

# Powered Mixers

## EUROPOWER PMP6000/PMP4000 PMP1680S

### 1600-Watt 10/16/20-Channel Powered Mixer with Multi-FX Processor and FBQ Feedback Detection System

- Ultra-compact 2 x 800-Watt stereo powered mixers (1600 Watt bridged mode)
- Revolutionary Class-D amplifier technology: enormous power, incredible sonic performance and super-light weight
- Ultra-compact design at nearly half the weight of conventional powered mixers
- PMP6000: 20-channel mixer section features 12 mono and 4 stereo channels plus separate CD/Tape input/output
- PMP4000: 16-channel mixer section features 8 mono and 4 stereo channels plus separate CD/Tape input/output
- PMP1680S: 10-channel mixer section features 6 mono and 2 stereo channels plus separate CD/Tape input/output
- PMP6000, PMP1680S: Dual studio-grade 24-bit stereo FX processors with 100 awesome presets including reverb, chorus, flanger, delay, pitch shifter and various multi-effects
- PMP4000: Studio-grade 24-bit stereo FX processor with 100 awesome presets including reverb, chorus, flanger, delay, pitch shifter and various multi-effects
- Revolutionary FBQ Feedback Detection system instantly reveals critical frequencies for easy feedback removal
- 12/8 high-quality Mic Preamps with switchable +48 V phantom power for condenser microphones



The new BEHRINGER PMP Powered Mixers (2 x 800-Watt stereo, 1600-Watt bridged mode) produce even more power than their predecessors while maintaining a famously low weight and high efficiency. These mixers employ Class-D technology including a new switch-mode power supply, significantly reducing weight and heat. The 20-channel PMP6000 features 12 built-in XENYX preamps, the 16-channel PMP4000 features 8 built-in XENYX mic preamps, and the 10-Channel PMP1680S features 8 high-quality built-in mic preamps. All three models feature 24-bit FX processors, stereo 7-band graphic EQ and our renowned FBQ Feedback Detection System.

#### What is Class-D Technology?

Instead of operating relatively continuously like Class AB circuits, Class-D amps switch on and off thousands of times per second,

delivering power only when needed. In other words, the amplifier is either fully on or fully off, which significantly reduces power losses from the output devices given off as heat. Less heat means our amps don't need massive heat sinks, and that means we can make them lighter. Our no-compromise design means the new PMP mixers will deliver full power with incredible fidelity all night long, without the need for lengthy rest cycles.

When used in conjunction with switching-mode power supplies, which don't require huge and heavy transformers, our Class-D amplifiers provide tremendous dynamic punch and superior fidelity. The resulting speaker systems are much lighter, making them easy to transport and set up.

#### Massive Mono or Stunning Stereo

Our latest PMP give you the choice of 2 x 800-Watt stereo, 2 x 800-Watt dual mono mode (giving you a mono version

*Continued on next page*



# EUROPOWER

## PMP6000

## PMP4000

## PMP1680S

- Effective, extremely musical 3-band EQ, switchable Low cut filter, and Clip LEDs on all mono channels
- PMP4000 and PMP6000: Stereo 7-band graphic EQ allows precise frequency correction of monitor or main outputs
- PMP1680S: Stereo 7-band graphic EQ allows precise frequency correction of monitor and main outputs
- Voice Cancellor function removes singer's voice from recordings for karaoke applications
- Selectable stereo (main L/R), double mono (main/monitor) or bridged mono amplifier operation mode
- PMP6000 and PMP1680S: Speaker Processing function adjusts frequency response to match professional speaker systems like BEHRINGER EUROLIVE series, etc.
- PMP6000 and PMP1680S: Standby switch mutes all mic input channels during breaks while background music is provided via CD/Tape input
- PMP6000: Breathtaking XPQ 3D stereo surround effect for more vitality and enhanced stereo image
- Adjustable stereo 2-Track input for connecting external line sources
- Multi-functional stereo Preamp outputs for added flexibility
- Internal switch-mode power supply, noise-free audio, superior transient response and very low power consumption
- High-quality components and exceptionally rugged construction ensure long life
- Conceived and designed by BEHRINGER Germany

