



Modus Line Array



Modus 40

Configuration	way	2
Recommended amplifier (Bi-Amp)	Wrms	1600 (1600 LF/400 HF)
Long term power (Bi-Amp)	W	1000 (1000 LF/200 HF)
Short term power IEC 268-5 (Bi-Amp)	W	3200 (3200 LF/800 HF)
Nominal impedance (Bi-Amp)	ohm	2 (2 LF/4 HF)
Frequency response	@-6dB	58Hz - 18kHz
Low frequency woofer	inch	8 x 8 - 2 coil - neodymium
High frequency driver	inch	8 x 1 - 1,7 coil - neodymium
Sensitivity (@1W/1m) (Bi-Amp)	dB	105 (105 LF/108 HF)
Maximum SPL (Bi-Amp)	dB	138 (138 LF/134 HF)
Dispersion	H x V	90° x 40°
Crossover frequency	kHz	1,2
Recommended HP filter		40Hz - 24dB/oct
Recommended external filter		/
Input connectors		2 x Speakon NL4 in & thru
Net dimensions	mm	713x980x490
WxHxD -single unit	inch	28,07x38,58x19,29
Net Weight	Kg/Lb	83 / 182,98
Transport dimensions (WxHxD - 2 units on pallet)	mm/inch	750x1400x1100 / 29,5x55,1x43,3
Transport weight (2 units on pallet)	Kg/Lb	190 / 418,87



Modus 15

Model	way	2
Configuration	Wrms	1600 (1600 LF/400 HF)
Recommended amplifier (Bi-Amp)	W	1000 (1000 LF/200 HF)
Long term power (Bi-Amp)	W	3200 (3200 LF/800 HF)
Short term power IEC 268-5 (Bi-Amp)	ohm	2 (2 LF/4 HF)
Nominal impedance (Bi-Amp)	@-6dB	58Hz - 18kHz
Frequency response	inch	8 x 8 - 2 coil - neodymium
Low frequency woofer	inch	8 x 1 - 1,7 coil - neodymium
High frequency driver	dB	105 (105 LF/108 HF)
Sensitivity (@1W/1m) (Bi-Amp)	dB	138 (138 LF/134 HF)
Maximum SPL (Bi-Amp)	H x V	90° x 15°
Dispersion	kHz	1,2
Crossover frequency		40Hz - 24dB/oct
Recommended HP filter		/
Recommended external filter		2 x Speakon NL4 in & thru
Input connectors	mm	713x980x460
Net dimensions (WxHxD -single unit)	inch	28,07x38,58x19,29
Net Weight	Kg/Lb	83 / 182,98
Transport dimensions (WxHxD - 2 units on pallet)	mm/inch	750x1400x1100 / 29,5x55,1x43,3
Transport weight (2 units on pallet)	Kg/Lb	190/418,87



MODUS

Modus Line Array



Modus SUB

Model	way	Band-Pass
Configuration	Wrms	1800
Recommended amplifier (Bi-Amp)	W	1000
Long term power (Bi-Amp)	W	3600
Short term power IEC 268-5 (Bi-Amp)	ohm	4
Nominal impedance (Bi-Amp)	@-6dB	38Hz - 200Hz
Frequency response	inch	2x15 - 4 coil - neodymium
Low frequency woofer	inch	/
High frequency driver	dB	103
Sensitivity (@1W/1m) (Bi-Amp)	dB	141 half-space
Maximum SPL (Bi-Amp)	H x V	omnidirectional
Dispersion	kHz	90Hz external
Crossover frequency		32Hz- 24dB/oct
Recommended HP filter		LP 90Hz- 24dB/oct
Recommended external filter		2 x Speakon NL4 in & thru
Input connectors	mm	713x713x836
Net dimensions (WxHxD -single unit)	inch	28,07x28,07x32,91
Net Weight	Kg/Lb	86 / 189,59
Transport dimensions (WxHxD - 2 units on pallet)	mm/inch	920x1800x780 / 36,2x70,9x30,7
Transport weight (2 units on pallet)	Kg/Lb	195 / 429,90

FBT launches the new MODUS way

Product Features

MODUS 4805LA

- 5° vertical dispersion
- 2 way powered bi-amplified true line array, bass reflex design
- 4 x 200 mm (8") custom neodymium woofers with 50mm voice coil (2")
- 4x25 mm (1") neodymium compression drivers and 44mm voice coil (1.7")
- 58Hz - 20Khz frequency response
- class D 600 Wrms amplifier for LF
- class D 300 Wrms amplifier for HF
- High efficiency switching 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
- 90° horizontal waveguide with near flat wavefront up to 18Khz
- 18 mm (3/4") birch plywood enclosure, with handles and mechanical hardware for suspension
- Mechanical hardware for suspension with 10:1 safety factor
- different configurations allowed by a complete range of optional accessories
- Performance comparable to high-end touring line arrays at an extremely competitive cost
- the extended frequency response at 58Hz allows the use in medium SPL applications without additional subwoofers



