590x780x760 23.2x30.7x29.9	574x594x730 22.6x23.4x28.7	574x290x402 22.6x11.4x15.8	493x1245x471 19.04x49x18.5	425x805x421 16.7x31.7x16.6	425x750x421 16.7x29.5x16.6	380x705x380 15x27.7x15	380x660x380 15x26x15
Net weight	Kg Lb	13.5 / 29.8	35 / 77.2	87 / 191.8	56 / 123.5	45 / 99.2	17 / 37.5	48 / 105.82	32 / 70.54	26 / 57.3	22.9 / 50.4	18 / 39.7
Transport dimensions (WxHxD)	mm inch	655x455x280 25.8x17.9x11	780x710x520 30.7x28x20.5	1150x740x900 45.2x29x35.4	805x650x930 31.7x25.6x36.6	460x775x765 18.1x30.5x30.1	890x390x510 35x15.4x20.1	618x1355x610 24.3x53.3x24	550x915x560 21.6x36x22	550x560x860 21.7x22.1x33.9	480x770x455 18.1x30.3x17.9	485x495x750 19.1x19.5x29.5
Transport weight	Kg Lb	15.2 / 33.5	39.5 / 87	99 / 218.25	64.5 / 142.2	54.2 / 119.5	19.1 / 42.1	53.5 / 117.94	35.5 / 78.26	28.5 / 62.8	24.9 / 54.8	20 / 44.1



Professional Line Array

VERTUS CLA was created with the thought of **integrating professional line array technology in an extremely compact and elegant speaker column.**

Compared to the traditional two-way speakers, the **sound is distributed much more evenly throughout the audience**, both in outdoor and in indoor environments acoustically difficult or reverberating as well. The CLA cylindrical wave front boasts the pleasant effect of present and precise forwardly projected sound. Even acoustic feedback towards microphones is reduced.

VERTUS CLA is a light and compact modular line array system created for both live and fixed installations, comprised by two products:

- **CLA 604A:** bi-amp two-way column speakers **400 + 100W RMS**
- **CLA 208SA:** active subwoofer **600W RMS**

CLA604A is an extruded aluminum column speaker fitted with **6 x 4" custom woofers and 4 x 1" dome tweeters**, each coupled to a wave guide. The internal **Class D amplification**, 400W for woofers and 100W for tweeters with switch mode power supply and **DSP processor with 4 equalization presets** provide unexpected dynamics in a system of these dimensions.

The rapid latching system with pins allows for the expansion of the system, doubling-up CLA608A modules to form a unified column with an absolute and coherent source integration and increase of SPL and low-frequency directivity control.

CLA 208SA is a **2 x 8" active subwoofer in bass-reflex** design and birch ply enclosure. The internal Class D amplifier delivers 600W and is matched with a switch mode power supply and a DSP processor with filtering functions, equalization and speaker protection. **Created with the idea of extending the CLA608A's low frequency performance in live applications**, the CLA208SA serves as the base support for the CLA604A column speaker which can either be frontally mounted to the sub, as well as fixed upon the optional stand through the M20 socket on the upside of the sub. The CLA208SA subwoofers are modular as well, and they can be stacked to enlarge and increase the maximum SPL.



Vertus CLA 604A
400+100W



Vertus CLA 208SA
600W



3 x CLA 208SA



2 x CLA 208SA



CLA 208SA



2 x CLA 208SA



CLA 208SA W

CLA 604A



2 x CLA 604A



3 x CLA 604A



VT-SC 59

VT-SC 114 W



CLA system features:

- **High-level sound quality** from 50Hz to 20kHz expressly developed for live performance
- **Long distance sound projection** and better SPL distribution towards the audience
- **Great and dynamic power performance** thanks to tri-amplification system
- **Lightweight and easy to carry**
- **Design and elegance** for an easy integration even in the most demanding installations
- **Very compact dimensions** enable the listener to concentrate on sound and not on speakers!
- **High horizontal dispersion**

The internal XLR signal link system and Neutrik POWERCONN power supply on both the sub and the satellite, **allows for hiding wires and cables from open sight, preserving the system's clean aesthetics.**

VERTUS CLA is a true professional line array system that can satisfy the musician looking for a compact PA solution, easily to carry, modular, ready to use in just minutes with no-compromise quality. It is **capable of being integrated into any environment or installation requiring high-quality sound and controlled directional characteristics.**

Vertus
Line Array Systems

The technology and quality of a professional line array in a compact column

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Vertus is also available in white colour:
Vertus 604A W
Vertus 208SA W



Vertus CLA 604A

Column Active Line Array
400W + 100W RMS - 125dB SPL

- 2-way bi-amplified Line Array Column
- **6 x 100 mm (4")** custom woofer with 25 mm (1") voice coil
- **4 x 25 mm (1")** neodymium dome tweeter on waveguide
- 130Hz to 20KHz frequency response
- **Class D 400W RMS** amplifier for **LF** and **100W RMS** for **HF** with switch mode power supply
- **DSP processor** with 4 available equalization presets
- Control panel with volume, presets, HP filter, Mic-Line, status LED
- XLR input and Neutrik POWERCONN supply input at the lower part of the column; XLR link and Neutrik POWERCONN loop output at the higher part, in order to hide each connection cable
- **100°H x 20°V dispersion**
- **Extruded-aluminum power coated cabinets.** Superior latching system enables the extension of the length of the line array by adding CLA604A modules for increased modularity of the system
- Possibility to angle the columns of +/- 30° on a horizontal plane
- Ideal for both live applications, assisted by the CLA 208SA active subwoofer, as well as for fixed installation
- **Easily expandable for a total power of 6600W** (stereo system composed of 3 x CLA604A and 3 x CLA208SA)
- Very light and easy to carry





Vertus CLA 208SA

Processed Active Subwoofer
600W RMS - 129dB SPL

- Active subwoofer in bass-reflex design
- **2 x 200 mm (8")** custom neodymium, **high-excursion woofer** with 50 mm (2") voice coil
- 50Hz to 180Hz frequency response
- **Class D 600W RMS** amplifier with switch mode power supply
- **DSP processor** with 4 available presets
- Control panel with combo XLR/Jack stereo input and link, XLR Hi-pass out stereo, volume, presets, 0°-180° phase switch, status LED
- **Neutrik POWERCONN** input and link
- **15 mm birch plywood enclosure** with anti-scratch paint finish, stackable
- M20 stand adapter, 2 integrated handles, front hardware to sustain CLA604A modules
- Suitable for low frequency extension and reinforcement of the CLA604A array, especially for live performance





Model		CLA604a	CLA208Sa
Configuration	way	2	1
Built-in amplifier cont. LF/HF	W RMS	350/80	400
Built-in amplifier max. LF/HF	W RMS	400/100	600
Built-in amplifier max. peak LF/HF	W	800/200	1200
Frequency response	@-6dB	130Hz - 20KHz	50Hz - 180Hz
Low frequency woofer	inch	6 x 4" - 1" coil	2 x 8" - 2" coil
High frequency driver	inch	4 x 1" - 1" coil	-
Maximum SPL cont/peak	dB	122 / 125	125 / 129 half space
Dispersion	H x V	100° x 20°	Omnidirectional
Input impedance	kOhm	22	22
Crossover frequency	kHz	2.5	0.15
AC Power requirements	VA	450	450
Input connectors		XLR with loop	stereo XLR with loop/HP out
Power cord	m / ft	5 / 16.4	5 / 16.4
Net dimensions (WxHxD)	mm inch	130x841x130 5.12x33.1x5.12	550x270x500 21.7x10.6x19.7
Net weight	Kg/Lb	9 / 19.84	20 / 44.09
Transport dimensions (WxHxD)	mm inch	220x930x220 8.66x36.61x8.66	690x370x625 27.16x14.56x24.60
Transport weight	Kg/Lb	11.5 / 25.35	23.5 / 51.80





Modus

Line Array Systems

An innovative Line Array System

MODUS. Conceived to offer all the advantages of the very latest **"true full-range array"** to an increasingly vast number of users, groups together four modules per vertical array in a single box with **vertical and horizontal dispersion angles controlled and already optimized** to solve effectively the most varied sound reinforcement requirements, from touring to permanent installations.

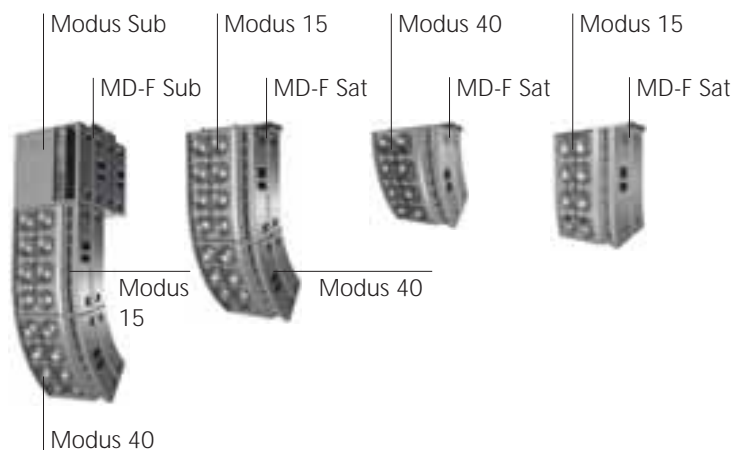
The system, available in **passive and powered versions**, is composed of two line-array enclosures (MODUS 15, MODUS 40) and one band-pass subwoofer (MODUS SUB), all flyable thanks to the user friendly built-in hardware manufactured with the highest safety standards. The two array modules offer coverage patterns **90°Hx40°V** and **90°Hx15°V** dispersion angles, which can be used alone or in pairs to form a "J" array capable of covering a 90°H x 55°V angle. The SUB can be either be suspended or stacked and is a complement to the System to provide extended low frequency SPL when required.



- **Custom neodymium woofers and drivers** with high BxL factor and high linear excursion
- **8 different configurations** allowed by a complete range of optional accessories for transport, suspension and ground stacking
- Optional wheel trolley and casters facilitate **quick load ins and load outs**
- **13 layer (18 mm/0.7") birch plywood enclosure with textured scratch resistant paint finish with integrated handles and mechanical hardware for suspension**
- The lack of breaks in the source of the mid-high frequencies (inevitable in multi-box arrays) and the definition at the design stage of the vertical coverage angle, enable to improve emission uniformity and coherence
- The waveguide, designed to create a coherent cylindrical acoustic front, is free of multiple sound paths, ensuring a natural-

sounding emission that is hard to find in competitors' systems

- Performance comparable to high-end touring line-arrays at an extremely competitive cost



MODUS15/40

- They can be used either individually, with vertical dispersion of respectively 15° or 40° or joined together, forming a J-array with a vertical dispersion angle of 55°
- Thanks to the wide frequency response, they can be used without a subwoofer in application with average SPL

MODUS SUB

- The particular acoustic loading and layout of the loudspeakers (compound push-pull bandpass) enable to drastically reduce the

distortion and movement of the cone, ensuring high SPL and very high reliability

APPLICATIONS

- Permanent installations in theatres, concert halls, clubs, places of worship, conference rooms, indoor sports arenas and stadia
- Sound reinforcement for live events: touring, bands, orchestras, conference both indoors and out, where uniform sound pressure level is required over the entire listening area

Modus 40a
1400 + 700W

Modus 40
1600W



Modus 15a
1400 + 700W

Modus 15
1600W



Modus SUBa
1400W

Modus SUB
1800W



MODUS directs the sound. Light in price, excellent in performance

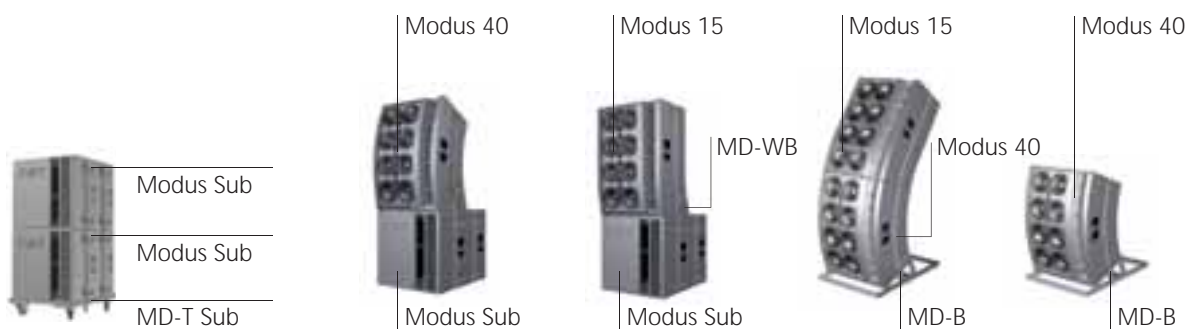
Self-powered range:

- High-efficiency amplifiers with **PWM technology**
- **Digital Signal Processor**
- **Digital delay** (63.75 m in 25 cm steps)
- **EQ presets** (selectable according to installation configuration)
- 24-bit/192kHz low-noise A/D and D/A converters
- Connector panel with XLR signal input and link, input gain, Ground lift, 2 banks of DIP SWITCHES for delay control (63.75 m in 25 cm steps) and a choice of various configuration presets

- **Power supply with Neutrik POWERCON connectors** Input and Output

Passive range Biamp or Full Range:

- **Internal filters** with external display of the setting in use.
- **High quality passive components**
- **Electronic protection circuit** to limit power peaks sent to the drivers with auto resetting "soft-trip" **thermal protection** resetting "soft-trip" thermal protection that ensures operation even in the event of over-powering



Active Modus

2-way powered bi-amplified true line array, bass reflex design, internal Digital Signal Processor

8 polypropylene waveguide horns with 90° horizontal dispersion

On-board presets allow different equalization configurations, gain and digital delay through the rear control panel



Modus 40a

Precision coverage active array
1400W + 700W RMS - 137dB SPL

- 2-way powered bi-amplified true line array with 40° vertical dispersion
- **1400W RMS LF and 700W RMS HF** Class D (PWM) high efficiency integrated amplifier
- **8 x 200 mm (8") custom neodymium woofers** with 50 mm voice coil (2")
- **8 x 25 mm (1") custom neodymium compression drivers** and 44 mm voice coil (1.7")



Modus 15a

Precision coverage active array
1400W + 700W RMS - 137dB SPL

- 2-way powered bi-amplified true line array with 15° vertical dispersion
- **1400W RMS LF and 700W RMS HF** Class D (PWM) high efficiency integrated amplifier
- **8 x 200 mm (8") custom neodymium woofers** with 50 mm voice coil (2")
- **8 x 25 mm (1") custom neodymium compression drivers** and 44 mm voice coil (1.7")

Modus 40

Precision coverage passive array
1600W/2ohm LF/4ohm HF - 138dB SPL

- Dual-mode passive crossover
- NL4 speakon connectors
- External digital processor required

Modus 15

Precision coverage passive array
1600W/2ohm LF/4ohm HF - 138dB SPL

- Dual-mode passive crossover
- NL4 speakon connectors
- External digital processor required





Modus SUBa

Processed active subwoofer
1400W RMS - 140dB SPL

- Powered subwoofer in bandpass push-pull configuration, internal Digital Signal Processor
- **1400W RMS Class D (PWM)** high efficiency integrated amplifier
- **2 x 380 mm(15") custom neodymium woofers** with 100 mm (4") voice coil
- On-board presets allow different equalization configurations, gain and digital delay through the rear control panel

Modus SUB

Passive subwoofer
1800W/4ohm - 141dB SPL

- NL4 speakon connectors
- External digital processor required



Modus
Line Array Systems



Model		MODUS 40a	MODUS 15a	MODUS SUBa
Configuration	way	2	2	Band-Pass
Built-in amplifiers LF/HF	W RMS	1400/700	1400/700	1400
Frequency response	@ -6dB	58Hz - 18kHz	58Hz - 18kHz	38Hz - 90Hz
Low frequency woofer	inch	8 x 8 - 2 coil - neodymium	8 x 8 - 2 coil - neodymium	2x15 - 4 coil - neodymium
High frequency driver	inch	8 x 1 - 1.7 coil - neodymium	8 x 1 - 1.7 coil - neodymium	-
Sensitivity (@1W/1m)	dB	105	105	103
Maximum SPL	dB	137	137	140 half space
Dispersion	H x V	90° x 40°	90° x 15°	omnidirectional
Input impedance	kohm	22	22	22
Crossover frequency	kHz	1.2	1.2	0.09
AC Power requirements	VA	1400	1400	1200
Input connectors		XLR with loop	XLR with loop	XLR with loop
Power cord	m / ft	5 / 16.4	5 / 16.4	5 / 16.4
Net dimensions (WxHxD - single unit)	mm/inch	713x980x490 / 28.1x38.6x19.3	713x980x460 / 28.1x38.6x19.3	713x713x836 / 28.1x28.1x32.9
Net weight	Kg / Lb	93 / 205.02	93 / 205.02	96 / 211.64
Transport dimensions (WxHxD - 2 units on pallet)	mm/inch	750x1400x1100 / 29.5x55.1x43.3	750x1400x1100 / 29.5x55.1x43.3	920x1800x780 / 36.2x70.9x30.7
Transport weight (2 units on pallet)	Kg / Lb	210 / 462.97	210 / 462.97	215 / 473.99

