

GENERAL CATALOGUE

2002

**FBT**

*Professional Audio Equipment*



The establishment of these partnerships in the 1980s led to FBT's handling the distribution of famous imported products on the Italian market, including the prestigious brand names of PEARL and SABIAN.

The love of music and the application of this love on an industrial level to sound reinforcement are part of FBT's genetic make-up. Because FBT traces its origins back to a special, unique part of the world in the Marches region of Italy called Recanati, where music has always been an essential part of the very fabric of civilization. History within history, experience within experience, innovation within tradition. The company, established in the Sixties, is today recognised as a leader in the manufacture of speakers, amplifiers, mixers and ambient amplification systems, under its own name and with the "QUBE" brand name, fruit of its partnership with the American firm RENKUS-HEINZ.



FBT'S philosophy can be summed up in four fundamental points:

- total customer satisfaction
- ongoing technological innovation
- wide product ranges
- complete production cycle methods.



1 FUNCTIONAL TESTING AND QUALITY CONTROL  
 2 PRODUCTION

FBT has always ensured a fast and reliable after-sales service for its customers, 365 days a year, including public holidays.



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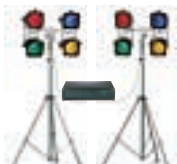
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## ACCESSORIES

# PICKUP

## MIXERS

THE PICKUP SERIES IS AVAILABLE WITH 6, 8, 14 AND 18 CHANNELS IN VERSIONS WITH OR WITHOUT THE INTERNAL DSP MULTI-EFFECT AND AMPLIFIED WITH THE INTERNAL DSP MULTI-EFFECT, WITH POWER CAPACITIES OF 200W, 500W AND 800W RMS.

PICKUP MIXERS ARE MADE ENTIRELY OF METAL WITH TOP-QUALITY COMPONENTS FITTED USING SMT (SURFACE MOUNTING TECHNOLOGIES), ALPS ROTARY POTENTIOMETERS AND SLIDE CONTROLS (ALL SLIDE CONTROLS HAVE DUST GUARDS), XLR JACKS AND NEUTRIK SPEAKONS, EXTRA-LOW NOISE INTEGRATED CIRCUITS.

THE POWER SUPPLY UNITS AND POWER STAGES ARE OUTSIDE THE MIXERS BUT INTEGRAL WITH THEM, MAKING THEM EASIER TO CARRY AND HANDLE.

FOR THE AMPLIFIED MODELS, THE POWER STAGE HAS BEEN MADE USING PWM TECHNOLOGY (TOP QUALITY WHILE BEING COMPACT AND LIGHT).



### PICKUP 18 E

- > Electronically balanced 18-channel stereo mixer
- > 10 mono Mic-Line channels (XLR Neutrik-Jack), 3 equalizer bands High-Mid-Low, Phantom voltage 48V
- > 4 stereo Line channels (Jack), 2 equalizer bands High-Low
- > 2 monitor lines
- > 1 effects line
- > 1 monitor/effects line
- > Gain control, Pfl, Peak indicator, Mute, Pan / Bal on all channels
- > Alps potentiometers and 60 mm slide controls with anti-dust protection

### PICKUP 18 X

- > Power supply external but integral (no hum)
- > Double DSP digital multi-effect (256 PRG) with backlit LCD with 2 rows of 16 characters
- > Vu-Meters with 12 LEDs
- > Phones/Control Room high dynamic output jack

The same features as the 18 E model with the following difference:

- > Without double DSP digital multi-effect

### PICKUP 18 A

The same features as the 18 E model with the following difference:

- > Amplified version with internal amplifier of 400W+400W (4 Ohm) rms



BACKLIT LCD DISPLAY WITH 2 ROWS OF 16 CHARACTERS FOR FASTER AND EASIER READING IN ALL CONDITIONS.



### PICKUP 14 E

- > Electronically balanced 14-channel stereo mixer
- > 6 mono Mic-Line channels (XLR Neutrik-Jack), 3 equalizer bands High-Mid-Low, Phantom voltage 48V
- > 4 stereo Line channels (Jack), 2 equalizer bands High-Low
- > 1 monitor line
- > 1 effects line

- > Gain control, Peak indicator, Pfl, Pan / Bal on all channels
- > Alps potentiometers and 60 mm slide controls with anti-dust protection
- > Power supply, external but integral (no hum)
- > DSP digital multi-effect (256 PRG) with backlit LCD with 2 rows of 16 characters
- > Vu-Meters with 5 LEDs
- > Phones/Control Room high dynamic jack output

### PICKUP 14 X

The same features as the 14 E model with the following difference:

- > Without DSP digital multi-effect

### PICKUP 14 A

The same features as the 14 E model with the following difference:

- > Amplified version with internal amplifier of 250W+250W rms (4 Ohm)



14



B

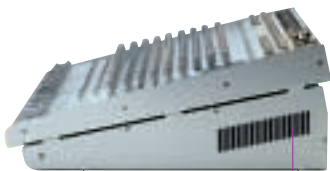
# PICKUP

## MIXERS



MODELS "E" AND "X"

POWER UNIT



MODEL "A"

POWER STAGE

## PICKUP 8 E

- > Electronically balanced 8-channel stereo mixer
- > 4 mono Mic-Line channels (XLR Neutrik-Jack), 3 equalizer bands High-Mid-Low, Phantom voltage 48V and Gain control on all channels
- > 2 stereo Line channels (Jack), 2 equalizer bands High-Low
- > 1 monitor line
- > 1 effects line
- > Pan / Bal control, Peak indicator on all channels
- > Alps potentiometers
- > Power supply external but integral (no hum)
- > DSP digital multi-effect (256 PRG) with backlit LCD with 2 rows of 16 characters
- > Vu-Meters with 5 LEDs
- > Phones/Control Room high dynamic output jack



PICKUP 8 E

## PICKUP 8 X

The same features as the 8 E model with the following difference:

- > Without DSP digital multi-effect

## PICKUP 8 A

The same features as the 8 E model with the following difference:

- > Amplified version with internal amplifier of 100W+100W rms (4 Ohm)

## PICKUP 6 E

- > Electronically balanced 6-channel stereo mixer
- > 2 mono Mic-Line channels (XLR Neutrik-Jack), 3 equalizer bands High-Mid-Low, Phantom voltage 48V and Gain control on all channels
- > 2 stereo Line channels (Jack), 2 equalizer bands High-Low
- > 1 monitor line
- > 1 effects line
- > Pan / Bal control
- > Alps potentiometers
- > External power supply
- > DSP digital multi-effect with 16 programs
- > Vu-Meters with 5 LEDs
- > Phones/Control Room high dynamic output jack



PICKUP 6 E

### TECHNICAL SPECIFICATIONS

Model		18 E-X-A	14 E-X-A	8 E-X-A	6 E
		Mono channels			
MICRO	Quantity and type	10 x XLR-F balanced	6 x XLR-F balanced	4 x XLR-F balanced	2 x XLR-F balanced
	Impedance kOhm	2	2	2	2
	Max input signal dBu	0	0	0	0
	Max gain (@ Main Out) dB	75	75	75	75
	Equivalent input noise (EIN) (from 22Hz to 22kHz not weighted @ Main Out) dB	-128	-128	-128	-128
	CMRR (@ Main Out, Gain 75dB) dB	-80	-80	-80	-80
LINE	Quantity and type	10 x Jack Stereo	6 x Jack Stereo	4 x Jack Stereo	2 x Jack Stereo
	Impedance kOhm	33	33	33	33
	Max input signal dBu	30	30	30	30
	Max gain (@ Main Out) dB	40	40	40	40
TONES	High Shelving (@ 12kHz) dB	±15	±15	±15	±15
	Medium Peaking (@ 2.5kHz) dB	±12	±12	±12	±12Ç
	Low Shelving (@ 80Hz) dB	±15	±15	±15	±15
<b>Stereo Channels</b>					
LINE	Quantity and type	4 x Jack Stereo	4 x Jack Stereo	2 x Jack Stereo	2 x Jack Stereo
	Impedance kOhm	10	10	10	10
	Max input signal dBu	22	22	15	15
	Max gain (@ Main Out) dB	18	18	12	12
TONES	High Shelving (@ 12kHz) dB	±15	±15	±15	±15
	Low Shelving (@ 80Hz) dB	±15	±15	±15	±15
<b>General Outputs</b>					
	Impedance Ohm	600	600	600	600
	Max output (Main Out) dBu	28	28	28	28
	Max output (Monitor, Eff, Tape In) dBu	22	22	22	22
	Distortion + Noise @ 16dBu, main out, 40dB gain	0.003%	0.003%	0.003%	0.003%
	Signal/Noise ratio @ for all channels assigned with gain 20dB	110	110	110	110
	Frequency response @0/-1dB	20Hz-90kHz	20Hz-90kHz	20Hz-90kHz	20Hz-90kHz
<b>versions E - A only</b>		<b>Internal Effect</b>			
AUDIO CHAR.	Sample frequency kHz	32	44.1	44.1	44.1
	A/D and D/A converters DELTA SIGMA	20 bit	18 bit	18 bit	18 bit
	Frequency response	20Hz-15kHz	20Hz-20kHz	20Hz-20kHz	20Hz-20kHz
DSP	Dynamic memory delay	1000 mS	1490 mS	1490 mS	1490 mS
	Multiplier	24x24 56 bit	16x16 24 bit	16x16 24 bit	16x16 24 bit
<b>version A only</b>		<b>Internal Amplifier</b>			
	Output power (IHF 20mS) rms	400+400W	250+250W	100+100W	-
	Minimum load impedance Ohm	4+4	4+4	4+4	-
	Distortion + Noise (THD + N) @ 6dBu, Main Out	0.1%	0.1%	0.05%	-
	Cooling	convection	convection	forced	-
	Frequency response @n0/-3dB	20Hz-25kHz	20Hz-25kHz	25Hz-45kHz	-
<b>General Specifications</b>					
	Power supply	230Vac 50/60 Hz	230Vac 50/60 Hz	230Vac 50/60 Hz	230Vac 50/60 Hz
<b>E - X</b>	Dimensions (WxHxD) mm	438x85x384	314x85x332	245x85x258	192x85x258
<b>E - X</b>	Weight kg	5.500	3.700	2.650	1.900
<b>A</b>	Dimensions (WxHxD) mm	438x151x384	314x137x332	245x122x258	-
<b>A</b>	Weight kg	10.500	7.400	5.400	-

