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ABOUT US

THE SOUND OF EXPERIENCE.

A.E.B. Industriale SRL, the manufacturer of dBTechnologies products is shaped by the engineering and the spirit of the owner and founder Arturo Vicari.

The passion for audio and technology is the key to success for dBTechnologies, from research & development to production and distribution.

Our worldwide network of production and distribution, coordinated through our head office in Bologna/Italy, guarantees a cost effective production and a superb customer service.

When developing our products, it is vital to us to be able to offer an innovative, flexible and reliable product which suits highest professional demands, all for an affordable price.

High investments into R&D enable us to fulfil the professional demands of our customers. With innovative ideas and high motivation, our young R&D team around head designer Claudio Ottani works day and night to provide you with the most outstanding products using our well known audio design.

Quality management is one of the top priorities of dBTechnologies. With the utmost care for quality during the manufacturing process and several audio tests over many hours with the finished product, we guarantee a continuously high quality and reliability.

We are very sure that we can offer you one of the best products on the market. See, feel and hear for yourself! Check our products out with the most dynamic and fragile instrument of the world - your own voice. You will be convinced!
Picking up where the successful FIFTY LINE active system left off, FIFTY LINE PLUS is the next rung up the evolutionary ladder. Featuring a new sleek black look and loaded with new ultra light neodymium speakers, it offers a big plus in sound and performance as well as even greater handling convenience.

The FL10 PLUS passive mid-/high-range unit sports a horn-loaded 10" midrange woofer and 1" neodymium compression driver in coaxial array. This driver excels at rendering midrange and higher-range frequencies. The FL10 top offers three rigging points as well as a cable compartment at the back. The integrated tilt mechanism makes it easy to aim stacked FL10 PLUS units towards the audience.

A three-channel Class-H power amp housed in the FL15 PLUS mid-/low-range enclosure drives the FL10. It provides one channel to feed the onboard 15" neodymium woofer, as well as two actively split signal paths (bi-amped) via a four-wire speaker cable for outboard speakers. The high-quality processor-controlled power amps come with a digital controller board that equalizes response, actively separates signals, controls limiters, manages temperature-controlled fan cooling, and monitors the system.

FIFTY LINE PLUS systems may be configured with one or two FL18 PLUS subwoofers to suit the given requirements. The integrated, processor-controlled Class-H power amp drives the RCF® 18" neodymium woofer. This amp features an active crossover, a Soft Clip limiter, and a Phase Invert switch, making FIFTY LINE PLUS a genuine four-way system with active signal separation capabilities.

Professional Neutrik® PowerCon connectors with Slave Out ports provide mains power to the FL15 PLUS and FL18 PLUS cabinets. Made of professional-grade multiplex coated with tough black textured lacquer, FIFTY LINE PLUS enclosures are ready to accept 100 mm casters. Equipped with an integrated pole mount, the FL18 PLUS subwoofer is easily paired with other mid-/high-range units.

Every FIFTY LINE PLUS enclosure comes with a dust cover to protect it during transport. The FIFTY LINE PLUS system is remarkably easy to use and very flexible in its configurations with one or two stacks per side, each comprising one or two FL18 PLUS subs. Offering amazing convenience, utility, and versatility, it is an excellent choice for many demanding applications requiring professional quality sound and high SPL from the first meter forward.

*System configurations on Page 20.*
**FL10 Passive**
- 10" woofer horn loaded
- 1" RCF compr. driver
- Driven by FL15
- 250-19,000 Hz
- SPL 131 dB peak
- Dispersion 60° x 50°
- Speakon4 Connector
- 27,2 kg / 59.9 lb
- 500x500x650 mm 20x20x25,5 in

**FL15 3-Amp Active**
- 100+300+500W RMS
- 15" Neodymium Bandpass-Woofe
- 53-250 Hz
- Max. SPL 132 dB
- Crossover out at 250 Hz
- 2 x Neutrik Powercon
- 1 x Neutrik Speakon4-Out for Bi-Amping FL10
- 38 kg / 83.8 lb
- 500x500x650 mm 20x20x25,5 in

**FL18 Active**
- 800W RMS
- 18" RCF-Speaker, 4" Voice coil
- 40-100 Hz
- Max. SPL 133,5 dB
- Crossover out at 100 Hz
- 2 x Neutrik Powercon
- 49 kg / 110 lb
- 500x700x650 mm 20x27,5x25,5 in

**Accessory:**
- AFL 05  Powercon Link Cable 1,5 m.
- AFL 04  3 x M10 Eye

**Dust Covers included!**

Number 1 - Soundcheck Magazin Readers Poll 2005 + 2006
Power Density

Digipro® Class-D power amp technology packs huge performance and operating efficiency into a lightweight solution that leaves a very small footprint. With its remarkable 1:1 power-output-to-weight ratio, this technology brings highest performance capability to compact speaker systems. What’s more, it is also phenomenally easy to handle.

digipro® - the high-end power pack.

Audiophile Performance

Power amps need a great deal of headroom to render natural audio events as authentically as possible. It takes a high-voltage power supply to provide this kind of headroom. Digipro® delivers exceedingly high performance ranging up to 1000W/RMS, providing the dynamic range required for faithful, true-to-nature reproduction of every input signal. This power, paired with an ultra fast attack and truly realistic transient response, yields impressive audio performance that rivals that of very elaborate and expensive tube circuits. With a high pulse frequency of 500 KHz, this technology is able to deliver high-definition, high-fidelity audio signals with richly detailed yet natural-sounding top end.
**Full-fledged Class-D for Full-blown Efficiency**

In contrast to many other so-called “digital” power amps that merely run on a clocked switched-mode power supply, digipro® is a full-fledged Class-D power amp that operates on the principle of pulse width modulation (PWM). This technology is tremendously efficient with more than 90% yield. Components remain very cool because so little energy is lost in the form of heat. No fans are necessary. What’s more, components last longer and operate more reliably courtesy of the reduced thermal load.

**Maximum Performance**

Digipro® power amps come with highly advanced, ultra efficient switched-mode power supplies (SMPS) with active power factor correction (PFC). They provide all the juice amps need to deliver peak performance even when mains power quality is poor, for example, when low power feeds at live events cause voltages to dip. This makes SMPS far superior to conventional power supplies. SMPS:

- Operates in the range of 95 V to 265 V
- Conditions power when line voltages fluctuate

**Power and Intelligence**

Digipro® technology synchronizes power stages and control circuits, creating an intelligent, responsive protection and supervision system. An integrated processor controls the ongoing interaction between the audio signal, switched-mode power supply, and PWM output stages, and processes key information concerning the status of the internal signal flow from the input to the speakers.

- digipro® monitors impedance and shuts down in case of short-circuit.
- Thermal limiters attenuate performance if the unit runs hot.
- Peak and RMS limiters protect speakers.
Flexsys F212
Active 2x12”/1” two-way speaker cabinet
The F212 is an active two-way system with considerable reach. A very efficient and powerful mid-/high-range unit, it was designed to be combined with active subwoofers to construct high-performance PA systems. Loaded with two 12” woofers, this assertive cabinet throws sounds across considerable distances, performing exceedingly well in the low midrange. Its excellent directivity comes courtesy of ADCTM (Acoustical Directivity Control) technology that also allows F212 enclosures to be clustered to achieve wider coverage. The cabinet is driven by two bi-amped digipro® Class-D digital power amps with switched-mode power supplies offering PFC to ensure peak performance even under less-than-perfect live conditions. A custom-engineered, array-enabled 60° x 40° CD horn, coupled to a next-generation 1” RCF neodymium compression driver, delivers assertive, high-definition response throughout the upper frequency range. Sited on top, the high-frequency horn is at a height perfect for stacked arrays, so ground stacks do not have to be placed on platforms or other raised structures. Thanks to the integrated tilt unit, aligning F212 towards the audience is very easy.

With this combination of muscular digital power amps and neodymium magnets, the F212 is a powerful cabinet whose ability to produce exceedingly high SPL belies its surprisingly light weight.

Flexsys F315
Active 15”/6”/1” 3-way speaker cabinet
The F315 is an active three-way system designed to render the full frequency range. Powerful and assertive, it delivers the sonic goods without requiring an added subwoofer. A bi-amped 1000 W/RMS digipro® Class-D digital power amp with switched-mode power supply offering PFC drives this fullrange enclosure. Its powerful 15” woofer, housed in a bass reflex chassis, packs a mighty low-end punch. A specially designed dual horn section comprised of a 6” horn-loaded midrange driver and a 1” compression driver covers the middle and high frequency spectrum. Every component renders precisely the frequency range that it handles best, creating a homogeneous yet expansive composite sonic image that covers a very wide audience area. An integrated DSP ensures the different speakers phase and time are in perfect alignment. It also performs energy management tasks, controlling RMS and thermal limiters to prevent any impending overload.

System configurations on Page 20.
### Audio Data

<table>
<thead>
<tr>
<th></th>
<th>F212</th>
<th>F315</th>
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<tr>
<td>Frequency response -10 dB:</td>
<td>50 Hz - 20 kHz</td>
<td>47 Hz - 20 kHz</td>
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<td>Frequency response +3 dB:</td>
<td>65 Hz - 19 kHz</td>
<td>60 Hz - 19 kHz</td>
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<tr>
<td>Max SPL:</td>
<td>132 dB</td>
<td>131 dB</td>
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<tr>
<td>Bass/midrange woofer:</td>
<td>2x 12&quot;, 2.5&quot; voice coil, ADC™ phase alignment</td>
<td>15&quot; , 3&quot; voice coil, 6&quot; hornloaded, 2&quot; voice coil</td>
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<td>High frequency driver:</td>
<td>1&quot; RCF neodymium compression driver, 1.75&quot; voice coil</td>
<td>1&quot; compression driver, 1.5&quot; voice coil</td>
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<td>Horn:</td>
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<td>90&quot; x 40&quot; CD horn</td>
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<td>Rotatable:</td>
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### Amp and processor

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<td>1000-watt switched-mode power supply with PFC</td>
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<td>HF amp:</td>
<td>Class-D 250 W/RMS</td>
<td>Class-D 500 W/RMS</td>
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<tr>
<td>Bass amp:</td>
<td>Class-D 500 W/RMS</td>
<td>Class-D 500 W/RMS</td>
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<tr>
<td>Cooling:</td>
<td>Convection, fan-free</td>
<td>Convection, fan-free</td>
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<tr>
<td>System presets:</td>
<td>Fullrange, Array Size</td>
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<td>Limiter:</td>
<td>RMS, thermal limiters</td>
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### Input section