Model		MODUS 40	MODUS 15	MODUS SUB
Configuration	way	2	2	Band-Pass
Recommended amplifier (Bi-Amp)	W RMS	1600 (1600 LF/400 HF)	1600 (1600 LF/400 HF)	1800
Long term power (Bi-Amp)	W	1000 (1000 LF/200 HF)	1000 (1000 LF/200 HF)	1000
Short term power IEC 268-5 (Bi-Amp)	W	3200 (3200 LF/800 HF)	3200 (3200 LF/800 HF)	3600
Nominal impedance (Bi-Amp)	ohm	2 (2 LF/4 HF)	2 (2 LF/4 HF)	4
Frequency response	@ -6dB	58Hz - 18kHz	58Hz - 18kHz	38Hz - 200Hz
Low frequency woofer	inch	8 x 8 - 2 coil - neodymium	8 x 8 - 2 coil - neodymium	2x15 - 4 coil - neodymium
High frequency driver	inch	8 x 1 - 1.7 coil - neodymium	8 x 1 - 1.7 coil - neodymium	-
Sensitivity (@1W/1m) (Bi-Amp)	dB	105 (105 LF/108 HF)	105 (105 LF/108 HF)	103
Maximum SPL (Bi-Amp)	dB	138 (138 LF/134 HF)	138 (138 LF/134 HF)	141 half-space
Dispersion	H x V	90° x 40°	90° x 15°	omnidirectional
Crossover frequency	kHz	1.2	1.2	90Hz external
Recommended HP filter		40Hz - 24dB/oct	40Hz - 24dB/oct	32Hz - 24dB/oct
Recommended external filter		-	-	LP 90Hz - 24dB/oct
Input connectors		2 x Speakon NL4 in & throu	2 x Speakon NL4 in & throu	2 x Speakon NL4 in & throu
Net dimensions (WxHxD - single unit)	mm/inch	713x980x490 / 28.07x38.58x19.29	713x980x460 / 28.07x38.58x19.29	713x713x836 / 28.07x28.07x32.91
Net Weight	Kg / Lb	83 / 182.98	83 / 182.98	86 / 189.59
Transport dimensions (WxHxD - 2 units on pallet)	mm/inch	750x1400x1100 / 29.5x55.1x43.3	750x1400x1100 / 29.5x55.1x43.3	920x1800x780 / 36.2x70.9x30.7
Transport weight (2 units on pallet)	Kg / Lb	190 / 418.87	190 / 418.87	195 / 429.90



MD-F Sat
Flying bar Sat



MD-F Sub
Flying bar Sub



MD-T Sat
Trolley for
2 Modus Sat



MD-T Sub
Trolley for
2 Modus Sub



MD-B
Metal stand
base to tilt
Modus 40/15



MD-WB
Joint base to ground
stack Modus 40/15
to Modus Sub



The New Incredible Verve Sound



The new Verve Speakers Series features birch plywood enclosures with a scratch resistant textured paint finish, entirely 'Made in Italy' and offers outstanding performance at competitive prices.

New high efficiency PWM and very light yet powerful class D integrated amplifiers, a new digital signal processor with 4 EQ presets with an extremely low noise floor.

VERVE speakers are equipped with constant directivity rotatable horns, high efficiency woofers and HF compression drivers, higher quality protected crossover networks.

Available in 5 bi-amplified active, 5 passive models and 2 coaxial bi-amplified stage monitors.

To extend the low frequency response, VERVE speakers can be matched with FBT SUBLine subwoofers, available in 12", 15" e 18" models. Full line of hardware accessories for permanent installations is also available.

- **15 mm (0.59") birch plywood scratch resistant enclosure** and internal bracing
- **Bi-amplified models with high dynamic Class D amplifiers 400W + 100W RMS** to provide a pleasant sound even at loud volume

- New ultra-light woofers custom made for FBT with a weather resistant coating, extremely reliable and efficient
- **High efficiency switch mode power supply**
- Advanced filter algorithms including dynamic equalization at low frequencies and advanced energy control to allow high SPL while always granting reliable and distortion-free audio reproduction
- An **increase in total SPL** thanks to FBT's new digital limiter algorithms and increased amplifier power output
- Passive models: **soft-trip high-frequency protection circuitry** to ensure proper operation even in overdriven conditions and **superb quality components**, metallic polyester condensers and large diameter coils. All components embedded in special resin to ensure total immunity to vibration
- **Fully rotatable constant directivity** horn to adjust HxV angle coverage in the non-coaxial models
- Ergonomic integrated carrying handles, M10 rigging points, top-hat speaker stand socket and wall bracket mounting hardware



Verve 110A
400 + 100W
Verve 110
300W

Verve 108A
400 + 100W
Verve 108
250W

Verve 115MA
400 + 100W
Verve 115M
500W

Verve 112MA
400 + 100W
Verve 112M
500W



Verve
Speaker Systems

Packed with features and guaranteed to deliver your music in the way you demand: loud and clear!

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VERVE Series is also available in white colour.

New Digital Signal Processor with 4 factory equalization presets provides simple and efficient EQ adjustment. The presets have been extensively tested in the anechoic chamber to optimize the sound performance for different applications.

- **ORIGINAL:** is the typical 'VERVE' sound
- **BOOST:** bass and high are emphasized for a rich and engaging sound
- **HI-END/ VOCAL:** very flat response, typical of the top touring systems. Provides increased intelligibility and presence for vocals and speech
- **WARM:** provides a full bodied response to the Low/Mid frequencies and less aggressive on the high



Active Verve

2-way, bi-amplified, bass reflex design

Biamped: 400W RMS LF, 100W RMS HF, Class D power amplifiers

Digital Signal Processor with 4 Equalization Presets

15 mm (0.59") birch plywood scratch resistant enclosure and internal bracing

High efficiency switch mode power supply

Control Panel: features balanced XLR/Jack input and XLR LINK OUT, Volume, EQ Presets, HP Filter, 3 status LED indicators

Passive Verve

Built-in passive crossover with soft-trip protection for the LF woofer and HF driver

Speakon NL-4 IN and LINK OUT connectors



Verve 212a

SPL Processed Active Speaker
400W + 100W RMS - 133dB

- 2 x 320 mm (12") woofer with 64 mm (2.5") voice coil, custom made for FBT
- 36 mm (1.4") B&C compression driver with 64 mm (2.5") voice coil
- Frequency response from 50Hz to 20 kHz
- 70°H x 50°V Constant Directivity Horn
- 6xM10 anchoring points and 2 heavy duty metal handles

Verve 212

Passive reinforcement speaker
800W/8ohm RMS - 134dB SPL





Verve 115a

SPL Processed Active Speaker
400W + 100W RMS - 130dB SPL

- 380 mm (15") LF woofer with 64 mm (2.5") voice coil, custom made for FBT
- 25 mm (1") exit throat B&C HF compression driver with 36 mm (1.4") voice coil
- Frequency response from 45Hz to 20 kHz
- 80°H x 50°V Constant Directivity Horn
- 6 x M10 suspension points, wall bracket mount flange plate, 35 mm (1 3/8") top-hat speaker stand socket, two integrated handles



Verve 112a

SPL Processed Active Speaker
400W + 100W RMS - 130dB SPL

- 320 mm (12") LF woofer with 64 mm (2.5") voice coil, custom made for FBT
- 25 mm (1") exit throat B&C HF compression driver with 36 mm (1.4") voice coil
- Frequency response from 52Hz to 20 kHz
- 80°H x 50°V Constant Directivity Horn
- 6 x M10 suspension points, wall bracket mount flange plate, 35 mm (1 3/8") top-hat speaker stand socket, one integrated handle

Verve
Speaker Systems

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Verve 115

Passive reinforcement speaker
400W/8ohm RMS - 129dB SPL



Verve 112

Passive reinforcement speaker
400W/8ohm RMS - 128dB SPL



Active Verve

2-way, bi-amplified, bass reflex design

Biamped: 400W RMS LF, 100W RMS HF, Class D power amplifiers

Digital Signal Processor with 4 Equalization Presets

15 mm (0.59") birch plywood scratch resistant enclosure and internal bracing

High efficiency switch mode power supply

Control Panel: features balanced XLR/Jack input and XLR LINK OUT, Volume, EQ Presets, HP Filter, 3 status LED indicators

Passive Verve

Built-in passive crossover with soft-trip protection for the LF woofer and HF driver

Speakon NL-4 IN and LINK OUT connectors



Verve 110a

Processed Active Speaker
400W + 100W RMS - 128dB SPL

- 250 mm (10") LF woofer with 50 mm (2") voice coil, custom made for FBT
- 25 mm (1") exit throat B&C HF compression driver with 36 mm (1.4") voice coil
- Frequency response from 60Hz to 20 kHz
- 80°H x 50°V Constant Directivity Horn
- 6 x M10 suspension points, wall bracket mount flange plate, 35 mm (1 3/8") top-hat speaker stand socket, one integrated handle

Verve 110

Passive reinforcement speaker
300W/8ohm RMS - 125dB SPL



Verve 108a

Processed Active Speaker
400W + 100W RMS - 128dB SPL

- 200 mm (8") LF woofer with 50 mm (2") voice coil, custom made for FBT
- 25 mm (1") exit throat B&C HF compression driver with 36 mm (1.4") voice coil
- Frequency response from 65Hz to 20 kHz
- 80°H x 50°V Constant Directivity Horn
- Wall bracket mount flange plate, 35 mm (1 3/8") top-hat speaker stand socket

Verve 108

Passive reinforcement speaker
250W/8ohm RMS - 123dB SPL





Verve 115Ma

Processed Active Reinforcement Monitor
400W + 100W RMS - 131dB SPL

- 2-way, bass-reflex, bi-amplified
- 400W RMS LF, 100W RMS HF, Class D power amplifiers
- 380 mm (15") custom woofer with 64 mm (2.5") voice coil
- 25 mm (1") B&C compression driver with 44 mm (1.7") voice coil
- Digital Signal Processor with 4 Equalization Presets
- 15 mm (0.59") birch plywood scratch resistant enclosure and internal bracing
- Frequency response from 57Hz to 20 kHz
- Control Panel: balanced XLR/Jack input and XLR link out, Volume, EQ Presets, HP Filter, 3 status LED indicators
- 90° omnidirectional angle dispersion
- Wall bracket mount flange plate, 35 mm (1 3/8") top-hat speaker stand socket, two integrated handles

Verve 115M

Sound Reinforcement Monitor
500W/8ohm RMS - 129dB SPL

- Built-in passive crossover with soft-trip protection for the LF woofer and HF driver
- Speakon NL-4 IN and LINK OUT connectors



Verve 112Ma

Processed Active Reinforcement Monitor
400W + 100W RMS - 129dB SPL

- 2-way, bass-reflex, bi-amplified
- 400W RMS LF, 100W RMS HF, Class D power amplifiers
- 320 mm (12") custom woofer with 64 mm (2.5") voice coil
- 25 mm (1") B&C compression HF driver with 44 mm (1.7") voice coil
- Digital Signal Processor with 4 Equalization Presets
- 15 mm (0.59") birch plywood scratch resistant enclosure and internal bracing
- Frequency response from 65Hz to 20 kHz
- Control Panel: balanced XLR/Jack input and XLR link out, Volume, EQ Presets, HP Filter, 3 status LED indicators
- 90° omnidirectional angle dispersion
- Wall bracket mount flange plate, 35 mm (1 3/8") top-hat speaker stand socket, two integrated handles

Verve 112M

Sound Reinforcement Monitor
300W/8ohm RMS - 127.5dB SPL

- Built-in passive crossover with soft-trip protection for the LF woofer and HF driver
- Speakon NL-4 IN and LINK OUT connectors





Model		Verve 212a	Verve 115a	Verve 112a	Verve 110a	Verve 108a	Verve 115Ma	Verve 112Ma
Configuration	way	2	2	2	2	2	2	2
Built-in amplifier cont. LF/HF	W RMS	350/80	350/80	350/80	350/80	350/80	350/80	350/80
Built-in amplifier max. LF/HF	W RMS	400/100	400/100	400/100	400/100	400/100	400/100	400/100
Built-in amplifier max. peak LF/HF	W	800/200	800/200	800/200	800/200	800/200	800/200	800/200
Frequency response	@-6dB	50Hz - 20KHz	45Hz - 20KHz	52Hz - 20KHz	60Hz - 20KHz	65Hz - 20KHz	57Hz - 20KHz	65Hz - 20KHz
Low frequency woofer	inch	2x12 - 2.5 coil	15 - 2.5 coil	12 - 2.5 coil	10 - 2 coil	8 - 2 coil	15 - 2.5 coil	12 - 2.5 coil
High frequency driver	inch	1.4 - 2.5 coil	1 - 1.4 coil	1 - 1.4 coil	1 - 1.4 coil	1 - 1.4 coil	1 - 1.7 coil	1 - 1.7 coil
Maximum SPL cont/peak	dB	127.5 / 133	125.5 / 130	124 / 130	122.5 / 128	121 / 128	125.5 / 131	124 / 129
Dispersion	H x V	70° x 50°	80° x 50°	80° x 50°	80° x 50°	80° x 50°	90°	90°
Input impedance	kOhm	22	22	22	22	22	22	22
Crossover frequency	kHz	1.3	1.6	1.6	1.8	2.2	1.5	1.6
AC Power requirements	VA	450	450	450	450	450	450	450
Input connectors		XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop	XLR with loop
Power cord	m / ft	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4
Net dimensions (WxHxD)	mm inch	394x1015x380 15.51x39.96x14.96	425x742x420 16.73x29.21x16.53	394x645x380 15.51x25.39x14.96	326x565x325 12.83x22.24x12.79	268x500x270 10.55x19.68x10.62	620x360x470 24.40x14.17x18.50	550x320x410 21.65x12.59x16.14
Net weight	Kg Lb	34.5 76.05	27.2 59.96	20.6 45.41	15.4 33.95	11.6 25.57	19.6 43.21	16.6 36.59
Transport dimensions(WxHxD)	mm inch	500x1135x500 19.68x44.68x19.68	530x860x530 20.86x33.85x20.86	500x765x500 19.68x30.11x19.68	430x685x430 16.92x26.96x16.92	330x620x330 12.99x24.40x12.99	530x740x530 20.86x29.13x20.86	670x430x500 26.37x16.92x19.68
Transport weight	Kg Lb	38.5 84.87	30.2 66.57	23.4 51.58	17.4 38.36	13.6 29.98	22.6 49.82	19.4 42.76

Model		Verve 212	Verve 115	Verve 112	Verve 110	Verve 108	Verve 115M	Verve 112M
Configuration	way	2	2	2	2	2	2	2
Recommended amplifier	W RMS	800	500	400	300	250	500	500
Long term power	W	400	250	200	150	125	250	250
Short term power IEC 268-5	W	1600	1000	800	600	500	1000	1000
Nominal impedance	Ohm	8	8	8	8	8	8	8
Frequency response	@-6dB	55Hz - 18KHz	50Hz - 18KHz	55Hz - 18KHz	60Hz - 18KHz	70Hz - 18KHz	60Hz - 18KHz	70Hz - 18KHz
Low frequency woofer	inch	2x12 - 2.5 coil	15 - 2.5 coil	12 - 2.5 coil	10 - 2 coil	8 - 2 coil	15 - 2.5 coil	12 - 2.5 coil
High frequency driver	inch	1.4 - 2.5 coil	1 - 1.4 coil	1 - 1.4 coil	1 - 1.4 coil	1 - 1.4 coil	1 - 1.7 coil	1 - 1.7 coil
Sensitivity (@1W/1m)	dB	101	99	98	97	95	99	98
Maximum SPL cont/peak (Bi-Amp)	dB	130/ 134	125 / 129	124 / 128	121 / 125	119 / 123	124 / 129	125 / 129
Dispersion	H x V	70° x 50°	80° x 50°	80° x 50°	80° x 50°	80° x 50°	90°	90°
Crossover frequency	kHz	1.4	1.6	1.8	2	2.2	1.6	2
Recommended HP filter		40hz - 24dboct	35hz - 24dboct	40hz - 24dboct	45hz - 24dboct	55hz - 24dboct	45hz - 24dboct	65hz - 24dboct
Input connectors		2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru
Net dimensions (WxHxD)	mm inch	394x1015x380 15.51x39.96x14.96	425x742x420 16.73x29.21x16.53	394x645x380 15.51x25.39x14.96	326x565x325 12.83x22.24x12.79	268x500x270 10.55x19.68x10.62	620x360x470 24.40x14.17x18.50	550 x 320 x410 21,65x12,59x16,14
Net weight	Kg Lb	34.5 76.05	27.2 59.96	20.6 45.41	15.4 33.95	11.6 25.57	19.6 43.21	16.6 36,59
Transport dimensions(WxHxD)	mm inch	500x1135x500 19.68x44.68x19.68	530x860x530 20.86x33.85x20.86	500x765x500 19.68x30.11x19.68	430x685x430 16.92x26.96x16.92	330x620x330 12.99x24.40x12.99	530x740x530 20.86x29.13x20.86	670 x 430 x 500 26,37x16,92x19,68
Transport weight	Kg Lb	38.5 84.87	30.2 66.57	23.4 51.58	17.4 38.36	13.6 29.98	22.6 49.82	19.4 42,76





