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PWM Amplifier



Class G Amplifier



Switch Mode Power Supply



Neodymium Woofer



Digital Processor



Analog Processor



Tone Controls



Lightweight



Floor Monitor



Hardware for permanent installations

*T*hat which is singular in the effect of music on the spirit, belongs mostly to pure sound [...] Analyse well the effect of music on your heart, and you will find that its singular effect derives directly from the nature of sound and varies according to its differences.

*Giacomo Leopardi  
Zibaldone, pp. 1663-1664*



FBT designs and manufactures  
**highly professional audio products**  
with the aim of improving sound quality...

FBT designs and manufactures highly professional audio products, with the aim of improving sound quality, making it clean, harmonic and melodious, thus enabling music to strike listeners' hearts and souls.

Recanati is a town of Poetry... but also of Music, which has always been a soundtrack accompanying entire generations in this small corner of central Italy, a land full of history, art and passion.

FBT was founded here in 1966. In the beginning, it was a simple artisan workshop. Then, through the years, a corporate strategy of great flexibility and on-going attention paid to new market requirements in the audio field led to this small "workshop" becoming an "all-round" firm, ready to respond flexibly and dynamically to the market's constant evolutions, offering professionalism, reliability and quality.

FBT is now a leading industry at national and international level.

A long high varied experience ranging from Professional Audio Equipment, through Audio Contractor installed sound systems, Cicognani, Qube Kempton, to the Musical Instrument Distribution division, focussed on the marketing of top brands such as Pearl, Sabian, Drum Art, JTS, and Crafter and Hardcase



... a highly flexible corporate strategy.....



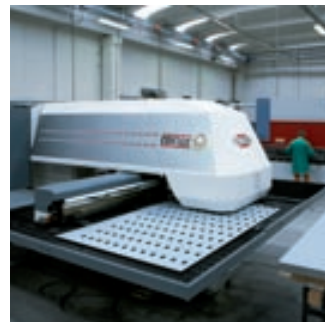
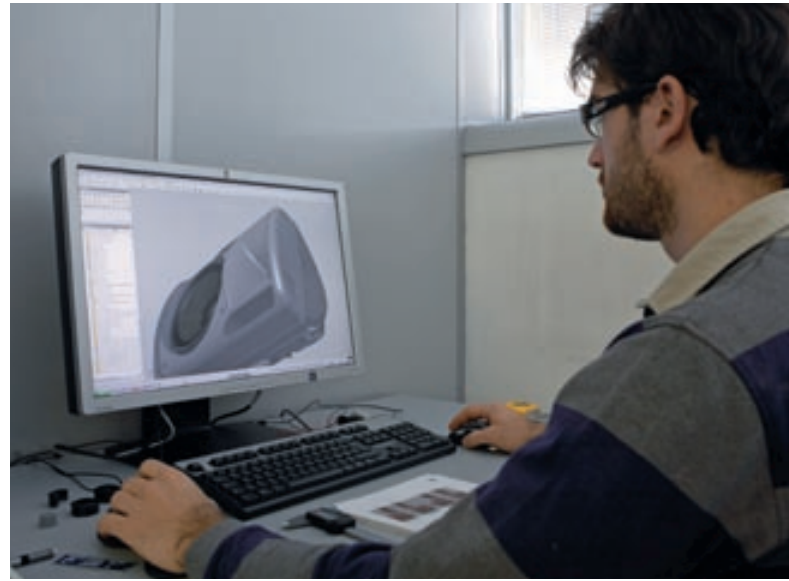
### ITALIAN-MADE QUALITY

A comprehensive corporate situation in which a single structure includes everything from the research and design lab, through the electronic sector, the plastic moulding department, carpentry shop, mechanical workshop, paint shop and test department through to assistance and after-sales service. A series of self-sufficient departments that work side by side, integrating and coordinating the various activities, submitting them to strict on-going quality control. Great care with every detail and

a vocation for top design, the result of an all-Italian tradition, for which style is a timeless art, full of values and meaning. A production chain entirely MADE in Italy, every stage of which is carried out in the FBT factory, which pursue with success and determination the philosophy of truly "national" products and quality

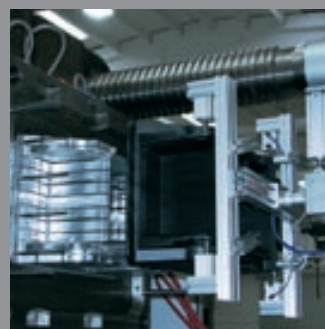
### KNOW HOW

Innovation in tradition. This is FBT's secret. The vast know how built up through the years, the highly specialized engineering and



