

OPERATIONS MANUAL

Bedienungsanleitung

Manual de funcionamiento

Manual de fonctionnement

Manual del utente

®



PDM-24s

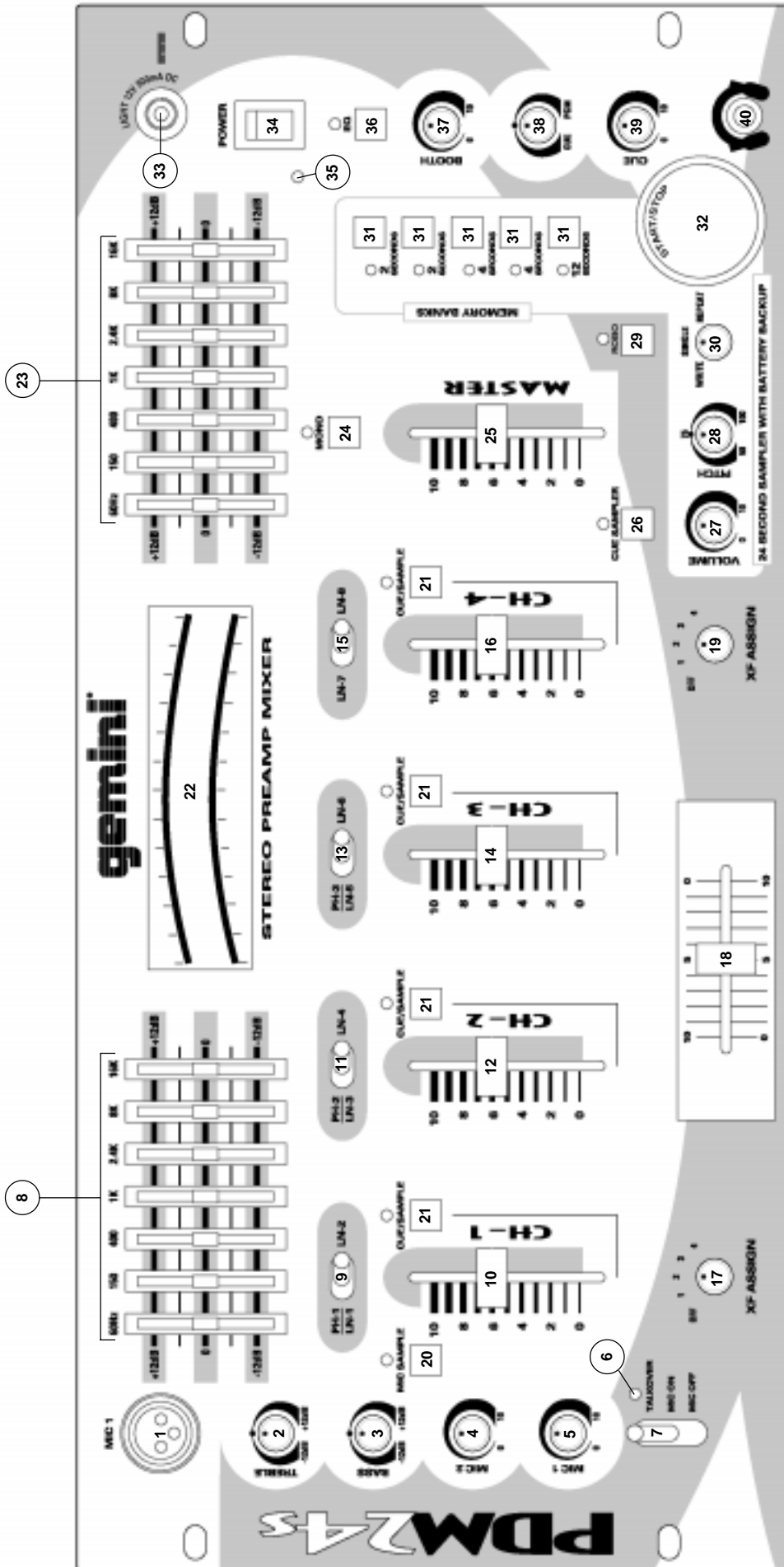
PROFESSIONAL STEREO PREAMP MIXER

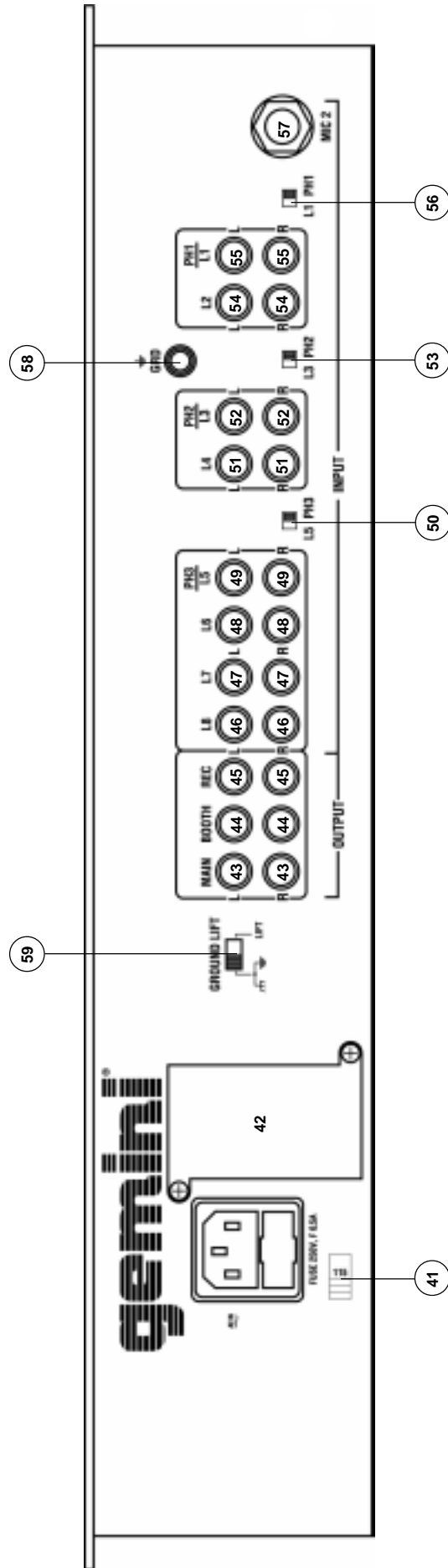
Professioneller Stereo Vorverstärkermischpult

Mezclador-preamplificador estereofónico para el profesional

Mélangeur-préamplificateur stéréophonique pour le professionnel

Miscelatore-preamplificatore stereofonico per il professionale





Introduction

Congratulations on purchasing the Gemini PDM-24s 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

- 4 Stereo Channels
- State of the Art Cue Section
- 3 Phono/Line Convertible, 5 Line, and 2 Mic Inputs
- Dual 7 Band Graphic Equalizers
- Talkover
- Master, Booth and Record outputs
- Digital Sampler with 5 Memory Banks
- Battery backup to retain samples

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 (41)** 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 (34)** switch is in the off position. The **POWER LED (35)** will be off.
3. The PDM-24s is supplied with 3 sets of amp output jacks. The **MAIN OUTPUT (43)** jacks are unbalanced and used to connect to your main amplifier. The **REC OUTPUT (45)** jacks can be used to connect the mixer to the record input of your recorder enabling you to record your mix. The **BOOTH OUTPUT (44)** jacks allow you to hook up an additional amplifier.
