# User Guide



# Prefix Stereo Blender Acoustic Guitar System

Warning! We strongly recommend that you familiarize yourself with the preamp's controls before you attempt to perform with this system. Failure to do so can produce painful acoustic feedback (see Quick Start on page 3).

Please take a few minutes to read this guide and familiarize yourself with the Stereo Onboard Blender's controls.



Thank you for choosing a Fishman equipped instrument. Our goal is to provide you with the finest acoustic amplification products - systems that simply let you sound your best. With our long-standing commitment to quality, you can feel confident that your Fishman gear will provide great sound and trouble free performance for years to come.

Your satisfaction is very important to us. If you have any questions, please contact us on the web at tech@fishman.com; or by telephone at 978-988-9665.

Featured for the Stereo Blender is the acclaimed Acoustic Matrix™ under-saddle pickup. It delivers a clear, articulate sound with emphasis on string definition and attack. To compliment and contrast this pickup, a miniature electret microphone (mounted to the underside of the preamp chassis) captures the guitar's elusive natural ambience and sound chamber resonance. Blend the pickup and Microphone together for a powerful and cohesive acoustic guitar tone that is deeper and more "filled out", than the sound of either the microphone or pickup alone.

The Stereo Blender preamp module incorporates a unique flip-top battery compartment for easy access. Levels are set by the master volume and blend controls. Traditional shelving-style bass & treble, plus a semi-parametric "Contour" EQ are included so you can shape your guitar's tone exactly to taste. To complete the package, we include a phase switch and an adjustable notch filter, both essential for flighting feedback.

#### IMPROVEMENTS.

For the Stereo Blender we have updated and upgraded our top-of-the-line Prefix preamp. With the flick of a switch, you can now choose between stereo or mono signal paths for the system's under-saddle pickup and integral miniature microphone. This new feature expands your options for routing both signals.

We have also improved the performance of our notch filter by fine tuning its response to give you better control over your sound. In addition, a completely new circuit improves EMI and RF rejection for even quieter performance than its predecessor.

### THE PICKUP

The system's under-saddle pickup is the industry standard Fishman Acoustic Matrix<sup>TM</sup>. It is made with Fishman's exclusive co-polymer sensing material. This proprietary material reproduces your acoustic guitar sound with a sensitivity and dynamic range that surpasses all other known materials (including piezo-ceramic and so called "piezo-film" pickups).

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At the heart of the pickup is a multi-layer stack of co-polymer strips. These strips sense motion across the entire length of the saddle for unparalleled performance. Compared ceramic pickups with individual elements, the Acoustic Matrix' "unitary" co-polymer design provides a more natural and balanced response, with sensitivity to both the strings and the soundboard. The transducer is fully enclosed in a shielded foil wrap for quiet performance and total EMI noise rejection.

### THE MICROPHONE

This quality electret-condenser microphone will provide very high level sound reproduction before feedback when used in conjunction with the unit's Phase, Notch and Contour EQ (see pages 7-8). Conveniently shock-mounted to the underside of the preamp chassis, the microphone is strate-gically isolated inside the instrument. For stage use, the Microphone's interior location affords you unprecedented freedom of movement as well as minimal bleed through from other instruments.

# QUICK START

We recommend that you preset the system EQ to locate and eliminate microphone feedback before you mix in the under-saddle pickup.

- 1. Set all controls as follows:
  - Notch and Volume fully counter-clockwise
  - · All EQ sliders at center position
  - Blend slider at full left position (A = microphone)
- 2. Slowly increase the volume and play the notes from the open low E, up to the fourth fret G sharp until the instrument starts to rumble or howl with feedback on one or more of these notes. Adjust the Notch control until this feedback is eliminated (usually between one and two o'clock on the dial).
- Increase the volume some more and play (on the low E string) the fifth fret A and above. Flip the phase switch to the position that eliminates feedback in this region.

#### Quick Start Cont' d ...

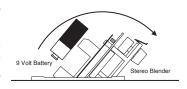
- 4. Slowly increase the Volume again, until you start to hear a high squeal.
- Lower the Contour Slider (level) all the way down and adjust the Frequency slider until the squealy feedback is eliminated. Raise the Contour slider (if possible) to just below the threshold of feedback.
- 6. Move the Blend slider to the right to mix in the pickup signal (B).
- Adjust the Bass and Treble controls as desired. Note that these controls do not affect the microphone signal.
- 8. Play your guitar as loud as you like.

