## **Power Amps**

- EPX3000: 2 x 1500 Watts into 2 Ohms; 2 x 900 Watts into 4 Ohms; 3000 Watts into 4 Ohms (bridge mode)
- EPX2000: 2 x 1000 Watts into 2 Ohms; 2 x 650 Watts into 4 Ohms; 2000 Watts into 4 Ohms (bridge mode)
- ATR (Accelerated Transient Response) technology for ultimate punch and clarity
- Ultra-light, ultra-low noise and ultraefficient switch-mode power supply for noise-free audio, superior transient response and low power consumption
- Switchable limiters offer maximum output level with reliable overload protection
- Detented gain controls for precise setting and matching of sensitivity
- Precise Power, Signal and Clip LEDs to monitor performance
- XLR, 1/4" TRS and RCA input connectors for compatibility with any source
- Professional speaker connectors and "touch-proof" binding posts support most speaker wiring systems
- Built-in Subwoofer/Satellite crossover for more flexibility
- Independent DC and thermal overload protection on each channel automatically protects amplifier and speakers without shutting down the show
- "Back-to-front" ventilation system including air filter for reliable operation
- "Built-like-a-tank", impact-resistant, all-steel 2U rackmount chassis
- High-quality components and exceptionally rugged construction ensure long life
- Conceived and designed by BEHRINGER Germany

## behringer.com

### **Power Amplifiers**

EUROPOWER — Professional 3000/2000-Watt Light Weight Stereo Power Amplifiers with ATR (Accelerated Transient Response) Technology







#### Ultra-light, built on a legacy

Power amps have always been heavy, mainly because of the massive transformers and huge banks of capacitors needed for high-power operation. In fact, six conventional power amps in a rack can easily top 250 pounds. The same number of EPX Series amps come in at just under 134 lbs./61 kg, and they pack all the power of their conventional counterparts!"

#### In a class of their own

The secret to the EPX series' incredible power-to-weight ratio is their use of a switching-mode power supply combined with Class-H topology. Switching-mode power supplies work on demand. Instead of constantly working at full power

and dissipating excess power as heat, they only ramp up the power output when needed—thousands of times per second. Considerably more efficient than traditional power supplies, switchingmode power supplies are small and light, yet deliver ample power.

Think of a Class H amp as a car with two engines (in amps, you call them "rails"). One engine runs all the time. The other runs only when musical peaks demand extra power output. An EPX Class H amp only generates a fraction more power than is immediately needed while the output stage operates at its maximum efficiency all the time.

Continued on next page



## **Power Amps**

And just like in today's hybrid cars, the efficiency of this dual system is far greater than having one engine or rail that must operate all the time. EPX amps don't waste power. Class H amps don't waste power, require much smaller heat sinks and much lighter power transformers.

# Accelerated Transient Response delivers the knock-out punch

It takes huge pulses of energy (current and voltage) to propel a woofer cone out fast enough to match a bass beat. That's called Transient Response and it's the holy grail of amp designers. By carefully selecting transistors with extremely high slew rates and optimizing other proprietary parts of our circuitry, our amps are able to react instantly to even the most demanding electronic bass impulses. If the woofers in your PA system can keep up, your audience will hear a tighter, crisper, more natural sound.

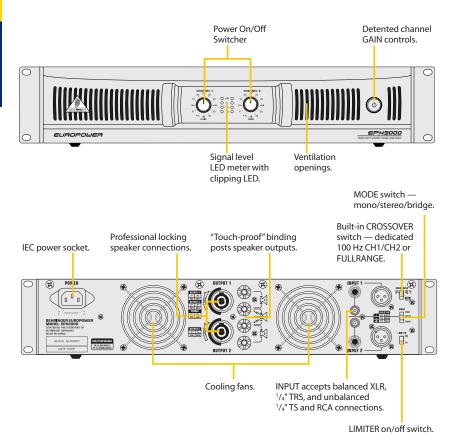
Instead of operating relatively continuously like Class AB circuits, Class H amps, which were first described in NASA technology (U.S. patent 3,319,175), feature rail tracking for effectively modulating the power supply rails with only the peaks of the input signal. This technology has revolutionized pro audio amp designs with its outstanding performance and efficiency. When combined with switching-mode power supplies that replace heavy toroid transformers, our new designs provide more dynamic punch and, because they are so much more efficient, run cooler and don't require huge, heavy heat sinks.

