

### 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.

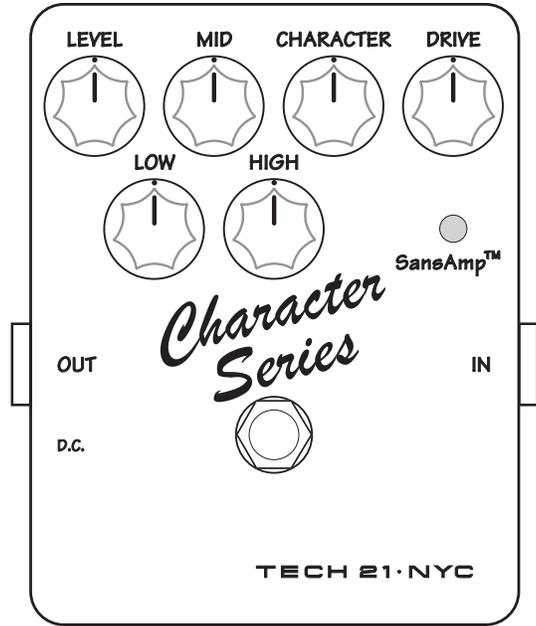
**ALL REPAIRS** for residents of U.S. and Canada: Call Tech 21 for **Return Authorization Number**. Manufacturer will **not** accept packages without prior authorization, pre-paid freight (UPS preferred) and proper insurance.

**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 Character Series pedals are unusual inside as well as out. They have an abundance of knob controls, are easy to use, and feature our proprietary, **100% analog** SansAmp technology. These multi-function pedals can be used as a stomp box with a guitar amp, as a pre-amp to drive a power amp, and for recording straight into a mixer or computer.

You can explore and tailor various eras within each amp style simply by turning a knob. A single, continuously-variable Character control sweeps through an entire tonal range that spans decades of sounds. The Character and Mid controls and speaker simulation are individually voiced and custom-tuned to reflect the specific personality traits inherent in each amp style.

By engineering individual amplifier styles, the Character Series pedals offer a significant value at a nominal price. Whether you're frugal or extravagant, you can focus on just those that are your personal faves. Choose one, two, or collect them all --and trade them with your friends!

## APPLICATIONS

**ASA STOMPBOX with a guitar amp.** You can connect the Character Series pedals in-line just as you would a standard distortion or overdrive pedal. If the pre-amp of your guitar amplifier is imparting too much of its own character on the pedal, plug into the low level input and set the pre-amp as clean and neutral as possible. Since most amps tend to be on the bright side, you may need to start with High below 12 o'clock and then adjust as necessary. You can also plug the pedal into the effects loop return (if the amp has one). This will disable the entire pre-amp of the amplifier allowing you to hear a truer representation of the sound. NOTE: the master volume on your amplifier will be defeated, so be sure to have the volume control down on the pedal.

**ASA PRE-AMP driving a power amp.** The 1/4" output of the Character pedal has enough juice to drive a standard power amplifier. Simply connect the 1/4" output to the power amp input and adjust the Level control accordingly. You will probably not use the bypass mode of the pedal in this setup.

**ASA DIRECT RECORDING DEVICE into mixer or computer.** All of the tone shaping and cabinet emulation needed is already incorporated into the pedal, giving you the perfect sound "right out of the box." The Character Series pedals automatically convert your guitar signal to Low Z allowing you to plug into a variety of inputs that would normally load down your guitar's signal. These pedals can be plugged into mixers (live and studio), workstation/recorders, and even directly into the sound card on a computer.

## THE INS AND OUTS

**1/4" INPUT:** 1 megOhm 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. To avoid battery drain, unplug when unit is not in use.

**!! WARNING !! DO NOT RUN THE SPEAKER OUTPUT OF ANY AMP directly into a SansAmp input.**  
Severe damage to the amp and the SansAmp will result.

**1/4" UNIVERSAL OUTPUT:** Unbalanced 1kOhm Low Z output. This output can be connected to High Z guitar amplifiers (or effects) as well as Low Z mixer and computer inputs. Output level is unity gain when pedal is in bypass mode. When activated, the output level can range from instrument level to line level depending on your settings. Also drives long cables without loss of signal integrity, even in bypass.

## GUIDE TO CONTROLS

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

**LOW, HIGH, MID:** 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  $\pm 12$ dB. Low is tuned to 125 Hz; High frequency is 3.2 kHz. Mid is custom tuned for each model.\*

**DRIVE:** Adjusts the overall amount of gain and overdrive, similar to when the output section of a tube amp is being pushed. The first half of the rotation will increase the volume as well as the overdrive.

**CHARACTER\*:** Voiced differently for each pedal in the series. It sweeps through various tonal possibilities associated with each style of amplifier. In addition to modifying the frequency response, Character also influences the attack and drive characteristic of each particular amplifier style. Therefore, you may need to adjust your gain and tone settings after tweaking the Character control.

