OPERATIONS MANUAL

Bedienungsanleltung Manual de funcionamiento Manual de fonctionnement Manual del utente

BPM-150 PROFESSIONAL STEREO PREAMP MIXER

Professionneller Stereo Vorverstärkermischpult Mezclador-preamplificador estereofónico para el profesional Mélangeur-préamplificateur stéréophonique pour le professionnel Miscelatore-preamplificatore stereofonico per il professionale







Introduction

Congratulations on purchasing the Gemini BPM-150 mixer. This state of the art mixer includes the latest features and is backed by a three year limited warranty, excluding crossfader and channel slides. Prior to use, we suggest that you carefully read all the instructions.

Features

- 2 Stereo channels
- 2 Phono/Line Convertible, 1 Phono, 1 Line and 1 Mic input
- 1/4" DJ Mic jack
- Low, Mid, High and Gain controls on each channel
- Master output control
- Cue section

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 (2) 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 BPM-150 is supplied with 2 sets of output jacks. The OUTPUT AMP (3) jacks are used to connect to your main amplifier. The OUTPUT REC (5) jacks can be used to connect the mixer to the record input of your recorder enabling you to record your mix.
- 4. The **DJ MIC (26)** input (found on the front panel) accepts a 1/4" connector and balanced and unbalanced microphones.
- 5. On the rear panel are 2 stereo PHONO/LINE (7, 11) inputs, 1 stereo PHONO (12) input and 1 stereo LINE (6) input. The PHONO/LINE SWITCHES (8, 10) enable you to set the (7, 11) inputs to Phono or Line. The phono inputs will accept only turntables with a magnetic cartridge. A GROUND SCREW (9) 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 (38)** jack.

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 (4)** in the left position).
- 2. Then turn the power off before moving the GROUND LIFT SWITCH (4). Lift the ground by moving the GROUND LIFT SWITCH 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 (1)** switch.
- CHANNEL 1: The GAIN (13), HIGH (20), MID (21), and LOW (22) controls allow you to fully adjust the selected source. Switch # (23) allows you to select either the PHONO 1 (12) or the PHONO 2/LINE 1 (11) input. The CHANNEL SLIDE (24) controls the output level of this channel.
- 3. CHANNEL 2: The GAIN (39), HIGH (32), MID (33), and LOW (34) controls allow you to fully adjust the selected source. Switch # (35) allows you to select either the PHONO 3/LINE 2 (7) or the LINE 3 (6) input. The CHANNEL SLIDE (36) controls the output level of this channel.

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 (31) allows the mixing of one source into another. The left side of the CROSSFADER (31) is CHANNEL 1 and the right side is CHANNEL 2. The CROSSFADER (31) 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.



The **CROSSFADER CURVE BUTTON (19)** allows you to adjust the kind of curve the crossfader has. Depress the crossfader curve button to make the curve steep and cutting (perfect for scratching). Release the crossfader curve button to make the curve gradual and gentle. The **CROSSFADER REVERSE SWITCH (29)** allows you to reverse the crossfader so that CHANNEL 2 is controlled by the left side of the crossfader and CHANNEL 1 is controlled by the right side of the crossfader.

NOTE: When the CROSSFADER REVERSE SWITCH (29) is activated (moved to the right), only the crossfader reverses. The Channel Slides, Gain and tonal controls do not reverse.

- 5. PUNCH IN: The **PUNCH IN BUTTONS (18, 44)** allow you to add a channel's signal to the mix when the crossfader is set to the opposite channel.
- BPM DISPLAY: There are BPM DISPLAYS (25, 37) for Channel 1 and Channel 2. They update approximately every 2.5 seconds and digitally display the Beats Per Minute allowing you to match the beats visually.
 BPM DISPLAY (25) reflects the Beats Per Minute of Channel 1, and BPM DISPLAY (37) reflects the Beats Per Minute of Channel 2.

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.

7. The BEAT OFFSET INDICATORS (30) 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 1 and Channel 2 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 diffence 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.

 OUTPUT CONTROL SECTION: The level of the MASTER OUTPUT (3) is controlled by the MASTER (43) control.

NOTE: The RECORD OUT (5) 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 low, mid and high controls of that same channel.

- 9. 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. The MIC/TALKOVER (14) switch has three settings. When the MIC/TALKOVER (14) switch is in the left position, the mic and talkover are both off. When the MIC/TALKOVER (14) switch is in the center position the mic is on, the MIC INDICATOR (15) will glow, but talkover is off. When the MIC/TALKOVER (14) switch is in the right position, the mic and talkover will be on and the volume of all sources except the Mic input are lowered by 16 dB. MIC LEVEL (17) controls the level of the MIC. The MIC EQ (16) control allows you to fully adjust the tone of the MIC.
- 10. CUE SECTION: By connecting a set of headphones to the HEADPHONE (38) jack, you can monitor either channel or both together. Move the CUE SWITCH (40) to the left to monitor CHANNEL 1. Move the CUE SWITCH (40) to the right to monitor CHANNEL 2. By rotating the CUE PGM PAN (41) control to the left you will be able to monitor the assigned cue signal. Rotating to the right will monitor the PGM (program) output. Use the CUE LEVEL (42) control to adjust the headphone volume without effecting the overall mix.

11. DISPLAY: The peak hold, dual function **DISPLAY (27)** indicates either the **MASTER** output left and right levels or the channel 1 and channel 2 levels. You can choose the option you want by pressing the **DISPLAY (28)** button.

NOTE: When the DISPLAY (27) is in the channel 1/channel 2 display mode, by adjusting the individual channel gain 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 600 Ohm
Phono	3mV 47Kohm
Line	150 mV 27Kohm
OUTPUTS:	
Amp	0 dB 1V 400ohm
Ma	x18V Peak to Peak

GENERAL:

Low (Channels 1 - 2)+ 12dB/-32 dB
Mid (Channels 1 - 2)+ 12dB/-32 dB
High (Channels 1 - 2)+ 12dB/-32 dB
Gain (Channels 1 - 2)0 to -20dB
Frequency Response20Hz - 20KHz +/- 2dB
Distortion0.02%
S/N Ratiobetter than 80dB
Talkover Attenuation16dB
Headphone Impedance160hm
Power Source115V/230V 60Hz/50Hz 12W
Dimensions10" x 10.24" x 3.3" (254 x 260 x 84 mm)
Weight



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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