

## CH-3 Artist Harp Pickup Installation Instructions

Please read these instructions through completely prior to installing this pickup in your harp.

The CH-3 Artist comes with the following items:

One pickup sensor mounted to an articulated rosewood frame, one 9 volt powered preamp, one Velcro mounted battery bag, one adjustable aluminum jack bracket, and a supply of putty and wire clips. You will have the choice as to how you wish to mount the preamp to your harp. The preamp may be mounted permanently to the harp by drilling a hole through the back of the sound box and mounting it through that hole - or the preamp may be mounted using the supplied adjustable aluminum jack bracket. This bracket will securely clamp the preamp to the opening of a sound port of the harp.

### Pickup Placement

The photo's to the right show that the main element of the pickup system is meant to span the string reinforcing strip. The treble unit is aligned so that its foot remains parallel to the main element.

Normal placement for the main element is one-third of the way up from the lowest bass string anchor point. For example: on a 29 string harp, the main element would be just below the 10<sup>th</sup> string anchor point.

On some harps the bass string area of the string strip is enlarged and it may not be possible to place the main element exactly at the one-third point. In these cases the main element should be placed as close to that one third distance as is possible. No part of the pickup should contact the string strip or string balls.

### Pickup Attachment

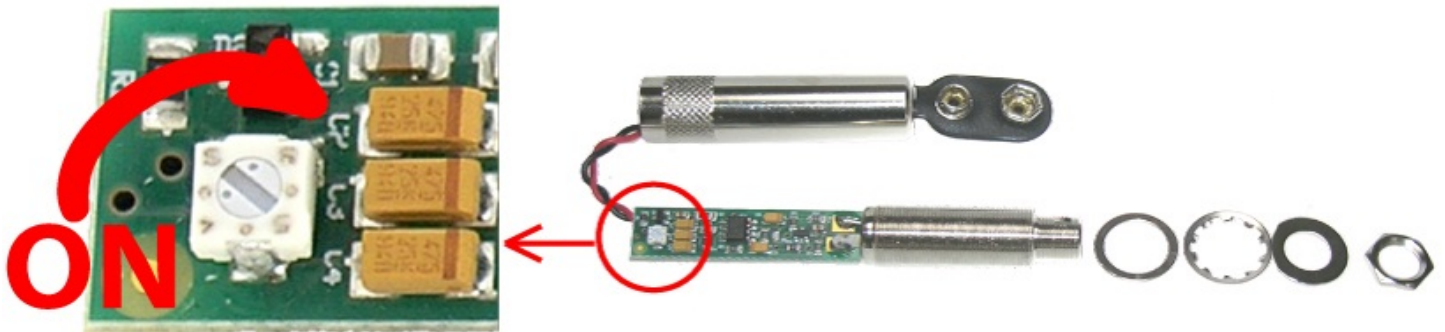
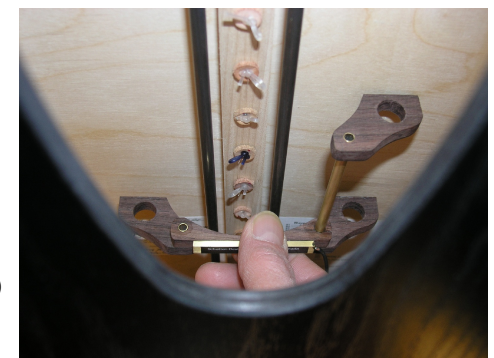
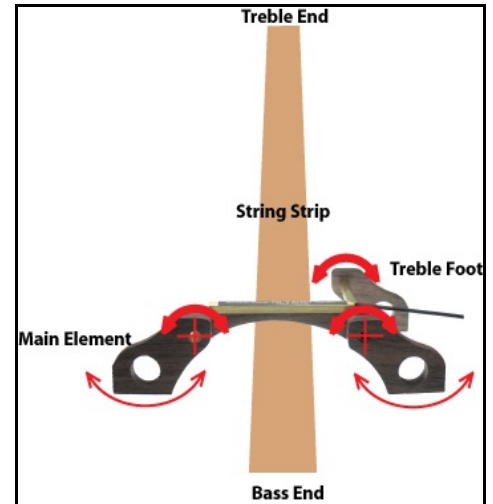
The three 'feet' of the pickup are meant to as fully contact the soundboard of the harp as possible. The feet of the pickup are articulated and can be rotated so that they will conform to the curve or belly of most harps. Place the pickup against the soundboard and rotate the feet to fit the soundboard.

