

OPERATIONS MANUAL

Bedienungsanleitung

Manual de funcionamiento

Manual de fonctionnement

Manual del utente

®



BPM-250

PROFESSIONAL STEREO PREAMP MIXER

Professioneller Stereo Vorverstärkermischpult

Mezclador-preamplificador estereofónico para el profesional

Mélangeur-préamplificateur stéréophonique pour le professionnel

Miscelatore-preamplificatore stereofonico per il professionale



28

L

R

-20 -15 -10 -7 -3 -1 0 +1 +3 +5 +8

27

PROFESSIONAL STEREO PREAMP MIXER

LIGHT 12V SODMA GC



POWER



BPM250

6 HIGH GAIN

7 HIGH

8 MID

9 LOW

6 HIGH GAIN

7 HIGH

8 MID

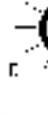
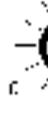
9 LOW

6 HIGH GAIN

7 HIGH

8 MID

9 LOW



MIC PH1/11

10

CH-1

19

13

10 9 8 7 6 5 4 3 2 1 C

MIC PH2/12

11

CH-2

14

10 9 8 7 6 5 4 3 2 1 0

MIC PH3/13

12

CH-3

15

10 9 8 7 6 5 4 3 2 1 0

21 CH-1

21 CH-2

21 CH-3



25

BEAT OFFSET

BPM

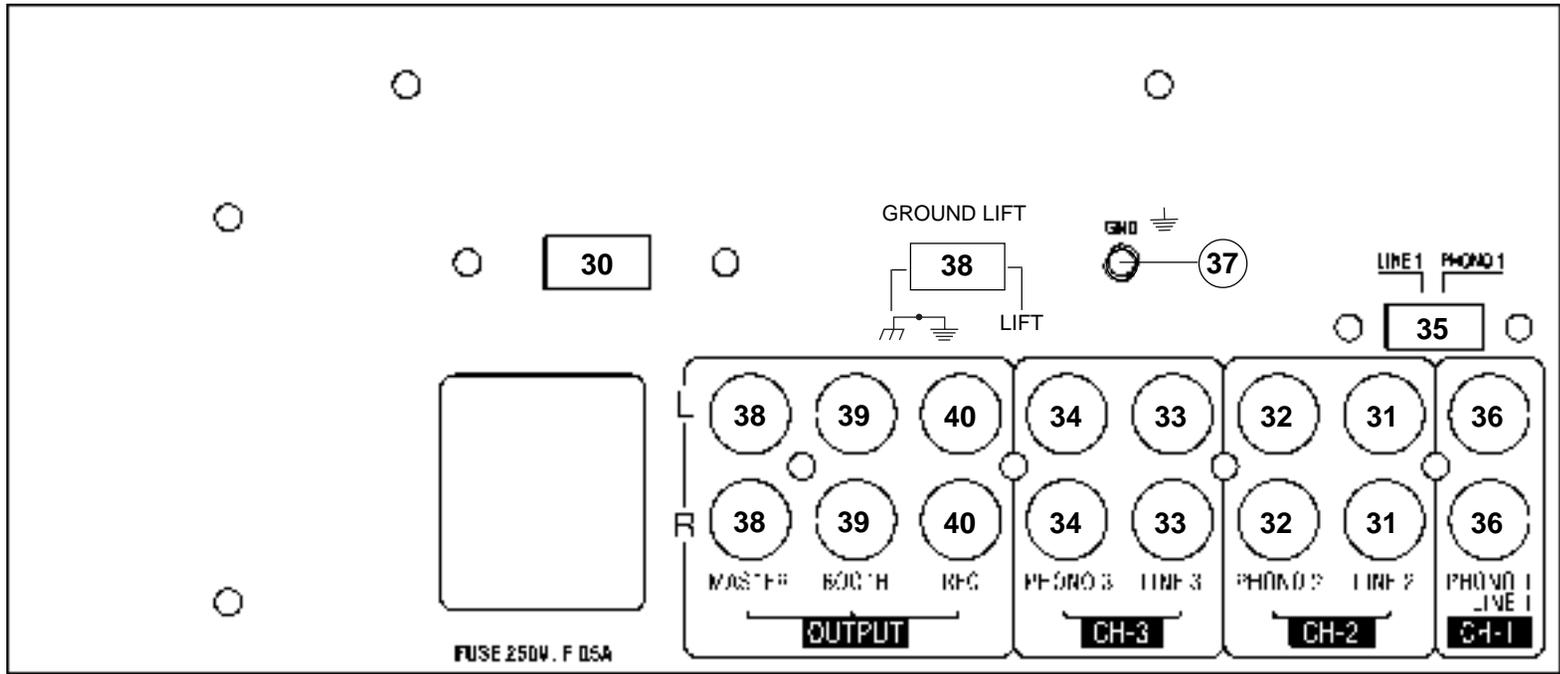
23

BPM

24



26



Introduction

Congratulations on purchasing a Gemini BPM-250 mixer. This state of the art mixer is backed by a three year warranty, excluding crossfader and channel slides. Prior to use, we suggest that you carefully read all the instructions.

Features

- Cut Feature for Bass, Mid and High of each channel
- 3 Stereo channels (3 Phono, 3 Line and 1 Mic)
- Combo XLR or 1/4" DJ Mic jack
- Bass, Mid, Treble and Gain controls on each channel
- Beat indicators
- 12 volt BNC light jack
- Master, Booth and Record outputs
- Dual mode display (Left & Right output or Channel 2 and Channel 3)
- Push button cueing with Cue/Program pan control

Cautions

1. All operating instructions should be read before using this equipment.
2. To reduce the risk of electrical shock, do not open the unit. There are NO USER REPLACEABLE PARTS INSIDE. Please refer servicing to a qualified service technician.

In the U.S.A., if you have any problems with this unit, call 1-732-969-9000 for customer service. Do not return equipment to your dealer.

3. Do not expose this unit to direct sunlight or to a heat source such as a radiator or stove.
4. This unit should be cleaned only with a damp cloth. Avoid solvents or other cleaning detergents.
5. When moving this equipment, it should be placed in its original carton and packaging. This will reduce the risk of damage during transit.
6. DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.
7. DO NOT USE ANY SPRAY CLEANER OR LUBRICANT ON ANY CONTROLS OR SWITCHES.

Connections

1. Before plugging in the power cord, make sure that the **VOLTAGE SELECTOR (30)** switch is set to the correct voltage.

NOTE: This product is double insulated and not intended to be grounded.

2. Make sure that the **POWER (1)** switch is in the off position. The **POWER LED (2)** will be off.
3. The BPM-250 is supplied with 3 sets of output jacks. The **OUTPUT AMP (38)** jacks are used to connect to your main amplifier. The **OUTPUT REC (40)** jacks can be used to connect the mixer to the record input of your recorder enabling you to record your mix. The **OUTPUT BOOTH (39)** jacks allow you to hook up an additional amplifier.
4. The **DJ MIC (3)** input (found on the front panel) accepts a 1/4" or XLR connector and accepts only unbalanced microphones.
5. On the rear panel are 2 stereo **PHONO (32, 34)** inputs, 2 stereo **LINE (31, 33)** inputs and 1 stereo **PHONO/LINE (36)** input. The **PHONO/LINE (35)** switch enables you to set the **(36)** input to Phono or Line. The phono inputs will accept only turntables with a magnetic

cartridge. A **GROUND (37)** screw for you to ground your turntables is located on the rear panel. The stereo line inputs will accept any line level input such as a CD player, a cassette player, etc.

6. Headphones can be plugged into the front panel mounted **HEADPHONE (4)** jack.
7. The BPM-250 comes with a front panel **BNC LIGHT (5)** jack. This jack is for use with a gooseneck light like the Gemini GNL-700.

Using the Ground Lift Switch

Depending on your system configuration, sometimes applying the ground will create a quieter signal path. Sometimes lifting the ground can eliminate ground loops and hum to create a quieter signal path.

1. With the mixer on, listen to the system in idle mode (no signal present) with the ground applied (the **GROUND LIFT SWITCH (38)** in the left position).
2. **Then turn the power off before moving the GROUND LIFT SWITCH (38).** Lift the ground by moving the **GROUND LIFT SWITCH (38)** to the right, turn the power back on and listen to determine which position will provide a signal devoid of background noise and hum. Keep the **GROUND LIFT SWITCH** in the ground position if the noise level remains the same in either position.