The **SUBLine** series consists of **12Sa, 15Sa, 18Sa active and 18S passive subwoofer models**, built in birch plywood and aimed to extend the low frequency response to a wide range of FBT speaker systems

Created with the aim to maximize SPL/SIZE ratio, they have **Class D amplifiers, switch mode power supply and Digital Signal Processor** with presets to match any other FBT speaker

With IN/OUT stereo connectors, it is possible to use only one subwoofer with Left and Right speakers

Optional wheels, ergonomic integrated carrying handles and plywood cabinets allow an **easy transport**



SUBLine 18Sa

Processed Active Subwoofer
1200W RMS - 137dB SPL

- Bass-reflex design Subwoofer
- 460 mm (18") high excursion woofer with 75 mm (3") voice coil, custom made for FBT by B&C
- Frequency response from 33Hz - 120Hz
- 1200W RMS Class D power amplifier with switch mode power supply
- Digital Signal Processor with 6 presets, 3 equalization with 2 LPF Crossover Settings, 6 step digital delay line
- Control Panel with Stereo XLR in/outs, Volume, EQ Presets, Delay, Phase Reversal Switch 0°-180°, 3 status LED indicators

SUBLine 18S

Sound Reinforcement Subwoofer
1200W RMS - 136dB SPL

- Neutrik Speakon NL4MD-V connectors IN & LINK OUT
 - External digital processor required: FBT DLM26 Digital Loudspeaker Management



Active SUBLine

15 mm (5/8") Baltic birch plywood cabinet with scratch & scuff resistant paint finish

M20 (20 mm) top mount speaker stand socket, two aluminum carrying handles

Provides additional low frequency reinforcement when used along with Verve, EvoMaxX, Jolly speakers



SUBLine 15Sa

Processed Active Subwoofer
600W RMS - 135dB SPL

- Compact band-pass design Subwoofer with high SPL and punch
- 380 mm (15") high excursion magnet woofer with 75 mm (3") voice coil, custom made for FBT
- Frequency response from 38Hz to 120Hz
- 600W RMS Class D power amplifier with switch mode power supply
- Digital Signal Processor with 4 presets, 2 equalization with 2 LPF Crossover Settings
- Control Panel with Stereo combo XLR/Jack in/outs, Stereo XLR HP-filter outs, Volume, EQ Presets, Phase Reversal Switch 0°-180°, 3 status LED indicators
- Very Lightweight



SUBLine 12Sa

Processed Active Subwoofer
600W RMS - 129/133dB SPL

- Compact band-pass design Subwoofer with high SPL and punch
- 320 mm (12") high excursion magnet woofer with 64 mm (2.5") voice coil, custom made for FBT
- Frequency response from 42Hz to 140Hz
- 600W RMS Class D power amplifier with switch mode power supply
- Digital Signal Processor with 4 presets, 2 equalization with 2 LPF Crossover Settings
- Control Panel with Stereo combo XLR/Jack in/outs, Stereo XLR HP-filter outs, Volume, EQ Presets, Phase Reversal Switch 0°-180°, 3 status LED indicators
- Very Lightweight





Model		SUBLine 18Sa	SUBLine 15Sa	SUBLine 12Sa
Configuration	way	1	1	1
Built-in amplifier cont. LF/HF	W RMS	900	400	400
Built-in amplifier max. LF/HF	W RMS	1200	600	600
Built-in amplifier max. peak LF/HF	W	2400	1200	1200
Frequency response	@-6dB	33Hz - 140Hz	38Hz - 120Hz	42Hz - 140Hz
Low frequency woofer	inch	1x18 - 3 coil	1x15 - 3 coil	1x12 - 2.5 coil
High frequency driver	inch	-	-	-
Maximum SPL cont/peak	dB	133 / 137 half-space	131 / 135 half-space	129 / 133 half-space
Dispersion	H x V	omnidirectional	omnidirectional	omnidirectional
Input impedance	kOhm	22	22	22
Crossover frequency	kHz	80 or 120Hz	80 or 120Hz	90 or 140Hz
AC Power requirements	VA	800	450	450
Input connectors		stereo XLR with loop	stereo XLR with loop, HP out	stereo XLR with loop, HP out
Power cord	m / ft	5 / 16.4	5 / 16.4	5 / 16.4
Net dimensions (WxHxD)	mm inch	510x629x650 20.07x24.76x25.59	480x560x595 18.91x22.06x23.44	425x510x520 16.73x20.07x20.47
Net weight	Kg / Lb	42 / 92.59	31.5 / 70	24 / 52.91
Transport dimensions(WxHxD)	mm inch	700x790x800 27.55x31.10x31.49	590x665x705 23.22x26.18x27.75	435x610x630 17.12x24.01x24.80
Transport weight	Kg / Lb	53 / 116.84	35 / 77	28 / 61.72

Model		SUBLine 18S
Configuration	way	1 reflex
Recommended amplifier	W RMS	1200
Long term power	W	600
Short term power IEC 268-5	W	2400
Nominal impedance	Ohm	4
Frequency response	@-6dB	33hz - 400hz
Low frequency woofer	inch	18 - 3 coil
High frequency driver	inch	-
Sensitivity (@1W/1m)	dB	98.5
Maximum SPL cont/peak (Bi-Amp)	dB	133 / 136 half-space
Dispersion	H x V	omnidirectional
Crossover frequency	kHz	external active
Recommended HP filter		28hz - 24dboct
Input connectors		2 x Speakon NL4 in & throu
Net dimensions (WxHxD)	mm inch	510x629x650 20.07x24.76x25.59
Net weight	Kg/Lb	39 / 85.98
Transport dimensions(WxHxD)	mm inch	700x790x800 27.55x31.10x31.49
Transport weight	Kg/Lb	50 / 110.23



StageMaxx

Stage Monitor

MaxX More!

The new stage monitor

FBT's brand new StageMaxX has been inspired by the need to have a product specifically designed and engineered for use as stage monitor, overcoming all compromises for a full user satisfaction.

The extremely heavy-duty and resonance free polypropylene cabinet is born from the enormous experience of FBT in gas injected mold engineering it acoustically behaves like a wooden cabinet allowing the perfect integration of all the components for an uncompromising quality in a compact, elegant, unobtrusive on stage, extremely comfortable and easy to carry product.

StageMaxx 12Ma is the right combination of all the quality features to be a perfect stage monitor:

- Low profile and aesthetic elegance
- Compact size
- Frequency response studied for stage monitor applications
- High headroom before feedback
- High sound quality
- Great power and dynamics
- Symmetric dispersion
- Aligned LF and HF acoustic centers
- Easy handling on stage
- Lightweight
- Heavy-duty polypropylene cabinet

StageMaxX features a 12" B&C loudspeaker custom made for FBT and coaxially mounted with a B&C 1" exit throat compression driver.

The coaxial configuration allows perfect alignment of the acoustic centers of the transducers, guaranteeing symmetry of dispersion and

improving focus of the stereo image in Left-Right configuration.

Bi-amplification design with high dynamic Class D amplifiers delivering 400W + 100W RMS through a switch mode power supply.

Digital Signal Processor with 4 factory equalization presets provides simple and efficient EQ adjustment to optimize the acoustical response for different applications. The FOH preset allows the use in suspended installation as well as 'drum fill' applications.

StageMaxX features two lateral M10 rigging points and wall mounting bracket for different applications (optional accessories).

3 frontal status LED indicators to control ON OFF limiter and protection state.

New Neutrik POWERCON TRUE 1 AC connector with Input and loop out to supply AC power to up to 7 additional StageMaxX speakers at 230Vac and 3 at 117Vac.

Three ergonomic integrated carrying handles, one frontally placed to easily drag and move the monitor on stage and the replaceable Teflon feet ensure sliding on stage with minimal wear.

The cabinet has 35° or 55° tilted front panel for an optimal listening distance for single user (35°) or for more users (55°).

The 4 presets are:

- **ORIGINAL:** is the typical "MaxX" sound adapted to "STAGE" application
- **HI-CUT/DRUM FILL:** provides less mid-high for a comfortable listening in near-field at high level
- **LO-CUT/DOUBLE:** provides less low frequency for better intelligibility and for optimal coupling in stereo configuration
- **FOH:** Front Of House use in suspended or pole-mount installations





StageMaxX 12Ma

Processed Active Reinforcement Monitor
400W + 100W RMS - 130dB SPL

- 2-way, bi-amplified, bass reflex design cabinet
- Coaxial custom FBT 320 mm (12") B&C speakers with 64 mm (2.5") voice coil
- B&C 25 mm (1") exit throat compression driver and 44 mm (1.7") voice coil
- **Bi-amp: high dynamic Class D amplifiers 400W + 100W RMS** to provide a pleasant sound even at loud volume
- High efficiency switch mode power supply
- Digital Signal Processor with 4 factory equalization presets
- Control Panel: XLR/Jack input and XLR link out, Volume, 4 Presets, HP Filter, 3 frontal status LED indicators
- Neutrik POWERCON TRUE 1 AC connector with Input and loop out to supply AC power to additional StageMaxX speakers
- 90° Directivity Horn
- Proprietary filtered algorithms, dynamic equalization at low frequencies, advanced energy control allows an high SPL while granting reliable and distortion free audio reproduction with high headroom
- Sturdy gas-injected polypropylene molded enclosures engineered to avoid undesired resonance
- Weather resistant coating under the grill to protect the driver and the speaker
- High SPL in a compact size monitor
- 35° or 55° tilted front panel for an optimal listening distance for single or multiple users
- Three ergonomic integrated carrying handles, two M10 rigging points
- Teflon replaceable feet allow an easy use on stage



Available in white colour:
StageMaxX 12Ma W



StageMaxX
Stage Monitor



Model		StageMaxX 12Ma
Configuration	way	2
Built-in amplifier cont. LF/HF	W RMS	350/80
Built-in amplifier max. LF/HF	W RMS	400/100
Built-in amplifier max. peak LF/HF	W	800/200
Frequency response	@-6dB	60Hz - 20KHz
Low frequency woofer	inch	12 - 2.5 coil
High frequency driver	inch	1 - 1.7 coil
Maximum SPL cont/peak	dB	124 / 130
Dispersion	H x V	90°
Input impedance	kOhm	22
Crossover frequency	kHz	1.8
AC Power requirements	VA	450
Input connectors		XLR with loop
Power cord	m / ft	5 / 16.4
Net dimensions (WxHxD)	mm inch	550x289x392 21.65x11.37x15.43
Net weight	Kg / Lb	13.6 / 29.98
Transport dimensions(WxHxD)	mm inch	670x430x500 26.37x16.92x19.68
Transport weight	Kg / Lb	16.4 / 36.15



SM-S 12
Metal bracket with
top-hat speaker
stand socket

KMS 300
Aluminium speaker
stand Air-Cushioned



SM-U 12
Wall metal bracket
to mount in horizontal
position



Monitor 55°

Monitor 35°



A benchmark in Sound Reinforcement

With the **HiMaxX series**, FBT establishes a **reference** point on the scenario of 12" and 15" sound reinforcement polypropylene enclosures, introducing performance and technical content of an impressive standard.

The **engineering of the enclosures**, the use of **switch mode power supplies** and **high-efficiency power amplifiers**, the custom design of the transducers made FBT's R&D team achieve the maximum in power/weight ratio.



Three models; two 2-way full-range enclosures in polypropylene, **HiMaxX 40** (12" + 1") and **HiMaxX 60** (15" + 1.4"), plus a compact 18" bandpass SUB in birch plywood (**HiMaxX 100Sa**). Compact and light weight, HiMaxX brilliantly solve all the most demanding needs for **bands**, musicians and professionals looking for **powerful, versatile and very high quality** loudspeaker enclosures. Ideal for live and sound reinforcement applications requiring **ease of transport**, they are also suited to **fixed installations**, thanks to the cabinets' design and optional accessories.

HiMaxX 60a
1100+250W
HiMaxX 60
700W



HiMaxX 40a
1000+250W
HiMaxX 40
500W



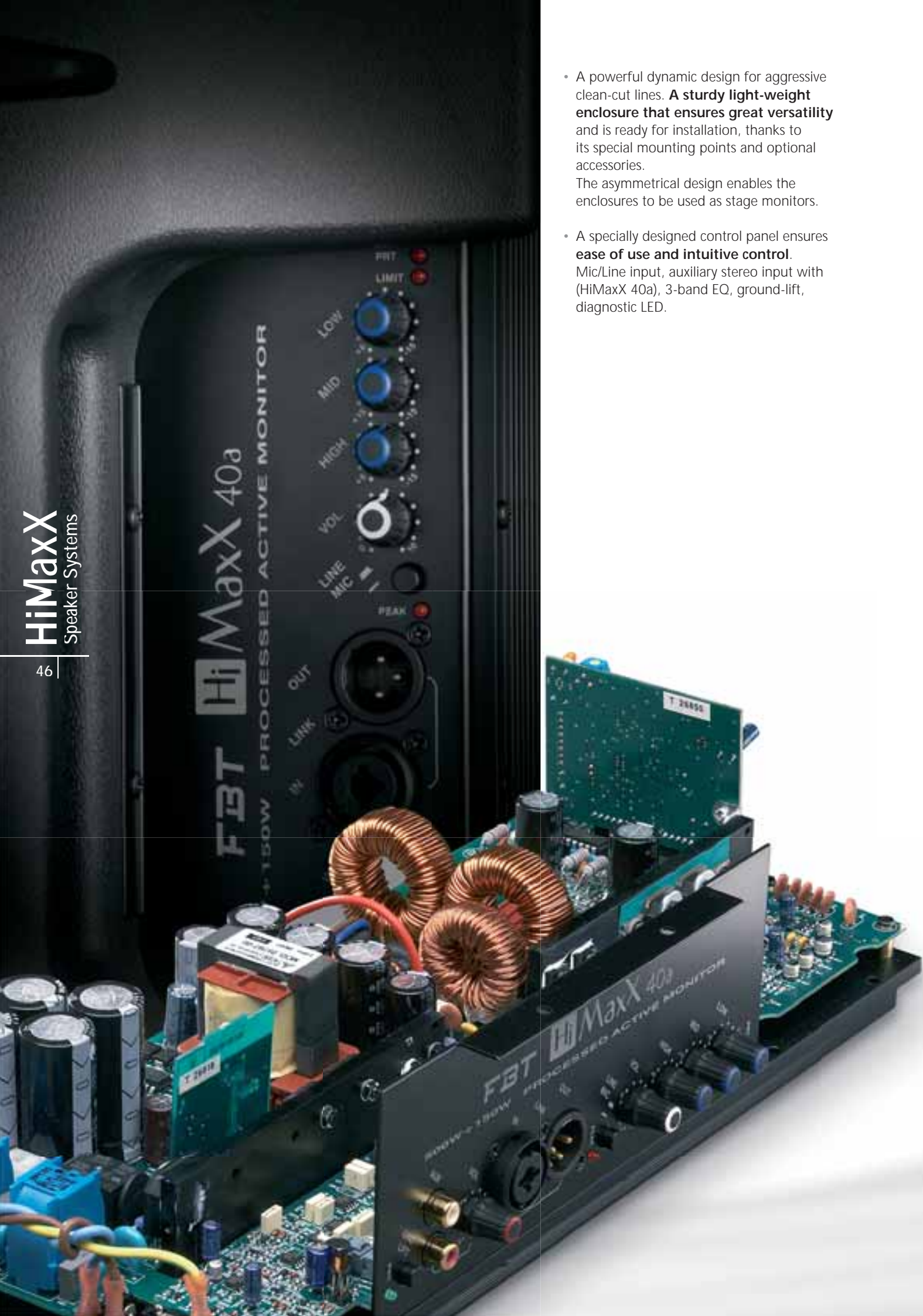
HiMaxX 100Sa
1200W



HiMaxX
Speaker Systems

Amazing audio quality, thrilling performance, innovative design and extreme reliability





- A powerful dynamic design for aggressive clean-cut lines. **A sturdy light-weight enclosure that ensures great versatility** and is ready for installation, thanks to its special mounting points and optional accessories.
The asymmetrical design enables the enclosures to be used as stage monitors.
- A specially designed control panel ensures **ease of use and intuitive control**. Mic/Line input, auxiliary stereo input with (HiMaxX 40a), 3-band EQ, ground-lift, diagnostic LED.