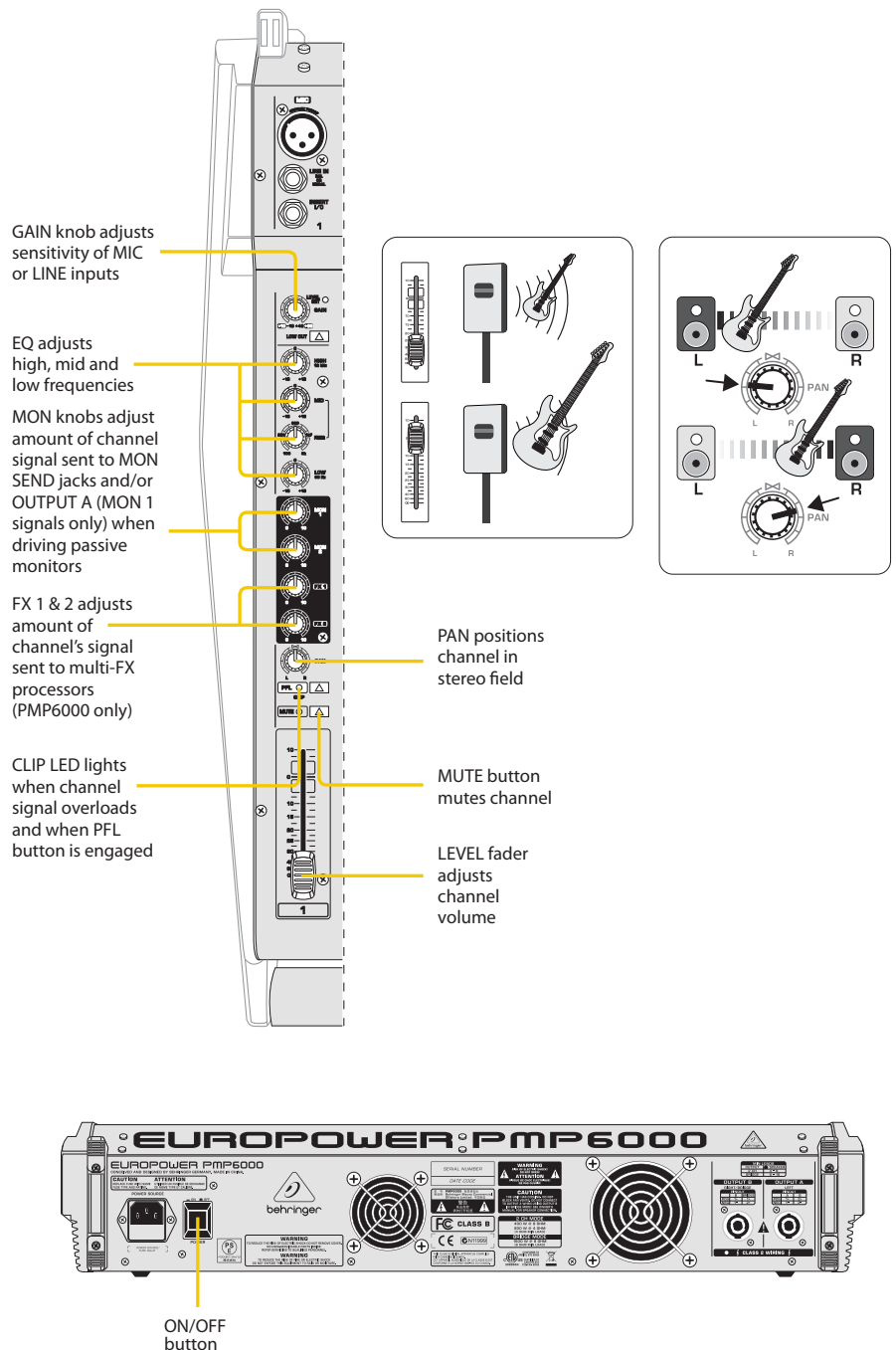
of the main signal through one powered output plus a mono version of monitor send signals through the second powered output) or 1,600-Watt bridged mono sound. Whether the center of attention happens to be a folk trio, a speech, or a synth-rock band with mind-boggling stereo patches, PMP mixers can

accommodate. This sonic versatility also makes it an excellent choice for churches, where vocals and stereo recordings often share face time.

### Classic Control, State-of-the-Art Sound

Leave the mic preamps at home, because the quality of sound that was

*Continued on next page*



# EUROPOWER PMP6000 PMP4000 PMP1680S

once only available in the studio is ready to go wherever you do. Built-in, boutique-caliber mic preamps with switchable +48 V phantom power make it possible to use either dynamic or condenser mics with the PMP Series. The PMP6000 gives you 12 mic inputs while the PMP4000 and PMP1680S each give you 8 mic inputs.

## Built-in Digital Effects Processor

The new generation of PMP mixers come equipped with 24-bit FX processors, giving you 100 mind-blowing digital effect presets such as delay, chorus and reverb. Apply them to any channel, as well as to the monitors and main output. In case you're pulling double duty as sound engineer and performer, the FX processors features a footswitch jack for remote on/off. Of course, if you have treasured outboard gear you've grown attached to, these mixers can integrate them into the mix while leaving out the built-in FX processor.

## Changing the Channels

The PMP Series gives you excellent flexibility to accommodate whatever a performance requires. You get 12 (PMP6000) or 8 (PMP4000 and PMP1680S) channels for mics, guitars and other mono instruments. Stereo channels 13-20 (PMP6000), 9-16 (PMP4000) and 7-10 (PMP1680S) are designed to work in pairs as stereo channels, or independently for more mono instruments. All mono channels have 3-band EQ, switchable Low cut filter for eliminating infrasonics, and Clip LEDs to indicate when the input signal is too hot.

A STANDBY switch (PMP6000 and PMP1680S) mutes all mic channels during breaks, preventing the microphones from picking up noise or interference. You can leave all faders untouched while you play a CD via the CD/TAPE inputs.



