

**TOURING&
INSTALL**

**PORTABLE
SOUND**

**AUDIO
CONTRACTOR**

NEWS
2016



since 1963 - Made in Italy

2 | Ventis

Speaker System

THE VENTIS RANGE FROM FBT COMPRIZES FOUR VERSATILE LOUDSPEAKER ENCLOSURES FOR EITHER PORTABLE USE OR FIXED INSTALLATION



Ventis 115A
700W + 200W

Ventis 115
500W

Ventis 112A
700W + 200W

Ventis 112
400W

Ventis 110A
700W + 200W

Ventis 110
300W

Ventis 206A
700W + 200W

Ventis 206
400W

Available in either passive or bi-amplified versions, each of the models - the VENTIS 115, 112, 110, and 206 - has been designed to meet the highest standards in both performance and aesthetic appeal.

For the VENTIS range, quality and flexibility are the watchwords. Based on a powerful combination of B&C compression drivers and FBT's own custom, long excursion woofers, the 115, 112 and 110 models are two-way, bass reflex designs housed in 15mm birch plywood. A full-grille design backed by specially treated acoustic cloth delivers the characteristic style for which FBT is known, while fully rotatable constant directivity horns ensure accurate coverage.

The three enclosures are as suitable for fixed installation as they are for use on the stage. M10 points are included as standard while an optional U-bracket can be used for wall-mounting. For use on the road, the **VENTIS** models include aluminum handles with rubber inserts, a 35mm polemount socket, and a 45° sloped profile for unobtrusive placement on-stage as a monitor.

Meanwhile the multi-purpose **VENTIS 206 can be deployed as a front fill, an under-balcony fill, as a main providing pristine speech intelligibility or simply as the full-range companion of a subwoofer.** Constructed in 12mm birch plywood, the 206 has an integrated rear handle, an optional mounting bracket and, most importantly, an astonishing size to SPL ratio. Power for the active **VENTIS** models comes courtesy of a specially designed, Italian made switching mode amplifier

module. Low frequencies are driven by a highly efficient 700W RMS (full bridge) Class-D topology, operating with extremely low THD. For the HF stage, a 200W RMS performance is delivered via a meticulously crafted Class-H / AB design.

Finally, DSP on-board the **VENTIS** enclosures is both user friendly and powerful. Located on the rear of each enclosure, a menu-driven system is navigated via a single rotary control with push-to-select functionality. A total of 6 pre-optimised settings are available (see below), plus 2 further slots for users to form their own designs, using 5 parametric equalizers per slot. Also available is a high-pass filter, a mic/line selector, low, mid and high tone settings and an optional delay of between 0 and 3.5 metres. Finally, users can exclusively choose between two limiter modes, MAX-SPL or MAX-QUALITY, to best suit their performance.



The VENTIS Presets

The FBT VENTIS range offers powerful DSP with 6 versatile presets. Crafted by expert FBT engineers, the presets offer a performance for every requirement.

ORIGINAL / LIVE The renowned, smooth FBT sound

VOCAL A special EQ setting to maximise speech intelligibility

DJ Designed to keep the energy high and your audience dancing

TOURING The reliability and the roar of the industry's most popular touring systems

LOUDNESS The ultimate preset for listening at a medium or low volume

WARM A special setting to emphasise full-bodied, low-mid frequencies.



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Speaker system

2-way, bi-amplified, bass reflex design

Biamped: 700W RMS LF and 200W RMS HF power amplifiers in Class D for LF and in Class H/AB for HF

Digital Signal Processor with graphic display

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, XLR LINK OUT, 2 x Volume, RCA Stereo input, DSP display with rotative encoder and push



Ventis 115A

PROCESSED ACTIVE SPEAKER
700W + 200W RMS
133dB SPL

- 380mm (15") LF woofer with 64mm (2.5") voice coil, custom made for FBT
- 25mm (1") exit throat B&C HF compression driver with 44mm (1.7") voice coil
- Frequency response from 42Hz to 20KHz
- 80°H x 50°V Constant Directivity rotatable Horn
- 6 x M10 suspension points, wall bracket mount thread, 35 mm (1 3/8") top-hat speaker stand socket, two aluminium handles
- 45° monitor taper

Ventis 115

PASSIVE REINFORCEMENT SPEAKER
500W / 8ohm - 130dB SPL

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

Ventis 112A

PROCESSED ACTIVE SPEAKER
700W + 200W RMS
133dB SPL

- 320mm (12") LF woofer with 64mm (2.5") voice coil, custom made for FBT
- 25mm (1") exit throat B&C HF compression driver with 36mm (1.4") voice coil
- Frequency response from 48Hz to 20 kHz
- 80°H x 50°V Constant Directivity Rotatable Horn
- 6 x M10 suspension points, optional wall bracket mount thread, 35mm (1 3/8") top-hat
- Speaker stand socket, two aluminium handles
- 45° monitor taper

Ventis 112

PASSIVE REINFORCEMENT SPEAKER
400W / 8ohm - 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

Ventis 110A

PROCESSED ACTIVE SPEAKER
700W + 200W RMS
131B SPL

- 250mm (10") LF woofer with 50mm (2") voice coil, custom made for FBT
- 25mm (1") exit throat B&C HF compression driver with 36mm (1.4") voice coil
- Frequency response from 58Hz to 20 kHz
- 80°H x 50°V Constant Directivity Rotatable Horn
- 6 x M10 suspension points, optional wall bracket mount thread, 35mm (1 3/8") top-hat
- Speaker stand socket, one aluminium handle
- 45° monitor taper