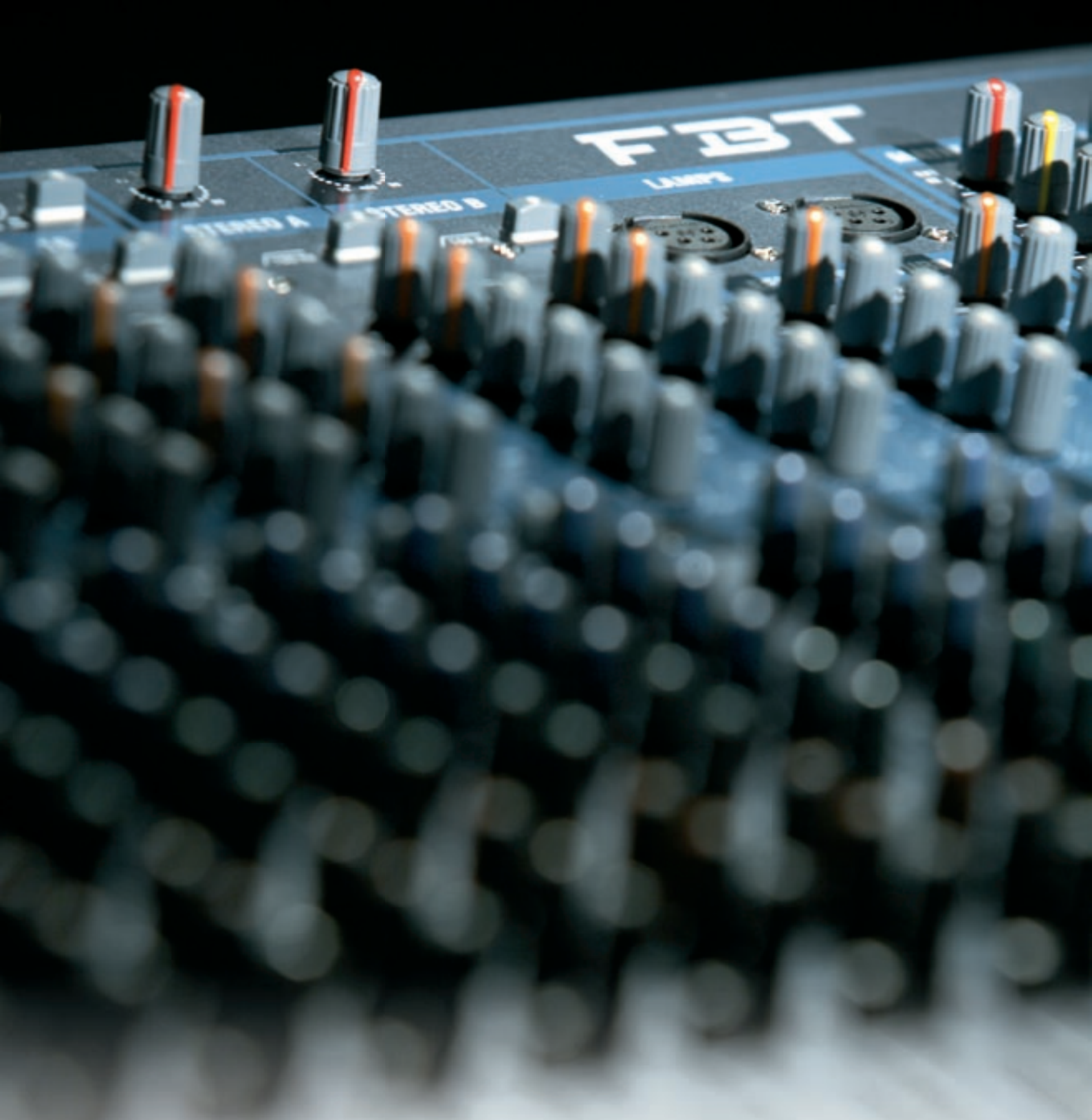
the impulse towards the discovery of new important frontiers in audio, enable FBT to realize top-quality professional audio systems. A team of experts able to select the most suitable innovative materials and offer constantly avant-garde top level acoustic and electronic technology. Loudspeaker enclosures with built-in processors, neodymium loudspeakers, power amplifiers using PWM (pulse width modulation) technology, extremely intuitive easily accessible control panels : a highly varied series of positive features that are FBT's strong points. On-going renewal, constant evolution that never forgets tradition and the original starting point: a passion for Music.