The FBQ Feedback Detection system automatically shows you which frequencies are causing feedback. Just touch the FBQ button and watch the red LEDs on the 7-band graphic EQ pinpoint show you which frequencies to adjust for optimized sound, without the feedback.

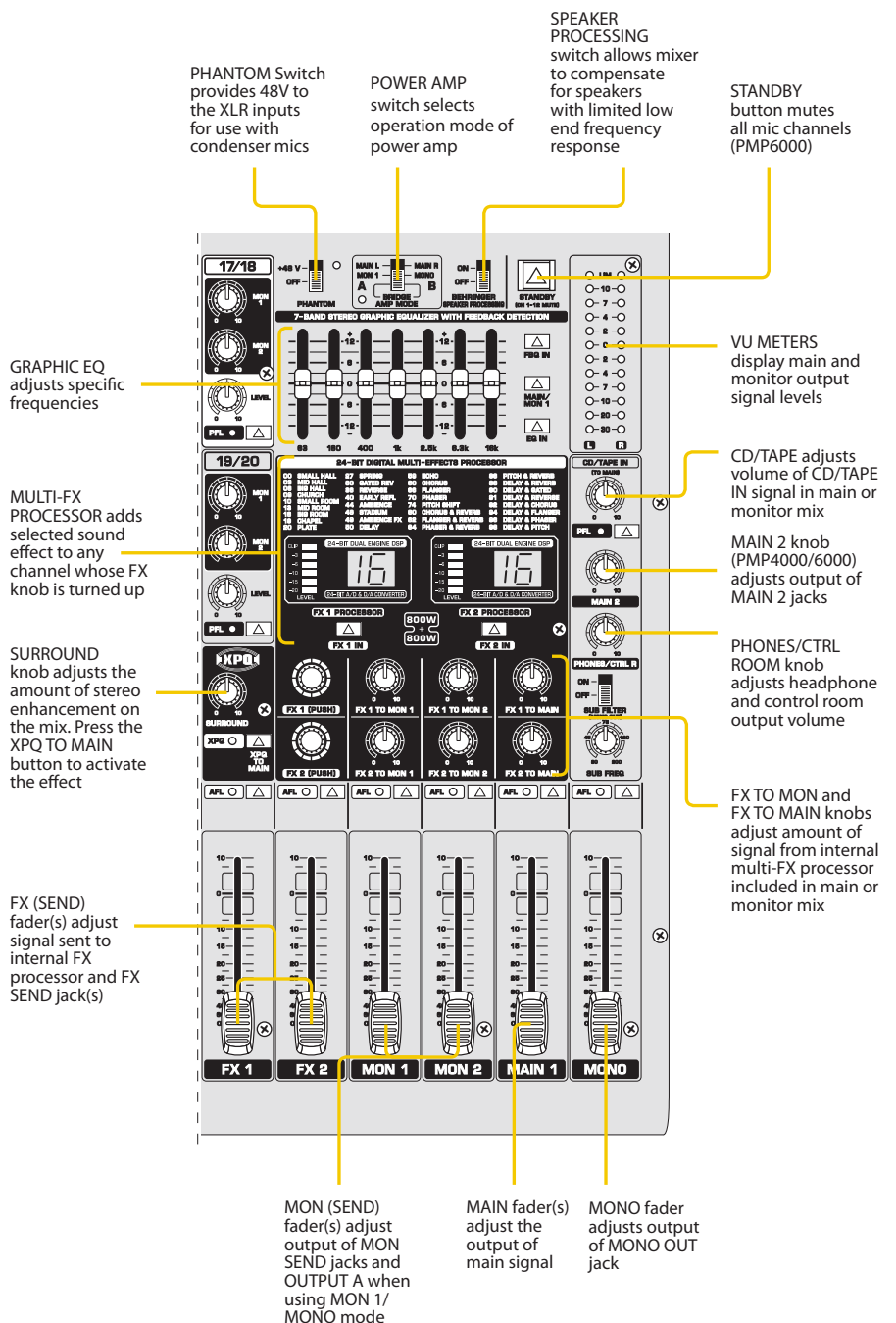
## The Ins and Outs

Use the CD/TAPE IN RCA inputs to feed in external stereo signals from CD players or tape decks. The VOICE CANCELLER switch eliminates the vocals from

pre-recorded music for instant karaoke applications.

CD/TAPE OUT RCA outputs send line-level signals from the mixer to a recording device. The left and right main outputs can be used for a variety of purposes, including connecting more power amps. Connect monitor power amps or active monitor speakers to the MON SEND output. Powered outputs on these mixers are available in professional Speakon-compatible format for secure operation.