See diagram on page 9

# SETUP

# **Battery Compartment**

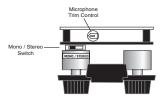
Pull the small tab at the top of the Onboard Blender™ toward you. The body of the preamp will swing out, revealing the battery compartment. Observe the polarity marks on the battery clip and install a fresh 9V alkaline battery accordingly.



# Microphone Trim Control

A small circular potentiometer is located on the underside of the preamp just below the battery compartment. This is a "set it and forget it" control. Use it to initially calibrate the microphone balance in relation to the pickup. Set the Blend slider to the center position and with a small slotted screwdriver, adjust the Trim Control until both the microphone and pickup levels are balanced to your taste.

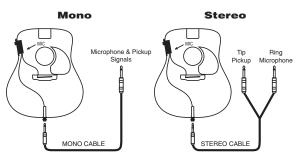
# USER GUIDE



#### Mono/Stereo Switch

A small slide switch, located on the underside of the preamp (across from the Notch control pot), lets you choose between mono and stereo operation. Leave the switch in the factory set Mono position when you use a standard instrument cable.

If you wish to split the pickup and microphone signals for separate external processing (such as with a Fishman Acoustic Blender), move the switch to the Stereo position and use a stereo cable or a stereo "Y" cable to carry the two signals to separate destinations. In the stereo mode, the pickup goes to the tip output and the microphone goes to the ring output.



Note that the microphone signal at the ring output is affected only by the Volume, Blend and Phase controls.

### **Endpin Jack**

When you plug into the endpin jack, the Stereo Onboard Blender™ switches on. To conserve the battery, remove the instrument cable from the endpin jack when the system is not being used. It is a good idea to turn down your amp or mixer input before you plug into the endpin jack. Doing so will protect your speakers (and your ears) from loud pops.

# **Battery Low LED**

Plug into the endpin jack and the Low Battery light will flash momentarily, indicating that the power is on. When the Low Battery light stays on, it is time to change the battery.

# CONTROLS

# **Volume Control**

Set this as high as possible (without distorting your amp or mixer) for the cleanest signal. This control affects both the pickup and the microphone.

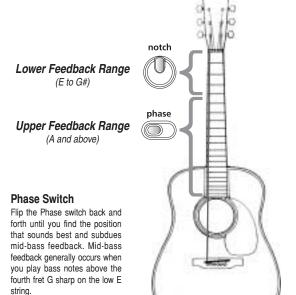
### **Notch and Phase**

These controls work hand in hand to suppress two adjacent ranges of acoustic feedback. When you set them properly, you can play your instrument as loud as you like, feedback free.

#### Notch

Tune the Notch filter to scoop out the lowest range of feedback when you play bass notes between the open low E string and (up to and including) the fourth fret G sharp on the same string. Low frequency "cavity resonance" feedback can usually be squelched by setting the Notch control between one o'clock and two o'clock on the dial. Note that for instruments that do not suffer from low frequency feedback, the notch can be defeated by moving the dial to the Off (seven o'clock) position.

NOTE: The Notch control only affects the magnetic and piezo pickup signals at the tip output.



#### Bass

#### This control affects the under-saddle pickup signal only!

A Boost here will add depth and weight to the sound the instrument.

#### Contour EQ

Two sliders (Contour and Frequency) make up this EQ. The Frequency slider lets you tune in on the specific range of sounds that you can boost/cut with the Contour (level) slider. The Contour control affects only the pickup and microphone signals at the tip output.

With the Contour EQ you can boost or cut a wide range of frequencies, from gutsy low midrange (250 Hz) to brilliant high treble (10 kHz). Often your instrument will benefit from a slight midrange cut.

To cut mids, boost the Contour control and then sweep the Frequency control until you find the band of frequencies that are brash and nasal sounding (usually around the center of the Frequency slider's travel).

Then move the Contour slider below its detent to taste.