FBT Professional Audio Equipment **MODUS**



MODUS 4820LA

- 20° vertical dispersion
- 2 way powered bi-amped true line array, bass reflex design
- 4x200 mm (8") custom neodymium woofers with 50mm voice coil (2")
- 4x25 mm (1") neodymium compression drivers and 44mm voice coil (1.7")
- 58Hz - 20Khz frequency response
- class D 600 Wrms amplifier for LF
- class D 300 Wrms amplifier for HF
- High efficiency switching 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
- 90° horizontal waveguide with near flat wave front up to 18Khz
- 18 mm (3/4") birch plywood enclosure, with handles and mechanical hardware for suspension
- Mechanical hardware for suspension with 10:1 safety factor
- different configurations allowed by a complete range of optional accessories
- Performance comparable to high-end touring line arrays at an extremely competitive cost
- the extended frequency response at 58Hz allows the use in medium SPL applications without additional subwoofers.

MODUS 215FSA



- Powered subwoofer in band-pass push-pull
- 2x380mm (15") B&C neodymium subwoofer with 100mm (4") coil
- Class D amplifier delivering 2000W RMS with high efficiency switch mode power supply
- DSP with 6 EQ presets cardioids configurations, delay
- control panel with XLR input and link, volume, presets, delay, phase 0°-180°, ground lift
- Frequency response extended to 33HZ
- 18mm (3/4") birch plywood enclosure, with 4 integrated handles and mechanical hardware for suspension
- the particular acoustic loading enable to drastically reduce the distortion and movement of the cone, ensuring high SPL and very high reliability
- can either be suspended above the line array modules or ground stacked
- 4 Optional wheels for transport

MODUS 118FSA



- compact bass reflex subwoofer
- 460 mm (18") custom B&C neodymium woofer with 76 mm (3") voice coil
- Class D amplifier delivering 1200W RMS with high efficiency switch mode power supply
- DSP with 8 EQ presets cardioids configurations, delay
- control panel with XLR input and link, volume, presets, delay, phase 0°-180°, ground lift
- Frequency response extended to 36HZ
- 18 mm (3/4") birch plywood enclosure, with 4 integrated handles and mechanical hardware for suspension
- can either be suspended above the line array modules or ground stacked
- 4 Optional wheels for transport

FBT Professional Audio Equipment **StageMaxX**



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	550x289x392
	inch	21 65x11 37x15 43
Net weight Kg	Lb	13 6 29 98
Transport dimensions (WxHxD)	mm	670x430x500
	inch	26 37x16 92x19 68
Transport weight	Kg Lb	16 4 36 15

FBT Professional Audio Equipment **X-SUB**



X-SUB, the matching partner ... Feel the punch!

Recanati, Italy - Designed as the perfect partner for the X-LITE and X-PRO series, FBT introduces the new X-SUB 18SA powered subwoofer. Loaded with a single 18" heavy duty woofer, the X-SUB 18SA is controlled by a 1200W Class D amplifier with DSP at 4 presets allowing perfect tailoring of the extended low frequency to the mid-high. The rugged plywood enclosure is built to withstand touring conditions, yet crafted with Italian style to suit the most elegant fixed installations. Finally, the M20 thread allows for pole mounting on a 3-way system design.

X-SUB 18SA

1200W - 136dB SPL Processed Active Subwoofer

- Compact band-pass design subwoofer with high SPL and punch
- 460mm (18") high excursion woofer with 75 mm (3") voice coil
- Frequency response from 38Hz to 120Hz
- 600W RMS Class D power amplifier with switch mode supply
- Digital Signal processor with 6 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°, status LED indicators
- 18mm birch plywood cabinet with scratch & scuff resistant paint finish
- M20 (20mm) top mount speaker stand socket, two FBT design aluminum handles, 100mm optional wheels
- Provides additional low frequency reinforcement when used along with X-PRO or X-LITE speaker series

FBT HiMaxX
Professional Audio Equipment



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 - 20Hz	45Hz - 20Hz	38Hz - 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 482x757x427 inch 19x29.8x16.8	407x634x370 16x24.9x14.5	530x605x655 21x23.8x25.8
Net weight	Kg 28.3 Lb 62.4	17.9 39.4	43 94.8
Transport dimensions (WxHxD)	mm 520x867x600 inch 20.4x34.1x23.6	495x720x470 19.5x28.3x18.5	660x735x785 26x29x31
Transport weight	Kg 30.3 Lb 66.8	20.5 45.2	47 103.6

