

Instrument Electronics by Instruments Passive Piezo Pickup Installation Guide

*Applicable for models EP001K, EP002K, EP003K, EP004K

A Video of this Installation Guide can be found here:



https://journeyinstruments.com/pickup-installation/

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Preparation and Getting Started:



Included Materials with Your Journey Pickup:

- 2 jigs of cardboard for pickup positioning
- 1 square of Blu Tak putty for securing pickups to jig
- 1 Golf Tee for primary position of the installation jig
- 1 wood stake to position pickup through secondary bridge pin hole.
- 1 rubber bushing for installing on carbon guitars or guitars with a thinner end block.
- * These are included in the retail kits EP-001K, EP-002K, EP-003K, EP-004K

Additional Tools and Materials Needed:

- Super Glue Gel® or other cyanoacrylate glue gel for attaching piezos in place. Gel is preferred over regular glue due to its viscosity.
- $\sim \frac{1}{4}$ " (6mm) wood rod or tapered chopstick to position pickup jack through the drilled hole. (a guitar string may be used as well, but it takes more effort)
- 12mm spanner wrench or ratchet
- A swatch of leather, silicone, or rubber to secure endpin jack cover tightly

If You do not have a pickup hole pre-drilled, you'll need:

- Electric Drill for drilling endpin hole
- Masking / Luthier Tape to prevent checking or chipping around drilled hole.
- Step Drill Bits (2 12 mm minimum) used for initial hole drilling
- 12mm Wood Drill Bit for finishing the drilled hole for pickup assembly

Notes and Tips

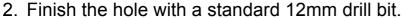
- 1. We don't include cyanoacrylate glue gel in the kit because many countries have restrictions for air shipping these adhesives.
- 2. Wide masking tape or luthier tape (2 inch or 5 cm) is best, but you can overlap tape when drilling the endpin jack hole.
- 3. Keep a clean and clutter-free work area so you don't scratch your guitar during this installation.
- 4. We include an extra jig and extra putty in case you want to practice positioning the jigs.

Pickup Installation

To install a JourneyTek™ passive piezo bridge plate pickup, you'll need to first drill a hole in the block for the pickup

Part 1. Drilling the pickup jack hole in the block

- After removing the endpin, apply masking tape & use a step drill bit to drill a tapered hole. When the outmost diameter is 12mm, switch drill bits.
 - a. (Step drill bits are used to gradually widen the hole to prevent chipping and cracking of finish around the drilled hole.)
 - b. If you don't have an endpin on your guitar, you should first use an awl or punch to mark the center of the hole to be drilled.



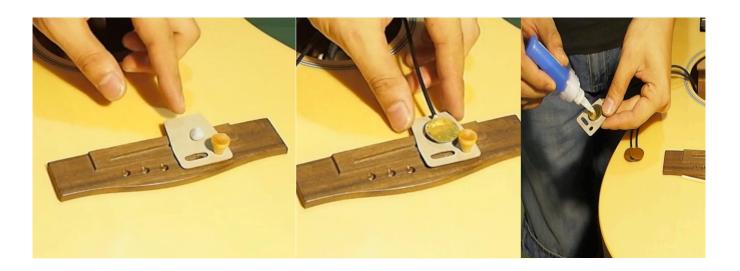
a. (You can add the rubber bushing around the bit towards the drill body to prevent damaging the guitar if you apply too much force)

Part 2: Installing the Passive Piezo Pickup

- 3. Add a capo at around 7th fret to hold strings, then loosen strings. (Journey Instruments collapsible guitars have string retainers so you can skip this step on our collapsible models)
- 4. Remove strings from the bridge holes and the saddle.
- 5. Test Run.



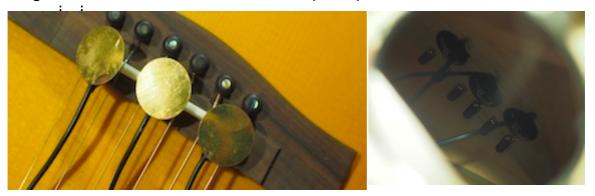
- a. Use Jig to position the piezo on top of the bridge between strings 1&2. Position golf tee in hole 1, and use wood stake to position jig in hole 2.
- b. Remove a small piece of the provided BlueTak and roll into pea-sized ball.
- c. Position the BlueTak between hole 1 and 2 on the saddle slot and place onto the jig. Center and press one of the Piezos against the jig with metallic side facing upward.
- d. Now practice by inserting the jig into the soundhole with one hand and trying to align the golf tee (on the outside) with the round hole on the jig. Then use the stake to align the piezo against the bridge plate.



