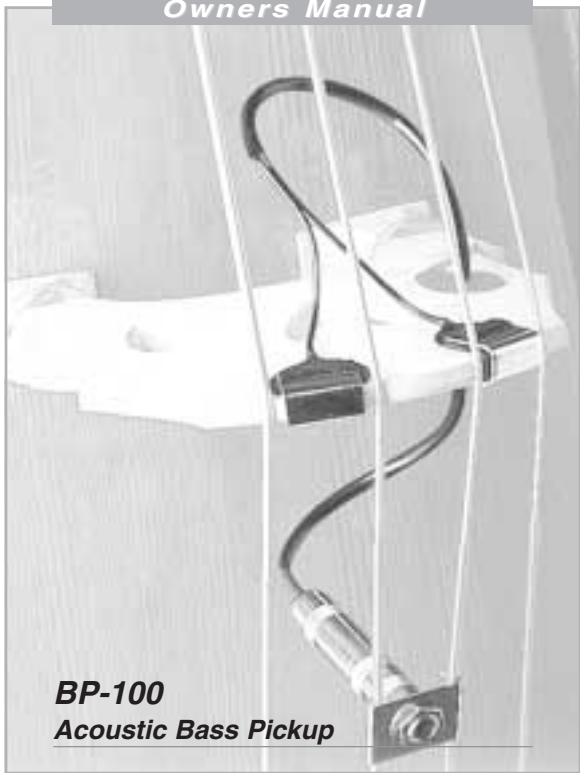


Owners Manual



BP-100
Acoustic Bass Pickup

FISHMAN[®]
Acoustic Power

BP-100 Acoustic Bass Pickup

Thank you for your purchase of a FISHMAN product. Please read these instructions carefully. If you have any questions or problems, contact our **PRODUCT INFORMATION LINE** at **978-988-9665**.

The BP-100 is a bridge mounted, piezo-ceramic pickup. It senses string vibrations via two piezo elements, fastened between adjacent string pairs. The elements are held to the bridge with two felt lined metal clips. The pickup is terminated to a specially modified Switchcraft 1/4" jack.

The BP-100, reproduces a very deep bass tone with emphasis on the fundamental pitch, unlike most other bass pickups which tend to emphasize the 1st overtone. The BP-100 responds evenly throughout all playing registers and resists feedback at high volume levels. The pickup installs non-destructively in minutes and can easily be transferred to another instrument.

PARTS LIST

- BP-100 Pickup
- 2 Felt-covered Clips
- 1" Rubber Isolation Plug
- 3/4" Rubber Isolation Plug
- Instrument Cable

INSTALLATION

Prepare the Bridge

1. The area of the bridge where the elements will be mounted **must** be flattened with a sanding block or a flat file. Otherwise, the performance of the pickup **will** be adversely affected. Most problems with the pickup's performance can be remedied by flattening the bridge face.

Use a 120-150 grit sanding block or a file to flatten the area that will make direct contact with the elements. Check the flatness of the bridge face with the edge of a steel ruler or single-edged razor blade.

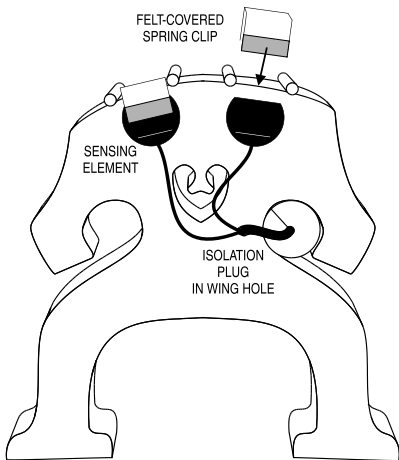
- Clean the bridge with alcohol before mounting the elements. Remove all rosin deposits.

Mount the Pickup

CAUTION: DO NOT PULL OR BEND THE WIRES AT THE BASES OF THE ELEMENTS. YOU MAY DESTROY THE PICKUP!

- Slide the pickup wire through the E-string side wing slot.
- Mount the elements black side up on the side of the bridge that faces the fingerboard. Center one element between the G and D strings with its straight edge 1/8" below the top edge of the bridge. Slide a felt-covered clip over this edge to secure the element. The clip should be pushed tightly against the top of the bridge. A loose clip may be tightened by squeezing it before installation.

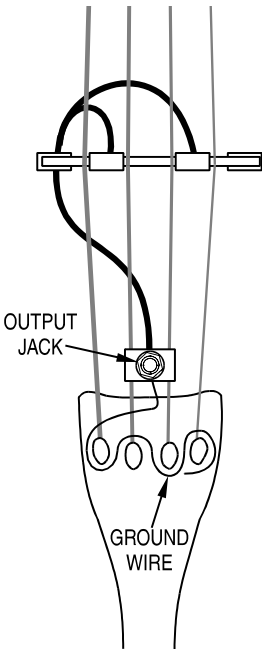
Install the other element in the same fashion, centering it between the A and E strings. Note that if the bridge is beveled at the top edge, the elements must be mounted below the bevel.



3. Weave the ground wire over the string ball-ends making sure to contact each ball.
4. Determine which isolation plug fits snugly into the E-string side wing-hole on the bridge. Slip the wire into the slit of the isolation plug and fit the plug into the wing-hole.

