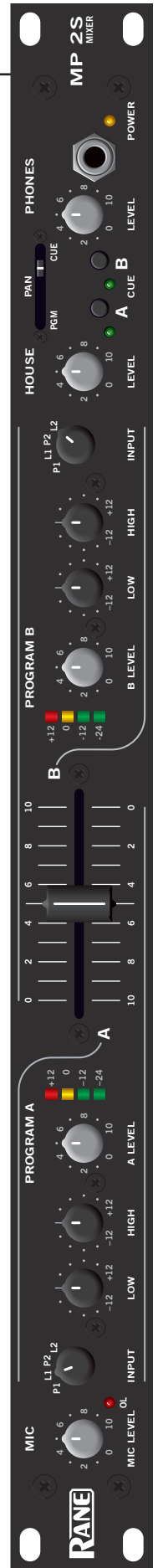




rhox
áudio e vídeo pro

MP 2S

DJ MIXER



IMPORTANT SAFETY INSTRUCTIONS



1. Read these instructions.
 2. Keep these instructions.
 3. Heed all warnings.
 4. Follow all instructions.
 5. Do not use this apparatus near water.
 6. Clean only with a dry cloth.
 7. Do not block any ventilation openings. Install in accordance with manufacturer's instructions.
 8. Do not install near any heat sources such as radiators, registers, stoves, or other apparatus (including amplifiers) that produce heat.
 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
 10. Protect the power cord and plug from being walked on or pinched particularly at plugs, convenience receptacles, and the point where it exits from the apparatus.
 11. Only use attachments and accessories specified by Rane.
 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
 14. 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 is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
 15. The plug on the power cord is the AC mains disconnect device and must remain readily operable. To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
 16. This apparatus shall be connected to a mains socket outlet with a protective earthing connection.
 17. When permanently connected, an all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated in the electrical installation of the building.
 18. If rackmounting, provide adequate ventilation. Equipment may be located above or below this apparatus, but 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 apparatus.
 19. This apparatus may be installed in an industry standard equipment rack. Use screws through all mounting holes to provide the best support.
- WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

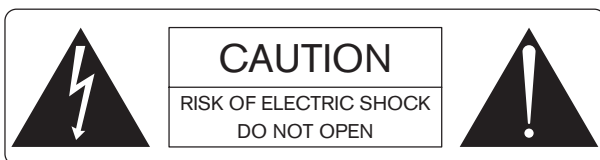
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications not expressly approved by Rane Corporation could void the user's authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

WARNING



To reduce the risk of electrical shock, do not open the unit. No user serviceable parts inside. Refer servicing to qualified service personnel.

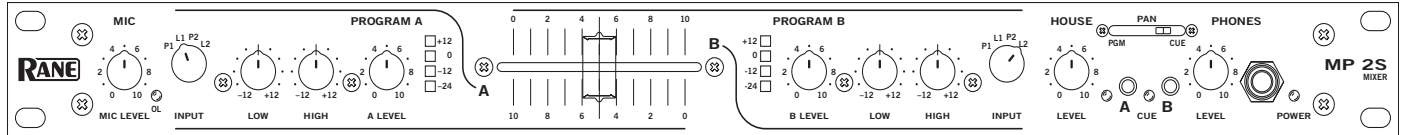
The symbols shown below are internationally accepted symbols that warn of potential hazards with electrical products.



This symbol indicates that a dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



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 2S, or are sending the Output to an unbalanced equalizer or amplifier, consult the included RaneNote "Sound System Interconnection" for proper wiring.

The MP 2S 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 **PROGRAM 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 (**PROGRAM A**). Select an **INPUT** for **PROGRAM A** and another for **PROGRAM B** and start playing your sources. Set the **LOW** and **HIGH** controls to the center. Adjust the **PROGRAM LEVEL** controls so the bottom three (-24, -12, and 0) indicators light up. If the +12 indicator flashes, turn down its **PROGRAM 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 **PROGRAM 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.

