

PROFESSIONAL POWERED MIXER

OPERATING MANUAL

**Choice**  
**Select**  
*ULTRA*

CHO3074

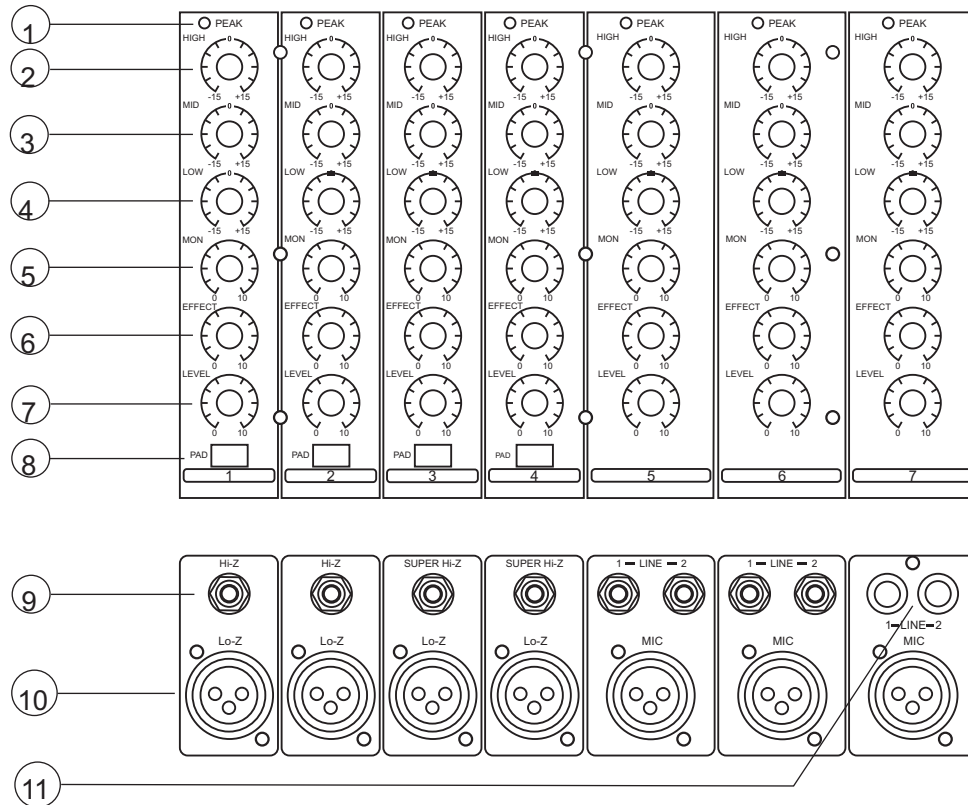
PM-740MP3

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Keep the manual for your future needs!

# POWERED MIXER

## FRONT PANEL DESCRIPTION



## INTRODUCTION

The PM-740MP3 is a seven-channel mixer with a variety of built-in features and is built into a rugged construction cabinet for heavy-duty use.

## FEATURES

- Seven total input channels.
- Built-in two-channel power amplifier with maximum output of 200W + 200W, which can be selected as Main1-Main2, Main-Monitor, or Bridge connection of 400W.
- Two built-in limiter circuits to prevent excessive input level to the amplifier.
- Built-in independent 7-band graphic equalizers offer precise correction of the Main and Monitor outputs. This allows separate adjustments to suit different acoustics settings.
- Global +48V phantom power for condenser microphones. Built in mp3 player with LED.
- Built-in digital effect switch provides 16 different delaying time effects. This enables users to add reverberation or ambiance to vocals or instrumental sound.

## PRECAUTIONS

- Connect the power cord to an AC outlet as stated in this manual.
- Do not bend, twist, pull or heat the power cord.
- Do not place heavy objects, including this mixer, on top of the power cord. A damaged power cord may cause fire or electrical shock.
- Do not allow water or liquids to be spilled into unit. Liquids inside this unit can cause fire or electrical shock.
- Do not open and modify the unit under any circumstances. Doing so may cause fire or electrical shock. No user-servicable parts are inside. Refer all servicing to a qualified service personnel.
- If the unit is damaged or functions abnormally, turn off the unit and notify your dealer immediately for repair.