All measurements are made with 230Vac power supply using an AUDIO PRECISION instrument mod. ATS1

\* Bessel response

# CLICKMIX 5

MIXER

THE CLICKMIX 5 IS A MIXER WITH A METRONOME DESIGNED AND MADE FOR MANY MUSICAL ACTIVITIES, RANGING FROM DAILY PRACTICE TO LIVE PERFORMANCES. THE DISPLAY AND CONTROLS ARE EASY TO REACH AND ADJUST. CLICKMIX 5 MAKES IT POSSIBLE TO PROGRAM TIMES OF 1/4, 1/8, TRIPLETS, AND 1/16 OF A NOTE AND STORE THEM FOR FUTURE USE. POSSIBILITY OF 100 PRESETS. TUNER GENERATING NOTES FROM C3 TO C4 AND AT FREQUENCIES FROM 435 TO 445 HZ.

# NEW

CLICKMIX 5



### Features of the mixer:

- > 1 unbalanced mono input with a jack  $\varnothing$  6.3 mm with volume and bass and treble control
- > 1 unbalanced stereo input with a jack  $\varnothing$  6.3 mm with volume and bass and treble control
- > 1 unbalanced stereo input with a jack  $\varnothing$  6.3 mm and RCA sync with volume and bass and treble control
- > Metronome volume
- > Headphones volume
- > Headphones output (32 ohm)
- > RCA sync stereo output with the possibility to turn on the click
- > Backlit LCD 2x16 characters (lighting turns off automatically after 10 sec when battery powered)
- > Device can be programmed to switch off automatically

### "REC" output

- > Gain 20 dB
- > THD+N<0.02%@18dBu

### "Phones" output

- > Pass band 70Hz÷70kHz
- > THD+N<0.2%
- > Power (R=32 $\Omega$ , f=1kHz, THD+N=1%):
  - 400 mW with external power unit;
  - 100 mW with batteries

### Click

- > Generation at 25kHz 16 bit
- > THD+N<0.05%@18dBu on "Rec" output

### General

- > Power supply: two 9-volt batteries or external power unit 18+18 Vac, 50/60 Hz(\*)
- > Dimensions (WxHxD) 192x40x155 mm
- > Weight 1 Kg

### Optional extras:

- > Pedal switch (normally off) for remote control
- > External power unit:
  - primary: 230 Vac secondary: 18+18 Vac 50 Hz, 15 VA
  - > External power unit:
    - primary: 117 Vac secondary: 18+18 Vac 60 Hz, 15 VA
  - > Nylon bag

### Features of the metronome:

- > Time error 0.1%:
  - 30÷252 for crotchets
  - 30÷252 for quavers
  - 30÷168 for triplets
  - 30÷126 for semiquavers
- > Measurement: 1÷15
- > Click start and stop
- > Tap tempo
- > 4 click styles. Two kinds of sound can be chosen for the click: the Rim and Cowbell. For both sounds it is possible to have the first click of each measurement with a different tone
- > Click stop after a programmed number of measurements
- > Pitch: Tuner C3÷C4 and 435÷445 Hz
- > 100 preset



(\*) The external power unit makes for greater dynamics in headphones.



THE SP 28 AUDIO SELECTOR HAS BEEN DESIGNED FOR SOUND REINFORCEMENT APPLICATIONS, FIXED AND STUDIO INSTALLATIONS.

THE STEREO INPUT OF AN AUDIO SIGNAL CAN BE SELECTED AND REGULATED ON 4 STEREO CHANNELS; WITH PRIORITY ACTIVATION THE SELECTED CHANNEL EXCLUDES THE PREVIOUS ONE.

BOTH INPUTS (20KOHM) AND OUTPUTS (600 OHM) ARE BALANCED AND HAVE A GROUND LIFT SWITCH.

# SP 28

SELECTOR

NEW

SP 28



- > Frequency response (@-3 dB) 10 Hz to 20 kHz
- > THD + N 0.001%
- > Input impedance 22K ohm balanced
- > Gain 6 dB
- > Signal/noise ratio > 110 dB
- > Max input level 20 dB
- > CMRR > 50 dB
- > Separation between channels (@ 100Hz, 1 kHz, 10kHz) 76 dB, 55 dB, 36 dB
- > Max output (@ 10 K ohm) 26 dBu
- > Output impedance 600 ohm
- > Connectors: XLR-F inputs, XLR-M outputs
- > Power supply 230 Vac, 50 Hz
- > Dimensions (WxHxD) 482x44x205 mm
- > Weight 2.4 kg

#### Front panel:

- > 4 rotary potentiometers separately adjusting the output level of the 4 stereo systems (Left and Right)
- > 4 push-buttons, without detent, that activate (LED on) the relevant outputs of the 4 stereo systems (Left and Right)
- > 1 **"Priority"** push-button, with detent, to activate the output of the selected system while excluding the previous one
- > 1 **"Left"** push-button, with detent, activating all the outputs associated with the left channel
- > 1 **"Right"** push-button, with detent, activating all the outputs associated with the right channel
- > **"Power"** switch

#### Rear panel:

- > 1 connector to link the external power unit (supplied)
- > 2 electronically balanced inputs of the Left and Right channels (XLR-M Neutrik)
- > 8 electronically balanced outputs of the 4 stereo systems (XLR-F Neutrik)
- > All the inputs and outputs with the Ground-Lift switch



# SYMBOL

## POWER AMPLIFIERS

THE TECHNOLOGICAL INNOVATION OF THE DESIGN WAS GEARED TO ACHIEVE THE HIGHEST AUDIO PERFORMANCE TO PROVIDE "NO-COMPROMISE" AMPLIFICATION EVEN IN EXTREME CONDITIONS.

OVERSIZED OUTPUT STAGES, HIGH EFFICIENCY TECHNIQUES SUCH AS 2 AND 3 STEP POWER SUPPLIES AND VERY HIGH CURRENT DELIVERY CAPACITY ARE JUST SOME OF THE MAIN FEATURES.

SYMBOL POWER AMPLIFIERS ARE AVAILABLE ON 2 RACK UNITS, WITH STEREO POWER OUTPUT OF 1500 AND 2400 WATTS RMS INTO 2 OHM.

# NEW

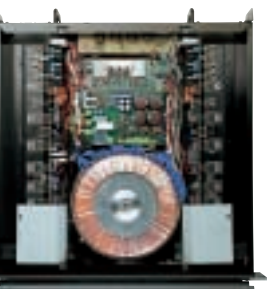
## SYMBOL 18000



- > Impulsive power with both channels driven:
  - 2 x 800W (8 Ohm)
  - 2 x 1500W (4 Ohm)
  - 2 x 2400W (2 Ohm)
- > Continuous power with both channels driven:
  - 2 x 700W (8 Ohm)
  - 2 x 1300W (4 Ohm)
  - 2 x 1800W (2 Ohm)
- > XLR signal inputs and outputs
- > Electronically balanced inputs
- > 4-way Speakon power outputs and binding posts
- > Option of parallel, mono and stereo operation
- > Power supply protection with miniature circuit breaker
- > Independent protection on each channel
- > Soft start
- > Delayed output connection
- > Double DC protection for speakers (relays)
- > Output short-circuit protection
- > SOA protection
- > Clipping limiter
- > 8 bi-colour LEDs indicating all operating modes
- > Ground lift switch
- > Signal/noise ratio S/N under 110 dB weighting curve "A"
- > Frequency response 20Hz - 20kHz
- > Dimensions (WxHxD) mm 482x88x460
- > Weight 28 kg

# NEW

## SYMBOL 12000



The same features as the 18000 model with the following differences:

- > Impulsive power with both channels driven:
  - 2 x 600W (8 Ohm)
  - 2 x 1000W (4 Ohm)
  - 2 x 1500W (2 Ohm)
- > Continuous power with both channels driven:
  - 2 x 550W (8 Ohm)
  - 2 x 900W (4 Ohm)
  - 2 x 1300W (2 Ohm)
- > Weight 24 kg



THE HP POWER AMPLIFIERS FEATURE SIMPLICITY, CLEAN LINES AND THE UTMOST RELIABILITY. THEY ARE CAPABLE OF DELIVERING STEREO OUTPUT POWER OF 200, 300 AND 500 WATTS RMS (4 OHM) OFFERING, THANKS TO THE "X-OVER FILTER" SECTION WITH 3RD STAGE BUTTERWORTH FILTERS (CUTOFF AT 18 DB/OCT.), A WIDE RANGE OF POSSIBLE APPLICATIONS.

