



Vesta 3-ch Preamp Instruction Manual

May 2021, Rev A. – Kyle Rhodes

Initial Setup Quick-Start

Power / Connections

1. Connect a suitable DC power adapter – center negative, 9V, and capable of at least 200 mA (0.2A) of current. This jack is between the input and output jacks.
2. Connect your guitar to the input jack (right jack when looking down at the face of the pedal).
3. Connect a power amp to the output jack. Alternatively, connect to an audio interface, cabinet simulation box, etc.

Controls

4. Set all knobs to 12:00 (noon, straight up), except the Level controls, keep at minimum for now.
5. On Rhythm channel (middle row of knobs), set Bright Up, Fat Down, Mode Up.
6. On Lead channel (bottom row of knobs), set Bright Up, Fat Up, Mode Down.
7. Set Bypass Mode (switch in upper left corner) to Clean (Up).

Buttons

8. After the power-on sequence, the KSR logo should be glowing green (Clean channel active).
9. The Bypass (left) button will toggle the pedal between Clean and distortion.
10. The Rhythm/Lead (right) button will toggle between the Rhythm (cyan KSR) and Lead (purple KSR) channels.
11. Note – hold the Left button for a few seconds to mute. This is useful for tuning and changing guitars.

Play

12. Slowly bring up the Level controls until you're happy with the volume. Depending on the power amp sensitivity these controls can yield a high volume even with low settings, so use caution for your hearing's sake. Feel free to tweak the controls, and see the Control Description below for more details.

Control Description

Overview

Both distortion channels have the same switches and controls, and work in the same manner. However, Rhythm is inherently tighter and more aggressive than the Lead channel. Lead is more compressed and smoother and fatter overall.

The Clean channel is not designed to get the “pushed” sound with the Level increased. It is designed to stay clean. If you notice any distortion on this channel it will likely be unpleasant, and it is best to lower the Level control. Note that due to the design of the audio circuit, clipping this channel can also adversely affect the Rhythm and Lead channels.



Switches

Bypass Mode

The upper-left 3-way switch selects the pedal's Bypass Mode. Basically, whenever the pedal is "bypassed", one of these three modes is active:

1. The center position is True Bypass, works just like any pedal that uses a switch or relay to bypass the signal through the pedal from the input to the output. This is what you'd use with a loop switcher or pedalboard with other pedals handling buffering / clean tones. The KSR logo is unlit for this mode.
2. Down is Buffered Bypass -- this runs the signal through the pedal's buffer, but does not alter the tone in any way. This is useful for driving other pedals on a pedal board into the front of a clean amp. The KSR logo lights yellow for this mode.
3. Up is Clean Bypass. This is what you'd use to drive a power amp directly. This is the only mode that enables the top row Tone and Level knobs. The KSR logo lights green for this mode.

Bright

Bright is a 2-position switch that works just like a bright switch on an amp. It is more effective the lower the Gain setting. Up is on, Down is off.

Feel

Feel is a 3-position switch that primarily adjusts the low-end response of the given channel. Center is the tightest. Up adds more low-end/punch. Down has the most thump and bass/low-mid presence.

Mode

Mode is a 3-position switch that allows you to change the overall gain style of the given channel. Up is Classic, like your favorite British Crunch 3-gain stage tone from the 70/80s. Down is Vintage High-Gain, similar to your favorite 90s high-gain tones. Center adds even more gain, like another 90s thick gain tone you're all familiar with.

Note that Mode also affects the overall brightness and aggression -- e.g. Mode Up (Classic) with Gain cranked up will be smoother and "rounder" than Mode Down (Vintage HG) with a bit less Gain. In general, the overall tone will always benefit from EQ adjustments as you dial in the Gain and Mode settings.

Knobs

Overview

Each distortion channel has 5 knobs -- Gain, Bass, Middle, Treble, and Level. The Clean channel has 2 knobs -- Tone and Level.

Gain

The Gain control has a very wide usable range. It even works well cranked and doesn't get mushy and "flubby". Experiment with the whole range, and note how the EQ could benefit from adjustment, depending on your Gain setting.

Bass / Middle / Treble

These EQ controls work and react just like a tube amp. They all will interact with each other to some degree, so play with a lot of settings here to maximize your potential sounds. Try familiar EQ settings, and experiment with unusual settings.



Tone

The Clean channel EQ is a simple single-knob Tone control. This is essentially a variable frequency notch filter that allows you to dial in a nice clean tone regardless of your playing style and guitar. A little movement on this knob can make for a big change in sound.

