

LIVE TO PLAY LIVE®

MXR
BASSINNOVATIONS

M87 BASS COMPRESSOR

Dunlop
JIMDUNLOP.COM

92503010480 revA

M87 BASS COMPRESSOR

DESCRIPTION

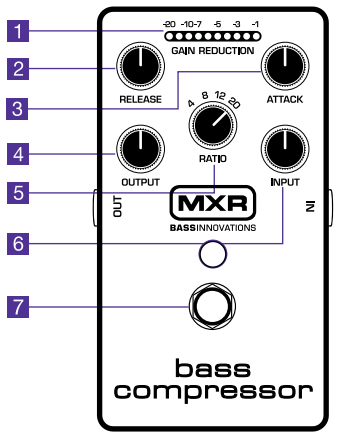
- CHT™ Constant Headroom Technology for clear, clean performance
- A studio classic in an MXR pedal
- True bypass
- Ten Gain Reduction status LEDs

CONTROLS

1. METER precisely displays gain reduction level and Compressor response time when the input signal reaches the compression threshold
2. RELEASE adjusts how quickly the Bass Compressor returns to uncompressed gain level
3. ATTACK adjusts the time the Bass Compressor takes to respond to an input signal and reduce gain
4. OUTPUT used to set the desired output level of the Bass Compressor
5. RATIO sets the degree of compression, from mild 4 (4:1) to extreme 20 (20:1)
6. INPUT adjusts the input signal level relative compression threshold and sets the amount of gain reduction
7. FOOTSWITCH toggles Bass Compressor on/bypass

POWER

The **M87 Bass Compressor** can be powered by one 9 volt battery (accessed by removing the bottom plate of the pedal), a Dunlop ECB003 AC adapter (ECB003E in Europe) or a Dunlop DCB10 DC Brick power supply.



DIRECTIONS

- Set Release, Attack, Output and Input to 12 o'clock, and Ratio to 4.
- Run a cable from your bass to your Bass Compressor's Input jack and run another cable from the Bass Compressor's output jack to your amplifier.
- Turn the effect on by depressing the footswitch (Blue LED lit).
- Observe the LED Meter while playing normally and set the INPUT knob so that the first 3 to 7 green gain reduction LEDs light, clockwise to light more and counterclockwise to light fewer LEDs.
- Adjust the OUTPUT knob to set the desired output signal level of the compressor, clockwise for more output signal level and counterclockwise for less. Going between Compressor bypass and ON is very helpful when adjusting the OUTPUT level.
- Use the ATTACK knob to set how quickly your Bass Compressor responds to your signal and starts to reduce gain, from 800 microseconds fully counterclockwise to 20 microseconds fully clockwise. Fast ATTACK settings create abrupt and tight compression, while slow ATTACK settings sound more relaxed.
- Use the RELEASE knob to set how long it takes your Bass Compressor to return to uncompressed or 0dB gain reduction level (no meter LEDs lit), adjustable from 1.1 seconds fully counterclockwise to 50 milliseconds fully clockwise. Fast RELEASE settings create less compression on the attack of notes played in fast succession. Slow RELEASE settings produce smooth compression on sustained notes.
- Use the RATIO knob to select compression ratio. The 4 setting selects a 4:1 ratio, meaning that if the input level rises 4 decibels above threshold, the output level will only rise by 1 decibel. Therefore, gain has been reduced by 3 decibels. The 8 setting selects an 8:1 compression ratio, 12 selects 12:1, and 20 selects 20:1

COMPRESSION

Standard studio dynamic range reduction can be achieve with Attack and Release at their 12 o'clock settings, a 4:1 or 8:1 ratio, and by adjusting the input control to consistently light the -3 to -7 dB LED during note attacks. Then, to only soften note attacks, dial in a faster attack time (CW) and reduce the input control (CCW) to light only the -3 to -5 dB LEDs during note attacks. Or to accentuate note attacks, dial in a slower attack time (CCW) and a faster release time (CW). To hear a more compressed sound, set the input control to a higher level (CW) to light more gain reduction LEDs with a slow release time and a fast attack time.

LIMITING

Compression and Limiting are similar in process but differ in degree of compression. High compression ratios 12:1 or 20:1 with fast attack and release settings are considered to be limiting. With your Bass Compressor, the 12:1 ratio setting produces 'soft' limiting, while the 20:1 produces 'hard' limiting, or 'brick wall' limiting with the fastest attack and release settings. In contrast, to get the classic 'squishy' limiting effect, dial in a slow release time (CCW) with a fast attack.

METER

Short string taps are an easy way to see the METER display Compressor reaction time and can be helpful in setting Attack and Release controls.

SPECIFICATIONS

Input Impedance	1 MΩ
Output Impedance	600 Ω
Max Input Level	+14 dBV
Max Output Level	+8.5 dBV
Frequency Response	20 Hz to 20 kHz, +/- 1 dB
Signal to Noise Ratio*	> 90 dBV
Total Harmonic Distortion**	> 0.5%
Gain	31 dB
Compression Ratio	4:1, 8:1, 12:1, 20:1
Attack Time	20 µs to 800 µs
Release Time	50 ms to 1.1 s
Bypass	True Hardwire
Current Draw	
LEDs off	14 mA
LEDs on	19 mA
Power Supply	DC 9 volt
Housing Material	Aluminum
Housing Dimensions	4-3/4" x 2-3/4" x 1-9/32"
Weight	8.4oz.

0 dBV = 1Vrms,
**A-Weighted, all controls at mid position*
***20 dB gain reduction, 1.1 s release setting, 50 Hz to 20 kHz*

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