BI-AMPLIFIED SYSTEMS DEMONSTRATE AN IMMEDIATE AND PRACTICAL APPLICATION FOR THIS TYPE OF FILTER SECTION. IN THIS CASE, USING TWO HP POWER STAGES (ONE SET TO HIGH PASS AND THE OTHER TO LOW PASS) IT IS POSSIBLE TO OBTAIN A FILTERED AMPLIFICATION SYSTEM WITHOUT ADDING ANY ADDITIONAL CROSSOVER PROCESSORS.

HP

POWER AMPLIFIERS

HP 1000



- > Impulsive power with both channels driven:
  - 2 x 300W (8 Ohm)
  - 2 x 500W (4 Ohm)
- > Continuous power with both channels driven
  - 2 x 260W (8 Ohm)
  - 2 x 420W (4 Ohm)
- > XLR-F input sockets and Jacks for "link" connections
- > Power outputs with Speakon connectors (HP 400 Jack) (min 4 Ohm)
- > Power output in Bridge mode with Speakon connector (min 8 Ohm)
- > 3-way switch to select operating mode: Parallel, Stereo or Bridge
- > 3-way switch to select the Butterworth filter operating mode: By-Pass, High-Pass or Low-Pass
- > Switch to select the high-pass cutoff frequency 35 Hz or 120 Hz
- > Power supply protection with miniature circuit breaker
- > Delayed output connection
- > DC protection for speakers (relays)
- > Short-circuit protection
- > Operating mode indicator LEDs
- > Fast Recovery Clipping function
- > Frequency response 20Hz - 20kHz
- > Dimensions (WxHxD) 482x88x410 mm
- > Weight 14.2 kg

HP 600

The same features as the 1000 model with the following differences:

- > Impulsive power with both channels driven:
  - 2 x 170W (8 Ohm)
  - 2 x 320W (4 Ohm)
- > Continuous power with both channels driven
  - 2 x 150W (8 Ohm)
  - 2 x 200W (4 Ohm)
- > Weight 13.2 kg

HP 400

The same features as the 1000 model with the following differences:

- > Impulsive power with both channels driven:
  - 2 x 120W (8 Ohm)
  - 2 x 200W (4 Ohm)
- > Continuous power with both channels driven
  - 2 x 100W (8 Ohm)
  - 2 x 140W (4 Ohm)
- > Weight 13.2 kg



# FBTMAXX

## SPEAKER SYSTEMS

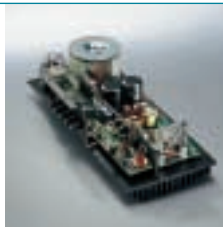
NEW

THE NEW GENERATION OF FBTMAXX SPEAKERS IS MADE OF POLYPROPYLENE WITH GAS INJECTION MOULDING, PRODUCING AN ULTRA-LIGHT FBT PRODUCT THAT IS EXTREMELY STURDY.

THE SPECIAL DESIGN, COUPLED CURVES AND ROUNDED EDGES, PERMITS MULTIFUNCTIONAL APPLICATION IN ALL AUDIO-PROFESSIONAL AMPLIFICATION SYSTEMS: SUCH AS STAGE MONITORS, FOR WALL OR CEILING INSTALLATION AND WITH SPECIAL ADAPTERS TO STACK THE ENCLOSURES. SPECIAL ATTENTION HAS BEEN PAID TO THE ACCESSIBILITY OF CONTROLS IN ALL CONDITIONS OF USE. FBTMAXX, A PERFECT MARRIAGE OF POWER, MECHANICS AND LEADING-EDGE TECHNOLOGY.



SPEAKERS  
10", 12" AND 15"  
CUSTOM  
NEODYMIUM  
ULTRA-LIGHT  
AND ULTRA POWERFUL.



PWM POWER STAGES,  
THREE TIMES MORE  
EFFICIENT THAN  
CONVENTIONAL  
TECHNOLOGY.

ADAP<sup>(M)</sup>  
A PROCESSOR FOR  
TOTAL COMPONENT  
PROTECTION.



FBTMAXX 4A  
FBTMAXX 4

Box 30

FBTMAXX 6A  
FBTMAXX 6

FBTMAXX 6A  
FBTMAXX 6



BALANCED XLR/JACK INPUTS (COMBO NEUTRIK) + XLR NEUTRIK LINK, GAIN, THREE-BAND EQUALIZER, VOLUME.

ALL THE SPEAKERS ARE FITTED FOR WALL OR CEILING INSTALLATION, HORIZONTALLY OR VERTICALLY, USING THE SPECIFIC MOUNTS.

THE PHOTO SHOWS FBTMAXX 4 IN ITS HORIZONTAL VERSION.



FBTMAXX 2A  
FBTMAXX 2

Box 50

FBTMAXX 95A  
FBTMAXX 9S

FBTMAXX 4A  
FBTMAXX 4

FBTMAXX 2A  
FBTMAXX 2



# FBTMAXX

SPEAKER SYSTEMS

NEW

FBTMAXX 6A



## FBTMAXX 6a 700+200W

### Processed active monitor

- > Extremely light and sturdy enclosure made of polypropylene with gas injection moulding.
- > Custom horn, handled and stand adapter built into the structure
- > It can be used in all audio-professional amplification systems
- > Profile for use as a stage monitor
- > Four anchoring points (M10) for wall and ceiling installation
- > Full access to controls in all conditions of use
- > 2-way bi-amplification system:
  - woofer with power stage of 700W rms with PWM "Pulse Width Modulation" technology
  - driver/horn with power stage of 200W rms in class G

- > 380 mm custom B&C speaker with 75 mm coil with neodymium magnet, ultra-light and ultra powerful. Die-cast aluminium basket
- > Compression driver with 65 mm coil and 36 mm shaft
- > ADAP<sup>®</sup> (Advanced Dynamic Active Protection) processor for total transducer protection and optimized acoustic response. It guarantees total reliability even under the harshest conditions (prolonged Larsen effect)
- > Active electronic filter 24 dB/oct
- > Control panel highly professional with XLR/Jack Neutrik<sup>®</sup> input
  - XLR Neutrik<sup>®</sup> Link - Gain plus 3-band equalizer (High-Mid-Low)
  - Volume

NEW

FBTMAXX 6

FBTMAXX 6A  
FBTMAXX 6

**FBTMAXX 6  
700W - Sound  
Reinforcement Monitor**  
available in the passive  
version with 4 or 8 Ohm





FBTMAXX 4A - 2A

**FBTMaxX 4a**  
**300+100W**  
**Processed active monitor**

**FBTMaxX 2a**  
**200+50W**  
**Processed active monitor**

- > Extremely light and sturdy enclosure made of polypropylene with gas injection moulding
- > Custom horn, handled and stand adapter built into the structure
- > It can be used in all audio-professional amplification systems
- > Asymmetric profile for use as a stage monitor
- > Four anchoring points (M10) for wall and ceiling installation for FBTMaxX 4a (two for FBTMaxX 2a)
- > Provided with adapters to stack the enclosures.
- > Full access to controls in all conditions of use
- > 2-way bi-amplification system:
  - woofer with power stage of 300W rms for FBTMaxX 4a with PWM "Pulse Width Modulation"

- technology, (200W rms - FBTMaxX 2a)
- driver/horn with power stage of 100W rms for FBTMaxX 4a in class AB (50W rms - FBTMaxX 2a)
- > 320 mm custom B&C speaker FBTMaxX 4a (250 mm - FBTMaxX 2a) with neodymium magnet, ultra-light and ultra powerful.
- Die-cast aluminium basket
- > 1" compression driver
- > ADAP<sup>®</sup>(Advanced Dynamic Active Protection) processor for total transducer protection and optimizing acoustic response. It guarantees total reliability even under the harshest conditions (prolonged Larsen effect)
- > Active electronic filter (24 dB/oct.)
- > Highly professional control panel with XLR/Jack Neutrik<sup>®</sup> input - XLR Neutrik<sup>®</sup> Link - Gain plus Mic/Line selector - 3-band equalizer (High-Mid-Low) - Volume



