

# Handmade Pickups For Acoustic Instruments

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## Cello Pickup Model C-12 Std.

## Please read the instructions completely before installing your pickup.

### Before You Start, A Word About Amplification:

C-12 Std 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 C-12 Std 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 with an outboard preamp.

<u>PA systems:</u> 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.

<u>Acoustic Amps.</u> 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.

Tools Supplied: 1 small \( \frac{1}{2} \)" wrench for tightening the jack assembly

## **Installation Instructions:**

- 1) This pickup is designed to operate properly on any size of cello. It is intended to be installed in the area of the bridge as shown in the accompanying picture.
- 2) Reasonable care should be taken when handling the pickup until it is installed. The lead wire from the pickup is quite flexible and is not prone to breakage. Please refrain from any excessive pulling or tugging on the lead wire.
- 3) Remove the nut, flat washer and upper clamp from the jack assembly
- 4) Insert the jack assembly upward through the strings so that the jack plate spans the center strings (as shown in the photo at right).
- 5) Reinstall the upper clamp, flat washer and nut from above the strings. Tighten the nut on the jack assembly to secure it in place using the supplied ½" wrench.
- **6)** Take a small amount of putty from that supplied with the pickup. Ideally, you want to use a piece a little smaller than the size of a pea.
- 7) Stretch the putty and knead it between your thumb and fingers until it warms. Place the putty on the brass side of the pickup and holding the pickup around its' perimeter (and not by the wire) spread and push the putty around until it covers the brass surface.
- 8) The putty should be uniformly spread and should be approximately 1/16" in thickness. If you use too much putty and make it too thick, the pickup will not achieve the proper output level and the sound quality may not be up to specs.
- **9)** The pickup is designed to be placed on the bass side of the bridge and is to span the wing slot. It should be touching both the wing of the bridge and the leg. It doesn't matter which way the pickup is aligned. The lead wire from the sensor may be at the top or the bottom, whatever suits the particular installation best.
- 10) Lightly push the pickup into place against the bridge.

## Removing The Pickup:

# Caution: Never pull the pickup off of the bridge by pulling on the wire, damage to the pickup can result.

- 1) Since the C-12 Std. is installed spanning the open space between the wing and the leg of the bass side of the bridge, you should have no difficulty in getting a fingernail or the tip of your finger underneath the brass base of the unit. By gently lifting at one edge or corner of the pickup, you should be able to lightly and easily persuade the pickup (along with the putty) to come away from the bridge.
- 2) The mounting putty may be used over and over again.
- 3) To restore the stickiness of putty that's already been used and is still on the pickup, remove the putty from the pickup, stretch and knead it until it becomes soft and sticky and then reapply it to the pickup.

#### 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.



