

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.

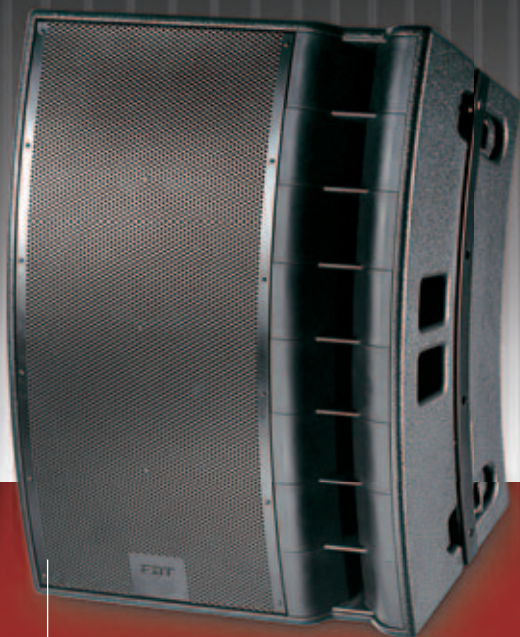
Although offering a product that is very competitive and extremely easy to use, **no corners were cut in terms of quality and performance**.

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



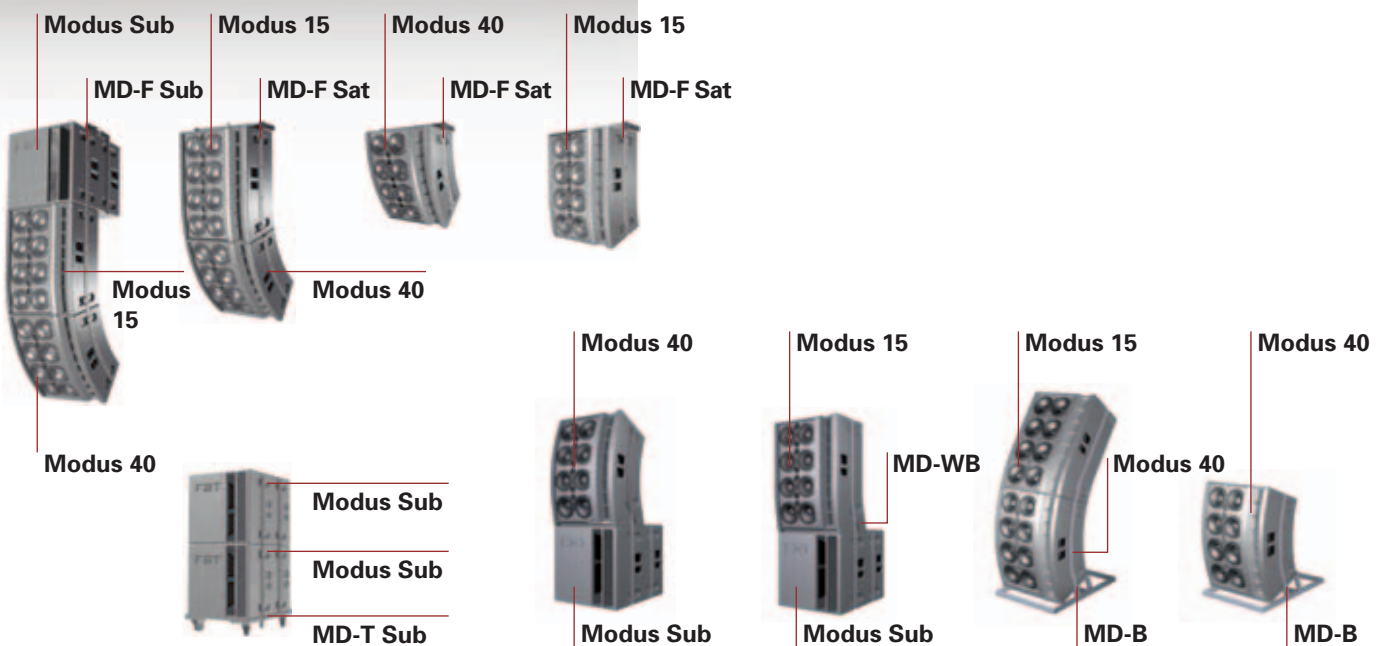


### Self-powered range:

- > 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 amplifiers 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

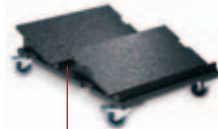
Model		MODUS 40	MODUS 15	MODUS SUB
Configuration	way	2	2	Band-Pass
Recommended amplifier (Bi-Amp)	Wrms	1600 (1600 LF/400 HF)	1600 (1600 LF/400 HF)	1800
Long term power (Bi-Amp)	W	1000 (1000 LF/200 HF)	1000 (1000 LF/200 HF)	1000
Short term power IEC 268-5 (Bi-Amp)	W	3200 (3200 LF/800 HF)	3200 (3200 LF/800 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 - 24dB/oct	40Hz - 24dB/oct	32Hz - 24dB/oct
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



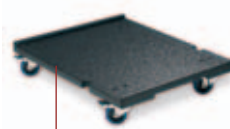
**MD-F Sat**  
Flying bar Sat



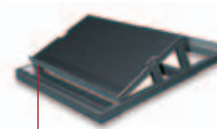
**MD-F Sub**  
Flying bar Sub



**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