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gemini



OPERATORS MANUAL

BEDIENUNGSHANDBUCH
MANUAL DEL OPERADOR
MANUEL D'INSTRUCTIONS

PS-650i

PROFESSIONAL STEREO PREAMP MIXER

Professioneller Stereo Vorverstärkermischpult

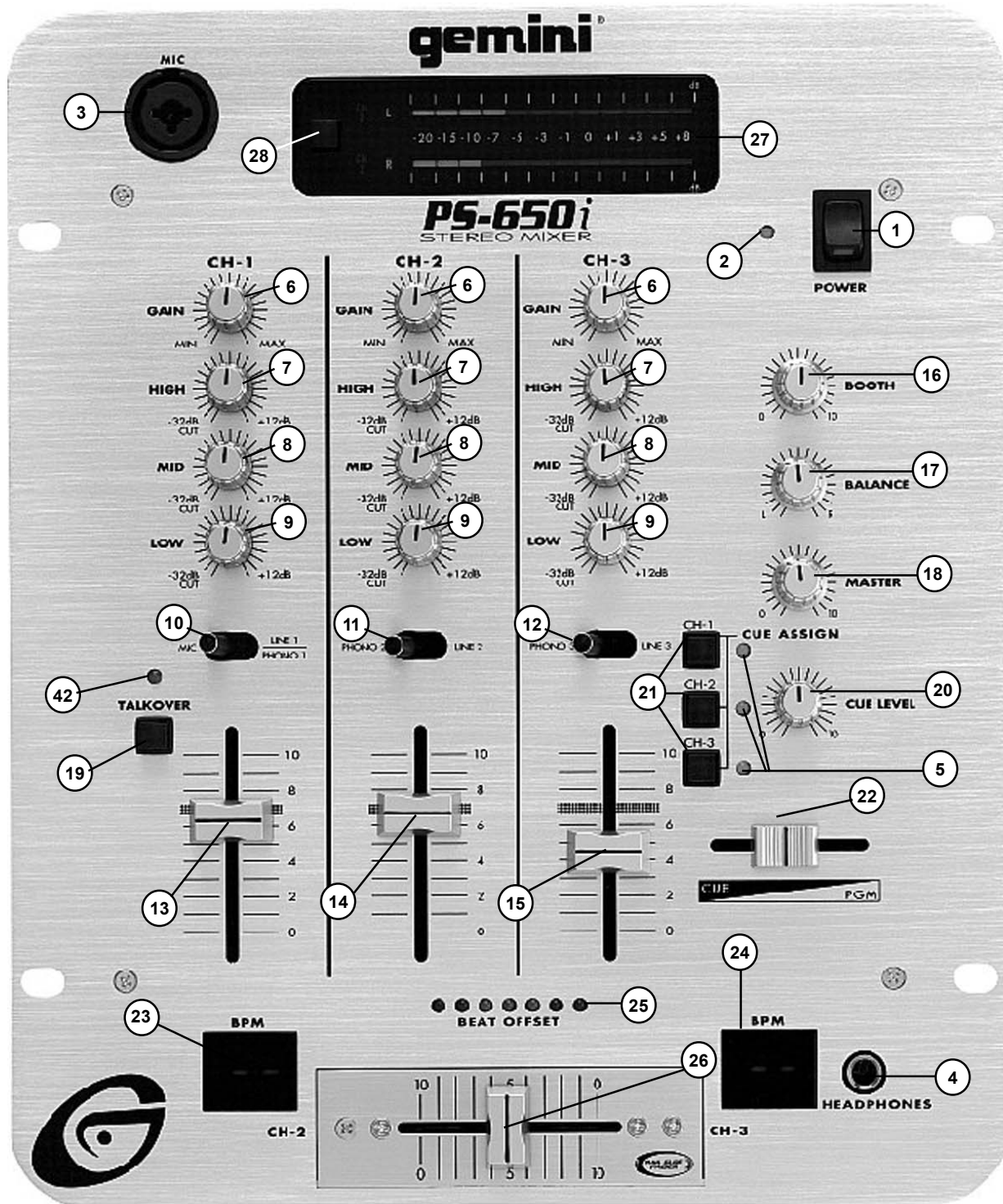
Mezclador-preamplificador estereofónico para el profesional

