

## Read Me First!

Installation of this product is a simple procedure, but we recommend this job only if you are an experienced repair technician.

## Requirements

### Saddle slot:

Minimum saddle slot length: 2.775" (70.48mm)

Maximum E to E spacing at saddle: 2.5" (63.5mm)

### Soundhole

Minimum usable soundhole diameter: 3.875" (98mm)

Maximum usable soundhole diameter: 4.125" (107mm)

Maximum X brace height at soundhole: .5" (13mm)

The Ellipse Aura preamp is designed to fit in most flat top guitars without modification, but we cannot guarantee a drop-in fit with all instruments. Before you begin installation, pre-fit the preamp in the soundhole. Ideally, the preamp should lie flat, with the mounting bracket flush to the edge of the soundhole.

## Installation

### Precautions

When separating the mounting bracket from the preamp do not pry up the ends of the bracket (at the magnets) or you will damage it. See instructions below for separating the preamp from the mounting bracket.



After installation, use caution when you clean the fingerboard or perform fret work! The powerful neodymium magnets used to secure the preamp will attract steel-wool debris and fret filings. These can damage the Ellipse electronics. As a precaution, cover the soundhole before you work on the fingerboard. Uncover only after all debris is removed.



### Preliminary

1. Widen the endpin hole to  $\frac{15}{32}$ " (11.9mm) to accommodate the endpin jack.
2. Drill a  $\frac{3}{32}$ " hole (2.4mm) in the saddle slot for the pickup wire, no less than .100" (2.5mm) from the nearest string. Install the pickup per Acoustic Matrix installation instructions.

### 1. Seal the mounting surface



To ensure a strong and reliable bond, you must now sand, clean and seal the underside of the soundhole where the preamp will mount.

1. Sand the underside of the soundhole down to bare wood. Take care to remove all residual lacquer, polish and dirt.
2. Use mineral spirits to clean the sanded area. Remove any excess oil, resin and dust from the exposed wood. Let the area dry before proceeding to the next step.
3. Seal the exposed wood with an appropriate coating.



Use only a coating that will bond the wood fibers and present a hard, uniform surface for the adhesive.

We recommend any of the following:

- Hide glue
- All purpose two-part epoxy
- Cyanoacrylate glue (higher viscosity, non-instant type)
- Carpenter's glue

Let the area dry before proceeding to the next step.

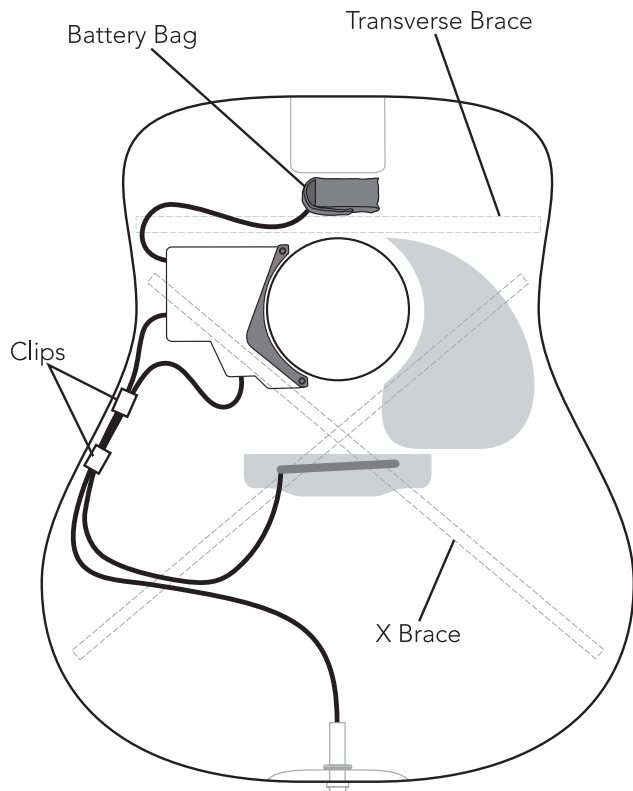
### 2. Test for fit

Before exposing the adhesive, test the preamp for fit. Locate the module flush with the edge of the soundhole, on the bass side. Center it between the transverse brace and the bass-side X brace (figure 1). If viewed as a clock face (neck at twelve o'clock), you will position the phase switch at nine o'clock.

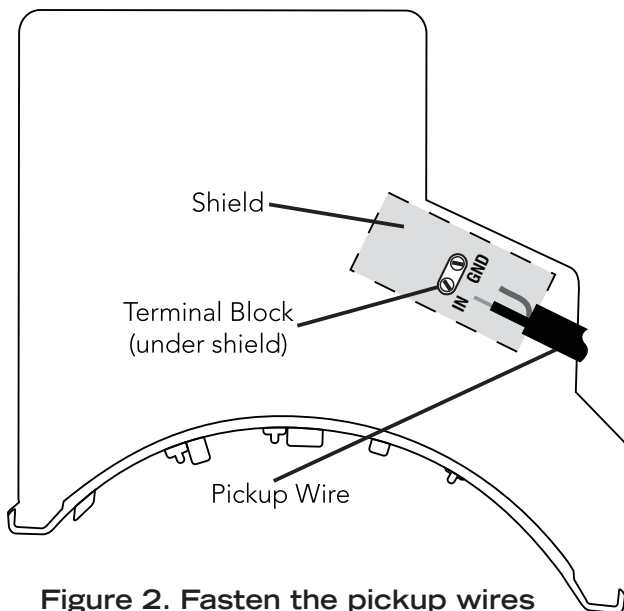
### 3. Endpin jack

Install the endpin jack per Switchjack Installation Guide.

