

Description

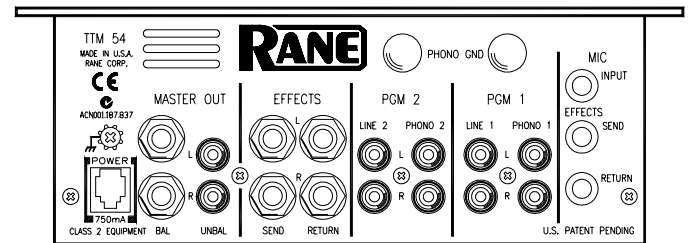
The TTM 54 Performance Mixer is a precision instrument designed for the most demanding DJ. This ain't no toy! The Rane TTM 54 offers more features, higher performance and better reliability than any Performance Mixer, from any manufacturer, at any price. This Mixer moves the art form to a new level.

Unique Features

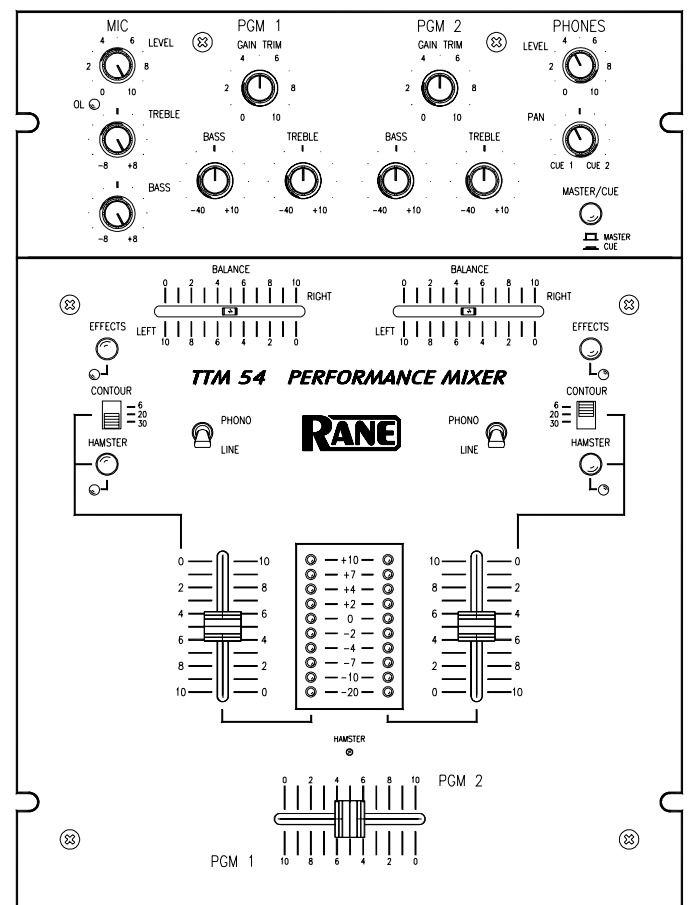
- A precision *Active Crossfader*™ with continuously adjustable Contour and “Hamster” reversal controls, provides the lowest feed-through, lowest noise, and most responsive control in the industry, all with unprecedented reliability (see Fig. 1).
- Front panel “Hamster” reversal and switchable Contour controls give *Active Program Faders* ultimate flexibility (see Fig. 2).
- High performance *Accelerated-Slope*™, band-split 24 dB per octave tone controls provide more than 40 dB of Bass and Treble cut without affecting the vocal midrange (see Fig. 4).
- A proprietary, assignable Effects Loop allows a stereo effect to be inserted in Pre-Fader Program 1, Pre-Fader Program 2, or Master at the press of a switch.
- Independent 18 dB per octave Rumble filters for *each* phono input.

Other Features

- Two Phono and two Line inputs with high quality, long-life *clickless* transform selector switches.
- Balanced Mic input with Bass and Treble tone controls and independent Effects Loop.
- Balanced ¼" TRS and Unbalanced RCA Master outputs.
- Dual mono 10-segment level meters with peak hold, indicate level for Programs 1 and 2.
- Headphone monitor for Master program allows performance rehearsal with Master level turned down.
- Stereo Headphone Cue pans between Program 1 and Program 2.