*Continued on next page*



# EUROPOWER

## PMP6000

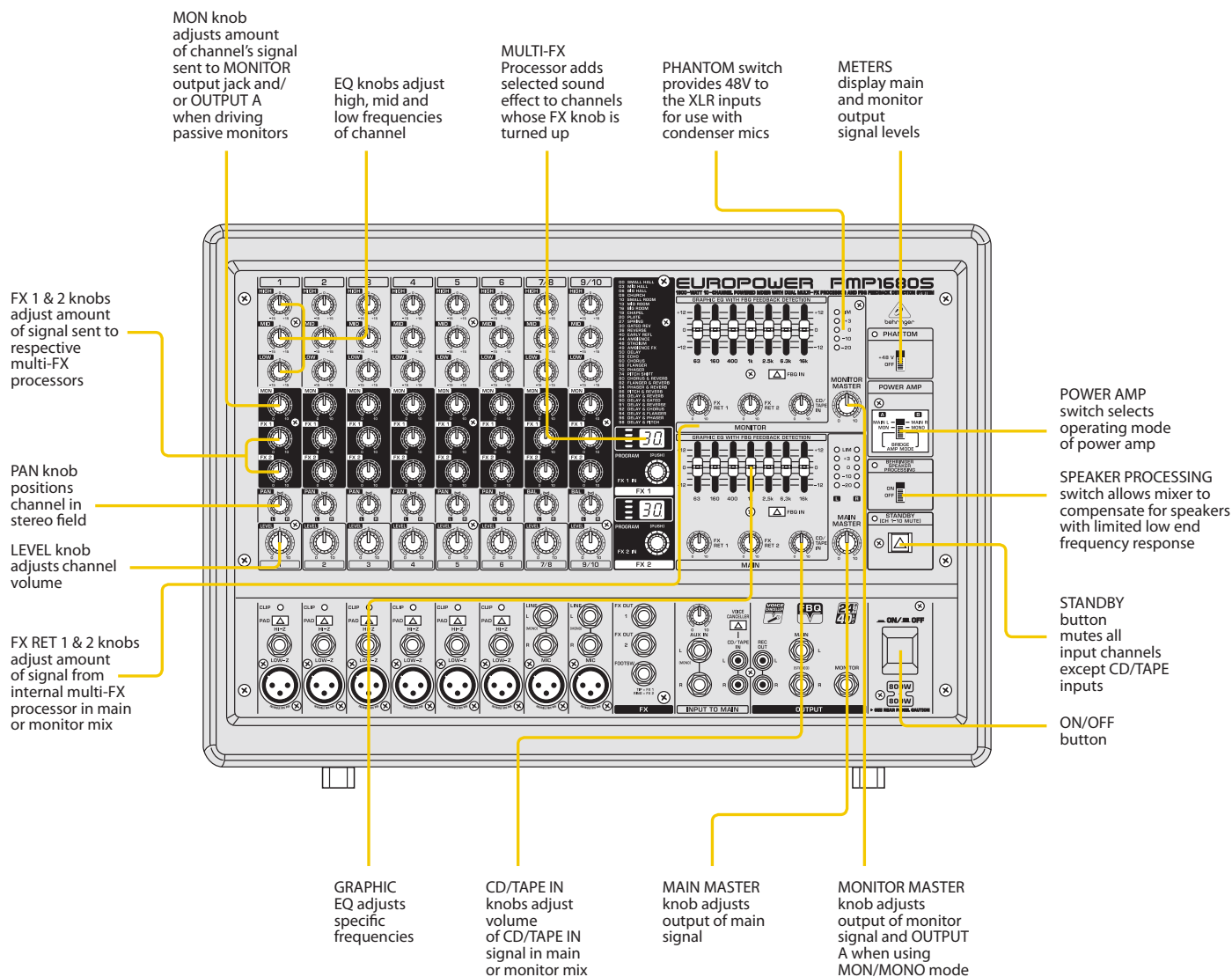
## PMP4000

## PMP1680S

### Small, Simple, Superb

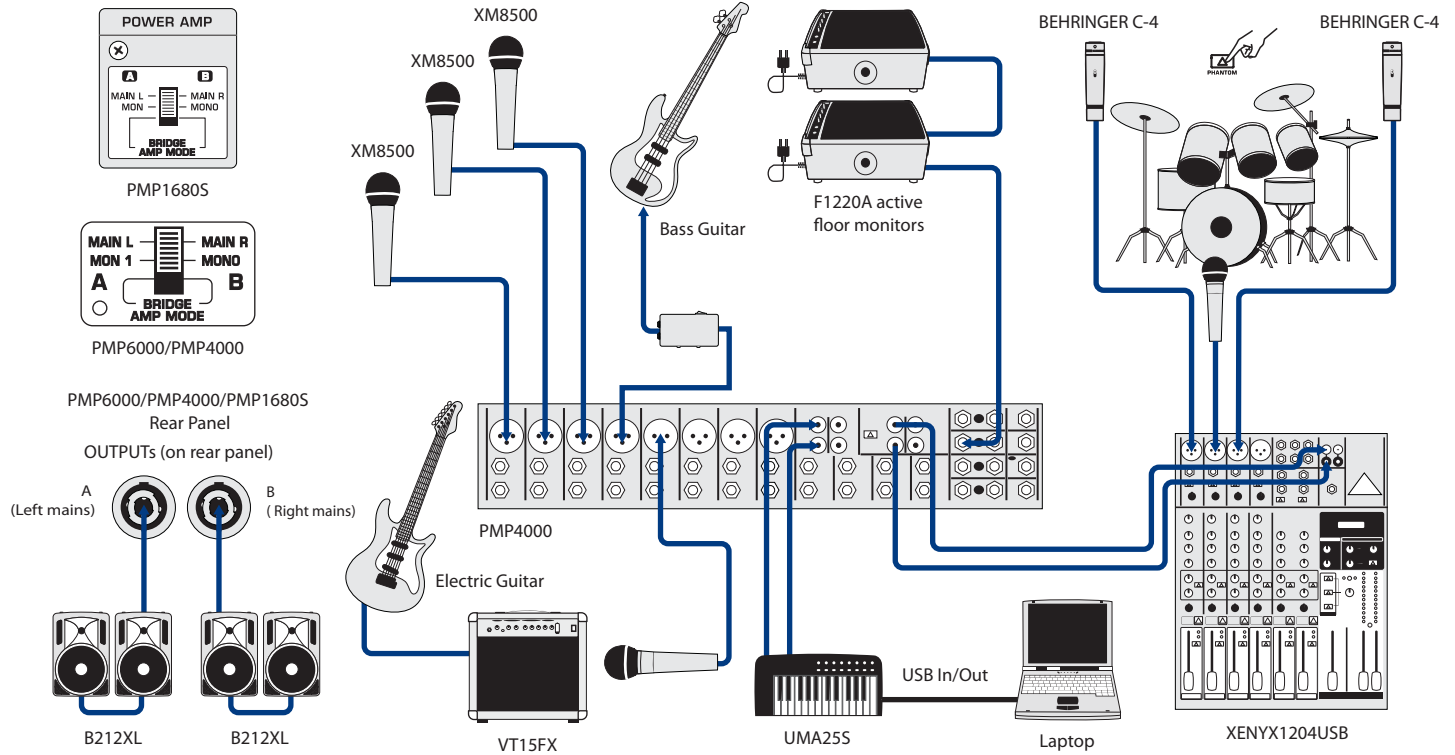
Medium-sized events call for a lightweight (PMP6000: 13.1 kg/28.9 lbs; PMP4000: 0.4 kg/22.9 lbs; PMP1680S: 9.9 kg/28.8 lbs), easy-to-use powered mixer. BEHRINGER powered mixers are the

most efficient, affordable mixers for the job, and are even suitable for use as pure analog mixers or as pure power amplifiers. With new technological advantages and incredible built-in features, it's easier than ever to lend exceptional sound quality to all kinds of public performances.