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<th>F315</th>
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<td>Signal link:</td>
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<td>XLR male balanced</td>
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<td>Input sensitivity:</td>
<td>Max. -3 dBu</td>
<td>Max. -3dBu</td>
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<td>Mains</td>
<td>Powercon Input and Link</td>
<td>PowerCon Input and Link</td>
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### Hardware

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<th></th>
<th>F212</th>
<th>F315</th>
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<tr>
<td>Enclosure:</td>
<td>Multiplex coated with textured black lacquer</td>
<td>Multiplex coated with textured black lacquer</td>
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<tr>
<td>Handles:</td>
<td>Two side grips and one on top</td>
<td>Two side grips, one on top</td>
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<tr>
<td>Pole mount:</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Angles up:</td>
<td>15° for array clusters</td>
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<tr>
<td>Grille:</td>
<td>Metal backed with acoustic foam rubber</td>
<td>Metal backed with acoustic foam rubber</td>
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<td>Rigging points:</td>
<td>12 x M10</td>
<td>12 x M10</td>
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<td>Dimensions (W x H x D):</td>
<td>360 x 930 x 500 mm</td>
<td>440 x 880 x 500 mm</td>
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<td>14.2&quot; x 36.6&quot; x 19.7&quot;</td>
<td>17.3&quot; x 34.6&quot; x 19.7&quot;</td>
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<tr>
<td>Weight:</td>
<td>31.5 Kg</td>
<td>31 Kg</td>
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<td></td>
<td>69.3 lbs</td>
<td>68.2 lbs</td>
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<tr>
<td>Optional accessories:</td>
<td>gig bag</td>
<td>gig bag</td>
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</table>
SUB 15 D

Active 15” band-pass subwoofer

Loaded with 15” woofer and featuring band-pass circuitry, the SUB 15D is a remarkably agile and responsive speaker system. Driven by an onboard digipro® digital power amp, this bin packs a powerful low-end punch perfect for rendering kick drums with high SPL. Like the SUB 18D, the SUB 15D operates in mono and stereo courtesy of the integrated active crossover, which also offers flexible configuration options. This subwoofer sets new standards in its class for weight, performance, and transportability. With digital power amps lightening the load, toting and setting up these bins is an exercise in convenience. This handling ease is an asset users are sure to value, particularly those frequently tasked to set up and tear down systems for live applications.

The SUB 15D is the perfect low-end enhancement for FLEXSYS F212 cabinets. Of course, it may also be combined with many other mid-/high-range units to configure powerful sound reinforcement systems.

State of the art digital power amps

The latest word in digital high-performance amplification, dBTechnologies’ digipro® amps leverage minimum weight and size to deliver maximum performance. Little energy is wasted as heat, so there is no need for fans. The power amps’ tremendous output achieves high SPL, faithful dynamic response unprecedented in its true-to-nature accuracy, and exceedingly muscular low end. Both SUB 15D and SUB 18D models feature advanced, ultra efficient switched-mode power supplies with power factor correction. PFC provides the juice these components need to perform to their full potential even under challenging conditions, for example, when confronted with low voltage supplies at live events.

Integrated System Controller

The integrated system controller in SUB 15D and SUB 18D cabinets operates in mono and stereo modes and adapts the cabinet to suit different satellite speakers and mid-/high-range units. It offers two switchable phase settings, 0° and 180°, as well as a choice of two cutoff frequencies.

Control LEDs afford users a view of the current operating status. A professional-grade locking Neutrik® PowerCon connector with a parallel output (Link) connects the enclosure to the mains supply.
SUB 18 D
Active 18” band-pass Subwoofer

The SUB 18D is the first-choice bass bin for users seeking powerful punch and ultra low-end response. Fine-tuned to augment and amplify the high-power 18” woofer’s audio performance, this custom-engineered band-pass enclosure outperforms conventional bass-reflex designs, achieving higher peak levels. A single SUB 18D, paired with, say, two Opera Live 402/405 cabinets, constitutes an extremely efficient and flexible satellite system for entertainers and DJs. Even a configuration as lean as this meets high expectations for bass response. Channels routed into the top panel make it easy to stack units and set up larger PA systems, for example, in combination with Flexsys F212 mid-/high-range units. The SUB 18D cabinet leaves small footprint that belies its high performance. And its low weight comes courtesy of the integrated ultra light digiproc® digital power amp – and it comes as a very pleasant surprise. Equipped with optional 100 mm casters, the unit is easy to transport.

Audio Data

<table>
<thead>
<tr>
<th>SUB 15D</th>
<th>SUB 18D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency response -10 dB:</td>
<td>35 Hz - x-over</td>
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<tr>
<td>Frequency response +3 dB:</td>
<td>40 Hz - 120 Hz</td>
</tr>
<tr>
<td>Max SPL:</td>
<td>133 dB</td>
</tr>
<tr>
<td>Design/Woofer:</td>
<td>Band-pass / 15”, 3” voice coil</td>
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Amp and processor

<table>
<thead>
<tr>
<th></th>
<th>SUB 15D</th>
<th>SUB 18D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply:</td>
<td>Switched-mode power supply with PFC</td>
<td>Switched-mode power supply with PFC</td>
</tr>
<tr>
<td>Bass:</td>
<td>Class-D 800 W/RMS</td>
<td>Class-D 1000 W/RMS</td>
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<tr>
<td>Cooling:</td>
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<td>Convection, fan-free</td>
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<tr>
<td>Limiter:</td>
<td>RMS, thermal limiters</td>
<td>RMS, thermal limiters</td>
</tr>
<tr>
<td>X-over frequency:</td>
<td>90Hz/120 Hz switchable, 24 dB/Oct.</td>
<td>90Hz/120 Hz switchable, 24 dB/Oct.</td>
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Input section

<table>
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<tbody>
<tr>
<td>Signal input:</td>
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<td>XLR fem. sym.</td>
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<tr>
<td>Signal link/ high-pass:</td>
<td>XLR male sym.</td>
<td>XLR male sym.</td>
</tr>
<tr>
<td>Input Sensitivity:</td>
<td>Max. -3dBu</td>
<td>Max. -3dBu</td>
</tr>
<tr>
<td>Mains:</td>
<td>PowerCon Input and Link</td>
<td>PowerCon Input and Link</td>
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Hardware

<table>
<thead>
<tr>
<th></th>
<th>SUB 15D</th>
<th>SUB 18D</th>
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<tbody>
<tr>
<td>Enclosure:</td>
<td>Multiplex coated with textured black lacquer</td>
<td>Multiplex coated with textured black lacquer</td>
</tr>
<tr>
<td>Handles:</td>
<td>Two side grips</td>
<td>Four side grips</td>
</tr>
<tr>
<td>Pole mount:</td>
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<td>530 x 700 x 600 mm</td>
</tr>
<tr>
<td></td>
<td>17.2” x 23.6” x 23.6”</td>
<td>20.9” x 27.5” x 23.6”</td>
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<tr>
<td>Weight:</td>
<td>32 kg / 70.4 lbs</td>
<td>42 kg / 92.4 lbs</td>
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</table>
Active subwoofers Class-H

SUB 12

400W Active 12” Subwoofer

The ideal companion to OPERA 110 and Basic 100 is our compact 12” active subwoofer with exiting technical specifications and powerful thrust. The 12” long excursion woofer with 3” voice coil moves up to top form in the bandpass housing. The innovative MT amp design provides the necessary propulsion at an extremely low weight. The MT amp design, produced in SMD technology, combines high-grade class-H technology with high-power components, to produce a lighter and more efficient unit. The integrated active crossover allows easy setup of the systems and can run both in Mono and Stereo mode. The temperature-controlled fan ensures adequate cooling, as the amplifier module is housed in an enclosed casing to reduce interference. The integrated dynamic soft clip limiter protects the system from overload. The 35 mm flange permits the use of a spacer bar.

SUB 12

- 12” Active-subwoofer
- MT-Amp 400 W/RMS
- 40 - 150 Hz (±3 dB)
- Max. SPL 127 dB
- Active stereo frequency softening
- 24 dB/oct. @ 100 Hz
- 2 x Neutrik Combo Input
- 2 x XLR Parallel-Out
- 2 x XLR X-Over-Out
- Phase reverse switch
- Dynamic soft-clip limiter
- Weight: only 18,9 kg / 42lb
- Dimensions (WxHxD): 520x360x500

SUB 12

12” Active-subwoofer
MT-Amp 400 W/RMS
40 - 150 Hz (±3 dB)
Max. SPL 127 dB
Active stereo frequency softening
24 dB/oct. @ 100 Hz
2 x Neutrik Combo Input
2 x XLR Parallel-Out
2 x XLR X-Over-Out
Phase reverse switch
Dynamic soft-clip limiter
Weight: only 18,9 kg / 42lb
Dimensions (WxHxD): 520x360x500
**SUB 15**

800 W Active 15” Subwoofer

The heart of the SUB15 is the high power 15” woofer with 3” coil, designed and manufactured by dBTechnologies, made to deliver maximum performance to this bandpass enclosure. Massive power reserves are guaranteed with the processor controlled class-H amplifier. Operational safety is assured with DC, Overheat, RFI protection circuitry, as well as a full wave Peak Limiter. The combination of our custom designed woofer with class-H amplifier, achieves a maximum SPL. The integrated active crossover, used in mono or stereo mode, gives max. flexibility - the SUB 15 can be used both as a single subwoofer supplying low-cut signals to 2 satellite speakers, or in mono mode with one subwoofer per side. The crossover is switchable at two frequencies. The phase can be reversed by 180° if the position of the SUB15 is not in line with the satellite speakers. As with all dBTechnologies subwoofers, the amplifier module is placed in a separate compartment inside the enclosure, to avoid “air noises” from the woofer through the cooling slots. The 4-speed temperature controlled fan assures safe operation even under hardest driving conditions. The fan is covered with a removable dust filter. Four control LED’s mirror the operating status of the system, to ease set-up, and safe operation. The SUB15 can be used in combination with OPERA LIVE speakers 402 and 405, or as a high performance low extension for existing systems.

**SUB 05**

400W Active 15” Subwoofer

The compact active subwoofer SUB05 is equipped with a high efficiency 15”Woofer and is driven by an integrated Class-H Amplifier with dB Technologies’ innovative MT-Amp-Design. The Bandpass construction provides a powerful bassreproduction with an impressive 129 dB SPL peak and a frequency response from 30-150 Hz.

The integrated active crossover can be used in stereo- or mono-mode which matches perfectly with the compact active speakers of the Basic- and OPERA LIVE 202 and 205 models. The wooden housing is made of Multilayer wood and is finished with a rugged black finish and is equipped with two handles and a pole mount cup. The light weight of the housing offers easy handling.