Ventis 110

PASSIVE REINFORCEMENT SPEAKER
300W / 8ohm - 127dB SPL

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

Ventis

Speaker system

TECHNICAL FEATURES



Ventis 206A

PROCESSED ACTIVE SPEAKER
700W + 200W RMS
131dB SPL

- **2x165mm (6.5") LF woofer** with **38mm (1.5")** voice coil, custom made for FBT
- **25mm (1") exit throat B&C HF** compression driver with **36mm (1.4")** voice coil
- Frequency response from **70Hz to 20 kHz**
- **70°H x 50°V** Constant Directivity Rotatable Horn
- 6 x M10 suspension points, wall bracket mount thread, 35mm (1 3/8") top-hat
- One integrated handle
- 12mm (0.47") birch plywood scratch resistant enclosure and internal bracing

Ventis 206

PASSIVE REINFORCEMENT SPEAKER
400W / 8ohm - 127dB 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		115A	112A	110A	206A
Configuration	way	2	2	2	1
Built-in amplifier max. rms LF/HF	W	700/200	700/200	700/200	700/200
Built-in amplifier max. peak LF/HF	W	1400/400	1400/400	1400/400	1400/400
Frequency response	@-6dB	42Hz - 20KHz	48Hz - 20KHz	58Hz - 20KHz	70Hz - 20KHz
Low frequency woofer	inch	15 - 2.5 coil	12 - 2.5 coil	10 - 2 coil	2x6.5 - 1.5 coil
High frequency driver	inch	1 - 1.7 coil	1 - 1.4 coil	1 - 1.4 coil	1 - 1.4 coil
Maximum SPL cont/peak	dB	127 / 133	126 / 133	124 / 131	124 / 131
Dispersion	H x V	80° x 50° rotatable	80° x 50° rotatable	80° x 50° rotatable	70° x 50° rotatable
Input impedance	kOhm	22	22	22	22
AC Power requirements	VA	640	640	640	640
Input connectors		XLR with loop, RCA ST	XLR with loop, RCA ST	XLR with loop, RCA ST	XLR with loop, RCA ST
Power cord	mm/inch	5/16.4	5/16.4	5/16.4	5/16.4
AC Power connector		Neutrik POWERCON TRUE1	Neutrik POWERCON TRUE1	Neutrik POWERCON TRUE1	Neutrik POWERCON TRUE1
Net dimensions (WxHxD)	mm inch	427x765x420 16.81x30.11x16.53	387x665x380 12.23x26.18x14.96	329x575x325 12.95x22.63x12.79	190x560x260 7.48x22.04x10.23
Net weight	kg/lb	25/55.11	20.6/45.41	15.6 /34.39	12.3/27.11
Transport dimensions (WxHxD)	mm inch	600x865x520 23.62x34.05x20.47	500x765x470 19.68x30.11x18.50	420x675x400 16.53x26.57x15.74	290x660x360 11.41x25.98x14.17
Transport weight	kg/lb	29/63.93	23.1/50.92	18.1/39.90	14.3/31.52

Model		115	112	110	206
Configuration	way	2	2	2	2
Recommended amplifier	W rms	500	400	300	400
Long term power *	W	250	200	150	200
Short term power (IEC 268-5) **	W	1000	800	600	800
Nominal impedance	Ohm	8	8	8	8
Frequency response	@-6dB	50Hz - 18KHz	55Hz - 18KHz	60Hz - 18KHz	75Hz - 20KHz
Low frequency woofer	inch	15 - 2.5 coil	12 - 2.5 coil	10 - 2 coil	2x6.5 - 1.5 coil
High frequency driver	inch	1 - 1.7 coil	1 - 1.4 coil	1 - 1.4 coil	1 - 1.4 coil
Sensitivity (@1W/1m)	dB	99	98	97	97
Maximum SPL cont/peak	dB	126 / 130	125 / 129	122 / 127	123 / 127
Dispersion	H x V	80° x 50° rotatable	80° x 50° rotatable	80° x 50° rotatable	70° x 50° rotatable
Crossover frequency	kHz	1,4	1,6	1,8	2
Recommended HP filter		HP 40Hz - 12-24db/oct	HP 45Hz - 12-24db/oct	HP 50Hz - 12-24db/oct	HP 60Hz - 12-24db/oct
Recommended external DSP		FBT DLM26	FBT DLM26	FBT DLM26	FBT DLM26
Input connectors		2 x SPEAKON	2 x SPEAKON	2 x SPEAKON	2 x SPEAKON
Net dimensions (WxHxD)	mm inc	427x765x420 16.81x30.11x16.53	387x665x380 12.23x26.18x14.96	329x575x325 12.95x22.63x12.79	190x560x260 7.48x22.04x10.23
Net weight	kg/lb	24.5/54.01	20.1/44.31	15.1/33.28	11.8/26.01
Transport dimensions (WxHxD)	mm inch	600x865x520 23.62x34.05x20.47	500x765x470 19.68x30.11x18.50	420x675x400 16.53x26.57x15.74	290x660x360 11.41x25.98x14.17
Transport weight	kg/lb	28.5/2.83	22.6/49.82	17.6/38.80	13.8/30.42

* 100 hour power test, IEC 268-5 standard (display the long term RMS voltage handling, using IEC filtered 6db crest factor pink noise)

** Based on peak level of 6 db crest factor random noise signal used for test

6 | X-PRO

Speaker System

NO MATTER WHETHER YOU'RE PERFORMING ON STAGE, DELIVERING A BUSINESS PRESENTATION OR DESIGNING THE HIGHEST QUALITY FIXED INSTALLATION, YOU WANT TO LEAVE AN INDELIBLE MARK ON YOUR AUDIENCE



X-PRO 15
400W

X-PRO 12
300W

X-PRO 10
250W

That's when FBT's new X-PRO series of passive speakers can help you make a difference.