CAUTION: DO NOT TERMINATE THE AC GROUND ON THE POWER MIXER IN ANY WAY. TERMINATION OF THE AC GROUND CAN BE HAZARDOUS.

Operation

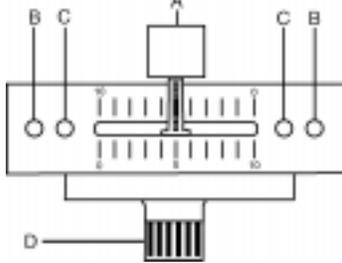
1. **POWER ON:** Once you have made all the equipment connections to your mixer, press the **POWER SWITCH (1)**. The power will turn on and the **POWER LED (2)** will glow RED.
2. **CHANNEL 1:** The **GAIN (6), HIGH (7), MID (8), and LOW (9)**, controls allows you to fully adjust the selected source. Switch # **(10)** allows you to select either the mic or the **PHONO/LINE (36)** input. The **CHANNEL (13)** slide controls the output level of this channel.
3. **MAIN CHANNEL SECTION:** To assign an input source to a channel, first set the **PHONO/LINE (11,12)** switches to their appropriate positions. To make the proper adjustments to your music, set the **GAIN (6), HIGH (7), MID (8) and LOW (9)** controls and position the **CHANNEL (14, 15)** slide.

NOTE: There is Low, Mid and High equalization for each channel with an extremely wide range of adjustment giving you a smoother mix.

SUGGESTION: You can use the Cut Features on each channel to remove Low, Mid and/or High to create special effects.

4. **CROSSFADER SECTION:** The **CROSSFADER (26)** allows the mixing of one source into another. The left side of the **CROSSFADER (26)** is channel 2 and the right side is channel 3. The **CROSSFADER (26)** in your unit is removable and if the need arises can be easily replaced. Crossfader units are available in three varieties. Part # RF-45 (which is identical to the crossfader supplied with the mixer) has a 45 mm travel from side to side. Part # RF-30 is available with a 30 mm travel distance. Also available is the PSF-45 with a special curve designed for scratch mixing. Just purchase one of these crossfader units from your Gemini dealer and follow these instructions:

1. Unscrew the outside **FADER PLATE SCREWS (B)**. Do not touch the **INSIDE SCREWS (C)**.
2. Carefully lift the fader and unplug the **CABLE (D)**.
3. Plug the new fader into the cable and place it back in the mixer.
4. Screw the fader to the mixer.



5. **BPM DISPLAY:** There are **BPM DISPLAYS (23, 24)** for Channel 2 and Channel 3. They update approximately every 2.5 seconds and digitally display the Beats Per Minute allowing you to match the beats visually. **BPM DISPLAY (23)** reflects the Beats Per Minute of Channel 2, and **BPM DISPLAY (24)** reflects the Beats Per Minute of Channel 3.

NOTE: A [- -] reading will appear on the BPM DISPLAY if the track has unclear beats. The [- -] reading will also appear if there is no signal present.

6. The **BEAT OFFSET INDICATORS (25)** light when the tracks of Channel 2 and Channel 3 are within 11 BPMs of each other and display how aligned the beats for Channel 2 and Channel 3 are. When the **RED LEDs** light, the beats are not aligned. When the **YELLOW LEDs** light, the beats are almost aligned. When the **GREEN LED** lights, the beats are aligned perfectly.

NOTE: If the difference between the two channel's beats exceed 11 BPM, the BEAT OFFSET INDICATORS will not light.

SUGGESTION: You can use the **BPM DISPLAYS** to determine which tracks have similar or the same Beats Per Minute. When mixing two tracks with similar Beats Per Minute, you can use one source's pitch control to align the Beats Per Minute with the other source's BPM. The **BPM DISPLAYS** and the **BEAT OFFSET INDICATORS** update every 2.5 seconds and will reflect the change in BPM and indicate when the beats are aligned.

