

HiFi Duet Pickup System Installation Guide

Overview

The HiFi Duet combines the benefits of a "studio quality" microphone (the Silo Mic), with our acclaimed HiFi pickup sensors. The goal of the HiFi Duet is to accurately reproduce the natural sound and feel of your guitar. To realize the full potential of this system, it is imperative to observe the installation instructions with great care and precision! This cannot be overstated! We strongly recommend that this installation be handled by an experienced professional.

PLEASE NOTE: DUE TO FACTORS BEYOND OUR CONTROL, THERE WILL BE SOME GUITARS THIS PICKUP SYSTEM WON'T WORK IN! Variables such as small bridge plates, or narrow X brace patterns, and deformed or modified bridge plate surfaces could create problems for a successful installation. If you have any questions about this, please contact our customer service department for assistance and information.

Begin by Installing the Strapjack

Strapjack Installation Instructions

Install the HiFi Sensors

IMPORTANT! The HiFi sensors must be installed and checked before the Silo mic. It's difficult to re-position the HiFi sensors after the mic has been installed, but re-positioning is sometimes needed to achieve ideal results. Therefore, we advise that you listen to your HiFi's once they are installed to confirm they work satisfactorily, then proceed with the Silo installation.

To listen to the HiFi's just plug everything except the microphone into the preamp, string up the guitar and set the mix knob to the "full range pickup" setting (Mix control rolled all the way toward the bridge). It is not necessary to have the preamp installed to do this, you can temporarily lay it inside the soundhole along the back/side of the guitar while testing the sensors. Plug the guitar into a full range PA or acoustic amp and listen to how they sound. You should expect a full accurate response from the HiFi sensors, with even string to string balance. Consult the <u>HiFi Troubleshooting Guide</u> if your results differ from this.

HiFi Installation

A special installation tool is included in the box for the HiFi sensors; assemble it prior to beginning the installation. Use of the tool will enable you to place the sensors accurately and predictably.

- 1. Prepare the bridge plate by removing all obstacles (splinters, adhesives, glue residue, wax, etc.) and clean the surface using a cloth or paper towel with a dab of rubbing alcohol. Allow to dry.
- 2. Place the installation tool over the bridge (outside of the guitar) and adjust the short end of the posts to fit into the outer bridge pin holes. Lay the fixture into the pin holes as shown in Fig H1. This will give you a visual reference for placing the pickups in the desired location.
- 3. Place a small adhesive strip (included) on the top of each pickup, directly over the "LR Baggs" logo. Fig H2.

- 4. Remove the backing from the small adhesive strips and place pickups on the installation tool, top side down as shown in Fig H3.
- 5. Center the sensors over the saddle with one placed between the low E and A strings, and the second between the B and high E strings. Leave enough space to keep the strain relief from contacting the string ends and bridge pins.
- Remove the adhesive backing from each sensor. 6.
- Bring the tool with the pickups inside the guitar through the 7. sound hole. Feed the two rods into the outer bridge pin holes until they poke out the top of the bridge. Grab one of the rods from the outside of the guitar but do not pull up yet. While holding the one rod, let go of the jig inside the guitar and grab the other rod on the outside of the guitar.
- Pull straight up on the rods until the pickups contact the bridge 8. plate (Fig H4a and H4b). Reach inside the guitar and press each pickup against the bridge plate to secure them.
- Remove the tool from the pickups, one at a time, and take the 9. tool out of the guitar. Pressing down on each rod successively will help pop the fixture loose from the pickups. If the adhesive dot stays on the pickup please remove it.
- 10. Check the placement using a mirror and a light source and make certain the sensors will not contact the bridge-pins or the string ends. If you discover they are contacting either, you must pull them off and re-position them. See Fig. H5 for ideal placement. If re-positioning is required, replace the adhesive strip (provided) with a new one each time and be sure to completely remove all fragments of the old adhesive.
- 11. When you have confirmed the placement, it is important to seat each sensor. This will affect not only the longevity of the installation but also the overall sound response. A sensor that has not been seated will tend to be extra sensitive to high frequencies. To seat the sensors, firmly press on each one for approximately 10 to 15 seconds, simultaneously applying equal pressure from the outside of the guitar with your other hand.



Fig. H5 **Correct Placement**



Fig. H2

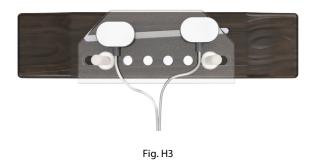




Fig. H4a



Fig. H4b

Silo Microphone Installation

CAUTION: This process is completely blind. If you are not qualified, stop now and take this to a professional installer.

The proper placement for the Silo mic is on the front part of the bridge plate, directly between the HiFi sensors. To prevent amplified rattles, it is vital that there is clearance between the mic, both the string ball ends, and the HiFi sensors.