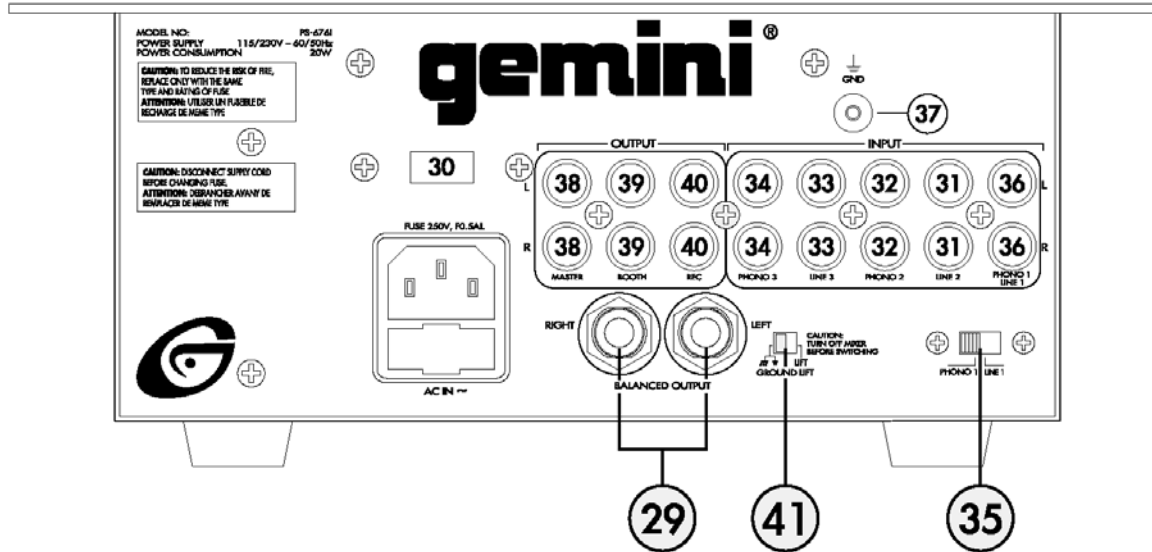
Mélangeur-préamplificateur stéréophonique pour le professionnel

Miscelatore-preamplificatore stereofonico per il professionale



PS-650i





PS-650i

INTRODUCTION

Congratulations on purchasing a Gemini Platinum Series model **PS-650i 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 Low, Mid and High of each channel
- BPM Display
- 3 Stereo channels (3 Phono, 3 Line and 1 Mic)
- Neutrik ComBo XLR/Jack DJ Mic.
- Low, Mid, High and Gain controls on each channel
- Beat Offset Indicators
- 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 Gemini Sound Products service technician.


In the USA: if you experience problems with this unit, please call 1 (732) 969-9000 for Gemini Customer Service.

Do not attempt to return this 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 is 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 PS-650i is supplied with four (4) sets of output jacks.
 - The **1/4" BALANCED OUTPUT (29)** jacks are used to connect to your main amplifier using standard balanced cables. We recommend using balanced amp outputs if the cables to your amp are 10 feet or more.
 - The **MAIN OUTPUT (38)** (RCA type) jacks are unbalanced and used to connect to your main amplifier.
 - The **REC OUTPUT (40)** (RCA type) jacks can be used to connect the mixer to the record input of your recorder enabling you to record your mix.
 - The **BOOTH OUTPUT (39)** (RCA type) jacks allow you to hook up an

additional amplifier.

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 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.

THE GROUND LIFT SWITCH

Depending on your system configuration, applying the ground sometimes creates a quieter signal path. Sometimes "lifting" the ground eliminates loops and hum to create a quieter signal path.

1. Listen to the system with the unit **ON**, without music, and with the ground "applied". **GROUND LIFT SWITCH (41)** should be to the left.
2. Turn power **OFF** before moving the **GROUND LIFT SWITCH**.
3. Now, "lift" the ground by moving the **GROUND LIFT SWITCH** to the right. Turn the power back **ON** and listen to determine which position provides a signal free of background noise and hum.

Note: Keep **GROUND LIFT** in the ground "applied" or left position if noise level remains the same in either position.



CAUTION: DO NOT TERMINATE THE AC GROUND ON THE POWER CABLE. TERMINATION OF THE AC GROUND CAN BE HAZARDOUS.