Constructed out of plywood enclosures finished with extra-texture paint, the X-PRO series is cut to withstand tour-tough conditions with Italian elegance and style. Professional features include ergonomic handles, M10 flying points, a monitor taper design, and a full protective grille.

Handles, **M10 rigging points** for suspended installation, 35mm stand socket and 35° or 45° monitor taper, all included to make the speaker adaptable to any application



X-PRO Series common features

- Plywood cabinet with anti-scratch coating and an internal ply reinforcement
- Custom FBT Speakers with high linear excursion capability and efficiency
- Compression driver with 25mm (1") throat and 35mm (1.4") voice coil
- Constant directivity horn which can be rotated to vary the speaker's angle of coverage



Monitor 35°



8 | **X-PRO**
Speaker system



X-PRO 15

PASSIVE REINFORCEMENT SPEAKER
400W/8ohm RMS - 126dB SPL

- 2-way bi-amplified bass reflex
- FBT Custom 380mm (15") LF woofer with 64mm (2.5") voice coil
- FBT 25mm (1") throat /35mm (1.4") voice coil HF compression driver
- 53Hz to 20KHz Frequency Response
- 80° H x 50° V constant directivity rotatable horn
- 35° or 45° monitor taper

X-PRO 12

PASSIVE REINFORCEMENT SPEAKER
300W/8ohm RMS - 125dB SPL

- 2-way bi-amplified bass reflex
- FBT Custom 320mm (12") LF woofer with 50mm (2") voice coil
- FBT 25mm (1") throat /35mm (1.4") voice coil HF compression driver
- 56Hz to 20KHz Frequency Response
- 80° H x 50° V constant directivity rotatable horn
- 35° monitor taper



X-PRO

Speaker system

TECHNICAL FEATURES



X-PRO 10

PASSIVE REINFORCEMENT SPEAKER
250W/8ohm RMS - 123dB SPL

- 2-way bi-amplified bass reflex
- FBT Custom 250mm (10") LF woofer with 50mm (2") voice coil
- FBT 25mm (1") throat /35mm (1.4") voice coil HF compression driver
- 68Hz to 20KHz Frequency Response
- 80° H x 50° V constant directivity rotatable horn
- 35° monitor taper

Model		15	12	10
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	53Hz - 20KHz	56Hz - 20KHz	68Hz - 20KHz
Low frequency woofer	inch	15 / 2.5 coil	12 / 2 coil	10 / 2 coil
High frequency driver	inch	1 / 1.4 coil	1 / 1.4 coil	1 / 1.4 coil
Sensitivity (@1W/1m)	dB	98	97	93
Maximum SPL cont/peak	dB	123 / 126	122 / 125	120 / 123
Dispersion	H x V	80°x50° rotatable	80°x50° rotatable	80°x50° rotatable
Crossover frequency	kHz	1.8	2	2.5
Recommended HP filter		HP40Hz 12-24db/oct	HP 45Hz 12-24db/oct	HP 55Hz 12-24db/oct
Recommended external DSP		FBT DLM26	FBT DLM26	FBT DLM26
Input connectors		2 x SPEAKON	2 x SPEAKON	2 x SPEAKON
Net dimensions (WxHxD)	mm inch	440x735x440 17.32x28.93x17.32	370x640x370 14.56x25.19x14.56	315x550x315 12.40x21.65x12.40
Net weight	kg lb	21.5 47.39	17.5 38.58	13 28.66
Shipping dimensions(WxHxD)	mm inch	535x810x535 21.06x31.88x21.06	465x715x465 18.30x28.14x18.30	410x625x410 16.14x24.60x16.14
Shipping weight	kg lb	24.5 54.01	20,3 44.75	15 33.06

* 100 hour power test, IEC 268-5 standard (display the long term RMS voltage handling, using IEC filtered 6db crest factor pink noise)

** Based on peak level of 6 db crest factor random noise signal used for test

10 | Vertus CS1000

Column Line Array

CREATED AS A NO-COMPROMISE CHOICE FOR BOTH LIVE PERFORMERS AND INSTALLERS, THE VERTUS CS1000 COMPACT LINE ARRAY COMBINES MAXIMUM PERFORMANCE WITH A MODULAR, SCALABLE APPROACH



Vertus CS1000
600W + 400W

Its lightweight but sturdy construction blended with FBT's distinctive engineering and elegance has delivered a system that can be deployed on stage within minutes, or discreetly integrated into the most delicate of decors to provide high-quality sound and controlled directivity.

A bi-amplified design, the system comprises a long excursion 12" bass reflex subwoofer and a passive mounted satellite, linked via a Neutrik SPEAKON connector and equipped with six full-range neodymium 3" speakers. Onboard the subwoofer is a Class-D, two channel amplifier, complete with switch-mode power supply, delivering 600W RMS to the subwoofer and 400W RMS to the satellite, both of which are housed in birch plywood enclosures.

For ease of use, a storage compartment is provided within the subwoofer enclosure to securely house both the satellite speaker and its supplied mounting pole for storage and transport. A dedicated locking system holds all of the equipment in place.

As with all FBT products, graceful but effective engineering is at the heart of the **VERTUS CS1000**, as exemplified by the mounting pole. Comprised of three sections, the pole allows users to alter the height of the satellite to suit their requirements, while a custom joint provides continuous vertical adjustment to ensure precise coverage in every venue. No listener is left untouched by the **VERTUS CS1000** - the slim proportions of the satellite facilitate a wide horizontal

dispersion of 110°, while the precision placement of the six 3" drivers to form a J-array creates a vertical dispersion of 30° (+10° / -20°).

