

### POWER REQUIREMENTS

\*Utilizes standard 9V alkaline battery (not included). NOTE: *Input* jack activates battery. To conserve energy, unplug when not in use. Power Consumption: approx. 5mA, for battery life of approximately 100 hours.

\*USE **DC POWER SUPPLY ONLY!** Failure to do so may damage the unit and void warranty. DC Power Supply Specifications:  
-9V DC regulated or unregulated, 100mA minimum;  
-2.1mm female plug, center negative (-).

**Optional factory power supply is available: Tech 21 Model #DC2.**

### WARNINGS:

\* Attempting to repair unit is not recommended and may void warranty.  
\* Missing or altered serial numbers automatically void warranty. For your own protection: be sure serial number labels on the unit's back plate and exterior box are intact, and return your warranty registration card.

**ONE YEAR LIMITED WARRANTY. PROOF OF PURCHASE REQUIRED.** Manufacturer warrants unit to be free from defects in materials and workmanship for one (1) year from date of purchase to the original purchaser and is not transferable. This warranty does not include damage resulting from accident, misuse, abuse, alteration, or incorrect current or voltage. If unit becomes defective within warranty period, Tech 21 will repair or replace it free of charge. After expiration, Tech 21 will repair defective unit for a fee.

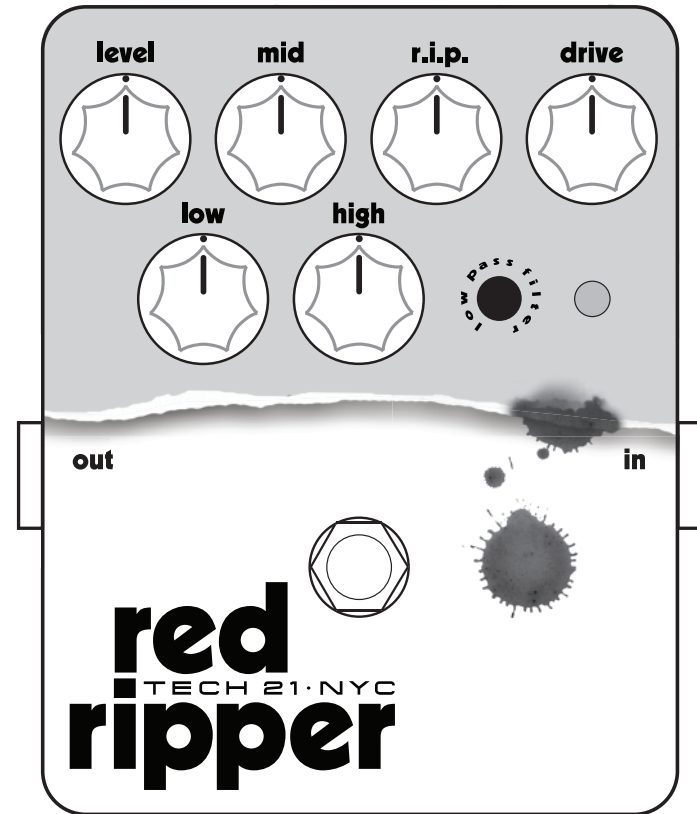
**ALL REPAIRS** for residents of U.S. and Canada: Call Tech 21 for **Return Authorization Number**. Manufacturer will **not** accept packages without prior authorization, pre-paid freight (UPS preferred) and proper insurance.

**FOR PERSONAL ASSISTANCE & SERVICE:**  
Contact Tech 21 weekdays from 10:00 AM to 5:00 PM, EST.

**MADE IN THE U.S.A.**



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**OWNER'S MANUAL**

## TECH 21, THE COMPANY

Tech 21 was formed by a guitarist possessing the unusual combination of a trained ear and electronics expertise. In 1989, B. Andrew Barta made his invention commercially available to players and studios around the world. His highly-acclaimed **SansAmp™** pioneered Tube Amplifier Emulation in professional applications for recording direct and performing live, and created an entirely new category of signal processing. There have since been many entries into this niche, yet SansAmp continues to maintain its reputation as the industry standard.