- Loudspeaker components are engineered in collaboration with B&C. FBT studied and designed **special chassis**. A more efficient **ventilation circuit** with a consequent reduction of 2dB "power compression", a **considerably stiffer** cone to improve reliability and distortion and an even **more powerful neodymium magnet** to increase control and efficiency.

The voice coil has a diameter of 75 mm (3") for **higher power handling and reliability**.

- **B&C compression driver** with a 25 mm (1") throat and 44 mm (1.7") coil (HiMaxX 40) for high power handling. Thanks to the use of a shorting copper cap, high frequencies are even more dynamic and crystal-clear.

- The development of the innovative amplifier is the result of years of research by the FBT R&D labs. It manages to combine the contrasting features of **lightness, high power, efficiency and reliability**, using the very latest technology. A **switch mode power supply** to reduce the weight and increase the power output velocity, a very high performance **PWM amplifier for the low frequencies**, to maximize the power fed out with minimum heat dissipation. A **Class G amplifier for the high frequencies** enables to achieve the audio quality of a Class A, with a much higher output.

- The **silent preamplifier** manufactured with SMD technology has the job of handling the equalization, 24dB/oct crossover, sophisticated protections, limiter and the commands of the control panel.

- The **horn's profile** has been **designed** to ensure greater directivity control and lower distortion. The dispersion angle is 90°H x 60°V.



BOX 100

Ceiling bracket
balancing stand



KMS 300

Adjustable air-cushion floor
stand (ø 35 mm - 1.38")
- max weight
56 Kg (124 Lb)





Active HiMaxX

2-way, bi-amplified in Bass- Reflex design

Switch mode power supply for an excellent ratio weight/power

Sturdy cabinet in polypropylene also designed for stage monitor use

Analog signal processor with limiter

4 x M10 suspension points, 35 mm Ø (1.38") top-hat for speaker stand placement and wall bracket mount flange, 2 integrated carrying handles

90°H x 60°V constant directivity horn



HiMaxX 60a

Processed Active Speaker
1100W + 250W RMS - 135dB SPL

- **B&C custom designed 380 mm (15") neodymium woofer** with 75 mm (3") voice coil
- **B&C 36 mm (1.4") compression driver** with 64 mm (2.5") voice coil
- **700W RMS PWM LF power amplifier**
- **200W RMS Class G HF power amplifier**
- **Control panel with:**
 - XLR Input and XLR Link
 - Gain and Volume functions in a single potentiometer improving the dynamic range and input signal/noise ratio
 - 3-band EQ (Bass, Mid, High)
 - Ground-lift
 - Diagnostic LED



Passive HiMaxX

Passive crossover filter featuring "soft-trip" circuitry to ensure full protection of LF woofer and HF driver

2 NL-4 Neutrik™ Speakon connectors

HiMaxX 60

Sound Reinforcement Speaker
700W / 8ohm - 132dB SPL





HiMaxX 40a

Processed Active Speaker
1000W + 250W RMS - 133dB SPL

- B&C custom designed 320 mm (12") neodymium woofer with 75 mm (3") voice coil
- B&C 25 mm (1") compression driver with 44 mm (1.7") voice coil
- 500W RMS PWM LF power amplifier
- 150W RMS Class G HF power amplifier
- Control panel with:
 - Gain and Volume functions in a single potentiometer improving the dynamic range and input signal/noise ratio
 - Combo XLR/jack input XLR link
 - Mic/Line selection
 - Independent RCA input channel with separate volume control to connect external devices such as MP3, CD, PC players
 - 3-band EQ (Bass, Mid, High)
 - Ground-Lift
 - Diagnostic LED
- Enclosure suitable for stacking



HiMaxX 100Sa

Processed Active Subwoofer
1200W RMS - 139dB SPL

- Bandpass subwoofer design
- 18" (460 mm) custom neodymium B&C woofer with a 3" (75 mm) voice coil
- Built-in 1200W RMS PWM amplifier
- Switch mode power supply
- Analogue signal processor with limiter
- Control panel with:
 - XLR/input and XLR stereo outputs with Hi-Pass, filter for connecting the satellites
 - Volume
 - Ground-Lift
 - 0°-180° phase inverter switch
 - Limiter LED
- 18 mm (0.7") birch plywood enclosure
- The special "bandpass" acoustic loading increases efficiency and maximum SPL
- 8 x M10 suspension points, stand socket and two integrated wooden handles
- Optional 4 swivel-mount casters 80 mm ø (3.15") on request

HiMaxX 40

Sound Reinforcement Speaker
500W / 8ohm - 131dB SPL





Model		HiMaxX 60a	HiMaxX 40a	HiMaxX 100Sa
Configuration	way	2	2	Band-Pass
Built-in amplifier cont. LF/HF	W RMS	700/200	500/150	900
Built-in amplifier max. LF/HF	W RMS	1100/250	1000/250	1200
Built-in amplifier max. peak LF/HF	W	2200/500	1600/500	2400
Frequency response	@-6dB	40Hz - 20kHz	45Hz - 20kHz	38 - 120Hz
Low frequency woofer	inch	1x15 - 3 coil	1x12 - 3 coil	1x18 - 3 coil
High frequency driver	inch	1.4 - 2.5 coil	1 - 1.7 coil	-
Sensitivity (@1W/1m)	dB	99	99	102
Maximum SPL cont./peak	dB	129/135	127/133	135/139
Dispersion	H x V	90° x 60°	90° x 60°	omnidirectional
Input impedance	kohm	22	22	22
Crossover frequency	kHz	1.2	1.6	active 120
Input connectors		XLR with loop	XLR/jack with loop RCA aux	stereo XLR with loop
Power cord	m / ft	5 / 16.4	5 / 16.4	5 / 16.4
Net dimensions (WxHxD)	mm inch	482x757x427 19x29.8x16.8	407x634x370 16x24.9x14.5	530x605x655 21x23.8x25.8
Net weight	Kg Lb	28.3 62.4	17.9 39.4	43 94.8
Transport dimensions (WxHxD)	mm inch	520x867x600 20.4x34.1x23.6	495x720x470 19.5x28.3x18.5	660x735x785 26x29x31
Transport weight	Kg Lb	30.3 66.8	20.5 45.2	47 103.6

Model		HiMaxX 60	HiMaxX 40
Configuration	way	2	2
Recommended amplifier	W RMS	700	500
Long term power	W	350	250
Short term power (IEC 268-5)	W	1400	1000
Nominal impedance	ohm	8	8
Frequency response	@-6dB	40Hz - 20kHz	50Hz - 20kHz
Low frequency woofer	inch	1x15 - 3 coil	1x12 - 3 coil
High frequency driver	inch	1.4 - 2.5 coil	1 - 1.7coil
Sensitivity (@1W/1m)	dB	99	99
Maximum SPL cont./peak	dB	129/132	127/131
Dispersion	H x V	90° x 60°	90° x 60°
Crossover frequency	kHz	1.3	1.6
Recommended HP filter		35Hz - 24dBoct	45Hz - 24dBoct
Recommended external filter		-	-
Input connectors		2 x Speakon	2 x Speakon
Net dimensions (WxHxD)	mm inch	482x757x427 19x29.8x16.8	407x634x370 16x24.9x14.5
Net weight	Kg Lb	26 57.3	16 35.2
Transport dimensions (WxHxD)	mm inch	520x867x600 20.4x34.1x23.6	495x720x470 19.5x28.3x18.5
Transport weight	Kg Lb	28.5 62.8	18.5 40.8





The next MaxX generation

ProMaxX Speaker Series maintains some of the winning attributes of the FBTMaxX Series, incorporates the latest technological achievements designed by FBT's R&D team, and guarantees quality of construction, utmost reliability, extreme portability and unbelievable sound fidelity.

ProMaxX 14a
600+300W
ProMaxX 14
700W



ProMaxX 12a
600+300W
ProMaxX 12
600W



ProMaxX 10a
600+300W
ProMaxX 10
400W



ProMaxX 15Sa
1200W



ProMaxX
Speaker Systems

Powerful and Versatile - Lightweight - Increased SPL - DSP with 8 presets

53

The **ProMaxX** Series 2-way speakers feature a sophisticated cabinet design that increases low frequency SPL and virtually eliminates undesired resonance. A custom FBT horn design provides improved projection, accuracy and uniform dispersion of the mid high and high frequencies. Two ergonomic carrying handles are integrated into the cabinets for easier placement on speaker stands and when transporting. An innovative electronic DSP circuitry and FBT's latest technological breakthroughs in the development Class D amplification circuitry, "Raises the Bar to New Heights" for lightweight powered speaker systems. Combining this with their ease of use and the versatility for many portable or installed sound reinforcement applications, the ProMaxX Speakers provide Musicians, DJ's, Audio / Video Contractors, Sound Reinforcement and Audio Rental Companies with advanced systems of Pro audio reproduction.





- Sturdy, gas-injected polypropylene molded enclosures, engineered to contain undesired resonance
- B&C neodymium magnet loudspeakers custom made for FBT
- **Class D, 1200W + 600W RMS** power amplifiers with high efficiency switch mode power supplies
- Proprietary filter algorithms, dynamic equalization at low frequencies, and advanced energy control allow high SPL while always granting reliable and distortion free audio reproduction
- **Original horn profile** provides extremely accurate and uniform dispersion for the entire frequency radiation angle, not just for the horizontal and vertical plane
- An increase in total SPL thanks to our enclosure design, engineered with 4 bass-reflex ports to increase the size of the radiation area, This further enhances low frequency efficiency and performance without a substantial increase in the external dimensions of the cabinets



FBT's **Digital Signal Processor with 8 factory equalization** presets provides simple and efficient EQ adjustment. Extensive tests in our anechoic chamber went into the development of these presets to optimize the ProMaxX speakers for use for numerous applications.

8 speakers in one!

The presets include:

- **ORIGINAL**: is the typical FBT sound for general application use
- **FLOOR**: the ProMaxX immediately becomes an ideal stage monitor
- **VOCAL**: provides increased intelligibility and presence for vocals and speech
- **WARM**: gives a full bodied response to the low-mid frequencies and less aggressive on the highs
- **HI-END SYSTEM**: make the response similar to speakers used for touring sound
- **FARFIELD**: optimize the response for listening distance over 15-20 meters, (48-65-ft,)
- **NEARFIELD**: optimized response for listening distance of up to 8 mt (25ft,)
- **LOUDNESS**: low frequency emphasis / presense at lower volumes for recorded music playback or disco

Our new unique **14" LF neodymium magnet woofer** with a 3" voice coil is featured in the ProMaxX 14a. This 14" woofer is housed inside the same enclosure as the ProMaxX 12a, and delivers the performance of a 15" woofer, but at the size and weight of a 12" .



Two ergonomic carrying handles, **M10 fly points**, top-hat speaker stand socket.

2 - way enclosures have 3 monitor tapers for use as a floor wedge at 12°, 45°, 55°, providing extraordinary versatility **for monitor application**.



12°

45°

55°



Active ProMaxX

2-way, bi-amplified, bass reflex design cabinet

Bi-amped: 600W RMS LF, 300W RMS HF, Class D power amplifiers with switch mode power supplies

Digital signal processor with 8 equalization presets

Control Panel: features XLR input and link out, Volume, EQ Presets, HP Filter, Ground-Lift Switch

2 x M10 suspension points, 35 mm (1.3/8") top-hat speaker stand socket, wall bracket mount flange plate

90°H x 60°V constant directivity horn

Front of House or Stage Floor Monitor: with 12°, 40° and 55° monitoring angles

Passive ProMaxX

Built-in passive crossover with soft-trip protection for the LF woofer and HF driver

Speakon NL-4 IN and LINK OUT connectors



ProMaxX 14a

Processed Active Speaker
600W + 300W - 135.5dB SPL

- 355 mm (14") LF neodymium magnet woofer with 76 mm (3") voice coil, custom made for FBT by B&C
- 36 mm (1.4") exit throat HF driver with 64 mm (2.5") voice coil
- Frequency response from 45Hz to 20 kHz
- ProMaxX 14a uses the same size gas-injected polypropylene molded enclosure as the ProMaxX 12a, but features a New 14" LF Woofer for lower frequency response
- Extremely light, only 17.4 Kg / 38.3 Lb

ProMaxX 14

Passive reinforcement speaker
700W / 8ohm - 132dB SPL



ProMaxX 12a

Processed Active Speaker
600W + 300W - 133dB SPL

- 320 mm (12") LF neodymium magnet woofer with 76 mm (3") voice coil, custom made for FBT by B&C
- 25 mm (1") exit throat B&C HF neodymium magnet compression driver
- Frequency response from 48Hz to 20 kHz
- Sturdy gas-injected polypropylene molded enclosure with 2 integrated handles
- Extremely light, only 15.8 Kg / 34.8 Lb

ProMaxX 12

Passive reinforcement speaker
600W / 8ohm - 130dB SPL





ProMaxX 10a

Processed Active Speaker
600W + 300W - 131dB SPL

- 250 mm (10") LF neodymium magnet woofer with 64 mm (2.5") voice coil, **custom made for FBT by B&C**
- 25 mm (1") throat exit B&C HF **neodymium magnet compression driver**
- Frequency response from 58Hz to 20 kHz
- Sturdy gas-injected polypropylene molded enclosure with one integrated handle
- Extremely light , only 11.3 Kg / 24.9 Lb

ProMaxX 10

Passive reinforcement speaker
400W / 8ohm - 127dB SPL



ProMaxX 15Sa

Processed Active Subwoofer
1200W - 136dB SPL

- **Compact band-pass** design subwoofer with **high SPL** and punch
- 380 mm (15") high excursion woofer with 76 mm (3") voice coil, **custom made for FBT by B&C**
- Frequency response from 38Hz to 120Hz
- **1200W RMS Class D** power amplifier with **switch mode power supply**
- **Digital Signal Processor with 8 presets**, 2 equalization with 4 LPF different frequency
- Control Panel with XLR input and link out, Volume, EQ Presets, Delay, Phase Switch 0°-180°, Ground-Lift Switch
- 15 mm (5/8") **Baltic birch plywood cabinet** with scratch & textured resistant paint finish
- **M20** (20 mm) top mount speaker stand socket, two aluminum carrying handles
- Provides additional low frequency reinforcement when used along with the ProMaxX speakers





Model		ProMaxX 14a	ProMaxX 12a	ProMaxX 10a	ProMaxX 15Sa
Configuration	way	2	2	2	1
Built-in amplifier cont. LF/HF	W RMS	400/200	400/200	400/200	800
Built-in amplifier max. LF/HF	W RMS	600/300	600/300	600/300	1200
Built-in amplifier max. peak LF/HF	W	1200/600	1200/600	1200/600	2400
Frequency response	@-6dB	45Hz - 20KHz	48Hz - 20KHz	58Hz - 20KHz	38Hz - 120Hz
Low frequency woofer	inch	14 - 3 coil neodymium	12 - 3 coil neodymium	10 - 2,5 coil neodymium	1x15 - 3 coil neodymium
High frequency driver	inch	1,4 - 2,5 coil	1 - 1,4 coil neodymium	1 - 1,4 coil neodymium	-
Maximum SPL cont/peak	dB	127,5 / 135,5	126 / 133	123 / 127	132 / 136 half-space
Dispersion	H x V	90° x 60°	90° x 60°	90° x 60°	omnidirectional
Input impedance	kOhm	22	22	22	22
Crossover frequency	kHz	1,3	1,6	1,8	preset dependant
AC Power requirements	VA	640	640	640	640
Input connectors		XLR with loop	XLR with loop	XLR with loop	XLR with loop
Power cord	m/ft	5/16,4	5/16,4	5/16,4	5/16,4
Net dimensions (WxHxD)	mm inch	402x644x345 15,8x25,4x13,6	402x644x345 15,8x25,4x13,6	320x550x275 12,6x21,6x10,8	507x585x605 20x23x23,82
Net weight	kg/lb	17,4 / 38,3	15,8 / 34,8	11,3 / 24,9	31 / 68
Transport dimensions(WxHxD)	mm inch	500x745x440 19,7x29,3x17,3	500x745x440 19,7x29,3x17,3	400x630x360 15,7x24,8x14,2	615x670x715 24,2x26,4x28,2
Transport weight	kg/lb	20,4 / 45	18,8 / 41,4	13,8 / 30,4	35 / 77