Level

Each channel has a Level control that allows you to dial in the respective channel's volume. You can also use this to boost (or cut) the volume of one channel relative to another, such as a solo boost, for example. Note that the Clean channel naturally needs a bit more Level to balance with the more compressed distortion channels.

Depending on your power amp sensitivity, these will either be set relatively low, or relatively high. For example, if you run the Vesta into the effects loop return of a head without a global Master Volume or Loop Return Level control, the Level knobs will need to be set very low for non-ear bleeding volume. If the amp has a global Master Volume, as all of our amps do, then start with the Level controls around 12:00 (noon) and boost/cut from there to balance. Then, use the amp's Master Volume to adjust your overall volume.

Buttons

When you press the Bypass (left) footswitch button the pedal activates either the Rhythm or Lead channel. The KSR logo lights Cyan for Rhythm and Purple for Lead. Use the right footswitch button to toggle between the two distortion channels.

Note that if you press the right button while the pedal's bypassed it will blink the color of the channel you switched to, but it won't actually change to that channel until you hit the Bypass button again.

You can Mute the pedal by holding the Bypass button for a couple seconds. The logo will start blinking and you can re-enable the pedal by hitting either button.

External Control Input

Overview

The Control Input jack allows you to change channels and bypass the Vesta from any control-closure output, such as from a loop switcher or effects processor. This should be a "dry" (relay) contact only, without a common ground to the audio signal path in order to prevent ground-loop (hum) issues.

Control

The jack is an 1/8" TRS style jack. If the contact closure output is two relays already presented with a TRS jack, this will likely work with a simple cable to connect the two. If the contact closure output is split between two TS jacks, a Y-cable to combine these to a TRS connection will be needed.

To operate the pedal remotely, simply connect the Tip to Sleeve to activate the distortion channels. Connect the Ring to Sleeve to activate the Lead channel. These require latching-style relay control.

Note if you press the pedal buttons the state of the pedal will be overridden from the control input connections. This is handy if you want to change things up on-the-fly from your programmed presets. As soon as the external control changes state, it takes over the state of the pedal.



Lit Logo

The unique backlit KSR logo conveys various information based on its color and if/how it blinks.

- Off: True-bypass
- Yellow: Buffered bypass
- Green: Clean channel
- Cyan: Rhythm channel
- Purple: Lead channel
- Blue: Blinks red X number of times upon power up to indicate firmware version – e.g. one blink = version 1
- White Flash: When muted in true-bypass mode, otherwise flash is in color of current channel/mode.
- White Flash (on power up): Indicates version of firmware – number flashes is version number.

Internal Jumpers

Overview

By removing the back cover, you can access some internal jumper settings. Please exercise caution whenever touching the internal electronics. Static electricity will damage these sensitive components, and discharging yourself by touching something grounded first is always good practice.

Logo Brightness

There are two brightness settings for the KSR logo. The Vesta ships with the Normal brightness selected by default. The Bright setting can be selected for better visibility during outdoor performances. Note that this setting uses more power, but consumption should still be below 200 mA max.

Ultra-Tight

There are two jumpers for setting the Rhythm and/or Lead channel to the Ultra-Tight mode. This is handy for use with power amps that have an inherent bass boost and you find the Vesta to sound too “boomy” in the low-end. We ship the Vesta with these jumpers open, thus enhancing the bass output. To enable Ultra-Tight, short the two top pins for the Rhythm channel, and the two bottom pins for the Lead channel.

Specifications

- Power Input: 9Vdc @ 200 mA max. Center-negative 2mm pin, 6mm barrel style connector. Note: Exceeding ~9.7V will shutdown the pedal to prevent damage to internal circuitry.
- Input Impedance: 1M Ω
- Output Impedance: ~ 25K Ω
- External Control Input: 1/8” (3.5mm) TRS (tip/ring/sleeve) jack. Dry (relay) contact only!
- Toggle switches: 7 total -- 5x 3-way and 2x 2-way
- Potentiometers: 12 total -- Gain/Bass/Middle/Treble/Level for Rhythm/Lead channels, plus Clean Tone/Level.
- Buttons: 2 total -- Bypass (left) and Rhythm/Lead (right)
- Indicator Lights: KSR logo backlit via 2x RGB LEDs
- Dimensions Overall: 5.75” wide x 4.75” deep x 2.375” tall (146 mm x 121 mm x 60mm)
- Weight: 1.3 lbs. (0.59 kg)