



MP 2

DJ MIXER



IMPORTANT SAFETY INSTRUCTIONS

For the continued safety of yourself and others we recommend that you read the following safety and installation instructions. Keep this document in a safe location for future reference. Please heed all warnings and follow all instructions.

Do **not** use this equipment in a location where it might become wet. Clean only with a damp cloth.

This equipment may be installed in an industry standard equipment rack. We recommend that all mounting holes be used, providing the best physical support. The equipment may be used as a table top device, although stacking of the equipment is dangerous and not recommended.

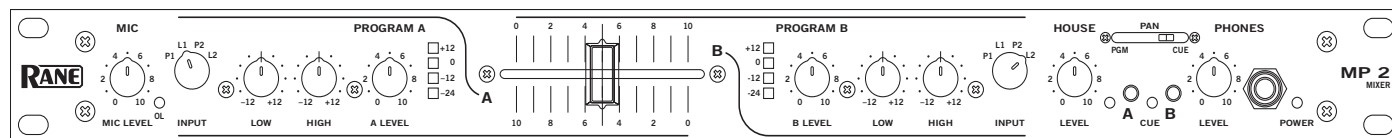
Do not directly block any of the ventilation openings. If rackmounting, please provide adequate ventilation. Equipment may be located directly above or below this unit, but note that some equipment (like large power amplifiers) may cause an unacceptable amount of hum or may generate too much heat and degrade the performance of this equipment.

Protect the power cord and plug from damage caused by being walked on or pinched. Protect the line cord, where it exits the unit, from excessive strain. Only use attachments and accessories specified by Rane.

Unplug this equipment during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug damage, spilled liquid, fallen objects into an opened chassis, exposure to rain or moisture, a dropped unit, or abnormal operation.





QUICK START

If you are too excited to read the manual, at least read this page to minimize any potential mistakes (we know you don't make any). Be sure your amplifier is off while making connections, and every time you turn on your system, apply power to your amplifier *last*.

The most common assumption is that the cables you already have will work. Well, let's be sure first. None of your RCA cables should be longer than 10 feet (3 meters) or you are asking for hum. The **MAIN** and **AUX OUTPUTS** are balanced ¼" TRS (tip-ring-sleeve) connectors, allowing you to run long lines if necessary with properly balanced cables. If you really have to use unbalanced (tip-sleeve) cables, keep them as short as possible (well under 10 feet [or 3 meters]). If you are connecting balanced devices (3-conductor) to either Input of the MP 2, or are sending the Output to an unbalanced equalizer or amplifier, consult the included RaneNote "Sound System Interconnection" for proper wiring.

The MP 2 has 3 sets of Outputs. The **HOUSE OUTPUT** is set by the front panel **HOUSE LEVEL** control. The **AUX OUTPUT** is set by the rear panel screwdriver adjusted **AUX LEVEL** control. The **TAPE OUTPUT** is fixed. All Output level controls are independent of each other. The only Level controls that affect all Outputs simultaneously are the **PGM A** and **B LEVEL** controls.

If you bring a phono signal into **P1** or **P2** be sure to keep the **PHONO** switch *in*; likewise when connecting a CD player to this input, be sure the **PHONO** switch is *out*.

Start with the **HOUSE LEVEL** all the way down so you don't scare the neighbors. Start with the Crossfader all the way to the left (**PGM A**). Select an **INPUT** for **PGM A** and another for **PGM B** and start playing your sources. Set the EQ controls to the center. Adjust the **LEVEL** controls so that the bottom three (-24, -12, and 0) indicators light up. If the +12 indicator flashes, turn down the **LEVEL** control. Now slowly turn up the **HOUSE LEVEL** so you can hear things working. Moving the Crossfader to the right brings in the source selected on **PGM B**.

The headphone cue system is simple: The **PAN** controls the headphone mix between the Program going to the **HOUSE** and what is on **CUE**, determined by the **CUE** switches.

A clean Crossfader is happy, behaved and long-living. See the **Fader Cleaning** instructions on page Manual-4.