A production chain  
entirely **MADE in Italy...**











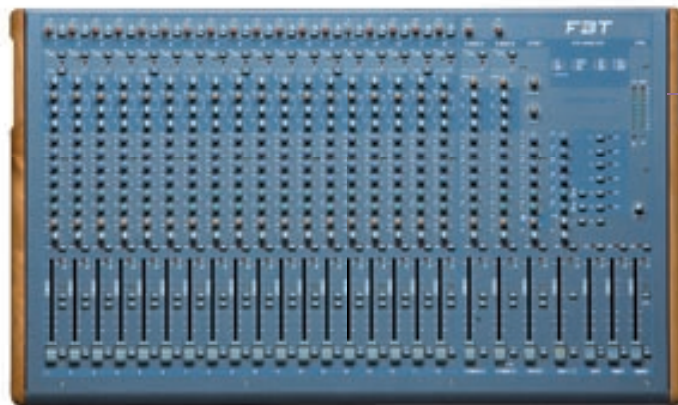
A wide experience in designing, engineering and manufacturing live mixing consoles brings FBT to develop the new **FORMULA**, Mixers, setting a new standard of quality for professional live sound mixers.

Available in various formats, the FORMULA Mixers provide all the features and functionality for **numerous live sound applications**, including: touring, recording, permanent installations, clubs, Houses of Worship, school auditoriums and theatres. The Formula 248 and 328 Mixers **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 128E and 122E models are built with the same quality and design reliability as the bigger models. **Compact and solid**, these mixers are addressed to those sound engineers who are looking for great features sized to their needs.



Formula 122E



Formula 182E



Formula 248



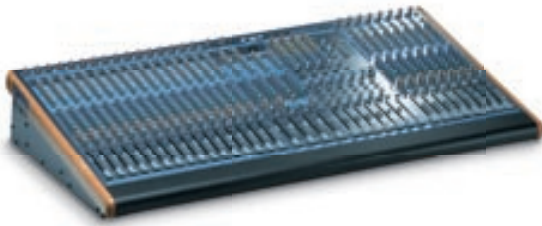
Formula 328



- > Balanced low noise XLR Input (CMRR  $\geq$  -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).
- > Eight aux sends give the possibility of providing adequate monitoring. As well as having the signal outputs on XLR-M, Aux 1 and Aux 2 have two built-in amplifiers, with relative volume, able to power two high-volume headphones
- > 100 mm dust protected faders allow smooth and accurate control of the input and output levels.
- > Each input channel can be assigned to 4 sub-groups to the Main L/R and to the Mono outputs (Formula 248/328).
- > Two stereo channels dedicated to effect return increase the Formula 248/328 mixer's operating possibilities
- > The 8-IN/4-OUT matrix provides four independent audio feeds (obtained with the mix of the signals of the Sub-groups, Main L/R, Mono and an external signal) to use for recording, sending feeds to different zones, audio control systems and additional aux outputs
- > 4-pin XLR lamp socket to connect a 12V/5W to illuminate the console.
- > Internal switching power supply allows universal AC input voltage (from 85 Vac to 260 Vac 50/60Hz).