4. The **MIC 1 (1)** input (found on the front panel) accepts a 1/4" or XLR connector. The **MIC 2 (57)** input (found on the rear panel) accepts 1/4" connectors. All accept balanced and unbalanced microphones.
5. On the rear panel are 3 stereo **PHONO/LINE (49, 52, 55)** inputs and 5 stereo **LINE (46, 47, 48, 51, 54)** inputs. The **PHONO/LINE SWITCH (50)** enables you to set the **(49)** input to Phono or Line. The

PHONO/LINE SWITCH (53) enables you to set the **(52)** input to Phono or Line. The **PHONO/LINE SWITCH (56)** enables you to set the **(55)** input to Phono or Line. The phono inputs will accept only turntables with a magnetic cartridge. A **GROUND SCREW (58)** 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 (40)** jack.
7. The PDM-24s comes with a front panel **BNC LIGHT (33)** 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 (59)** in the left position).
2. **Then turn the power off before moving the GROUND LIFT SWITCH (59).** 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.

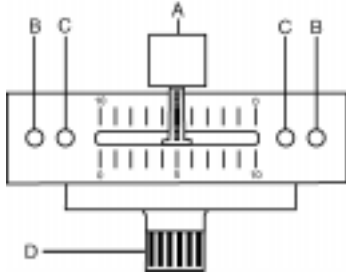
CAUTION: DO NOT TERMINATE THE AC GROUND ON THE POWER MIXER IN ANY WAY. TERMINATION OF THE AC GROUND CAN BE HAZARDOUS.