With a full line of SansAmp models, Tech 21 also offers effect pedals and MIDI products, as well as “traditional” style amplifiers for guitar and bass. Each product is thoughtfully and respectfully designed by B. Andrew Barta himself with the player in mind. Our goal is to provide you with flexible, versatile tools to cultivate, control, refine and redefine your own individual sound. Tech 21 takes great pride in delivering consistent quality sound, studio to studio, club to club, arena to arena.

## PRODUCT OVERVIEW

The **all-analog** Red Ripper features aggressive tones and vintage filter-style effects, all completely under your control for truly custom sounds. More than a simple distortion box, the Red Ripper spices up your bass tone with effects ranging from vintage fuzz to tectonic distortion, from Brassmaster-style octaver fuzz to Moogie-style synth tone. Unlike vintage devices, the Red Ripper comes with modern benefits. Active three-band EQ delivers studio-grade tone shaping in a compact pedal, while the Level and Drive controls let you find the sweet spot between dirt and volume. To complete the package, there's a Low Pass Filter switch to compensate for full-range bass systems equipped with tweeters, a buffered bypass, and a silent-switching, custom footswitch actuator.

## THE INS AND OUTS

**1/4” INPUT:** 1megOhm instrument level. For normal operation, signal level to *Input* should be close to that of a standard electric guitar (approx -10dBm / 250mV). The input is designed with the same sensitivity and loading characteristic as a tube amp. Also switches battery power on/off, so unplug when not in use.

**1/4” OUTPUT:** 1kOhm low impedance output drives long cables without loss of signal integrity, even in bypass.

## APPLICATIONS AND CONTROLS

Use with any amp --tube or solid state, vintage or modern. You can achieve the same results using the Red Ripper in conjunction with any model of our highly-acclaimed SansAmp™ Tube Amplifier Emulators.

**LEVEL:** Adjusts the output level of the unit. This control has an exceptionally wide range for maximum compatibility with a variety of equipment.

**MID, LOW, HIGH:** On-board post-EQ section gives you full control, like having a studio mixing board at your fingertips. Unlike passive tone controls that only cut, these active controls cut and boost.

MID is tuned to 12dB @ 500 Hz.

LOW is tuned to +22dB boost or -12dB cut @ 120 Hz.

HIGH is tuned to +30dB boost or -12dB cut @ 2.5 kHz.

**DRIVE:** Adjusts the overall amount of gain and overdrive, similar to when the output section of a tube amp is being pushed. Controls sensitivity to match your pickups and attack to the ripping effect.

**R.I.P.:** Controls the harmonic content and changes the character of distortion in a typically unusual, Tech 21 way. At minimum, the pedal reacts like a normal distortion/fuzz. As you increase, there's a blending of 2 different kinds of distortion, which creates a tearing, shearing sound. As you near 12 o'clock, you can hear the widest amount of harmonic sweep. At maximum, you can go fully over the top, especially when you have Drive at max, too.

The order of harmonics changes in a sweep-like fashion and is influenced by the dynamics of your playing, so you can change the amount or length of the sweep. Play harder for more fuzz and higher harmonics, ease up for less fuzz and enhanced lower harmonics. Sustained notes will have a long sweep and muted notes (we recommend using your palm) will have a short sweep. You can also lower the volume control on your bass to reduce the intensity of the effect.

While the Red Ripper can emulate the tones of an envelope filter, *the signal is not actually being filtered*, so your tone won't thin out and drop off when the effect is engaged.

**LOW PASS FILTER SWITCH:** Compensates high end, which is particularly useful when using cabinets with tweeters or horns.

