

HI-LEVEL PM2000/4000/5000/6000/8000 INSTRUCTION MANUAL

1.0 Stereo-Channels with 3 Inputs

The HI-LEVEL PM2000, PM4000, PM5000, PM6000 and PM8000 Production Mixers have three inputs per channel and can be used very universally.

1.1 Input Switch Line 1 / Line 2 / Mic

With the inputs switches you can switch the inputs on the backside between Line 1 or Line 2 (Phono) or microphone. (described as MIC from now on). The microphone-switch has priority function against the Line1/Line2 switch.

The Line Inputs can be used for signal sources like CD-Players, MD-Players, DAT-Players, Tape decks, Video recorders (Caution: Ground loop!), Tuners, Keyboards, etc. Ex factory the PM4000, PM5000, PM6000 and PM8000 are equipped with 3 Phono-Preamp cards each, which can be added or removed at will: The Line 2 input can easily converted into a phono preamp by the dealer/end user. These RIAA preamp are small PCB's which can easily be installed on the channel PCB by removing two jumpers and putting the small RIAA card instead. Then Line 2 is a phono input and works with any magnetic turntable. The turntables must be earthed on the back side at the screw terminal.

The MIC inputs are symmetrical XLR-inputs and can be used for balanced or unbalanced dynamic microphones. Pin 1 = Ground, Pin 2 = Hot (in Phase), Pin 3 = Cold (out of Phase).

1.2 Gain

The input level of the incoming signal can be adjusted with the inputs gain controls rotary pots for an optimum signal to noise ratio. We suggest to adjust the signal between 0dB and +3dB. If the input level is overdriven audible distortion can occur and the signal quality will be influenced negatively. Overloading the input over a longer period may damage your sound system.

Another advantage of the gain control is to adjust different incoming sound levels to an equal level which make smooth recordings or mixes much easier.

HI-LEVEL mixing consoles have a very wide adjustable gain range of 40dB with a very low noise electronic layout.

1.3 High-Mid-Low Equalizer

The HI-, MID-, LO- rotary pots can be used to boost or cut individual frequencies to correct the individual quality of signal sources. If you boost (single) frequencies too much you will also overload the input and need to lower the input gain control to 0dB to +3dB level.

1.4 CUE-Switch

The CUE switch sends the input signal to the headphone output and switches the input signal to the VU-meter at the same time to adjust the input gain. Of course several sources can be monitored at the same time.

1.5 CUE ON LED

The Cue On-Led means that one or more CUE switches are activated. A special feature of HI-LEVEL consoles is, that VU-meter AND Headphone output are switched fully automatically. This means that if no CUE switch is activated the VU-meter reads the actual output level and the output can be monitored with a headphone.

1.6 Channel faders

With the smooth, vertical mounted and dustproof ALPS-channel faders the volume of individual channel can be adjusted (PM5000 ALPS rotary pots). If two channels have been set to the same level with the input gain control and the channel faders are set to an equal level both signals should be heard relatively equal at the output.

2.0 Crossfader

The smooth ALPS Crossfader allows a smooth transition between two signal sources. The crossfader, which can easily be disconnected internally, is assigned between channels 1 and 2 on the PM4000/5000/6000/8000 between 1+2 and 3+4. This means that you can fade between the channels without any switches.

3.0 VU-Meter

The LED chains of HI-LEVEL Mixers use a slow and highly visual average calculation with attack times according to international studio standards. This means that the LED chains do not jump up and down as usual. This also means that someone should be aware that the peak signal can be up to +6dB higher especially for hardcore music material. To avoid overload and sound system damage reduce input signal to 0db to +3dB. See also 1.5.

3.1 Master

The Master Output sums the inputs signals, the headphone circuit and the crossfader signal. All HI-LEVEL mixers use a separate PCB for left and right output. PM4000, PM6000 and PM8000 have individual Master faders for very detailed stereo reproduction. The master output is ground compensated balanced which allows long cable runs without any signal loss. Pin 1 = Ground, Pin 2 = Hot (in Phase), Pin 3 = Cold (out of Phase). Additionally you have on any HI-LEVEL mixers the possibility to connect home hifi amplifiers directly to the unbalanced, gold plated RCA outputs.

3.2 Monitor

The Monitor outputs are identical to the Master outputs. They only differ in the use of an ALPS stereo rotary pot instead of two sliding pots. The monitor output can be used to drive separate sound systems, also in other rooms. The monitor output is ground compensated balanced which allows long cable runs without any signal loss. Pin 1 = Ground, Pin 2 = Hot (in Phase), Pin 3 = Cold (out of Phase). Additionally you have on any HI-LEVEL mixers the possibility to connect home hifi amplifiers directly to the unbalanced, gold plated RCA outputs.

4.0 Phones

As described under 1.4 the headphone signal is activated by the CUE switches. The headphone output is significantly influenced by correct input gain setting. If the input signal already comes in overloaded no good headphone signal can be expected.

The integrated amp is able to drive stereo headphones only. If you wish to use single cup headphones only one channel should be soldered to the 6.3mm headphone jack.

5.0 Record-Outputs

All HI-LEVEL Mixers have two parallel Record Outputs for Tape-, DAT- or MD-Recorders. The signal is only influenced by EQ, Gain and channel faders. The record outputs can be used to drive a lighting system also. Maybe you need a small isolating transformer.

6.0 ON/OFF-Switch

All HI-LEVEL mixers are intended to be used at 230 Volt mains. Other voltages are available but must be ordered on demand. When switching the mixer on dangerous signals at the outputs may occur which are big enough to drive amplifier inputs into clipping: always switch on any sources first, then the mixer and last the amplifiers. Switching off is done in opposite direction. HI-LEVEL cannot be made responsible for any damage.

7.0 Warranty

You have bought a HI-LEVEL mixer with high level quality and a long warranty period of 36 months. The warranty excludes any repairs by the end user within this 36 months. All movable parts like rotary pots, switches and faders have a special lifetime depending on wear, time of usage and most of all place of usage and are excluded of this warranty.

8.0 Setup

To avoid humming ground loops always connect all audio units to ONE multiple socket board. If this board has a mains switch your sound system is also protected against over voltage like thunderstorm. Never ever bring a cold unit in a warm room and switch it on. Immediate humidity will occur on the inside and outside of the unit and lead to very dangerous shocks and damaged units. Wait at least one hour to bring the unit to room temperature before you switch it on.

9.0 Tips from the manufacturer

The output voltage of all HI-LEVEL mixers is set to 1,5 Volts when operated at full power which should be enough to 90% of all modern amplifiers. By changing some resistors on the output PCBs this voltage can be upgraded to up to 8 Volts. Please ask your dealer.

If faders are worn, crackle or have dropouts never use contact spray. This spray ruins the carbon tracks in short time. We suggest to use a brush and clean the inside of the fader (the tracks) carefully, without touching the lever, from dust and carbon. Use compressed air or mouth to remove dirt. Do not spit in the fader! Fader life is significantly better when the mixing console is installed in an angle or vertical mounted. Check the correct position of the coloured caps of the rotary pots from time to time.