Model	HiMaxX 60	HiMaxX40
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 - 2kHz	50Hz - 20 kHz
Low frequency woofer	inch 1x15-3 coil	1x12-3 coil
High frequency driver	inch 1.4 - 2.5 coil	1 - 1.7 coil
Sensitivity (@1W/1m)	dB 99	99
Maximum SPL cont/peak (Bi-Amp)	db 129/132	127/131
Dispersion	HxV 90° x 60°	90° x 60°
Crossover frequency	kHz 1.3	1.6
Recommended HP filter	35Hz - 24dbot	35Hz - 24dbot
Recommended external filter	-	-
Input connectors	2 x Speakon	2 x Speakon
Net dimensions (WxHxD)	mm 482x757x427 inch 19x29.8x16.8	407x634x370 16x24.9x14.5
Net weight	Kg 26 Lb 57.3	16 35.2
Transport dimensions (WxHxD)	mm 520x867x600 inch 20.4x34.1x23.6	495x720x470 19.5x28.3x18.5
Transport weight	Kg 28.5 Lb 62.8	18.5 40.8

FBT Jolly
Professional Audio Equipment



Model	Jolly 15b a	Jolly 15r a	Jolly 12b a	Jolly 12r a	Jolly 8b a	Jolly 8r a	Jolly 5b a	Jolly 5r a
Configuration	Way 2	2	2	2	2	2	2	2
Built-in amplifier cont. LF/HF RMS	300 + 50	150 + 50	250 + 50	150 + 50	150 + 50	80 + 20	60 + 20	60
Frequency response	@-6dB 50Hz-20KHz	60Hz-20KHz	50Hz-20KHz	60Hz-20KHz	60Hz-20KHz	70Hz-20KHz	80Hz-20KHz	90Hz-20KHz
Low frequency woofer	inch 1x15" 2.5 coil	1x15" 2 coil	1x12" 2 coil	1x12" 2 coil	1x8" 1.5 coil	1x5" 1.5 coil	1x5" 1 coil	1x5" 1 coil
High frequency driver	inch 1" + horn 1 coil	1" + horn 1 coil	1" + horn 1 coil	1" + horn 1 coil	1" + horn 1 coil	1xTweeter + horn	1xTweeter 0.8 coil	1xTweeter 0.8 coil
Sensibility (@1W/1m)	dB 99	98	98	98	96	95	93	89
Maximum SPL cont/peak	dB 124/127	121/124	123/126	121/124	119/122	114/117	112/115	107/110
Dispersion	H x V 90° x 60°	90° x 60°	90° x 60°	90° x 60°	90° x 60°	90° x 60°	90° x 90°	90° x 90°
Input impedance	kOhm 22	22	22	22	22	22	22	22
Crossover frequency	kHz active 1.8	active 2	active 1.8	active 2	active 2	active 2.5	active 2.7	passive 3.5
Input connectors	XLR with loop	XLR with loop	combo/XLR M	combo/XLR M	combo/XLR M	combo/XLR M	combo/XLR M	combo/XLR M
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
Net dimensions (WxHxD)	mm 410x663x387 16.1x26.1x14.2	410x663x387 16.1x26.1x14.2	410x663x387 16.1x26.1x14.2	410x663x387 16.1x26.1x14.2	255x415x245 10x16.3x9.6	255x415x245 10x16.3x9.6	170x275x180 6.7x10.8x7.1	170x275x180 6.7x10.8x7.1
Net weight	Kg 19.5 Lb 43.00	19.5 43.00	18.5 40.79	16.5 35.27	8.1 17.86	6.2 13.69	3.5 7.72	3 6.61
Transport dimensions (WxHxD)	mm 495x740x475 19.5x29.1x18.7	495x740x475 19.5x29.1x18.7	495x740x475 19.5x29.1x18.7	495x740x475 19.5x29.1x18.7	330x480x320 13x18.9x12.6	330x480x320 13x18.9x12.6	240x245x235 9.4x13.6x9.2	240x345x235 9.4x13.6x9.2
Transport weight	Kg 22 Lb 48.50	22 48.50	21 46.30	18.5 40.79	9.1 20.06	7.2 15.90	4 8.82	3.5 7.72