## NOTEWORTHY NOTES

**1) Tech 21 controls are unusually sensitive** and tend to perform well beyond what would be considered “normal.” So you need not set everything at max to get maximum results. For instance, to brighten your sound, rather than automatically boosting High all the way up, try cutting back on Low first.

**2) To find the best settings** for interacting with your other gear, you may need to use radically different settings for each individual way you use it. You need not be discouraged or suspect something is wrong with the unit. If you've got your sound, you've simply found the right balance to complement each individual piece of gear. We recommend you start with the tone controls at 12 o'clock and cut or boost as necessary.

**3) Tech 21 pedals have exceptionally low noise levels.** However, they may amplify noise emanating from the input source. To minimize noise, we recommend active electronic instruments have the volume set at unity gain/maximum and tone controls positioned flat. If you need to boost, do so slowly and sparingly. Also check for pickup interference by moving your guitar or turning the volume off. Be aware single coil pickups are more likely to generate noise.

**4) Using with other effects.** For best results, plug your bass directly into the Red Ripper. This will preserve the interactive nature of the unit. Otherwise, place the following effects:

BEFORE: Chorus, Envelope Filter, Wah-Wah

AFTER: Chorus, Distortion (other), Echo, Reverb, SansAmp, Volume Pedal

EITHER: Chorus, Distortion (other)

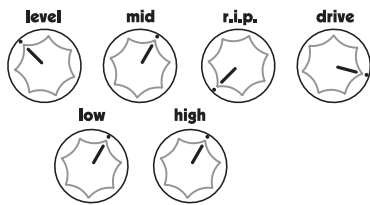
**5) Buffered bypass** eliminates the shortcomings associated with “true bypass” (pops and clicks, and high-end loss when multiple pedals are connected together), as well as signal loss associated with other types of switching circuits.

**6) Custom actuators.** All Tech 21 pedals feature smooth, silent-switching actuators that are licensed by other major manufacturers.

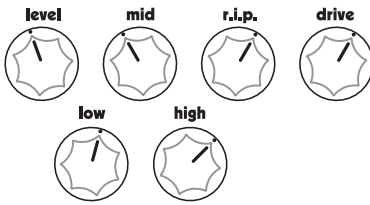
**7) LED indicator light.** When battery begins running low (around 6 volts), the LED will become noticeably dim.

## SAMPLE SETTINGS

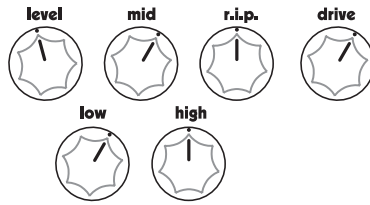
### TRADITIONAL BASS FUZZ



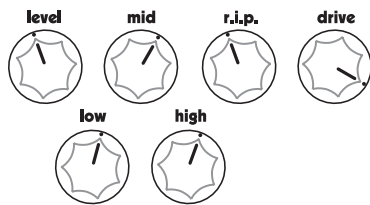
### MOOGIE



### EXPRESSIVE R.I.P.



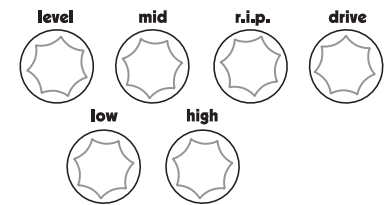
### MASTER OF BRASS



## CUSTOM SETTINGS

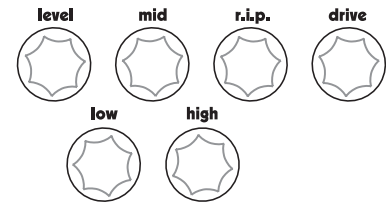
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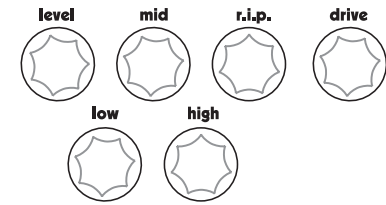
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