FBTMAXX 4 - 2

**FBTMaxX 4**  
**300W Sound**  
**Reinforcement Monitor**  
 available in the passive version with 4 or 8 Ohm

**FBTMaxX 2**  
**200W Sound**  
**Reinforcement Monitor**  
 available in the passive version with 4 or 8 Ohm<sup>±</sup>



FBTMAXX 4A  
 FBTMAXX 4



FBTMAXX 2A  
 FBTMAXX 2



FBTMaxX 9SA



### FBTMaxX 9Sa 900W - processed active sub-woofer

- > The lightweight, sturdy enclosure is made from shock-resistant polyethylene with rotomoulding
- > Handles built into the structure
- > Stand adapter
- > It can be used in all audio-professional amplification systems to enhance the low frequencies
- > Wall or ceiling installation available on request
- > Sub-Woofer system with power stage of 900W rms, PWM "Pulse Width Modulation" technology making it possible to decrease the weight in

- the ratio 1:3, achieving a level of efficiency 3 times higher than that of conventional technology
- > 380mm custom speaker with coil of 100mm with neodymium magnet, ultra-light and ultra powerful. Die-cast aluminium basket
- > ADAP<sup>®</sup> (Advanced Dynamic Active Protection)
- > Control panel for right and left channels with:
  - XLR/Jack
  - Neutrik(r) input
  - XLR Neutrik(r) Link
  - Filtered signal output (high-pass) for satellites
  - General volume



FBTMaxX 9S

### FBTMaxX 9S 900W Sound Reinforcement SUB-WOOFER

available in the 4 Ohm passive version with built-in low-pass and high-pass filters







Model		FBTMaxX 6a	FBTMaxX 4a	FBTMaxX 2a	FBTMaxX 9Sa
Configuration	Ways	2	2	2	1xBass Reflex
Internal Amplifier	W rms	700+200	300+100	200+50	900
Frequency response	@ -5dB	40 Hz - 20 kHz	50 Hz - 20 kHz	50 Hz - 20 kHz	40-125 Hz
Sensitivity	@ 1W/1m dB	98	98	97	97
Input impedance	KOhm	22	22	22	22
Maximum SPL	dB	128	123	121	126,5
Dispersion	(OxV)	90°x60°	90°x60°	90°x60°	-
Crossover frequency	kHz	1.3	1.8	1.8	-
Low frequency woofer	mm mm	1x380 coil ø 75	1x320 coil ø 64	1x250 coil ø 51	1x380 coil ø 100
High frequency driver	mm mm	36 + horn coil ø 65	25 + horn coil ø 36	25 + horn coil ø 36	- -
Net dimensions (WxHxD)	mm	482x757x399	407x634x330	352x550x307	496x648x485
Net weight	kg	29	16	13	29
Transport dimensions (WxHxD)	mm	595x878x515	510x740x410	435x630x395	595x760x575
Transport weight	kg	33	19	15.5	33
Input connectors		XLR-Jack	XLR-Jack	XLR-Jack	XLR-Jack
Power supply cable	m	5	5	5	5

Model		FBTMaxX 6	FBTMaxX 4	FBTMaxX 2	FBTMaxX 9S
Configuration	Ways	2	2	2	1xBass Reflex
Nominal impedance	Ohm	4/8	4/8	4/8	4
Recommended amplifier	W rms	700	300	250	900
Short term (IEC 268-5)	W rms	1400	600	500	1200
Frequency response	@ -5dB	40 Hz - 20 kHz	50 Hz - 20 kHz	50 Hz - 20 kHz	40-125 Hz
Sensitivity	@ 1W/1m dB	98	98	97	97
Maximum SPL	dB	126,5/129,5	123/126	121/124	126,5/128
Dispersion	(OxV)	90°x60°	90°x60°	90°x60°	-
Crossover frequency	kHz	2.6	1.8	1.8	-
Low frequency woofer	mm mm	1x380 coil ø75	1x320 coil ø64	1x250 coil ø51	1x380 coil ø100
High frequency driver	mm mm	36 + horn coil ø 65	25 + horn coil ø 36	25 + horn coil ø 36	- -
Net dimensions (WxHxD)	mm	482x757x399	407x634x330	352x550x307	496x648x485
Net weight	kg	25	13	11	26
Transport dimensions (WxHxD)	mm	595x878x515	510x740x410	435x630x395	595x760x575
Transport weight	kg	28.5	15.5	13	29
Input connectors		2 x Speakon	2 x Speakon	2 x Speakon	2 x Speakon

Note: SPEAKON is a NEUTRIK® registered trademark

# LIGHTFORCE<sup>2</sup>

## SPEAKER SYSTEMS

NEW

A WIDE RANGE OF RELIABLE, HANDY AND EXTREMELY VERSATILE SPEAKERS, AVAILABLE IN BI-AMPLIFIED AND PASSIVE VERSIONS.

THE ENCLOSURES ARE POPULAR PLYWOOD COVERED WITH CARPET ENSURING MAXIMUM SOUND EXPRESSION, WHILE BEING LIGHT AND NON-DEFORMABLE, ALSO DUE TO THEIR RIGID INTERNAL ARCHITECTURE.

THE ADAP<sup>®</sup> ELECTRONIC PROTECTION SYSTEM FOR THE TRANSDUCERS PROVIDES A GUARANTEE OF MAXIMUM PERFORMANCE IN USAGE SITUATIONS THAT WOULD BE IMPOSSIBLE FOR NORMAL SPEAKERS.

DESIGNED IN COMPLIANCE WITH INTERNATIONAL STANDARDS OF SAFETY AND ELECTROMAGNETIC COMPATIBILITY, LIGHTFORCE<sup>2</sup> SPEAKERS ARE CHARACTERIZED BY AN EXTREMELY FUNCTIONAL ASYMMETRIC TRAPEZOIDAL DESIGN FOR USE AS A STAGE MONITOR (LF 62-42-32) AND BY ERGONOMIC HANDLES FOR TRANSPORT, AND A 1.5-MM THICK PROTECTIVE METAL GRILLE.

THE RANGE IS COMPLETED BY AN AMPLIFIED SUBWOOFER LS 61A, A PASSIVE SUBWOOFER LS 61 AND A MULTIPURPOSE AMPLIFIER WITH A 6-CHANNEL MIXER LK 21.



- ERGONOMIC HANDLES FOR TRANSPORT
- METAL GRILLE 1.5 MM THICK



LF 62A - LF 42A - LF 32A  
CONTROL PANEL

- XLR/JACK NEUTRIK<sup>®</sup> INPUT
- XLR NEUTRIK<sup>®</sup> LINK
- VOLUME

LS 61A  
LS 61

LK 21

LF 62A  
LF 62

LF 32A  
LF 32

LF 42A  
LF 42

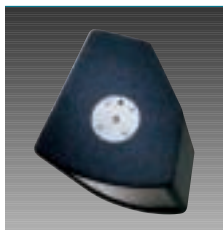
LF 62 - LF 42 - LF 32  
ASYMMETRIC PROFILE FOR  
USE AS A STAGE MONITOR.



**NEW**

ALL THE SPEAKERS ARE  
FITTED FOR WALL OR  
CEILING INSTALLATION,  
USING THE SPECIFIC  
MOUNTS:

- BOX 108 FOR  
LF 62A/62
- BOX 107 FOR  
LF 42A/42
- BOX 106 FOR  
LF 32A/32
- BOX 109 FOR  
LS 61A/61



TRAPEZOIDAL PROFILE FOR  
CLUSTER USE.

LF 62A  
LF 62

LF 42A  
LF 42

LF 32A  
LF 32

BOX 50  
ADJUSTABLE MOUNT  
TO HOOK UP WITH  
SUB-SATELLITE (Ø 3.5 CM)



BOX 30 BK  
FLOOR STAND,  
ADJUSTABLE (Ø 3.5 CM)

NEW

LF 62A - LF 62

LF 62 - LF 42 - LF 32  
PANEL INPUTS WITH 2  
SPEAKER CONNECTORS



### LF 62a

- Bi-amplified speaker cabinet with ADAP® protection system
- > Two-way system: woofer of 380 mm, driver of 25 mm with horn 90°x60°
  - > Internal amplifiers 300W rms x woofer and 50W rms x driver + horn
  - > Frequency response (@-5 dB) 40 Hz - 20 kHz
  - > Sensitivity (@ 1W/1m) 97 dB
  - > Maximum SPL 122.5 dB
  - > Crossover frequency 1.8 kHz
  - > Dimensions (WxHxD) 451x728x435 mm
  - > Weight 24.5 Kg



### LF 62

- Passive speaker cabinet
- > The same features and components as the LF 62a model with the following differences:
  - > Available with nominal impedance 4 Ohm or 8 Ohm
  - > Recommended amplifier 300W rms
  - > Short term applicable power 600W rms, (IEC 268-5)
  - > Maximum SPL 122/125 dB
  - > Weight 18 Kg

