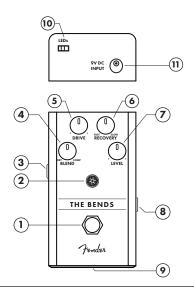


Fender

# THE BENDS



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## THE BENDS

Thanks for purchasing the Bends—a richly featured compressor designed especially for electric guitar and bass. The Bends is a powerful and easy-to-use sound processor.

A compressor is a sound processor that decreases an instrument's dynamic range. It does this by increasing overall signal level to make quiet sounds louder, and then automatically turning down excessively loud sounds. This dual-action operation makes quiet sounds louder and loud sounds quieter.

Why is this desirable? For clean guitar and bass sounds, compression evens out playing dynamics so that musicians needn't play with perfect dynamics to achieve a consistent performance. With single-note soloing or lead playing, adding a healthy dose of compression increases sustain and can give the impression of playing with distortion even though the sound is completely clean. For distorted guitar sounds, adding compression helps increase sustain when using less amplifier gain, which can result in clearer, more articulate tone that still has power and bite. With bass, compression keeps volume consistent when, for example, a player changes techniques from finger style to slapping.

On the downside, too much compression sometimes removes important dynamic information, such as the transient that happens when a guitar pick leaves the string at the very front of the note. The Bends has two features that can help with this—the Gain Reduction jewel indicator and the Blend control.

Finally, the Bends has a carefully designed audio path that uses a duplicate circuit in critical spots to help reduce noise.

## Blend

The Blend control changes what the player hears when the pedal is active. In fully counterclockwise position, it provides the original unaffected guitar signal. In fully clockwise position, it provides the output of the compression engine only. When set to noon, it delivers a 50/50 mix of the input signal and the compressed signal. This control enlivens tone while keeping the benefit of added sustain. Try adjusting the Drive, Recovery and Level controls at first with the Blend control set fully clockwise (compression only). Once a satisfying compressed sound is achieved, turn the Blend knob down slightly to add some realism.

## Drive

The drive control affects how much compression is applied to the signal. The jewel indicator will change from white (effect is active) to pink (gain reduction or compression is occurring). Note that with the Drive control turned down, it's difficult (if not impossible) to get the LED to change; this gets much easier with higher Drive settings. A good rule of thumb for a natural sound is to set the Drive control to the point at which the LED changes color with loud playing but remains solid white with soft-to-medium playing.

#### Recovery

This control adjusts how much time it takes for the compressor to recover (return to the original gain amount) once playing has stopped. Longer settings (clockwise) tend to sound more natural; shorter settings (counterclockwise) tend to sound more exciting. This control has enough range to add a peculiar rough-sounding distortion at the extreme counterclockwise position. This is normal.

#### Level

This control sets the final output level of the compressed signal. In general, adjust this control after the Drive control has been set to the desired output level.

## Jewel Indicator

The Jewel Indicator serves two purposes: to indicate when the effect is active and to show when gain reduction (compression) is occurring. This is accomplished with two actual LEDs in one housing—white for bypass and red for gain reduction. When both are on, the resulting color is pink. Note that it is possible to bypass the compressor while it's in the middle of heavy gain reduction, in which case the LED will turn red briefly until the gain reduction has normalized. This is normal and does not indicate a problem.

### **Bypass Footswitch**

This rugged footswitch has a true bypass design that bypasses the effect and provides the original signal at the output jack.

#### Input Jack

This is a high-impedance input suitable for electric guitar, bass, acoustic guitars with pickup systems, keyboards and other instruments.

### **Output Jack**

This is a low-impedance output jack that connects to the amp or to the next effect pedal.

#### **DC Power Connector**

This is a standard center-negative 9VDC jack for use with appropriate power supplies.

## **LED Kill Switch**

This switch extinguishes the LEDs that illuminate the control knobs—useful in maximizing battery life when running the pedal from batteries.

#### Low Battery Indicator

This red LED on the front of the battery door illuminates when battery voltage drops below a set threshold, indicating that the battery should be replaced soon.

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P/N 7713289000 - REV A

#### Important Safety Instructions

 WARNING: To prevent damage, fire or shock hazard, do not expose the unit or its AC power to rain or moisture.

- · Do not alter the AC plug of the connected power adapter
- Do not drip or splash liquids on the unit.
- · No user serviceable parts inside, refer servicing to qualified personnel only.

 WARNING: The unit must only be connected to a safety agency certified, regulated, power source (adapter), approved for useand compliant with applicable local and national regulatory safety requirements.

 Unplug the AC power adapter before cleaning the unit exterior. Use only a damp cloth for cleaning and then wait until the unit is completely dry before reconnecting it to power.

 Amplifiers and loudspeaker systems, and ear/headphones (if equipped) are capable of producing very high sound pressure levels which may cause temporary or permanent hearing damage. Use care when setting and adjusting volume levels during use.

#### Languages

Manual available in Espanol, francais, Italiano, Deutch, Portugues, (Chinese) www.fender.com/support

#### **Expanded Owner's Manual**

Expanded Owner's Manual available at: www.fender.com/support

#### Specifications

POWER SUPPLY: One 9V battery or 9VD	INPUT: 1MΩ OUTPUT LOAD: >10kΩ One 9V battery or 9VDC regulated adapter, 5.5 x 2.1 mm barrel connector, center negative		
5.5 x 2.1 mm barrel cor			
POWER REQUIREMENTS: 15mA@9VDC +-@-			
60mA, Total Current Co	nsumption		
DIMENSIONS: 2.75" x 4.9" x 2.5" (95	.25mm x 124.5mm x 63.5mm)		
WEIGHT: .9lbs (.40kg)			




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产品中有害物质的名称及含量

	有害物质						
部件名称	45 (Pb)				多溴联苯 (PBB)	多決二苯醚 (PBDE)	
箱体	0	0	0	0	0	0	
喇叭单元*	0	0	0	0	0	0	
电子部分	х	0	х	0	0	0	
接线端子	х	0	0	0	0	0	
电线	х	0	0	0	0	0	
所件	0	0	0	0	0	0	

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

X: 表示该有森有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。

注: 含有有害物质的部件由于全球技术发展水平限制而无法实现有害物质的替代。

\*产品含有喇叭单元时有效。