**1. Peak LED Indicator**

LED lights when the input signal level is too high. In general, input level should be set to the level where the LED flashes briefly on the loudest peaks. Should the LED indicator flashes continuously turn the input control down. This ensures the best possible signal-to-noise ratio and dynamic range.

**2. High EQ**

Turn to the right to boost high frequencies. This adds crispness to percussion from drum machines, cymbals, and synthesizers. Turn to the left to cut these frequencies. This reduces sibilance or hiss. The control has a shelving response giving 15dB of boost or cut at 12kHz.

**3. Mid EQ**

Turn to the right to boost middle frequencies which is useful for improving guitar tones. Turn to the left to cut middle frequencies to reduce nasal vocals. The control giving 15dB of boost or cut at 2.5kHz.

**4. Low EQ**

The control has shelving response giving 15dB of boost or cut at 80Hz. Turning to the right adds warmth to vocals or extra punch to guitars, drums and synthesizers. Turn to the left to reduce stage rumble, hum, or to improve mushy sound effects.

**5. Monitor Control (MON)**

The monitor control feeds the channel signal to the Monitor.

**6. Effect Control**

This knob feeds the channel signal to the external effects loop (if any), as well as the digital effect after the Level Control (7). The effects will fade up or down based on the settings of both the Effect Control and the Level Control, mentioned below.

**7. Level Control**

This level control determines the proportion of the channel signal in the mix and provides a clear visual indication of the channel level.

**8. Pad Switch (PAD)**

The pad switch attenuates the input signal by 20dB.

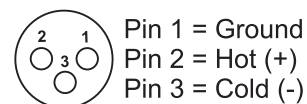
**9. High-Z & Super High-Z 1/4" Input**

Inputs can be connected from guitars, synthesizers, drum machines, CD players, and other line level devices. By using in conjunction with the PAD switch (8), these devices can be safely connected and the mixer will accept balanced or unbalanced signals. The input impedance of Hi-Z jack is 2.2Kohm and is 1Mohm for Super High-Z input jack.

**10. Low-Z Input**

Channels 1~7 accepts XLR-type connectors for low impedance microphones. It can provide +48V phantom power if the phantom switch (28) is turned on (WARNING: Instruments not designed for phantom power should be plugged only into the accommodated 1/4" input jacks, otherwise damages to the instruments will occur). The input impedance is 5Kohm.

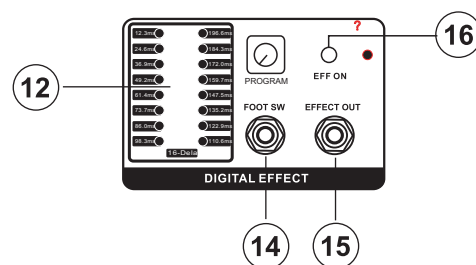
XLR Type connector is wired as:

**11. Line Input**

Channels 5~6 also accepts microphones thru XLR-type connectors and stereo line level devices (such as synthesizers or rhythm boxes). These can be connected to the Line input.

Channel 7 accepts RCA type connector for stereo line level devices.

You can use both the microphones and line inputs of given channel.

**12. Digital Delay Display**

There are 16 different time delaying settings from 12.3ms to 196.6ms.

**13. Delay Time Setting Switch**

Use Up switch (▲) to increase delaying time and Down switch (▼) to decrease delaying time.

**14. Foot Switch Jack**

1/4" jack provides a connection between the PM740 and a foot switch. The Digital Effect Switch (16) must be on for the foot switch to work.

**15. Effect Out**

Allows for an external effect device to be connected to the PM-740. Nominal impedance: 10K ohms.

**16. Digital Effect Switch**

Press the "On" button and the LED display should light up. The digital signal will then be fed to the main bus.

**17. Graphic Equalizer**

There are two 7-band graphic equalizers that allow for frequency response adjustment of the Main and Monitor bus signal. If Main1/Main2 or Bridge mode is selected, then only the Main/Main1 bus signal can be adjusted. The graphic equalizers provide a maximum of ±12dB for each frequency. This equalizer is designed to suit different room acoustics, feedback control, and improve the live PA sound. Always set all controls to "0" before turning on the PM-740 To avoid excessively adjusting the frequency which could limit the dynamic range and increase the chance of unpleasant feedback.

