

# EP2000/EP4000

## Power Amplifiers

- EP2000: 2 x 1,000 Watts into 2 Ohms; 2 x 750 Watts into 4 Ohms; 2,000 Watts into 4 Ohms (bridge mode)
- EP4000: 2 x 2,000 Watts into 2 Ohms; 2 x 1,400 Watts into 4 Ohms; 4,000 Watts into 4 Ohms (bridge mode)
- Precise Power, Signal and Clip LEDs to monitor performance
- XLR and 1/4" TRS input connectors for compatibility with any source
- Professional speaker connectors and "touch-proof" binding posts support most speaker wiring systems
- Selectable low-frequency filters (30 Hz or 50 Hz) remove distracting infra-sound frequencies
- Independent limiters per channel offer reliable protection against overload and distortion
- High-current toroidal transformer for ultra-high transient response and absolute reliability
- Ultra-reliable Toshiba/Fairchild power transistors
- 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

## Amplifiers

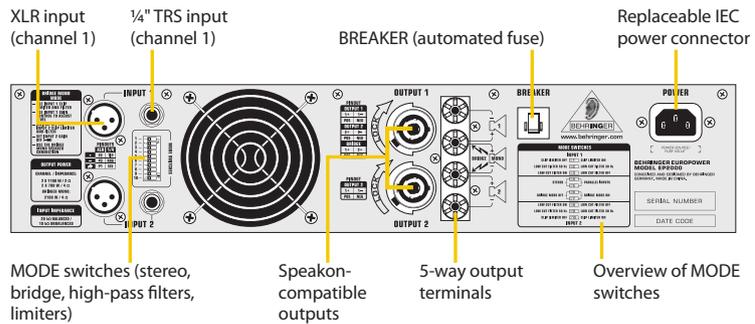
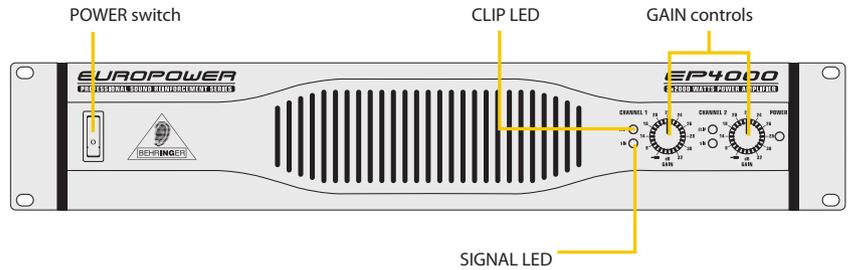
2000 & 4000-Watt EUROPOWER Stereo Power Amplifiers with ATR (Accelerated Transient Response) Technology



The EP2000 and EP4000 represent everything musicians love about our popular EP1500/EP2500—excellent sound quality, road-worthy toughness and reliability, low-noise operation and incredible power. With 2,000 and

4,000-Watts respectively, the EP2000 and EP4000 amplifiers are perfect for medium-sized club gigs, mobile PA systems, church services or public spaces.

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# EP2000/EP4000

## Power Amplifiers

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

The über-simple front panel controls of these amps give you all of your sound's vital signs at a glance. After flipping the MAIN switch, 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.

### Panel discussion

A panel of switches found on the back panel offers an array of cool options to apply to both channels of the EP2000 and EP4000. 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 EP2000 or EP4000 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.

Ultra-low frequency sounds (infrasonics) are caused by rickety stage vibrations, mic thumps and wind noise. While technically inaudible, they can cause a huge drain on amp power, potential damage to your speakers and a sludgy sound in the audible bass ranges. Both EP models feature a defeatable Low Cut Filter that chops off unwanted frequencies below 50Hz or 30Hz (depending on your PA system's capabilities).

The same panel contains the switches that allow you to put these amps to work in either stereo or bridge (mono) mode. Both the EP2000 and EP4000 can be linked to additional power amps by switching into parallel mode.