Model	Jolly 15b	Jolly 15r	Jolly 12b	Jolly 12r	Jolly 8b	Jolly 8r	Jolly 5b	Jolly 5 bt	Jolly 5r
Configuration	way 2	2	2	2	2	2	2	2	2
Recommended amplifier	W QRMS 350	250	300	250	160	120	80	50(70/100V)	60
Long term applicable power (AES)	W 175	125	150	125	80	60	40	25	30
Short Term applicable power (IEC 268-5)W	700	500	600	500	320	240	160	100	120
Nominal impedance	Ohm 8	8	8	8	8	8	16	-	16
Frequency response	@-6dB 50Hz-20KHz	55Hz-20KHz	50Hz-20KHz	60Hz-20KHz	70Hz-20KHz	80Hz-20KHz	80Hz-20KHz	80Hz-20KHz	80Hz-20KHz
Low frequency woofer	inch 1x15" 2.5 coil	1x15" 2 coil	1x12" 2 coil	1x12" 2 coil	1x8" 1.5 coil	1x8" 1.5 coil	1x5" 1 coil	1x5" 1 coil	1x5" 1 coil
High frequency driver	inch 1" + horn 1 coil	1" + horn 1 coil	1" + horn 1 coil	1" + horn 1 coil	1" + horn 1 coil	1xTweeter 1 coil	1xTweeter 0.8 coil	1xTweeter 0.8 coil	1xTweeter 0.8 coil
Sensitivity (@1W/1m)	dB 99	98	98	98	96	95.5	93	93	90
Maximum SPL cont/peak	dB 124/127	122/125	123/126	122/125	118/121	116.5/119.5	114/117	110/113	107/110
Dispersion	H x V 90° x 60°	90° x 60°	90° x 60°	90° x 60°	90° x 60°	90° x 60°	90° x 90°	90° x 90°	90° x 90°
Crossover frequency	kHz 1.8	2.2	1.8	2.5	3	3.5	3.5	3.5	4
Recommended HP filter	40Hz-24dbot	50Hz-24dbot	40Hz-24dbot	40Hz-24dbot	50Hz-24dbot	60Hz-24dbot	70Hz-24dbot	70Hz-24dbot	80Hz-24dbot
Input connectors	2xSpeakon	2xSpeakon	2xSpeakon	2xSpeakon	2xSpeakon	1xjack	1xjack + terminal strip	terminal strip	terminal strip
Net dimensions (WxHxD)	mm 410x663x387 inch 16.1x26.1x14.2	410x663x387 16.1x26.1x14.2	410x663x387 16.1x26.1x14.2	410x663x387 16.1x26.1x14.2	255x415x245 10x16.3x9.6	255x415x245 10x16.3x9.6	170x275x180 6.7x10.8x7.1	170x275x180 6.7x10.8x7.1	170x275x180 6.7x10.8x7.1
Net weight	Kg 14.5 Lb 31.97	14.5 31.97	13.5 29.76	13.5 29.76	5.8 12.79	5 11.04	2.2 4.85	3.2 7.05	1.7 3.75
Transport dimensions (WxHxD)	mm 495x740x475 inch 19.5x29.1x18.7	495x740x475 19.5x29.1x18.7	495x740x475 19.5x29.1x18.7	495x740x475 19.5x29.1x18.7	330x480x320 13x18.9x12.6	330x480x320 13x18.9x12.6	240x345x235 9.4x13.6x9.2	240x345x235 9.4x13.6x9.2	240x345x235 9.4x13.6x9.2
Transport weight	Kg 17 Lb 37.48	17 37.48	16 35.27	16 35.27	6.8 15.00	6 13.25	2.7 5.95	3.7 8.16	2.2 4.85



Amico



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
	LINE	CMRR (@mainout, gain 75dB)	dB -80
		Quantity and type	2 x JACK balanced
		Impedance	kohm 33
		Max input signal	dBu 30
		Max gain (@ main out)	dB 40
TONE	High Shelving (@ 12 kHz)	dB ± 15	
	Medium Peaking (@ 2.5 kHz)	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
	LINE	CMRR (@ main out, gain 75 dB)	dB -80
		Quantity and type	8 x JACK balanced
		Impedance	kohm 22
		Max input signal	dBu 30
		Max gain (@ main out)	dB 18
TONE	High Shelving (@ 12 kHz)	dB ± 15	
	Medium Peaking (@ 2.5kHz)	dB ± 12	
	Low Shelving (@ 80Hz½)	dB ± 15	
OUTPUT	Impedance	chms 600	
	Max 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-20Hz	



GENERAL SPECIFICATIONS	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	0 x V omnidirectional
	Low frequency woofer	inch 1x15
	High frequency driver	inch -
	SAT output onconnectors	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	0 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 22.4x36.5x22.4
	Net weight	Kg / Lb 34 / 74
	Transport dimensions (WxHxD)	mm 570x880x570 inch 22.4x36.5x22.4
	Transport weight	Kg / Lb 38 / 81.6
	Optional accessories	Carrying cover twin cables, 2 aluminium stands



DLM26



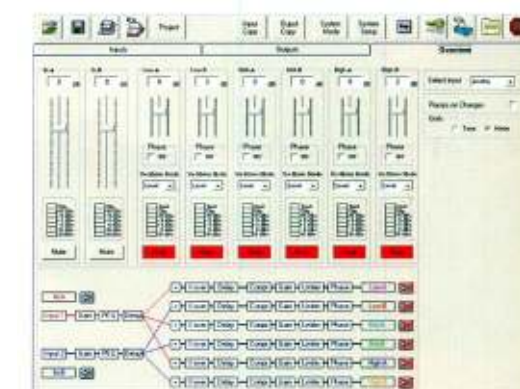
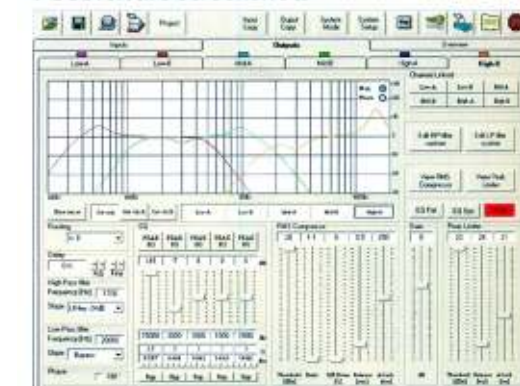
Rear Panel