NOTE: Beat mixing is a skill that requires practice. Not every track has a strong beat, and beat mixing works best with tracks with clear and strong beats.

7. **OUTPUT CONTROL SECTION:** The level of the **AMP OUT (38)** is controlled by the **MASTER (18)** control. The **BALANCE (17)** control will allow the Amp Out signal to be balanced between the left and right speakers. The **BOOTH (16)** control adjusts the level of the **BOOTH OUTPUT (39)**. **HINT:** The booth OUTPUT is used by some DJs to run monitor speakers in their DJ booth. You can also use it as a second ZONE or AMP output.

NOTE: The RECORD OUT (40) has no level control. The level is set by the channel slides and the gain controls of the selected channel. The tonal qualities are set by the bass, treble and mid controls of that same channel.

8. **TALKOVER SECTION:** The purpose of the talkover section is to allow the program playing to be muted so that the mic can be heard above the music. When the **TALKOVER (19)** button is pushed, the **TALKOVER INDICATOR** will glow and the volume of all sources except the Mic or whatever is connected to the **PHONO/LINE (36)** input are reduced by -16 dB.
9. **CUE SECTION:** By connecting a set of headphones to the **HEADPHONE (4)** jack, you can monitor any or all of the channels. Select the correct **CUE (21)** button or buttons and their respective **CUE LED (29)** indicators will glow. Use the **CUE LEVEL (20)** control

to adjust the headphone volume without effecting the overall mix. By sliding the **CUE PGM PAN (22)** control to the left you will be able to monitor the assigned cue signal. Sliding to the right will monitor the PGM (program) output.

10. **DISPLAY:** The peak hold, dual function **DISPLAY (27)** indicates either the **MASTER (38)** output left and right levels or the channel 2 and channel 3 levels. You can choose the option you want by pressing the **DISPLAY (28)** button.

NOTE: When the DISPLAY (27) is in the channel 2/channel 3 display mode, by adjusting the individual channel gain and tone controls, you can increase or decrease the signal to match the other channel's signal. The channel slides and crossfader have no effect on the display readings.

Specifications

INPUTS:

DJ Mic.....	1.5mV 2Kohm unbalanced
Phono.....	3mV 47Kohm
Line.....	150 mV 27Kohm

OUTPUTS:

Amp/Booth.....	0 dB 775mV 400ohm
Max.....	24V Peak to Peak
Rec.....	225mV 5Kohm

GENERAL:

Low.....	+ 12/-26dB
Mid.....	+ 12/-26dB
High.....	+ 12/-26dB
Gain (Mic).....	0 to -40dB
Gain (Chnl 1-3).....	0 to -20dB
Frequency Response.....	20Hz - 20KHz +/- 2dB
Distortion.....	0.02%
S/N Ratio.....	better than 80dB
Talkover Attenuation.....	-16dB
Headphone Impedance.....	16ohm
Power Source.....	115/230V 50/60Hz 15W
Dimensions.....	10" x 12" x 4 7/16" (254 x 305 x 112 mm)
Weight.....	6.5 lbs (3 kg)



In the U.S.A., if you have any problems with this unit, call 1-732-969-9000 for customer service. Do not return equipment to your dealer.

Parts of the design of this product may be protected by worldwide patents.

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**Worldwide Headquarters • 8 Germak Drive, Carteret, NJ 07008 • USA
Tel (732) 969-9000 • Fax (732) 969-9090**

France • G.S.L. France • 11, Avenue Leon Harmel, Z.I. Antony, 92160 Antony, France
Tel 011-331-5559-0470 • Fax 011-331-5559-0485

Germany • Gemini Sound Products GmbH • Ottostrasse 6, 85757 Karlsfeld, Germany
Tel: 08131 - 39171-0 • Fax: 08131 - 39171-9

UK • Gemini Sound Products • Unit C4 Hazleton Industrial Estate, Waterlooville, UK P08 9JU
Tel: 011-44-170-5591-771 • Fax: 011-44-170-5593-533

Spain • Gemini Sound Products S.A. • Mino, 112, Nave 1, 08223 Terrassa, Barcelona, Spain
Tel: 011-34-93-736-34-00 • Fax: 011-34-93-736-34-01