OPERATION

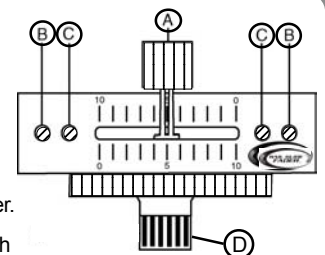
1. **POWER ON:** Once you have made all the equipment connections to your mixer, press the **POWER SWITCH (1)**. The power will turn on and the **POWER LED (2)** will glow **RED**.
2. **CHANNEL 1:** The **GAIN (6)**, **HIGH (7)**, **MID (8)**, and **LOW (9)** controls allow you to fully adjust the selected source. Switch (10) allows you to select either the mic or the **PHONO/LINE (36)** input. The **CHANNEL SLIDE (13)** 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 SLIDE (14,15)**.

PLEASE NOTE: There is Low, Mid and High equalization for each channel with an extremely wide range of adjustment.

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


The Crossfader in your unit is removable, and should the need arise, can easily be replaced by following these instructions.
Note: Gemini replacement Crossfaders are available in three varieties: the **RG-45 PRO (RAIL GLIDE™)** Dual-Rail Crossfader; the **RF-45**, which has a 45mm travel from side-to-side; and the **PSF-45**, which features a special "curve" designed for scratch mixing.

1. Unscrew the outside **FADER PLATE SCREWS (B)**.
 - Do not touch **INSIDE SCREWS (C)**.
2. Carefully remove old Crossfader and unplug **CABLE (D)**.
3. Plug new Crossfader into **CABLE (D)** and place back into mixer.
4. Screw Crossfader to mixer with **FADER PLATE SCREWS (B)**.




◆ Your Gemini mixer comes with an **RG-45 PRO (RAIL GLIDE™) DUAL-RAIL CROSSFADER**. Rail Glide™ Crossfaders have internal dual stainless steel rails that allow the slider to ride smoothly and accurately from end to end.

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.
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: BOOTH OUTPUT (39) is used by some DJs to run monitor speakers in the 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. Tonal qualities are set by the low, mid and high 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 (28) 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 (5) 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 (28) 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.**

11. **The CROSSFADER CURVE SWITCH (42)** allows you to adjust the kind of curve the crossfader has, Move switch to the "sharp" position to make the curve steep and cutting (perfect for scratching). Move switch to the "gradual" position to make the curve gradual and gentle. The **CROSSFADER REVERSE SWITCH (43)** allows you to reverse the crossfader so that CHANNEL 3 is controlled by the left side of the crossfader and CHANNEL 2 is controlled by the right side of the crossfader.

 **NOTE: When the CROSSFADER REVERSE SWITCH (32) is activated, only the crossfader reverses. The Channel Slides, Gain, and Tonal controls do not reverse.**

SPECIFICATIONS

I INPUTS:

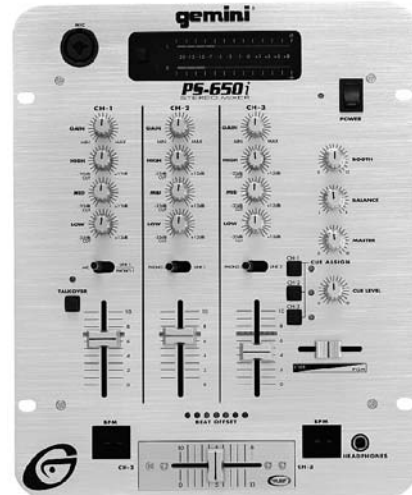
DJ Mic.....1.5mV 2 kΩ unbalanced
 Phono @ 1 kHz.....2 mV 47 kΩ
 Line.....100 mV 27 kΩ

OUTPUTS:

Amp/Booth.....0 dB 775mV 400Ω
 Max.....24V Peak-to-Peak
 Rec.....225mV 5 kΩ

GENERAL:

Bass+ 12dB/- 32 dB
 Mid+ 12dB/- 32 dB
 Treble+ 12dB/- 32 dB
 Gain (Mic).....0 to -40dB
 Gain (Chnls 1-3).....0 to -20dB
 Frequency Response.....20Hz - 20kHz +/- 2dB
 Distortion.....less than 0.02%
 S/N Ratio.....better than 80dB
 Talkover Attenuation.....16dB
 Power Source.....115/230V 50/60Hz 20W
 Dimensions.....254mmW x 305mmD x 112mmH
 10"W x 12"D x 4 7/16"H
 Weight.....6.5 lbs(3 Kg)





**In the USA: If you experience problems with this unit,
call 1-732-738-9003 for Gemini Customer Service.**

Do not attempt to return this equipment to your dealer.

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