

# **marantz**

***PROFESSIONAL***

## **RACK MIX 12**

User Guide

English ( 2 – 5 )

Appendix

English ( 22 – 23 )



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<https://loja.rhox.com.br>

## User Guide (English)

### Introduction

The Rack Mix 12 is an ultra-slim 1U rack-mounted 12-channel mixer with 6 mic/line combination inputs and 6 additional line inputs. It has balanced XLR outputs, a 1/4" (6.35 mm) mono output that can be used to connect the Rack Mix 12 to a remote mixer, a pair of RCA stereo outputs that can be used to connect to a remote recording device, and 1/4" (6.35 mm) mic monitoring port that can be used to monitor the mics' signals. The Rack Mix 12 provides individual volume control for all inputs in addition to volume control for the mono output port and a master volume control. It has a 3-level equalizer and a controlled priority for Mic/Line 1. It can be powered from standard AC or 24 V DC power source.

Please see this guide's [Setup](#) chapter to learn how to integrate Rack Mix 12 with your audio system.

### Box Contents

Rack Mix 12

Rack Ears

(6) Rack Ear Screws

Power Cable

User Guide

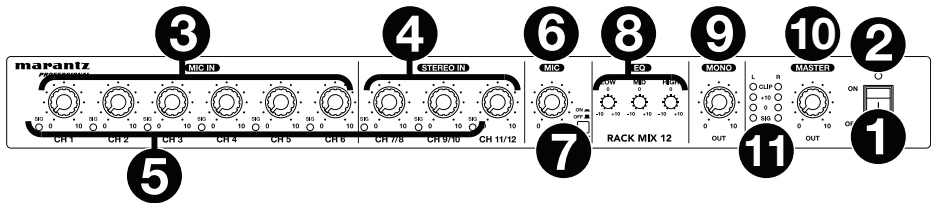
Safety & Warranty Manual

### Support

For the latest information about this product (system requirements, compatibility information, etc.) and product registration, visit [marantzpro.com](http://marantzpro.com).

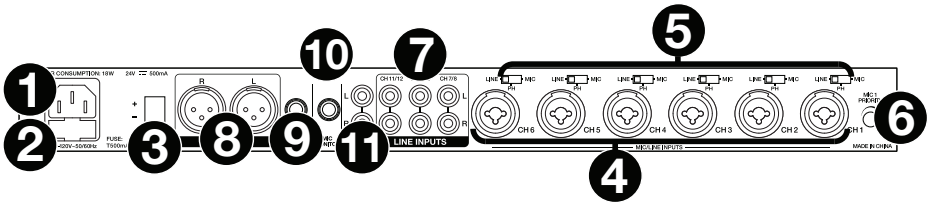
## Features

### Front Panel



1. **Power Switch:** Use this switch to power Rack Mix 12 on or off.
2. **Power Light:** This light illuminates when Rack Mix 12 is powered on.
3. **Mic In Level:** Turn these knobs to set the input level of the corresponding **mic/line inputs** (Channels 1–6).
4. **Stereo In Level:** Turn these knobs to set the input level of the corresponding **line inputs** (Channels 7/8–11/12).
5. **Signal (Sig) Lights:** Indicates that the channel's incoming audio signal is within an optimal range.
6. **Mic Level:** Turn this knob to set the input level of the **Mic Monitor** output. Use the **Mic On/Off** button to enable to disable it.
7. **Mic On/Off:** Press this to turn enable or disable the **Mic Monitor** output. When the button is depressed (in the **down** position), the signal from the **mic/line inputs** (Channels 1–6) will be sent to the **Mic Monitor** output, and the **Line Outs** will be disabled. When the button is raised (in the **up** position), the **Mic Monitor** output will be disabled, and all channels will be sent to the **Line Outs**.
8. **EQ:** Turn these knobs to increase (“boost”) or reduce (“cut”) the amount of bass frequencies (**Low**), mid-range frequencies (**Mid**), and treble frequencies (**High**) of the main mix.
9. **Mono Level:** Turn this knob to adjust the level of the **Mono Out**.
10. **Master Level:** Turn this knob to adjust the level of the Line Outs, Mono Out, and Rec Out.
11. **Level Meters:** These lights indicate the audio level of the Line Outs, Mono Out, and Rec Out. The **Clip** light can light up occasionally, but if it happens too often, reduce the volume of the mix and/or individual channels.