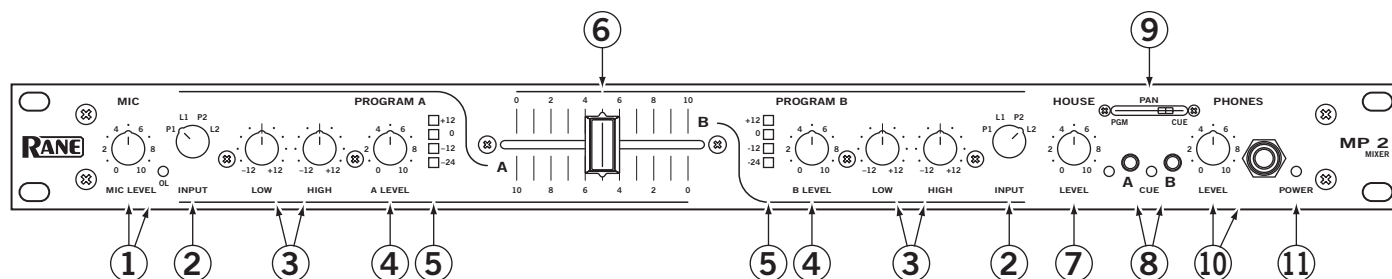
Never connect anything except a Rane RS 1 to the thing that looks like a red telephone jack on the rear of the MP 2. This is an AC supply and requires some special attention if you do not have an operational power supply *exactly* like the one that came with your unit. Consult the Rane factory for a replacement or substitution.

WEAR PART

This product contains the following wear part subject to the ninety (90) day warranty period described on page Warranty-1:

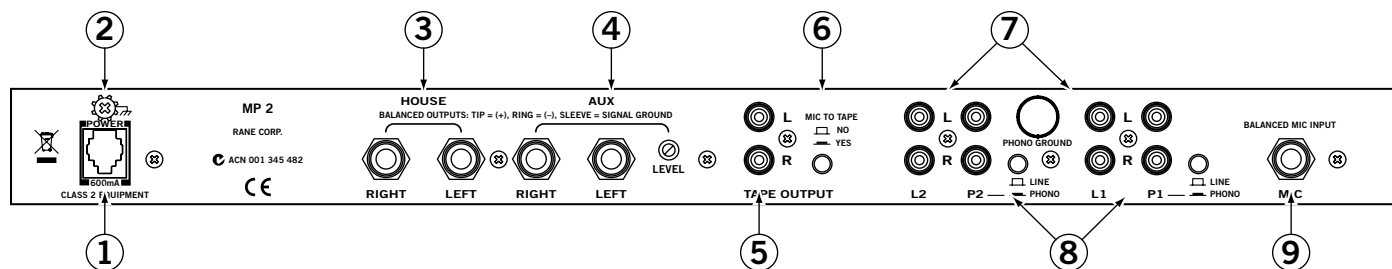
(1) Active Crossfader #11646.

FRONT PANEL DESCRIPTION



- ① **MIC LEVEL control:** Adjusts the Level of the MAIN MIC Input. The **OL** (overload) indicator lights when the maximum mic level has been reached, 3 dB before clipping. *If this lights up, either turn the MIC LEVEL down, or stop yelling.*
- ② **Program INPUT selectors:** Provide Input selection between the 2 Phono and 2 Line Inputs for each of the Program A or Program B Channels.
- ③ **Program LOW and HIGH EQ level controls:** adjust the equalization for each of the Program Channels. Pointing these controls straight up at their center detents takes the tone controls out of the path. This is not designed to be the only equalizer in the system, this is intended to provide EQ between varying program materials. We recommend an external graphic equalizer for the best system sound, connected between the MASTER OUTPUTS and the amplifier.
- ④ **Program LEVEL controls:** set the volume of each Program Input, as you would expect! These controls are pre-Crossfader, so both Program Level controls also depend on the Crossfader setting(see ⑥).
- ⑤ **Program meter:** This four-segment meter shows signal presence (at -24), optimum signal level (at around 0), and a warning to turn down the associated LEVEL control if the +12 indicator lights up.
- ⑥ **Active Crossfader:** Controls the mix of Program A and B Levels in a logical manner. When the Crossfader is all the way left, only Program A is heard. When it's all the way right, only Program B is heard. When it's right in the middle, both Program A and B are mixed together equally. This is an *Active Crossfader™* which uses a VCA to deliver an extended life and reduced travel noise, but to insure trouble-free operation, see *Fader Cleaning* on page Manual-4.
- ⑦ **HOUSE LEVEL control:** Adjusts the Output Levels of the MAIN OUTPUTS.
- ⑧ **Phone CUE switches:** Select Program A or B in any combination. The associated yellow indicator lights when a CUE is activated and pressed *in*. Depressing a button sends PGM signals to the CUE side of the PAN control. For example, when the Crossfader is to the left (playing PGM A to the House), listen to CUE B (PGM B) on the headphones to audition, match beats or prepare its starting point.
- ⑨ **Phone PAN control:** Changes the relative levels of the Cue and Program mixed together in stereo for the headphones. PGM follows the Main (House) Output; Cue is determined by the CUE switches and only goes to the headphones. Adjust this control anywhere between Program and Cue.
- ⑩ **PHONE LEVEL and headphone jack:** As you guessed, plug your headphones in here and adjust the overall volume with the LEVEL control.
- ⑪ **POWER indicator:** Illuminates to let you know that the MP 2 is plugged in and ready to go.