**SUB 05**

- 15” Active-subwoofer
- MT-Amp 400 W/RMS
- 30 - 150Hz (+/- 3 dB)
- Max. SPL 129 dB
- 2 x XLR/Jack Input
- 2 x XLR Parallel-Out
- 2 x XLR X-Over-Out
- Active stereo Xover24 dB/oct.
- Dynamic soft-clip limiter
- Weight 27 kg / 60lb
- Dimensions (WxHxD): 600x430x550

**SUB 15**

- 15” Active-subwoofer
- MT-Amp 800 W/RMS
- 40 – 120 Hz (±3 dB)
- Max. SPL 133dB
- 2 x Neutrik Combo Input
- 2 x XLR Parallel-Out
- 2 x XLR X-Over-Out
- Phase reverse switch
- Dynamic softclip limiter
- Weight: only 32 kg / 70,5 lb
- Dimensions (WxHxD): 600x430x600
The dBTechnologies stage monitors M10-2 and M12-4 PLUS combine outstanding sound reproduction characteristics with high sound pressure levels in a compact housing.

Because of the positioning of the high-quality components one above the other (in phase), both monitors are offering a high feedback resistance specially for microphone applications at a very linear set up over the full frequency range, which should make the sound loving musician very happy. The M10-2 is equipped with a 10" woofer and a 1" driver including a rotatable horn plus an integrated bi-amp power amp which allows sound pressure levels up to 120dB. A flat and narrow design allows a discrete positioning with a short distance to the performer.

The M12-4 PLUS offers an integrated pole mount and fly points which makes it a true multi purpose enclosure. The 12" woofer and the 1" compression driver with a rotatable horn, plus the powerful bi-amp amp provide a superb sound quality with strong low-mids and precise low frequency reproduction. Both monitors offer a softclip-limiter in the input stage and a contour-controller for raising or lowering the mid-frequencies.

The multiplex housing with black paint finish and rigid metal front grill with acoustic foam allow two different positioning angles.
STAGE MONITOR M12-4 Plus

- 2 way bi-amplified active monitor
- 12” dB Technologies Woofer, 2” coil
- 1” Compr. 90°x70°, rotatable
- 250 + 50 Watt/RMS, 600 Watt/PRG
- 68 – 19000 Hz (-3db)
- Max. SPL: 126 dB
- Housing made of 18mm black lacquered multiplex
- Two set-up angels, 30° & 60°
- Standmount, 3 x M10 flying points
- Weight: only 18,4 kg
- Dimensions (WxHxD): 400 x 387 x 525 mm

STAGE MONITOR M10-2 Plus

- 2 way bi-amplified active monitor
- 10” dB Technologies Woofer, 2” coil
- 1” Compr. 90°x70°, rotatable
- 150 + 50 Watt/RMS, 400 Watt/PRG
- 70 – 19000 Hz (-3db)
- Max. SPL: 120 dB
- Housing made of 18mm black lacquered multiplex
- Two set-up angels, 25° & 55°
- Weight: only 13,7 kg
- Dimensions (WxHxD): 380 x 286 x 493 mm
Opera Live
Active Speakers
OPERA LIVE Series

OPERA - high quality active speakers, with professional audio performance and a superior price-performance ratio.

LIVE-SERIES, the newest generation of the OPERA family, has been adapted to the requirements of musicians and DJs. As a result of its switchable sound set-up, it offers the best possible characteristics of sound reflection for live music as well as playback or speech. The new, more compact multi-functional cabinet creates an ideal connection between acoustic necessity and practical handling, in a very modern design.

The LIVE SERIES offers maximum flexibility and unique features such as a slanted rear side for monitor applications, integrated flange for stands, and 3 integrated M10 threaded fly points. Together with the bass speakers that have been specially designed for the OPERA LIVE series, the cabinet presents a very full and clear bass sound reflection (high sound pressure) with reduced resonance and little noise. The integrated tweeter offers a clear dispersion of 90° x 60°.

Three handles, one on the top and two on the side make it very easy to carry.

All models are bi-amped and are monitored by an integrated audio controller. In addition to the active splitting of the two ways, the audio controller facilitates a particularly clear sound, by phase and delay adjustment. Furthermore, the audio controller guarantees a flat and linear reproduction of all frequencies across the entire audio range. The limiter ensures a maximum of operational reliability, even when driving the speaker beyond its limits, indicated by a control LED.

All models* of the LIVE series offer three switchable sound setups - FLAT (neutral), MUSIC and SPEECH. This makes it possible to adapt it to the respective application without any further external equipment. The models 402 and 405 are equipped with a special compression driver. Because of its 1.5” pure titanium diaphragm, the sound is clear, linear, and feedback resistant.

<table>
<thead>
<tr>
<th>Model</th>
<th>Power (RMS)</th>
<th>Power (Music)</th>
<th>Speaker</th>
<th>Frequency response</th>
<th>Max. SPL</th>
<th>Crossover</th>
<th>Sensitivity</th>
<th>Input connection</th>
<th>Output connection</th>
<th>Impedance</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERA Live 210</td>
<td>150 + 50 W</td>
<td>300 + 100 W</td>
<td>10&quot; dB Bass</td>
<td>68-16000 Hz</td>
<td>120dB</td>
<td>2000 Hz</td>
<td>-40 bis 0dB</td>
<td>6,3mm Jack unbal. / XLR bal.</td>
<td>XLR bal., parallel</td>
<td>20 K Ohm bal., 10 K Ohm unbal.</td>
<td>312 x 550 x 280 mm</td>
<td>11,9 kg / 28,7 lb</td>
</tr>
<tr>
<td>OPERA Live 202</td>
<td>150 + 50 W</td>
<td>300 + 100 W</td>
<td>12&quot; dB Bass/2&quot; Voice coil</td>
<td>68 – 18000 Hz</td>
<td>120dB</td>
<td>2000 Hz</td>
<td>-40 bis 0dB</td>
<td>6,3mm Jack unbal. / XLR bal.</td>
<td>XLR bal., parallel</td>
<td>20 K Ohm bal., 10 K Ohm unbal.</td>
<td>406 x 650 x 350 mm</td>
<td>16,9 kg / 36,4 lb</td>
</tr>
<tr>
<td>OPERA Live 205</td>
<td>150 + 50 W</td>
<td>300 + 100 W</td>
<td>15&quot; dB Bass/2,5&quot; Voice coil</td>
<td>60 – 18000 Hz</td>
<td>120dB</td>
<td>2000 Hz</td>
<td>-40 bis 0dB</td>
<td>6,3mm Jack unbal. / XLR bal.</td>
<td>XLR bal., parallel</td>
<td>20 K Ohm bal., 10 K Ohm unbal.</td>
<td>406 x 650 x 350 mm</td>
<td>17,3 kg / 38 lb</td>
</tr>
<tr>
<td>OPERA Live 402</td>
<td>250 + 50 W</td>
<td>500 + 100 W</td>
<td>15&quot; dB Bass/2,5&quot; Voice coil</td>
<td>60 – 18000 Hz</td>
<td>120dB</td>
<td>2000 Hz</td>
<td>-40 bis 0dB</td>
<td>6,3mm Jack unbal. / XLR bal.</td>
<td>XLR bal., parallel</td>
<td>20 K Ohm bal., 10 K Ohm unbal.</td>
<td>406 x 650 x 350 mm</td>
<td>18,6 kg / 39,7 lb</td>
</tr>
<tr>
<td>OPERA Live 405</td>
<td>250 + 50 W</td>
<td>500 + 100 W</td>
<td>15&quot; dB Bass/2,5&quot; Voice coil</td>
<td>60 – 18000 Hz</td>
<td>120dB</td>
<td>2000 Hz</td>
<td>-40 bis 0dB</td>
<td>6,3mm Jack unbal. / XLR bal.</td>
<td>XLR bal., parallel</td>
<td>20 K Ohm bal., 10 K Ohm unbal.</td>
<td>406 x 650 x 350 mm</td>
<td>19,7 kg / 41,9 lb</td>
</tr>
</tbody>
</table>

* not for Live210

Accessories

| Gig Bag TT04 | Opera Live 202/205/402/405 |
| Tilt-adaptor AFL02 | Opera Live 210 |
| Bracket WB 06 | Opera Live 210 |
| Wallmount bracket WB 04 | Opera Live 210 |

Number 1 - Soundcheck Magazine Readers Poll 2006
This Speaker Line from dBTechnologies is made for the budget end of the market, providing a high quality product with great audio features and performance.

BASIC LINE is designed to match the demands of entry-level applications, such as DJ’s, schools, and churches alike, where budget orientated solutions are required. There are two different models available, with power amps of 160 or 275 Watts RMS power.

Both Models are equipped with a dBTechnologies 12” woofer and a 1” driver, powered by 2 separate amplifiers with integrated phase and sound correction circuits. The speaker is protected against overload and distortion through a built in Limiter, with a Status-LED indicator. The input sensitivity can be switched from Line to Microphone level, using the XLR or Jack input plug. The output level can be adjusted with a volume control.

**BASIC 100**
- 2 way bi-amplified active loudspeaker
- 10” Bass / 1” HF 90°x60°
- 70+20 Watts
- Freq. response: 70-20000 Hz
- Max. SPL: 117 dB SPL
- Multifunctional housing
- XLR and jack input
- Mic-/Line input, switchable
- XLR-Parallel-Out
- Dynamic softclip limiter
- Weight: 9 kg

**BASIC 200**
- 2 way bi-amplified active loudspeaker
- 12” Woofer / 1” HF driver
- 120 + 40 Watts
- Freq. response: 65-18,000 Hz
- Max. SPL: 118 dB
- Multifunctional housing
- XLR and jack input
- Mic-/Line input, switchable
- Dynamic softclip limiter
- Dimensions 400x600x345mm (LxHxD)
- Weight: 14.5 kg / 32 lb
**BASIC 100**
- Power RMS: 70 + 20W
- Freq. response: 70-20000 Hz
- Crossover: 2000 Hz
- SPL max.: 117 dB
- Speaker: 1 woofer 10”
- Sensitivity: -40dB/0dB (switchable)
- Dimension: 312 x 550 x 280 mm
- Weight: 9 kg / 19.8 lb

**BASIC 200**
- Power RMS: 120 + 40W
- Freq. response: 65-18000 Hz
- Crossover: 2000 Hz
- SPL max.: 118 dB
- Speaker: 1 woofer 12”
- Sensitivity: -40dB/0dB (switchable)
- Dimension: 400 x 600 x 345 mm
- Weight: 14.5 Kg / 32 lb

**BASIC 400**
- Power RMS: 225 + 50W
- Freq. response: 60-18000 Hz
- Crossover: 2000 Hz
- SPL max.: 125 dB
- Speaker: 1 woofer 12”
- Sensitivity: -40dB/0dB (switchable)
- Dimension: 400 x 600 x 345 mm
- Weight: 16.5 Kg / 36.4 lb

### Accessories
- Gig Bag TT 03
  - Basic 200/400
- Bracket WB 06
  - Basic 100
- Wallmount Bracket WB 07
  - Basic 200/400

**BASIC 400**
- 2 way bi-amplified active loudspeaker
- 12” Woofer / 1” HF driver
- 225 + 50 Watts
- Freq. response: 60-18,000 Hz
- Max. SPL: 125 dB
- Multifunctional housing
- XLR and jack input
- Mic/Line input, switchable
- Dynamic softclip limiter
- Dimensions 400x600x345mm (LxHxD)
- Weight: 16.5 kg / 36.4 lb
FLEXSYS GALA and CONCERT System

Active three-way PA systems

Thanks to the remarkably compact size and extended flexibility, the Flexsys GALA or CONCERT systems are the perfect sound reinforcement solution for applications demanding a high-performance system that is easy to set up and transport even in very limited space.