**Rear Panel**



1. **AC Power Input:** Use the included power cable to connect this input to a power outlet. Alternatively, use the DC power input, described below. (If both power inputs are connected to power outlets, Rack Mix 12 will draw its power from the AC power input.)
2. **Fuse Cover:** If the fuse is broken, use a screwdriver or other tool to lift this tab, and replace the fuse with a fuse with the same rating. Using a fuse with an incorrect rating can damage the unit and/or fuse.
3. **DC Power Input:** Use a separate DC power supply to connect this input to a power outlet. Alternatively, use the AC power input, described above. (If both power inputs are connected to power outlets, Rack Mix 12 will draw its power from the AC power input.)

4. **Mic/Line Inputs (Channels 1–6):** Connect microphones or line-level devices to these inputs with XLR or 1/4" (6.35 mm) cables.
5. **Input Selector (Channels 1–6):** Use these switches to set what type of audio source is connected to each **mic/line input**: a microphone without phantom power (**Mic**), a microphone with +18–21V of phantom power (**Ph**), or a line-level device (**Line**).

**Note:** Most dynamic microphones do not require phantom power, while most condenser microphones do. Consult your microphone's documentation to find out whether it needs phantom power.

6. **Mic 1 Priority:** Turn this knob to set how loud the volume level of all other inputs will be when the Channel 1 **mic/line input** receives an incoming signal. At its lowest setting, a signal received by the Channel 1 mic/line input will mute all other input signals entirely. At its highest setting, a signal received by the Channel 1 mic/line input will not affect the other input signals at all.
7. **Line Inputs (Channels 7/8–11/12):** Connect line-level devices to these inputs with standard stereo RCA cables.
8. **Line Out:** Use standard XLR cables to connect these outputs to your loudspeakers or amplifier system. Use the **Master Level** knob to control the level of these outputs.
9. **Mono Out:** Use a standard 1/4" (6.35 mm) TS cable to connect this output to a remote recording device, remote v
10. **Mic Monitor:** Use a standard 1/4" (6.35 mm) cable to connect this output to a powered monitor, remote mixer, etc. When the **Mic On/Off** button is depressed (in the **down** position), the signal from the **mic/line inputs** (Channels 1–6) will be sent to this output, and the **Line Outs** will be disabled. When the **Mic On/Off** button is raised (in the **up** position), this output will be disabled, and all channels will be sent to the **Line Outs**.
11. **Rec Out:** Use standard stereo RCA cables to connect these outputs to a remote recording device, remote mixer, etc. Use the **Master Level** knob to control the level of these outputs.

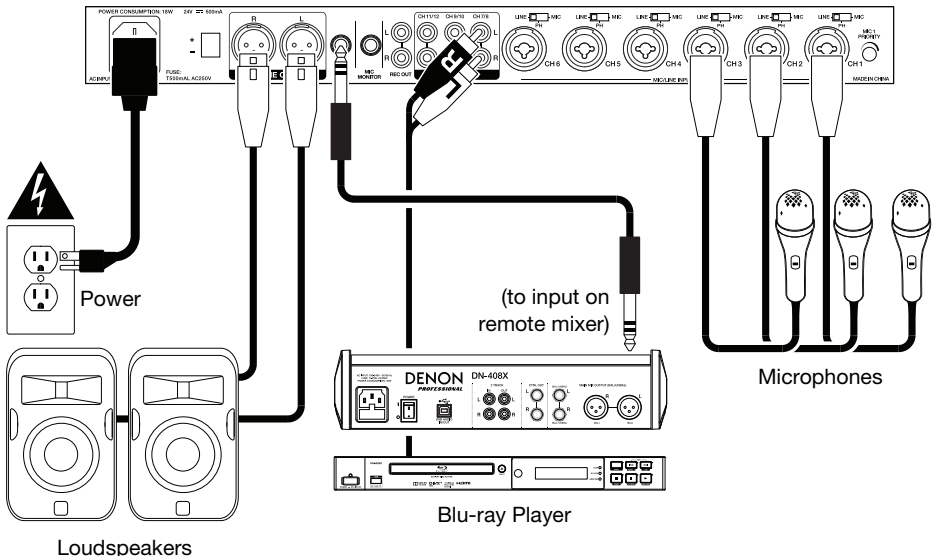
## Setup

Items not listed under [Introduction > Box Contents](#) are sold separately.

### To set up Rack Mix 12 with your sound system:

1. If you are using any audio source with RCA outputs (Blu-ray<sup>®</sup> players, stereos, etc.), use standard RCA cables to connect them to the **line inputs** on the rear panel. Your audio sources must be line-level (no phono-level turntables).
2. If you are using microphones or other audio sources that send a line-level signal, connect them to the **mic/line inputs** on the rear panel.
3. Use standard XLR or 1/4" (6.35 mm) TRS cables to connect the **line outputs** on the rear panel to your loudspeakers, remote mixer, etc.
4. If you want to send the main mix to a remote recording device, remote mixer, etc., use a standard 1/4" (6.35 mm) TS cable to connect the **Mono Out** on the rear panel to it. Alternatively, use standard stereo RCA cables to connect the **Rec Outs** on the rear panel to it.
5. Use the included power cable to connect Rack Mix 12 to a power outlet.
6. Power on all of your audio sources (Blu-ray players, stereos, microphones, etc.).
7. Power on Rack Mix 12.

