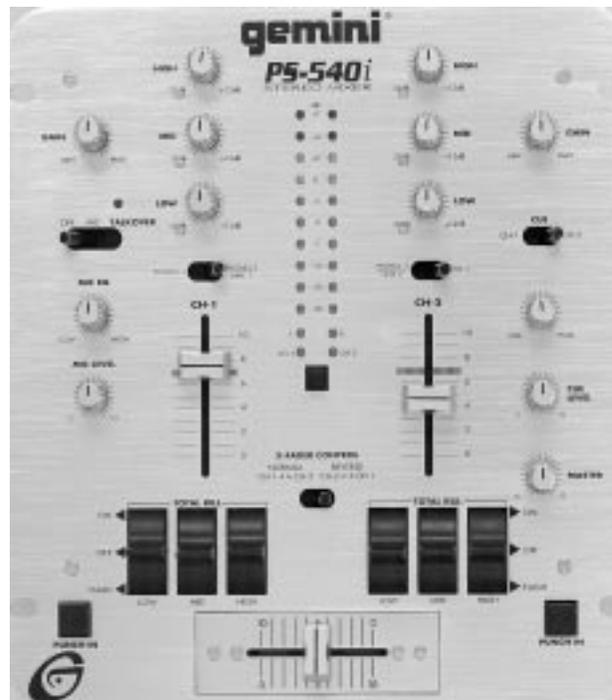




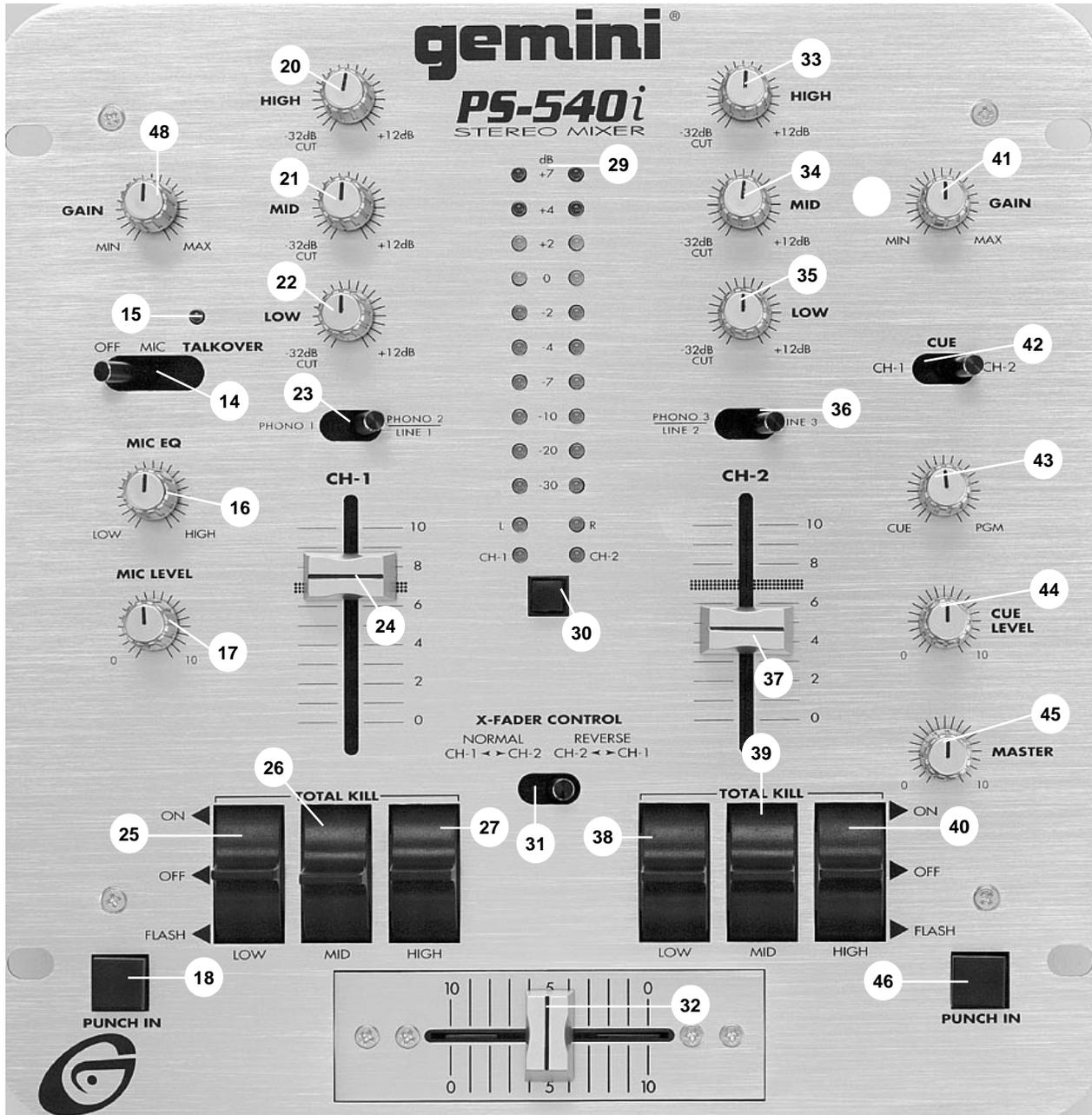
# OPERATIONS MANUAL

# PS-540i

## PROFESSIONAL MIXER



# PS-540i





# PS-540i

# INTRODUCTION

Congratulations on purchasing the Gemini PS540i 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

Balanced and unbalanced Master Outputs

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 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 (2)** 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.
3. The PS-540i is supplied with 3 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.  
  