### These amps have guts

There's plenty of awesome features on the outside of the EP2000 and EP4000, but there's also a team of cool components on the inside helping it work its magic. They come loaded with famously reliable Toshiba/Fairchild power transistors as well as a high-current toroidal transformer for ultra-high transient response

and further reliability. Independent DC and thermal overload protection on each channel automatically protects the amplifier and speakers from any show-stopping meltdowns. There's no need for fuses, giving you one fewer potential mid-gig headache.

The EP2000 and EP4000 have both XLR and 1/4" TRS inputs. Even the outputs are totally flexible, consisting of Speakon-compatible outputs and five-way binding posts. Whether you're dealing with bare wire or boutique audiophile cabling, the EP2000 and EP4000 are right at home.

The exhaust fan, visible on the back panel, is the final stage of an internal

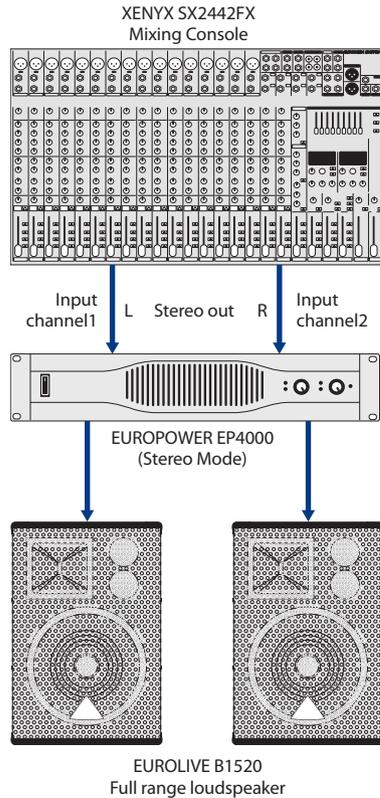
front-to-back cooling system that keeps these amps working in the mild temperatures they love, even through periods of extended use. Finally, an impact-resistant, all-steel 2U rack-mount chassis helps these workhorses stand up to all the rigors of the road.

### Accelerated Transient Response delivers the knock-out punch

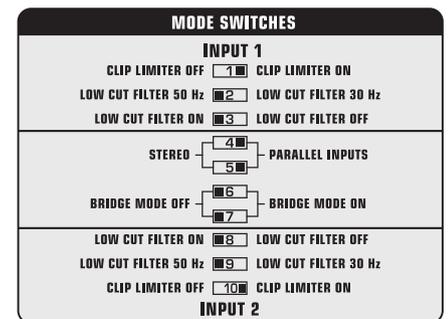
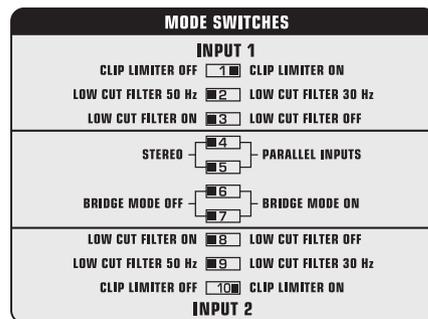
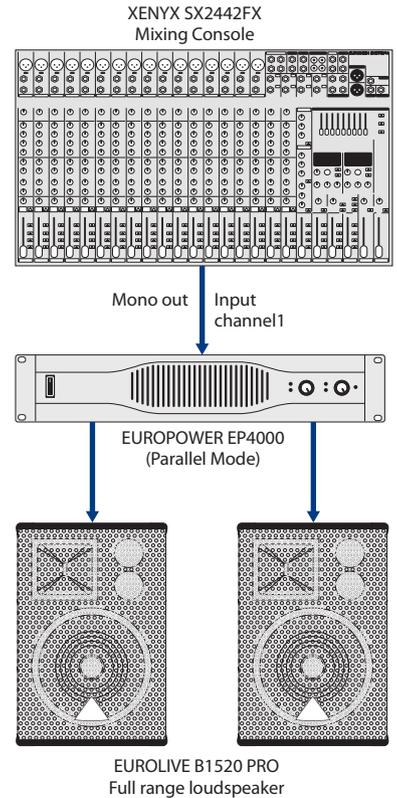
It takes huge pulses of energy (current and voltage) to propel a woofer cone out fast enough to match a bass beat. That's called Transient Response and it's the holy grail of amp designers. By carefully selecting transistors with extremely high