**4. Fasten the pickup wires** to the terminal block on the preamp module (figure 2). The signal wire goes to the terminal marked "IN," and the shield wire goes to the "GND" terminal. Tighten the screws on the terminal block to secure the wires.



**Figure 1. Component locations**



**Figure 2. Fasten the pickup wires**

### 5. Fasten the preamp

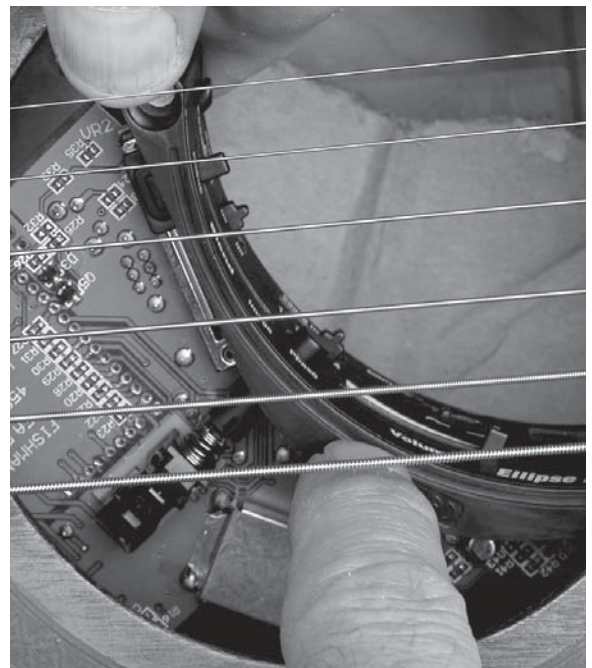
If the mounting bracket it is not already attached to the preamp, snap it in place now. Peel back the release film on the bottom of the mounting bracket and fasten the preamp to the underside of the soundhole. Apply even, steady pressure to the preamp to set the adhesive. The adhesive gains maximum hold after 24 hours.

### 6. Option: separate the preamp from the mounting bracket

Once the preamp is installed, you may separate it from the mounting bracket for better access inside the guitar. You'll need a heavy guitar pick to separate the two. Lodge the pick between the preamp and mounting bracket (figure 3) and twist until the preamp snaps away. Swing the preamp toward the soundhole, then separate it from the mounting bracket (figure 4).



**Figure 3. Separate preamp from bracket**



**Figure 4. Release right side magnet**

**7. Secure the wires** inside the instrument with the supplied adhesive-backed clips (figure 1). Clean the area where you will mount the clips with mineral spirits. Let the area dry before continuing.

### 8. Battery bag

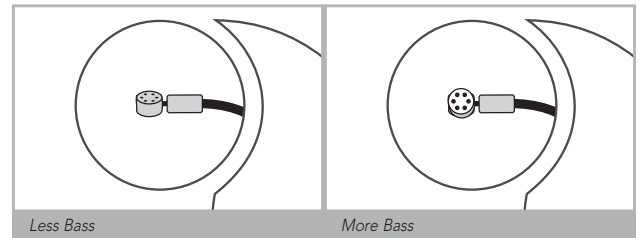
Install the battery bag on or near the neck block.

1. Clean the area where you will mount the bag with mineral spirits. Let the area dry before continuing.
2. Peel off the plastic film from the Velcro patch and attach the bag at the chosen location.
3. Carefully separate the bag from the Velcro patch. To set the adhesive, burnish the entire area of the patch, especially the edges.
4. Install a 9V alkaline or lithium battery. Tuck the battery into the bag and re-attach to the Velcro patch. The adhesive under the Velcro patch requires 24 hours to achieve a full bond, so take care to not stress the adhesive if you remove the battery bag after the initial installation.

### 9. Microphone positioning (Blend model)

You can position the microphone to find the "sweet spot" inside the instrument. Experiment with the placement until you find the position that works best in the instrument.

Plug in the guitar and move the Blend slider to the left for mic only. Start with the mic capsule so it faces the back of the guitar. Move the mic closer to the soundhole for more bass. Turn the capsule toward the sides of the instrument for less bass.



### 10. Mic Trim control (Blend model)

Use a small slotted screwdriver to adjust the Mic Trim potentiometer recessed below the volume slider. This is a "set it and forget it" control for calibrating the microphone level in relation to the pickup. Set the Blend slider to the center position and adjust the Mic Trim control until both the microphone and pickup levels are balanced to your liking.