Need more power? The VERTUS CS1000 takes a modular approach in that two systems can be used in a dual configuration to form a totally coherent and much more powerful solution. By stacking the two subwoofers and locking the two satellites together end-to-end (via optional hardware), the maximum SPL of the overall system is raised by 6dB. Coverage is also extended - although the horizontal dispersion remains consistent, vertical dispersion increases to 40° (+20° / -20°)

Other features ensure ease of use and a rugged build quality.



The subwoofer is equipped with aluminum handles complete with a rubber insert to guarantee a comfortable grip - transporting the entire system, including the subwoofer, satellite, mounting pole, joint and all cables, is both convenient and comfortable. The fanless amplifier module is protected by diecast aluminum, while onboard DSP offers a choice of eight dedicated presets, each one shaped by FBT's long experience in creating proprietary algorithms to suit every requirement.

Finally, the **VERTUS CS1000 is compact in dimension but big on sound.** The volume of the satellite can be adjusted in accordance with the subwoofer in 8 steps between -4.5 / +5dB range, while a selectable high-pass filter ensures optimum reproduction. And as your requirements grow, the **VERTUS CS1000** compact line array will grow with you - simply combine four systems in a two per-side stereo configuration to achieve a remarkable 8.000W peak.



Vertus CS1000

Column Line Array



Vertus CS1000

COMPACT LINE ARRAY INTEGRATED SYSTEM
600W + 400W RMS - 129 dB SPL

- 2-way speaker system
- Subwoofer with a custom 12" (320mm) long excursion speaker with a 2.5" (64mm) voice coil
- 6 x full-range, 3" (70mm) neodymium high efficiency custom woofers with 0.75" (20mm) voice coils
- Frequency response of 40Hz to 20KHz
- Onboard Class-D, switch-mode amplifier delivering 600Wrms + 400Wrms for LF and HF respectively
- Built-in DSP with eight presets to suit every application
- Variable satellite volume between -4.5 / + 5 dB in 8 steps
- Control Panel with master volume, presets, variable satellite volume, HPF, and LED status
- Input and link via XLR and Neutrik SPEAKON for satellite connection
- Dispersion 110° (H) x 30° (V)
- Modular design allowing two systems to be configured as one single solution via optional

accessories

- **Bass reflex stackable subwoofer** in a birch plywood enclosure with diecast aluminum handle and rubber inserts, plus M20 support and a custom pole-mount solution facilitating adjustable height and vertical aiming
- **The satellite and pole are fully integrated into the subwoofer cabinet, where a push button system locks the satellite in place for transportation**
- The satellite is equipped with a coupling system for accessories which allow the extension of the length of the line array, positioning one atop the other. Alternatively, the same system allows the satellite to be permanently wall-mounted
- **Ideal for both live applications and fixed installations**
- **Easily expandable to a total power of 8.000W peak** (via a stereo system consisting of 4 x VERTUS CS1000, positioned two per side)