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### Stereo Mode



### Parallel Mode



# EP2000/EP4000

## Power Amplifiers

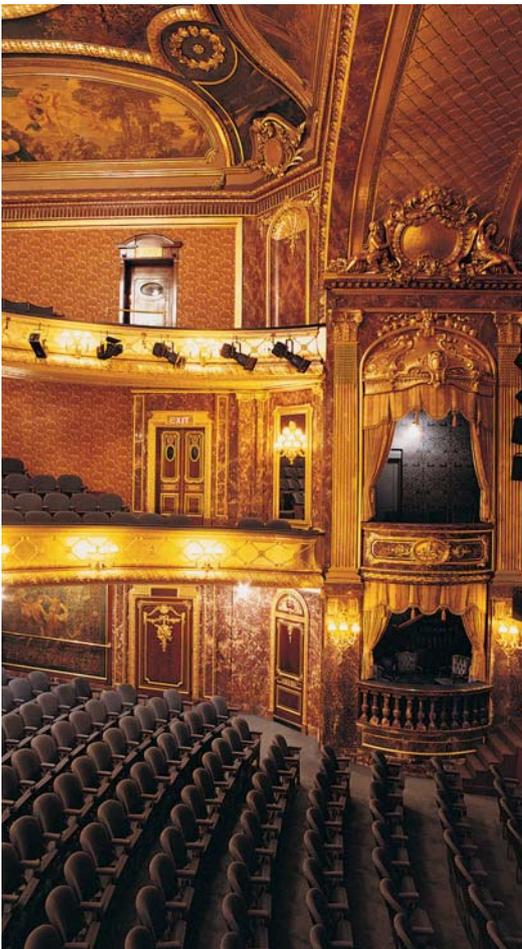
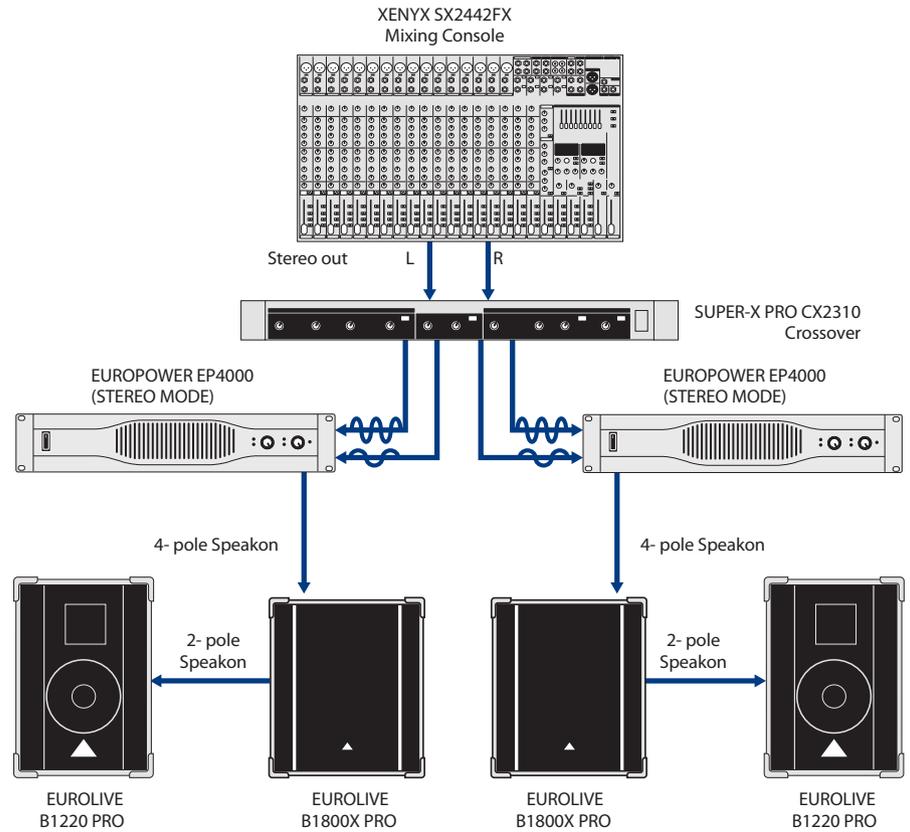
slew rates and optimizing other proprietary parts of our circuitry, our amps are able to react instantly to even the most demanding electronic bass impulses. If the woofers in your PA system can keep up, your audience will hear a tighter, crisper, more natural sound.