## SPEAKER SIMULATION\*

Built in speaker simulation is an integral part of the Character Series circuitry. Each model is tuned to match the speaker/cabinet of that amplifier. It is designed for a smooth, even response as would be achieved by a multiply-miked cabinet, without the peaks, valleys, and notches associated with single miking. The shape of the speaker curve will not adversely effect or interfere with the frequency response of your own cabinet. There is no need to defeat the speaker simulation circuit when using it with a guitar amplifier. The speaker simulation works in tandem with the EQ controls to custom tailor the overall sound.

**\*For more details and sample settings, see separate charts specific to each model.**

## 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) **Placement notes:** Each of the Character Series pedals can be treated as an amplifier or pre-amp when it comes to setting up your signal chain:

**Place the following effects BEFORE the Character Series pedal:**

Booster, Compression, Fuzz, Phaser/Vibe, Overdrive, Wah.

**Place the following effects AFTER the Character Series pedal:**

Delay, EQ, Flanger, Phaser (yes, after is good, too), Pitch Shifter, Reverb.

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.

## Blonde

### SPECIALIZED CONTROLS\*

#### MID\*

Custom tuned to  $\pm 12\text{dB}$  @ 1kHz.

#### CHARACTER\*

Sweeps through an entire range of tonal possibilities associated with this style of amplifier. In addition to modifying the frequency response, the Character control also influences the attack and drive characteristic of this particular amplifier style. Therefore, you may need to adjust your gain and tone settings after tweaking the Character control.

**Settings below 12 o'clock** are in the Black and Silver Face family. When clean, there's a soft midrange with a nice top-end sparkle. Driven, the tone moves to a warmer low-end breakup.

**Around 12 o'clock** brings you into Blonde territory with more of everything --more lows, more mids and more highs.

**Above 12 o'clock** moves things into the Tweed era with a pronounced midrange bark.

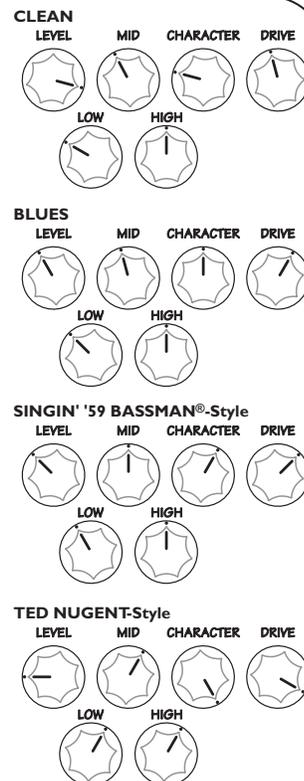
**Full up** gives you lead boosted tones.

#### SPEAKER SIMULATION\*

Built in speaker simulation is tuned to match a standard 12" Jensen®-style speaker.

\*Voiced specifically for the Blonde pedal. Please consult the Owner's Manual for complete guidance to operation.

®Registered trademarks. Names of sample settings are intended for descriptive purposes only and should not be construed as an endorsement or affiliation with the companies, products, or artists named.



# British

## SPECIALIZED CONTROLS\*

### MID\*

Custom tuned to  $\pm 12\text{dB}$  @ 500 Hz.

### CHARACTER\*

Sweeps through an entire range of tonal possibilities associated with this style of amplifier. In addition to modifying the frequency response, the Character control also influences the attack and drive characteristic of this particular amplifier style. Therefore, you may need to adjust your gain and tone settings after tweaking the Character control.

**Settings below 12 o'clock** bring you the Bluesbreaker/JTM45® era of British blues--warm, overdriven tone with the characteristic bulldog bite.

**Nearing 12 o'clock** brings you into the Plexi range with a noticeable throatiness in the mids.

**Above 12 o'clock** gets you the classic presence boost of the '70s Metalface.

**Full up** it goes to 11. That's right, 11.

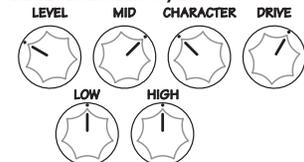
### SPEAKER SIMULATION\*

Built in speaker simulation is tuned to match English Greenback-style speakers.

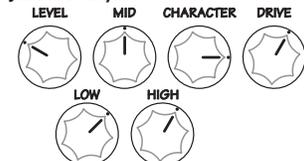
\*Voiced specifically for the British pedal. Please consult the Owner's Manual for complete guidance to operation.

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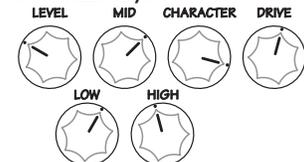
### BLUESBREAKER-Style



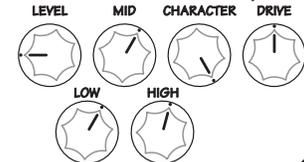
### JCM 800®-Style



### VAN HALEN-Style



### BRITISH CRUNCH / AC/DC-Style



# California

## SPECIALIZED CONTROLS\*

### MID\*

Custom tuned to  $\pm 12\text{dB}$  @ 500 Hz.

