



Mojo Squeeze



General Description

Finally! A cure for confusion has arrived. Quit guessing and anguishing over proper compressor settings. Get on with what's important, your work! Rane has created a compressor that offers noise reduction and simple settings. No more compression headache! The MC 22 Mojo Squeeze is just what the doctor ordered. Use only as directed.

Let's start with what a compressor actually does. No matter how you cut it, this is an automatic volume control. It is a hand on a knob, turning the volume down and turning it up again. The hand is really quick and really accurate, but it's just turning a volume control.

When the input signal reaches a level set by the Threshold control, the compressor begins turning down the signal by an amount determined by the Ratio control. The MC 22, like most compressors, operates by making the loud signals quieter, but does not make the quiet parts louder. However, by keeping the loud signals under control, the entire system may be turned up when necessary to make the quiet parts louder. There's more than just a stereo compressor working here. The *adx* circuit is an automatic downward expander, acting like a compressor running in reverse, making the quiet parts quieter. This is valuable in reducing system background noise. This is set at a Ratio of 2:1 that is only active when the input level drops below -55 dBu. The *adx* LED illuminates when the downward expander is active.

When using the MC 22 as a true stereo processor with left and right signals, activate the Link switch to prevent large balance and image shifts. While Linked, both Channels attenuate by exactly the same amount when either Compressor works, maintaining correct stereo imaging. The Channels are totally independent with the Link switch off.

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

Features

- adx Automatic Downward Expander
- Program Dependent Attack
- 2 Independent Channels with Stereo Link Switch
- +4 dBu and OL Indicators for Optimal Gain Setting

- Signal Present and Overload Indicators
- Channel Bypass Switches
- Balanced XLR & ¼" TRS Connectors
- Internal AC Power Supply Meets CE Requirements





Features and Specifications

Parameter	Specification	Limit	Units	Conditions/Comments
Gain	0	±0.1	dB	
Compressor:				
Threshold Range	+20 to -40	±2	dBu	
Ratio	1:1 to 10:1	0.1		
Attack Time	30	typ.	ms	For a 10 dB Step to settle within 2 dB
Release Rate	.3 dB/ms	typ.		
adx Downward Expander:				
Threshold	-55	±2	dBu	
Ratio	2:1	10%		
Inputs: Type				
XLR	Active Balanced			Pin 2 "hot" per AES standards
¹ /4" TRS	Active Balanced/Unbalanced			
Impedance	20k	1%	ohms	Common mode each leg to ground
Maximum Level	+20	1	dBu	
Gain Range	±15	±1.5	dB	
Outputs:				
XLR	Active Balanced			100 ohms impedance each leg
¹ ⁄4" TS	Active Unbalanced			100 ohms impedance
Maximum Level	+20	1	dBu	2k ohms
Frequency Response	20 Hz-20 kHz	+0/5	dB	R load > 2 kHz
THD+Noise	0.01	typ.	%	1 kHz @ +4 dBu
vs Amplitude	0.1	max.	%	0 to +20 dBu @ 1 kHz
vs Frequency	0.05	max.	%	+4 dBu, 20 Hz to 20 kHz
Signal-to-Noise Ratio	90	typ.	dBr	Unity gain, re +4 dBu, 20 kHz BW
Common Mode Rejection Ratio	40	min.	dB	
Unit: Agency Listing				
120 VAC model	UL			UL 6500 (file E193164)
	cUL (Canada)			C22.2 (file E104174)
230 VAC model	CE-EMC EN55013, EN55020			EMC Directive 89/336/EEC
	CE-Safety EN60065			LV Directive 73/23/EEC
Unit: Construction	All Steel			
Size	1.75"H x 19"W x 5.3"D (1U)			(4.4 cm x 48.3 cm x 13.5 cm)
Weight	5 lb			(2.3 kg)
Shipping: Size	4.25" x 20.3" x 13.75"			(11 cm x 52 cm x 35 cm)
Weight	8 lb			(3.6 kg)
Note: $0 \text{ dBu} = 0.775 \text{ Vrms}$				





MC 22 Block Diagram



MC 22 Applications

- Two-Channel Compressor/Limiter
- **Guitar & Bass Compression** •
- Sound System with Compression
- **Driver Protection** •
- Recording ٠
- Long Distance Line Driver ٠





MC 22 Rear Panel



Architectural Specifications

The dynamic processor shall be a two (2) channel unit with separate compression controls for each channel. A link switch shall be provided to allow compression tracking between channels. The compressor shall provide a means for setting threshold and ratio independently. LED meters shall be provided as an indication of gain reduction for each channel. All attack and release characteristics provided by the compressor shall be a function of the current program material, thus providing a high level of transparency to the listener. The unit shall include an automatic downward expander circuit.

RFI filters shall be provided at the processor's inputs. Input level controls shall be provided for each channel. LEDs shall be provided to indicate the presence of an input signal as well as high level overload conditions. Bypass switches shall be provided for each channel. The inputs shall be active balanced/unbalanced designs terminated with XLR & ¼" TRS connectors. The outputs shall consist of both an active balanced XLR design and an active unbalanced ¼" TS design.

The unit shall be capable of operation by means of its own built-in power supply connected to 120 VAC (230 VAC where applicable) and meet UL, cUL, and CE requirements. The unit shall be entirely constructed from cold-rolled steel, and mount into a standard EIA relay rack occupying 1 rack space.

The unit shall be a Rane Corporation Model MC 22.

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