**18. Main/Monitor Effect Return Control**

This adjusts the sound effect level from the built-in digital effect to the main bus.

**19. Equalizer and Power Amplifier Selector**

This selector allows the two graphic equalizers and the built-in two-channel power amplifier to work in either Main/Monitor or Main/Main1 mode. The Monitor Master Control (26) and the Monitor Effect Return Control (18) will only control the Monitor section even if Main1/Main2 mode is selected (29).

**20. Effect Out Control**

This adjusts the output level of the digital effects.

**21. Aux In Control**

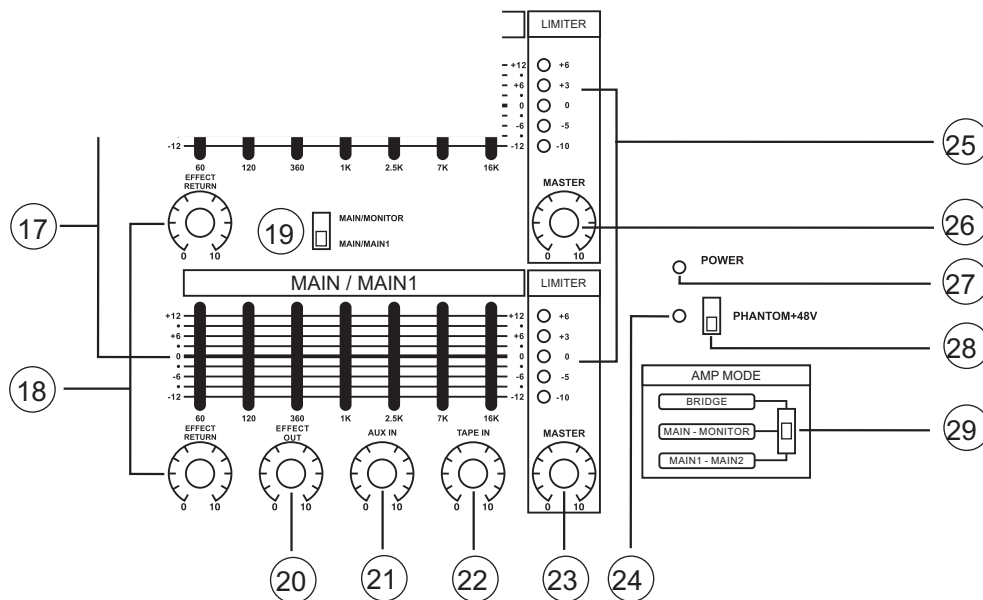
This knob adjusts the signal level from the Aux In socket (30) to the Main bus.

**22. Tape In Control**

This knob adjusts the signal level from the Tape In socket (31) to the Main bus.

**23. Main Master Control**

The Main bus sound level and any device connected to Main output socket (34) sound level is controlled with this knob.



**24. Phantom Power LED Indicator**

When the Phantom Power switch (28) is on, this LED will light up.

**25. Level Meter Indicator**

Indicator displaying which frequency or signal is emitting potentially high levels that may cause an overload.

**26. Monitor Master Control**

The Monitor bus sound level and any device connected to Monitor output socket (33) sound level is controlled with this knob.

**27. Power LED Indicator**

When the mixer is on, this LED will light up.

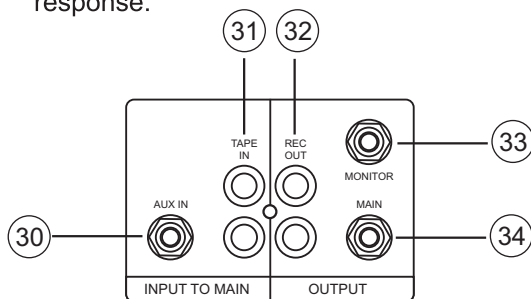
**28. Phantom +48V Switch**

This switch applies phantom powering to the Lo-Z microphone socket for condenser microphones Channel 1~7. Do NOT turn on while the microphone is not plugged into the unit.

**29. Amplifier Mode Selector**

There are 3 settings for the built-in two-channel power amplifier.