## 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

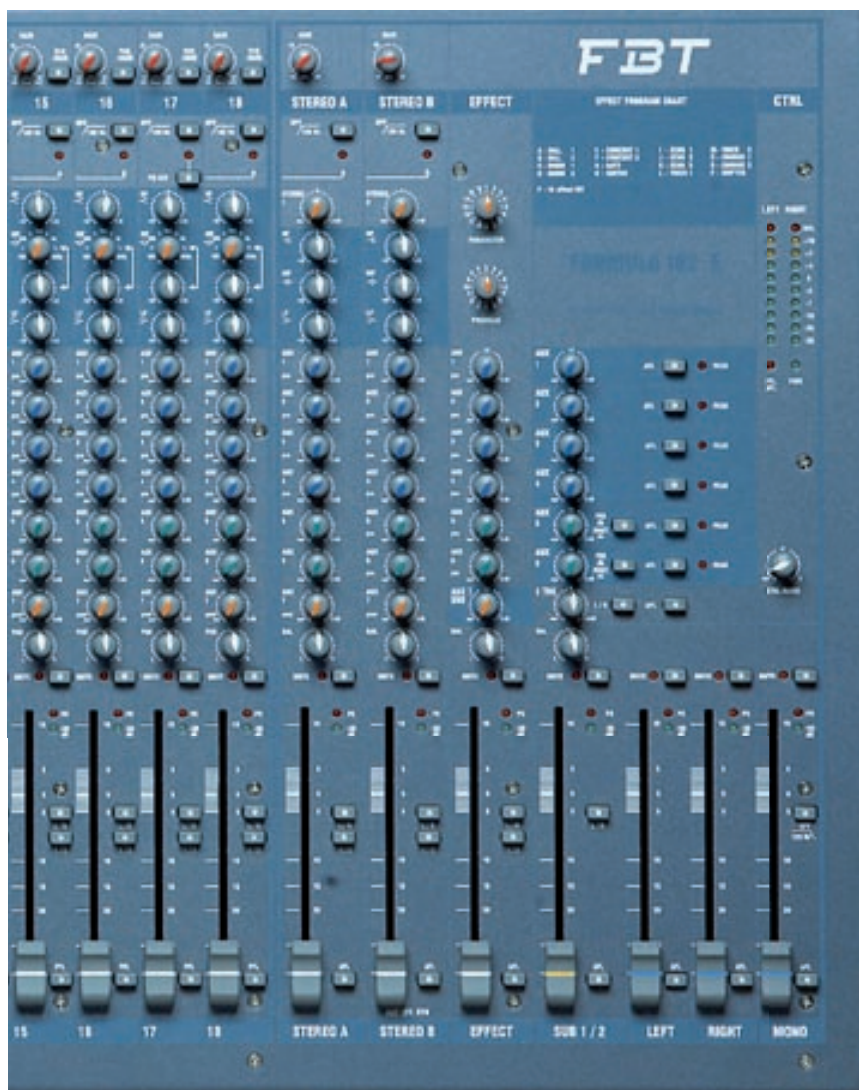






### Formula 182 E

- > 16 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: 3 pre, 1 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 122 E

- > 12 Mono channels frame
- > 2 stereo channels each with mic and stereo line inputs with independent level controls
- > L/R and Mono main outputs
- > 5 Auxiliary sends: 3 pre, 1 pre/post, 1 post
- > Channel assignment on 2 audio groups and 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
- > 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



