



M87B

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# Bass Compressor

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Celebrate 15 years of MXR Bass Innovations with a special edition version of one of its most popular pedals. The MXR Blackout™ Series Bass Compressor features a stealthy matte black housing with gloss black text and a bright yellow LED for a super sharp aesthetic to match this pedal's exceptional sound and performance.

[jimdunlop.com/m87b](http://jimdunlop.com/m87b)

# External Controls



- 1 FOOTSWITCH toggles effect on/bypass (yellow LED indicates on)
- 2 OUTPUT knob controls overall effect volume
- 3 RELEASE knob controls how quickly your signal returns to its uncompressed gain level
- 4 METER display shows gain reduction level and compressor response time
- 5 ATTACK knob controls reaction time of compression
- 6 INPUT knob controls gain level of input signal
- 7 RATIO sets the degree of compression, from mild 4 (4:1) to extreme 20 (20:1)

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# Basic Operation

1. Run a cable from your bass to the Bass Compressor's INPUT jack and run another cable from the Bass Envelope Filter's OUTPUT jack to your amplifier.
2. Set RELEASE, ATTACK, OUTPUT and INPUT controls to 12 o'clock and the RATIO control to 4.
3. Turn the effect on by depressing the footswitch.
4. Observe the METER display 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 less LEDs.
5. Rotate the OUTPUT knob clockwise to increase overall effect volume or counterclockwise to decrease it.
6. Rotate the ATTACK knob clockwise to increase reaction time of compression or counterclockwise to decrease it.
7. Rotate the RELEASE knob clockwise to increase the time it takes your signal to return to its uncompressed level or counterclockwise to decrease it.
8. 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.

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## Power

The MXR® Bass Compressor is powered by one 9-volt battery (remove bottom plate to install), a 9-volt AC adapter such as the Dunlop ECB003/ECB003EU, or an MXR® Brick™ Series power supply.

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## Compression

Standard studio dynamic range reduction can be achieved by setting ATTACK and RELEASE knobs to 12 o'clock, with a 4:1 or 8:1 ratio, and by adjusting the input control to consistently light the -3 to -7dB LEDs while playing. To soften the sound of your attack, 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. To accentuate the sound of your attack, dial in a slower attack time (CCW) and a faster release time (CW). For 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.

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## Limiting

Limiting refers to high compression ratios (12:1 or 20:1) with fast attack and release settings. The Bass Compressor's 12 setting produces soft limiting while 20 setting produces hard limiting, and even "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.

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## 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.

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# Specifications

Input Impedance	1M $\Omega$
Output Impedance	600 $\Omega$
Maximum Input Level	+14 dBV
Maximum Output Level	+9.2 dBV
Freq Response	$\pm 1$ dB, 20 Hz to 20 kHz
Noise Floor*	-95 dBV
THD**	< 0.5%
Max Gain	31 dB
Compression Ratio	4:1, 8:1, 12:1, 20:1
Attack Time	20 $\mu$ s to 800 $\mu$ s
Release Time	50 ms to 1.1 s
Current Draw	
LEDs OFF	14 mA
LEDs ON	19 mA
Bypass	True Bypass
Current Draw	6 mA
Power Supply	9 volts DC

\*A-Weighted, all controls at mid position

\*\*20 dB gain reduction, 1.1s release setting, 50 Hz to 20 kHz