GALA System
- 2 x F212 mid-/high-range units
- 4 x SUB 15D Subwoofer
- Total power output 4,700 W/RMS

CONCERT System
- 2 x F212 mid-/high-range units
- 4 x SUB 18D Subwoofer
- Total power output 5,500 W/RMS

Entertainer M500
2 x BASIC 100 + 1 x SUB 12
3-Way Active, 580 W/RMS

Entertainer L600
2 x BASIC 100
+ 1 x SUB 05
3-Way Active, 580 W/RMS
**Entertainer X1100**
2 x OPERA Live 202 + 1 x SUB15
3-Way Active, 1200 W/RMS

**Compact 1200C**
2 x OPERA 210 + 2 x SUB12
3-Way Active, 1200 W/RMS

**CLUB System**
2 x OPERA LIVE 202 + 2 x SUB 05
3-Way Active, 1200 W/RMS

**CLUB EX System**
2 x OPERA LIVE 402 + 2 x SUB15
3-Way Active, 2200 W/RMS

**FIFTY LINE System 118 PLUS**
2 x FL10 + 2 x FL15 + 2 x FL18
3-Way Active, 3200 W/RMS

**FIFTY LINE System 218 PLUS**
2 x FL10 + 2 x FL15 + 4 x FL18
3-Way Active, 4800 W/RMS
The TWIN series consists of two models with identical measurements. The TWIN 128/228 is equipped with 2 x 8” woofers in combination with a 1” tweeter. The overall mechanical design, with its full front metal grill, make this enclosure particularly suitable for fixed installations and touring applications. The two 8” long-throw woofers and the 1” tweeter with 90°x60° horn, create a very homogeneous and linear sound characteristics with extensive reach. This multifunctional cabinet offers many placement options, for instance as a floor monitor (60° or 45°) by turning the horn. In addition horizontal and vertical mounting hardware is available.

For permanent installation, the optional loudspeaker mount WB04 or the clamp WB06 is available, and the integrated flange permits installation on a standard speaker stand. The integrated bi-amp amplifier offers separated amplification for tweeter and bass, and in addition, the input stage is also equipped with a soft clip limiter.

Both models can be used with various active dBTechnologies Subwoofers.
**TWIN 128 - TWIN 128 White**

- 2 way bi-amplified
- 2 x 8” Bass / 1” HF 90°x60°
- 70+20 W/RMS, 180 W/PRG
- Freq. response: 80-18,000 Hz
- Max. SPL: 118 dB
- Multi-function housing
- Combined XLR/ jack input
- Mic-/Line input, switchable
- XLR parallel output
- Dynamic limiter
- Weight: 10 kg / 22 lb
- Dimensions: 312 x 550 x 280

**TWIN 228**

- 2 way bi-amplified
- 2 x 8” Bass / 1” HF 90°x60°
- 150+50 W/RMS, 300 W/PRG
- Freq. response: 68-18,000 Hz
- Max. SPL: 121 dB
- Multi-function housing
- Combined XLR/ jack input
- Mic-/Line input, switchable
- XLR parallel output
- Dynamic limiter
- Weight: 12 kg / 26 lb
- Dimensions: 312 x 550 x 280
The K-Series is a range of compact active speakers for versatile applications like mobile use or fixed installations. The K162 has a multifunctional housing with a special shaped backside for monitor use.

The detailed input-section provides XLR- and Jack inputs with switchable Mic-/Linesensitivity and an additional RCA Stereo-input which is independent from the volume-control, to allow small setups, e.g. one Microphone + CDPlayer without an additional mixer.

As options, stand adaptors for speaker stands (SN120) and microphone stands (SN130), a wall mount bracket (WB03) and a useful carrier handle AK50 (K162) are available.

K70

The K70 is equipped with a 5" Woofer and a tweeter. The integrated amplifier provides 50W/RMS and is equipped with an integrated Limiter for maximum reliability.

- Compact 2-Way Active speaker
- 5" Woofer + Tweeter
- 50 W/RMS
- 100 - 16,000 Hz
- Mic-/Line, XLR-Jack Input
- 2 x RCA Chinch Input
- SPL max. 101 dB
- Dimensions 170 x 270 x 185 mm
- Weight 3.5 kg / 7.7lb

K162

The top model K162 offers a perfect sound and a high SPL at a very compact size and light weight. Driven by the integrated 65W/RMS amplifier, the two 6.5" Woorfer and the tweeter convince by a high SPL of 110 dB and a wide range of response from 85 - 19,000 Hz.

- Compact 2-Way Active speaker
- 2 x 6.5" Woofer + Tweeter
- 65 W/RMS
- 85 - 19,000 Hz
- Mic-/Line, XLR-Jack Input
- 2 x RCA Chinch Input
- SPL max. 110 dB
- Dimensions 210 x 350 x 270 mm
- Weight 5.5 kg / 12.1 lb
The LIVE Series loudspeakers were designed for portable or installed applications. Two models are available: the L 80 35 W/RMS and the L 160 65 W/RMS – both versions come in the same compact enclosure which can be wall mounted, used free-standing or mounted on a microphone stand.

These cabinets feature two full range, 5” double cone loudspeakers with mechanical phase correction. Their tailored frequency response makes them ideal for speech and music reproduction.

Featuring soft-clip limiters for total protection against overloading, these compact loudspeakers have both microphone and line-level signal inputs via a combo XLR/1/4” jack connector.

For applications such as recording studios and monitoring we have developed the MONITOR M160, offering the widest frequency response in a compact design with accurate sound reproduction. The M160 is a bi-amped system (60 + 20 W/RMS) with a 1" soft-dome tweeter and a 6" bass loudspeaker with a frequency range from 50Hz to 20 KHz.

L&M Series

<table>
<thead>
<tr>
<th>L 80</th>
<th>L 160</th>
<th>M 160</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (Music)</td>
<td>80 W</td>
<td>160 W</td>
</tr>
<tr>
<td>Power (RMS)</td>
<td>35 W</td>
<td>65 W</td>
</tr>
<tr>
<td>Freq. response</td>
<td>65 Hz – 18 kHz</td>
<td>65 Hz – 18 kHz</td>
</tr>
<tr>
<td>SPL, max</td>
<td>100</td>
<td>110</td>
</tr>
<tr>
<td>Speaker</td>
<td>2 x 5”</td>
<td>2 x 5”</td>
</tr>
<tr>
<td>Inputs</td>
<td>Neutrik Combo® 6,3mm Jack/XLR bal.</td>
<td>Neutrik Combo® 6,3mm Jack/XLR bal.</td>
</tr>
<tr>
<td>Outputs</td>
<td>LINK-OUT XLR bal.</td>
<td>LINK-OUT RCA Cinch</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>–50– +10 dBm, regelbar</td>
<td>–50 bis +10 dBm</td>
</tr>
<tr>
<td>Impedance</td>
<td>200 Ohms – 47 kOhms</td>
<td>47 kOhms</td>
</tr>
<tr>
<td>Dimension</td>
<td>195 x 195 x 317 mm</td>
<td>195 x 195 x 317 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>3,1 kg</td>
<td>4,6 kg</td>
</tr>
</tbody>
</table>

Wallmount bracket WB 03 W
Wallmount bracket WB 03
Mic stand adapter SN120
2AKP340
No Plug - just Play.

The compact active OPERA 110 mobile loudspeaker with integrated mixer, optional wireless UHF receiver, and switchable powering through the integrated A/C, 12V or normal 230V power supply. Maximum flexibility, easy to use with endless application possibilities. The specially designed power amplifier with auto-sleep mode allows powering, regardless of the volume level for up to 12 hours. There are inputs for mics, CD player, or laptop, which can be separately adjusted. For the voltage supply of a portable CD player or a slave unit, a power socket with adjustable voltage is available on the control panel. The 10”/ 1” components of the OPERA 110 convince through high speech clarity with a pleasant vocal sound and impressive sound reproduction. For use with a loudspeaker stand, a 35mm standard flange is built in the housing. The optional integrated wireless receivers can be combined with either handheld or pocketpack with lavaliere or headsets. The optional time delay can be adjusted by two rotary switches and can be bypassed.

Multi-Purpose.

If you need several loudspeakers, you can drive as many OPERA 110 MOBILES as you like from only one transmitter, within the possible range of the transmitter [Example1]. The range of the transmitter is between 70 and 100 m, heavily dependent on the environment. For longer distances the optional directional antenna set RDA 900 should be used for better operating reliability. With this, distances well above 100 m can be achieved. If the audio signal, as well as a microphone signal, applied to the first unit (e.g. CD) is to be sent to other OPERA 110 MOBILES, this can be achieved with the MS 110 set [Example2]. The optional RMS 110 master - slave set contains a directional antenna with integrated transmitter for transmitting the complete audio signal from the first unit to other OPERA 110 MOBILES using a second carrier frequency. For simple connection there is both a low volt output with adjustable voltage between 3 - 12 volts and a mix output for 6.3 mm jack available.
There are 3 different versions available:

**Opera 110 Mobile (standard)**
- integrated 16 channel UHF receiver

**Opera 110 Mobile TD**
- integrated 16 channel UHF receiver
- integrated delay

**Opera 110 Mobile CTD**
- without wireless receiver
- integrated delay

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>851M</td>
<td>UHF handheld, 2 freq. switchable</td>
<td></td>
</tr>
<tr>
<td>860M</td>
<td>UHF handheld, 16 freq. switchable</td>
<td></td>
</tr>
<tr>
<td>851P</td>
<td>UHF pocket, 2 freq. switchable</td>
<td></td>
</tr>
<tr>
<td>860P</td>
<td>UHF pocket, 16 freq. switchable</td>
<td></td>
</tr>
</tbody>
</table>

**HMB 100S**
Headset microphone black, condensor capsule, incl. windshield

**HMS 200S**
Headset microphone flesh, condensor capsule, incl. windshield, waterproof

**HMS 2000S**
Headset microphone flesh, condensor capsule, cardioid incl. windshield, waterproof

**LMB 100S**
Lavaliere microphone black, condensor capsule, incl. windshield,

**LMB 1000S**
Lavaliere microphone black, condensor capsule, cardioid incl. windshield

**Accessories**

**Example 1**

**Example 2**

** OPERA Mobile with Antenna MS110**

**Gig-Bag TT02**
The passive loudspeaker range ARENA offers four different high-quality 2-way enclosures and three powerful subwoofers. This series can be used for many different mobile or fixed install applications due to its extensive configurations. All high/mid units use a multipurpose housing made out of multilayer birch wood, offering a pole mount, 12 professional flypoints and a slanted backside for monitor applications.