LF 42A - LF 42

### LF 42a

- Bi-amplified speaker cabinet with ADAP® protection system
- > Two-way system: woofer 320 mm, driver 25 mm with horn 90°x60°
  - > Internal amplifiers 200W rms x woofer and 50W rms x driver + horn
  - > Frequency response (@-5 dB) 50 Hz - 20 kHz
  - > Sensitivity (@ 1W/1m) 97 dB
  - > Maximum SPL 121 dB
  - > Crossover frequency 1.8 kHz
  - > Dimensions (WxHxD) 388x598x378 mm
  - > Weight 18 Kg

### LF 42

- Passive speaker cabinet
- > The same features and components as the LF 42a model with the following differences:
  - > Available with nominal impedance 4 Ohm or 8 Ohm
  - > Recommended amplifier, 200W rms
  - > Short term applicable power 400W rms, (IEC 268-5)
  - > Maximum SPL 120/123 dB
  - > Weight 13.5 Kg

LF 62A  
LF 62



LF 42A  
LF 42





### LS 61A

#### CONTROL PANEL

- RIGHT AND LEFT CHANNEL
- XLR/JACK
- NEUTRIK® INPUT
- XLR NEUTRIK® LINK
- SIGNAL OUTPUT
- HIGH-PASS FILTER
- XLR NEUTRIK®
- VOLUME



**NEW**

LF 32A - LF 32

### LF 32a

Bi-amplified speaker cabinet with ADAP® protection system

- > Two-way system: woofer 250 mm, driver
- > Internal amplifiers 150W rms x woofer and 50W rms x driver + horn
- > Frequency response (@-5 dB) 50 Hz - 20 kHz
- > Sensitivity (@ 1W/1m) 95 dB
- > Maximum SPL 118 dB
- > Crossover frequency 1.7 kHz
- > Dimensions (WxHxD) 327x538x354 mm
- > Weight 14 Kg

### LF 32

Passive speaker cabinet

- > The same features and components as the LF 32a model with the following differences:
- > Available with nominal impedance 4 Ohm or 8 Ohm
- > Recommended amplifier 150W rms
- > Short term applicable power 300W rms, (IEC 268-5)
- > Maximum SPL 117/120 dB
- > Weight 10.5 Kg



LS 61A - LS 61

### LS 61a

Amplified subwoofer with ADAP® protection system

- > Configuration: Woofer of 15" in bass reflex
- > Internal amplifier 300W rms
- > Frequency response (@-5 dB) 40 Hz - 125 Hz
- > Sensitivity (@ 1W/1m) 97.5 dB
- > Maximum SPL 122 dB
- > Crossover frequency 140 Hz
- > Dimensions (WxHxD) 455x554x493 mm
- > Weight 24.5 Kg

### LS 61

Passive subwoofer

- > The same features and components as the LS 61a model with the following differences:
- > Available with nominal impedance 4 Ohm (mono), 8+8 Ohm (stereo)
- > Recommended amplifier 300W rms or 150+150W rms
- > Short term applicable power 600W rms or 300+300W rms (IEC 268-5)
- > Maximum SPL 122/125dB
- > Weight 19 Kg



LS 61 INPUT/OUTPUT PANEL WITH 4 SPEAKON CONNECTORS



NEW

LK 21



Multipurpose amplifier of 120W rms with 6-channel mixer, internal effects circuit with echo/reverb and 2-way speaker system

### Mixer Section

- > 2 mono channels, Ch1 (acoustic guitar, accordion) and Ch2 (dynamic microphone) with XLR and Jack balanced inputs, 3 High-Mid-Low tone controls, effect volume
- > 1 stereo channel Ch3/4 (keyboards, expander, samplers) with inputs Jack, 2 High-Low tone controls, volume and effect level
- > 1 stereo channel Ch5/6 with RCA Pin Jack inputs (stereo playback/recording appliances)

### Tones

- > High  $\pm 15$  dB @ 10kHz
- > Medium  $\pm 12$  dB @ 2,5kHz
- > Low  $\pm 15$  dB @ 50Hz

### Effects Section

- > Echo/reverb effect switch
- > Control of length of effect or number of reflections
- > Effect volume control
- > Option to include pedal unit for remote effect control

### Amplifier Section

- > Internal amplifier 120W rms (IHF 20 mS)
- > THD+N < 0.1% @ 100W
- > S/N > 75 dB
- > Frequency response 20 Hz - 20 kHz
- > Cooling by convection
- > SOA protection
- > Phones socket

### Speakers Section

- > Two-way system:
  - woofers of 320 mm + driver with horn 90°x40°
- > Crossover frequency 2.5 kHz
- > Net dimensions (WxHxD) 390x630x360 mm
- > Weight 17 Kg
- > Transport dimensions (WxHxD) 440x710x410 mm
- > Transport weight 21 kg
- > Power supply cable 5 m





Model		LF62a	LF42a	LF32a	LS61a
Configuration	Ways	2	2	2	1 x bass reflex
Internal amplifier	W rms	300+50	200+50	150+50	300
Frequency response	@-5dB	40Hz-20kHz	50Hz-20kHz	50Hz-20kHz	40Hz-125Hz
Sensitivity	@ 1W/1m dB	97	97	95	97.5
Maximum SPL	dB	122.5	121	118	122
Dispersion	OxV	90°x60°	90°x60°	90°x60°	-
Crossover frequency	kHz/slope	1.8/24dB oct	1.8/24dB oct	1.7/24dB oct	0,14/24dB oct
Low frequency woofer	mm	1x380	1x320	1x250	1x380
High frequency driver	mm	25 +horn	25 +horn	25 +horn	-
Net dimensions (WxHxD)	mm	451x728x435	388x598x378	327x538x354	455x554x493
Net weight	Kg	24.5	18	14	24.5
Transport dimensions (WxHxD)	mm	491x788x475	428x658x418	367x598x394	495x614x533
Transport weight	Kg	29	21.5	17	30.5
Input connectors		XRL-Jack	XRL-Jack	XRL-Jack	XRL-Jack
Power cable	m	5	5	5	5

Model		LF62	LF42	LF32	LS61
Configuration	Ways	2	2	2	1 x bass-reflex
Nominal impedance	Ohm	4/8	4/8	4/8	4 - 8+8
Recommended amplifier	Wrms	300	200	150	300
Short term (IEC268-5)	Wrms	600	400	300	600
Frequency response	@-10 dB	40Hz-20kHz	50Hz-20kHz	50Hz-20kHz	40Hz-125Hz
Sensitivity	@1W/1m dB	97	97	95	97,5
Maximum SPL	dB	122/125	120/123	117/120	122/125
Dispersion (OxV)		90°x60°	90°x60°	90°x60°	-
Crossover frequency	kHz/slope	5/12dB oct.	4.2/18dB oct.	5.3/18dB oct.	0.14/12dB oct
Low frequency woofer	mm	1x380	1x320	1x250	1x380
High frequency driver	mm	25+horn	25+horn	25+horn	-
Net dimensions (WxHxD)	mm	451x728x435	388x598x378	327x538x354	455x554x493
Net weight	Kg	18	13.5	10.5	19
Transport dimensions (WxHxD)	mm	491x788x475	428x658x418	367x598x394	495x614x533
Transport weight	Kg	22.5	17	13.5	25
Input connectors		2xSpeakon*	2xSpeakon*	2xSpeakon*	2xSpeakon*

\* SPEAKON is a NEUTRIK® registered trademark

# PICKUP SPEAKER SYSTEMS

## SPEAKER SYSTEMS



### K 400

WITH THE CHOICE OF 2- OR 3-WAYS AND POWER OUTPUTS FROM 100W RMS TO 400W RMS, THE NEW PICKUP SPEAKER SYSTEMS ARE AVAILABLE IN PASSIVE VERSIONS (K 400 - K 250 - K 100) AND AMPLIFIED VERSIONS (KM 80).

PICKUP SPEAKER SYSTEMS FEATURE COMPACT DIMENSIONS WITH A STYLISH LOOK WHILE BEING FUNCTIONAL; FINISHED WITH CARPET TO PROTECT THE STRUCTURE AGAINST SMALL KNOCKS OR SURFACE SCRATCHING, EQUIPPED WITH A FRONT GRILLE TO PREVENT KNOCKS ON THE FRONT DAMAGING THE SPEAKERS, A HANDY SIDE HANDLE FOR EASY TRANSPORT AND SUPPLIED WITH THE NECESSARY CONNECTING CABLES.



