K&K Sound

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Coos Bay, OR 97420
Phone (541) 888-3517
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www.kksound.com

Quantum Trinity System

1. Please install the pickups according to the Pure pickup instructions. They can be found at www.kksound.com/manuals.html

2. The following instructions will take you through the microphone installation and the preamp specifications.

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Trinity System
Microphone Installation Instructions

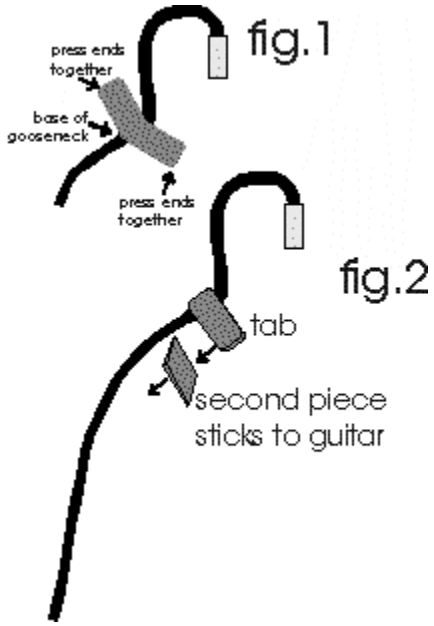
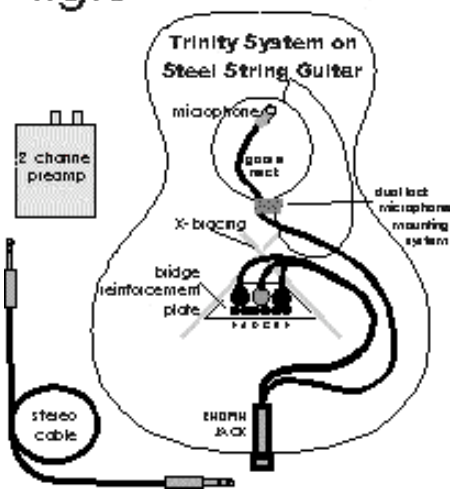


fig.3



1. Cut a 2 1/2" piece of the supplied dual-lock and locate the base of the gooseneck (gooseneck is clearly thicker and stiffer than the mic cable). Loop the dual-lock piece around the base of the gooseneck. Pinch the sticky sides together to get a tab as shown in fig. 1.

2. Cut a second piece of dual-lock approx. 1" long (see fig.2) and stick it to a suitable spot inside your guitar close to the edge of the sound hole (fig. 3).

3. Form the gooseneck to achieve a mic position as shown in fig. 3. This position is recommended to avoid picking directly over the mic. The mic should aim outwards, towards the strings, between the G and B string. The distance between strings and mic should be about 3/8 inch (ca 10 mm).

4. Press the dual-lock mic-tab onto the second dual-lock piece inside your guitar and re-adjust the mic's gooseneck.(fig.3) The dual-lock works like "super" velcro and can be re-opened.

5. You have the option to experiment with different mic angles and positions to obtain your personal best sound.

6. Secure all wiring inside guitar with tape.

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Quantum Blender

The Quantum Blender is designed for mixing a piezo transducer with a microphone, magnetic pickup or another piezo pickup.

Please use the supplied 12-volt DC wall-adapter or one of equal specifications to power the unit. Polarization (plus/minus direction) of the DC plug is irrelevant, your Quantum Blender takes care of this.

Channel 1 is switchable from mic to pickup impedance. It can be used with any "2 wire" powered lavalier type condenser mic or with a piezo or magnetic pickup. With an appropriate microphone impedance matching transformer a dynamic mic can be used as well.

Channel 2 is designed with K&K's Trinity or Pure Guitar Systems in mind, but it works well with all types of piezo transducers.

Gain

The gain controls allow for adjusting the input sensitivity of each channel. Gain corresponds to the input sensitivity of the circuit. Here you can set the sensitivity of each channel to fit different pickups, microphones or transducers. Note: If the gain is set too high, distortion may occur. Always set the gain at the lowest possible setting for your application and turn the volume control on the front panel all the way up, rather than the other way round.

Inputs

Stereo ¼" line input
2 individual mono ¼" line inputs

Outputs

Balanced XLR Mix out (carries both channels)
Line level ¼" Mix out (carries both channels)
Individual ¼" line outputs of channel 1 and 2

Effect Loop

The effect loop allows for connecting to an effect unit (like reverb) via a special ¼" stereo cable with a stereo plug on one side and 2 mono ¼ plugs on the other. Effect send goes to the TIP, effect return to the RING terminal. Please keep in mind that once you hook up an effect unit of lower quality, you introduce additional noise. The effect loop sends the entire signal through the effect unit and back into the Quantum Blender. If you use a mixing board and if you are looking for the best possible noise specifications, we recommend you add the effect on the aux- bus (auxiliary) or effect-bus of the board.

Sound Adjustment

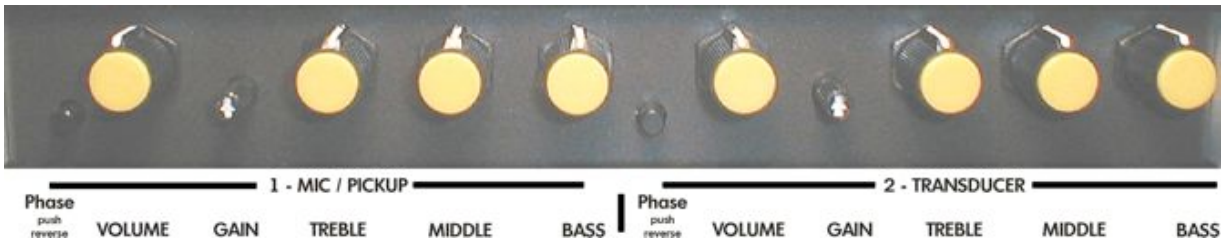
We suggest you start with all controls at zero position (fully counterclockwise) and the phase switches in non-inverted (not pushed in) position. First turn up the volume then the gain - until you reach the desired volume level. Then "dial in" the frequencies starting with bass then mid and treble.

Adjusting the Sound of an Internal Guitar Mic

An internal guitar mic does not need any significant frequency boost. Preferably keep bass and midrange down and optionally dial in some treble. We found that the Trinity mic sounds best with all 3 EQ bands almost at a zero position.

Specifications

Front panel:



Rear panel:

Technical Data

EQ Frequencies channel 1:
Bass: 100 Hz (high pass filter) +/- 18 dB
Midrange: 1500 Hz (band pass filter) +/- 12dB
Treble: 8000 Hz (low pass filter) +/- 18 dB

EQ Frequencies channel 2:
Bass: 100 Hz (high pass filter) +/- 15 dB
Midrange: 1500 Hz (band pass filter) +/- 18dB
Treble: 10 000 Hz (low pass filter) +/- 15 dB

Frequency Response:
Channel 1: 10Hz to 35KHz.
Channel 2: 10Hz to 35KHz.

Distortion: Less than 0.005% @ 1KHz

Signal to noise ratio: - 85dB - A weighted, referred to nominal – 20dBV input

Input Impedance:
Channel 1 pickup: 1 Meg Ohms.
Channel 1 mic: 3 Kilo Ohms.
Channel 2 transducer: 1 Meg Ohms.

Mic Power: 9volt DC max

Power source: 12 volt DC - 700 milli amp minimum– automatic polarizing