Vertus

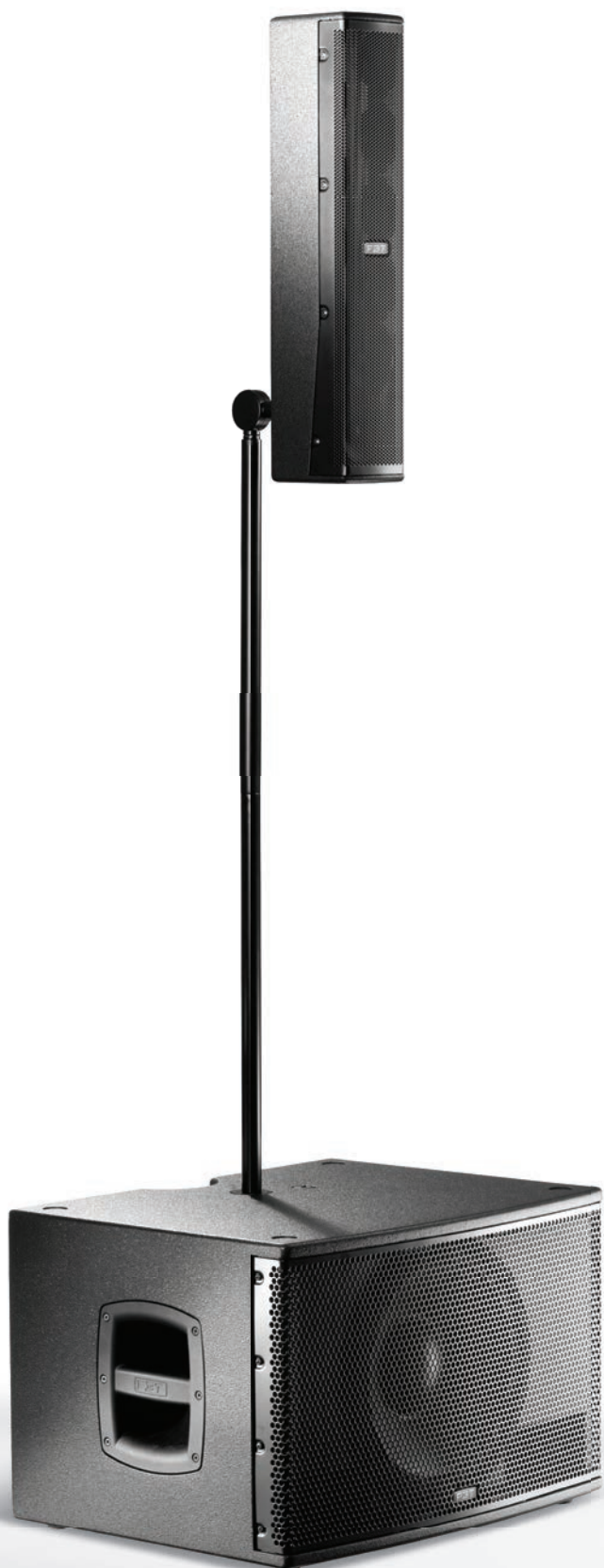
Column Line Array

TECHNICAL FEATURES



Model	CS1000
Configuration	way 2
Built-in amplifier cont. rms LF/HF	W 600/400
Built-in amplifier max. peak LF/HF	W 1200/800
Frequency response	@-6dB 40Hz - 20KHz
Low frequency woofer	inch 12 - 2.5 coil
Mid-High frequency driver	inch 6 x 3 - 0.8 coil - neodymium
Maximum SPL cont/peak	dB 125 / 129
Dispersion	H x V 110° x 30°
Input impedance	kOhm 22
Crossover frequency	Hz 180
AC Power requirements	VA 640
Input connectors	XLR with loop
Power cord	m 5 inch 16.4

	Satellite	Subwoofer
Net dimensions (WxHxD)	mm 105X530X120	565X373X450
	inch 4.13x20.86x4.72	22.24x14.68x17.71
Net weight	kg 3,5	22,4
	lb 7.71	49.38
Transport dimensions (WxHxD)	mm 695X473X580	
	inch 27.36x18.62x22.83	
Transport weight	kg 33.5	
	lb 73.85	



ProMaxX

Speaker System

WITH A SPECIALLY DEVELOPED POLYPROPYLENE CABINET AND STYLISH FULL GRILLE AESTHETIC, THE NEW PROMAXX BY FBT REPRESENTS THE NEXT STEP IN THE EVOLUTION OF A PORTABLE SOUND CLASSIC



ProMaxX 114A
700W + 200W



ProMaxX 112A
700W + 200W



ProMaxX 110A
700W + 200W

Equipped with custom FBT speakers complete with B&C's renowned compression driver technology, **PROMAXX combines true made-in-Italy quality and style.** At its heart is a purpose-built FBT amplifier module with a switch-mode power supply. For the low frequency section, 700W RMS is driven via a highly efficient Class-D topology, boasting extremely low THD. For HF, meanwhile, 200W RMS is delivered by a Class-H / AB design chosen to ensure the highest definition of audio performance at high frequencies.

Also onboard is a powerful digital signal processing (DSP) platform made available to users of all levels thanks to an intuitive graphical user interface. Located on the rear of the enclosure, the menu-driven system is navigated via a single rotary control with push-to-select functionality. Users can choose between 6 equalizer presets, each carefully designed by FBT engineers to ensure that every application is catered for (see below). Additionally, 2 preset slots are available for users to form their own designs, using 5 parametric

equalizers per slot. Also available is a high-pass filter, a mic/line selector, low, mid and high tone settings and an optional delay of between 0 and 3.5 metres. Finally, users can exclusively choose between two limiter modes, MAX-SPL or MAX-QUALITY, to best suit their performance. The PROMAXX feature-set is matched by the enclosure's versatility, with options for pole-mounting, wall-hanging, suspension or even deployment in an array. The result is the most accessible PROMAXX yet.



Presets for every occasion

PROMAXX offers 6 presets to cater for a broad variety of uses, each crafted by FBT engineers. Employing powerful DSP, the presets ensure reliability while eliminating distortion.

- ORIGINAL / LIVE** The renowned, smooth FBT sound
- VOCAL** A special EQ setting to maximise speech intelligibility
- DJ** Designed to keep the energy high and your audience dancing
- TOURING** The reliability and the roar of the industry's most popular touring systems
- LOUDNESS** The ultimate preset for listening at a medium or low volume
- WARM** A special setting to emphasise full-bodied, low-mid frequencies

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°

ProMaxX

Speaker system

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

Biamped: 700W RMS LF, 200W RMS HF, power amplifiers in Class D for LF and in Class H/AB for HF with switch mode power supplies

Digital signal processor with graphic display

Control Panel features balanced XLR/Jack input, XLR LINK OUT, 2 x Volume, RCA Stereo input, DSP display with rotative encoder and push

2 x M10 suspension points, 35mm (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



ProMaxX 114A

PROCESSED ACTIVE SPEAKER
700W + 200W RMS - 135,5dB SPL

- 355mm (14") LF neodymium magnet woofer with 75mm (3") voice coil, custom made for FBT by B&C
- 35mm (1,4") exit throat B&C HF compression driver with 64mm (2,5") voice coil
- Frequency response from 45Hz to 20 kHz
- **Compact Dimensions:** ProMaxX 114a uses the same size gas-injected polypropylene molded enclosure as the ProMaxX 112a, but features our 14" LF Woofer for lower frequency SPL
- **Full grille design with black acoustic cloth**
- Extremely light, only 17,4kg / 40.78lb

ProMaxX 114

PASSIVE REINFORCEMENT SPEAKER
700W / 8ohm - 132dB SPL

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

ProMaxX 112A

PROCESSED ACTIVE SPEAKER
700W + 200W RMS - 133dB SPL

- 320mm (12") LF neodymium magnet woofer with 64mm (2.5") voice coil, custom made for FBT
- 25mm (1") exit throat B&C HF magnet compression driver with 34mm (1.4") voice coil
- Frequency response from 48Hz to 20KHz
- Sturdy, gas-injected polypropylene molded enclosures, engineered to contain undesired resonance
- **Full grille design with black acoustic cloth**
- Extremely light only 14.8Kg/32.62lb

