



### MOJO PERFORMANCE MIXER

## **Description**

The TTM 52 Performance Mixer is a precision instrument designed for the serious DJ. Like the TTM 54, "this ain't no toy!" The TTM 52 features the same high quality components, reliability and performance as the Rane TTM 54 mixer with a reduced feature set (see the comparison chart on the last page of this Data Sheet.) The TTM 52 offers a more cost effective solution for DJs who demand the same quality and performance as the TTM 54, but do not require the additional features.

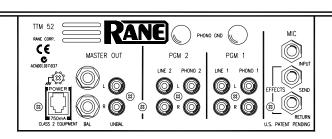
The Rane Mojo Series maintains sonic and construction quality not found (until now) in this price range. Designed for the working musician...simple operation...reduced features...without compromise in audio quality or dependability.

# **Unique Features**

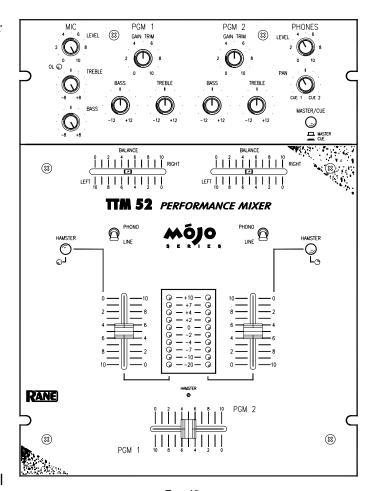
- A precision Active Crossfader<sup>™</sup> with continuously adjustable Contour and "Hamster" reversal controls, provides the lowest feed-through, lowest noise, and most responsive control in the industry, all with unprecedented reliability (see Fig. 1).
- Front panel "Hamster" reversal switch and Active Program
  Faders.
- Independent 18 dB / octave Rumble filters for each phono input.

#### Other Features

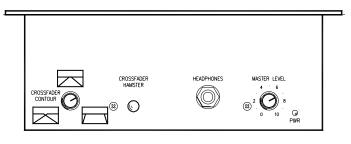
- Two Phono and two Line inputs with high quality, long-life clickless transform selector switches.
- Balanced Mic input with Bass and Treble tone controls and independent Effects Loop.
- Balanced ¼" TRS and Unbalanced RCA Master outputs.
- Dual mono 10-segment level meters with peak hold, indicate level 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



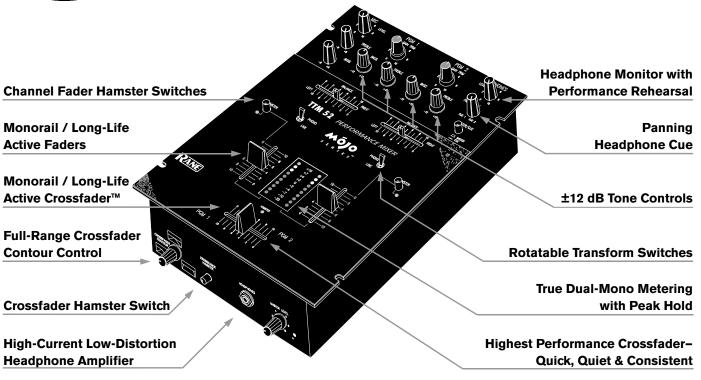
Top View



Front View







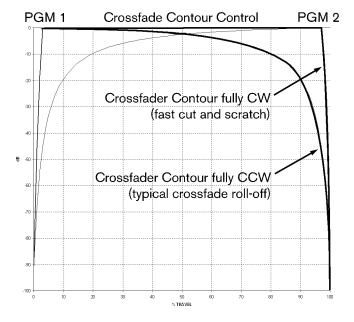
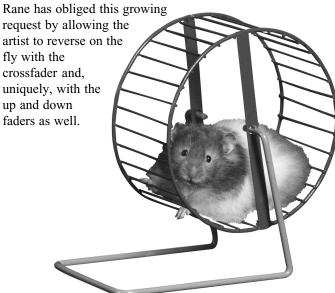


Figure 1. Crossfader Contour control

### The origin of Hamster-

A few years back, there was a crew of turntablists who called themselves *The BulletProof Scratch Hamsters*. They approached several mixer manufacturers with an idea for "reversing" the crossfader program material. In other words, they wanted to have Program A appear where Program B was, and vice versa. This idea was intriguing enough to make one manufacturer comply and they began offering this feature on a popular model (internally). In turntablist circles the reversal feature is referred to as *Hamster* in homage to the idea originators. This capability has evolved to a point where the performer wants (maybe needs) to *Hamster* on the fly instead of opening the mixer up and selecting one way or the other.







