

Schatten HD-2 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.

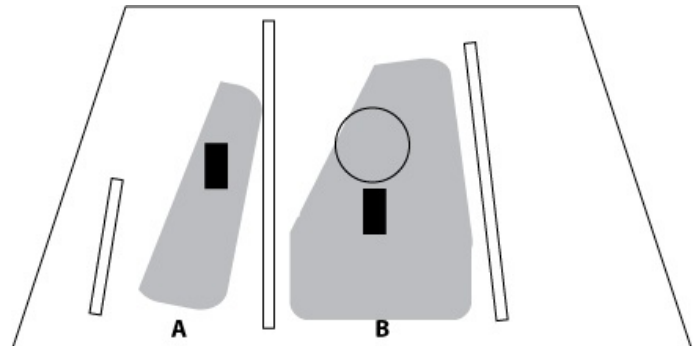
PA systems: If you require the added ability to be able to plug directly into a P.A. or mixer then a preamp designed for pickups will be necessary. The preamps that are built into PA systems are microphone preamps and generally will not work properly with a passive pickup.

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 pickup system is comprised of two separate transducer sensing units. These units are interchangeable as either may be used for either string course.
- 2) The face of the sensor showing the white figure eight is the face that will contact the dulcimer.
- 3) Hammered dulcimers vary greatly in their internal bracing, bridge placement, and areas of the soundboard and back that are particularly resonant. For these reasons we cannot specifically tell you where to place the sensors on your instrument in order to get the best sound. What we can do is to help you identify the most promising areas for placing the sensors. You will still have to go through some trial and error in order to locate these spots.
- 4) The diagram at right shows the top of a dulcimer. The light gray indicates the most resonant areas of the instrument top. The small black rectangles represent where the sensors might be placed.
- 5) To locate the resonant areas on your instrument's top, you may tap the top lightly between the strings using one your hammers.
- 6) Through testing you will locate the best spots to adhere the sensors. In some installations the pickup works best with one or both of the sensors attached to the back of the instrument.
- 7) The tape supplied with the pickup will provide a strong bond between the sensors and the instrument. For testing (or if you only want to temporarily install the sensors) you may lessen the 'stick' of the tape by adhering one side to the sensor, removing the non-stick transfer paper, and then repeatedly placing the sensor against your jeans or t-shirt or other textile in order to pick up fibers and decrease the tack of the tape.
- 8) Should you need to remove a sensor from the instrument, holding the sensor and rotating it slightly will usually help to free it up.
- 9) For mono use, plug each of the sensors into the 'Y' adapter before plugging into the amp.
- 10) For stereo use, each sensor must be plugged into separate amplifiers or into a two channel preamp and then into different channels on a mixer.



Note: The tape supplied with the pickup system is a cloth woven carpet tape that is generally available through most hardware or building centers should you require more. There is also a fiberglass woven indoor/outdoor carpet tape available. This tape usually has considerably more 'stick' than the cloth tape and while it may stick better, it may definitely make the sensors more difficult to remove.

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.