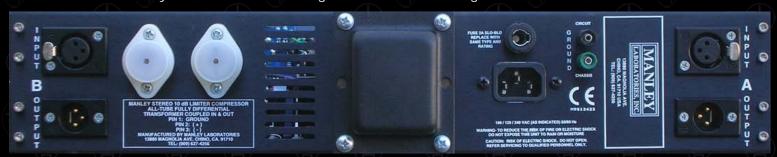


Manley Variable Mu® Faceplate. Current production with input level switch and HPSC as standard.



Manley Variable Mu® Mastering Version above with High Pass Side Chain switches.



Manley Variable Mu® Rear Panel

The MANLEY VARIABLE MU® LIMITER COMPRESSOR has been our best selling product for many years. It is one of the very few compressors that has become a real standard in Mastering studios and contributed to most hit records over the last decade and probably the next. "Mu" is tube-speak for gain, and Variable Mu® is our registered trademark for this limiter compressor. It works by using the "remote cut-off" or re-biasing of a vacuum tube to achieve compression. The precious vintage Fairchild 670 also uses this technique and is one of few all-tube compressor to do so, that we know of. Even the side-chain has glowing rectifier bottles. How's it work? The unique 5670 dual triode is at the center of the peak-reducing and compression action constantly being re-biased by the vacuum tube rectified side-chain control voltages which cause this tube to smoothly change its gain. Just like that.

The COMPRESS mode is soft-knee 1.5 to 1 ratio while the sharper knee LIMIT mode starts at 4 to 1 and moves to a more dramatic ratio of 20 to 1 when limiting over 12dB. Interestingly, the knee actually softens as more limiting is used. Distortion can be creatively used by turning up the Input and turning down the Output while using very little or no compression. See the gain reduction curves here!

You might notice that the Variable Mu® Limiter Compressor has a ganged input control, but do not jump to conclusions that it is mono-unfriendly. Track away! There are separate threshold and output controls to make compensations with plus you can always adjust your individual source levels elsewhere, right? The advantage of the stereo input control becomes dramatically clear when you switch to LINK mode, and that's what our Variable Mu® Limiter Compressor does better than anything else: final mix, 2-track, or mastering limiting and compression. Like one reviewer put it: "It's like pouring a bowl of sweet cream over the mix." Mmmmmm. Yummy. Give your music a big hug.

Features and Specifications

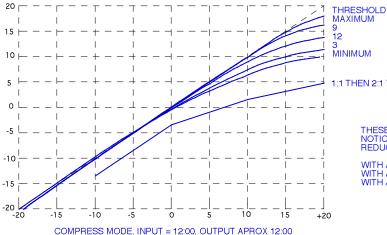
- MANLEY input & output transformers with nickel laminations in mu-metal cases with flat frequency response from 20Hz-25KHz
- BALANCED INPUTS & OUTPUTS (600 Ohms)
- Fully differential ALL-TUBE circuitry using one each 5670, 5751, 7044 or 5687, & 12AL5 per channel
- Independently regulated B+ and Heater supplies
- Hard-wire BYPASS switch
- Stepped switch INPUT attenuator as of 10/2011. (older units use Silent dual-ganged potentiometer)
- RECOVERY 5 steps: 0.2s, 0.4s, 0.6s, 4sec., 8sec.
- Variable ATTACK: 25msec-70msec
- Continuously variable THRESHOLD
- LIMIT (4:1 to 20:1) or COMPRESS (1.5 to 1)
- HP SC: High Pass Side Chain Filter -3dB @ 100Hz
- Large ILLUMINATED Sifam METERS (older units before serial number MSLC61642 shipped before 12/2003 use: 26V 1.2W FESTOON LAMPS; Manley's Part Number: VAR016B) Order spare bulbs using our parts order form. (newest units after serial number MSLC61642 shipped after 12/2003 use white LED lighting)
- STEREO LINK SWITCH
- Several units can be linked for Surround (custom order)
- Maximum gain: 35dB
- Max. output: +30dBu (26Vrms) 26dB Headroom
- <0.1% THD @ 1KHz Noise floor: -85dB typical
- Power Consumption (120/240VAC): 80 watts
- Unit is factory set for 100V, 120V or 220-240VAC operation for original destination country's mains voltage.
- Operating Mains Voltage changeable with power transformer changeover switch and fuse value change.
- Mains Fuse Value for 100~120VAC operation: replace with 1.25A as of 10/2011
- Mains Fuse Value for 220~240VAC operation: replace with 0.6A (600mA) as of 10/2011
- Mains Fuse Type: MDA or MDL SLO-BLO Time delay 1 1/4" x 1/4"
- Mains Voltage Frequency: 50~60Hz

Dimensions: 19" x 3 1/2" x 10" (chassis occupies 2u) Power transformer protrudes 3.5" out the back of the chassis.

• Shipping Weight: 23 lbs.

SPECIAL MASTERING VERSIONS AND CUSTOM MODS AVAILABLE TO ORDER

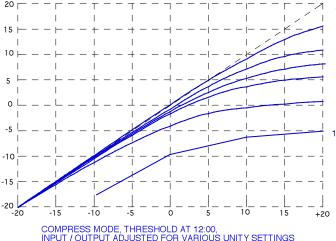
MANLEY VARIABLE MU LIMITER COMPRESSOR



1:1 THEN 2:1 THEN 3:1 REFERENCE LINE

THESE ARE TYPICAL SETTINGS AND G.R. CURVES: NOTICE THE SMOOTHNESS AT THE ON-SET OF GAIN REDUCTION ESPECIALLY AT "DRASTIC" SETTINGS.

WITH ABOUT 2 dB OF GR THE RATIO IS APPROX 1.5:1 WITH ABOUT 5 dB THE RATIO BECOMES 2:1 WITH ABOUT 10 dB THE RATIO BECOMES 5:1

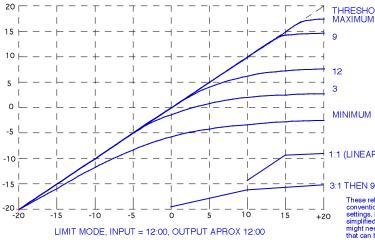


THESE CURVES SHOW MORE EXTREME SETTINGS:

NOTICE WHEN DRIVEN VERY HARD THE COMPRESS RATIO BECOMES 8:1 OR NEAR SO CALLED LIMITING.

ALL CURVES SHOW A "SOFT ROUND KNEE" STARTING WITH LOW RATIOS IN TYPICAL SETTINGS AND INCREASING ONLY WHEN GAIN REDUCTION PASSES 10 dB.

1.2:1 THEN 3:1 THEN 9:1 REFERENCE LINE



AS THE THRESHOLD IS LOWERED THE KNEE BECOMES VERY SOFT (ROUND) SO THAT THE UNIT BEHAVES MORE LIKE A COMPRESSOR AND SLOWLY REACHES LIMITING.

1:1 (LINEAR)THEN 12:1 REFERENCE LINE

3:1 THEN 9:1 REFERENCE LINE

These reference lines are to help visualize or compare the ratios with conventional comp-limiters. Because our GR curves can be very rounded in some settings, it becomes difficult to specify the ratio accurately. The lines are simplified straight line approximations of some of the curves. Without them, you might need to count squares to estimate ratios. Many limiters have GR curves that can be drawn with a ruler. Not this one.