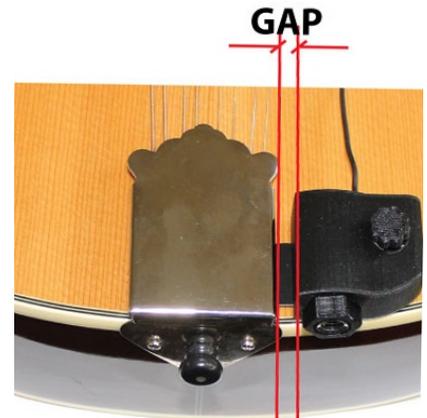


## Installation Instructions BM-1 Pro Pickup

### Jack Assembly Mounting

The jack assembly is designed to have its mounting plate fit directly underneath the tailpiece. VHB tape on the upper surface of the mounting plate will secure the jack to the underside of the tailpiece.

- 1) Remove the strings.
- 2) Dry fitting the jack assembly. Slide the mounting plate of the jack assembly under the tailpiece. Note that you must leave a gap for clearance for the tailpiece cover to slide off.
- 3) Put a piece of masking tape on the instrument top to mark the right outboard edge of where the jack body should locate.
- 4) Remove the tailpiece cover
- 5) Remove the red backing from the VHB on the mounting plate.
- 6) Pull the front edge of the tailpiece up slightly if necessary to have enough clearance beneath it to slide the mounting plate with the VHB underneath.
- 7) Position the jack body as marked with the masking tape so you maintain the gap..
- 8) Press the tailpiece down to contact the mounting plate.
- 9) Remove the tailpiece with the attached jack. Now we want to press the mounting plate as firmly as possible against the underside of the tailpiece to secure it.
- 10) Re-install the the tailpiece with the attached jack.



### Installing the BM-1 Pro

For installation on most instruments the sensor is normally adhered to the bridge face. If for any reason that placement for the sensor is not possible then the sensor may be adhered to the area of the top directly behind the bridge.

- 1) For mounting on the bridge, the sensing element for the BM-1 series of pickups requires a flat area approximately 1/4" high by 2 1/4" in length on the saddle part of the bridge of the instrument. Check the fit of the element against the bridge. Re-contour or shape the bridge if necessary. The most secure mounting material for attaching the sensor to the bridge is the VHB. The putty may be used if the bridge contour is not flat. The putty must be used as thinly as possible.
- 2) For mounting to the top, use as thin an amount to putty as possible. One can use the VHB but it adheres very strongly and could possibly damage a soft finish upon removal.
- 3) Position the sensor about 1/8" (3mm) behind the bridge and press it down into place.
- 4) Reinstall the strings and tailpiece cover.
- 5) Any excess wire can be stored inside the jack assembly by slowly but firmly pushing it in through the grommet hole in the jack enclosure.



### A Word About Amplification:

BM-1 passive pickups have been designed to operate properly and sound good without the use of a preamp when plugged into any normal electric guitar amp. As a non-preamped piezo pickup the BM-1 has an impedance of approximately 2 mega ohms which most electric guitar amps will handle. As with any passive pickup, the sound can be further enhanced and EQ'd with an outboard preamp.

PA systems: If you require the added ability to be able to plug directly into a P.A. or mixer then a preamp designed for pickups will be necessary. The preamps that are built into PA systems are microphone preamps and generally will not work properly with a passive pickup.

Acoustic Amps: If you are plugging into an acoustic amp a preamp may be required depending upon the design of that acoustic amp. Acoustic amps may or may not require the use of a preamp with a passive pickup and that will depend upon whether or not there is a special built in preamp section within that amp that specifically allows for the choice of plugging in either a passive (non-preamped) or active (preamped) pickup. This choice is quite often a second channel or a

pushbutton on the amp's control panel. Many acoustic amps show a selection that may indicate the choice of 'high impedance' and 'low impedance'. Low impedance in these instances usually indicates that in this range the amp will handle an impedance of 1000 ohms or less - which will allow active pickups with preamps to be used.

High impedance in these instances may indicate an allowable impedance in the 2 or 3 mega ohm range - which will allow passive pickups to be used. Or it may indicate a maximum input impedance allowed of 20,000 ohms or less - which will handle magnetic electric guitar pickups but not passive pickups. You should carefully read the technical specifications of your acoustic amp in order to see what it will do.