

ToneFREQ™ Instructions

ToneFREQ is a USA hand-built analog device for dramatically improving and customizing the way your guitar sounds. ToneFREQ can be used with any electric or electro-acoustic guitar.

Connecting ToneFREQ:

1. Use the velcro straps to attach ToneFREQ to your guitar strap (see the photo to the right). For best results, ToneFREQ should be placed on the strap close to the guitar output jack with the lights facing up toward you. Some guitar straps are very narrow. To attach ToneFREQ to narrow straps, pass one side of the velcro strip through an unused eyelet hole on your guitar strap to more securely attach ToneFREQ.
2. **Use a short 1/4" instrument cable to plug your guitar into the ToneFREQ In. The shorter the cable you use, the better your sound quality will be.** For best results, use Tweak Head Technology's ToneFREQ 1.5' input cable available online at www.tweakheadtechnology.com.
3. Connect another 1/4" instrument cable from ToneFREQ OUT to your effects or amplifier. **Note: When you have a cable plugged into the OUT jack, ToneFREQ will draw power from the battery.**

We strongly recommend starting out optimizing your guitar tone using a clean guitar sound first. This will allow you to hear detail that might otherwise be masked in a distorted signal.



Using ToneFREQ:

To Tune Your Pickups:

Use the **Pickup Tuning** knob to dial in 5 different harmonic Pickup Tuning signature settings for your pickups. Each signature has an associated color-coded position on the dial. Pickup Tuning has a 6th position which bypasses the feature. If Pickup Tuning is bypassed, you are listening to your native guitar pickup signature. As you change Pickup Tuning settings, your guitar pickups will be "tuned" and they will take on a different resonant signatures unlike their own. The effect is similar to a semi-parametric EQ that has been voiced specifically for guitar. Pickup Tuning signatures will sound different depending on whether Buffer Amp is bypassed or engaged. This will provide you with additional sonic diversity and effectively means that there are a total of 10 Pickup Tuning settings - 5 with Buffer Amp engaged and 5 with Buffer Amp bypassed. Please note that ToneFREQ is a true bypass device. As a result, a slight click sound may be heard when dialing through the Pickup Tuning settings. This should be considered normal operation.

To Enhance Your Sound:

The ToneFREQ **Buffer Amp** can dramatically improve the sound of your guitar electronics, pickups, external cabling, effects and amplifier. With Buffer Amp engaged, your guitar and gear will sound better and you can run long cable lengths without signal degradation. You may notice improved dynamic response from your guitar. Use the Buffer Amp knob to engage or bypass the Buffer Amp feature. ToneFREQ features true bypass. When the ToneFREQ power light is off, the Buffer Amp is bypassed. In this state, you will be hearing the unaltered sound of your guitar as if ToneFREQ were not connected at all. Your guitar signal will still pass through when ToneFREQ is bypassed.

To Boost Your Volume:

Use the **Gain** knob to add gain (volume) to your guitar signal. Add just the right amount of gain to optimally drive your pre-amp stage or crank it to take a lead. At min position there is no gain boost. At max position there is +20 dB gain boost.

Changing The Battery: ToneFREQ will operate for at least 400 hours on a standard 9-Volt Alkaline battery. If the Buffer Amp is engaged, you have a cable plugged into the OUT jack and ToneFREQ power light is out, it's time to change the 9-volt battery. To do so, simply unscrew the 4 screws located at each of the back corners of ToneFREQ, gently lift the cover, replace the battery & cover and replace the screws. **Caution: Do not overly tighten the screws or you may strip the threads!** We recommend using Alkaline batteries for longest life.

To increase battery life, do not leave a cable plugged into the ToneFREQ OUT jack when the unit is not in use.

ToneFREQ Bonus Feature: Turn the **Gain** knob up to increase the gain and alternate engaging and bypassing **Buffer Amp** for tremolo or stutter effects.

ToneFREQ™ Getting Started

ToneFREQ is a revolutionary new guitar product that is designed to allow your electric guitar to sound better than you ever imagined. ToneFREQ has 3 very important features that will aid you in your quest for ultimate tone. Before we walk you through them, you'll first need to connect ToneFREQ to your guitar strap using the 2 velcro straps. Position ToneFREQ on your strap so that it is close to your guitar output jack and the lights are facing upward. Once ToneFREQ is attached to your strap, plug a **2' or shorter instrument cable from your guitar output to the ToneFREQ In jack**. If required, consult the ToneFREQ Instructions (reverse side) for more guidance and suggestions on connecting ToneFREQ to your guitar. Plug another cable from ToneFREQ Out jack to your effects or amplifier. Now you are ready to start using ToneFREQ. **We strongly recommend starting out optimizing your guitar tone using a clean guitar sound first.** This will allow you to hear detail that might otherwise be masked in a distorted signal.

ToneFREQ Buffer Amp: Electric guitars were never designed to properly drive instrument cables. As a result, a lot of your tone can be lost between your guitar and your amplifier - especially when you have more than a few feet of cable in your signal path. The ToneFREQ Buffer Amp corrects the physics of how your guitar operates so that you can optimally drive long cable lengths without signal degradation. Our Buffer Amp is a far superior design to other line buffer amplifiers/line drivers because it fixes your guitar signal at your guitar instead of on the floor after your guitar sound has already been degraded. **To achieve best results, it is critical that your guitar be connected to the ToneFREQ In jack using a cable no longer than 3' in length.**

With the ToneFREQ Buffer Amp engaged you will experience anywhere from moderate to dramatic improvement in your guitar sound quality. There are many factors that will determine how much sound improvement you will experience. Some of these factors include total cable length in your signal path, cable quality as well as the build quality of your guitar and amplifier. We recommend that you always have the Buffer Amp engaged in order to achieve the best sound quality. Should you have a need to defeat it, the Buffer Amp does have a true bypass switch. When bypassed, your guitar signal will be unaltered and will be subject to typical signal degradation.

Turn the Buffer Amp to the Engage position to improve your guitar sound quality. You will know that Buffer Amp is engaged when the green power light is illuminated. If your guitar cable is plugged into the ToneFREQ Out jack, Buffer Amp is engaged and no light is illuminated, your battery needs to be replaced. Consult the ToneFREQ instructions to replace the battery. **When not in use, always unplug the output cable from ToneFREQ for longest battery life.**

Pickup Tuning: You can change the harmonic resonant signature of your pickup(s) using our Pickup Tuning feature. Pickup Tuning has 6 settings and each setting has its own color-coded position associated with it. The bypass position represents your native guitar pickup sound. The 6 Pickup Tuning settings act like a semi-parametric EQ that has been voiced specifically for guitar. The Pickup Tuning feature lets you "tune" your pickups sonic characteristics. You may find that Pickup Tuning allows you to find that perfect spot in the mix of your latest recording. Or, it may just give you the greater sonic diversity you need to keep from having to use an additional guitar at a live show. Use it in combination with your guitar pickup and tone controls for ultimate control over your sound. Pickup tuning functions when the buffer amp is engaged or disengaged for greater sonic diversity. This yields 12 different pickup signatures - 6 with buffer amp engaged, and 6 with buffer amp bypassed.

Gain: Gain is a completely variable 20 dB gain boost. When the Gain knob is at its minimum setting there is no gain boost. The maximum setting represents +20 dB of gain added to your signal. Use Gain to optimally drive the first pre-amp stage of your amplifier by dialing in the perfect amount of gain. Gain will only function when Buffer Amp is engaged.