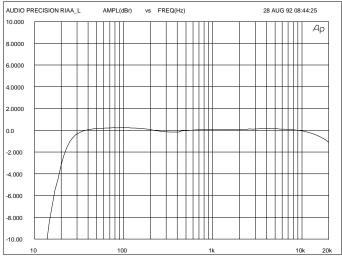


Fig. 3: Phono Response (using inverse RIAA)

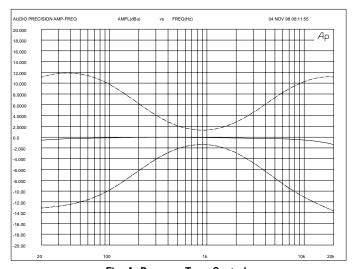


Fig. 4: Program Tone Controls

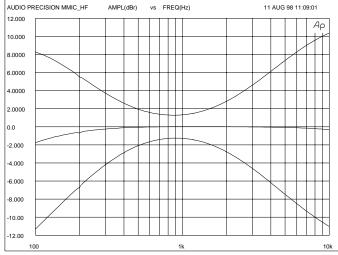


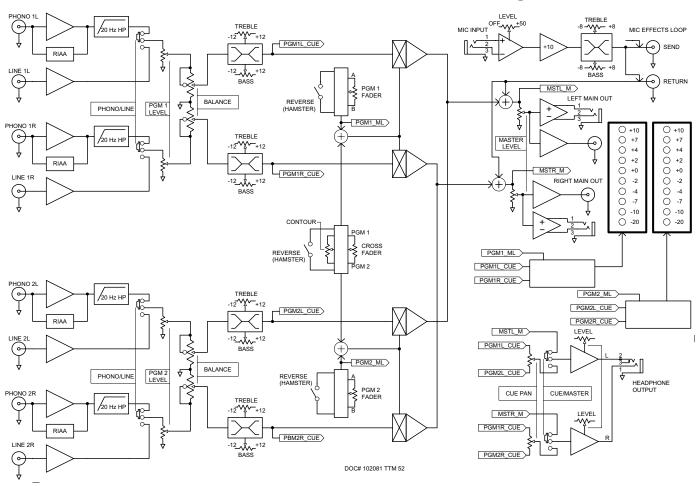
Fig. 5: Mic Tone Controls and Overall Response

Parameter	Specification	Conditions				
Phono Inputs:	RIAA	See Fig. 3				
Number	2 Stereo					
Gain	40 dB	1 kHz				
Rumble Filter	20 Hz	18 dB/oct. Butterworth, See Fig. 3				
<b>Line Inputs:</b>	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%	re 0 dBu, 20-20 kHz, 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. 5					
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:	±12 dB					
Response	See Fig. 4					
<b>Metering:</b>	Dual Mono, 10 Segment					
	Post Program Fader; 1 sec. peak hold					
	Indicator Turn-on Blanking					
Max. Current:	750 mA RMS from remote supply					
<b>Unit: Agency List</b>						
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 a	rt. 1 LV 73/23/EEC				
Power Supply: Age	ency 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				
<b>Unit: Size</b>	3"H x9"W x11.75"D (7.6 x23 x30 cm)					
<b>Shipping: Size</b>	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		TTM 54 PERFORMANCE MIXER (+10, -40) (PGM 1, PGM 2 or Master)	RAN No Non	E TTM 52 PERFORMANCE MIXER (±12 dB)	BRAI No None	ND X PERFORMANCE MIXER (±15 dB)
Highpass Rumble Filters	YES	(18 dB/Oct., each phono input)	YES	( 18 dB/Oct., each phono input)	NONI	
Long-Life, Low-Noise Active Input Faders	YES	(10 uz/oou, outli pilone inputy	YES	( 10 uz. oou, ouo p.io.iopus)	NO	(passive)
Front Panel Input Fader Contour Control	YES		NO		NO	(internal 3-position)
Hamster Reversal Sw. For Input Faders	YES		YES		NO	
Long-Life, Low-Noise Crossfader	YES	(VCA)	YES	(VCA)	YES	(light-driven resistor)
Crossfader Contour Control	YES	(high accuracy, active)	YES	(high accuracy, active)	YES	
Crossfader Hamster Reversal Switch	YES		YES		NO	
High Output, Low Distortion Headphone Amp	YES	(200 mW @ .1% THD+N, 150 $\Omega)$	YES	(200 mW @ .1% THD+N, 150 $\Omega$ )	NO	(25 mW @ 1.2% THD+N, 150 $\Omega$ )
True L+R Dual Mono Metering With Peak Hold	YES		YES		NO	(left channel only/no peak hold)
High Resolution Meter Display	YES	(10 segment)	YES	(10 segment)	NO	(7 segment)
Mic Effects Loop	YES		YES		NO	
Greater Than 110 dB Dynamic Range	YES		YES		NO	(<100 dB)
High-Quality, Glass Epoxy PCBs	YES	(double-sided)	YES	(single-sided)	NO	(single-sided phenolic)
Made In the USA	YES		YES		NO	

©Rane Corporation 10802 47th Ave. W., Mukilteo WA 98275-5098 TEL (425)355-6000 FAX (425)347-7757 WEB http://www.rane.com