### K 250

- > Speaker cabinet
- > 3-way system with passive filter: 1x15" (380 mm) woofer, 1x8" (200 mm) midrange, horn with dispersion (OxV) 90°x90° plus 1" driver
- > Available with nominal impedance of 4 Ohms
- > Recommended amplifier of 400W rms
- > Short term applicable power (1 sec) 600W rms (IEC 268 - 5)
- > Frequency response (@ - 10 dB) 50 Hz - 20 kHz
- > Sensitivity (@ 1W/1m) 99 dB
- > Maximum SPL 126,5 dB
- > Crossover frequency 0.8/5.5 kHz
- > Connecting cables 15 m
- > Dimensions (WxHxD) 420x710x415 mm
- > Weight 29 Kg

- > Speaker cabinet
- > 2-way system with passive filter: 1x15" (380 mm) woofer, horn with dispersion (OxV) 90°x60° plus 1" driver
- > Available with nominal impedance of 4 Ohms
- > Recommended amplifier, 250W rms
- > Short term applicable power (1 sec.) 500W rms, (IEC 268 - 5)
- > Frequency response (@ - 10 dB) 60 Hz - 18 kHz
- > Sensitivity (@ 1W/1m) 99 dB
- > Maximum SPL 123/126 dB
- > Crossover frequency 2 kHz
- > Connecting cables 15 m
- > Dimensions (WxHxD) 420x630x415 mm
- > Weight 21 Kg

K 400



KM 80A







**K 100**

- > Speaker cabinet
- > 2-way system with passive filter: 1x12" (320 mm) woofer, horn with dispersion (OxV) 90°x90° plus driver
- > Available with nominal impedance of 4 Ohms
- > Recommended amplifier, 100W rms
- > Short term applicable power (1 sec) 150W rms (IEC 268-5)
- > Frequency response (@ - 10 dB) 60 Hz - 18 kHz
- > Sensitivity (@ 1W/1m) 96 dB
- > Maximum SPL 117.5 dB
- > Crossover frequency 2.5 kHz
- > Connecting cables 15 m
- > Dimensions (WxHxD) 340x500x340 mm
- > Weight 12.5 Kg



**KM 80A**

- > Amplified stage monitor
- > 1x10" (250 mm) full-range woofer
- > Internal amplifier 100W rms
- > Mains supply cable 2.5 m
- > Signal cable 10 m

**K 250**

**K 100**



**SS 2**  
ENCLOSURE  
FLOOR  
STAND,  
STANDARD

**BOX 30BK**  
FLOOR  
STAND,  
ADJUSTABLE,  
IN ALUMINIUM  
WITH  
ANTISHOCK  
SAFETY  
SYSTEM

# EXTRUDE

## SPEAKER SYSTEMS

MADE ENTIRELY OF ALUMINIUM, THE EXTRUDE SPEAKERS ARE AN AMPLIFICATION SOLUTION FOR PIANO-BARS, CONFERENCE HALLS, CABARETS, THEATRES, PLACES OF WORSHIP, MUSICAL ENTERTAINMENT, WAITING ROOMS... WHERE SMALL DIMENSIONS, POWER AND STYLISH DESIGN ARE REQUIRED. PROFESSIONAL MONITORS FEATURING UNBEATABLE STRUCTURAL AND MECHANICAL RIGIDITY. IN ADDITION, THEIR ASYMMETRIC SHAPE MAKES IT POSSIBLE TO ELIMINATE ALL POSSIBLE FORMATION OF INTERNAL REFLECTION. AVAILABLE IN PASSIVE VERSIONS OF 8 OHM AND AMPLIFIED VERSIONS (150W AND 300W RMS) WITH MOSFET TECHNOLOGY. AVAILABLE IN ANTHRACITE GREY AND INDIGO BLUE.



### EX 5.0A

- > Speaker system made of extruded aluminium
- > Integrated amplifier 300W rms (IHF 20 mS)
- > Low frequency Woofer 2x8" (2x200 mm)
- > Compression Tweeter 1.4"
- > Frequency response (@ -10 dB) 60 Hz - 19 kHz
- > Sensitivity (@ 1W/1m) 102 dB
- > Maximum SPL 126 dB
- > Crossover frequency 3.5 kHz
- > Angle of dispersion (OxV) 50°x50°
- > Mains power cable 2.5 m
- > Dimensions (WxHxD) 223x575x230 mm
- > Weight 16.5 Kg

### EX 5.0



CONTROL PANEL EX 5.0A - EX 2.5A

The same features as the EX5.0a model with the following differences:

- > 2-way system with passive filter
- > Available with nominal impedance 8 Ohm
- > Recommended amplifier, 300W rms
- > Short term applicable power (1 sec.) 500W rms. (IEC 268-5)
- > Maximum SPL 126/129 dB
- > Weight 13 Kg



EX 5.0A



EX 5.0

EX 2.5A



ES 2.5A

- > Full range speaker system made of extruded aluminium
- > Integrated amplifier 150W rms (IHF 20 mS)
- > Woofer full range 1x8" (1x200 mm)
- > Frequency response (@ -10 dB) 80 Hz - 17 kHz
- > Sensitivity (@ 1W/1m) 99 dB

- > Maximum SPL 120 dB
- > Angle of dispersion (OxV) 40°x40°
- > Mains power cable 2.5m
- > Dimensions (WxHxD) 223x334x230 mm
- > Weight 9.4 Kg



ES 2.5

The same features as the EX5.0a model with the following differences:

- > Available with nominal impedance of 8 Ohm

- > Recommended amplifier, 150W rms
- > Short-term applicable power (1 sec.) 250W rms (IEC 268-5)
- > Maximum SPL 120/123 dB
- > Weight 6.9 Kg



EX 5.0A



EX 2.5

THE JOLLY<sup>3</sup> SPEAKERS ARE MADE OF THERMOPLASTIC RESIN AND ARE A TANGIBLE SOLUTION FOR AMPLIFICATION IN PIANO-BARS, CONFERENCE HALLS, CABARETS, THEATRES, PLACES OF WORSHIP..., PLACES REQUIRING COMPACT DIMENSIONS. THESE MONITORS PROVIDE LINEAR FREQUENCY RESPONSE BOTH IN AND OUT OF AXIS, AT HIGH OR LOW LEVELS AND THE CAREFULLY SELECTED COMPONENTS ENSURE THE UTMOST RELIABILITY, MAKING IT POSSIBLE TO ACHIEVE SOUNDS WITH A RICH PRESENCE AND BODY.

JOLLY<sup>3</sup> IS AVAILABLE IN THE PASSIVE VERSION (4-16 OHM), WITH A BUILT-IN 100V LINE TRANSFORMER FOR ANY INSTALLATION REQUIREMENT, OR WITH AN INTEGRATED AMPLIFIER OF 60W RMS.



### JOLLY<sup>3</sup> A



- > 2-way system with passive filter
- > Integrated amplifier 60W rms (IHF 20 mS)
- > Low frequency Woofer 1x5" (1x129 mm)
- > Dome tweeter
- > Frequency response (@ -10 dB) 80 Hz - 20 kHz
- > Sensitivity (@ 1W/1m) 93 dB
- > Maximum SPL 110 dB
- > Crossover frequency 3.5 kHz
- > Angle of dispersion (OxV) 90°x90°
- > Mains power cable 2.5 m
- > Dimensions (WxHxD) 162x256x157 mm
- > Weight 4 Kg

### JOLLY<sup>3</sup>

The same features as the JOLLY<sup>3</sup> A model with the following differences:

- > 2-way system with passive filter
- > Available with nominal impedance of 4 or 16 Ohm
- > Recommended amplifier, 80W rms
- > Short-term applicable power (1 sec.) 120W rms (IEC 268-5)
- > Maximum SPL 112/114 dB
- > Weight 3 Kg

### JOLLY<sup>3</sup> T

The same features as the JOLLY<sup>3</sup> model with the following differences:

- > Line transformer (100V)
- > 4-way volume selector: Off-Min-Med-Max
- > Recommended amplifier of 60W rms with constant voltage of 100V
- > Maximum SPL 110 dB
- > Weight 3.7 Kg





Model		Ex 5.0a	Ex 2.5a	JOLLY <sup>3</sup> a
Configuration	Ways	2	full range	2
Internal Amplifier (*)	W rms	300	150	60
Frequency response	@ - 10 dB	60 Hz - 19 kHz	80 Hz - 17 kHz	80 Hz - 20 kHz
Sensitivity	@ 1W/1m dB	102	99	93
Maximum SPL	dB	126	120	110
Dispersion (OxV)		50°x50°	40°x40°	90°x90°
Crossover frequency	kHz	3,5	-	3,5
Woofer	mm	2x200	1x200	1x129
Tweeter	mm	32	-	dome tweeter
Net dimensions (WxHxD)	mm	223x575x230	223x334x230	162x256x157
Net weight	Kg	16.5	9.4	4
Transport dimensions (WxHxD)	mm	290x650x290	290x400x290	210x340x230
Transport weight	Kg	18	11	5
Input connectors		XLR-Jack	XLR-Jack	1 x Jack
Power cable	2.5 m	•	•	•

(\*) The power was measured according to the IHF method with 20ms bursts and a 20% duty cycle

