

Schatten HD-4 Hammered Dulcimer Pickup

Before You Start, A Word About Amplification:

HD-2 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 HD-2 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.

Installation Instructions

1) The diagram to the right shows the most likely placements for the HD-4 sensors. The light gray indicates the most resonant areas of the instrument top. The small black rectangles represent a good starting point for where the sensors are most likely going to be placed. You may have to go through a bit of trial and error in order to locate these spots on your instrument.

2) The sensors are attached to the top using the supplied double sided tape. The tape is a woven carpet tape that is normally available from most hardware or building centers should you need more.

3) In order to place the sensors, the easiest way is to slack off a couple of strings to best allow access to the top. Slide the sensors under the strings and pull them up through a slacked string area.

4) Trim a piece of tape to fit the bottom of each sensor, remove the paper backing and stick the tape to the sensor.

5) Remove the rest of the backing and stick each sensor to the soundboard.

6) Choose a spot at the bottom edge of the soundboard in area B to attach the jack body. Remove the backing from one face of the supplied 3M VHB tape and stick it to the underside of the jack box.

7) Remove the other bit of backing from the VHB and stick the box where you want to mount it. Press it down firmly.

8) Excess wire from each sensor can be stored within the jack box by simply pushing it into the box through the grommets.

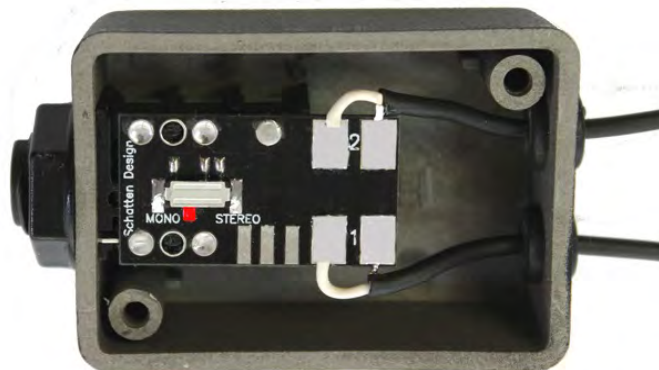
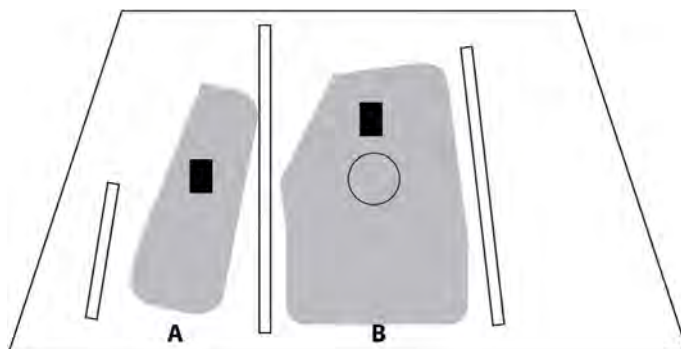
9) As supplied the HD-4 is set for Mono output. You will need a normal 1/4" guitar type cable to plug into the box.

10) If you want stereo output, remove the two screws holding on the cover of the jack box.

11) The photo to the right shows the circuit board inside the box with the micro slider switch. Move the little slider (highlighted here in red) firmly to the right to select stereo output. Replace the cover.

You will need a TRS (stereo) cord to plug into the box.

Note: If you wish to remove the sensors or the jack box from the surface of the instrument, it is most easily done if you rotate the sensor or the box back and forth as you apply a gentle pulling motion.



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.