BEHRINGER didn't invent Class H technology, but our R&D Department has been working for years to perfect our own version, creating lightweight amps that run cool and also achieve our goal of Accelerated Transient Response.

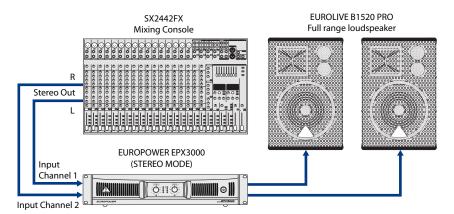
#### Everything you need, nothing you don't

The simple front panel controls of these amps give you all of your sound's vital signs at a glance. After pressing the Power Button, the POWER LED will light when the amp is ready for action. Both channels have independent gain dials as well as clip LEDs that indicate when the signal is distorted and you need to reduce the gain. There are also SIGNAL LEDs that light up when a signal is present at the input.

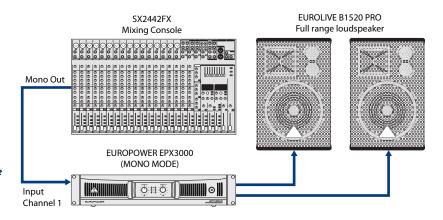
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### **Stereo Mode**



### **Mono Mode**



## **Power Amps**

#### **Panel discussion**

The EPX series' INPUTs accept balanced XLR, <sup>1</sup>/<sub>4</sub>" TRS, and unbalanced <sup>1</sup>/<sub>4</sub>" TS and RCA connections. Take your pick of professional locking speaker outputs or touch-proof binding posts to securely connect speakers.

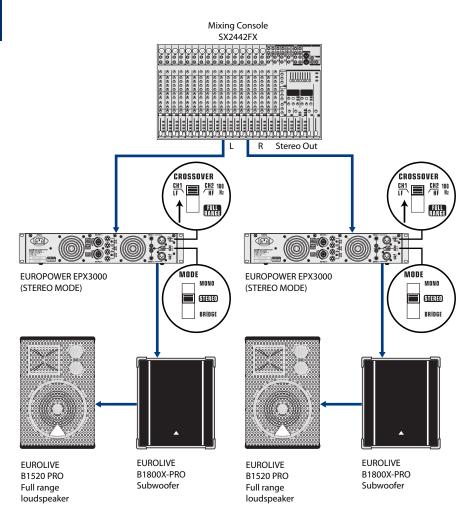
A panel of switches found on the back offers an array of cool options applicable to both channels. The Clip Limiter lets you get even more out of the amplifier without overdriving either it or your speaker system. Built-in circuitry automatically senses when the amp is being overdriven into "clipping" and then momentarily reduces the input level to avoid clipping distortion. This all happens in a few thousandths of a second, so it's an inaudible way of avoiding audible clipping distortion. Of course, you can turn the Limiter off if you're feeling lucky.

The same panel contains the switches that allow you to put these amps to work in either mono, stereo (two-channel mode) or bridge mode, which is always in mono. A built-in CROSSOVER switch lets you select the point at which highs and lows are separated (CH1<100Hz / CH2>100 Hz or FULLRANGE).

BEHRINGER's EPX line is built for the working musician. It's much easier to transport than a conventional AB power amp, it packs ample power, it's got a built-in crossover and limiter, and it's built to last through all the rigors of the road. Plus its light price tag will leave you with enough cash left over to acquire more stuff to amplify! Check out an EPX and find out why BEHRINGER power amps are among the most popular on Earth.