Due to the premium loudspeaker components, all units are able to handle high sound pressure levels. They offer outstanding, specially designed constant directivity horns which are rotatable by 90°, thanks to the symmetrical shape.

The low weight of the enclosures allows easy handling. All models are equipped with a black front grill with acoustic foam layer; the housing is finished with black paint.
ARENA 8
The ARENA 8 is equipped with a 8” woofer and a 1” driver with a rotatable CD horn. The unit can handle 200W/RMS power and provides sound pressure levels of up to 122dB. The ARENA 8 is recommended for speech and background music, as a very compact stage monitor or combined with the ARENA SW12 subwoofer as a small PA system.

Arena 10
The 10” woofer and the 1” driver with rotatable CD horn, can handle up to 300W/RMS and are able to put out up to 125dB spl. ARENA 10 offers a superb sound quality and can be used as a standard fullrange enclosure (at reduced low frequency reproduction) or in combination with the ARENA SW15 subwoofer. Due to the extensive configuration and sound performance the ARENA 10 is one of a kind.

Arena 12
A 12” woofer and a high-quality 1” compression driver with a CD horn, makes the ARENA12 the top all-rounder within the series. For small venues usable as a full range enclosure but also to be driven together with ARENA SW15 or ARENA SW18 as a high-profile compact PA-System.

Arena 15
Due to its powerful low frequency reproduction and a compression driver with a 1.4” voice coil the ARENA 15 is the right choice for full range applications. It convinces with a high SPL and the low weight of only 23.7kg guarantees easy handling. Like all ARENA-Series models the ARENA 15 provides 12 professional fly-points with metalbracings. The enclosure can be combined with ARENA SW15 and ARENA SW18 subwoofers.

### Specifications

<table>
<thead>
<tr>
<th></th>
<th>ARENA 8</th>
<th>ARENA 10</th>
<th>ARENA 12</th>
<th>ARENA 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (RMS)</td>
<td>200 W</td>
<td>300 W</td>
<td>400 W</td>
<td>400 W</td>
</tr>
<tr>
<td>Power (PRG)</td>
<td>400 W</td>
<td>600 W</td>
<td>800 W</td>
<td>800 W</td>
</tr>
<tr>
<td>Speaker</td>
<td>8” woofer</td>
<td>10” woofer</td>
<td>12” woofer</td>
<td>15” woofer</td>
</tr>
<tr>
<td></td>
<td>1.5” coil</td>
<td>2” coil</td>
<td>2” voice coil</td>
<td>2.5” voice coil</td>
</tr>
<tr>
<td></td>
<td>1” driver</td>
<td>1” driver</td>
<td>1” comp. driver</td>
<td>1” comp. driver</td>
</tr>
<tr>
<td></td>
<td>1.4” coil</td>
<td>1.4” coil</td>
<td>1.4” coil</td>
<td></td>
</tr>
<tr>
<td>Freq. response (-3dB)</td>
<td>100 - 19000 Hz</td>
<td>95 - 19000 Hz</td>
<td>80 - 19000 Hz</td>
<td>80 - 19000 Hz</td>
</tr>
<tr>
<td>SPL max.</td>
<td>122 dB</td>
<td>125 dB</td>
<td>127 dB</td>
<td>129 dB</td>
</tr>
<tr>
<td>Crossover</td>
<td>2100 Hz</td>
<td>2100 Hz</td>
<td>2000 Hz</td>
<td>2000 Hz</td>
</tr>
<tr>
<td>Dispersion Angle</td>
<td>90°x70”</td>
<td>90°x70”</td>
<td>90°x40”</td>
<td>90°x40”</td>
</tr>
<tr>
<td>Connectors (In/Out)</td>
<td>2xNeutrik Speakon®</td>
<td>2xNeutrik Speakon®</td>
<td>2xNeutrik Speakon®</td>
<td>2xNeutrik Speakon®</td>
</tr>
<tr>
<td>Impedance</td>
<td>8 Ohms</td>
<td>8 Ohms</td>
<td>8 Ohms</td>
<td>8 Ohms</td>
</tr>
<tr>
<td>Flying Points</td>
<td>12 x M8</td>
<td>10 x M8</td>
<td>12 x M10</td>
<td>12 x M10</td>
</tr>
<tr>
<td>Pole Mount / Handles</td>
<td>35mm/1</td>
<td>35mm/1</td>
<td>35mm/2</td>
<td>35mm/2</td>
</tr>
<tr>
<td>Dimensions (WxHxD)</td>
<td>270 x 458 x 270</td>
<td>321 x 508 x 320</td>
<td>379 x 631 x 378</td>
<td>458 x 710 x 453</td>
</tr>
<tr>
<td>Weight</td>
<td>9.3 kg</td>
<td>12.2 kg</td>
<td>17.8 kg</td>
<td>23.7 kg</td>
</tr>
</tbody>
</table>

### Accessories

- **WB A08-15**: Arena 8 wallmount bracket
- **WB A10**: Arena 10 wallmount bracket
- **WB A12**: Arena 12 wallmount bracket
- **WB A15**: Arena 15 wallmount bracket
- **WB A810**: Arena 8/10 wallmount bracket, rotatable
- **TE M10**: 4 x M10 Eye
- **TE M8**: 4 x M8 Eye
Subwoofer SW 12
The ARENA SW 12 is an extraordinarily compact and light band-pass subwoofer loaded with a powerful 12" woofer and tuned to deliver tight, punchy low-end response. The multiplex enclosure is equipped with a pole mount. Courtesy of the integrated crossover, a single power amp suffices to quickly set up satellite systems comprising up to 8 Arena mid-/high-range units.

Subwoofer SW 15
The ARENA SW15 offers a 15" woofer which can take a load up to 500W/RMS putting out an extraordinary SPL very powerful low end frequencies. It can be easily combined with ARENA10 and ARENA12 high/mid units, due to the internal passive crossover. Also possible is bi-amp operation using an external crossover unit. The multi layer birch wood housing offers two handles and one M20 thread for mounting a pole mount plus threads on the back to fit a set of wheels.

Subwoofer SW 18
The 4" voice coil of the ARENA SW18 delivers powerful and accurate low frequency reproduction, down to 35Hz, at a maximum load of 600W/RMS. Sound pressure levels of up to 132dB at a crossover frequency of 150Hz, using the internal crossover make this subwoofer the professionals choice. This woofer can be easily combined with the ARENA satellite units, using just one external power amp. Also possible is biamp operation using an external crossover unit.

**ARENA SW12**
- Power (RMS): 400 W
- Power (PRG): 800 W
- Speaker: 12" dB woofer
- Freq. response (-3dB): 40-150 Hz
- SPL max.: 124 dB
- Crossover: 150 Hz Low-Cut+High-Cut
- Slope: 12 dB/Oct.
- Connectors (In/Out): Neutrik Speakon®
- Impedance: 8 Ohms
- Pole Mount / Handles: M20/ 2 x on side
- Dimensions (WxHxD): 360 x 520 x 500 mm
- Weight: 17 kg

**ARENA SW15**
- Power (RMS): 500 W
- Power (PRG): 1000 W
- Speaker: 15" woofer, 3" coil
- Freq. response (-3dB): 40-150 Hz
- SPL max.: 130 dB
- Crossover: 150 Hz Low Cut
- Slope: 12 dB/Oct.
- Connectors (In/Out): 2x Neutrik Speakon®
- Impedance: 8 Ohms
- Pole Mount / Handles: M20/2 x on side
- Dimensions (WxHxD): 470 x 600 x 600 mm
- Weight: 34 kg

**ARENA SW18**
- Power (RMS): 600 W
- Power (PRG): 1200 W
- Speaker: 18" woofer, 4" coil
- Freq. response (-3dB): 35 – 150 Hz
- SPL max.: 132 dB
- Crossover: 150 Hz Low-Cut
- Slope: 12 dB/Oct.
- Connectors (In/Out): 2x Neutrik Speakon®
- Impedance: 8 Ohms
- Pole Mount / Handles: M20/2 x on side
- Dimensions (WxHxD): 565 x 700 x 700 mm
- Weight: 44 kg
Systems Combinations

**System 8-12**
1200 W RMS

**System 10-15**
1600 W RMS

**System 12-215***
2800 W RMS

**System 12-18**
2000 W RMS

* ASX18 or DSX24 recommended for biamp use
d8Technologies’ HPA series power amps deliver high performance and quality at an astonishingly affordable price. Designed for professional use in touring racks as well as for fixed installation, the series comprises four Class-(HD) models that deliver 2x 510 W/RMS to 2x 1050 W/RMS at 4 ohms. Featuring Class-(HD) technology with and weighing just 14 kg, the flagship HPA 3100L power amp delivers up to 3400 W/RMS output. It comes with a PFC switched-mode power supply.

Engineered for utmost ease of use, these amps offer connection options - XLR inputs for patching in signals as well as Speakon ports for connecting speaker systems. What’s more, their extensive protective circuits ensure reliable, safe operation.