REAR PANEL DESCRIPTION



- ① **POWER input connector:** *This is not a telephone jack!* Connect an 18 volt AC center-tapped transformer only. Use only a Rane model RS 1, shipped with the unit, or other compatible power supply approved by Rane.
- ② **Chassis ground point:** This screw is provided for connection to chassis ground if required. See *Chassis Grounding* below.
- ③ **HOUSE OUTPUT:** The front panel HOUSE LEVEL control affects the volume at this Output. These balanced ¼" TRS (tip-ring-sleeve) Outputs connect to a balanced equalizer or amplifier. Though not recommended, unbalanced ¼" TS (tip-sleeve) cables may be used for short runs (under 3 meters [10 feet]) to an amplifier with unbalanced inputs. See the RaneNote "Sound System Interconnection" for wiring recommendations.
- ④ **AUX OUTPUT:** This delivers the same signal as the HOUSE OUTPUT, but has its own LEVEL control on the rear panel. *This Output is not affected by the front panel HOUSE LEVEL control.* These balanced ¼" TRS (tip-ring-sleeve) Outputs connect to a balanced equalizer or amplifier (for a possible second listening zone) and follow the same interconnection rules as above.
- ⑤ **TAPE OUT:** These line level RCA Outputs are intended for use with a tape recorder, but not necessarily restricted to that purpose. You may be creative. *These Outputs are not affected by the HOUSE LEVEL or AUX LEVEL controls.*
- ⑥ **MIC to TAPE OUT switch:** In the YES position the Mic signal along with the Program Inputs are routed to the TAPE OUT. In the NO position only the Program Inputs appear at the TAPE OUTPUT.
- ⑦ **LINE 1 & 2 INPUTS:** connect to stereo sources such as CD players or any line-level device. L1 and L2 may be assigned to Program A or Program B via the front panel INPUT switches.
- ⑧ **PHONO/LINE 1 & 2 INPUTS:** These stereo Inputs are switchable from a PHONO (RIAA) stage for magnetic cartridges (PHONO switch *in*) to a LINE level Input suitable for any line level device such as a CD player (PHONO switch *out*). The **Phono Ground screw** connects those extra wires coming out of the turntables.
- ⑨ **MIC Input:** Accepts a ¼" balanced (TRS) or unbalanced (TS) microphone cable, controlled by the MIC LEVEL control on the front panel.

IMPORTANT NOTE

CHASSIS GROUNDING

If your system exhibits excessive hum or buzzing, there is an incompatibility in the grounding configuration between units somewhere. Your mission, should you accept it, is to discover how your particular system wants to be grounded. Here are some things to try:

1. Try combinations of lifting grounds on units that are supplied with ground lift switches or links.
2. If your equipment is in a rack, verify that all chassis are tied to a good earth ground, either through the line cord grounding pin or the rack screws to another grounded chassis like the amplifier.
3. Units with outboard power supplies do *not* ground the chassis through the line cord. Make sure that these units are grounded either to another chassis which is earth grounded, or directly to a known ground by means of a wire connected to a screw on the chassis with a star washer to guarantee proper contact.

Refer to the RaneNote, "*Sound System Interconnection*" included with this manual for further information on grounding.

Fader Cleaning

With heavy use in harsh environments, the faders may need lubrication. This treatment extends longevity and can make used faders as good as new. The fader assembly must be removed from the MP 2 for proper cleaning. We recommend any of the following cleaning solutions:

Caig DeoxIT FaderLube F100 spray lubricant (www.caig.com)

Caig DeoxIT FaderLube F5 spray cleaner (www.caig.com)

CRC 2-26 (www.crcindustries.com)

Order DeoxIT® from:
CAIG Laboratories, Inc.
12200 Thatcher Ct.
Poway, CA 92064
Phone 858-486-8388
Fax 858-486-8398
Web www.caig.com

CLEANING INSTRUCTIONS

A. Fader assembly replacement (part #11646)

1. Unplug the MP 2.
2. Remove the bottom cover.
3. Remove the fader screws from the front panel.
4. Draw fader assembly out through the bottom.
5. Remove ribbon cable from old fader.
6. Attach ribbon cable to new fader, screw onto front panel and replace bottom cover.

B. Fader cleaning

1. Hold the fader assembly away from the mixer.
2. Position the fader at mid-travel.
3. Spray cleaner/lubricant into both ends of the fader in sufficient amounts to flush debris.
4. Move the fader over its full travel back and forth a few times.
5. Shake excess fluid from the fader assembly.
6. Wipe off excess fluid.