Rear View



Top View



Front View

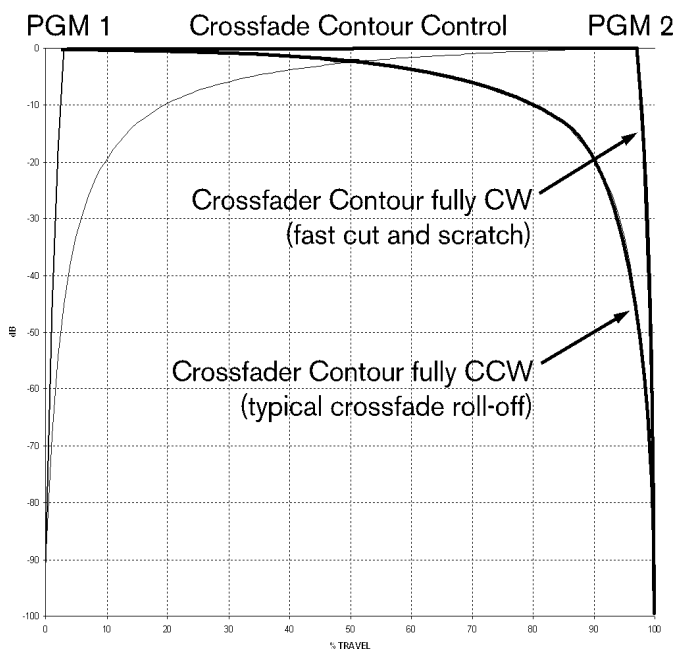
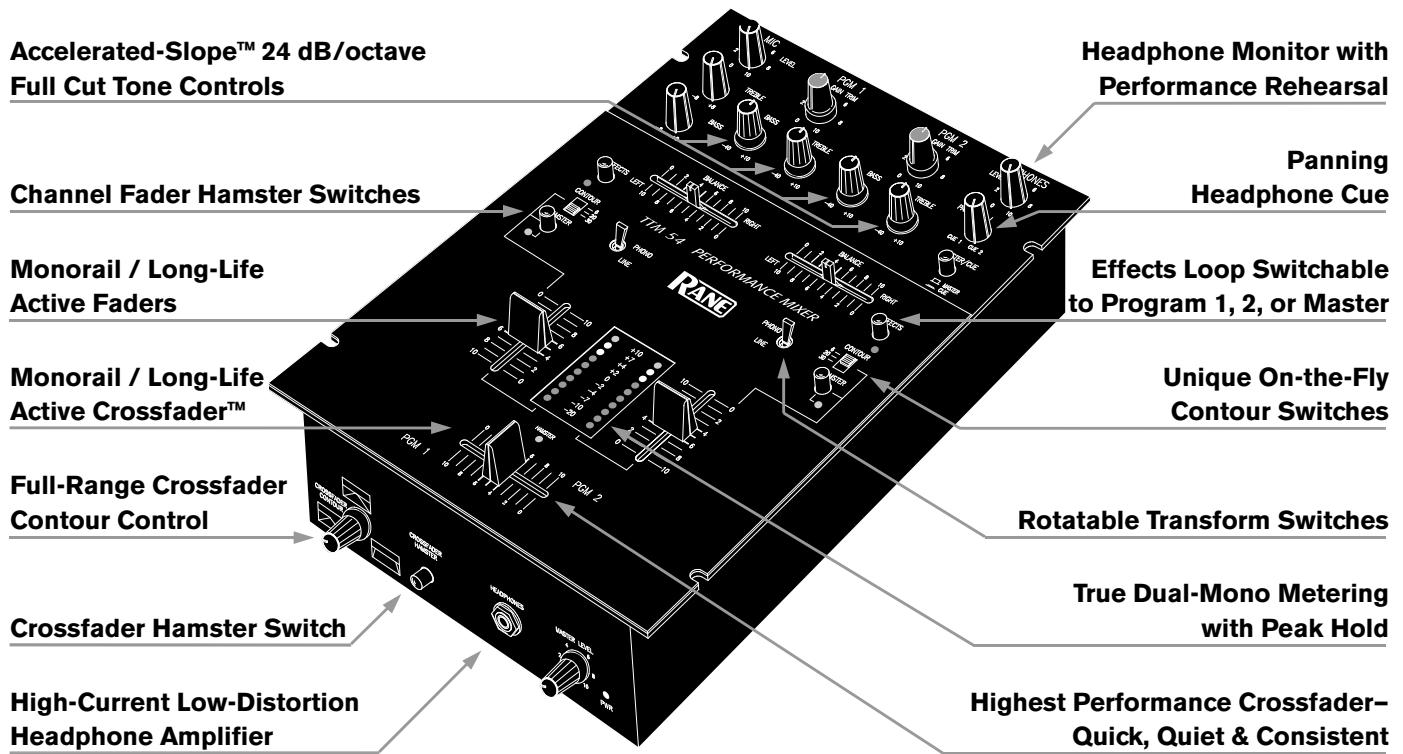


