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## POWERMIX TRINITY SYSTEM

### Preparation and Pickup Installation

Please familiarize yourself with the installation manuals for the FanTaStick undersaddle transducer and the Pure bridgeplate pickup. (You can disregard the paragraphs regarding the endpin jack.) If they're not included, the manuals can be downloaded at [kksound.com/manuals.html](http://kksound.com/manuals.html)

First, install the FanTaStick undersaddle transducer according to its manual and solder the RCA plug to its cable end (see photo with FanTaStick instructions).

Second, install the Pure pickup according to its manual.

Third, place the PowerMix 3-Channel Preamp, the mic, the volume control element, and the battery holder through the sound hole inside your guitar. Place them out of the way for now.



Start by installing the endpin jack as described below. After this you will install the preamp parts and the microphone.

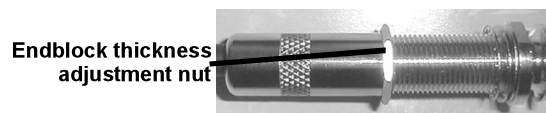
The preamp has marked RCA inputs for the 2 pickups. The mic is hard-wired to the preamp.

### Endpin Jack Installation

Unscrew the endpin jack's strap knob.

Take off the nut and washer.

Find out the thickness of your end block and set the nut on the cap accordingly (see picture below). Once in place, screw the cap against it to secure the nut.



Insert the jack from the inside into the endpin hole. **Tip:** A chopstick or something similar will help you get a hold of the jack to pull it through the hole.

Attach the outside washer and nut and tighten. Attach the strap knob.

**Note:** Make sure that the strap knob screws in **ALL THE WAY** over the outer threaded part of the jack, so that a tiny portion of the thread is exposed when the strap-knob is tightened.

## PowerMix 3-Channel Preamp:

This preamp features 3-band EQ plus a gain control for each individual channel. These controls are called "trim pots." They can be adjusted with a small, long screwdriver.

The EQ trim pots are in linear position (no cut or boost) when the white arrow points to a center position. Please keep in mind that the midrange trimmers, as opposed to the bass and treble trimmers, are oriented 90 degrees clockwise

The **gain** trimmers set the degree of pre-amplification on the input of the circuit. They act like volume controls but if they are set too high, distortion may occur. (**Note:** The lowest (counterclockwise) setting does not shut the channel off. It is the lowest available gain setting.) We recommend you use the gain trimmers to balance the three channels so that when you turn the thumbwheel volume controls to full, you have each channel at your maximum desired volume. From there you can blend the three channels in any way you desire.

We factory preset these trimmers, but this setting will likely not be perfect for your guitar. Feel free to adjust the trimmers in any way you like. (**Tip:** Keep written records of the settings you like.) The preamp's EQ and gain should be set to fit your guitar and style. Once you find your settings, you may never have to touch the controls again. Use the EQ on your amp or PA to compensate for different room acoustics.

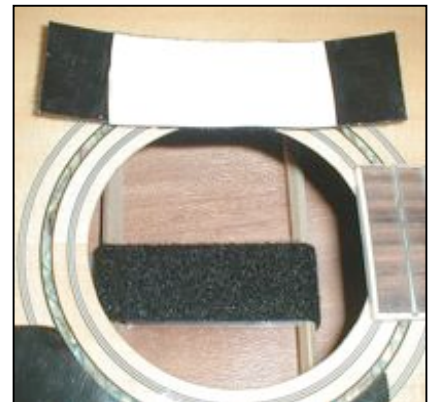
We supply a sticker that shows the function of the EQ trimmers of the preamp and the arrangement of the thumbwheel pots. Attach this sticker where you will be able to refer to it easily (like your guitar case, or even your guitar).

## Internal Preamp Installation

The preamp is attached with a self-adhesive Velcro fastener. For convenient access, it is best to mount the preamp directly under the sound hole. This allows for quick access to the EQ trimmers with a long, small blade screwdriver.

If you do not want to stick Velcro directly to the label of the guitar, we recommend this temporary mounting technique: Use the supplied 6" strip of Velcro and trim the length and the protection paper as shown in the photo (right). Usually there is about 3 1/4" (85mm) distance between the 2 braces. Please measure your guitar and trim accordingly. Stick one Velcro-end to one brace, pull the strip tight and stick the other end to the next brace. Now you can temporarily attach the preamp to this strip.

If you prefer, you can keep the preamp attached in this way. It is actually quite sturdy. However, once you are done with your sound adjustments you can move the preamp to another location, deeper inside the guitar.



## Installing the Battery Holder

Please install the battery holder to the neck-block with its self-adhesive Velcro fastener. To change batteries we recommend you remove the entire holder, change the battery comfortably under the sound hole, and re-attach it to the neck-block.

## Installing the Volume Control Element

Please install the volume control element as shown in the photo (right), on the inner edge of the sound hole (to the left of the low e string). Use its self-adhesive dual-lock fastener.

The two volume controls are arranged as follows (for a right handed person): the pickup volume is on the right, facing the bridge, the mic is on the left, facing the neck of the guitar.



## Installing the Microphone

We recommend attaching the mic with the supplied self-adhesive "dual-lock" fastener to the inner edge of the sound hole at a 6 o'clock position (sound hole edge closest to the bridge, see photo). The mic should point out of the sound hole. A good starting point is about 1 inch below soundboard level, aiming between the b and e string.

The mic position or attachment point can of course be altered in any way you like. However, we have found that a mic position too deep inside the guitar does not sound natural. Even though the mic's volume appears to get louder the deeper you place it in the guitar, it tends to produce an unnatural "tunnel effect."

Please start with the mic positioned as shown in the photo. After fine-tuning the EQ trimmers on the preamp, you can then move the mic a little higher (bring mic top to soundboard level) or move it lower and listen to the result. Different guitars tend to react differently to the mic position.



## Connecting and Securing the System

Plug the FanTaStick's male RCA connector into its female counterpart and secure the connectors to a brace using the attached dual-lock fastener.

Use the supplied 1/2" x 1 1/2" self-adhesive Velcro strips to secure the cables inside the guitar.

The wire connected to the battery holder should allow for removing the holder and bringing it into a position to comfortably change the battery through the sound hole.

Keep in mind that you may wish to reposition the preamp at a later date.

# PowerMix Trinity System Graphics