The putty supplied with the pickup will be used to adhere the pickup to the soundboard. Take a small quantity of the putty (a bit bigger than a large pea) and spread that amount on the bottom of each foot of the pickup. When spread the putty should be approximately 3/16" (5mm) thick. Place the pickup in position on the soundboard and press each foot against the soundboard to adhere the pickup. Some excess putty will squeeze out from between the pickup and the soundboard - this excess putty should be left in place.

The putty will make up for any small gapping that may exist between the feet of the pickup and the soundboard. On harps with a very pronounced curvature or belly to the soundboard, the bottom of the feet may have to be re-profiled to match the curvature of the soundboard. This work should be done by a skilled luthier or repair person.

### Preamp Adjustment

The preamp that comes with the CH-3 Artist has a trim pot on its' circuit board that may be adjusted to set the amount of gain or boost that the preamp provides. It is suggested that after installing the pickup itself, and before mounting the preamp inside the harp, that you test the output of the system by plugging into your amp or PA and seeing how the pickup sounds. The exploded photo of the preamp assembly shows how the preamp is assembled and the location of the trim pot. If the pickup system is not loud enough, you may increase the output of the preamp by turning the trim pot clockwise. If the pickup system is too loud or distorts, you may decrease the output of the preamp by turning the trim pot counter-clockwise.



### Battery Bag Installation

- 1) In order to make sure that the battery wires will reach to where you want to position it, install a battery in the bag and attach the battery connector.
- 2) Chose an accessible spot on the inside of your harp where you would like to place the battery. Make certain that you can reach the battery through a sound port and that both the battery and the wires can remain out of sight. Make sure that the spot you chose is relatively flat and that it is clean and dry. It is recommended that you clean the area where the battery bag is to be placed by wiping that area down with some rubbing alcohol. This should remove any wax or sealers on the interior of the sound box and allow the self adhesive velcro pad to stick properly.
- 3) Once you have confirmed the location, peel the backing from the velcro pad and press it into place.

## **Preamp Mounting**

**Permanent mounting** - you will drill a hole through the back wall of the soundbox. This hole will normally be located in an area towards the bottom of the back of the soundbox as shown in the picture to the right.

- 1) If the wall of the soundbox is fairly thin, drill a 3/8" diameter hole through the wood and insert the preamp from the inside. Install a flat washer and nut on the outside and tighten.
- 2) If the wall of the soundbox is too thick to allow the preamp jack to protrude enough to capture the flat washer and nut, drill a 1/2" diameter hole and using the supplied lock washer, flat washers and nut, secure the preamp.



**Mounting using the adjustable jack bracket** - the jack bracket is made of aluminum with cork padding on the interior surfaces of the bracket that come into contact with the harp.

- 1) Move the screws and the backing plates so that they are able to just fit within the open width of the sound port.
- 2) Secure the preamp within one of the two larger holes of the jack bracket. The hole with the maximum offset should be used when installing the jack bracket and preamp into a harp that has center bracing or rods that would come into contact with the preamp body.
- 3) Tighten the philips head screws to secure the jack bracket in place.



## **Finishing Up**

It is important that the wires leading from the battery and from the pickup sensor to the preamp be secured so that they are not free to move around. Using the supplied 'D' shaped self adhesive wire clips, open each wire clip so that the wire(s) can be inserted within and peel and stick the clips to secure the wires to the inside of the harp.