6. Glue Piezos:

- a. Apply superglue gel on the entire surface of the first piezo and glue in place.
- b. It should be flush against the bridge plate and positioned correctly with NO OVERLAPPING. (Our 20mm piezos should be a prefect size to align nicely along the bridge plate under the saddle of most standard steel string guitars see Example of spacing)
- c. Critical: After positioned, hold the piezo in place for about 30 seconds to ensure a solid bond.
- d. If you're comfortable with the process, repeat the use of the jig to position and glue the remaining piezos between holes 3&4 and 5&6.
- e. First use the golf tee then finalize position using the steak.
- f. DO NOT OVERLAP PIEZOS. They should be glued flat against the bridgeplate with no overlapping. If not you've not fully mastered positioning the piezos, practice positioning the next jig before proceeding.

g. After you glue the piezo, there may be some extra putty on the back of the pickup when you remove the jig. You can remove this AFTER the glue is dried and has secured the pickup.



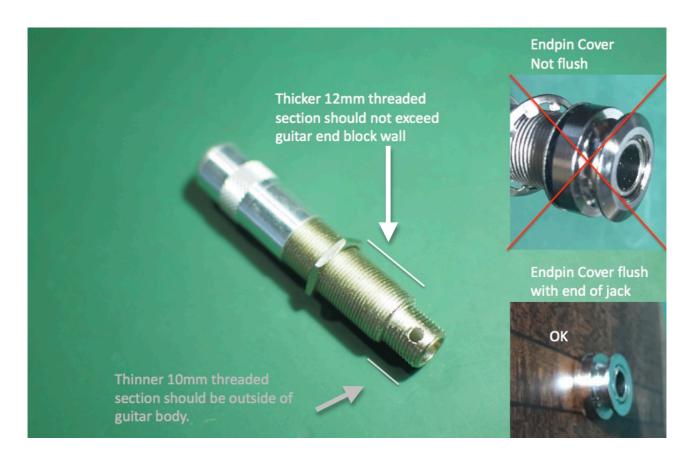
Example of spacing

Inside View when done

- 7. Adjust 12mm Backing Nut and/or Sleeve:
 - a. Now adjust the backing washers (or sleeve) on the jack so the length of the thicker 12mm threaded area is 0.5-1.0 mm shorter than the thickness of the end block wall.
 - i. (You can use the wood stake to stick in the drilled hole and mark off the wall thickness with a pen and then adjust the backing nut)
 - ii. If threaded section is too short, your guitar cable won't connect properly because the jack cover will prevent the guitar cable from plugging in all the way.
 - iii. If threaded section is too long, when you tighten the nut fully the pickup will still be loose.
 - b. The large ID (inner diameter) and locking washers go on the inside of the guitar with the flat washer against the backing nut and the locking washer with teeth facing against the guitar body.



c. The smaller ID washer goes outside the body under the nut, with the Endpin / strap button cover on last.



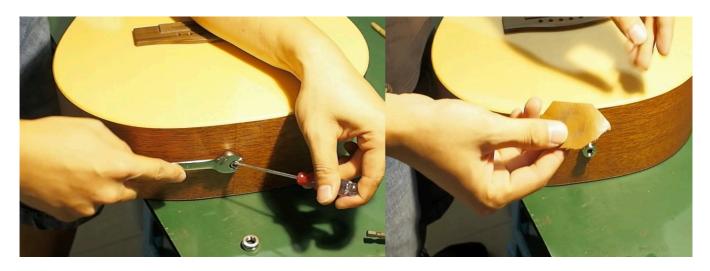
- 8. Press Output Jack Into Position:
 - a. Insert the jack inside the guitar through the end block.



- b. We recommend using a small ~6mm wooden rod (or a tapered chopstick) to help guide it through the drilled endpin jack hole. You can also use a guitar string threaded through the side hole on the jack (with string ring inside the jack) to help pull it into place, but it's a little tricky.
 - i. With the wood rod you can insert it into the endpin hole and push it into the jack that you're pressing from the inside.

- ii. If you use a guitar string, you first feed the string through the small 3mm hole in the smaller threaded section of the pickup. Now take the end of the wire and push it through with one hand and grab with your other.
- iii. With the wire sticking through the endpin hole, pull on the wire with one hand and press the pickup through with the other hand until it is secure.

9. Secure Outer Fittings:



- a. Place the washer beneath the nut, then use a wrench or ratchet wrench to tighten into place. Don't fully tighten until next step.
- b. Once secure, then use a small 3mm diameter screwdriver to stick in the small hole on the side of the threaded pickup shaft. This fixes the shaft position so you can continue to tighten the bolt until it is secure.
- c. Finally, screw on the endpin cover/strap button.
 - i. Use a swatch of leather or rubber to make the final turns if possible.
- 10. Insert saddle, re-install strings, tune to pitch and enjoy your new pickup!