**HPA Features**

- 4 models ranging from 2x 510 W/RMS to 2x 1200 W/RMS at 4 ohms
- Class-(HD) technology to minimize thermal load and maximize efficiency
- Fast response and dynamic sonic image with lowest distortion factors
- Easy to configure in mono/stereo/bridge modes
- Extensive protective circuits ensure high reliability and operating safety
- Front panel signal and clip and protect LED indicators
- Operable at 2 ohms
- Speakon connectors
- 2 HU, 19”, low weight for easy transportation
- Switchable limiter

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**HPA Series**

**HPA 1000**
- Power output, stereo, RMS @ 2 ohms: 2x 510 W
- Power output, stereo, RMS @ 4 ohms: 2x 740 W
- Power output, stereo, RMS @ 8 ohms: 2x 930 W
- Power output, bridged, RMS @ 4 ohms: 2x 1200 W
- Power output, bridged, RMS @ 8 ohms: 2x 1520 W
- Amp class: Class-HD
- Frequency response: 20 Hz - 20 kHz
- THD @ 1 kHz: <0.05%, 1 dB below clip
- Damping factor @ 8 ohms: >300
- Slew rate: 50 V/μs
- Signal-to-noise ratio: 105 dB
- Input sensitivity: 26 dB / 32 dB / 1.4 V
- Input impedance: 20 kΩ/10 kΩ balanced
- Protective circuits: Temp., DC, RFI, short-circuit
- Cooling: Temperature-controlled fan
- Dimensions (W x H x D): 482 x 89 mm x 402
- Rack height: 2 HU
- Weight: 15 kg

**HPA 1400**
- Power output, stereo, RMS @ 2 ohms: 2x 740 W
- Power output, stereo, RMS @ 4 ohms: 2x 1050 W
- Power output, stereo, RMS @ 8 ohms: 2x 1240 W
- Power output, bridged, RMS @ 4 ohms: 2x 1700 W
- Power output, bridged, RMS @ 8 ohms: 2x 2100 W
- Amp class: Class-HD
- Frequency response: 20 Hz - 20 kHz
- THD @ 1 kHz: <0.05%, 1 dB below clip
- Damping factor @ 8 ohms: >300
- Slew rate: 50 V/μs
- Signal-to-noise ratio: 105 dB
- Input sensitivity: 26 dB / 32 dB / 1.4 V
- Input impedance: 20 kΩ/10 kΩ balanced
- Protective circuits: Temp., DC, RFI, short-circuit
- Cooling: Temperature-controlled fan
- Dimensions (W x H x D): 482 x 89 mm x 402
- Rack height: 2 HU
- Weight: 17 kg

**HPA 2800**
- Power output, stereo, RMS @ 2 ohms: 2x 1240 W
- Power output, stereo, RMS @ 4 ohms: 2x 1700 W
- Power output, stereo, RMS @ 8 ohms: 2x 2100 W
- Power output, bridged, RMS @ 4 ohms: 1x 2800 W
- Power output, bridged, RMS @ 8 ohms: 1x 3400 W
- Amp class: Class-HD
- Frequency response: 20 Hz - 20 kHz
- THD @ 1 kHz: <0.05%, 1 dB below clip
- Damping factor @ 8 ohms: >300
- Slew rate: 50 V/μs
- Signal-to-noise ratio: 106 dB
- Input sensitivity: 26 dB / 32 dB / 1.4 V
- Input impedance: 20 kΩ/10 kΩ balanced
- Protective circuits: Temp., DC, RFI, short-circuit
- Cooling: Temperature-controlled fan
- Dimensions (W x H x D): 482 x 89 mm x 402
- Rack height: 2 HU
- Weight: 21 kg

**HPA 3100 L**
- Power output, stereo, RMS @ 2 ohms: 2x 1700 W
- Power output, stereo, RMS @ 4 ohms: 2x 2200 W
- Power output, stereo, RMS @ 8 ohms: 2x 2400 W
- Power output, bridged, RMS @ 4 ohms: 1x 3400 W
- Power output, bridged, RMS @ 8 ohms: 1x 4200 W
- Amp class: Class-HD
- Frequency response: 20 Hz - 20 kHz
- THD @ 1 kHz: <0.05%, 1 dB below clip
- Damping factor @ 8 ohms: >300
- Slew rate: 55 V/μs
- Signal-to-noise ratio: 108 dB
- Input sensitivity: 26 dB / 32 dB / 1.4 V
- Input impedance: 20 kΩ/10 kΩ balanced
- Protective circuits: Temp., DC, RFI, short-circuit
- Cooling: Temperature-controlled fan
- Dimensions (W x H x D): 482 x 89 mm x 420
- Rack height: 2 HU
- Weight: 14 kg
DSX24

Digital speaker controller featuring a USB interface

The DSX24 is a versatile digital controller well suited for use in touring racks as well as for fixed installation. Featuring two inputs and four outputs, this unit delivers excellent performance in combinations with two-way active stereo systems comprising subwoofers and mid-/high-range units that see such widespread on stages all over the world.

An extensive set of signal processing tools such as delay times ranging up to 3000 msec and four parametric EQs & shelving filters for each input/output enables users to precision-tune speaker systems to suit the given venue and operating conditions. Each output features a variable digital limiter to protect speaker components. The integrated USB interface allows users to remotely manage and control the system conveniently and quickly using a PC. With the benefit of controller software, users can easily create presets for dBTechnologies speakers as well as custom configurations and load these programs to the DSX24.

Users with a preference for analog handling will love the hands-on controls. They afford direct access to key parameters by simply pushing a button or twisting a knob on the front panel. A blue backlit display with 2x32 characters and LED level meters above each input and output afford users a clear view of the unit’s performance.

Technical Data DSX24

Inputs/outputs: 2/4
Display: Blue LCD, 2x32 characters
Control features: Parameter jog-wheel, Mute and Edit buttons for each channel
Read-outs: 4-segment LED; signals and limit meters for each channel
Signal input: XLR female, balanced
Signal output: XLR male, balanced
Sample rate: 48 kHz/32 bits
Dynamic range: >110 dB(A)
Frequency range: 20 Hz to 22 kHz, +/-0.5 dB

Signal processing
Input level: Adjustable from -80 to +12 dB via front panel knobs
Peak output level: +22 dBu
Delay: up to 3000 ms
Input EQ: 4 param./channel and shelving
Output EQ: 4 param./channel and shelving
EQ gain: +/-20 dB, in 0.5 dB steps
EQ bandwidth: Octave or Q (quality)
Signal routing: Freely selectable A, B, A+B Matrix
X-Over: HP & LP freely configurable with 12, 18, 24 and 48 dB/octave
Bessel, Butterworth, Linkwitz Riley
Limiter: Adjustable THD and freely selectable
Attack, Hold, and Release times
PC interface: USB for remote control and data interchange
Presets: 30 freely programable presets
Mains: 90V - 240 V AC via an IEC connector
Dimensions (W x H x D): 483 x 44 (1 HU) x 27 mm
19" x 17.3” x 10.6”
Weight: 3.5 kg /7.7 lbs

ASX 18

- active 2-way crossover
- variable crossover frequencies
- 2 x XLR/jack input
- 2 x HF-XLR-Output
- 2 x LF-XLR-Output
PLM Compact Mixers

Compact and very easy to use, PLM mixing consoles boast special features such as USB interfaces and 24-bit signal processors with preprogrammed digital effects that make them the tools of choice for many applications. The PLM 16 Fx even offers a seven-band graphic EQ.

PLM 5.2 USB
- 5 input channels
- 1 Mono input equipped with balanced microphone-level XLR and 1/4” (6.3 mm) line-level connectors with adjustable Gain
- 2-band EQ in the Mono input
- 2 Stereo inputs equipped with balanced 1/4” (6.3 mm) jacks
- USB interface for rendering MP3s from a computer
- Mono input Panorama knob and Stereo input Balance knobs
- Channel Level knob for every input
- Peak LED for the Mono input
- Balanced 1/4” (6.3 mm) Master output jacks
- Headphones Out with volume control
- Tape/CD RCA connector in/outs, routable to the Master Mix or Headphones Out
- Dual 4-segment LED level meters
- External power supply

PLM 8.4 Fx
- 8 input channels
- 4 Mono inputs equipped with balanced microphone-level XLR and 1/4” (6.3 mm) line-level connectors with adjustable Gain and switchable 48V phantom power
- 3-band EQ in the Mono inputs
- 2 Stereo inputs equipped with balanced 1/4” (6.3 mm) jacks
- Mono input Panorama knobs and Stereo input Balance knobs
- Channel Level knob for every input
- Peak LED for the Mono inputs
- Aux Send for external effects and the Monitor bus
- Stereo Aux Returns
- Built-in 24-bit FX DSP with numeric display, 16 presets, Effect Send and Effect Return
- Balanced 1/4” (6.3 mm) Master output jacks
- Separate Master Mix, Control Room, and Headphones outputs
- Tape/CD RCA connector in/outs, routable to the Master Mix or Headphones Out / Control Room
- Dual 10-segment LED level meters
- External power supply
PLM 16.6 Fx

- 16 input channels
- 8 Mono inputs equipped with balanced microphone-level XLR and 1/4" (6.3 mm) line-level connectors with adjustable Gain, 1/4" (6.3 mm) Inserts, and switchable 48V phantom power
- 4 Stereo inputs equipped with balanced 1/4" (6.3 mm) jacks and adjustable Gain
- 3-band EQ in all inputs
- Mono input Panorama knobs and Stereo input Balance knobs
- Channel Level knob for every input
- Peak-LED for all inputs
- Aux Send and Aux Returns with adjustable Send and Return levels
- Pre- and Post-fade Aux Sends for external effects and the Monitor bus
- 2 multifunctional Stereo Aux Returns with adjustable levels
- Built-in 24-bit FX DSP with numeric display, 99 presets, Mute, Effect Level, and Effect Return Level
- Stereo 7-band graphic EQ, assignable to Master Mix or Aux 1 and 2
- Main L-R, Group 1-2 and PFL function in all channels
- Balanced 1/4" (6.3 mm) Master output jacks
- 60 mm faders in all channels
- Global, switchable 48V phantom power
- Balanced XLR and 1/4" (6.3 mm) outputs
- Separate Master Mix, Mono, Group 1-2, Control Room, and Headphones outputs
- Tape/CD RCA connector in/outs, routable to the Master Mix or Headphones Out / Control Room
- Dual 10-segment LED level meters
- External power supply
**PU 920**

**Digital Controlled 16 Channel System**

State of the Art Technology

The PU 920 bases on the successful 910 series and provides improved performances like extended working range, pilot tone strength and frequency agility. The latest structure in SMD technology with components only 0.07 x 0.15 mm in size makes an excellent audio performance possible with the highest operating reliability and long battery life, due to low current consumption. The newly developed digital squelch control offers extremely high operating reliability. The simultaneous transmission of the battery status of the transmitter to the receiver provides convenience and security at the same time. If the battery capacity is only sufficient for 30 - 45 minutes, the “Battery Low” warning is passed on to the receiver, which can be seen by the sound technician by the use of a red LED. The professional audio design, achieved through high-grade, low noise pre-amplifiers, in conjunction with the polished PLL UHF technology with 16 bit microprocessors, make the PU 920 the first choice for professional users. The newly developed compander circuitry uses the latest components for high linearity and minimal interference noise. Dynamics, audio quality, and operation set new standards at this price/performance ratio.