- Accessories supplied

Model		Ex 5.0	Ex 2.5	JOLLY <sup>3</sup>	JOLLY <sup>3</sup> T
Configuration	Ways	2	full range	2	2
Nominal impedance	Ohm	8	8	4 / 16	(**)
Recommended amplifier	W rms	300	150	80	60 (100V)
Short term (IEC 268-5)	W rms	500	250	120	-
Frequency response	@ - 10 dB	60 Hz - 19 kHz	80 Hz - 17 kHz	80 Hz - 20 kHz	80 Hz - 20 kHz
Sensitivity	@ 1W/1m dB	102	99	93	93
Maximum SPL	dB	126/129	120/123	112/114	110
Dispersion (OxV)		50°x50°	40°x40°	90°x90°	90°x90°
Crossover frequency	kHz	3.5	-	3.5	3.5
Woofer	mm	2x200	1x200	1x129	1x129
Tweeter	mm	32	-	dome tweeter	dome tweeter
Net dimensions (WxHxD)	mm	223x575x230	223x334x230	162x256x157	162x256x157
Net weight	Kg	13	6.9	3	3.7
Transport dimensions (WxHxD)	mm	290x650x290	290x400x290	210x340x230	210x340x230
Transport weight	Kg	15	8	3.5	4
Input connectors		2 x Jack	2 x Jack	1 x Jack 1x Lever terminal	1x Lever terminal

(\*\*) 4-way volume selector (Off-Min-Med-Max)

# PICKUP SYSTEM

INTEGRATED AMPLIFICATION SYSTEMS



PK 800

A POWERFUL, EFFICIENT, RELIABLE AND COMPACT AMPLIFICATION SOLUTION IN WHICH ALL THE COMPONENTS ARE DESIGNED AND HARMONIZED TOGETHER TO OFFER THE HIGHEST PERFORMANCE. THE PICKUP SYSTEMS, WITH RANGES OF 200W, 500W AND 800W RMS, ARE COMPOSED OF A POWERED MIXER IN THE PICKUP MIXER SERIES (8, 14 AND 18 CHANNELS), EQUIPPED WITH DSP DIGITAL MULTI-EFFECT CIRCUIT AND TWO SPEAKERS IN THE PICKUP SPEAKER SYSTEMS SERIES.

THE NEW PICKUP MIXERS, MADE ENTIRELY OF STEEL, ARE MANUFACTURED USING SMT TECHNOLOGY.

ALPS POTENTIOMETERS, XLR SOCKETS AND NEUTRIK SPEAKERS.

THE POWER STAGES OF THE LARGER VERSIONS ARE MADE USING PWM (PULSE WIDTH MODULATION) TECHNOLOGY. IN ADDITION, TO OPTIMIZE THE SOUND QUALITY, THE POWER STAGES ARE OUTSIDE THE MIXERS BUT INTEGRAL WITH THEM.

## 1 x Pickup 18A powered mixer

- > 10 mono channels + 4 stereo channels
- > 1 effects line
- > 2 monitor lines
- > 1 monitor/effects line
- > Power supply Phantom 48V
- > Double DSP digital multi-effect with backlit LCD with 2 rows of 16 characters
- > Output power 400W + 400W rms
- > Additional features pages 2 and 5

## 2 x K400 speakers

- > 3 ways
- > 4 Ohm
- > 1x15" (380 mm) woofer
- > 1x8" (200 mm) midrange
- > Horn with 1" driver
- > Connecting cables
- > Additional features page 22



PICKUP 14A



POWER STAGE

PK 800



# PICKUP SYSTEM

INTEGRATED AMPLIFICATION SYSTEMS



BACKLIT LCD DISPLAY WITH 2 ROWS OF 16 CHARACTERS FOR FASTER AND EASIER READING IN ALL CONDITIONS.



PK 500

## 1 x Pickup 14A powered mixer

- > 6 mono channels + 4 stereo channels
- > 1 effects line
- > 1 monitor line
- > Power supply Phantom 48V
- > DSP digital multi-effect with backlit LCD display with 2 rows of 16 characters
- > Output power 250W + 250W rms
- > Additional features pages 3 and 5

## 2 x K250 speakers

- > 2 ways
- > 4 Ohm
- > 1x15" (380 mm) woofer
- > Horn plus 1" driver
- > Connecting cables
- > Additional features page 22



PK 200

## 1 x Pickup 8A powered mixer

- > 4 mono channels + 2 stereo channels
- > 1 effects line
- > 1 monitor line
- > Power supply Phantom 48V
- > DSP digital multi-effect with backlit LCD display with 2 rows of 16 characters
- > Output power 100W + 100W rms
- > Additional features pages 4 and 5

## 2 x K100 speakers

- > 2 ways
- > 4 Ohm
- > 1x12" (320 mm) woofer
- > Horn plus 1" driver
- > Connecting cables
- > Additional features page 23

PK 500

PK 200





242 E

### Powered stereo mixer

- > 4 channels with balanced Mic/Line Jack/XLR inputs
- > 3 tone controls High-Mid-Low
- > Effect control
- > Panorama
- > Channel volume
- > 5th stereo channel with CD/Tape and Line inputs
- > Channel volume
- > Output for tape recorder (Rec)

### Effects Section

- > DSP digital multi-effect with 16 programs
- > Volume
- > Stereo input for external equalizer
- > Remote control

### Master Section

- > General volume
- > Stereo input for external equalizer
- > Pre-amplifier output to drive an auxiliary amplifier or a monitor

- > Power supply Phantom 48V
- > Volume of the internal power amplifier
- > Stereo socket to connect headphones automatically excluding the speakers
- > Internal stereo amplifier of 120W +120W rms (IHF burst 20mS, duty cycle 20%)

### Micro input (balanced)

- > Impedance 2,2 kOhm
- > Equivalent input noise -126dB
- > Max gain 54dB

### Line input (balanced)

- > Impedance 150 kOhm
- > Max gain 12dB

### Tones

- > High ±15dB @12 kHz
- > Medium ±12dB @2.5 kHz
- > Low ±15dB @80 Hz

### Outputs

- > Impedance 600 Ohm
- > Max output 21dBm (8.68 Veff.)

- > THD+N 0,015 (@16dBm)
- > S/N 89dB (@PRE OUT)
- > Frequency response 20 Hz÷20 kHz

### High-Efficiency Stereo Amplifier

- > Impulsive power 120W+120W rms (IHF burst 20mS, duty cycle 20%)
- > THD+N <0.5% (@120W rms)
- > Impedance min. 8 Ohm
- > Cooling by convection
- > DC protection, MCB and Soft-Start
- > Dimensions (WxHxD) 526x134x300 mm
- > Weight 8.9 Kg



S 122

### 2 Speakers

- > Protective metal grille
- > Fitted for mount coupling
- > Can be used as a monitor
- > Built-in handles
- > 2-way configuration
- > Components: woofer (ø 250mm/10") + high efficiency horn tweeter

- > Recommended amplifier 120W rms
- > Impedance 8 Ohm
- > Sensitivity (SPL @ 1W/1m) 99 dB
- > Sensitivity (SPL max. @1W/1m) 120 dB
- > Jack connectors ø 6.3 mm

- > Dimensions (WxHxD) 426x328x300 mm
- > Weight 7.1 Kg
- > Connecting cables supplied

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242 E





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### Powered stereo mixer

- 4 channels with balanced Mic/Line inputs
- > 2 High-Low tone controls
- > Effect control
- > Volume control
- 5th channel with CD/Tape and Line inputs
- > Channel volume
- > Output for tape recorder (Rec)

### Effects Section

- > Option to connect an external multi-effect
- > Remote control

### Master Section

- > General system volume
- > Stereo input for an external equalizer
- > Pre-amplifier output to drive an auxiliary amplifier or a monitor
- > Volume of the internal power amplifier

- > Headphones socket automatically excluding the speakers
- > Amplifier, 200W (40mS tone burst) 120Wrms

### Micro input (balanced)

- > Impedance 2.2 kOhm
- > Equivalent input noise -126dB

- > Max gain 54dB

### Line input (balanced)

- > Impedance 100 kOhm
- > Max gain 12dB

### Tones

- > High  $\pm 15$ dB @14 kHz
- > Low  $\pm 15$ dB @40 Hz

### Outputs

- > Impedance 600 Ohm
- > Max output 21dBm (8.68Veff.)
- > THD+N 0.015% (@16dBm)
- > S/N 89dB (@PRE OUT)
- > Frequency response 20 Hz - 20 kHz

### Amplifier

- > Output power 200 W (40mS tone burst)
- > Output power 120 Wrms
- > THD+N <0.7% (@100 Wrms)
- > Impedance min. 4 Ohm
- > Cooling by convection
- > Thermal and SOA protection
- > Dimensions (WxHxD) 526x134x300 mm
- > Weight 7.1 Kg



S 8 2

### 2 Speakers

- > Protective metal grille

- > Fitted for mount coupling
- > Can be used as a monitor
- > Built-in handles
- > Program power 120 W