Operation

1. **POWER ON:** Once you have made all the equipment connections to your mixer, press the **POWER SWITCH (34)**. The power will turn on and the **POWER LED (35)** will glow RED.
2. **CHANNEL 1:** Switch # **(9)** allows you to select the **PHONO 1/LINE 1 (55)** or the **LINE 2 (54)** input. The **CHANNEL SLIDE (10)** controls the input level of this channel.
3. **CHANNEL 2:** Switch # **(11)** allows you to select the **PHONO 2/LINE 3 (52)** or the **LINE 4 (51)** input. The **CHANNEL SLIDE (12)** controls the input level of this channel.
4. **CHANNEL 3:** Switch # **(13)** allows you to select the **PHONO 3/LINE 5 (49)** or the **LINE 6 (48)** input. The **CHANNEL SLIDE (14)** controls the input level of this channel.
5. **CHANNEL 4:** Switch # **(15)** allows you to select the **LINE 7 (47)** or the **LINE 8 (46)** input. The **CHANNEL SLIDE (16)** controls the input level of this channel.
6. **CROSSFADER SECTION:** The **CROSSFADER (18)** allows the mixing of one source into another. The PDM-24s features an assignable crossfader. The **ASSIGN (17, 19)** switches allow you to select which channel will play through each side of the crossfader. The **ASSIGN (17)** switch has 5 settings (OFF, 1, 2, 3 or 4) and allows you to select channel 1, 2, 3 or 4 to play through the left side of the crossfader. The **ASSIGN (19)** switch has 5 settings (OFF, 1, 2, 3 or 4) and allows you to select channel 1, 2, 3 or 4 to play through the right side of the crossfader. With the **ASSIGN** switch in the off position, that side of the crossfader will be inactive. The **CROSSFADER (18)** 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.



7. **EQUALIZER SECTION:** This unit features dual 7 band **GRAPHIC EQUALIZERS (8, 23)** to allow you to adjust the sound for any room. To activate the equalizer, press the **EQ BUTTON (36)** (the EQ LED will light). By adjusting any of the 7 left equalizer slide controls (**8**), you can cut or boost the tonal characteristics of the sound coming from the left speaker by ± 12 dB. By adjusting any of the 7 right equalizer slide controls (**23**), you can cut or boost the tonal characteristics of the sound coming from the right speaker by ± 12 dB. Deactivate the equalizer by pressing the **EQ BUTTON (36)** again (the EQ LED will turn off).
8. **OUTPUT CONTROL SECTION:** The level of the **MAIN OUTPUT (43)** is controlled by the **MASTER (25)** slide. Activating the **MONO (24)** button (the mono LED will light) makes the overall output mono. The **BOOTH (37)** control adjusts the level of the **BOOTH OUTPUT (44)**. **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 REC OUTPUT (43) has no level control. The level is set by the channel slides of the selected channel. The tonal qualities can be controlled by the equalizers.
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 SWITCH (7)** controls MIC 1 and MIC 2 and has three settings. When the **MIC/TALKOVER SWITCH (7)** is in the bottom position, MIC 1 and MIC 2 and talkover are off. When the **MIC/TALKOVER SWITCH (7)** is in the center position MIC 1 and MIC 2 are on, the **MIC INDICATOR (6)** will glow, but talkover is off. When the **MIC/TALKOVER SWITCH (7)** is in the top position, MIC 1 and MIC 2 and talkover will be on and the volume of all sources except the Mic inputs are lowered by 16 dB. The **TREBLE (2)** and **BASS (3)** controls allow you to fully adjust the tone of MIC 1 and MIC 2. **MIC 1 LEVEL (5)** controls the level of MIC 1. The **MIC 2 LEVEL (4)** controls the level of MIC 2.
10. **CUE SECTION:** By connecting a set of headphones to the **HEADPHONE (40)** jack, you can monitor any or all of the channels. Press the **CUE/SAMPLE ASSIGN (21)** buttons for channels 1 - 4 to select the channel or channels to be monitored and their respective LED indicators will glow. Press the **CUE/SAMPLE ASSIGN (20)** button to monitor MIC 1 and MIC 2. The **CUE/SAMPLE ASSIGN (20, 21)** buttons are also used to assign samples (see Sampler Operation for more details). Press the **CUE SAMPLER (26)** to monitor samples. Use the **CUE LEVEL (39)** control to adjust the cue volume without effecting the overall mix. By moving the **CUE PGM PAN (38)** control to the left you will be able to monitor the assigned cue signal. Moving the control to the right will monitor the PGM (program) output.
11. **DISPLAY:** The **DISPLAY (22)** indicates either the **MASTER** output left and right levels.