# Mixers



Model	Formula 248 - 328	Formula 182 E	Formula 122 E
<b>Freq. response (20Hz-20KHz)</b>			
mic input (+ 40dB gain) on main output	-1 / -0,5dB	-1 / -0,5dB	-1 / -0,5dB
line input ( 0dB gain) on main output	-1 / -0,5dB	-1 / -0,5dB	-1 / -0,5dB
<b>Distortion (1KHz, 16dBu main out)</b>			
THD + Noise (mic + 40dB gain)	0,0045%	0,0045%	0,0045%
THD + Noise (line 0dB gain)	0,0042%	0,0042%	0,0042%
<b>CMRR (1KHz)</b>			
micro (+ 40dB gain)	better 80dB	better 80dB	better 80dB
micro with PAD (0dB gain)	better 48dB	better 48dB	-
<b>Crosstalk (1KHz)</b>			
adjacent channel	- 90dB	- 90dB	- 90dB
mute shutoff (fader 0dB mark)	- 94dB	- 94dB	- 94dB
fader shutoff (shutoff)	- 92dB	- 92dB	- 92dB
<b>Noise (22Hz-22KHz Bandwidth)</b>			
EIN (150 Ohm source, + 60dB gain)	- 129dB	- 129dB	- 129dB
residual output noise (main out, all levels off)	- 96dBu	- 96dBu	- 96dBu
main mix noise	- 86dBu	- 86dBu	- 86dBu
(all channel routed mix, fader 0dB mark, muted)			
<b>Equalization (mono channel, +/- 15dB gain)</b>			
High	Shelving 12KHz	Shelving 12KHz	Shelving 12KHz
High Mid	400-12KHz, Q max2,5	-	-
Mid	-	100-8KHz, Q= 1,41	100-8KHz, Q= 1,41
Low Mid	35-1KHz, Q max 2,5	-	-
Low	Shelving 80Hz	Shelving 80Hz	Shelving 80Hz
<b>Equalization (stereo channel, +/- 15dB gain)</b>			
High	Shelving 12KHz	Shelving 12KHz	Shelving 12KHz
High Mid	2,5KHz, Q = 1,41	-	-
Mid	-	peak 2,5KHz	peak 2,5KHz
Low Mid	250Hz, Q = 1,41	-	-
Low	Shelving 80Hz	Shelving 80Hz	Shelving 80Hz
<b>Max Input Levels</b>			
micro	+ 14dBu	+ 14dBu	+ 14dBu
micro with PAD	+ 34dBu	+ 34dBu	-
tape	+ 18dBu	+ 18dBu	+ 18dBu
line, stereo	+ 18dBu	+ 18dBu	+ 18dBu
<b>Rated outputs</b>	+ 4dBu	+ 4dBu	+ 4dBu
<b>Max output</b>	+ 24dBu	+ 24dBu	+ 24dBu
<b>Input impedance</b>			
micro	1,5Kohm bal	1,5Kohm bal	1,5Kohm bal
line	20Kohm bal	20Kohm bal	20Kohm bal
stereo	10Kohm bal	10Kohm bal	10Kohm bal
insert in	min 4Kohm	min 4Kohm	min 4Kohm
<b>Output impedance</b>			
main,aux,group	600ohm	600ohm	600ohm
direct out	600ohm	600ohm	600ohm
insert out	600ohm	600ohm	600ohm
headphones	min 32+32ohm	min 32+32ohm	min 32+32ohm
<b>Digital Effects Processor</b>			
frequency response (20-20KHz)	no	Yes	Yes
number of effects	- 3dB	- 3dB	- 3dB
	256	256	256
<b>Power Supply</b>	85-260 Vac 50/60Hz	85-260 Vac 50/60Hz	85-260 Vac 50/60Hz
<b>Net Dimensions</b>	mm/inch (WxHxD)		
	<b>248</b> - 1066x165x570 / 42x6,5x22,4	804x124x410 / 31,6x4,8x16,1	596x124x410 / 23,5x4,8x16,1
	<b>328</b> - 1274x165x570 / 50,1x6,5x22,4		
<b>Net Weight</b>	Kg/Lb		
	<b>248</b> - 24 / 52,9	14 / 30,8	10 / 22
	<b>328</b> - 28 / 61,7		
<b>Transport dimensions</b>	mm/inch (WxHxD)		
	<b>248</b> - 1115x300x665 / 43,9x11,8x26,1	804x124x410 / 31,6x4,8x16,1	596x124x410 / 23,5x4,8x16,1
	<b>328</b> - 1330x300x665 / 52,3x11,8x26,1	845x235x550 / 33,3x9,2x 21,67	680x235x500 / 22,8x9,25x19,7
<b>Transport weight</b>	Kg/Lb		
	<b>248</b> - 30 / 66	17 / 37,5	13 / 28,6
	<b>328</b> - 34,5 / 76		



## 2 rack HU High performance power amplifiers.

The Symbol 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

to 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



**Symbol 12000**  
1500+1500W



### 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	Wrms	2 x 800Wrms @ 8ohm / 2 x 1500Wrms @ 4ohm 2 x 2400Wrms @ 2ohm	2 x 600Wrms @ 8ohm / 2 x 1000Wrms @ 4ohm 2 x 1500Wrms @ 2ohm
Impulsive power Bridge Mode	Wrms	3000Wrms @ 8ohm / 4800Wrms @ 4ohm	2000Wrms @ 8ohm / 3000Wrms @ 4ohm
Continuous power both channels driven @ THD < 0,05% 1kHz	Wrms	2 x 700Wrms @ 8ohm / 2 x 1300Wrms @ 4ohm 2 x 1800Wrms @ 2ohm	2 x 550Wrms @ 8ohm / 2 x 900Wrms @ 4ohm 2 x 1300Wrms @ 2ohm
Continuous power Bridge Mode	Wrms	2600Wrms @ 8ohm / 3600Wrms @ 4ohm	1800Wrms @ 8ohm / 2600Wrms @ 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	482x88x460	482x88x460
	inch	19x3,5x18,1	19x3,5x18,1
Net Weight	Kg / lb	25 / 55,1	24 / 52,9
Transport dimensions (WxHxD)	mm	580x580x120	580x580x120
	inch	22,8x22,8x4,7	22,8x22,8x4,7
Transport weight	kg / lb	28 / 61,7	27 / 59,5









FBT's up-front creativity is expressed to its full in this innovative line-array **sound reinforcement 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 not larger than a conventional horn-loaded enclosure, with **vertical and horizontal dispersion angles controlled and already optimized** to solve effectively the most varied sound reinforcement requirements, from touring to permanent installations.