Model		ProMaxX 14	ProMaxX 12	ProMaxX 10
Configuration	way	2	2	2
Recommended amplifier	W RMS	700	600	400
Long term power	W	350	300	200
Short term power IEC 268-5	W	1400	1200	800
Nominal impedance	Ohm	8	8	8
Frequency response	@-6dB	50Hz - 18KHz	55Hz - 18KHz	60Hz - 18KHz
Low frequency woofer	inch	1x14 - 3 coil - neodymium	1x12 - 3 coil - neodymium	1x10 - 2,5 coil - neodymium
High frequency driver	inch	1 x 1,4 - 2,5 coil	1 - 1,4 coil - neodymium	1 - 1,4 coil - neodymium
Sensitivity (@1W/1m)	dB	100	99	97
Maximum SPL cont/peak	dB	128 / 132	126 / 130	123 / 127
Dispersion	H x V	90° x 60°	90° x 60°	90° x 60°
Crossover frequency	kHz	1,3	1,6	1,8
Recommended HP filter		40hz - 24dboct	45hz - 24dboct	50hz - 24dboct
Input connectors		2 x Speakon NL4 in & throu	2 x Speakon NL4 in & throu	2 x Speakon NL4 in & throu
Net dimensions (WxHxD)	mm inch	402x644x345 15,8x25,4x13,6	402x644x345 15,8x25,4x13,6	320x550x275 12,6x21,6x10,8
Net weight	kg/lb	16 / 35,2	14,4 / 38,7	9,9 / 21,8
Transport dimensions (WxHxD)	mm inch	500x745x440 19,7x29,3x17,3	500x745x440 19,7x29,3x17,3	400x630x360 15,7x24,8x14,2
Transport weight	kg/lb	19 / 41,8	17,4 / 38,3	12,4 / 27,3



Evo²Maxx

Speaker Systems

The Second generation of an International Best Seller

Evolving from the FBT EvoMaxX Series of loudspeakers, FBT Evo²MaxX speakers feature totally new Digital Sound Processing resulting in improved sound quality and SPL, especially in bass reproduction at high volume. The sound is more relaxing and natural and the four new DSP presets provide quick dynamic equalization and protection contours for any acoustically challenging venue. Other exciting features are high efficiency and excursion woofers, powerful Class D amplifiers with an extremely low noise floor.

Alongside these key performance improvements, FBT has been inspired to develop the Evo²MaxX Series by one very important goal – offering the customer more value for money. Evo²MaxX lightweight yet sturdy polypropylene cabinets feature a monitor taper designed to ensure that they perform with excellence no matter whether they are used at front of house for a main sound system, as stage floor monitors or within permanent installations.



Additional options are also available for extending low frequency response in the shape of the 15" subwoofer Evo²MaxX 9Sa or the SUBLine 12Sa, 15Sa and 18Sa, all of which boast birch plywood enclosures with 12", 15" band-pass and 18" reflex designs respectively.



- Sturdy, gas-injected polypropylene molded enclosures, engineered to contain undesired resonance
- High efficiency loudspeakers custom made for FBT with a weather resistant coating, allowing use in covered outdoor applications
- **B&C HF** compression drivers
- **Latest Class D, 400W LF and 100W HF** power amplifiers with **high efficiency switch mode power supplies**. These amplifiers boast an extremely lightweight design with passively cooled circuitry, meaning no noisy fans!
- **New digital signal processor with dynamic equalizations and sophisticated dynamic limiters**
- **four improve sound quality and SPL granting reliable and distortion-free audio reproduction**
- **New 4 DSP presets for improved versatility and ease of use**
- **Premium sound quality as results of extensive listening test**
- **High SPL** thanks to FBT's new digital limiter algorithms and high power class D amplifier
- Ergonomic carrying handles, M10 fly points, a top-hat speaker stand socket and a stage monitor taper - all included to ensure superb versatility for live sound events and permanent installations.



Evo²MaxX
Speaker Systems

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More powerful Class D amplifiers - Extra lightweight polypropylene cabinets - Higher SPL for optimal audio reproduction
New DSP with four EQ presets - More value for the money



Perhaps best of all the fact that Evo²MaxX owners can enjoy four loudspeakers in one thanks to FBT's **New four factory DSP presets**. The result of hundreds of hours of development time in FBT's dedicated R&D facility, the presets optimize the Evo²MaxX range to accommodate a vast range of applications.

The presets include:

ORIGINAL: Corresponding FBT benchmark sound for use in general applications

FLOOR/VOCAL: The Evo²MaxX immediately becomes an ideal stage monitor. Also suited for high clarity and intelligibility vocal reproduction.

BOOST/LOUNGE: Providing loudness contour with increased bass response for a relaxing and very enjoyable listening, especially at low and medium volume

CLUB/DJ: Providing all the punch and full-bodied response required by DJ users, suitable for high volume DISCO and PARTY applications

Active Evo²MaxX

2-way, bi-amplified, bass reflex design cabinet

Biamped: 400w RMS LF, 100w RMS HF, Class D power amplifiers with switch mode power supplies

Digital Signal Processor with 4 Equalization Presets

Sturdy gas-injected polypropylene molded enclosure with two integrated handles and Stage Floor Monitor taper

25 mm (1") exit throat
B&C HF compression driver

Control Panel: features balanced XLR/Jack input and XLR link out, Volume, EQ Presets, HP Filter, 3 status LED indicators,

90°H x 60°V Constant Directivity Horn

Enclosure suitable for stacking

Passive Evo²MaxX

Built-in passive crossover with soft-trip protection for the LF woofer and HF driver

Speakon NL-4 IN and LINK OUT connectors



Evo²MaxX 6a

Processed Active Speaker
400W + 100W RMS - 130dB SPL

- 380 mm (15") LF woofer with 64 mm (2.5") voice coil
- Frequency response from 42Hz to 20 kHz
- 4 x **M10** suspension points, 35 mm (1 3/8") top-hat speaker stand socket, wall bracket mount flange plate
- Extremely light, only 24.4 Kg / 53.8 Lb

Evo²MaxX 6

Passive Reinforcement Speaker
400W/8ohm - 130dB SPL



Evo²MaxX 4a

Processed Active Speaker
400W + 100W RMS - 130dB SPL

- 320 mm (12") LF woofer with 64 mm (2.5") voice coil
- Frequency response from 50Hz to 20 kHz
- 4 x **M10** suspension points, 35 mm (1 3/8") top-hat speaker stand socket, wall bracket mount flange plate
- Extremely light, only 15.6 Kg / 34.4 Lb

Evo²MaxX 4

Passive Reinforcement Speaker
300W/8ohm - 128dB SPL





Evo²MaxX 2a

Processed Active Speaker
400W + 100W RMS - 128dB SPL

- **250 mm (10")** LF woofer with 50 mm (2") voice coil
- Frequency response from 58Hz to 20 kHz
- 2 x **M10** suspension points, 35 mm (1 3/8") top-hat speaker stand socket, wall bracket mount flange plate
- Extremely light, only 12 Kg / 26.5 Lb

Evo²MaxX 2

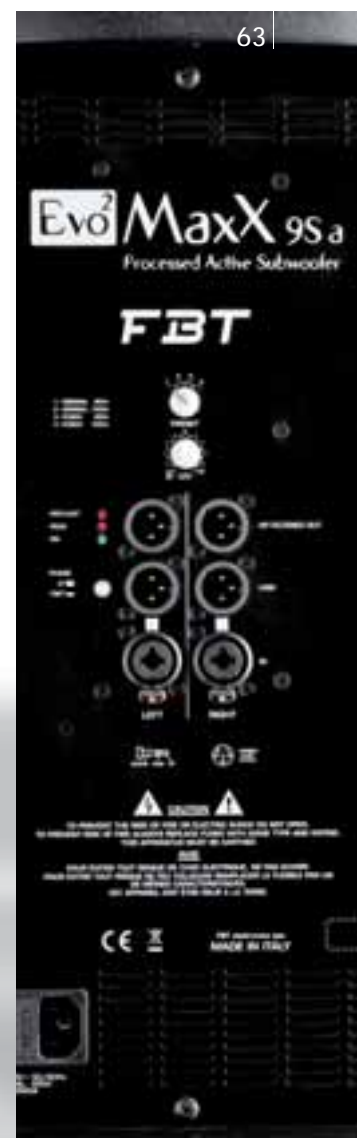
Passive Reinforcement Speaker
250W/8ohm - 125dB SPL



Evo²MaxX 9Sa

Processed Active Subwoofer
600W RMS - 132dB SPL

- **Compact bass-reflex** design Subwoofer
- **380 mm (15")** high excursion woofer with **75 mm (3")** voice coil, **custom made for FBT**
- Frequency response from 38Hz to 120Hz
- **600W RMS Class D** power amplifier with **switch mode power supply**
- **Digital Signal Processor with 4 presets**, 2 equalization with 2 LPF Crossover Settings
- Control Panel with balanced **Stereo combo XLR/Jack in/outs**, **Stereo XLR HP-filter outs**, Volume, EQ Presets, Phase Reversal Switch 0°-180°, 3 status LED indicators
- **Lightweight cabinet enclosure** with internal wooden reinforcements
- **M20** (20 mm) top mount speaker stand socket, two integrated carrying handles
- Provides additional low frequency reinforcement when used along with 2 - way Evo²MaxX speakers
- Extremely lightweight only **21.7 Kg** (48.4 Lb)





Model		Evo ² MaxX 6a	Evo ² MaxX 4a	Evo ² MaxX 2a	Evo ² MaxX 9Sa
Configuration	way	2	2	2	1
Built-in amplifier cont. LF/HF	W RMS	350/80	350/80	350/80	400
Built-in amplifier max. LF/HF	W RMS	400/100	400/100	400/100	600
Built-in amplifier max. peak LF/HF	W	800/200	800/200	800/200	1200
Frequency response	@-6dB	42Hz - 20KHz	50Hz - 20KHz	58Hz - 20KHz	40Hz - 120Hz
Low frequency woofer	inch	15 - 2.5 coil	12 - 2.5 coil	10 - 2 coil	1x15 - 3 coil
High frequency driver	inch	1 - 1.7 coil	1 - 1.4 coil	1 - 1.4 coil	-
Maximum SPL cont/peak	dB	126 / 130	124 / 130	122.5 / 128	128 / 132 half-space
Dispersion	H x V	90° x 60°	90° x 60°	90° x 60°	omnidirectional
Input impedance	kOhm	22	22	22	22
Crossover frequency	kHz	1.6	1.6	1.8	preset dependant
AC Power requirements	VA	450	450	450	450
Input connectors		XLR with loop	XLR with loop	XLR with loop	stereo XLR with loop, HP out
Power cord	m / ft	5 / 16.4	5 / 16.4	5 / 16.4	5 / 16.4
Net dimensions (WxHxD)	mm inch	482x757x399 19x29.8x15.7	407x634x330 16x25x13	352x550x307 13.9x21.6x12.1	496x648x485 19.5x25.5x19.1
Net weight	Kg / Lb	24.4 / 53.8	15.6 / 34.4	11.2 / 24.7	25.7 / 56.6
Transport dimensions (WxHxD)	mm inch	595x878x515 23.4x34.6x20.3	510x704x410 20.1x29.1x16.1	435x630x395 17.1x24.8x15.5	595x760x575 23.4x29.9x22.6
Transport weight	Kg / Lb	28.7 / 63.2	18 / 39.6	13.8 / 30.4	30.9 / 68.1

Model		Evo ² MaxX 6	Evo ² MaxX 4	Evo ² MaxX 2
Configuration	way	2	2	2
Recommended amplifier	W RMS	400	300	250
Long term power	W	200	150	125
Short term power IEC 268-5	W	800	600	500
Nominal impedance	Ohm	8	8	8
Frequency response	@-6dB	48Hz - 18kHz	55Hz - 18kHz	60Hz - 18kHz
Low frequency woofer	inch	1x15 - 2.5 coil	1x12 - 2.5 coil	1x10 - 2 coil
High frequency driver	inch	1 x 1 - 1.7 coil	1 - 1.4 coil	1 - 1.4 coil
Sensitivity (@1W/1m)	dB	99	98	97
Maximum SPL cont/peak (Bi-Amp)	dB	126 / 130	124 / 128	121 / 125
Dispersion	H x V	90° x 60°	90° x 60°	90° x 60°
Crossover frequency	kHz	1.3	1.6	1.8
Recommended HP filter		40Hz - 24dboct	45Hz - 24dboct	50Hz - 24dboct
Input connectors		2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru
Net dimensions (WxHxD)	mm inch	482x757x399 19x29.8x15.7	407x634x330 16x25x13	352x550x307 13.9x21.6x12.1
Net weight	Kg / Lb	23.9 / 52.7	16.1 / 35.4	11.8 / 26
Transport dimensions(WxHxD)	mm inch	595x878x515 23.4x34.6x20.3	510x704x410 20.1x29.1x16.1	435x630x395 17.1x24.8x15.5
Transport weight	Kg / Lb	28.2 / 62.2	18.5 / 40.7	14.4 / 31.7



New J series

More technology for improved performance and quality value for money

The **new J series** is a technologically advanced range of products that improves on the performance of the previous Jolly line. The new **J series** is a competitive, value for money range of speakers.

The range is based on the development of three new high efficiency class-D amplifiers with power specifications of 350 + 100W for the **J 15A**, **J 12A** and **DJ 15A**, 200 + 50W for the **J 8A** and 80 + 40W for the **J 5A**.

These amplifiers have been designed 'from the ground up' in FBT's R&D laboratories.

The largest amplifier model that equips the **J 15A**, **J 12A** and **DJ 15A** has a switch mode power supply as well as a digital signal processor with 4 pre-sets.

The **J 8A** and **J 5A** amplifiers have toroidal

transformer power supplies. The **J 8A** has a digital signal processor with 2 pre-sets, whilst the **J 5A** has analog signal processing.

The speakers have been completely redesigned, introducing the technological developments of recent years to achieve a far superior efficiency and linearity.

Following from the new J series, FBT bring you the **DJ 15A**, designed with today's modern DJ in mind. The **DJ 15A** has invaluable features allowing quality audio playback using our revolutionary DSP technology. This includes 4 presets enabling the DJ to change the sound of their music to suit the environment they play within. These DSP presets will allow the DJ's audience to enjoy improved sound quality and SPL, especially in

A multipurpose performer: J speakers are versatile and easy to use in applications like Band PA, personal monitor, stage performance, theatres and halls, clubs, gyms, bars and more.



S/J8
Adjustable wall
mount stand



S/J5
Adjustable wall mount
stand

bass reproduction at high volume.

The **DJ 15A** also has another useful feature for DJs, including a two channel input mixer allowing the DJ to plug a music source and microphone direct into the speaker, giving separate control over volume for both devices. You can also daisy chain these speaker together if required. Ideal for many application of today's modern DJ.