Inputs / Outputs	XLR balanced + 20dbu max level	
Total memories	64	
THD+N	0.001% at 1kHz 0dBu	
S/N	> 110dB	
Frequency Response	20 Hz - 20 kHz @ -0.5 db	
A/D and D/A resolution	24 bits	
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 0.5 dBu resolutions steps	
Centre frequency	selectable with a 1/24th of octave resolution steps 20Hz / 20 kHz	
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	From 1st order (Butterworth -6dB/Oct) up to 4th Order	
Low Pass Filters	(Butterworth, Linkwitz or Bessel -24 dB/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 480x40x220-19" (1U rack)	inch 18.8x1.5x8-19" (1U rack)
Net Weight:	Kg 2.8	Lb 6.1
	Transport Dimensions (WxHxD)	mm 530x100x310
Transport Weight	Kg 3.9	Lb 8.6
	Voltage	90 - 240 Vac 50/60Hz
Power	30VA	

Special Features :

- Hi-pas/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 features in general purpose digital processors.
- ALL PASS first and second order filters usefull for Cardioid SUB configurations, very precise phase crossover alignment, special pattern control array, alignment between different speakers and systems.

PC software screenshots



FBT Professional Audio Equipment
Symbol



Symbol 18000

2400+2400W

- Impulsive power with both channels driven 2x2400W (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 witch



Symbol 12000

1500+1500W

- Impulsive power with both channels driven 2x1500W (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 witch

Model		SYMBOL 18000	SYMBOL 12000
Balanced Inputs	XLR-F	XLR-F	XLR-F
Impulsive Power both Channels Driven	W RMS	2 x 800 RMS @ 8ohm 2 x 1500 RMS @ 4ohm 2 x 2400 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 / 480W RMS @ 4ohm	2000W RMS @ 8ohm / 3000W RMS @ 4 ohm
Continuous Power both Channels Driven @ THD < 0.05% 1 kHz	W RMS	2 x 700 RMS @ 8ohm 2 x 1300 RMS @ 4ohm 2 x 1800 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 @ 4 ohm
Input sensitivity		2 Veff	1.7 Veff
Input Impedance		15 Kohm	15 Kohm
Slew Rate		> 40V/uS	740V/uS
Signal to noise ration 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 - 1 kHz
Maximum current output		80Aeff	80Aeff
Maximum current output		80 Aeff	80 Aeff
Maximum power consumption		3500VA	27VA
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