Figure 1. Crossfader Contour control

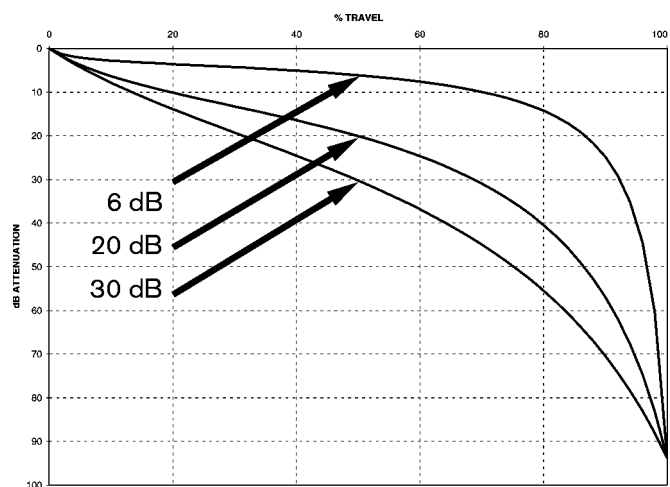


Figure 2. Input Fader Contour control switch positions at -6, -20 and -30 dB down points at the 50% fader position.

PERFORMANCE MIXER

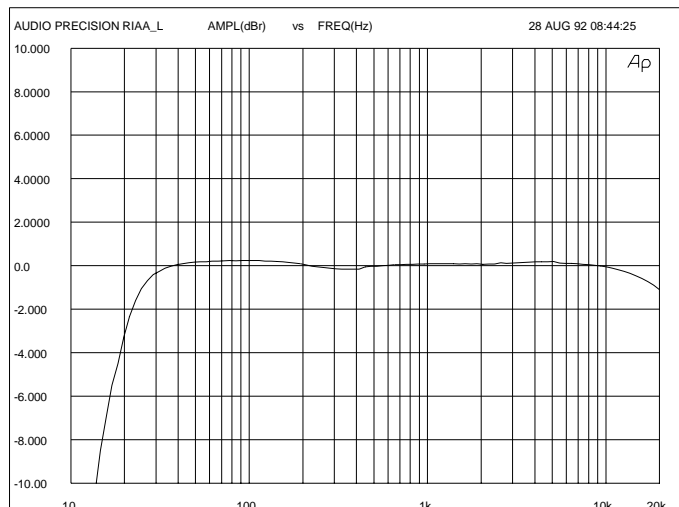


Fig. 3: Phono Response (using inverse RIAA)