**Multichannel Applications**

The receiver 920R in a 9.5” metal casing provides information on all the essential operating parameters, such as operating frequency, HF and audio level and also the battery status of the transmitter, through its large illuminated display. The antennas are mounted on the front and can be removed allowing them to be repositioned or permitting the use of the optional active antenna splitter AS6W in multi-channel applications. The active antenna splitter AS6W is recommended for the maximum in operating reliability and high range where more than two PU 920s are operated in parallel. Up to six PU 920 receivers can be connected to the AS6W. For more than six systems, up to 3 AS6Ws can be cascaded. For the use of the active AA 900 antenna amplifier, the AS 06W provides a switched phantom feed. The AA 900 antenna amplifier is recommended to compensate for RF signal loss on long antenna cables. There is a choice of +8dB or +16dB amplification available. If for example high ranges are required, for open-air environments or in large halls, the RDA-900 directional antenna set will increase the possible range considerably and optimize operating reliability. The directional antenna can be installed on microphone and loudspeaker stands or, for instance, in a truss system. In addition to the connection cables, the RDA 900 set also includes a rain cover for outdoor applications.

**Accessories**

- VH 531 Headset
  - Condenser capsule, Cardioid, Black or flesh
- HMB 100M Headset microphone black, condensor capsule, incl. windshield
- HMS 200M Headset microphone flesh, condensor capsule, incl. windshield, waterproof
- HMS 2000M Headset microphone flesh, condensor capsule, cardioid incl. windshield, waterproof
- LMB 100M Lavaliere microphone black, condensor capsule, incl. windshield
- LMB 1000M Lavaliere microphone black, condensor capsule, cardioid incl. windshield
- VH506 Instrument cable

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**920 R Receiver**

- Diversity PLL UHF
- 16 switchable frequencies
- Robust metal 9,5” housing
- Digital squelch control LED
- Battery status LED
- LCD display for frequency signal strength and audio status
- Detachable antennas with BNC connectors
- Balanced XLR output

**920 G Guitar Transmitter**

- Very compact design
- 3.5 mm, lockable mini-jack connector
- High input impedance design for guitars
- Audio-Mute switch
- Input gain control
- Peak signal LED
- Battery status LED

**920 M Handheld Transmitter**

- Robust metal housing
- Digital Pilot Tone control
- Integrated antenna
- TGX 58 ® Beyerdynamics capsule
- Single switch operation
- Battery status LED
- Ergonomic design
- An average of 50% reduction of battery costs (AAA batteries) and average 8-hour operation

**920 P Pocket Transmitter**

- Very compact design
- 3.5 mm, lockable mini-jack connector
- Phantom power 5V
- Input gain control
- Peak signal LED
- Battery status LED
**AS 6W Wide Band Antennensplitter**

Active 19” Antenna splitter for up to six P4920 Diversity-Receiver.
PU 902

PU 902

The PU902 series provides a high-quality wireless transmission with ease of use and high reliability. The PU 902 series can be used for building multi-channel systems, and it can be combined with the active antenna splitter AS6W.

Two sets are available: The PU 902 M set consists of the hand held transmitter 902M, its cardoid dynamic capsule assures a most natural voice. The ergonomic, well-balanced design also offers easy access to all essential controls. The 902R receiver completes the system.

The PU902 P set consists of the pocket transmitter 902P which can be combined with a selection of lavalier, headset or instrumental microphones. 5V phantom power is supplied to accommodate condenser microphone capsules, and input signal levels can be precisely controlled by the adjustable Input-Level indicator. The 902R receiver completes the system.
902M Handheld Transmitter
- 16 switchable frequencies
- LCD display
- Integrated antenna
- ON-/OFF -Switch
- An average of 50% reduction of battery costs (9V battery) and average 10-hour operation

902R Receiver
- 16 switchable frequencies
- True diversity system
- DISPLAY with white color backlight
- Digital control for squelch threshold from 5 to 40 dB
- Detachable antennas with BNC connectors (rear panel)
- Balanced XLR and UNBALANCED (6.3mm socket) output
- Switch volume low / high (line/mic) in rear panel and potentiometer in front panel

902P Pocket Transmitter
- 16 switchable frequencies
- Display showing frequency and battery level (7 step)
- 3.5 mm, lockable mini-jack connector
- 5V Phantom power
- Input gain control
- Input impedance switch (Low/High)
- 2 x AA-battery (up to 10 hr)

Accessories:
- AS 6 W Wide band Antenna Splitter for up to 6 PU902R
- VH 831 beyerdynamic Headset, condensor capsule, cardiod
- HMB 100S Headset microphone black, condensor capsule, incl. windshield
- HMS 200S Headset microphone flesh, condensor capsule, incl. windshield, waterproof
- HMS 2000S Headset microphone flesh, condensor capsule, cardiod incl. windshield, waterproof
- LMB 100S Lavaliere microphone black, condensor capsule, incl. windshield
- LMB 1000S Lavaliere microphone black, condensor capsule, cardiod incl. windshield
- VH806 Adapter cable 6.3mm Jack for Instruments
The new PU860 UHF wireless system provides 16 switchable frequencies and convinces with outstanding sound and improved dynamics. The ergonomic 'one switch' design allows easy handling. The integrated blue LED in the transmitter indicates clearly on/off and mute status.

The 860M handheld transmitter uses condenser capsules for brilliant audio quality. The capsule itself is mounted to an elastic spider similar to a studio microphone, to avoid disturbing handling noise. In addition the sensitivity of the capsule can be adjusted to different demands.

Included in the system is a well designed pocket transmitter UH860P. It provides 5V phantom power plus a gain control for adjusting the signal levels depending on the use of a lavalier microphone, headset or instrument cable which are available as sets.

Due to the most modern circuitries the PU860-Series offers a very low battery consumption. Battery life of up to 20 hours is possible, using AA rechargeable or standard batteries.

Up to 4 PU860 systems can be run in parallel. For rack mount use two different rack adaptors are available.

**PU 860**

**Accessories**

- **VH 831** beyerdynamic Headset, condenser capsule, cardioid
- **HMB 100S** Headset microphone black, condenser capsule, incl. windshield
- **HMS 200S** Headset microphone flesh, condenser capsule, incl. windshield, waterproof
- **HMS 2000S** Headset microphone flesh, condenser capsule, cardioid incl. windshield, waterproof
- **LMB 100S** Lavalier microphone black, condenser capsule, incl. windshield
- **LMB 1000S** Lavalier microphone black, condenser capsule, cardioid incl. windshield
- **VH806** Adapter cable 6.3mm Jack for Instruments
**Accessories**

- **VH 831** beyerdynamic Headset, condensor capsule, cardioid
- **HMB 100S** Headset microphone black, condensor capsule, incl. windshield
- **HMS 200S** Headset microphone flesh, condensor capsule, incl. windshield, waterproof
- **HMS 2000S** Headset microphone flesh, condensor capsule, cardioid incl. windshield, waterproof
- **LMB 1000SL** Lavaliere microphone black, condensor capsule, incl. windshield
- **LMB 10000S** Lavaliere microphone black, condensor capsule, cardioid incl. windshield

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**PU 851**

The PU851 offers latest UHF Technology and high fidelity audio performance with a modern design and easy handling. The compact half rack space receiver is equipped with two antennas and a diversity circuitry for highest reliability. At the backside of the receiver PU851R, volume and squelch can be controlled by two pots. All transmitter of the PU851-Series offer a very comfortable and easy handling with one momentary switch for On-/Off and MUTE. A blue LED indicates the status. Due to the innovative circuitry, the transmitter guarantees a long battery-life (up to 20h) with costeffective AA-Batteries. The PU851 has got an extended possible frequency range (550 - 850 MHz). Each unit can be switched between 2 different frequencies to avoid interferences between two systems. The PU851 is available in 5 different pairs of frequencies, where up to 4 systems can run simultaneously.

**PU 851 P**

The pocket-set PU851 P is equipped with a compact pocket-transmitter, ready to be combined with condenser-lavalier microphone, headset or cable for instruments. The pocket transmitter provides phantom power of 3.5V plus an adjustable input sensitivity control incl. Peak-LED. Like the handheld transmitter the 851P offers easy handling with just one On/Off switch and an additional MUTE-Switch.

- 3.5V-Phantompower
- Input gain control
- On-/Off-/Mute button
- Double frequency switch
- More than 20 hours of operation (2 x AA Alcaline battery)

**PU 851 M**

The PU851 M Vocal-Set is equipped with a high quality condenser capsule with enhanced dynamics offering a superb audio quality with high feedback resistance and reduced handling noise thanks to a free suspension, comparable to a studio microphone.

- Cardioid condenser capsule
- Anti-Shock-Suspension
- Double frequency switch
- On-/Off-/Mute button
- Bi-color blue/red LED for On and Mute status
- More than 20 hours of operation (2 x AA Alcaline battery)

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**PU 851 R**

- VH 806
- LMB 100S
- LMB 1000S
- HMB 100S
- HMS 200S
- HMS 2000S

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**3.5V-Phantompower**

**Input gain control**

**On-/Off-/Mute button**

**Double frequency switch**

**More than 20 hours of operation**

(2 x AA Alcaline battery)
**WM 210 pro**  
**VHF Single Antenna System**

The WM 210 Series is the entry-level wireless product from dBTechnologies. This system offers a great price/performance ratio with simple Plug&Play operation. Despite its competitive price point, the system offers many professional features such as balanced XLR connectors, variable squelch control, and output level control. This fixed frequency system is ideal for AV, educational and installation markets. Due to its selectivity, up to 5 systems can be operated simultaneously.

**WM 220 pro**  
**VHF Diversity System**

The WM 220 system operates in the VHF range employing diversity technology. The diversity technique uses two antenna to ensure trouble-free reception. The system automatically detects the best signal and switches to it without any noise.