FBT Professional Audio Equipment
Formula



Model	Formula 248 - 328	Formula 182 E	Formula 122 E	Formula 143 FX A
Freq. response (20Hz-20kHz)				
mic input (+ 40dB gain) on main output	-1 / -0.5dB	-1 / -0.5dB	-1 / -0.5dB	-2 / -0.2dB
line input (0dB gain) on main output	-1 / -0.5dB	-1 / -0.5dB	-1 / -0.5dB	-2 / -0.2dB
Distortion (1kHz, 16dBu main out)	0.0045%	0.0045%	0.0045%	(filter 20Hz-20kHz) 0.004%
THD + Noise (mic + 40dB gain)	0.0042%	0.0042%	0.0042%	(filter 20Hz-20kHz) 0.0045%
THD + Noise (line 0dB gain)				
CMRR (1kHz)				
micro (+ 40dB gain)	better 80dB	better 80dB	better 80dB	> 85dB
micro with PAD (0dB gain)	better 48dB	better 48dB	-	-
Crosstalk (1kHz)				
adjacent channel	-90dB	-90dB	-90dB	-95dB
mute shutoff (fader 0dB mark)	-94dB	-94dB	-94dB	-94dB
fader shutoff (shutoff)	-92dB	-92dB	-92dB	-92dB
Noise (22Hz-22kHz Bandwidth)				
EIN (150ohm source, + 60dB gain)	-129dB	-129dB	-129dB	-126dB
residual output noise (main out, all levels off)	-96dBu	-96dBu	-96dBu	-91dBu
main mix noise (all channel routed mix, fader 0dB mark muted)	-86dBu	-86dBu	-86dBu	-80dBu
Graphic Eq. (+ 8/- 15dB gain)	-	-	-	63Hz, 125Hz, 400Hz, 1kHz, 2.5 kHz, 6kHz, 12kHz
Equalization (stereo channel, + 8/- 15dB gain)				
High	Shelving 12kHz	Shelving 12kHz	Shelving 12kHz	Shelving 12kHz
High Mid	400-12kHz, Q max 2.5	-	-	-
Mid	-	100-8kHz, Q= 1.41	100-8kHz, Q= 1.41	peak 2.5kHz
Low Mid	35-1kHz, Q max 2.5	-	-	-
Mid	Shelving 80 Hz	Shelving 80 Hz	Shelving 80 Hz	Shelving 80 Hz
Equalization (stereo channel, + 8/- 15dB gain)				
High	Shelving 12kHz	Shelving 12kHz	Shelving 12kHz	Shelving 12kHz
High Mid	2.5kHz, Q max 1.41	-	-	-
Mid	-	peak 2.5kHz	peak 2.5kHz	peak 2.5kHz
Low Mid	250Hz, Q max 1.41	-	-	-
Mid	250Hz, Q max 1.41	Shelving 80 Hz	Shelving 80 Hz	Shelving 80 Hz
Max input Levels				
micro	+ 14dBu	+ 14dBu	+ 14dBu	+ 14dBu
micro with PAD	+ 34dBu	+ 34dBu	-	-
tape	+ 18dBu	+ 18dBu	+ 18dBu	+ 18dBu
Insert line, stereo	+ 18dBu	+ 18dBu	+ 18dBu	+ 18dBu
Rated outputs	+ 4dBu	+ 4dBu	+ 4dBu	+ 4dBu
Max output	+ 24dBu	+ 24dBu	+ 24dBu	+ 24dBu
Input impedance				
micro	1.5Kohm bal	1.5Kohm bal	1.5Kohm bal	1.5Kohm bal
line	20Kohm bal	20Kohm bal	20Kohm bal	20Kohm bal
Stereo	10Kohm bal	10Kohm bal	10Kohm bal	10Kohm bal
insert in	min 4Kohm	min 4Kohm	min 4Kohm	min 4Kohm
Output impedance				
main, aux, group	600ohm	600ohm	600ohm	600ohm
direct out	600ohm	600ohm	600ohm	600ohm
insert out	600ohm	600ohm	600ohm	600ohm
headphones	min 32 + 32ohm	min 32 + 32ohm	min 32 + 32ohm	min 32 + 32ohm
Digital Effects Processor	no	Yes	Yes	Yes
frequency response (20-20kHz)	-	- 3dB	- 3 dB	-
number of effects	-	256	256	-
Triple Internal Processors(A,B,C)				
24 bit conversion, sampling frequency	-	-	-	48kHz
Frcy response (20-20kHz)	-	-	-	- 3dB
A & B programs	-	-	-	240
C programs	-	-	-	320
Built-in amps	no	no	no	2x850W @ 230Vac Imp.
Output power				4.2x550W @ 230Vac Imp.
input sensivity				/ 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	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	248-24/52.9 328-28/61.7	14/30.8	10/22	19/41.9
Transport dimensions (LxAxP)	248-1115x300x665 328-1330x300x665	845x235x550 33.3x9.2x21.67	680x235x500 22.8x9.25x19.7	650x270x570 25.5x10.6x22.4
Transport Weight	248-30/328-34.5	17/37.5	13/28.6	21/46.3



MUSE



Product Features

MUSE 210LA

Precision coverage vertical active array

600W + 300W RMS - 135dB SPL

- " 2-way, compact bass-reflex line array system
- " Two 250mm (10") woofers with 64mm (2.5") voice coils
- " Two custom B&C HF compression drivers with 25mm (1") throats
- " Precision waveguide delivering 90° of horizontal dispersion up to 18KHz
- " Frequency response from 55Hz to 20KHz
- " Onboard Class-D bi-amp system delivering 600Wrms and 300Wrms for LF and HF with switch-mode power supplies
- " Onboard DSP processor with 8 EQ presets, adjustable HF level of +/- 5db for accurate amplitude shading
- " Control panel with XLR input and link, preset control, HF level control, HP-filter and ground lift
- " Strong birch plywood cabinet with integrated aluminum handles, hardware and fly-ware offering adjustable angling ranging from 0° to 10° in 2° increments
- " Wide range of accessories to offer ultimate flexibility no matter whether your MUSE line array system is suspended or ground-stacked, plus a specially designed cover to guard against bad weather

SUBLine 218SA

Processed active subwoofer

1200W RMS - 140dB SPL

- Bass-reflex design Subwoofer
- 2x 460mm (18") high excursion woofer with 75mm (3") voice coil, custom made for FBT by B&C
- Frequency response from 30Hz to 120Hz
- 1200W RMS Class D power amplifier with switch mode power supply
- DSP with 6 presets, 3 x EQ with 2 x LPF crossover settings, 6-step digital delay line
- Control panel with stereo XLR in/out, Volume, EQ presets, Delay, Phase reversal switch 0°-180°, 3 status LED indicators
- 18mm Baltic birch plywood enclosure with heavy duty coating
- 2x M20 threads for stand pole mount and 4 x aluminum ergonomic FBT handles, optional wheels
- Provides additional low frequency extension when used along with MUSE 210LA active line array system



X-Lite



The new X-LITE Speaker Series ... Take them with You!