ProMaxX 112

PASSIVE REINFORCEMENT SPEAKER
400W / 8ohm - 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





ProMaxX 110A

PROCESSED ACTIVE SPEAKER
700W + 200W RMS - 131dB SPL

- 250mm (10") LF neodymium magnet woofer with 50mm (2") voice coil, custom made for FBT
- 25mm (1") throat exit B&C HF magnet compression driver with 34mm (1.4") voice coil
- Frequency response from 58Hz to 20KHz
- Sturdy, gas-injected polypropylene molded enclosures, engineered to contain undesired resonance
- **Full grille design with black acoustic cloth**
- Extremely light only 10.3kg/22.70lb

ProMaxX 110

PASSIVE REINFORCEMENT SPEAKER
300W / 8ohm - 127dB SPL

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

ProMaxX

Speaker system
TECHNICAL FEATURES



Model		114A	112A	110A
Configuration	way	2	2	2
Built-in amplifier max. rms LF/HF	W	700/200	700/200	700/200
Built-in amplifier max. peak LF/HF	W	1400/400	1400/400	1400/400
Frequency response	@-6dB	45Hz - 20KHz	48Hz - 20KHz	58Hz - 20KHz
Low frequency woofer	inch	14 - 3 coil - neodymium	12 - 2.5 coil	10 - 2 coil
High frequency driver	inch	1.4 - 2.5 coil	1 - 1.4 coil	1 - 1.4 coil
Maximum SPL cont/peak	dB	127.5 / 135.5	126 / 133	124 / 131
Dispersion	H x V	90° x 60°	90° x 60°	90° x 60°
Input impedance	kOhm	22	22	22
AC Power requirements	VA	640	640	640
Input connectors		XLR with loop, RCA ST	XLR with loop, RCA ST	XLR with loop, RCA ST
Power cord	m/inch	5/16.4	5 /16.4	5 /16.4
AC Power connector		IEC	IEC	IEC
Net dimensions (WxHxD)	mm inch	402x644x345 15.8x25.4x13.6	402x644x345 15.8x25.4x13.6	320x550x275 12.6x21.6x10.8
Net weight	kg/lb	17.5/40.78	14.8/32.62	10.3/22.70
Transport dimensions(WxHxD)	mm inch	500x745x440 19.7x29.3x17.3	500x745x440 19.7x29.3x17.3	400x630x360 15.7x24.8x14.2
Transport weight	kg/lb	20.1/44.31	17.8/39.24	12.8/28.21

Model		114	112	110
Configuration	way	2	2	2
Recommended amplifier	W rms	700	400	300
Long term power	W	350	200	150
Short term power IEC 268-5	W	1400	800	600
Nominal impedance	Ohm	8	8	8
Frequency response	@-6dB	50Hz - 18KHz	55Hz - 18KHz	60Hz - 18KHz
Low frequency woofer	inch	14 - 3 coil - neodymium	12 - 2.5 coil	10 - 2 coil
High frequency driver	inch	1.4 - 2.5 coil	1 - 1.4 coil	1 - 1.4 coil
Sensitivity (@1W/1m)	dB	100	99	97
Maximum SPL cont/peak	dB	128 / 132	125 / 129	122 / 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 - 24dBoc	45Hz - 24dBoc	50Hz - 24dBoc
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	402x644x345 15.8x25.4x13.6	402x644x345 15.8x25.4x13.6	320x550x275 12.6x21.6x10.8
Net weight	kg/lb	15/33.06	13.4/29.54	8.9/19.62
Transport dimensions(WxHxD)	mm inch	500x745x440 19.7x29.3x17.3	500x745x440 19.7x29.3x17.3	400x630x360 15.7x24.8x14.2
Transport weight	kg/lb	18/39.68	16.4/36.15	11.4/25.13

Q Subwoofer

A NEWLY DESIGNED, EXTREMELY POWERFUL SUBWOOFER, CAPABLE OF DELIVERING EXTREMELY HIGH SPL AND GUARANTEEING SIGNIFICANT LOW FREQUENCY EXTENSION



The optimisation of the woofer load volume and vented port with BEM finite element simulation, and the careful development of the grille and the protective fabric to minimise acoustic impedance, has led to a net improvement in performances as compared with previous models. **Equipped with an high excursion ceramic B&C woofer with 100mm ventilated coil**, it has negligible power compression, ensuring maximum acoustic pressure even after hours of continuous use.

The supplied 1200W RMS class D amplifier with switching power is equipped with a digital signal processor with entirely new algorithms.

Equipped with 6 presets, each of which is not only associated with a different equalisation – to tailor the subwoofer response to various usage conditions – but also with different dynamic processor calibration to extend the maximum acoustic pressure to very high levels, with no deterioration of the original signal. This ensures absolute configurability of the sound obtained, great flexibility of use and above all an impressive SPL/size ratio. The 18mm birch plywood cabinet is equipped with 4 aluminium handles and two M20 stand supports, suitable for use on either

the short or the long side. It is compatible with MITUS 206 and MUSE 210 systems in ground-stacked configuration, and is designed to allow 4 optional 100mm wheels to be fitted.

An exceptionally powerful and versatile subwoofer that can be combined with a wide range of FBT speakers.

The presets include:

ORIGINAL: general preset, suitable for the majority of uses. Low pass filter is set at 95Hz, peak limiter is adjusted for getting the perfect balance between high SPL and low distortion

DEEP: this preset extends and boosts subwoofer low range to approx. 40Hz. Low pass filter is set at 95Hz, peak limiter is extremely fast and guarantees to remove almost completely the

distortion due to amplifier clipping. This necessarily causes little reduction in maximum SPL. Generally recommended for applications requiring extremely pure sound and maximum low frequency extension.