## **Bi-Amp Mode**



# **Power Amps**

**Input Voltage** 

EPX2000/EPX3000	100V - 240V
Stereo Mode (both channels driv	ven)
EPX2000/EPX3000	Continuous average output power per channel
EPX2000	
8Ω / 20 Hz - 20 kHz @ 0.1% THD :	350 W
8Ω / 1kHz @ 0.1% THD :	360 W
4Ω / 20 Hz - 20 kHz @ 0.1% THD :	600 W
4Ω / 1 kHz @ 0.1% THD :	650 W
2Ω / 20 Hz - 20 kHz @ 1% THD :	950 W
2Ω / 1 kHz @ 1% THD :	1000 W
EPX3000	
8Ω / 20 Hz - 20 kHz @ 0.1% THD :	500 W
8Ω / 1kHz @ 0.1% THD :	520 W
4Ω / 20 Hz - 20 kHz @ 0.1% THD :	850 W
4Ω / 1 kHz @ 0.1% THD :	900 W
2Ω / 20 Hz - 20 kHz @ 1% THD :	1400 W
2Ω / 1 kHz @ 1% THD :	1500 W
Bridged Mono	
EPX2000	
8Ω / 20 Hz - 20 kHz @ 0.1% THD :	1200 W
8Ω / 1kHz @ 0.1% THD :	1250 W
4Ω / 20 Hz - 20 kHz @ 1% THD :	1900 W
4Ω / 1 kHz @ 1% THD :	2000 W
EPX3000	
8Ω / 20 Hz - 20 kHz @ 0.1% THD :	1700W
8Ω / 1kHz @ 0.1% THD :	1800W
4Ω / 20 Hz - 20 kHz @ 1% THD :	2800W
4Ω / 1 kHz @ 1% THD :	3000W
Distortion	
EPX2000/EPX3000	<0.01%

FPX2000	20Hz - 20kHz, +0/-1 dB
	5Hz - 50kHz(at -3dB points)
EPX3000	20Hz - 20kHz, +0/-1 dB 5Hz - 50kHz(at -3dB points)
Damping Factor (1 kHz and	below)
EPX2000	>300 @ 8Ω
EPX3000	>400 @ 8Ω
Signal to Noise (20 Hz - 20 k	(Hz)
EPX2000/EPX3000	>100 dB
Voltage Gain	
EPX2000/EPX3000	32 dB
Input Sensitivity	
EPX2000	1V
EPX3000	1.17V
Input Impedance	
EPX2000/EPX3000	10k ohms unbalanced / 20k ohms balanced
Controls	
Front:	AC switch/ gain controls for each channel
Rear:	MONO Switch, X-Over Switch, Limiter Switch, BRIDGE MODE Switch
X-Over	FX 100Hz, 12dB slope
Limiter Type	
EPX2000/EPX3000	VCA CLIP Limiter, switchableIndicators
Connectors (each channel)	
Input:	Active balanced XLR (pin 2+), ¼" TRS
Output:	Touch-proof binding posts / speaker connectors

J	
EPX2000/EPX3000	Continuously variable speed fan, back-to-front air flow
Amplifier protection	
EPX2000/EPX3000	Full short circuit, open circuit, thermal, ultrasonic, RF protection. Stable into reactive or mismatched loads
Load protection	
EPX2000/EPX3000	On/off muting, DC-fault power supply shutdown
Output Circuitry	
EPX2000/EPX3000	Class H, 2-tier
Power consumption	
1/8 Power (pink noise) Bridged 4ohms	
EPX2000	5A_230V / 9A_120V
EPX3000	6.5A_230V / 12A_120V
use fuse rating	
EPX2000	EU:10A250V/UL:20A250V
EPX3000	EU:15A250V/UL:30A250V
Dimensions	
EPX2000/EPX3000	19"/2U
Weight	
EPX2000/EPX3000	10.10 kg/22.26 lbs.

Cooling:

BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.

For service, support or more information contact the BEHRINGER location nearest you:

**BEHRINGER Australia** tel.: +61 3 9877 7170, fax: +61 3 9877 7870 **BEHRINGER Germany** tel.: +49 2154 9206 4149, fax: +49 2154 9206 4199 **BEHRINGER Japan** tel.: +81 3 5281 1180, fax: +81 3 5281 1181 **BEHRINGER Singapore** tel.: +65 5845 1800, fax: +65 6214 0275 **BEHRINGER USA / CANADA** tel.: +1 425 672 0816, fax: +1 425 673 7647