Product Features :

X-LITE 15A

Processed Active Speaker

1000W - 128dB 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
- 42Hz to 20KHz Frequency Response
- 90° H x 60° V constant directivity horn
- 30° or 45° monitor taper



X-LITE 12A

Processed Active Speaker

1000W - 127dB 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
- 50Hz to 20KHz Frequency Response
- 90° H x 60° V constant directivity horn
- 30° or 45° monitor taper

X-LITE 10A

Processed Active Speaker

1000W - 126dB 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
- 58Hz to 20KHz Frequency Response
- 90° H x 60° V constant directivity horn
- 30° monitor taper



FBT X-PRO
Professional Audio Equipment

X-PRO Speaker Series ... Aim for success!

Product Features :

X-PRO 15a

Processed Active Speaker

1000W - 128 dB 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
- 42Hz to 20KHz Frequency Response
- 80° H x 50° V constant directivity rotatable horn
- 35° or 45° monitor taper



X-PRO 12a

Processed Active Speaker

1000W - 127dB 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
- 50Hz to 20KHz Frequency Response
- 80° H x 50° V constant directivity rotatable horn
- 35° or 45° monitor taper



X-PRO 10a

Processed Active Speaker

1000W - 126dB 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
- 58Hz to 20KHz Frequency Response
- 80° H x 50° V constant directivity rotatable horn
- 35° monitor taper



TRABES

- Trussing
- Roofs
- Lifts
- Towers
- Hoists
- Crowd Barriers
- Furniture
- Trussing Accessories
- Rigging Accessories
- Flight Cases
- Cable Crossovers



R-W-M
Divo

- Power Supply 230/400 Volts 50 Hz
- Self-braking electromagnet motor
- Two completely independent brake systems (standard production equipment)
- Force limiting friction device
- Axial reduction gear on bearings in oil bath
- Helical tempered and cemented gears in oil bath
- Upper/Lower swiveling hooks
- Dust varnishing
- Watertight rubber rings on all flanges
- Ready to be adapted to a digital mechanism
- Calibrated galvanized steel chain
- Supplied with chaincontainer bag

CODE	DESCRIPTION	WEIGHT
RWM D2000	Electric chain hoist 2000 kg	43 kg
RWM D1000	Electric chain hoist 1000 kg	43 kg
RWM D500	Electric chain hoist 500 kg	34 kg
RWM 1020	Chain (7x22 zn) 1000 kg	1.10 kg/m
RWM 520	Chain (5x15 zn) 500 kg	0.55 kg/m
RWMA10	Chaincontainer bag 20 cm	0.40 kg
RWMA11	Chaincontainer bag 40 cm	0.60 kg
RWMA12	Chaincontainer bag 60 cm	0.90 kg



RAM Audio®



T Series

Medium power installed sound
4 & 8 Channels. GPIO interface optional module

- Frequency Response : (power bandwidth $\pm 0.25\text{dB}$): 20Hz-20kHz
 Total Harmonic Distortion : (20Hz-20kHz): <0.05%
 Sensitivity : T604:1.5/0.8/0.4V - T1204:2.1/1.0/0.5V - T1208:1.4/0.7/0.4V - T2408:2.0/1.0/0.5V
 Protections : Soft-start, Turn-on Turn-off muting, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Overloaded power supply, SSP™ and FCM™

OUTPUT POWER	T-604	T-1204	T-1208	T-2408
RMS, 1kHz, 1.0% THD+N				
4 ohm	4x 160 W	4x 320 W	8x 150 W	8x 300 W
8 ohm	4x 115 W	4x 220 W	8x 100 W	8x 195 W
Bridge @ 8ohm	2x 320 W	2x 640 W	4x 300 W	4x 600 W
Pink Noise 12dB CF				
4 ohm	4x 210 W	4x 415 W	8x 180 W	8x 370 W



RX Series

High power QuantaPulse SMPS amps
EtherAM Control option

- Frequency Response : (power bandwidth $\pm 0.5\text{dB}$): 20Hz-20kHz
 Total Harmonic Distortion : (20Hz-20kHz): <0.05%
 Sensitivity : (rated power @8ohm): 600: 1 V 1000: 1.3 V 1500: 1.6 V 2000: 1.8 V 3000: 2.25 V
 Protections : Soft-start, Turn-on Turn-off transients, Muting at turn-on, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Power Transistors SOA guard, ICL™ Clip limiter (RX2000 & RX3000)