### The legend powers on

If you read the reviews of the EP2000 and EP4000's older brothers, the EP1500 and EP2500, and it's clear that those amps are renowned not only for their performance and durability, but also their astoundingly low price tags. The EP2000 and EP4000 extend that legacy to the next level. Why shell out for a "Brand-X" amp when you can get a BEHRINGER EUROPOWER amp and have money left over for other gear?



### Bi-Amp Mode with Subwoofer



# EP2000/EP4000

## Power Amplifiers

### Output Power

#### 20 Hz – 20 kHz @ 0.1% THD, both channels driven

EP2000	
8Ω per channel	350 W
4Ω per channel	500 W
2Ω per channel	650 W
EP4000	
8Ω per channel	550 W
4Ω per channel	950 W
2Ω per channel	1250 W

#### RMS @ 1% THD (sine wave), bridged mode

EP2000	
8Ω	1000 W
4Ω	1300 W
EP4000	
8Ω	1750 W
4Ω	2400 W

#### Peak Power, both channels driven

EP2000	
8 Ω per channel	400 W
4 Ω per channel	750 W
2 Ω per channel	1000 W
EP4000	
8 Ω per channel	750 W
4 Ω per channel	1400 W
2 Ω per channel	2000 W

#### Peak Power, bridged mode

EP2000	
8Ω	1500 W
4Ω	2000 W
EP4000	
8Ω	2800 W
4Ω	4000 W

### Distortion

EP2000	<0.01%
EP4000	<0.02%

### Frequency Response

At 10 dB below rated output power	20 Hz – 20kHz, +0/-dB
At -3 dB points	5 Hz – 50 kHz

### Damping Factor

EP2000/EP4000	>300 @ 8Ω
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### Noise

Unweighted, 20 Hz to 20 kHz	-100 dB
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### Voltage gain

EP2000/EP4000	40X (32 dB)
EP2000/EP4000	50X (34 dB)

### Input sensitivity

VRMS (@ 8Ω)	1.15V (+3.4 dBu)
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### Input Impedance

EP2000/EP4000	10kΩ unbalanced, 20kΩ balanced
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### Controls

Front	Power switch, gain control (channels 1 and 2)
Rear	DIP switches (10x)

### Indicators

POWER	green LED
CLIP	red LED, 1 per channel
SIGNAL	yellow LED, 1 per channel

### Connectors

Inputs	Balanced XLR and ¼" TRS connectors
Outputs	Touch-proof binding posts and professional speaker connectors

### Cooling

EP2000/EP4000	Continuously variable speed fan, back-to-front air flow
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### Amplifier protection

EP2000/EP4000	Full short circuit, open circuit, thermal and HF protection Stable into reactive or mismatched loads
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### Load protection

EP2000/EP4000	Turn-on/off muting, AC coupling
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### Output circuit type

EP2000	Class AB complementary linear output
EP4000	Class H complementary linear output

### Power supply

Mains Voltage/Breaker	
EP2000	100-120 V~, 50/60 Hz/15A
EP4000	220-230 V~, 50/60 Hz/8A

### Power consumption

EP2000	1600W
EP4000	2600W

Mains Connector	Standard IEC receptacle
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### Dimensions/weight

Dimensions (HxWxD)	
EP2000/EP4000	approx. 88 x 483 x 402mm approx. 3.5 x 19 x 15.8

### Weight

EP2000	approx. 15.7 kg/34.6 lbs
EP4000	approx. 16.6 kg/36.6 lbs

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.

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