### Example



## Appendix (English)

### Technical Specifications

Input Channels	Mic/Line Inputs (Channels 1–6)
	<b>Microphone Input</b> XLR+1/4" (6.35 mm) combination, electronically balanced, discrete input configuration
	<b>Frequency Response</b> 20 Hz – 22 kHz ( $\pm 2$ dBu)
	<b>THD+N</b> $\leq 0.03\%$ @ 1 kHz
	<b>Sensitivity</b> -40 dBu
	<b>Maximum Input</b> -19 dBu
	<b>Maximum Voltage Gain</b> 60 dB (Mic Input $\rightarrow$ Line Out, Mic Out & Mono Out) 50 dB (Mic Input $\rightarrow$ Rec Out)
	<b>Signal-to-Noise Ratio</b> $\geq 103$ dB
	<b>Phantom Power</b> +18–21 V, switch control
	Line Inputs (Channels 1–6)
	<b>Line Input</b> XLR+1/4" (6.35 mm) combination, electronically balanced
	<b>Frequency Response</b> 20 Hz – 22 kHz ( $\pm 2$ dBu)
	<b>THD+N</b> $\leq 0.03\%$ @ 1 kHz
	<b>Sensitivity</b> 0 dBu
	<b>Maximum Input</b> +21 dBu
	<b>Maximum Voltage Gain</b> 20 dB (Mic Input $\rightarrow$ Line Out, Mic Out & Mono Out) 10 dB (Mic Input $\rightarrow$ Rec Out)
	<b>Signal-to-Noise Ratio</b> $\geq 103$ dB
	Line Inputs (Channels 7/8–11/12)
	<b>Line Input</b> Stereo RCA pairs, electronically balanced
	<b>Frequency Response</b> 20 Hz – 22 kHz ( $\pm 2$ dBu)
	<b>THD+N</b> $\leq 0.03\%$ @ 1 kHz
	<b>Sensitivity</b> +10 dBu
	<b>Maximum Input</b> +21 dBu
	<b>Maximum Voltage Gain</b> 10 dB (Line Input $\rightarrow$ Line Out) 0 dB (Line Input $\rightarrow$ Rec Out) 4 dB (Line Input $\rightarrow$ Mono Out)
	<b>Signal-to-Noise Ratio</b> $\geq 103$ dB

<b>Impedance</b>	<b>Mic/Line Input</b>	1.4 k $\Omega$
	<b>Line Input</b>	$\geq 10$ k $\Omega$
	<b>All Outputs</b>	120 $\Omega$
<b>Equalizer</b>	<b>High</b>	$\pm 15$ dB @ 12 kHz
	<b>Mid</b>	$\pm 12$ dB @ 2.5 kHz
	<b>Low</b>	$\pm 15$ dB @ 80 Hz
<b>Crosstalk</b>	<b>Adjacent Inputs</b>	$\leq -70$ dB @ 1 kHz (Channels 1-6) $\leq -68$ dB @ 1 kHz (Channels 7/8-11/12)
	<b>Input <math>\rightarrow</math> Output</b>	$\leq -82$ dB @ 1 kHz (channel level @ max., EQ @ unity, master level & others @ min., input selectors set to <b>Line</b> )
<b>Main Mix</b>	<b>Line Output</b>	0 dBu (+2 dBu), balanced (channel level, master level & EQ @ unity, all others at min., input selectors set to <b>Line</b> )
	<b>Mic Output, Mono Output</b>	0 dBu (+2 dBu), unbalanced (channel level, master level & EQ @ unity, all others at min., input selectors set to <b>Line</b> )
	<b>Maximum Output</b>	+21 dBu balanced/unbalanced, 1/4" (6.35 mm) jacks
	<b>Noise (Bus)</b>	< -83 dB @ 20 Hz – 22 kHz (channel level, master level & EQ @ unity, all others at min., input selectors set to <b>Line</b> )
<b>Power</b>	<b>Connection:</b> IEC <b>Input Voltage:</b> 100V~, 110-120V~, 50/60Hz; 220-240V~, 50/60Hz or DC24V	
<b>Dimensions</b> (width x depth x height)	19.0" x 7.7" x 1.7 " 483 x 195 x 44 mm	
<b>Weight</b>	6.4 lbs.	
	2.9 kg	

Specifications are subject to change without notice.

## Trademarks & Licenses

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