- Bridge Mode: Utilizes both channels as a single mono block. Only the main signal can be heard from the Bridge socket.
- Main-Monitor Mode: the main bus signal will be sent to Main-Main1 speaker socket, and the Monitor bus signal will be sent to Monitor-Main2 speaker socket.
- Main1-Main2 Mode: the Main bus signal will be sent to both Main-Main1 and Monitor-Main2 speaker sockets and only Main/Main1 graphic equalizer can adjust the frequency response.



**30. Aux In**

Allows external devices to be added to the Main output. Nominal input impedance: 47K ohms. Mono signals should be plugged into this socket.

**31. Tape In**

Allows a cassette recorder or CD player to be added to the Main output. Nominal input impedance: 47K ohms.

**32. Rec Out**

Allows a cassette deck or any other device to be plugged into unit to record sound coming from the PM-740.

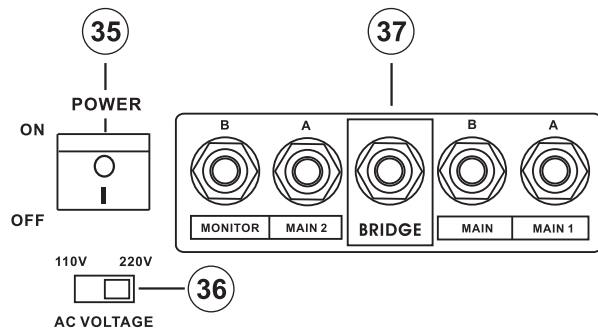
**33. Monitor Output**

Allows any home audio equipment to emit the sounds coming from the Monitor bus of PM740.

**34. Main Output**

Allows any home audio equipment to emit the sounds coming from the Main bus of PM740.

**REAR PANEL DESCRIPTION**



**35. Power Switch**

This switch turns on/off the PM740.

**36. Voltage Selector**

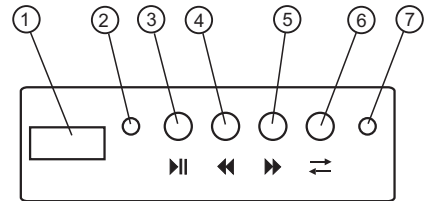
This selector is used to select either AC110V or AC220V power input.

**37. Speaker Output**

Speakers can be connected to these jacks. A total of four speakers can be connected to the PM740. However when all 4 jacks are using, using 8~16 ohm speakers is highly recommended to avoid any speaker blowouts or damage to the unit. Do not connect any speaker to the Bridge socket while the other four speakers ports are being used. The Bridge jack can support a 8~16 ohm speaker. While this jack is being used, DO NOT plug in any other speakers.

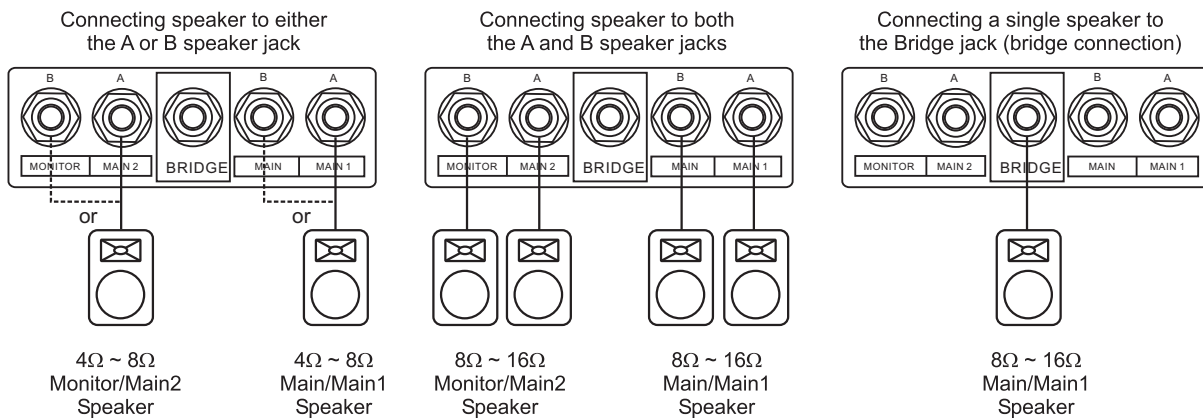
PLAYER WITH LED

- (1) Udisk connector
- (2) LED If no Udisk, the LED is unlit. If player is on, the LED is flashing. If the LED is lit steadily, player is in pause mode.
- (3) Play / Pause key
- (4) Press key To select the previous song.
- (5) Press key To select the next song.
- (6) Press key To set up loop mode.
- (7) LED If the LED is off, play in all loop mode, if LED is lit, in one song loop mode.