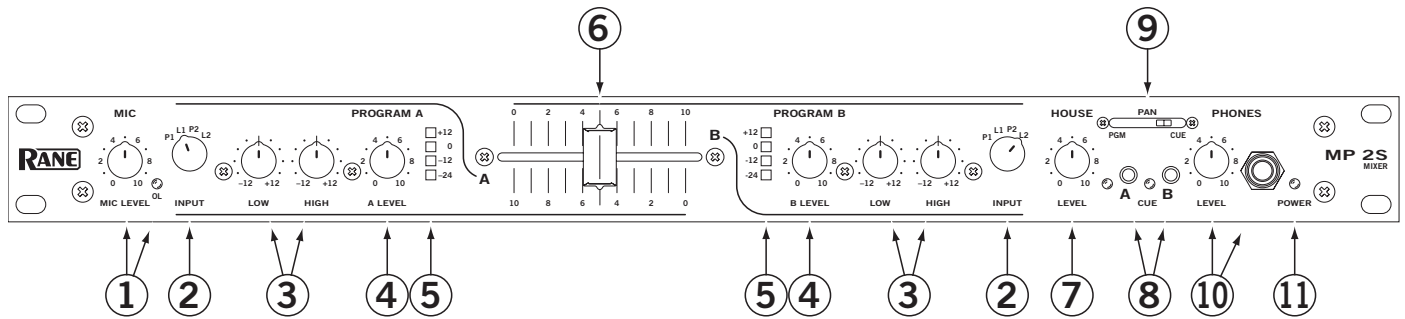
A clean Crossfader is happy, behaved and long-living. See the **Fader Cleaning** instructions on page Manual-4.

WEAR PART

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

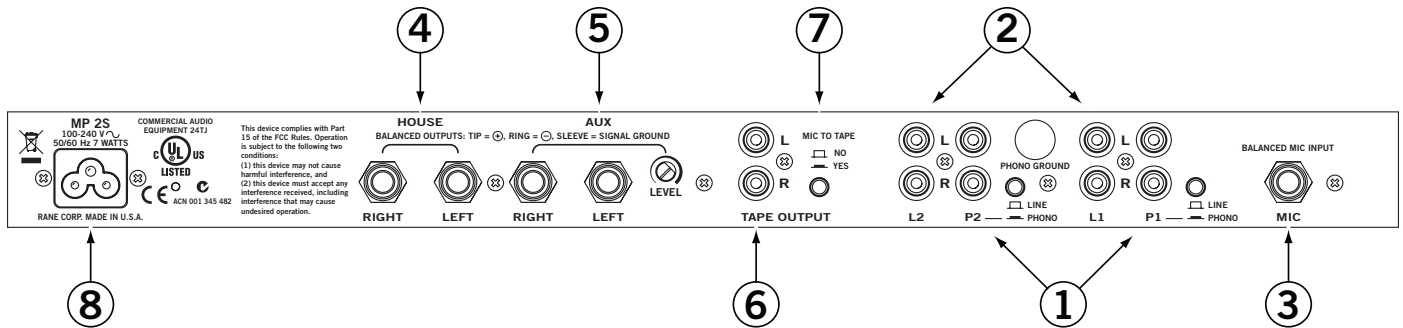
(1) Active Crossfader #11646.

FRONT PANEL DESCRIPTION



- ① **MIC LEVEL control:** adjusts the Level of the 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 two Phono and two Line Inputs for each of the Program A or Program B channels.
- ③ **Program LOW and HIGH 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 adjust tone 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:** 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. 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 Program to the CUE side of the PAN control. For example, when the Crossfader is to the left (playing Program A to the House), listen to CUE B (Program 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 **PHONES 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 2S is plugged in and ready to rock.

REAR PANEL DESCRIPTION



- ① **PHONO/LINE 1 & 2 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 (LINE, switch *out*). The **PHONO GROUND screw** connects to those extra green wires coming out of the turntables.
- ② **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.
- ③ **MIC Input:** accepts a ¼" balanced (TRS) or unbalanced (TS) microphone cable, controlled by the MIC LEVEL control on the front panel.
- ④ **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.
- ⑤ **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.
- ⑥ **TAPE OUTPUT:** These line-level RCA Outputs are intended for use with a tape recorder, but not necessarily restricted to that purpose. Be creative! *These Outputs are not affected by the HOUSE LEVEL or AUX LEVEL controls.*
- ⑦ **MIC to TAPE switch:** In the YES position the Mic signal along with the Program Inputs are routed to the TAPE OUTPUT. In the NO position only the Program Inputs appear at the TAPE OUTPUT.
- ⑧ **Universal Voltage Input:** via a miniature IEC 60320 C6 appliance inlet. With the right cord, you can plug anywhere in the world between 100 and 240 VAC. This mates with an IEC 60320 C5 line cord (USA domestic). Do **not** lift the ground connection!

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 2S 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 2S.
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.