J 15A
350+100W
J 15
300W
DJ 15A
350 + 100W



J 12A
350+100W
J 12
300W



J 8A
200+50W
J 8
160W



J 5A
80+40W
J 5
80W
J 5T
50W



A comprehensive line to fulfill all professional audio needs



BOX 112
Horizontal wall
mounting bracket



S/J8U
Wall mounting
bracket



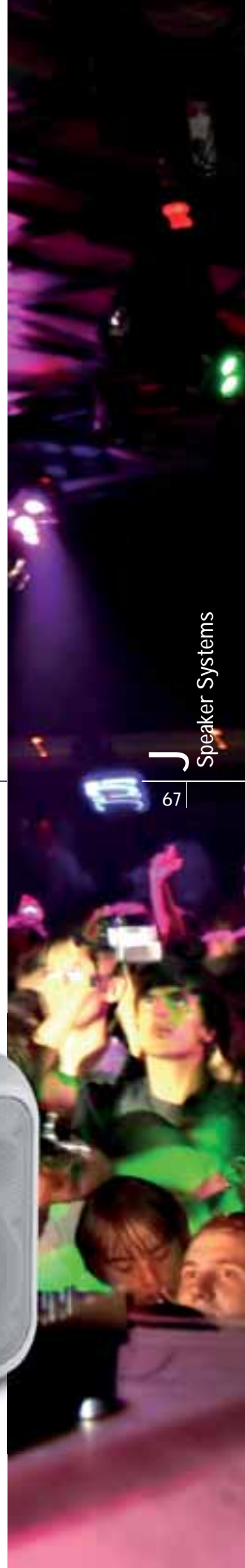
S/J5U
Wall mounting
bracket



MS 30BK
Adjustable metal
floor stand
2.5 mm (1")



J 5AW



Active J

2-way bi-amplified system in Bass-Reflex
2-way bi-amplified system in Bass-Reflex

Polypropylene enclosure with integrated handle except J 5A/5

2 x M10 anchoring points (15A, 12A, DJ 15A), 2 x M6 suspension points (8A, 5A)

25mm (1") HF custom compression driver (15A, 12A, 8A, DJ 15A)

90°H x 60°V constant directivity horn (15A, 12A, 8A, DJ 15A)

Passive J

Internal passive crossover filter with "soft-trip" protection circuits on woofer and compression driver

Linear frequency response over the entire dispersion angle



J 15A

Processed Active Monitor
350W+ 100W RMS - 129dB SPL

- 380 mm (15") custom woofer with improved efficiency and linearity
- 350Wrms class D amplifier for LF and 100Wrms for HF.
- High efficiency switch mode power supply
- On-board Digital Signal processing with dynamic equalizations and protections for high SPL and high reliability.
- 4 DSP preset for maximum acoustical flexibility

J 15

Sound Reinforcement Monitor
300W - 127dB SPL

- NL-4 Neutrik™ Speakon input and link connectors



DJ 15A

Processed Active Monitor
350W+ 100W RMS - 129dB SPL

- Same woofer, amplifier, power supply and On-Board Digital Signal processing as J 15A
- 4 DSP preset specially designed for DJ users
- Two channels input mixer with stereo/mono OUT
- Input panel with XLR/jack input and XLR Link, Mic/Line switch, Level, HP filter, 4 Preset Switch, Stereo RCA input, level, XLR OUT for daisy-chaining with Stereo/Mono switch selector



J 12A

Processed Active Monitor
250W + 50W RMS - 126dB SPL

- 320 mm (12") custom woofer with improved efficiency and linearity
- 350Wrms class D amplifier for LF and 100Wrms for HF.
- High efficiency switch mode power supply
- On-board Digital Signal processing with dynamic equalizations and protections for high SPL and high reliability.
- 4 DSP preset for maximum acoustical flexibility

J 12

Sound Reinforcement Monitor
300W - 126dB SPL

- NL-4 Neutrik™ Speakon input and link connectors





J 8A

Processed Active Monitor
200W+ 50W RMS - 124dB SPL

- 200 mm (8") custom woofer with improved efficiency and linearity
- 200Wrms class D amplifier for LF and 50Wrms for HF.
- Low noise toroidal transformer power supply
- On-board Digital Signal processing with dynamic equalizations and protections for high SPL and high reliability.
- 2 DSP preset for maximum acoustical flexibility
- Available in white colour **J 8AW**

J 8

Sound Reinforcement Monitor
160W - 121.5dB SPL

- NL-4 Neutrik™ Speakon input and link connectors
- Available in white colour **J 8W**



J 5A

Processed Active Monitor
80W+ 40W RMS - 117dB SPL

- 130 mm (5") custom woofer with improved efficiency and linearity
- 25 mm (1") neodymium silk dome tweeter with soft compression and phase plug
- 80Wrms class D amplifier for LF and 40Wrms for HF
- Low noise toroidal transformer power supply
- On-board analog signal processing with limiter for high SPL and high reliability
- Available in white colour **J 5AW**

J 5

Sound Reinforcement Monitor
80W - 117dB SPL

- Input panel with jack and terminal connector for bare wires
- Available in white color **J 5W**

J 5T

Sound Reinforcement Monitor
50W - 114dB SPL

- 4 position volume selector: 3W - 12,5W - 25W - 50W / 100V
- Input panel with terminal connector for bare wires
- Also available in white colour **J 5TW**





Model		J15a	J12a	J8a	J5a	J15DJa
Configuration	way	2	2	2	2	2
Built-in amplifier cont. rms LF/HF	W	300/70	300/70	150/40	60/30	300/70
Built-in amplifier max. rms LF/HF	W	350/100	350/100	200/50	80/40	350/100
Built-in amplifier max. peak LF/HF	W	700/200	700/200	400/100	160/80	700/200
Frequency response	@-6dB	48Hz - 20KHz	50Hz - 20KHz	60Hz - 20KHz	80Hz - 20KHz	48Hz - 20KHz
Low frequency woofer	inch	15 - 2 coil	12 - 2 coil	8 - 1.7 coil	5 - 1 coil	380 - 50 coil
High frequency driver	inch	1 - 1 coil	1 - 1 coil	1 - 1 coil	1 dome - 0.75coil	25 - 25 coil
Maximum SPL cont/peak	dB	125 / 129	124 / 128	120 / 124	113 / 117	125 / 129
Dispersion	H x V	90° x 60°	90° x 60°	90° x 60°	90° x 90°	90° x 60°
Input impedance	kOhm	22	22	22	22	22
Crossover frequency	kHz	1.8	2	2.5	3.5	1.8
AC Power requirements	VA	400	400	160	75	400
Input connectors		XLR-jack with loop	XLR-jack with loop	XLR-jack with loop	XLR combo with loop	XLR-jack with loop St. RCA, XLR out
Power cord	m inch	5 16.4	5 16.4	5 16.4	5 16.4	5 16.4
Net dimensions (WxHxD)	mm inch	410x663x387 16,14x26,10x15,23	410x663x387 16,14x26,10x15,23	255x415x245 10,03x16,33x9,64	170x275x180 6,69x10,82x7,08	410x663x387 16,14x26,10x15,23
Net weight	kg/lb	14 / 30.86	13.7 / 30.2	8.2 / 18.7	3.4 / 7.49	14 / 30.86
Transport dimensions(WxHxD)	mm inch	495x740x475 19.48x29.13x18.70	495x740x475 19.48x29.13x18.70	330x480x320 12.99x18.89x12.59	240x345x235 9.44x13.58x9.25	495x740x475 19.48x29.13x18.70
Transport weight	kg/lb	17.1 / 37.69	16.8 / 37.03	9.7 / 21.38	4.2 / 9.25	17.1 / 37.69

Model		J15	J12	J8	J5	J5T
Configuration	way	2	2	2	2	2
Recommended amplifier	W rms	300	300	160	80	50(70/100V)
Long term power	W	150	150	80	40	25
Short term power IEC 268-5	W	600	600	320	160	100
Nominal impedance	Ohm	8	8	8	16	16
Frequency response	@-6dB	50Hz - 20KHz	55Hz - 20KHz	65Hz - 20KHz	90Hz - 20KHz	90Hz - 20KHz
Low frequency woofer	inch	15 - 2 coil	12 - 2 coil	8 - 1.7 coil	5 - 1 coil	130 - 25 coil
High frequency driver	inch	1 - 1 coil	1 - 1 coil	1 - 1 coil	1 dome - 0.75coil	25 dome - 19 coil
Sensitivity (@1W/1m)	dB	99	98	96.5	94	91
Maximum SPL cont/peak (Bi-Amp)	dB	124 / 127	123 / 127	118.5 / 121.5	114 / 117	111 / 114
Dispersion	H x V	90° x 60°	90° x 60°	90° x 60°	90° x 90°	90° x 90°
Crossover frequency	kHz	1.8	2	2.5	3.5	3.5
Recommended HP filter		40hz - 24dboct	45hz - 24dboct	55hz - 24dboct	80hz - 24dboct	80hz - 24dboct
Input connectors		2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru	1 x jack + terminal strip	terminal strip
Net dimensions (WxHxD)	mm inch	410x663x387 16,14x26,10x15,23	410x663x387 16,14x26,10x15,23	255x415x245 10,03x16,33x9,64	170x275x180 6,69x10,82x7,08	170x275x180 6,69x10,82x7,08
Net weight	kg/lb	14.7 / 32.4	14.1 / 31.08	6.6 / 14.55	3.4 / 7.49	3.4 / 7.49
Transport dimensions(WxHxD)	mm inch	495x740x475 19.48x29.13x18.70	495x740x475 19.48x29.13x18.70	330x480x320 12.99x18.89x12.59	240x345x235 9.44x13.58x9.25	240x345x235 9.44x13.58x9.25
Transport weight	kg/lb	17.8 / 39.24	17.2 / 37.91	8.1 / 17.85	4.2 / 9.25	4.2 / 9.25



Integrated Sound System AMICO 10USB

AMICO 10USB is a completely integrated, ready-wired sound system offering a convenient plug and play solution for Houses of Worship, schools, conference halls, DJ sets, sports centers and small musical groups performing live in small to medium sized venues. The mixer, amplification and subwoofer are contained in a single ultra lightweight, yet extremely sturdy polypropylene enclosure. A storage compartment in the rear of the AMICO 10USB houses the two 2- way satellite speakers, allowing the wheeled system to be transported as a one piece unit. AMICO 10USB offers a professional mixing input channels with built-in class D power amplifiers and switch mode power supply. The system is powered by AC mains.



- Analog audio processor with 24dB/oct electronic crossover network and **ADAP** (Advanced Dynamic Active Protection) for total protection of the components
- **3 Class D power amplifiers** with switch mode power supplies to power the subwoofer and the two satellite speakers
- Built-in mixing console with 6 x XLR mic inputs with phantom power supply, 2 x mono inputs and 4 x stereo input channels, 3-band EQ, **99 selectable digital effects** with effects send and return controls
- **USB** input/output to play back music programs/ files from a computer or to record from the master audio output of the AMICO 10 USB to a computer-recording program
- **A quick and easy set-up:** complete system setup in less than 5 minutes! Just connect the satellite speakers to the AMICO 10USB amplifier outputs using the optional Speakon speaker cables and connect the AC power cable to an AC wall outlet
- Multi-function knobs to block, unblock, and remove the cover/ lid transport handle
- **Removable back panel** for access to the satellite speakers' storage compartment. The back panel protects the satellite speakers and keeps them secure when transporting the complete system





Amico 10USB

Processed Active Sound System
500W+2x150W RMS - 130dB total SPL

- **3-way, tri-amplified Bass-Reflex system**
- **14 channel mixer with 99 presets digital multieffect** and phantom power
- **USB** connection for music programs in play and record
- USB input/output to play back music programs/ files from a computer or to record from the master audio output of the AMICO 10USB to a computer - recording program
- **Subwoofer:** 380 mm (15") high efficiency and high excursion custom woofer with a 75 mm (3") voice coil
- **2 x Two way satellite speakers:** featuring 165 mm (6.5") woofers with 38 mm (1.5") voice coils, and a 25 mm (1") compression driver coupled to a 90°H x 60°V constant directivity horn
- **500W RMS Class D amplifier** for subwoofer
- **2 x 150W RMS Class D amplifier** for the satellite speakers
- **Switch mode power supply**



Amico
Integrated Sound Systems



Model			AMICO 10 USB
Configuration			3 WAY / SUB+2SAT
Internal Amplifiers		W RMS	500 + 2x150
MIXER		channels	2mono+4stereo
MONO CHANNELS	MICRO	Quantity and type	2 x XLR F
		Impedance	kohm 2.2
		Max input signal	dBu 0
		Max gain	dB 75
		Equivalent input noise	dB -128
		CMRR (@ main out, gain 75dB)	dB -80
	LINE	Quantity and type	2 x JACK balanced
		Impedance	kohm 33
		Max input signal	dBu 30
	TONE	Max gain (@ main out)	dB 40
		High Shelving (@ 12kHz)	dB ±15
		Medium Peaking (@ 2.5kHz)	dB ±12
Low Shelving (@ 80Hz)		dB ±15	
STEREO CHANNELS	MICRO	Quantity and type	4 x XLR F
		Impedance	kohm 22
		Max input signal	dBu 0
		Max gain	dB 75
		Equivalent input noise	dB -128
		CMRR (@ main out, gain 75dB)	dB -80
	LINE	Quantity and type	8 x JACK balanced
		Impedance	kohm 22
		Max input signal	dBu 30
	TONE	Max gain (@ main out)	dB 18
		High Shelving (@ 12kHz)	dB ±15
		Medium Peaking (@ 2.5kHz)	dB ±12
Low Shelving (@ 80Hz)		dB ±15	
OUTPUTS	Impedance	ohms 600	
	Mx output (Monitor, Eff, Tape In)	dBu 22	
	Distortion + Noise @ 16	dBu 0.025%	
	Signal/Noise ratio	dB 96	
	Frequency response (@ 0 / -1dB)	20Hz-20kHz	
BUILT-IN EFFECT	Sample frequency	kHz 48	
	Frequency response	20Hz-20kHz	

SUB / COMBO		
Configuration	Way	1
Internal amplifier	W RMS	500WSUB+2x150WSAT
Frequency response	@-6dB	40Hz-120Hz
Sensitivity (@1W, 1m)	dB	97
Maximum SPL (cont-peak)	dB	124/130
Dispersion	O x V	omnidirectional
Low frequency woofer	inch	1x15
High frequency driver	inch	-
SAT output connectors		2 x SPEAKON
SAT		2
Internal amplifier / Recommended	W RMS	150
Impedance	ohms	4
Frequency response	-6dB	90Hz-20kHz
Sensitivity (@1W, 1m)	dB	93.5
Maximum SPL (cont-peak)	dB	115/125
Dispersion	O x V	90° x 60°
Low frequency woofer	inch	1x6.5
High frequency driver	inch	1x1
Input connectors		1 x SPEAKON
Power supply cable	m / inch	5/197
GENERAL SPECIFICATIONS	Net dimensions (WxHxD)	mm 478x780x433
		inch 18.8x30.7x17
	Net weight	Kg / Lb 34 / 74
	Transport dimensions (WxHxD)	mm 570x880x570
		inch 22.4x36.5x22.4
GENERAL SPECIFICATIONS	Transport weight	Kg / Lb 38 / 81.6
	Optional accessories	Carrying cover, twin cables, 2 aluminium stands

V44

Nylon cover

**Amico Kit**

Cod. 20698

Optional carrying bag, spekaer stands, speakon-speakon cables

Digital Loudspeaker Management

The DLM26 is a DSP based 2 input x 6 output Digital Loudspeaker management processor, ideally suited for fixed installations and live events. It combines the functions of a multitude of conventional products in a compact 1U unit with extensive PC remote control capabilities.

Features superb audio quality with premium hi-end AKM5392 24bit A/D converters and AKM 4396 24bit D/A converters, carefully optimized double precision signal processing coupled with 24bit conversion ensure a dynamic range >110dB

The unit can work in STANDARD MODE or in DCL MODE. The first mode permits to configure the crossover in 2x2 way + SUB, 2x3 way or 6way, the input L, R, L+R are freely assignable to each output.



In DCL mode the unit can be configured in 3ch DCL, 2ch DCL + 2ch standard, 1ch DCL + 4ch standard. DCL mode means double compressor limiter, each DCL channel have a double band limiter and compressor with assignable LO/Hi split frequency.

Each input has 5 fully configurable filters, a delay of 288.66ms max in step of 6.8us, gain.

Each output has 4 fully configurable filters, a delay of 288.66ms max in step of 6.8us, gain, phase, LO-pass/Hi-pass crossover from 6 to 24db/Oct with standard or custom Q, RMS compressor with soft knee and peak limiter.

The 2 input levels are displayed by rows of 6 level LED + 1 clip LED, the 6 output levels are displayed by rows of 5 level LED + 1 clip LED + 1 Limiter LED. The unit has 2 analog inputs, a stereo digital SPDIF input, and 6 analog outputs. Linking functions between inputs and linking functions between outputs are available.

The Pc SW for the remote control via RS485 or USB is allowing to connect in net up to 32 units and is allowing to control full parameters of the processor, to show the phase of the filter setting and to adjust graphically the RMS compressor and the Peak limiter. The comprehensive standard specification also include up to 64 memories with security lockout and two password level settings.

