

OP-24 PLUS PREAMP OP-24 PLUS PREAMP OP-24 PLUS PREAMP **OP-24 PLUS PREAMP** OP-24 PLUS PREAMP OP-24 PLUS PREAMP OP-24 PLUS PREAMP OP-24 PLUS PREAMP **OP-24 PLUS PREAMP OP-24 PLUS PREAMP** OP-24 PLUS PREAMP

Owner's Manual

# OP-24 Plus preamp

#### INTRODUCTION

Congratulations and thank you for selecting an Ovation Acoustic/Electric guitar equipped with the OP-24Plus preamp. Please read this brief manual thoroughly to insure you get the best performance from your new Ovation.

The Ovation OP-24 Plus preamp access a wide range of "studio quality" contemporary acoustic/electric guitar sounds offering a player tremendous control and sonic flexibility. The circuitry is exceptionally guiet and adds no unwanted coloration.

Referring to fig. 1, you, Il see the layout and nomenclature associated with the control features if these unit

#### PREAMP FEATURES & FUNCTIONS

The preamp audio circuitry is whisper with very low distorion. (see specifications table) Tone control is greatly enhanced with a "three-and-a-half" (we'll talk about that later) band graphic equalizer. Moreover, you can connect your guitar to a wide range of audio amplifier and recording equiment with the preamp standard 1/4" Hi-Z, unbalance phone jack output.

#### CONNECTIONS

Near the endpin of a guitar featuring these preamps, you'll notice a 1/4" phone jack. This jack provides the signal from the preamp to any of a number of audio devices. mixers, effects, amps.

#### THE HI-Z CONNECTION

To connect your guitar to any high impedance (Hi-Z) acoustic guitar amp or mixer, use a standard, shielded, 1/4" guitar cable inserted into the 1/4" jack on the guitar. The preamp will drive most audio equipment with rated inputs down to about 1000 Ohms (this mean you can connect to almost anything). If you have a battery installed in the guitar, you're ready to play.

#### **OPERATION**

Make sure a fresh 9V battery is installed into the battery compartment of your guitar. The battery will fit only one way to assure correct polarity. Plugging a 1/4" shielded guitar cable into the jack on the guitar activates the electronics in your guitar. Please note that the tuner will operate without "plugging in." After connecting the guitar, plug into a PA or acoustic guitar amp for best results.

#### CONTROLS

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Please refer again to figure .1 to help yourself associate control names with their functions.



#### 1. VOLUME

This slide control allows you to set the output level of the preamp. Moving the slider toward the top increases the output level. The OP-24 Plus can output a very potent signal, so be careful not to "overdrive" your amp or mixer. If you notice any unwanted signal coloration, just reduce the output level of the guitar with this control.

## 2. BATTERY LOW

The indicator performs two functions. First, when you plug in a cable to the output jack, it will flash briefly to indicate that a battery is present. If no flash is evident, your battery is either dead or not installed. Secondly, this indicator will illuminate (and stay on), if the voltage of battery installed in the guitar dips be low about 7 volts. Replace ator performativo functions finst, whenever usure in a cable to the soutputitiack, it will on per battery.

#### 3. EO Controls

Low

The EQ section allows you to accent or attenuate certain frequency bands within the guitar's audio spectrum. When all of the controls are in the center (detent) position, signals pass through the circuit unaltered. Raising an EQ knob above the center

position increases the energy contained within that spectrum. Likewise, moving the control below the center position decreases the signals within that band.

The OP-24Plus preamp offers ± 12dB control simultaneously over three discrete ranges of the guitar's sonic spectrum. In addition, with the Mid-Shift switch, you can change the center frequency of the Mid EQ control by roughly one octave.

The Low EQ control allows you to increase or reduce the sound in the bass region. Raise this control above the center position to add fullness or bottom to your sound. De-amphasizing this band results I a lighter, less ponderous sound quality.

The High EQ control performs similarly to the "Low" control except that its effect shapes the high frequency, or treble band. Increase this control for bright or airy sounds, or decrease for darker or round tonalities.

Much like the High and Low controls, The Mid-band control adds coloration to one of two user-selectable midrange frequencies. With the Mid-shift switch in the 400Hz position(down), the mid EQ is effective controlling "nasal" tone qualities while in the 1KHz position, the mid control can add punch in upper mids or help "round off" the attack present in this frequency spectrum.

## 4. EQ In/Out

This push-button enables you to engage or defeat the EQ section. When the switch is in the depressed position, the EQ is active.

### 5. Mid-Shift

As discussed above, this switch allows you select the center of the frequency band in which you would like th Mid control to operate.

## 6. Pre-Shape

By engaging this control (switch in the "down" opsition), you add a fixed EQ curve on the sound from the pickup. Technically speaking, when the pre-shape circuit is in operation, the bass and treble frequencies are enhanced while at the same time, mid range response is attenuated. This pre-emphasis can be used alone, or with any other EQ setting you "Dail in" with the three EQ controls.

Specifications	
<b>Current Draw</b>	5mA @ 9VDC
Flat Ref. Level	-7.5dB
Freq. Response	20Hz~20KHz (±0.5dB)
S/N Ratio	91dB (EQ bypass) 89dB (EQ in w/flat setting) 84dB (EQ in w/max setting)
Low EQ	± 13dB @ 80Hz
Mid EQ	± 12dB @ 400Hz ± 6dB @ 1KHz
High EQ	± 12dB @ 10kHz
Output	Max. Level @ 10k Ohm 4Vp-p (1.4Vrms)
T.H.D	< .28% @ 500mV input
Low Battery	7.5V