PUNCH: Preset providing maximum power concentration in the 60 - 95Hz frequency range. Perfect for rock music and high power applications. Distortion is slightly higher, since it is less limited by the peak limiter, while sound pressure level increases. Low pass filter is set at 95Hz.

INFRA: Similar to DEEP as for the extension and absence of distortion. It differs for low pass filter setting at 75Hz. This allows for ground-stacked use of the subwoofer in applications featuring also a flying subwoofer. Thanks to the all pass filter for phase alignment, the frequency overlap in the 50Hz - 75Hz range for the two subwoofers is perfectly in phase.

CARDIOID REAR ORIGINAL 1 FRONT: preset to be used in systems with two subwoofers; select the ORIGINAL preset on the speaker oriented toward the audience.

CARDIOID REAR ORIGINAL 2 FRONT: preset to be used in systems with three subwoofers; select the ORIGINAL preset on the two speakers oriented toward the audience.



Q 118SA

PROCESSED ACTIVE SUBWOOFER 1200W RMS - 137dB SPL

- 18" woofer with 4" voice coil
- 1200W RMS Class D power amplifier with switch mode power supply
- DSP with 6 presets, digital 6 step Delay
- Control panel with: 3 status led indicators, Phase, Level, Preset, Delay, stereo XLR in/link, Power supply with powerCON TRUE1 cable duplex with input and output
- 0,70" baltic birch plywood cabinet with scratch and scuff resistant paint finish
- 2 M20 top mount speaker stand socket, 4 aluminum carrying handles, optional wheels

Q 118S

PASSIVE SUBWOOFER 1600W RMS - 140dB SPL

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

Q

Subwoofer

TECHNICAL FEATURES



Model	118SA	
Configuration	way	1 Bass Reflex
Built-in amplif. max. LF/HF	W RMS	1200
Built-in amplif. max. peak LF/HF	W	2400
Frequency response	@-6dB	30Hz - 100Hz
Low frequency woofer	mm inch	1 x 460 / bobina 100 1 x 18 / coil 4
Input impedance	kOhm	22
Maximum SPL cont/peak	dB	135 / 139 half-space
Dispersion	H x V	omnidirectional
Crossover frequency	Hz	preset dependant
Input connectors		balanced XRL
Net dimensions (WxHxD)	mm inch	500x700x720 21.65x27.55x28.34
Net weight	kg lb	58.5 128.97
Transport dimensions (WxHxD)	mm inch	700X865X800 27.55x34.05x31.49
Transport weight	kg lb	69.5 153.22

Model	118S	
Configuration	way	1 Bass Reflex
Recommended amplifier	W RMS	1600
Long term power	W	800
Short term power	W	3200
Nominal impedance	Ohm	4
Frequency response	@-6dB	35Hz - 250Hz
Low frequency woofer	mm inch	1 x 460 / bobina 100 1 x 18 / coil 4
Sensitivity	dB	99
Maximum SPL cont/peak	dB	136 / 140 half-space
Dispersion	H x V	omnidirectional
Crossover frequency	Hz	DSP with preset
Recommended HP filter		32Hz / 24dB oct. (ext.)
Input connectors		2 x Speakon
Net dimensions (WxHxD)	mm inch	500x700x720 21.65x27.55x28.34
Net weight	kg lb	58.5 128.97
Transport dimensions (WxHxD)	mm inch	700X865X800 27.55x34.05x31.49
Transport weight	kg lb	69.5 153.22

20 | Vaie 6500

Wall-mounted voice evacuation system



Designed to present a compact but powerful safety solution, the VAIE 6500 wall-mounted voice evacuation systems from FBT are fitted with a certified control unit, complying with EN54-16: 2008 / EN54-4. Delivering a total output of 500W, the systems are able to monitor and protect between 2 to 6 zones, depending on the model.

Designed with a strict adherence to regulations, VAIE 6500 wall-mounted voice evacuation systems come in three configurations: The VAIE 6502 for managing 2 zone sites, the VAIE 6504 for 4 zones and the VAIE 6506 for 6 zones. Remote operation is via a network of local controls and remote microphone stations, while the system remains connected to the fire alarm panel. The VAIE 6500's 500W output can be freely distributed between the

zones up to a maximum of 250W within a single zone. Also included is a 4.3" backlit touchscreen, enabling users to select alert and evacuations areas as well as adjust navigation volume levels, monitor the configuration of the system and check for faults. A regulation fireman's microphone is prominently available on the front panel, though the VAIE 6500 can also send out pre-recorded evacuation and alert messages.



Vaie 6500

wall-mounted voice evacuation system

TECHNICAL FEATURES

Model	VAIE 6502	VAIE 6504	VAIE 6506
Number of zones	2	4	6
Maximum power output (@230Vca)	500W RMS – 2 to 6 amps (max 250W per zone)		
Maximum power output (@24Vcc)	410W RMS (205W RMS per amplifier)		
Number of output zones	Max 6 zones to double redundant lines (A+B)		
Display	4.3" backlit resistive touchscreen (480 x 272)		

INPUTS

Emergency microphone	Front panel balanced XLR-F
Sensitivity / impedance	Signal level max 3600mV / 3 k Ω
Frequency response / S/N ratio	90 Hz – 20,000 Hz / 86 dB

AUX

	RCA input for stereo BGM source (converted to mono)
Sensitivity / impedance	Signal level max 1800mV / 31 k Ω
Frequency response / S/N ratio	60 Hz – 20,000 Hz / 84 dB