DLM26

Digital Loudspeaker Management



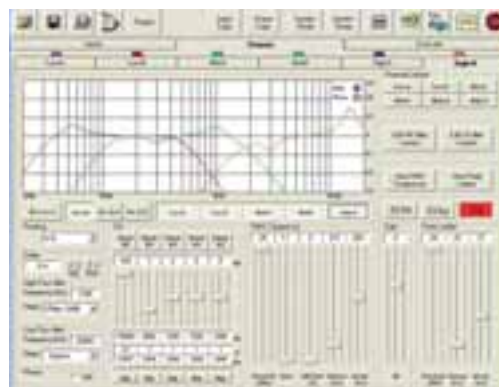
Rear panel

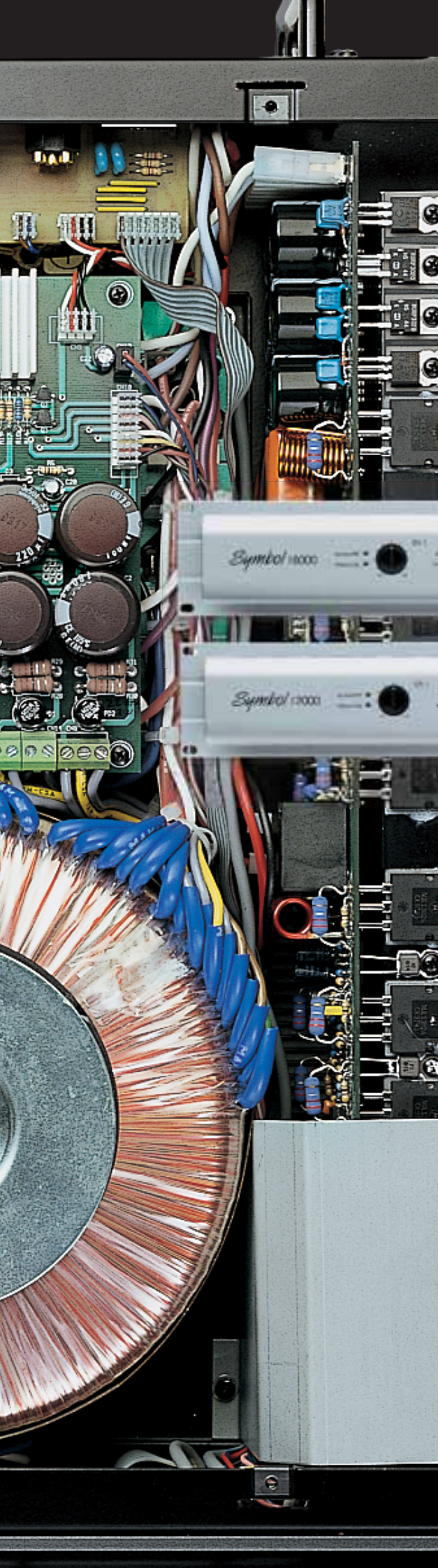
Inputs / Outputs	XLR balanced +20dbu max level
Total memories	64
THD+N	0.001% at 1kHz 0dBu
S/N	>110dB
Frequency Response	20Hz - 20kHz @ -0.5db
A/D and D/A Resolution	24bits
Filters (5 each in/out)	
Type	Peaking EQ, Hi-Shelv 1/2/Q, Lo-Shelv 1/2/Q, HPF 1/2/Q, LPF 1/2/Q, All Pass 1/2, Band pass, Notch
Orders	symmetrical Bell or High/Low Shelving up to second order
Filter gain	-15dBu / +15dBu by 0.5dBu resolution steps
Centre frequency	selectable with a 1/24th of octave resolution steps 20Hz / 20kHz
Filter Q/BW	Q from 0.05 up to 3 by 0.05 resolution steps
Compressors	
Threshold:	-10 / 20dbu
Ratio:	1:1 / 32:1
Soft Knee:	0 / 100%
Attack Time:	10ms / 4s
Release Time:	0.1 / 3s
Limiters	
Threshold:	-10 / +20dbu
Attack time:	2ms / 50ms
Release Time:	20ms / 200ms
High pass and Low Pass Filters	From 1st order (Butterworth -6dB/Oct) up to 4th Order (Butterworth, Linkwitz or Bessel -24dB/Oct), Custom Q
Filter's setting step:	1/24th of octave
Maximum Delay:	288.66ms by 6.8us increment/decrement step, on each Input and Output channel
Net Dimensions (WxHxD)	mm 480 x 40 x 220 - 19" (1U rack) inch 18.8x1.5x8 - 19" (1U rack)
Net Wheight:	Kg 2.8 Lb 6.1
Transport Dimensions (WxHxD)	mm 530x100x310 inch 20.8x3.9x12.2
Transport Weight	Kg 3.9 Lb 8.6
Voltage	90 - 240Vac 50/60Hz
Power	30VA

Special features:

- Hi-pass/Lo-pass/Shelving custom Q second order filters
- RMS compressor and PEAK limiter on each output channel with time constant and algorithm optimized for speaker thermal and mechanical protection while maximizing the output with no audible distortion
- Input channel L, R or L + R freely assignable to each output channel
- Double Compressor Limiter Mode (DCL) with two band RMS compressor and Peak limiter with adjustable HP / LP split frequency and separate parameter adj.
This is an exclusive and very useful feature in general purpose digital processors
- ALL PASS first and second order filters useful for Cardioid SUB configurations, very precise phase crossover alignment, special pattern control array, alignment between different speakers and systems

PC software screenshots





High Performance Power Amplifiers

Symbol 18000
2400+2400W

Symbol 12000
1500+1500W



The Symbol power amplifiers are a high end system throughout: the choice of **Cascode** circuits, the oversized power stages and the adoption of high efficiency techniques such as **2 and 3 step power supply** ensure very high current delivery capability.

The Symbol are available in **two models with output power of 1500+1500W and 2400+2400W into 2ohm.**

The superb sound quality provided by the output stages, the traditional FBT reliability and an impressive range of technical features place the Symbol 12000 and 18000 at **the very apex of their class**, again confirming FBT's hallmark ability to provide the right solution for all amplification needs.

FK
Flight-Case





Symbol 18000

2400+2400W

- Impulsive power with both channels driven:
2 x 2400W (2ohm)
- Thermal **stability into 2ohm**
- Electronically balanced XLR inputs and link
- 4-way SPEAKON power outputs
- 3 mode operations: parallel, bridge, stereo
- Full protection on each channel: short circuit, temperature, SOA
- Clipping limiter
- Ground lift switch

Symbol 12000

1500+1500W

- Impulsive power with both channels driven:
2 x 1500W (2ohm)
- Thermal **stability into 2ohm**
- Electronically balanced XLR inputs and link
- 4-way Speakon power outputs
- 3 mode operations: parallel, bridge, stereo
- Full protection on each channel: short circuit, temperature, SOA
- Clipping limiter
- Ground lift switch

Model		SYMBOL 18000	SYMBOL 12000
Balanced inputs		XLR-F	XLR-F
Impulsive power both channels driven	W RMS	2 x 800W RMS @ 8ohm 2 x 1500W RMS @ 4ohm 2 x 2400W RMS @ 2ohm	2 x 600W RMS @ 8ohm 2 x 1000W RMS @ 4ohm 2 x 1500W RMS @ 2ohm
Impulsive power Bridge Mode	W RMS	3000W RMS @ 8ohm / 4800W RMS @ 4ohm	2000W RMS @ 8ohm / 3000W RMS @ 4ohm
Continuous power both channels driven @ THD < 0.05% 1kHz	W RMS	2 x 700W RMS @ 8ohm 2 x 1300W RMS @ 4ohm 2 x 1800W RMS @ 2ohm	2 x 550W RMS @ 8ohm 2 x 900W RMS @ 4ohm 2 x 1300W RMS @ 2ohm
Continuous power Bridge Mode	W RMS	2600W RMS @ 8ohm / 3600W RMS @ 4ohm	1800W RMS @ 8ohm / 2600W RMS @ 4ohm
Input sensitivity		2 Veff	1.7 Veff
Input impedance		15Kohm	15Kohm
Slew rate		> 40V/μS	> 40V/μS
Signal to noise ratio S/N		> 110dB "A" weighted	> 110dB "A" weighted
Total harmonic dist. (1kHz-4ohm)	1W full power	< 0.02%	< 0.02%
IMD	1W full power	< 0.05%	< 0.05%
Frequency response	@ ± 0.2dB	20Hz - 20kHz	20Hz - 20kHz
Damping factor		> 250 @ 8ohm - 1kHz	> 250 @ 8ohm - 1kHz
Maximum current output		80Aeff	80Aeff
Maximum power consumption		3500VA	2700VA
Power supply voltage		230V~	230V~
Protections		DC/Thermal/SOA/Soft Start	DC/Thermal/SOA/Soft Start
Cooling		2 variable speed fans	2 variable speed fans
Net Dimensions (WxHxD)	mm inch	482x88x460 19x3.5x18.1	482x88x460 19x3.5x18.1
Net Weight	Kg / Lb	25 / 55.1	24 / 52.9
Transport dimensions (WxHxD)	mm inch	580x580x120 22.8x22.8x4.7	580x580x120 22.8x22.8x4.7
Transport weight	Kg / Lb	28 / 61.7	27 / 59.5



Formula

Mixers

Enhanced Features For Professional Live Mixing

143 FXA



182 E



248



328



Completely Made in Italy, the Formula 182E, 248, 328 and the new 143FXA provide the features and functions for numerous **live sound applications**: touring sound reinforcement, live recording, and permanent installations in Clubs, Houses of Worship, Auditoriums and Theatres. The **Formula 248 and 328** Mixers models offer enhanced capabilities such as FOH mixing, monitor mixes, matrix mixing, 4 sub groups and in ear monitoring. Frame sizes are of **24 and 32 channels**, plus 6 stereo channels. The **Formula 182E** model is built with the same quality and design reliability as the bigger models. Compact and solid, this mixer is addressed to those sound engineers who are looking for professional mixer but with a small size.

The **Formula 143FXA Powered Mixer** has great features such as 3 independent 24 bit DSP effect processors that are MIDI controllable, USB In/out, switchable anti-feedback filters, 2x850W Class D power amplifiers with individual switch mode power supplies, 7 band graphic EQ on mains outs and a heavy duty steel chassis with a latching steel cover. The Formula 143FXA Powered Mixer offers versatility for a wide range of professional sound reinforcement applications.

- **Balanced low noise XLR Input** (CMRR - 80dB)
- Mic preamplifier quality circuitry to provide exceptional fidelity, dynamics and transparency
- High-end EQ provide the desired ideal "live" sound with a practical facility of adjustment (+/- 15dB, Q > 2.5)
- 100 and 60 mm dust protected faders allow smooth and accurate control of the input and output level
- 4-pin XLR lamp socket to connect a 12V/5W to illuminate the control panel (Formula 182/248/328)

Formula 328

Formula 248

- 32 Mono channels frame (Formula 328)
- 24 Mono channels frame (Formula 248)
- 2 stereo channels with mic and stereo inputs with separate adjustment of the sources
- 2 stereo channels can be independently routed to L/R
- L/R and Mono main outputs
- 8 Auxiliary sends (4 pre, 2 pre/post, 2 post)
- 2 Stereo effect returns
- 4 Matrix (8-In/1-Out)
- Channel assignments on 4 sub-groups, Mono and L/R Stereo
- 4-band EQ with LF and HF Shelving,
- High/Mid and Low/Mid on all mono channels
- 4-band EQ on all stereo channels
- 2-Track In/Out recording facility assignable to L/R
- 1 Mic input with assignable talkback to the various outputs
- Dedicated channel, master and stereo monitoring via 4-LED ladder meters
- HPF-100Hz high pass filters
- +48V Phantom power supply, switchable in groups of 4 channels
- Mute, PFL/AFL on all channel faders
- Electronically balanced XLR-M outputs with 24 dBu gain
- 2 headphone outputs with independent level volumes respectively assigned to Aux 1 and Aux 2 outputs
- PFL headphone output, Control Room output with independent volume controls
- Gain 10dB – 60dB with 20dB selectable Pad attenuator
- FBT Precision™ ultra low noise mic preamps with +74dB gain and +34dBu gain for line sources
- 100 mm dust protected faders
- Superior electronic and mechanical parts
- 4-pin XLR lamp socket to connect a 12V/5W lamp
- Internal switching power supply





Formula 182 E

- 18 Mono channels frame
- 2 stereo channels each with mic and stereo line inputs with independent level controls
- L/R and Mono main outputs
- 7 Auxiliary sends: 4 pre, 2 pre/post, 1 post
- Channel assignment on 2 audio groups ad L/R
- Built-in 256 selection DSP digital effects
- 3-band EQ with LF and HF Shelving, sweepable High/Mid on all mono channels
- 3-band EQ with LF and HF Shelving, Mid peaking on all stereo channels
- 2-Track In/Out recording facility assignable to L/R
- 2 LED ladder meter on each channel for signal (-30dB) and saturation monitoring
- HPF-100Hz high pass filter
- +48V Phantom power supply
- Mute, PF/AFL on all channel faders
- PFL headphone output, Control Room outputs with independent level controls
- Electronically balanced XLR-M outputs
- 100 mm dust protected faders
- Superior electronic and mechanical parts
- Internal switching power supply



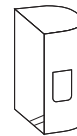
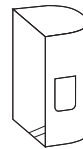
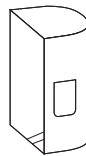
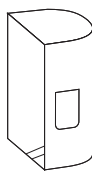
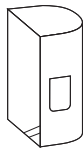
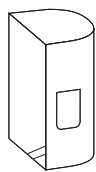
Formula 143 FXA

- **14 channels**, 6 mono with XLR/line, insert and 4 stereo with XLR-Mic in and L/R line in
- L/R and Mono main outputs
- **4 Auxiliary** sends: 2 pre, 2 post
- Built-in amps in **PWM** technology (Class D)
- Impressive output continuous power **2x850W / 4 Ohm**
- **TRIPLE built-in digital effect** section, for any kind of effect mixing desired: EFFECT A and B are available in all channels, feature Multitap and provide 15 effect banks with 16 variations programmable by the user. EFFECT C is resident on the stereo channel 13/14 and also provides guitar effects. Midi In and Thru for effects control
- Large 4-Line LCD screen displays the operations of the three effect processors
- Controls include PRESET, EFFECT, TAP/MODIFY selections
- HPF 100Hz lo-cut filter to suppress low frequency noise
- 3-band EQ with sweepable semi-parametric MID
- 48V Phantom power supply
- Built-in **USB 2.0** input connected to the 2-TRK SND/RTN
- Mute, PF/AFL on all channel faders
- PFL headphone output, Control Room outputs with independent level controls
- Electronically balanced XLR-M outputs
- **60 mm** dust protected faders
- Internal switch mode power supply

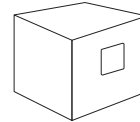
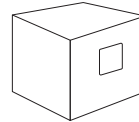
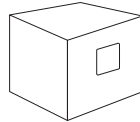
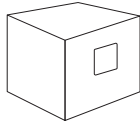
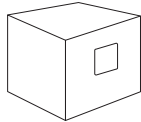
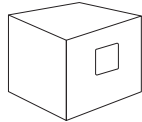