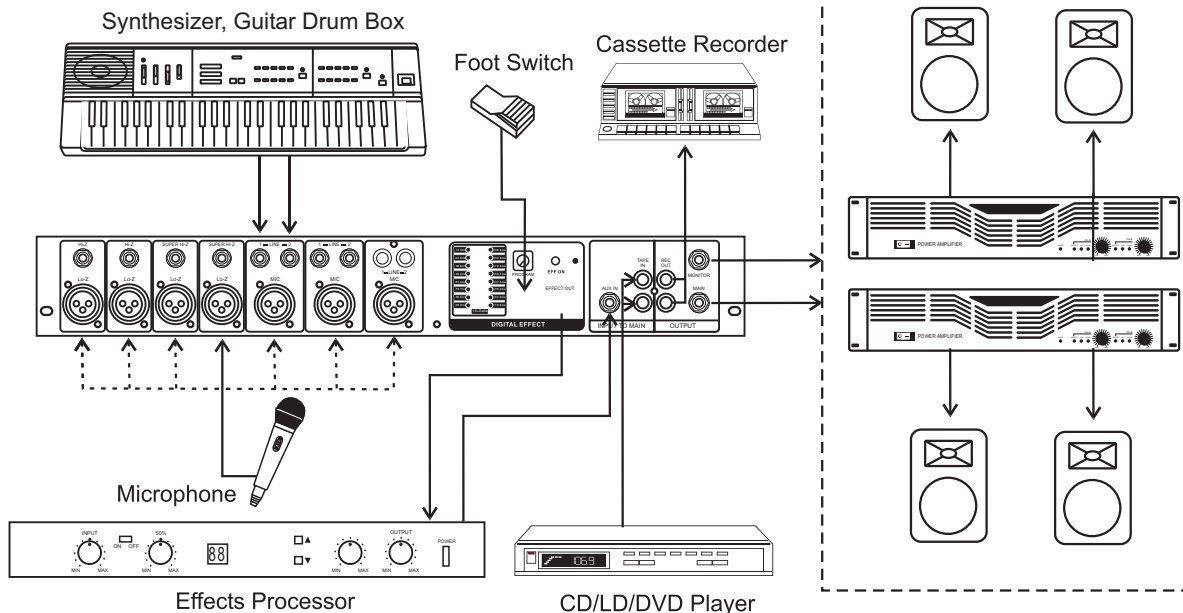


**SPEAKER CONNECTION**

There are three ways of connection as follows:

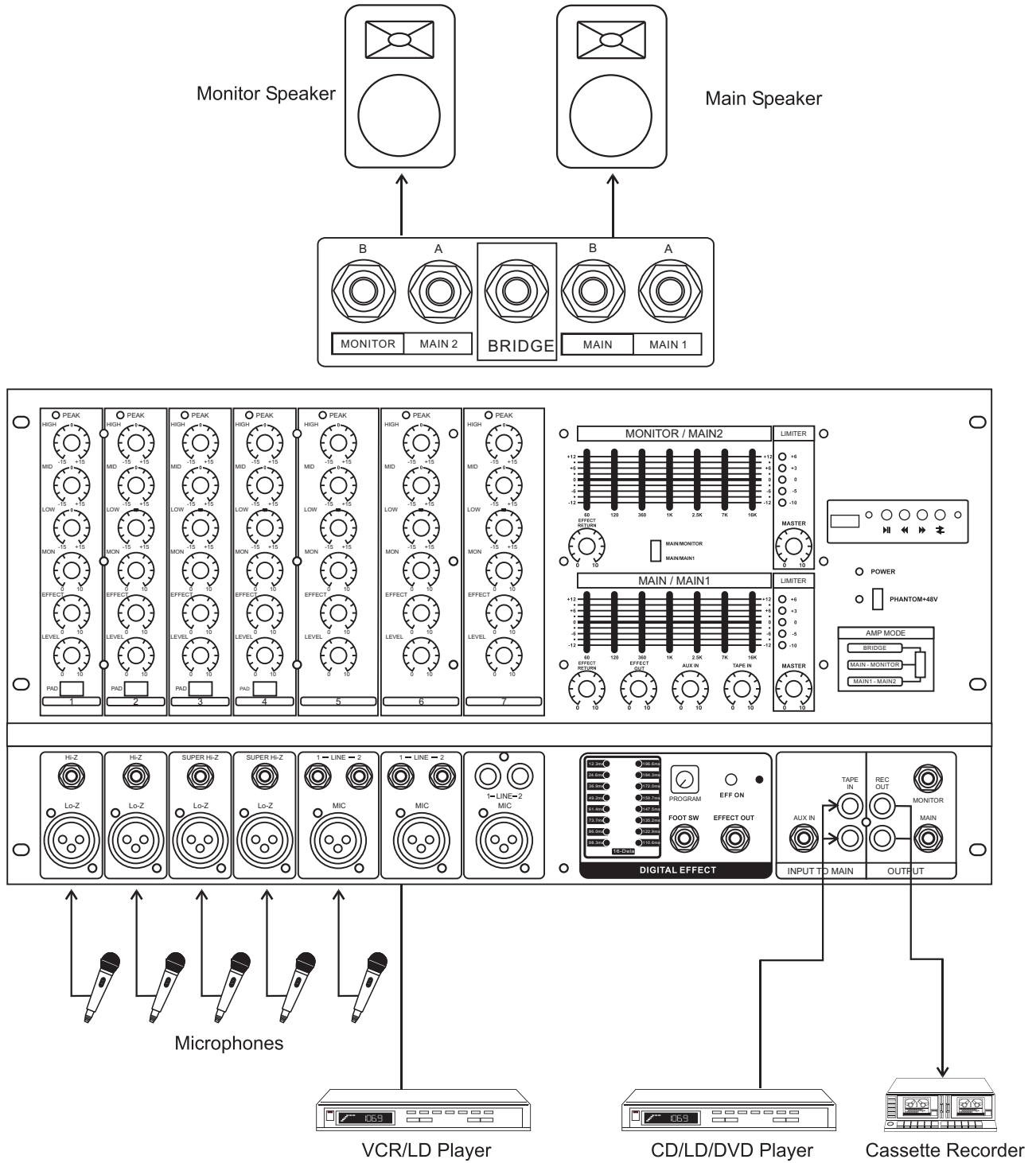


**SAMPLE CONNECTION**



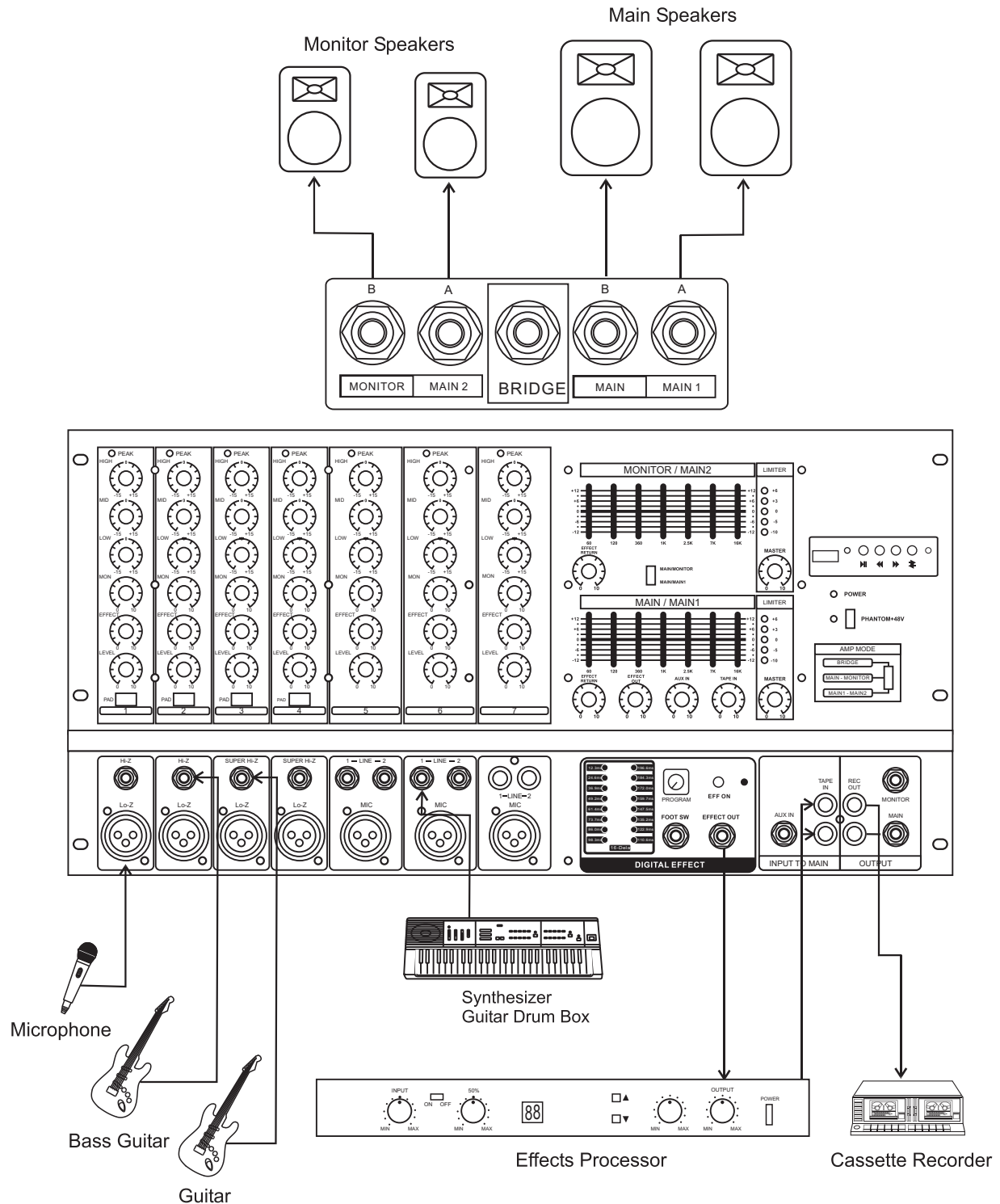
# APPLICATION

## 1- CONFERENCE PA SYSTEM / KARAOKE SYSTEM



### 2- LIVE BAND

If you use an external effect, we suggest that you turn down the effect controls of the main and monitor section.



**SPECIFICATIONS**

Input Impedance	Hi-Z.....: 2.2K Ohm Super Hi-Z.....: 1M Ohm Lo-Z.....: 5K Ohm Mic.....: 5K Ohm Line.....: 10K Ohm Aux In.....: 47K Ohm Tape In.....: 47K Ohm
Input Channel EQ	High EQ: $\pm 15\text{dB}$ @ 12KHz Mid EQ: $\pm 15\text{dB}$ @ 2.5KHz Low EQ: $\pm 15\text{dB}$ @ 80Hz
7-Band Graphic EQ	$\pm 12\text{dB}$ @ 60, 120, 360, 1K, 2.5K, 7K, 16K Hz
Digital Time Delay (ms) (1-16 Time Settings)	12.3, 24.6, 36.1, 49.2, 61.4, 73.7, 86, 98.3, 110.6 122.9, 135.2, 147.5, 159.7, 172, 184.3, 196.6
Frequency Response	20Hz ~20KHz, +1dB/-3dB @ 1W Output to 8 Ohm Speaker
Total Harmonic Distortion (THD)	<0.3% @ 20Hz~20KHz for 100W Output to 4 Ohm Speaker
PAD Attenuation	-20dB
Foot Switch	Digital Effect Mute: on/off
Phantom Power	+48V DC to Lo-Z and Mic. Inputs
Max. Power Output	200W + 200W @ 4 Ohm
Power Consumption	200W
Power Requirement	AC115V/230V/50/60Hz