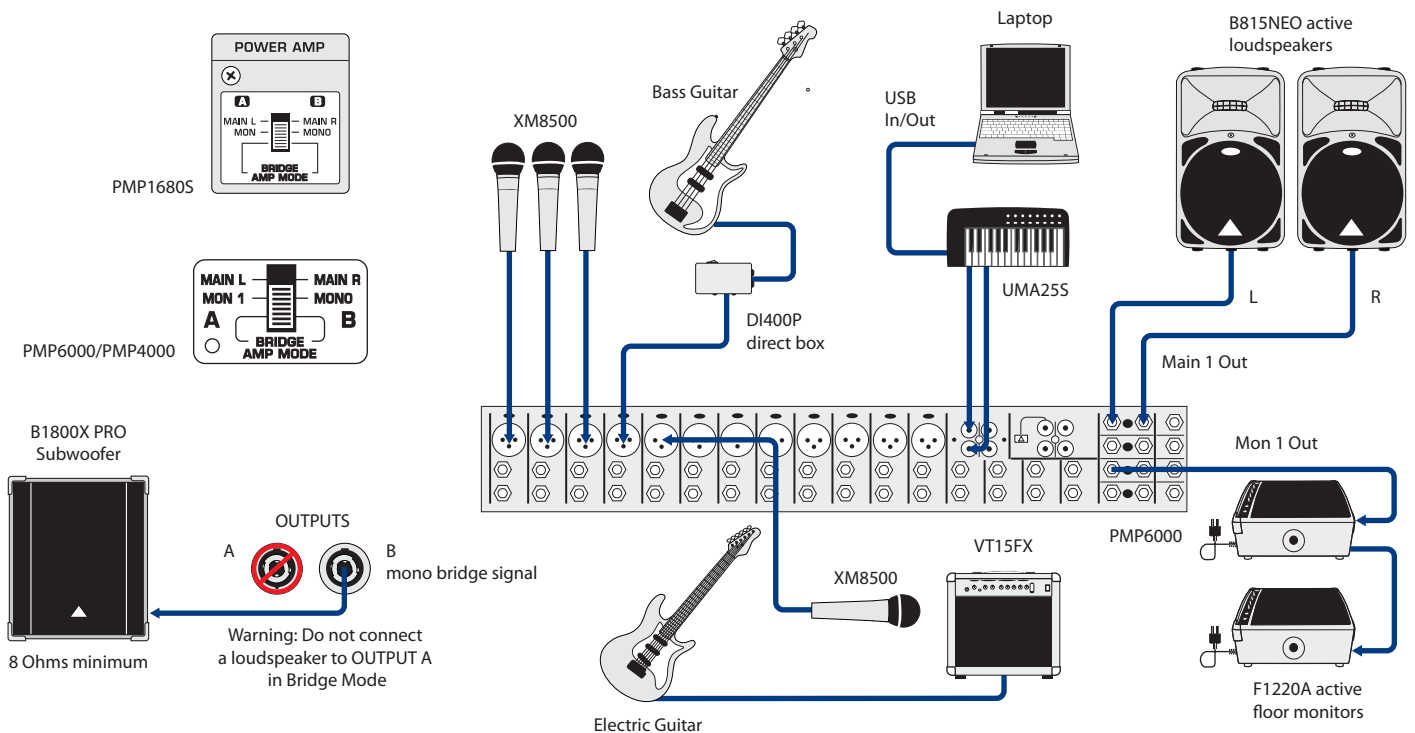


# EUROPOWER PMP6000 PMP4000 PMP1680S

## Setup in Stereo Mode

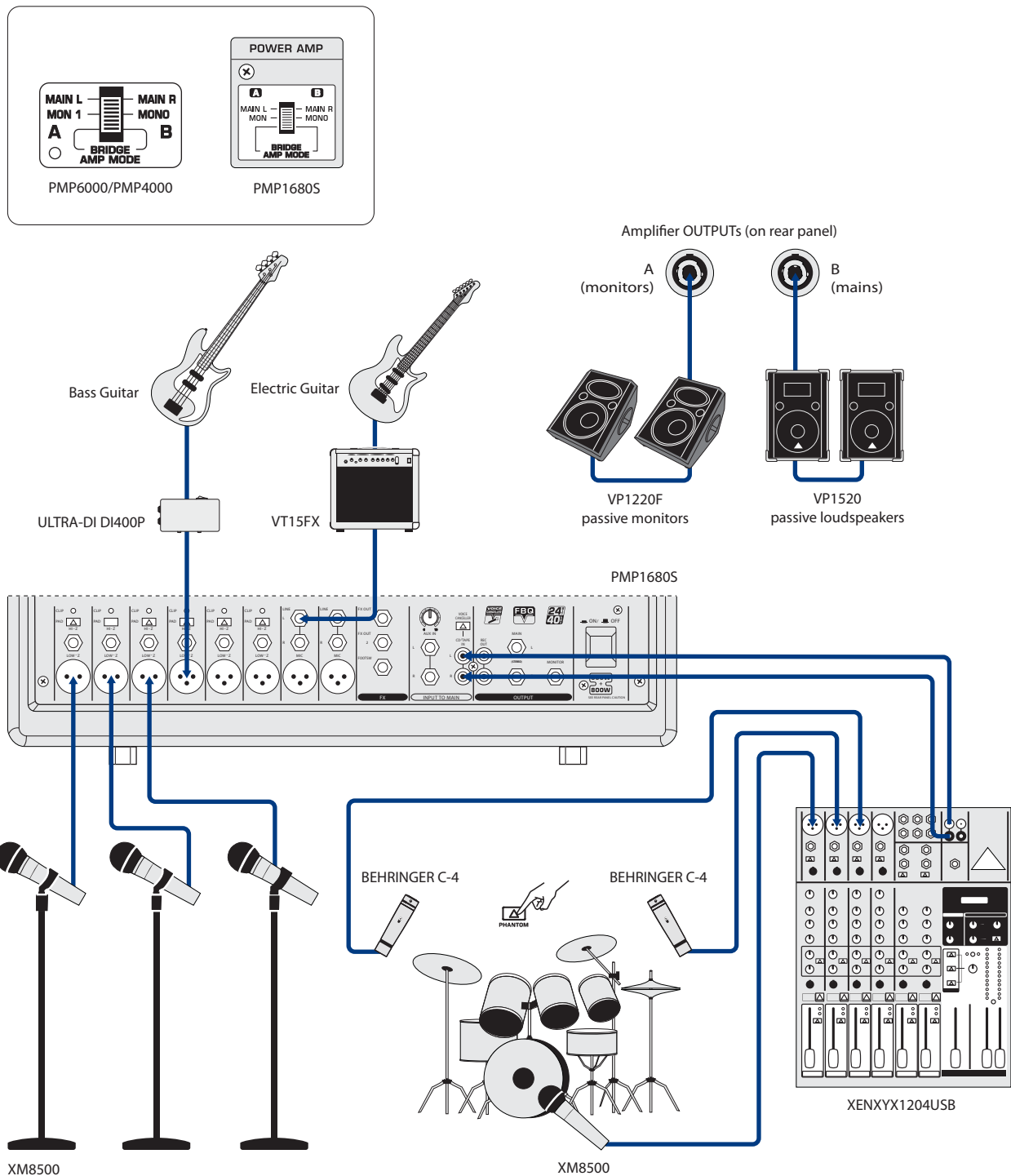


## Setup in Bridge Mode



# EUROPOWER PMP6000 PMP4000 PMP1680S

## Setup in Mon/Mono Mode



# EUROPOWER

## PMP6000

## PMP4000

## PMP1680S

### MICROPHONE INPUTS

#### PMP6000/PMP4000

Type input circuit	XLR, electronically balanced
--------------------	------------------------------