FINE TUNING

- Mounting the elements 1/4" to 1/2" below the top edge of the bridge will produce a different sound.
- You may fine tune the string balance by moving the upper corner of an element closer to or further from an individual string.
- Once the optimum position is determined, the elements should not be disturbed or removed from the instrument.
- The mounting clips must be tight. They should be retightened after installation to compensate for compression of the felt.



PLUGGING IN

Due to the nature of passive pickups, the type of cable you use and the input you plug into will affect the quality of your sound.

INSTRUMENT CABLE

Cable lengths over 10 feet (before preamp) will cause audible high frequency loss. Use a high quality, low capacitance shielded cable. This will insure minimal tone coloration and hum. Using fully shielded metal plugs will also help eliminate hum.

KINDS OF AUDIO INPUTS

Because of the lack of standardization for high impedance audio inputs, special attention should be paid to what you are plugging into:

The BP-100 will sound best when plugged directly into an input with a 10 M Ω impedance. At 10 M Ω , the full frequency response of the bass is reproduced. The BP-100 can also be plugged into inputs as low as 1 M Ω with adequate results. At 1 M Ω , the lowest bass frequencies will be slightly rolled off.

PREAMPS

We strongly recommend using a 10 M Ω , impedance matching, buffered preamp in conjunction with the pickup.

A matching preamp will:

1. Realize the full frequency response potential of the pickup.
2. Permit long cable runs (after the preamp) without signal deterioration.
3. Allow precise volume and tone shaping with dedicated EQ.
4. Insure compatibility with virtually any instrument level audio input available.

BP-100 Acoustic Bass Pickup

Fishman Transducers manufactures a complete line of compatible preamps, all with 10 Meg Ohm inputs:

MODEL BII - *Outboard Acoustic Instrument Preamp*

PRO-EQ II - *4 Band Acoustic Instrument Preamp*

PRO-EQ PLATINUM - *Outboard Acoustic Instrument Preamp / EQ / D.I.*

DUAL PARAMETRIC D.I. - *Fully Parametric Two Band Preamp / D.I.*

ACOUSTIC / BASS BLENDER - *2 Channel Pickup / Mic Preamp*

POCKET BLENDER - *2 Channel Pickup/Mic Preamp*

BASS AMPLIFIERS

Most bass amplifiers (at least 1 M Ω input impedance) will yield useable results. Beware of bass amps with pre-voiced electric bass EQ. These amps will usually sound boomy in the bass and brittle in the top end, even with all controls set "flat". Pre-voiced EQ can be defeated by plugging directly into the power amp, (with a buffering preamp) via an effects return jack.

SPEAKERS

Sealed speaker enclosures provide the most punch and uncolored reproduction. Most modern ported enclosures tend to overly interact with the instrument and cause low end emphasis that masks the acoustic quality of the instrument.

DIRECT BOXES

You can plug the BP-100 into an "active" direct box (1-10 M Ω input) with very good results. Using a passive direct box will sound weak and thin.

PA / RECORDING CONSOLES

Professional PA and recording consoles have a much lower input impedance than what is acceptable for the BP-100. For usable results, you will need an impedance matching preamp. Plugging a passive piezo pickup into a mixer without an impedance matching preamp will sound harsh and thin.

TROUBLESHOOTING

SYMPTOM	CAUSE	SOLUTION
<p>FEEDBACK and / or POOR TONE</p>	<p>Bridge is not flat.</p>	<p>Check the flatness of the bridge face with the edge of a steel ruler or a single edge razor blade. If necessary, use a 120-150 grit sanding block or a flat file to level the area of the bridge face. Flatten only the area that will make direct contact with the elements.</p>
	<p>Soundpost is too tight.</p>	<p>Check the instrument's soundpost for fit. An overly tight soundpost can be responsible for poor amplified tone.</p>
	<p>Pickup wire touching bridge or top.</p>	<p>Make sure that the pickup wire is not touching the bridge or the top of the instrument. Unwanted sounds are easily transmitted through this wire.</p>
<p>PICKUP BUZZES and / or RATTLES</p>	<p>Mechanical noise from felted clips or pickup.</p>	<p>Check that the felt covered clips and the pickup are not in contact with the strings.</p>
	<p>Loose shielding cap or nut on jack.</p>	<p>Check the shielding cap and nut on jack for tightness.</p>
	<p>Mechanical noise from straight plug.</p>	<p>Use only a right angle plug into the pickup to reduce vibration. Cracks on your instrument may create buzzes that are reproduced by the pickup. Listen to the instrument acoustically before blaming the pickup.</p>
<p>THIN and HARSH TONE</p>	<p>Impedance mismatch</p>	<p>Use an impedance matching 10 MΩ buffer-preamp with the pickup</p>
	<p>Bass amp with pre-voiced electric bass EQ</p>	<p>Pre-voiced EQ can be defeated by plugging directly into the power amp, (with a buffering preamp) via an effects return jack</p>

Limited Warranty

The FISHMAN BP-100 Acoustic Bass Pickup Pickup 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...

1. Call FISHMAN TRANSDUCERS at 978-988-9199 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.
3. 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.

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009-015-001 • 9-00

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