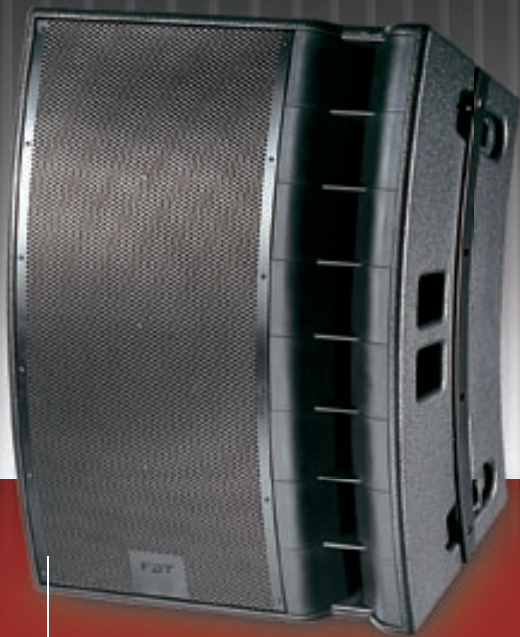
Although offering a product that is very competitive and extremely easy to use, **no corners were cut in terms of quality and performance**.

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



**Modus 40a**  
1400+700W  
**Modus 40**  
1600W



**Modus 15a**  
1400+700W  
**Modus 15**  
1600W



- > 13 layer (18mm/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** by means of a wave guide that shapes the wavefront in a perfectly uninterrupted manner.
- > **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 singly**, 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 SUBa**  
1400W