#### Mic E.I.N. (20 Hz - 20 kHz)

#### PMP6000/PMP4000

@ 0 Ohm source resistance	-134 dB/136 dB A-weighted
@ 50 Ohm source resistance	-131.5 dB/134 dB A-weighted
@ 150 Ohm source resistance	-129 dB/155 dB A-weighted
Frequency response	< 10 Hz - 200 kHz (-1 dB) < 10 Hz - > 200 kHz (-3 dB)
Gain	+10 dB, +60 dB
Max. input level	+12 dBu @ +10 dB gain
Impedance	approx. 2.6 k Ohm balanced/ 1.3 k Ohm unbalanced
Signal-to-noise ratio	109 dB/112 dB A-weighted (0 dBu In @ +10 dB gain)
Noise (THD + N)	0.002%/0.0018% A-weighted

### MONO LINE INPUTS

#### PMP6000/PMP4000

Type	¼" TS connectors, balanced
Impedance	approx. 20 k Ohm
Max. input level	+21 dBu

### STEREO LINE INPUTS

#### PMP6000/PMP4000

Type	¼" TRS connectors, unbalanced
Impedance	> 3.6 k Ohm
Max. input level	+22 dBu

### EQUALIZER

#### PMP6000/PMP4000

Low	80 Hz/+/-15 dB
-----	----------------

#### PMP4000

Mid	2.5 kHz/+/-15 dB
-----	------------------

#### PMP6000

Mid	100 Hz - 8 kHz/+/-15 dB
-----	-------------------------

#### PMP6000/PMP4000

High	12 kHz/+/-15 dB
------	-----------------

### 2 TRACK INPUT

#### PMP6000/PMP4000

Type	RCA
Impedance	approx. 3.6 k Ohm

### PREAMP OUTPUTS

#### PMP6000/PMP4000

##### MAIN

Type	¼" TRS connectors, unbalanced
Impedance	approx. 150 Ohm, unbalanced
Max. output level	+21 dBu

##### MONITOR

#### PMP6000/PMP4000

Type	¼" TRS connectors, unbalanced
Impedance	approx. 150 Ohm, unbalanced
Max. output level	+21 dBu

### STEREO OUTPUTS

#### PMP6000/PMP4000

Type	¼" TRS connectors, unbalanced
Impedance	approx. 150 Ohm, unbalanced
Max. input level	+21 dBu
Type	RCA
Impedance	approx. 1 k Ohm
Max. input level	+21 dBu

### LOUDSPEAKER OUTPUTS

#### PMP6000/PMP4000

Type	Professional locking connector
------	--------------------------------

##### Load impedance:

MAIN L/R	4 - 8 Ohm
MONITOR/MAIN MONO	4 - 8 Ohm
MAIN MONO/MAIN MONO	4 - 8 Ohm
BRIDGE	8 - 16 Ohm

### DSP

#### PMP6000/PMP4000

Converter	24-bit Delta-Sigma, 64/128-times oversampling
Dynamics D/A	90 dB
Sampling rate	46.875 kHz
Delay Time	max. 5 secs
Signal run time (Line In > Line Out)	approx. 1.5 ms

### DISPLAY

#### PMP4000

Type	2-digit, 7-segment LED
------	------------------------

#### PMP6000

Type	2 x 2-digit, 7-segment LED
------	----------------------------

### OUTPUT POWER

#### RMS @ 1% THD, both channels driven:

#### PMP6000

8 Ohm per channel	300 W
4 Ohm per channel	600 W

#### RMS @ 1% THD, bridged mode:

#### PMP6000/PMP4000

8 Ohm	1,200 W
-------	---------

#### Peak Power, both channels driven:

#### PMP6000/PMP4000/PMP1680S

8 Ohm per channel	400 W
4 Ohm per channel	800 W

#### Peak Power, bridged mode:

#### PMP6000/PMP4000

8 Ohm	1,600 W
-------	---------

### POWER SUPPLY

#### Mains voltage

#### PMP6000/PMP4000

USA/Canada	120 V~, 60 Hz
China/Korea	220 V~, 50/60 Hz
Europe/Australia	230 V~, 50 Hz
Japan	100 V~, 50 - 60 Hz
Fuse 100 - 120 V~	T 10 A H 250 V
Fuse 220 - 240 V~	T 6.3 A H 250 V

### POWER CONSUMPTION

#### PMP6000/PMP4000

Power consumption	1,050 W
Mains connector	IEC standard receptacle

### DIMENSIONS/WEIGHT

#### PMP4000

Dimensions (H x W x D)	4 7/8 x 18 3/4 x 18 1/8" 122 x 476 x 460 mm
------------------------	--

#### PMP6000

Dimensions (H x W x D)	4 7/8 x 23 1/2 x 19 1/2" 122 x 596 x 496 mm
------------------------	--