- > Continuous power 60 W
- > Impedance 8 Ohms
- > Sensitivity (SPL max W,1m) 116 dB
- > Sensitivity (SPL 1W,1m) 98 dB
- > Components: woofer ( $\varnothing$  250mm/10") + high efficiency horn tweeter
- > Jack connectors  $\varnothing$  6.3 mm
- > Dimensions (WxHxD) 426x328x300 mm
- > Weight 5.8 Kg
- > Connecting cables supplied



S 1 2 2



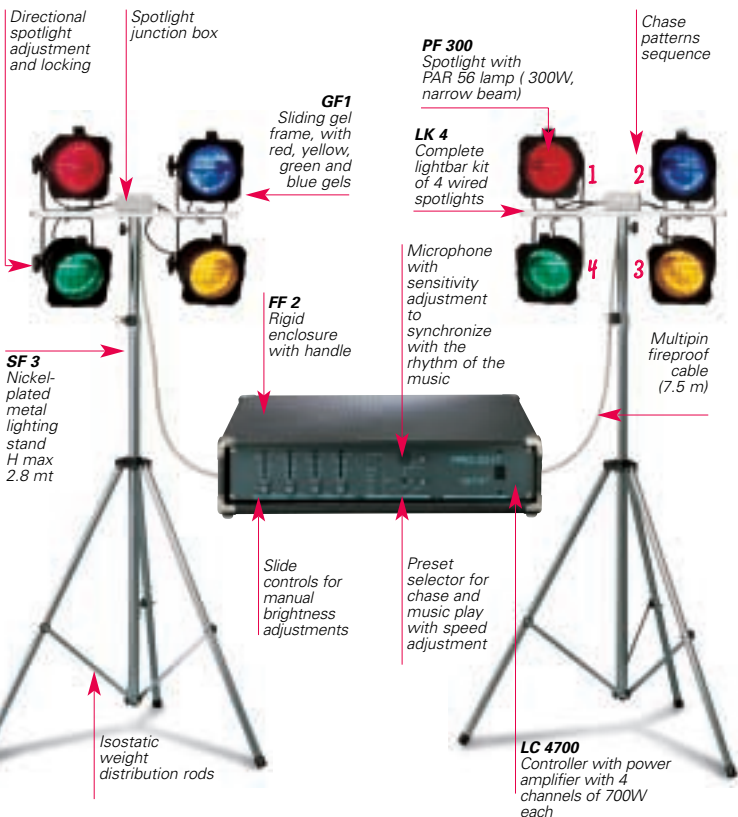
# FIRELIGHT

PROFESSIONAL  
LIGHTING  
SYSTEMS

FIRELIGHT IS A COMPACT, READY-TO-USE SYSTEM COMPLETE WITH EVERYTHING REQUIRED FOR LIGHTING AND EFFECTS (CABLES AND ACCESSORIES INCLUDED). THE SYSTEM HAS FOUR ADJUSTABLE SPEED LIGHTING EFFECT PROGRAMS. IN ADDITION, WITH THE MUSIC PLAY PROGRAM, THE LIGHTS SYNCHRONIZE AUTOMATICALLY WITH THE RHYTHM OF THE MUSIC.

WITH FIRELIGHT IT IS POSSIBLE TO CONTROL THE BRIGHTNESS OF THE EIGHT SPOTLIGHTS, COMBINED IN PAIRS, WITH THE FOUR SLIDE CONTROLS. AUTOMATIC CROSS-FADE CAN BE OBTAINED FROM ANY ACTIVE SCENE. ANY ONE OF THE FOUR AUTOMATIC EFFECT PRESETS CAN BE SELECTED AND THE EFFECT SPEED CHANGED IN REAL TIME, OR MUSIC PLAY CAN BE TURNED ON TO SYNCHRONIZE LIGHTS AND MUSIC.

FIRELIGHT IS ALSO IDEAL FOR LIGHTING DESIGNERS, LIGHT JOCKEYS, MUSICIANS, DISC JOCKEYS MC'S AND OTHER ENTERTAINERS.



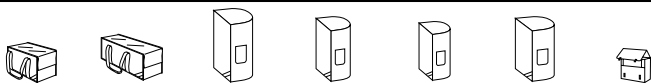
32 FC3 CONTROL PEDALS FOR TOTAL REMOTE CONTROL OF THE SYSTEM



# ACCESSORIES



V21	V24	V20	V23	V19	V22
Nylon bag	Nylon bag	Nylon bag	Nylon bag	Nylon bag	Nylon bag
PICKUP 18X - 18E	PICKUP 18A	PICKUP 14X - 14E	PICKUP 14A	PICKUP 8X - 8E	PICKUP 8A



V25	V26	V33	V29	V30	V31	J <sup>3</sup> CASE
Nylon bag	Nylon bag	Nylon case	Nylon case	Nylon case	Nylon case	Bag
EXTRUDE 2.5 - 2.5A	EXTRUDE 5.0-5.0A	FBTMaxx 6 - 6a	FBTMaxx 4 - 4a	FBTMaxx 2 - 2a	FBTMaxx 9S - 9Sa	JOLLY <sup>3</sup> JOLLY <sup>3</sup> A JOLLY <sup>3</sup> T



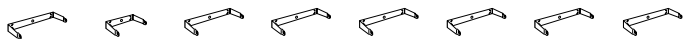
FK12W	FK8W	FK6	FK4	CX20P	CX16P
Flight-case 12 units 55x72x73	Flight-case 8 units 55x54x73	Flight-case 6 units 55x33x73	Flight-case 4 units 55x24x73	Rack trolley 20 units 56,5x106x55,5	Rack trolley 16 units 56,5x88x55,5
SYMBOL HP	SYMBOL HP	SYMBOL HP	SYMBOL HP	SYMBOL HP	SYMBOL HP



AL 18	AL 14	AL 8
Pair of rack mount brackets	Pair of rack mount brackets	Pair of rack mount brackets
PICKUP 18X - 18E	PICKUP 14X - 14E	PICKUP 8X - 8E



BOX 30BK	BOX 40BK	SS 2	MS 30BK	BOX 25	BOX 35	BOX 50	BOX 104	BOX 105
Floor stand, in aluminium Max weight 70 Kg	Floor stand, in steel Max weight 55 Kg	Floor stand, in steel Max weight 100 Kg	Floor stand, in steel	T-mount for 2 speakers	T-mount for 2 speakers	Sub-satellite connection	Mount for horizontal wall installation	Mount for vertical wall installation
FBT MAXX LIGHTFORCE <sup>2</sup> EXTRUDE	FBT MAXX LIGHTFORCE <sup>2</sup> EXTRUDE	FBT MAXX LIGHTFORCE <sup>2</sup>	JOLLY <sup>3</sup> JOLLY <sup>3</sup> A JOLLY <sup>3</sup> T	JOLLY <sup>3</sup> JOLLY <sup>3</sup> A JOLLY <sup>3</sup> T	EXTRUDE 2.5 - 2.5A	FBT MAXX LIGHTFORCE <sup>2</sup>	FBT MAXX 6 - 6a	FBT MAXX 6 - 6a
PK SYSTEM RENEGADE	PK SYSTEM RENEGADE	PK SYSTEM						



BOX 100	BOX 101	BOX 102	BOX 103	BOX 108	BOX 107	BOX 106	BOX 109
Mount for horizontal wall installation	Mount for vertical wall installation	Mount for horizontal wall installation	Mount for horizontal wall installation	Mount for wall installation, with horizontal flange	Mount for wall installation, with horizontal flange	Mount for wall installation, with horizontal flange	Mount for wall installation, with horizontal flange
FBT MAXX 4 - 4a	FBT MAXX 4 - 4a	FBT MAXX 2 - 2a	FBT MAXX 9S - 9Sa	LIGHTFORCE <sup>2</sup> LF 62	LIGHTFORCE <sup>2</sup> LF 42	LIGHTFORCE <sup>2</sup> LF 32	LIGHTFORCE <sup>2</sup> LS 61



BOX 55	BOX 65	BOX 98EX	BOX 99EX	A/J	S/J3	S/J3C	S/J3U
Box mount adapter	Wall, flange and articulated arm	Directional wall mount	Directional wall mount	Fixing adapter	Directional wall mount	Steel flange, recessed	Directional wall mount
EXTRUDE	EXTRUDE	EXTRUDE 2.5 - 2.5a	EXTRUDE 5.0 - 5.0a	JOLLY <sup>3</sup> JOLLY <sup>3</sup> A JOLLY <sup>3</sup> T	JOLLY <sup>3</sup> JOLLY <sup>3</sup> A JOLLY <sup>3</sup> T	JOLLY <sup>3</sup> JOLLY <sup>3</sup> A JOLLY <sup>3</sup> T	JOLLY <sup>3</sup> JOLLY <sup>3</sup> A JOLLY <sup>3</sup> T

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FBT elettronica SpA  
Zona Ind.le Squartabue - 62019 Recanati (MC) - Italy  
Tel. +39-071750591 a.r. Fax +39-0717505920  
[www.fbt.it](http://www.fbt.it) [info@fbt.it](mailto:info@fbt.it)