OUTPUT POWER	RX-600	RX-1000	RX-1500	RX-2000	RX-3000
RMS, 1kHz, 1.0% THD+N					
2 ohm	2x 340 W	2x 650 W*	2x 900 W*	2x 1250 W*	2x 1650 W*
4 ohm	2x 300 W	2x 500 W	2x 750 W	2x 1050 W	2x 1450 W
8 ohm	2x 190 W	2x 350 W	2x 500 W	2x 650 W	2x 1000 W
Bridge @ 4ohm	680 W	1300 W*	1800 W*	2500 W*	3300 W*
Bridge @ 8ohm	600 W	1000 W	1500 W	2100 W	2900 W
Pink Noise 12dB CF					
2 ohm	2x 530 W	2x 900 W*	2x 1200 W*	2x 1600 W*	2x 2200 W*
4 ohm	2x 380 W	2x 680 W	2x 970 W	2x 1350 W	2x 2000 W
8 ohm	2x 220 W	2x 400 W	2x 575 W	2x 870 W	2x 1225 W

RAM Audio®



V Series

High power QuantaPulse SMPS amps
EtherAM Control option

Features

- PFC QuantaPulse™ Regulated Dual SMPS
- Digital Control with extra large LCD display user interface
- Channel Temperature and Output Level Monitor in the LCD
- USB port for firmware update and DSP control
- 25 position Gain, Bridge mode, Input Links and ICL, front panel configurable
- Digital Potentiometers with Encoder control
- RAMAudio Power Management System
- Easily removable front panel dust filters
- Hi Efficiency, Heavy Duty Audio Power section for extreme use
- Industry standard Neutrik® XLR and Speakon® connectors
- Optional low latency 24bits high performance DSP with post-DSP signal links and Ethernet control. It features up to 70 meters input delay
- Optional EtherAM II Ethernet monitor and control system
- Optional EtherSound™ audio transport and AES/EBU Digital input
- Efficient front to back cooling

OUTPUT POWER	V-6000	V-9000	V-12000	V-9004	V-9044	V-12004	V-12044
1kHz, 1.0% THD+N							
2 ohm	2x 3025 W	2x 4400 W	2x 5900 W	4x 2260 W	-	4x 3025 W	-
4 ohm	2x 1600 W	2x 2300 W	2x 3100 W	4x 1150 W	4x 2200 W	4x 1600 W	4x 2950 W
8 ohm	2x 820 W	2x 1200 W	2x 1600 W	4x 600 W	4x 1150 W	4x 820 W	4x 1550 W
Bridge @ 4ohm	6050 W	8800 W	11800 W	2x 4520 W	-	2x 6050 W	-
Bridge @ 8ohm	3200 W	4600 W	6200 W	2x 2300 W	2x 4400 W	2x 3200 W	2x 5900 W



S Series

Medium power QuantaPulse EVO SMPS amps
2 & 4 Channels. EtherAM Control and optional modules

- Frequency Response : (power bandwidth $\pm 0.25\text{dB}$): 20Hz-20kHz
 Total Harmonic Distortion : (20Hz-20kHz): <0.05%
 Sensitivity : 1500:2.6/1.3/0.6V 2000:3.0/1.5/0.8V 3000:3.6/1.8/0.9V 4000:4.0/2.0/1.0V 6000:5.0/2.5/1.3V 3004:2.6/1.3/0.6V 4004:3.0/1.5/0.8V 4044:3.7/1.9/0.9V 6004:3.5/1.8/0.9V 6044:5.0/2.5/1.3V
 Protections : Soft-start, Turn-on Turn-off transients, Muting at turn-on, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Overloaded power supply, ICL™, PMS™, SSP™

OUTPUT POWER	S-1500	S-2000	S-3000	S-4000	S-6000	S-3004	S-4004	S-4044	S-6004
1kHz, 1.0% THD									
2 ohm	2x880W	2x1190W	2x1570W	2x1950W	2x2950W	4x700W	4x980W	-	4x1440W
4 ohm	2x575W	2x790W	2x1100W	2x1380W	2x2025W	4x500W	4x670W	4x975W	4x1000W
8 ohm	2x325W	2x460W	2x630W	2x810W	2x1250W	4x300W	4x430W	4x690W	4x620W
Bridge @ 4ohm	1760W	2380W	3140W	3900W	5900W	2x1400W	2x1960W	-	2x2880W
Bridge @ 8ohm	1150W	1580W	2200W	2760W	4050W	2x1000W	2x1340W	2x1950W	2x2000W
P. N. 12dB C.F.									
2 ohm	2x975W	2x1360W	2x2060W	2x2460W	2x4225W	4x890W	4x1170W	-	4x2080W
4 ohm	2x610W	2x880W	2x1240W	2x1600W	2x2600W	4x580W	4x820W	4x1230W	4x1280W