### CHARACTER\*

Sweeps through an entire range of tonal possibilities associated with this style of amplifier. In addition to modifying the frequency response, the Character control also influences the attack and drive characteristic of this particular amplifier style. Therefore, you may need to adjust your gain and tone settings after tweaking the Character control.

**At minimum**, you will hear the classic clean sounds of the Mark II.

**Nearing 12 o'clock** will yield the tougher, lead sounds of the Mark II.

**Above 12 o'clock**, sounds reminiscent of Santana will begin to emerge.

**Full up** gives you the high gain crunch of the Rectifier.

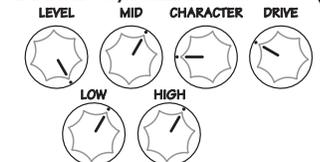
### SPEAKER SIMULATION\*

Built in speaker simulation is tuned to match a 12-inch high power EV®-style speaker.

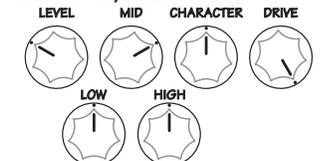
\*Voiced specifically for the California pedal. Please consult the Owner's Manual for complete guidance to operation.

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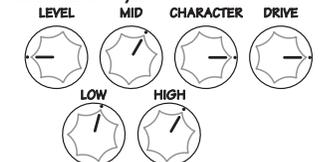
### BOOGIE®-Style CLEAN



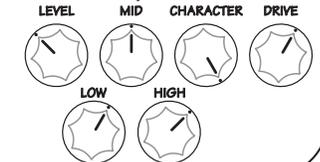
### MARK II®-Style LEAD



### SANTANA-Style



### RECTIFIER®-Style



# Liverpool

## SPECIALIZED CONTROLS\*

### MID\*

Custom tuned to  $\pm 12\text{dB}$  @ 500 Hz.

### CHARACTER\*

Sweeps through an entire range of tonal possibilities associated with this style of amplifier. In addition to modifying the frequency response, the Character control also influences the attack and drive characteristic of this particular amplifier style. Therefore, you may need to adjust your gain and tone settings after tweaking the Character control.

**Settings below 12 o'clock** bring you the familiar jangle of early '60s British amplification.

**Advancing towards 12 o'clock** gives you a Top Boost tone any Mod would be proud to have.

**Passing 12 o'clock** allows those thick, even harmonics, for which this Class A amp is known, to come through.

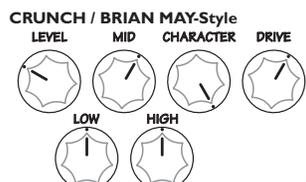
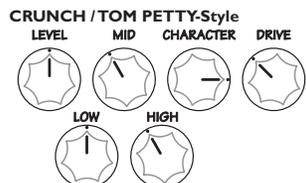
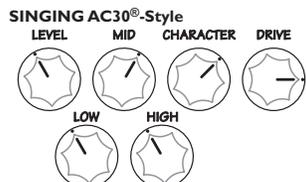
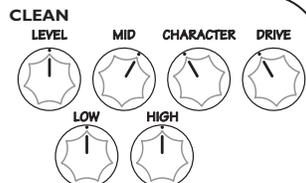
**Full up** gives you an over-the-top lead tone reminiscent of Brian May.

### SPEAKER SIMULATION\*

Built in speaker simulation is tuned to match English Alnico Bulldog-style speakers.

\*Voiced specifically for the Liverpool pedal. Please consult the Owner's Manual for complete guidance to operation.

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# VT Bass

## SPECIALIZED CONTROLS\*

### MID\*

Custom tuned to  $\pm 12\text{dB}$  @ 500 Hz.

### CHARACTER\*

Sweeps through an entire range of tonal possibilities associated with this style of amplifier. In addition to modifying the frequency response, the Character control also influences the attack and drive characteristic of this particular amplifier style. Therefore, you may need to adjust your gain and tone settings after tweaking the Character control.

**Settings below 12 o'clock** will give you the '70s powerhouse, the SVT.

**Around 12 o'clock** will introduce you to the studio staple, the flip top.

**Above 12 o'clock** increases the gain and crunch for less polite, modern rock, indie bass sounds.

**Full up** gives you distorted bass tones from Yes to Crimson to King's X styles.

### SPEAKER SIMULATION\*

Built in speaker simulation is tuned to match 10-inch American-style bass speakers.

\*Voiced specifically for the VT Bass pedal. Please consult the Owner's Manual for complete guidance to operation.

©Registered trademark. Names of sample settings are intended for descriptive purposes only and should not be construed as an endorsement or affiliation with the companies, products, or artists named.