- 12. To create clearance for the string ball ends, insert bridge pins snuggly into both the D and G string holes upside down from the inside of the guitar.
- 13. Remove the backing from the adhesive on the mic, feed the mic into the guitar through the sound hole with the mic wire facing the tail of the guitar and, without allowing the adhesive to grab the bridge plate, move the mic body into the space between HiFi sensors with the wire routing between and clearing the bridge pins. Move the mic away from the bridge pins if it is making contact, confirm by feel that the mic is still generally centered between the HiFi sensors and stick it down as lightly as possible to the bridge plate.
- 14. With the mic lightly tacked onto the bridge plate use, your inspection mirror to confirm the mic has proper clearance between the HiFi sensors, the bridge pins, and that the mic wire is nested between the bridge pins. If there isn't enough clearance around the mic, pop it off the bridge plate carefully with sideways pressure and repeat this process. Once the installation looks good, press the mic firmly to seat the adhesive and remove the bridge pins.



Fig. S1 NOTE: If a mic installation sleeve was included along with your HiFi Duet, do not use it. We will be redesigning this tool.



Correct Mic Position

Preamp Installation

This preamp will fit in most standard acoustic guitars, however, there are some brands/models that have tall braces just inside the edge of the soundhole; braces in this area exceeding 3/16" in height will pose a problem for the preamp installation. Check to confirm the preamp will fit before proceeding by holding it in the location where it will be installed. Confirm that both adhesive pads sit squarely on the surface. See Fig P1 for reference.

- 15. Plug all components into the preamp. It is best to make all connections outside of the guitar first, before permanently installing the preamp. Try to keep wires from becoming entangled in the process.
 - Connect the Silo mic to the jack labeled "mic"
 - Connect the HiFi pickups to the jack labeled "hifi"
 - Connect the Strapjack plug to the jack labeled "out"
 - Connect the battery plug to the jack labeled "batt"

Preamp Placement

The preamp mounts with double stick adhesive just inside the top/ bass side of the soundhole, between the X-Brace and Cross brace, with the control panel riding along the soundhole's edge (Fig. P1 and P2).

16. Clean the surface area prior to installation using a paper towel with just a dab of rubbing alcohol. Be careful not to get any alcohol on the outer part of the guitar as alcohol can damage the guitar's finish! Before you remove the adhesive backing, hold the preamp in place where you intend to install it just to confirm that it fits, and to help you know exactly where to mount it. Now remove the backing from the adhesive and carefully set the preamp in place. Make sure everything lines up before you apply much pressure. Once the preamp is in place, apply firm pressure to the back of the preamp to fully secure the adhesive while applying counter pressure from outside the guitar. Secure all wires with the wire retention clips provided and re-string the guitar.

NOTE: The HiFi Duet is microphonic, making it particularly sensitive to sounds caused by loose wires or other debris inside the guitar. Therefore, it is crucial that all wires be held securely within the retention clips as loose wires could rattle from vibrations, resulting in unwanted random noises in your signal. See Fig. C1 and C2.



HiFi Duet Connections



Fig. P1
Preamp installed inside view



Fig. P2 View from outside guitar



Fig. C1 Wires secure in clip!



Fig. C2 Wires loose within clip – NOT SECURE

Set-up Adjustments and Testing

- 17. Understanding the HiFi Duet's controls and functions: First, the Silo mic must be fine-tuned using the "Mic level control" (details below). Then using the "Mix" control you have a variety of mixing options from full range pickups (wheel rolled toward bridge), to variable blends of the pickups with the mic. In the "full mic" setting (wheel rolled toward the neck), what you get is a blend, with the Silo mic handling the primary voice of the guitar (mids and highs), and the HiFi sensors supporting just the low frequencies for a rich full bottom end.
- 18. Set the Silo Mic level.

IMPORTANT: Setting this control correctly is a delicate balance and vital to the sound and performance of the HiFi Duet! Located on the underside of the preamp, the "Mic Level" control adjusts the level of the Silo mic relative to the level of the HiFi sensors. The sensors and the mic must be equal in output level so they blend properly. If set too high, your signal will have excessive brightness and handling noise; set too low and your signal will be dull and covered sounding. You can access this control wheel using your index or middle finger through the soundhole with strings up to pitch.

Begin by plugging into an acoustic amp or PA, and set the volume to where it is just louder than the acoustic sound of the guitar but not so loud that you have feedback. Set the "mix" control all the way up in the neck position (maximum mic setting). This will enable you to hear the full range of the mic, making it easier to find the ideal position for the mic level. To adjust, roll the "Mic Level" wheel toward the neck to increase the level of the mic, and toward the bridge to decrease it, See Fig P3.



When the mic level is set properly, your amplified tone should be well balanced and true to the acoustic sound and feel of the guitar. If it lacks clarity and top end, increase the mic level. If you have excessive top end and handling noise, try rolling the mic back a bit until the result is a good representation of your guitar. When you have established a balanced tone in this position, the mic level will be appropriate for all positions within the blend range.

Results will vary between brands and models of guitars. If you are at all unsatisfied with your results, please contact our customer service dept. We are eager to help you achieve the finest amplified sound possible for your guitar.