**Handheld Transmitter VH 210 M**
- Cardioid dynamic capsule
- Integrated antenna
- Audio-Mute switch
- Battery status LED
- Ergonomic design

**WM 210 R Receiver**
- 1 telescopic antenna
- Robust construction
- On/Mute- and RF-Signal-LED
- Squelch and volume control on front panel
- Balanced XLR output
- 9.5” Rackspace

**WM 220 Receiver**
- VHF Diversity
- 2 telescopic antennae
- On/Mute and RF Signal LED
- Squelch and volume control on front panel
- Balanced XLR output
- 9.5” Rackspace

**Pocket Transmitter VH 210 L/G**
- 3,5 mm, lockable mini-jack connector
- Phantom power 5V (L Version)
- Audio-Mute switch
- Input gain control
- Peak signal LED
- Battery status LED

**HMB 100M**
Headset microphone black, condenser capsule, incl. windshield

**HMS 200M**
Headset microphone flesh, condenser capsule, incl. windshield, waterproof

**WM 210 M*/ WM 220 M Vocal-Set**
The Vocal-Set consists of the VH 210 M handheld transmitter and the WM210R/WM220R receiver. Due to its cardioid capsule the transmitter offers good feedback rejection with superior vocal performance.

**WM 210 L*/ WM 220 L Presenter-Set**
The WM 210 L Presenter-Set includes a condenser tie-clip microphone and is ideal for Lecturer’s / Presenter’s, video and theatre applications.

**WM 210 G* / WM 220 G Guitar-Set**
The Guitar-Set comes complete with an inter-connect cable with a 6.3mm jack plug. The low input sensitivity makes this system ideal for all instruments including bass guitar.

**WM 210 DHM*/WM 220 DHM Head-Set**
Ideal for presenter’s, drummers, keyboard players or anywhere where hands-free operation is necessary. The system comes complete with a HMB 100M headworn microphone.
KS22
VHF Multichannel Systems

KS Multi-Receiver
To meet the demands of specialist markets, dBTechnologies has developed the KS 22 series and KS 44 series wireless system.
The KS 22 series offers the space and cost saving benefits of two separate receivers built into one housing. The KS 2R diversity receiver housed in a half 19” 1U case has mute LED’s, diversity operation and individual squelch and output controls. The system can be supplied with either handheld or bodypack transmitters. This system is ideal for karaoke or when two presenters perform simultaneously. The KS 44 series is supplied with a four frequency, triversity KS 4R receiver. This metal cased, 1U 19” rackmount receiver features on/mute LED, diversity A/B LED, squelch and volume controls for four separate channels. The system offers tremendous flexibility with cost and space saving advantages.

KS 2 R Receiver
► VHF diversity, two channel receiver
► 2 telescopic antennae
► Robust construction
► On/Mute and RF Signal LED
► Squelch and volume control on front panel
► Balanced XLR output
► 95” Rackspace

Handheld Transmitter VH 210 M
► Cardioid dynamic capsule
► Integrated antenna
► Audio-Mute switch
► Battery status LED
► Ergonomic design

KS 22 Set
Complete with two VH 210 M dynamic, cardioid handheld transmitters.

KS 2 R Receiver
This two frequency VHF diversity receiver can be combined with any combination of transmitters from the WM and PV series.

KS 44 Set
Complete with four VH 210 M dynamic, cardioid handheld transmitters.

KS 4 R Receiver
This 19” four frequency VHF diversity receiver can be combined with any combination of transmitters from the WM and PV series.

KS 4 R Receiver
► Triversity VHF 4 channel receiver
► 3 telescopic antennae
► 19” metal housing
► On/Mute and channel A/B LED
► Squelch and volume control per channel on front panel
► Four balanced XLR outputs
In Ear Monitoring has established new dimensions of monitoring on the big stages around the globe. Compared to conventional monitoring, In Ear-Monitoring offers many advantages: Reduced set up and sound check times, less transport volume and weight, plus perfect control over sound and volume to avoid damage to the ears, are just a few examples. Apart from that the excellent control over performance, reliefment for the ears due to the reduced level of loudness, and the improvement of the FOH sound with a minimum of acoustic disturbance from stage to the audience are major benefits.

dBTechnologies offers 3 different wireless InEarSystems. The whole range is based on the „True-Sound-InEar“-Philosophy which features high quality HF-technology within UHF frequencies. With „True-Sound“ we emphasise the natural dynamic performance and a broad frequency range as two main issues in designing the IEM-Range.

Every analog wireless system offers only limited dynamics compared to a standard instrument/mic cable. But dynamics are an essential performance tool. That’s why dBTechnologies builds InEar-Systems with laborious compander switching, great dynamics and an improved frequency range. High quality SONY™ earphones incl. earpieces in 3 different sizes for maximum comfort and good isolation of environmental noises are included in the package for perfect audio and monitoring results. For your safety all InEar-Systems of dBTechnologies are equipped with a limiter and a soft squelch function to avoid any disturbance just in case of problems with the HF-Signal.

The receivers have a build in LPC®-Powermanagement for a extended battery life of up to 10 hours!

The advantages of In-Ear Monitoring

▸ Wireless operation enables total freedom of movement
▸ Individual monitoring mix with controlled levels offers hearing safety
▸ Greater immunity to feedback combined with cleaner mixes
▸ Less equipment to carry and more space on stage
▸ Faster sound checks and the capability for more individual mixes
▸ Lower sound levels on stage offering improved audience clarity
▸ Easier set-up of monitor mixes, as stage acoustics no longer apply
**IEM 1100-N**

**UHF In-Ear System**

The mono based UHF InEar System IEM1100 offers a well thought through dual input section with a XLR input and a XLR link/thru, which makes a personal mix of e.g. voice and background music possible and allows the signal to be linked to another IEM unit. The rigid transmitter made out of metal, designed as a half rack space unit, offers two volume controls with LED Level meters for each channel and a detachable antenna with BNC connector. The unbreakable pocket receiver made out of very light weight carbon fibre includes a mini jack socket and a combined volume/on/off switch.

The receivers new Diversity circuit offers a maximum in performance and distortion free operation.

Available as options are the AST4 Antenna Combiner to cascade up to four IEM Systems and the RDA950 Directivity Antenna Set to increase possible range. The new Diversity circuits offer a maximum.

**AST4**
Antenna Combiner. Combines up to four IEM1100T or IEM2200T on to one antenna.

**RDA950**
Passive directional antenna for use with IEM1100T, IEM2200T or AST4 Antenna Combiner. HF-Boost +8dBi, radius 180°.

**All Included:**

Supplied with each system are SONY™ headphones, their frequency response of 20 – 20000 Hz ensures the highest possible audio performance.

- IEM 1100 Complete set with earpiece set
- IEM 1100 R Receiver without earpiece set
- MPH 100 SONY™ High Resolution earpiece set

**IEM 1100 R In-Ear Receiver**
- Shatterproof carbon fiber casing
- Output level control
- Battery low indicator
- Soft squelch function
- Limiter and compander circuits

**IEM 1100 T In-Ear Transmitter**
- UHF quartz controlled
- 9,5” metal housing
- Detachable antennae
- Balanced two-channel mix in/out
- Limiter and compander circuits
- Input level and LED monitoring of both input channels
The new IEM600 offers 16 switchable UHF frequencies and has been updated with a high-quality input stage for better dynamics and sound performance.

The extremely strong and lightweight receiver, the IEM600 R, is equipped with a 3.5mm mini jack-socket for the earphones, a volume control and an on/off/mute button with LED indication. The separate on/off button allows switching without changing the volume.

The transmitter in a half rack space design offers a balanced 6.3mm jack input and a gain control with signal/peak LED for improved handling of the system.

Up to four IEM600 can be run in parallel. To install the transmitter into a rack two different rack adaptors are being provided. Recommended for use with the IEM600 are the MPH-100 headphones.

**IEM 600 R**
- In-Ear Receiver
- 16 frequencies switchable
- Volume control
- Battery Status indicator
- Soft-Squelch function
- Limiter and Komander
- ON/OFF button
- 2 x AA Batteries

**IEM 600 T**
- In-Ear Transmitter
- 16 frequencies switchable
- 9,5” housing
- Balanced Input
- Limiter und Komander circuits
- Input/Peak monitoring

**MPH100 (Optional)**
**IEM 500**

**UHF In-Ear System**

The IEM 500 offers professional InEar Technology for users with a limited budget without compromising in professional sound and safety. This system is recommended when using two units and not many other wireless systems. The IEM 500 is easy to handle since all parameters are pre-adjusted.

The wireless section works in UHF Band and is based on the modern circuitry of the PU850-Series, which convinces not only through high functionality but also through superb audio performance and low power consumption.

The half rack space unit transmitter is fitted with a balanced jack input and volume control on the backside. The fixed antenna is assembled on the front side of the transmitter. The pocket receiver includes a stereo headphone socket, a volume control and an on-/mute-/off switch. The MPH-100 headphones incl. earpieces are recommended to use with the IEM 500.

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**IEM 500 R**

**In-Ear Receiver**

- Volume control
- Battery Status Indicator
- Soft-Squelch function
- Limiter and Kompaender
- ON/OFF button
- 2 x AA Batteries

**IEM 500 T**

**In-Ear Transmitter**

- UHF fixed frequency
- 9,5” housing
- Balanced Input
- Limiter und Kompaender circuits
- Input/Peak monitoring

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**Technical Specifications:**

**IEM 500 R**

- **In-Ear Receiver**
  - Volume control
  - Battery Status Indicator
  - Soft-Squelch function
  - Limiter and Kompaender
  - ON/OFF button
  - 2 x AA Batteries

**IEM 500 T**

- **In-Ear Transmitter**
  - UHF fixed frequency
  - 9,5” housing
  - Balanced Input
  - Limiter und Kompaender circuits
  - Input/Peak monitoring

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**Technical Specifications:**

**VHF Standard Frequencies**:  
173.800 BLACK  
174.500 BROWN  
175.000 GREY  
175.750 ORANGE  
184.175 LIGHT GREEN  
184.500 PINK  
216.250 RED  
218.750 VIOLET  
222.625 DARK BLUE  
234.625 LIGHT BROWN  
236.575 DARK RED  
237.775 WHITE  
Six frequencies can operate simultaneously

**UHF Standard Frequencies**:  
PU851, IEM500, IEM1000N  
799.475 A  
799.600 B  
801.400 D  
801.550 E  
803.800 F  
806.750 G  
810.650 H  
854.900 I  
808.975 M  
810.025 N  
863.400 Q  
864.000 R  
864.800 S  
774.465 U  
778.210 V  

**PU920**  
Band LW2: 539.000 – 661.000 MHz  
Band K: 774.200 – 781.800 MHz  
Band U-N: 801.100 – 819.650 MHz  
Band U-UK: 854.900 – 864.950 MHz  
Band ISM: 863.050 – 864.175 MHz

**PU902**  
Band LW1  
Band LW2  
Band LW3  
Band U-N

**PU860**  
Band LW1  
Band LW2  
Band LW3  
Band UN  
Band U-UK  
Band U-UK

**IEM600**  
Band LW1  
Band LW2  
Band UN  
Band U-UK