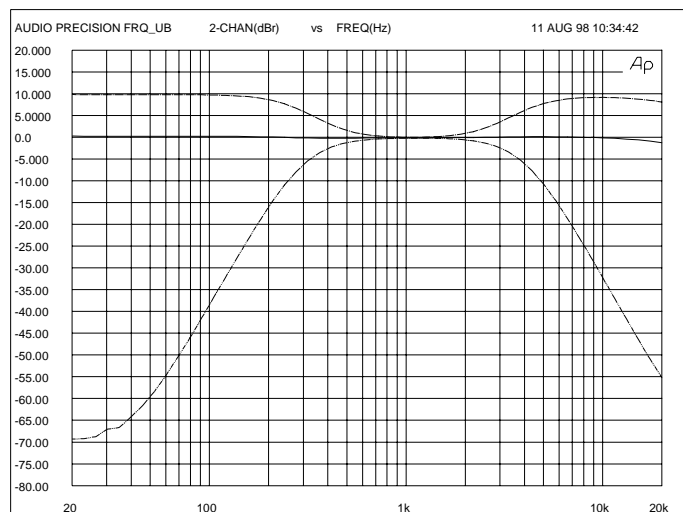


Fig. 4: Program Tone Controls

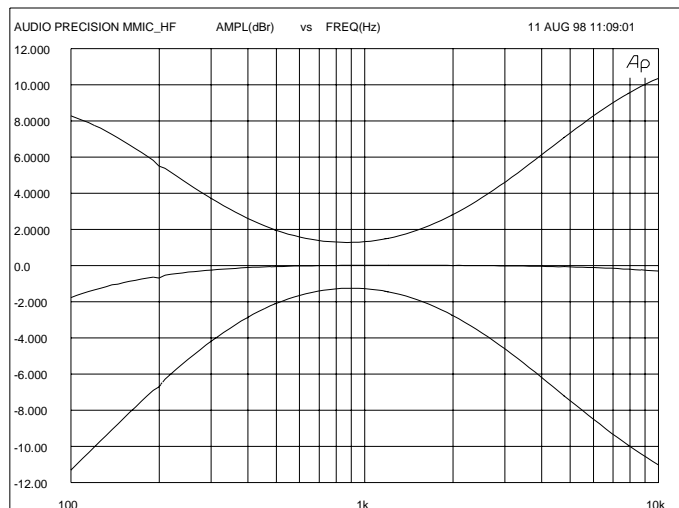
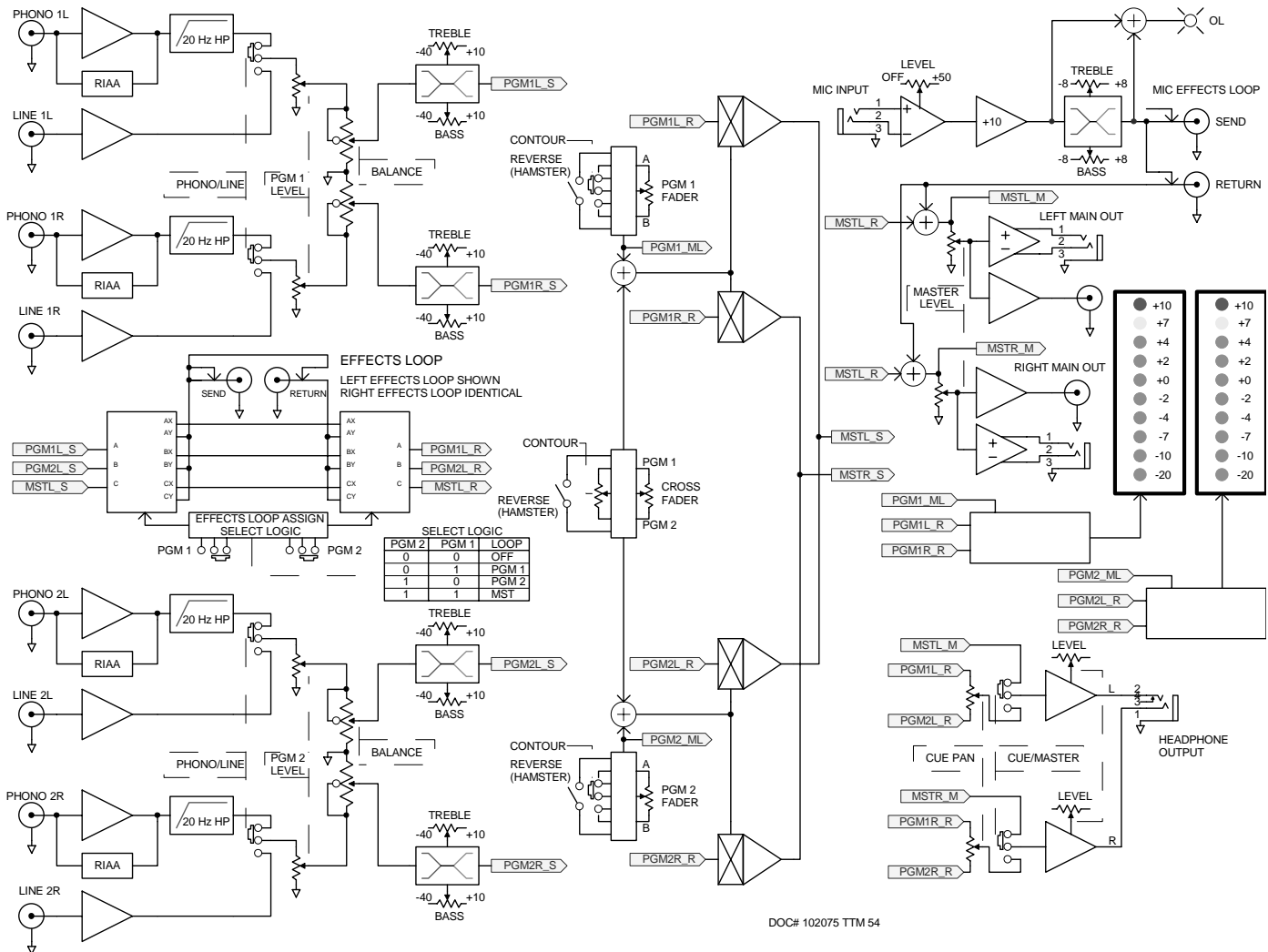