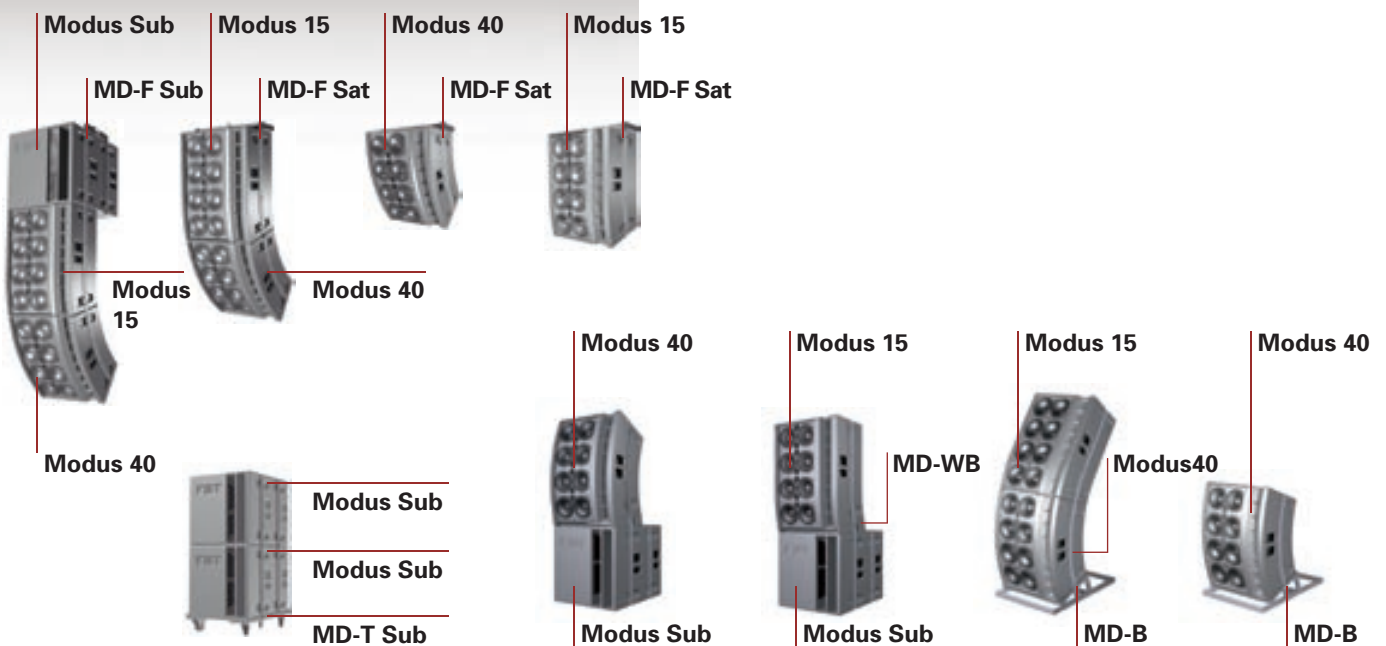


### Self-powered range:

- > High-efficiency amplifiers with **PWM technology**.
- > **Digital Signal Processor** with: IIR equalization, high-slope Linkwitz-Riley crossover, delay, control of energy sent to the loudspeakers, dynamic equalization of the low frequencies, noise gate.
- > **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 (63.75m in 25 cm steps) and a choice of various configuration presets. A DIP SWITCH enables to insert a hi-pass filter in the satellites (for use with a sub-woofer) or invert the phase of the SUB, diagnostic LED.
- > **Power supply with Neutrik POWERCON connectors** Input and Output which enables to 'link' the power supply between the boxes, limiting the use of long power cables.

### Passive range:

- > **Internal "Dual-Mode" filters** with external display of the setting in use. Can be used in **Full-range mode** or **Bi-Amp mode** driving the woofer and driver separately with 2 amplifiers and an external signal processor.
- > **High quality passive components**, all the components are glued with special resins to ensure absolute resistance to vibrations and impact.
- > **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.







## Modus 40a

**1400W + 700W - 137dB SPL**  
Active precision coverage  
vertical array

- > 2-way powered bi-amplified true line array, bass reflex design, internal **Digital Signal Processor**
- > **1400Wrms LF and 700Wrms 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")
- > 8 polypropylene waveguide horns with **90° horizontal** dispersion
- > **40° vertical dispersion**
- > On-board presets allow different equalization configurations, gain and digital delay through the rear control panel

## Modus 40

**1600W - 138dB SPL**  
Precision coverage  
vertical array

- > Passive version, **recommended power amplifier: 1600Wrms /2ohm** in full range mode or 1600Wrms/2ohm + 400Wrms/4ohm in bi-amp mode
- > Dual-mode passive crossover
- > NL4 speakon connectors
- > **External digital processor required**



## Modus 15a

**1400W + 700W - 137dB SPL**  
Active precision coverage  
vertical array

- > 2-way powered bi-amplified true line array, bass reflex design, internal **Digital Signal Processor**
- > **1400Wrms LF and 700Wrms HF** Class D (PWM) high efficiency integrated amplifier
- > **8 woofer** custom al neodimio da 200mm (8")

- 50 mm voice coil (2")
- > **8 x 25 mm (1")** custom neodymium compression drivers and 44 mm voice coil (1.7")
- > 8 polypropylene waveguide horns with **90° horizontal** dispersion
- > **15° vertical dispersion**
- > On-board presets allow different equalization configurations, gain and digital delay through the rear control panel

## Modus 15

**1600W - 138dB SPL**  
Precision coverage  
vertical array

- > Passive version, **recommended power amplifier: 1600Wrms/2ohm** in full range mode or 1600Wrms/2ohm + 400Wrms/4ohm
- > Dual-mode passive crossover
- > NL4 speakon connectors
- > **External digital processor required**



## Modus SUBa

**1400W - 140dB SPL**  
Active Subwoofer

- > Powered subwoofer in **bandpass push-pull** configuration, internal **Digital Signal Processor**
- > **1400Wrms 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

**1800W - 141dB SPL**  
Subwoofer

- > Passive version, **recommended power amplifier: 1800Wrms/4ohm**
- > NL4 speakon connectors
- > **External digital processor required**





Model		MODUS 40a	MODUS 15a	MODUS SUBa
Configuration	way	2	2	Band-Pass
Built-in amplifier LF/HF	Wrms	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)	Wrms	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 - 24dBoct	40hz - 24dBoct	32hz - 24dBoct
Recommended external filter		/	/	LP 90Hz - 24dB/oct
Input connectors		2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru	2 x Speakon NL4 in & thru
Net dimensions	mm	713x980x490	713x980x460	713x713x836
(WxHxD -single unit)	inch	28,07x38,58x19,29	28,07x38,58x19,29	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