#### PMP4000

Weight	22.9 lbs/10.38 kg
--------	-------------------

#### PMP6000

Weight	28.9 lbs/13.1 kg
--------	------------------

# EUROPOWER

## PMP6000

## PMP4000

## PMP1680S

### PMP1680S

#### MICROPHONE INPUTS

Type	XLR, electronically balanced input circuit
------	--

#### Mic E.I.N. (20 Hz - 20 kHz)

@ 0 Ohm source resistance	-112 dB/114 dB A-weighted
@ 50 Ohm source resistance	-112 dB/114 dB A-weighted
@ 150 Ohm source resistance	-112 dB/114 dB A-weighted
Frequency response	< 10 Hz - 200 kHz (-1 dB) < 10 Hz - > 200 kHz (-3 dB)

Gain	+30 dB, +10 dB with pad
Max. input level	+12 dBu @ +10 dB gain
Impedance	approx. 2.2 kOhm balanced/ 1.1 k Ohm unbalanced
Signal-to-noise ratio	110 dB/114 dB A-weighted (0 dBu In @ +10 dB gain)
Noise (THD + N)	0.001%/0.0007% A-weighted

#### MONO LINE INPUTS

Type	¼" TS connectors, balanced
Impedance	approx. 20 kOhm, balanced
Max. input level	+21 dBu

#### STEREO LINE INPUTS

Type	¼" TRS connectors, unbalanced
Impedance	approx. 100 kOhm, unbalanced
Max. input level	+21 dBu

#### EQUALIZER

Low	80 Hz/+/-15 dB
Mid	2.5 kHz/+/-15 dB
High	12 kHz/+/-15 dB

#### CD/TAPE INPUT

Type	RCA
Impedance	approx. 10 k Ohm

#### PREAMP OUTPUTS

##### MAIN

Type	¼" TS connectors, unbalanced
Impedance	approx. 150 Ohm, unbalanced
Max. output level	+21 dBu

##### MONITOR

Type	¼" TS connectors, unbalanced
Impedance	approx. 150 Ohm, unbalanced
Max. output level	+21 dBu

#### STEREO OUTPUTS

Type	¼" TRS connectors, unbalanced
Impedance	approx. 150 Ohm, unbalanced
Max. input level	+21 dBu
Type	RCA
Impedance	approx. 1 kOhm
Max. input level	+21 dBu

#### LOUDSPEAKER OUTPUTS

Type	Twist-lock professional speaker connector
------	---

#### Load impedance:

MAIN L/R	4 - 8 Ohm
MONITOR/MAIN MONO	4 - 8 Ohm
MAIN MONO/MAIN MONO	4 - 8 Ohm
BRIDGE	8 - 16 Ohm

#### DSP

Converter	24-bit Delta-Sigma, 64/128-times oversampling
Dynamics D/A	90 dB
Sampling rate	40 kHz
Delay Time	max. 5 secs
Signal run time (Line In > Line Out)	approx. 1.5 ms

#### DISPLAY

Type	2 x 2-digit, 7-segment LED
------	----------------------------

#### OUTPUT POWER

##### RMS @ 1% THD, both channels driven:

8 Ohm per channel	300 W
4 Ohm per channel	600 W

##### RMS @ 1% THD, bridged mode:

8 Ohm	1200 W
-------	--------

##### Peak Power, both channels driven:

8 Ohm per channel	400 W
4 Ohm per channel	800 W

##### Peak Power, bridged mode:

8 Ohm	1600 W
-------	--------

#### POWER SUPPLY

##### Mains voltage

USA/Canada	120 V~, 60 Hz
China/Korea	220 V~, 50/60 Hz
Europe/Australia	230 V~, 50 Hz
Japan	100 V~, 50 - 60 Hz
Fuse 100 - 120 V~	T 10 A H 250 V
Fuse 220 - 240 V~	T 6.3 A H 250 V

#### POWER CONSUMPTION

Power consumption	1050 W
Mains connector	IEC standard receptacle

#### DIMENSIONS/WEIGHT

Dimensions (H x W x D)	12 2/5 x 18 1/10 x 8 3/5" 315 x 460 x 220 mm
Weight	21.8 lbs/9.9 kg

Please note these specifications are preliminary and conceptual in nature, and as such are subject to change as product development progresses. This information is supplied for market research purposes only and is not to be made public in any manner. This document is solely the property of The MUSIC Group, or one of its subsidiaries, and must be surrendered upon request of the owner.

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

**Europe** Tel.: +49 2154 9206 4149  
Fax: +49 2154 9206 4199  
**USA/Canada** Tel.: +1 425 672 0816  
Fax: +1 425 673 7647

**Singapore** Tel.: +65 6845 1800  
Fax: +65 6214 0275  
**Australia** Tel.: +61 03 9877 7170  
Fax: +61 03 9877 7870

**Japan** Tel.: +81 3 5281 1180  
Fax: +81 3 5281 1181

©2011 Red Chip Company Ltd. Technical specifications and appearance subject to change without notice. The information contained herein is correct at the time of printing. All trademarks are the property of their respective owners. BEHRINGER accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph or statement contained herein. 985-10000-00448

behringer.com