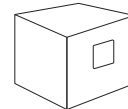
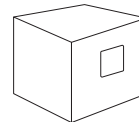
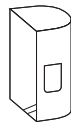
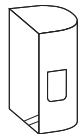
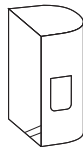
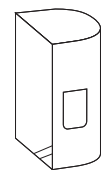
Model	Formula 248 - 328	Formula 182 E	Formula 122 E	Formula 143 FXA
Freq. response (20Hz-20kHz) mic input (+ 40dB gain) on main output line input (0dB gain) on main output	-1 / -0.5dB -1 / -0.5dB	-1 / -0.5dB -1 / -0.5dB	-1 / -0.5dB -1 / -0.5dB	-2 / -0.2dB -2 / -0.2dB
Distortion (1kHz, 16dBu main out) THD + Noise (mic + 40dB gain) THD + Noise (line 0dB gain)	0.0045% 0.0042%	0.0045% 0.0042%	0.0045% 0.0042%	(filter 20Hz-20kHz) 0.004% (filter 20Hz-20kHz) 0.0045%
CMRR (1kHz) micro (+ 40dB gain) micro with PAD (0dB gain)	better 80dB better 48dB	better 80dB better 48dB	better 80dB -	>85dB -
Crosstalk (1kHz) adjacent channel mute shutoff (fader 0dB mark) fader shutoff (shutoff)	- 90dB - 94dB - 92dB	- 90dB - 94dB - 92dB	- 90dB - 94dB - 92dB	- 95dB - 94dB - 92dB
Noise (22Hz-22kHz Bandwidth) EIN (150ohm source, + 60dB gain) residual output noise (main out, all levels off) main mix noise (all channel routed mix, fader 0dB mark, muted)	- 129dB - 96dBu - 86dBu	- 129dB - 96dBu - 86dBu	- 129dB - 96dBu - 86dBu	- 126dB - 91dBu - 80dBu
Graphic Eq. (+/- 15dB gain)	-	-	-	63Hz, 125Hz, 400Hz, 1kHz, 2.5kHz, 6kHz, 12kHz
Equalization (stereo channel, +/- 15dB gain) High High Mid Mid Low Mid Mid	Shelving 12kHz 400-12kHz, Q max2.5 - 35-1kHz, Q max 2.5 Shelving 80Hz	Shelving 12kHz - 100-8kHz, Q= 1.41 - Shelving 80Hz	Shelving 12kHz - 100-8kHz, Q= 1.41 - Shelving 80Hz	Shelving 12kHz - peak 2.5kHz - Shelving 80Hz
Equalization (stereo channel, +/- 15dB gain) High High Mid Mid Low Mid Mid	Shelving 12kHz 2.5kHz, Q = 1.41 - 250Hz, Q = 1.41 250Hz, Q = 1.41	Shelving 12kHz - peak 2.5kHz - Shelving 80Hz	Shelving 12kHz - peak 2.5kHz - Shelving 80Hz	Shelving 12kHz - peak 2.5kHz - Shelving 80Hz
Max Input Levels micro micro with PAD tape Insert line, stereo	+ 14dBu + 34dBu + 18dBu + 18dBu	+ 14dBu + 34dBu + 18dBu + 18dBu	+ 14dBu - + 18dBu + 18dBu	+ 14dBu - + 18dBu + 18dBu
Rated outputs	+ 4dBu	+ 4dBu	+ 4dBu	+ 4dBu
Max output	+ 24dBu	+ 24dBu	+ 24dBu	+ 24dBu
Input impedance micro line stereo insert in	1.5Kohm bal 20Kohm bal 10Kohm bal min 4Kohm	1.5Kohm bal 20Kohm bal 10Kohm bal min 4Kohm	1.5Kohm bal 20Kohm bal 10Kohm bal min 4Kohm	1.5Kohm bal 20Kohm bal 10Kohm bal min 4Kohm
Output impedance main, aux, group direct out insert out headphones	600ohm 600ohm 600ohm min 32+32ohm	600ohm 600ohm 600ohm min 32+32ohm	600ohm 600ohm 600ohm min 32+32ohm	600ohm 600ohm 600ohm min 32+32ohm
Digital Effects Processor frequency response (20-20kHz) number of effects	no - -	Yes - 3dB 256	Yes - 3dB 256	Yes - -
Triple Internal Processors (A,B,C) 24 bit conversion, sampling frequency Frequency response (20-20kHz) A & B programs C programs	-	-	-	48KHz -3dB 240 320
Built-in amps Output power Input sensitivity	no	no	no	2x850W @230Vac Imp. 4 2x550W @230Vac Imp. 8 Ohm +4dBu with vol. at 0dB
Power Supply	85-260 Vac 50/60Hz	85-260 Vac 50/60Hz	85-260 Vac 50/60Hz	120Vac /230Vac50/60Hz 2000VA peak
Net Dimensions mm/inch (LxAxP)	248 - 1066x165x570 / 42x6.5x22.4 328 - 1274x165x570 / 50.1x6.5x22.4	804x124x410 31.6x4.8x16.1	596x124x410 23.5x4.8x16.1	570x180x516 22.4x7x20.3
Net Weight Kg/Lb	248 - 24 / 52.9 328 - 28 / 61.7	14 / 30.8	10 / 22	19 / 41.9
Transport dimensions mm/inch (LxAxP)	248 - 1115x300x665 328 - 1330x300x665	845x235x550 33.3x9.2x 21.67	680x235x500 22.8x9.25x19.7	650x270x 570/ 25.5x10.6x22.4
Transport weight Kg/Lb	248 - 30 / 328 - 34.5	17 / 37.5	13 / 28.6	21 / 46.3



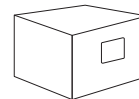
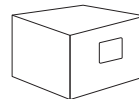
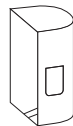
MT-C 215	MT-C 152	V 67	MT-C 114	V 66	V 70
36063	36062	33831	37932	33830	33834
Nylon cover	Nylon cover	Nylon cover	Nylon cover	Nylon cover	Nylon cover
Mitus 215	Mitus 152	Mitus 115	Mitus 114	Mitus 112	Mitus 210M



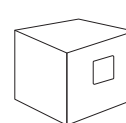
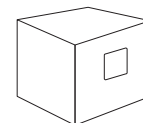
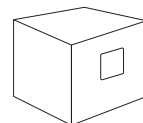
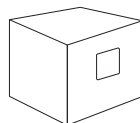
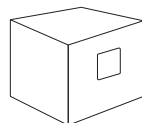
MT-C 218	MT-CH 218	V 69	MT-CH 121	V 68	MT-CH 118
36064	37066	33833	37067	33832	37068
Nylon cover	Nylon cover	Nylon cover	Nylon cover	Nylon cover	Nylon cover
Mitus 218	Mitus 218 with wheels	Mitus 121S	Mitus 121S with wheels	Mitus 118S	Mitus 118S with wheels



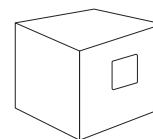
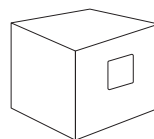
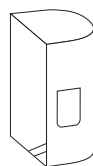
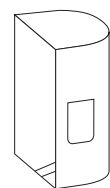
VV-C 212	VV-C 115	VV-C 112	VV-C 110	VV-C 108	VV-C 115M	VV-C 112M
36067	36068	36069	36070	36071	36072	36073
Nylon cover	Nylon cover	Nylon cover	Nylon cover	Nylon cover	Nylon cover	Nylon cover
Verve 212	Verve 115	Verve 112	Verve 110	Verve 108	Verve 115M	Verve 112M



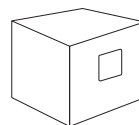
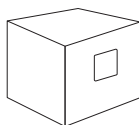
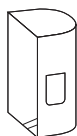
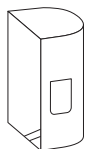
VT-C 604	VT-C 114	VT-C 59	VT-C 208	SM-C 12
36122	37145	37146	36123	36065
Nylon cover	Nylon cover	Nylon cover	Nylon cover	Nylon cover
Vertus CLA 604	Vertus VT-SC 114	Vertus VT-SC 59	Vertus CLA 208	StageMaxX 12



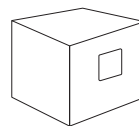
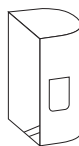
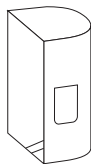
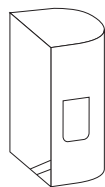
V 72	SL-CH 18S	V 71	SL-CH 15S	SL-C 12S
34721	37051	34720	37052	35958
Nylon cover	Nylon cover	Nylon cover	Nylon cover	Nylon cover
SUBLine 18 SA	Subline 18 SA with wheels	SUBLine 15 SA	Subline 15 SA with wheels	SUBLine 12 SA



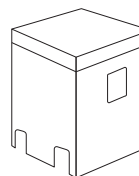
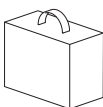
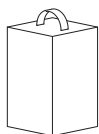
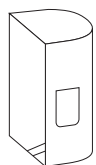
V 33	V 29	V 56	HM-CH 100
15777	10186	29486	37049
Nylon cover	Nylon cover	Nylon cover	Nylon cover
HiMaxX 60 Evo²MaxX 6	HiMaxX 40 Evo²MaxX 4	HiMaxX 100 SA	HiMaxX 100 SA with wheels



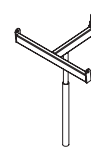
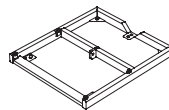
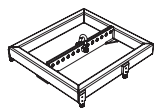
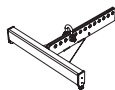
V 64	V 63	V 65	PM-CH 15S
33326	33325	33327	37050
Nylon cover	Nylon cover	Nylon cover	Nylon cover
ProMaxX 14 - ProMaxX 12	ProMaxX 10	ProMaxX 15 SA	ProMaxX 15 SA with wheels



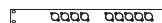
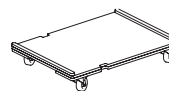
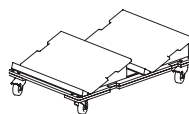
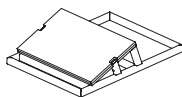
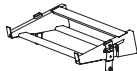
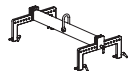
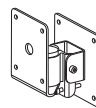
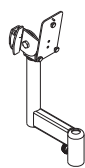
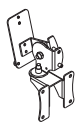
V 33	V 29	V 30	V 31
15777	10186	13349	13350
Nylon cover	Nylon cover	Nylon cover	Nylon cover
Evo ² MaxX 6	Evo ² MaxX 4	Evo ² MaxX 2	Evo ² MaxX 9 SA



V 38	V 37	V 36	V44
18614	18613	18612	23373
Nylon cover	Nylon cover	Nylon cover x 2	Nylon cover
J 15 - J 12	J 8	J 5	Amico 10 USB



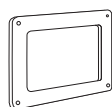
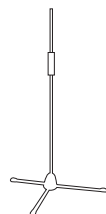
MT-F 206	MT-F 212	MT-J 206	MT-B 206	MT-S 206
31805	31804	31806	31888	33324
Flying bar	Flying bar	Joint Bar	Metal Base to ground 206 LA/L array or stack on 118 SA/S or 121 SA/S subs	Cluster bracket for 2 Mitus 206 LA mounted on Mitus 212 FSA
Mitus 206 LA/L	Mitus 212 FSA/FS	Mitus 212 FSA/FS with Mitus 206LA/L	Mitus 206 on Mitus 118 or Mitus 121	Mitus 206 LA/L

[illegible]

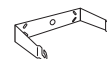
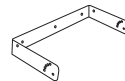
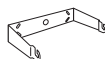
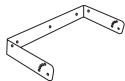
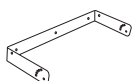
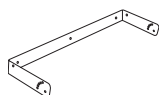
VT-S 604 / W	VT-W 604 / W	VT-DS 604 / W	VT-SC59 604 / W	VT-SC114 604 / W	VV-CO 108	VV-W 108
35723 / 37044	35722 / 37043	37053 / 37054	36879 / 36883	37041 / 37042	36080	36156
Stand Adapter ø 35mm black / white	Directional wall mount bracket black / white	Directional stand adapter black / white	Stand column H59 cm black / white	Stand column H114 cm black / white	Adjustable truss clamp	Directional wall mount bracket
Vertus CLA 604A	Vertus CLA 604A	Vertus CLA 604A	Vertus CLA 604A	Vertus CLA 604A	Verve 108	Verve 108



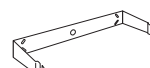
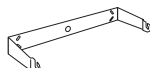
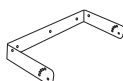
SJ-8 Black	SJ-5 Black	SJ-5 White	AJ-8 Black	AJ-5 Black
18567	18522	18525	18570	18532
Directional wall mount bracket	Directional wall mount bracket	Directional wall mount	Adapter from ø 35 mm to ø 25 mm	MS 30BK adapter for fixing purposes
J 8	J 5	J 5	J 8	J 5



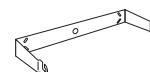
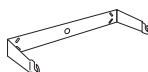
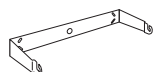
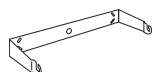
MS 30BK	SJ-5C White	SJ-8T Black	SJ-5T Black
06076	18526	18569	18527
Tripod speaker stand	White metal frame for ceiling/wall installation	Adjustable metal "T" stand for No. 2	Adjustable metal "T" stand for No. 2
J 5	J 5	J 8	J 5



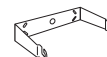
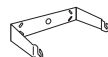
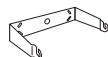
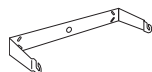
VV-U 115	VV-U 112	VV-U 110	VV-U 108	VV-U 115M	VV-U 112M
36074	36075	36076	36077	36078	36079
Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position
Verve 115	Verve 112	Verve 110	Verve 108	Verve 115M	Verve 112M



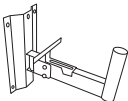
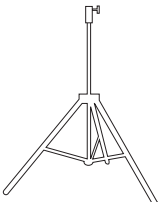
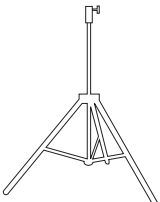




SM-U 12	SM-S 12	BOX 104	BOX 105	BOX 100	BOX 101
36066 / 36735	37099	15771	15772	10187	10188
Wall metal bracket to mount in horizontal position black / white	Metal bracket with top-hat speaker stand socket	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in vertical position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in vertical position
StageMaxX 12	StageMaxX 12	HiMaxX 60 Evo²MaxX 6	HiMaxX 60 Evo²MaxX 6	HiMaxX 40 Evo²MaxX 4	HiMaxX 40 Evo²MaxX 4

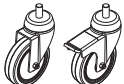



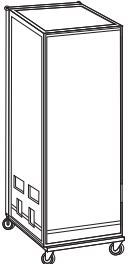
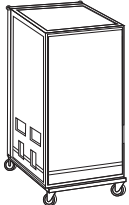
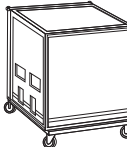
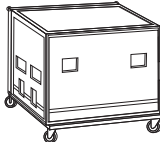
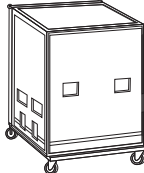
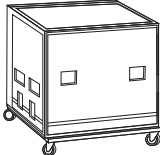
BOX 128	BOX 127	BOX 102	BOX 103
33329	33328	13351	13352
Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position
ProMaxX 14 ProMaxX 12	ProMaxX 10	Evo²MaxX 2	Evo²MaxX 9

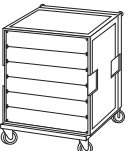
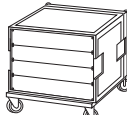
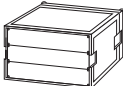



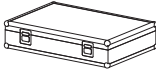
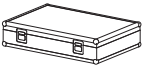
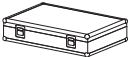
BOX 112	SJ-8U Black	SJ-8U White	SJ-5U Black	SJ-5U White
18602	18568	23120	18523	18524
Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position	Wall metal bracket to mount in horizontal position
J 15 J 12	J 8	J 8	J 5	J 5



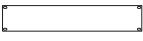
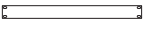
						
KWM 560 32890	KMS 300 32884	KMS 325 32886	KMS 210 32887	KMS 220 32888	FMS 220 36636	FMS 220 W 36723
Adjustable wall mount heavy duty steel speaker bracket	Aluminium speaker stand Air-Cushioned	Speaker stand with top adapter 35 to 25 mm	Adjustable speaker pole ø 35 mm	Adjustable speaker pole with M20 thread	Adjustable speaker pole with M20 thread. Black	Adjustable speaker pole with M20 thread. White
Available for all Series	Available for all Series	Available for all Series	Available for all Series	Available for all Series	Available for all Series	Available for all Series

	
KW-HM100 30423	KBW-1004S 25197
4 Wheels Kit: 2 with brake 80 mm ø	4 Wheels Kit with brake 100 mm ø
HiMaxX 100 SA SUBLine 15 SA ProMaxX 15 SA	Mitus 218 - Mitus 118 Mitus 121 SUBLine 18

					
FK 206-6 33933	FK 206-4 34911	FK 212-2 33931	FK 121-1 34690	FK 118-1 33932	FK 210-2 34719
Flight-case for 6	Flight-case for 4	Flight-case for 2	Flight-case for 1	Flight-case for 1	Flight-case for 2
Mitus 206 L/LA	Mitus 206 L/LA	Mitus 212 FSA	Mitus 121 S/SA	Mitus 118 SA	Mitus 210 M/MA

			
FK 12W 05370	FK 8W 05373	FK 6 05369	FK 4 05368
Flight-case 12 HU, protection panels (front+back), depth 43cm w/wheels	Flight-case 8 HU, protection panels (front+back), depth 43cm w/wheels	Flight-case 6 HU, protection panels (front+back), depth 43cm	Flight-case 4 HU, protection panels (front+ back), depth 43cm
Symbol	Symbol	Symbol	Symbol

		
FK 328 28770	FK 248 28771	FK 182 28772
Flight-case	Flight-case	Flight-case
Formula 328	Formula 248	Formula 182E

			
PL-C 4B 12731	PL-C 3B 12730	PL-C 2B 12729	PL-C 1B 12728
Blank Panel 4 Rack Units	Blank Panel 3 Rack Units	Blank Panel 2 Rack Units	Blank Panel 1 Rack Units
Symbol	Symbol	Symbol	Symbol

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