

# Handmade Pickups For Acoustic Instruments

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# Dualie Inside'R Pickup Installation Instructions For Guitars and Ukuleles

**For Guitars** To install the Dualie Inside'R you will need the following tools: Drill, 3/16", 3/8", and 31/64 drill bits, fluted burr, needle nose pliers.

### **Installing the Endpin Jack**

- 1) Slack off all strings. Remove or tape out of the way the B,G,D, and A strings leaving the high E and low E in place. Remove any end pin at the butt of the quitar.
- 2) Drill a pilot hole through the end block approximately 3/16" in diameter in the area you wish to place the end pin jack.
- 3) Using a fluted burr, chamfer the edges of the hole so that you will not damage the finish of the instrument when you use the larger sizes of bits required.
- 4) Drill through the guitar end block using a 3/8" bit and re-chamfer the hole. Repeat using the 31/64" drill bit to complete.
- 5) Remove the outer strap button and the small nut and washer from the endpin jack.
- 6) Place the Dualie inside the guitar and reach inside the sound hole and poke the endpin jack through the drilled hole in the end block. The jack should protrude approximately 5/16" outside the guitar. Reinstall the flat washer and small nut.
- 7) Insert a small allen wrench or other small round (like a drill bit) through the 2 holes in the end of the endpin jack to keep the jack assembly from rotating; tighten the small nut.

## **Installing the Pickup**







Fig 2

Pickup Placement For Steel String Guitars: 1) As shown in figures 1 and 2, the exact placement of the pickup can vary.

2) Take some of the inside putty supplied with the pickup and roll and knead the putty in your fingers to soften it up. Apply it evenly to the face of the pickup (this is the side with no label on it) that will contact the sound board of the instrument. Please note that we supply much more putty than you will

actually need to use in installing the pickup. A proper layer of putty on the pickup will 1/16" thick.

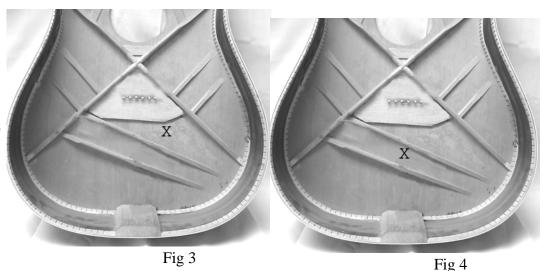
- 3) Insert your hand through the sound hole of the guitar and starting with a placement on the treble side of the X brace, press and slightly wiggle the pickup into place on the soundboard. Retune the E strings that were left in place. Plug the guitar in and see what it sounds like (remember, you have the outside E strings on and can get a pretty good idea of what the response is like).
- 4) Try the sound out along the X brace in the several positions that you have available and then try moving the pickup to the bass side of the X brace and repeating checking for the best sound. Note that some instruments will have a physical 'out of phase-ness' that might show up with the pickup on one side of the instrument. Moving the pickup to the other side will generally alleviate this.



Tests have shown that in general, the best sound on most acoustics will have the pickup installed outboard of the X braces. Placement can and will vary from one instrument to the other. Some will sound best with the pickup on the bass side (as shown in fig 1)

Other guitars will sound best with the pickup installed on the treble side of the top. Notice that the Pickup may prefer to be placed anywhere

along the X, even between the finger braces (fig 2).



Figures 3 and 4 show some alternate placements for the pickup. Some instruments will have better sound and fullness with pickup mounted below the bridge plate as shown.

#### **Pickup Placement For Classical Guitars**

Pickup placement on a classical will be generally in the area of the bridge; usually biased towards the bass side of the instrument. Sometimes it will sound best above the bridge towards the sound hole rather than below the bridge. You will have to experiment a bit to find the 'sweet spot' for the pickup.

## **Dualie Inside'R Pickup Installation Instruction For a Ukulele**

Follow steps 1 through 7 of Installing the endpin jack in the Guitars section.

- a) Take some of the inside putty supplied with the pickup and roll and knead the putty in your fingers to soften it up. Apply it evenly to the face of the pickup (this is the side with no label on it) that will contact the soundboard of the instrument. Please note that we supply much more putty than you will actually need to use in installing the pickup. A proper layer of putty on the pickup will be 1/16" thick.
- b) Insert your fingers through the sound hole of the uke and press and slightly wiggle the pickup into place on the soundboard. Most ukes will have a brace going across the instrument just below the sound hole and another brace going across below the bridge. You will install the pickup centered on the soundboard about three or four inches below the sound hole toward the bridge (this is about as far as one's fingers can reach inside) in the area between the two braces.



#### Warranty

We warrant to the original purchaser that our pickups are free from defects in materials and workmanship for a period of 2 (two) years. Should a product fail to perform properly within the specified warranty period you may contact your dealer or Schatten Design for instructions. No product will be accepted for warranty return by Schatten Design without a Return Authorization number.