Fig. 5: Mic Tone Controls and Overall Response

Parameter	Specification	Conditions
Phono Inputs:	RIAA	See Fig. 3
...Number	2 Stereo	1 kHz
...Gain	40 dB	18 dB/oct. Butterworth, See Fig. 3
...Rumble Filter	20 Hz	
Line Inputs:	2 Stereo	
...Gain	12 dB	unbalanced out
...Gain	18 dB	balanced out
...Frequency Resp.	10 Hz-30 kHz	+0,-3 dB
...Noise	-98 dB	re +4 dBu, 20 kHz BW, unity gain
	-87 dB	re +4 dBu, 20 kHz BW, Max. gain
...THD+N	<0.1% typical	re 0 dBu, 20-20k Hz, 80 kHz BW
...Control Feed-through	<-80 dB	re +4 dBu, all controls
...Crosstalk	<-70 dB	re +4 dBu, 1 kHz
Mic:	Balanced	1/4" TRS
...Gain	60 dB	balanced output maximum gain
...Response & EQ	See Fig. 6	
...Noise	-70 dB	re +4 dBu, 20 kHz BW, Max. gain
...CMRR	>40 dB	re +4 dBu, 1 kHz
...Effects Loop	Independent, Non-Switched	
PGM Tone Controls:	Accelerated-Slope™ 24 dB/octave Band Split	
...Response	See Fig. 4	
PGM Assignable Effects Loop:	Effects Switch Select Logic — PGM 1/PGM 2	
	Off/Off	Off
	On/Off	Pre-Fader PGM 1
	Off/On	Pre-Fader PGM 2
	On/On	Master
Metering:	Dual Mono, 10 Segment	
	Post Program Fader; 1 sec. peak hold	
	Indicator Turn-on Blanking	
Max. Current:	750 mA RMS from remote supply	
Unit: Agency List		
...120 VAC model	Class 2 Equipment	National Electrical
	UL	Exempt Class 2
	CSA	Exempt Class 2
...230 VAC model	CE-EMC	EMC 89/336/EEC
	CE-Safety exempt art. 1 LV 73/23/EEC	
Power Supply: Agency List		
...120 VAC model	UL	File E88261
	CSA	File LR58948
...230 VAC model	CE-EMC	EMC 89/336/EEC
	CE-Safety	LV 73/23/EEC
Unit: Size	3"H x 9"W x 11.75"D (7.6 x 23 x 30 cm)	
Shipping: Size	7.5" x 20" x 10.5"	(19 x 51 x 27 cm)
Weight	11 lb	(5 kg)

Note: All specifications are typical unless otherwise stated.

Block Diagram



FEATURE

Accelerated-Slope™ 40 dB Cut Tone Controls

Assignable Effects Loop

Highpass Rumble Filters

Long-Life, Low-Noise Active Input Faders

Front Panel Input Fader Contour Control

Hamster Reversal Sw. For Input Faders

Long-Life, Low-Noise Crossfader

Crossfader Contour Control

Crossfader Hamster Reversal Switch

High Output, Low Distortion Headphone Amp

True L+R Dual Mono Metering With Peak Hold

High Resolution Meter Display

Mic Effects Loop

Greater Than 110 dB Dynamic Range

High-Quality, Glass Epoxy PCBs

Made In the USA

RANE TTM 54 PERFORMANCE MIXER

YES (+10, -40)

YES (PGM 1, PGM 2 or Master)

YES (18 dB/Oct., each phono input)

YES

YES

YES

YES (VCA)

YES (high accuracy, active)

YES

YES (200 mW @ .1% THD+N, 150 Ω)

YES

YES (10 segment)

YES

YES

YES (double-sided)

YES

RANE TTM 52 PERFORMANCE MIXER

NO (±12 dB)

NONE

YES (18 dB/Oct., each phono input)

YES

NO

YES

YES (VCA)

YES (high accuracy, active)

YES

YES (200 mW @ .1% THD+N, 150 Ω)

YES

YES (10 segment)

YES

YES

YES (single-sided)

YES

BRAND X PERFORMANCE MIXER

NO (±15 dB)

NONE

NONE

NO (passive)

NO (internal 3-position)

NO

YES (light-driven resistor)

YES

NO

NO (25 mW @ 1.2% THD+N, 150 Ω)

NO (left channel only/no peak hold)

NO (7 segment)

NO

NO (<100 dB)

NO (single-sided phenolic)

NO