Sampler Operation

GENERAL INFORMATION: The PDM-24s Sampler uses Dynamic RAM memory and a 12 bit microprocessor controller. The full bandwidth results in true sound reproduction.

MEMORY INFORMATION: The PDM-24s comes equipped with five **MEMORY BANKS (31)**. The two banks marked 2 & 2 are two seconds in length, the two banks marked 4 & 4 are four seconds in length and the bank marked 12 is twelve seconds in length. These banks are separate and can not be linked. You can store a different sample in each bank but they must be recorded individually and they must be played one at a time.

SAMPLE RECORDING:

1. Put the **MODE SELECTOR (30)** switch into the **WRITE** position.
2. Select the source you want to sample from by pressing the appropriate **CUE/SAMPLE ASSIGN (20, 21)** button.
3. Select the memory bank you want to record into, by pressing the proper **MEMORY BANK (31)** button.
4. The PDM-24s comes equipped with a sampler **PITCH (28)** control. To get a perfect sample, set the control to its center position and record the sample. During playback, raising or lowering the control will raise or lower the pitch of the sample playback. The center position will remain as normal pitch.

HINT: You can record a sample with the PITCH (28) control in any position. Whatever that position is will become normal sound. If you start to record a sample with the PITCH (28) control set at minimum (this now becomes your normal pitch), by increasing the pitch to maximum, the pitch effect will double in speed. Recording at maximum and lowering to minimum will do exactly the opposite.

5. Tapping the **START/STOP (32)** button begins the sampling process (the **SAMPLER INDICATOR** will illuminate **RED**). Tapping the **START/STOP (32)** button a second time ends the sample (the **SAMPLER INDICATOR** will turn off). If you do not tap the **START/STOP (32)** button a second time, the sampling process will stop automatically after 2, 4 or 12 seconds depending on which **MEMORY BANK (31)** was selected.

SAMPLE PLAYBACK:

1. Put the **MODE SELECTOR (30)** switch into the **SINGLE** or **REPEAT** position.
2. Select the memory bank you wish to play by pressing the proper **MEMORY BANK (31)** button.
3. Tapping the **START/STOP (32)** button with the **MODE SELECTOR (30)** switch in the **SINGLE** position will cause the sampler to playback one time (the **SAMPLER INDICATOR** will illuminate **GREEN**). Every push of the **START/STOP (32)** button will restart the sample from the beginning. Rapid pressing of the **START/STOP (32)** button will cause a stuttering effect. Once the sample has started playback and the **START/STOP (32)** button is not pushed a second time, the sample will play to the end and then stop (the **SAMPLER INDICATOR** will turn off).
4. Tapping the **START/STOP (32)** button with the **MODE SELECTOR (30)** switch in the **REPEAT** position will cause the sample to continuously play over and over (the **SAMPLER INDICATOR** will illuminate **GREEN**). The **START/STOP (32)** button will act as an on/off switch. The first push will start the sample, the second push will stop it. The **SAMPLER LEVEL (27)** controls the level of the sample.

ROBO PLAY:

1. With the **ROBO PLAY (29)** button in the **OFF POSITION** (the **ROBO PLAY INDICATOR** will be **OFF**) and the **MODE SELECTOR (30)** switch in either the **SINGLE** or **REPEAT** mode, pressing the **START/STOP (32)** button will cause the sample to play along with the selected source.

2. When the **ROBO PLAY (29)** button is in the **ON** position (the **ROBO PLAY INDICATOR** illuminates **RED**), starting the sampler mutes the selected source. When the sample ends, the source automatically turns back on.

BATTERY BACKUP: The PDM-24s is equipped with battery backup to retain samples. To activate this feature, a 9 volt battery (not included) needs to be connected to the **BATTERY HOLDER (42)** located on the rear panel. This will enable you to store samples in memory, and when the unit is unplugged, the battery backup will retain the samples for future use. **If the unit is unplugged with no battery attached, all the samples will be lost.**

LOW BATTERY INDICATOR: A low battery indicator is included with the PDM-24s. When changing the battery, make sure the unit is plugged in and the power is **ON**. Failure to adhere to this will result in lost memory. The low battery indicator is **ON** when the selected memory bank LED blinks. The LED will also blink if no battery is connected to the unit.

Specifications

INPUTS:

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

OUTPUTS:

Main/Booth.....0 dB 1V 400ohm
Max.....20V Peak to Peak

Rec.....225mV 5Kohm

MIC 1 & MIC 2:

DJ Mic.....1.5mV 2Kohm balanced
Bass.....± 12dB
High.....± 12dB

GENERAL:

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 10W
Dimensions.....19"w x 4"h x 9"d
Weight.....10.17 lbs



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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