### **Treble**

#### This control affects the under-saddle pickup signal only!

A boost here will help to "cut through the mix". Conversely, cutting the Treble will mellow and subdue your amplified tone.

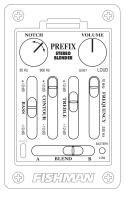
### Blend Control

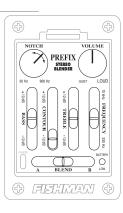
This control determines the balance between the two pickups. Move the slider left to emphasize the Microphone (A). Move it right to hear more of the Pickup (B).

# SUGGESTED EQ SETTINGS

#### Anti-feedback

See Quick Start on Page 3





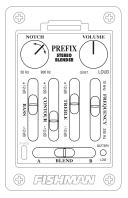
#### **Brilliance**

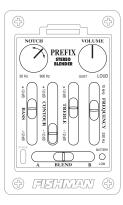
If you are playing through a limited range amplifier (like an electric guitar amp) or have dead strings on the instrument, you can brighten up your sound by setting the Frequency slider to 10 kHz and raising the Contour level to taste. If you plan to play at high stage volume levels, dial in more pickup than microphone to avoid feedback.

#### Suggested EQ Settings Cont'd ...

### Mid-Cut

You can scoop out harsh midrange by setting the Frequency slider slightly above center with the Contour (level) cut to taste below the center detent. Often the desired mid-cut will fall into the same frequency range as potential microphone feedback. You can also cut midrange (pickup only) by boosting the BASS and TREBLE sliders to realize an "implied" mid-cut at 800 Hz.





# **Fingerstyle**

This setting will add fullness to the bass and definition to the treble.

# **SPECIFICATIONS**

Nominal Input Level: -20 dBV

Input Overload: (20 Hz - 20 kHz)-2 dBV

Pickup Input Impedance: 20 M Ohms

Output Impedance (tip): Less than 3.5 k Ohms
Output Impedance (ring): Less than 6.6 k Ohms

Nominal Output Level (tip): -12 dBV

Output Level Range (ring): Max: -12 dBV Min: -16dBV

THD: Less than .04 %, -20 dBV input

Signal to Noise Ratio: 77 dB (A weighted referred to nominal -20 dBV input)

Current Drain: Less than 4 mA

Power Supply: 9V alkaline battery (estimated 140 hours

continuous use with low battery indicator

PICKUP ONLY

at 6.5V)

Notch Filter Range: 20Hz - 300 Hz (-15 dB)

Bass Control Range: ± 12 dB at 60 Hz

± 3 dB at 350 Hz

Treble Control Range: ± 12 dB at 10 kHz

± 3 dB at 2.4 kHz

Contour Control Range: ± 12dB

(adjustable from 250 Hz to 10 kHz)

Q = 0.5

All specifications subject to change without notice.

# Limited Warranty

The Fishman Prefix Stereo Blender is warranted to function for a period of One (1) Year from the date of purchase. If the unit fails to function properly within the warranty period, free repair and the option of replacement or refund in the event that Fishman is unable to make repair are Fishman's only obligations. This warranty does not cover any consequential damages or damage to the unit due to misuse, accident, or neglect. Fishman retains the right to make such determination on the basis of factory inspection. Products returned to Fishman for repair or replacement must be shipped in accordance with the Return Policy, as follows. This warranty remains valid only if repairs are performed by Fishman. This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

#### **Return Policy**

To return products to Fishman Transducers, you must follow these steps...

- Call Fishman Transducers at 978-988-9665 for a Return Authorization Number ("RAN").
- 2. Enclose a copy of the original Bill of Sale as evidence of the date of purchase, with the product in its original packaging and a protective carton or mailer.
- Fishman Transducers' technicians will determine whether the item is covered by warranty or if it instead has been damaged by improper customer installation or other causes not related to defects in material or workmanship.
- 4. Warranty repairs or replacements will be sent automatically free of charge.
- 5. If Fishman Transducers determines the item is not covered by warranty, we will notify you of the repair or replacement cost and wait for your authorization to proceed.

FISHMAN TRANSDUCERS

340-D Fordham Road Wilmington MA 01887 USA
Phone 978-988-9199 • Fax 978-988-0770

www.fishman.com

009-087-006 • 11-00