The 1/4" jack **BALANCED OUTPUT (4)** jacks are used to connect to your main amplifier using standard 1/4" connector cables. We recommend using balanced amp outputs if the cables to your amp are 25 feet or more.
4. The **DJ MIC (28)** input (found on the front panel) accepts a 1/4" connector for balanced or 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)** 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.

### ◆ The phono inputs will accept only turntables with a magnetic cartridge.

6. Headphones can be plugged into the front panel mounted **HEADPHONE (47)** 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 (13)** should be set 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)**.
2. **CHANNEL 1:** The **GAIN (48)**, **HIGH (20)**, **MID (21)**, and **LOW (22)** controls allow you to fully adjust the selected source. Switch **(23)** allows you to select the **PHONO 1 (12)** or the **PHONO 2 LINE 1 (11)** input. **CHANNEL SLIDE (24)** controls the input level of this channel.
3. **CHANNEL 2:** The **GAIN (41)**, **HIGH (33)**, **MID (34)**, and **LOW (35)** controls allow you to fully adjust the selected source. Switch **(36)** allows you to select the **PHONO 3/LINE 2 (7)** or the **LINE 3 (6)** input. **CHANNEL SLIDE (37)** controls the input level of this channel.

**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.**

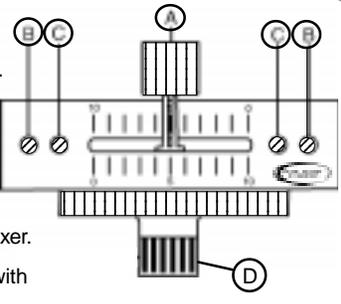
4. **KILLING FREQUENCIES:** There are two ways to kill frequencies, using the **LOW (25, 38)**, **MID (26, 39)**, and **HIGH (27, 40) KILL SWITCHES**. Each Kill Switch has three positions, latch, normal and flash. When you move the selected KILL SWITCH to the top **LATCH (ON)** position, the switch will stay there, and the frequency will be killed. When you move the selected KILL SWITCH to the center position the kill function is not active, and the frequency will not be killed. When you move the selected KILL SWITCH to the bottom **FLASH** position and hold it there, the frequency will be killed. Releasing the selected KILL SWITCH from the bottom position will bring it back to the center position and the frequency will no longer be killed.

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.

5. **CROSSFADER SECTION:** The **CROSSFADER (32)** allows the mixing

of one source into another. The left side of the **CROSSFADER (32)** is CHANNEL 1 and the right side is CHANNEL 2.

1. Unscrew the outside FADER PLATE SCREWS (B).
- Do not touch INSIDE SCREWS (C).
2. Carefully remove old Cross-fader 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).



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 (31)** 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 (31) is activated (moved to the right), only the crossfader reverses. The Channel Slides, Gain, Kill Switches and tonal controls do not reverse.**

6. **PUNCH IN:** The **PUNCH IN BUTTONS (18,46)** allow you to add a channels signal to the mix when the crossfader is set to the opposite channel.
7. **OUTPUT CONTROL SECTION:** The level of the **MASTER OUTPUT (3)** is controlled by the **MASTER (45)** 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.**

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. 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.
9. **CUE SECTION:** By connecting a set of headphones to the **HEADPHONE (47)** jack, you can monitor either channel or both together. Move the **CUE SWITCH (42)** to the left to monitor CHANNEL 1. Move the **CUE SWITCH (42)** to the right to monitor CHANNEL 2. By rotating the **CUE PGM PAN (43)** 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 (44)** control to adjust the headphone volume without effecting the overall mix.
10. **DISPLAY:** The peak hold, dual function **DISPLAY (29)** 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 (30)** button.



**NOTE: When the DISPLAY (29) is in the channel 1/channel 2 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 2 KΩ Balance
Phono @ 1kHz.....	2mV 47 kΩ
Line.....	100 mV 10 kΩ

### OUTPUTS:

Amp.....	0 dB 1V 400 Ω
Max.....	18V 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 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.....	10"Wx 10.24"H x 3.3"D(254 x 260 x 84 mm)
Weight.....	6.3 lbs(3 kg)



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call 1 (732) 969-9000 for Gemini Customer Service.  
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Parts of the design of this product may be protected by worldwide patents.

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