Paging units

	1 RJ45 input for paging units (series MBT1106 / MBT1112)
Sensitivity / impedance	Signal level max 1400mV / 85 k Ω
Frequency response / S/N ratio	60 Hz - 20,000 Hz / 83 dB

Emergency units

	1 RJ45 for connecting the emergency microphone
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OUTPUTS

Constant voltage outputs	Max 6 zones per 100V line to double line (A/B) Tot. 12 pairs of terminals, 2.5 mm ²
Load impedance	Minimum 40 Ω per zone
Monitor BF	Built-in speaker on front panel (1W / 8 Ω)

Connecting to external devices

Sensitivity / input Remote connections	2 RJ45 inputs for connected VAIE6500 systems
impedance voice - music	Signal level Max 3600 mV / 3 k Ω
Output / impedance channels voice - music	1 V / 400 Ω

Emergency control	Programmable for normal or emergency modes
Control inputs	7 diagnostic inputs. Terminals and supply 24Vdc.

Outputs	3 relays, N.o-N.C.-exchange terminals
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GENERAL

230VCA power supply	230 VCA 50/60 Hz
Maximum power consumption	24 VCC (min 22Vcc - max 28VCC) / 20 A (200+200W load)
Secondary internal power supply	EN 54-4 rated charger
Battery compartment	Maximum 2 batteries (12VDC / 40Ah)
Environmental specification	Temperature: +5°C - +40°C / relative humidity 25% - 75% without condensation
Rack	Optional brackets for mounting in a 19" rack (14U)
Product dimensions	430 x 620 x 240 mm

Vaie 6500

- Up to 7 monitored inputs, each of which is configurable for the playback or either evacuation or alert messages, programmable for each zone, or for the reset of the messages
- 1 auxiliary input for audio sources
- 1 VOX input
- 3 configurable relay outputs
- Dual output (A + B) per zone
- A secure front-panel button for operating the emergency system complete with LED indicator
- Audible fault warnings with reproduced alarm messages
- The ability to source either BGM or paging announcements from an auxiliary input or microphone
- The connection of up to 16 microphone stations
- The connection of up to 4 emergency paging stations
- The ability to connect up to 6 further VAIE 6500 systems
- Industry-standard 19" rack-mounting format

DEM 3616

Digital Evacuation Matrix

HAS BEEN CREATED TO ENSURE FAILSAFE RELIABILITY
WHEN IT IS NEEDED MOST



As cities become evermore crowded and emergencies occur more frequently, it has never been more essential to choose an **emergency evacuation solution that can be trusted**. Built to meet FBT's exacting standards of engineering, the DEM3616 Digital Evacuation Matrix will safely, intelligibly and reliably guide large numbers of people out of danger and into safety.

At the core of the DEM3616 design philosophy are international safety requirements and standards, while a wealth of additional features are included to exceed expectations in even the most demanding application.

Users will immediately benefit from:

- A complete diagnostic overview of the system's operation
- Full 'critical path' control and monitoring, safeguarding the integrity of the audio signal all the way from source to speaker
- Continuous loudspeaker line monitoring (including signal quality and coverage) without the need to interrupt normal BGM or paging

- The ability to simultaneously broadcast evacuation and warning messages to different zones
- Full supervision over the link between the DEM3616 and fire-fighting system
- Built-in back-up power amplifier management
- Management of a secondary source of 24 VDC power with a battery-charging unit.

Integrating the system into even the largest of campuses can be simply achieved by either Cat-5 or fibre-optic connection, while multiple DEM3616 systems can be daisy-chained to form a scalable solution addressing up to an impressive 255 zones.



DEM 3616

DSP Functions

Capable of processing 8 BGM source channels simultaneously across 16 output zones, the DEM3616 Digital Evacuation Matrix offers powerful onboard DSP

Music channel functions include:

- Digital gain
- A high-pass and low-pass filter
- A 5-band parametric equalizer
- Automatic gain control
- A bypass function for each option

Outputs functions include:

- Ducking between two local music channels
- A delay of 1.3 seconds per-channels
- High pass and low pass filter
- 5-band parametric equalizer
- 10-band graphic equalizer
- Noise compensation
- Limiter
- A bypass function for each option

- A built-in, dedicated fireman's microphone
- A 7" LCD touchscreen for intuitive operation
- A key for secure alarm activation
- A 4-slot output section for zone management including:
 - 4 output zones
 - 2 monitored contacts in case of alarm in each of the zones
 - 5 general purpose outputs (Open collector)
 - 7 general purpose input
- 2 optional boards for local BGM source selection including:
 - 4 line inputs
 - 4 mic/line inputs with phantom power and programmable gain
- 16 music channels from the digital bus
- An onboard USB media player
- Global contact including:
 - A monitored global alert contact
 - A monitored global emergency contact
 - Global fault
- 2 slots for digitally connecting multiple DEM3616 systems
 - 2 Ethernet ports (transmitting up to 100m)
 - 2 fibre-optic ports (transmitting up to 2km)
- A built-in web server for performance monitoring
- 3 serial outputs to future-proof the system
- 2 connections for microphone stands
- 2 schedulers per zone for BGM playback
- An internal message generator (with 6 messages)
- A headphone output for monitoring
- An optional DSP board

**TOURING &
INSTALL**

**PORTABLE
SOUND**

**AUDIO
CONTRACTOR**

FBT Elettronica SpA
62019 Recanati (MC) - Italy
Tel: +39 071 750591
Fax: +39 071 7505920
info@fbt.it - www.fbt.it
(International Headquarter - Factory)

FBT Audio (UK) Ltd
South Croydon, Surrey, UK
Tel: 0844 310 4592
Fax: 0844 310 4594
info@fbtaudio.co.uk
www.fbtaudio.co.uk

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