POWER REQUIREMENTS

- Utilizes standard 9V alkaline battery (not included). NOTE: Input jack activates battery. To conserve energy, unplug when not in use
- 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 #DC9.

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 or register online: tech21nyc.com/support.

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 9:00 AM to 5:00 PM, EST.

Hand-built in the U.S.A. using high-quality components sourced domestically and around the globe.

TECH 21

T: 973-777-6996 • E: info@tech21nyc.com
W: tech21nyc.com

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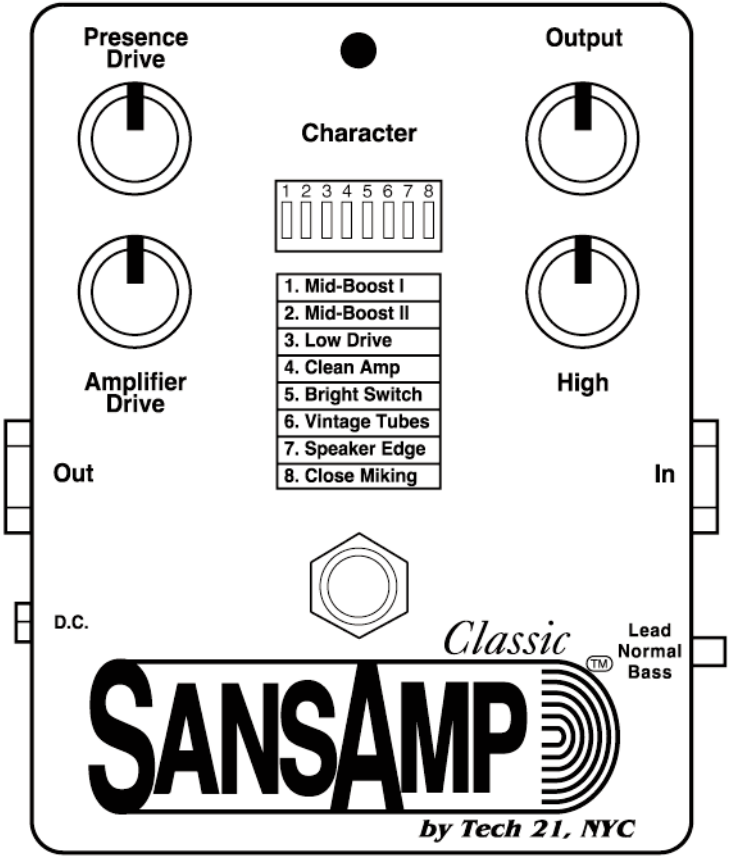


INTRODUCTION

SansAmp was designed and engineered to satisfy your critical ear. It is not a distortion pedal or fuzz box. Attempts have been made to recreate the unique, full sound of various tube amplifiers in one convenient, compact unit you can easily carry anywhere. But the technology has eluded designers and resulted in products that continually disappoint musicians.

Uncompromising standards and ten years of research now bring this engineering feat to reality. SansAmp not only duplicates the warm, rich tones of tube amps, the sounds are actually improved to be cleaner and more flexible ("Hot Wired") with less noise. SansAmp preserves the original sound of your guitar so that your individual personality and style remain unaltered.

With SansAmp, you can plug **directly** into any recording console, stage amplification, stereo, or even into a set of headphones alone. SansAmp virtually eliminates all existing considerations of tube amplifiers without sacrificing any sound quality.

THE HISTORY

Since an early age, I have been awed by the irony of high technology. Why, in this age of ultra sophistication, do we still have to assemble a seemingly endless chain of mechanical and electronic devices to produce a guitar or bass sound suitable for recording and live performances?

To me, the whole process was like using a turbo jet engine to blow out a candle....you have to assemble hot-rodded amps, speaker cabinets, microphones, equalization, etc., to achieve an end result equivalent to a couple of millivolts of signal! The standard method of miking amps and speakers is time consuming, frustrating, inefficient, and expensive. Due to the nature of tube amps and the many steps involved, it's virtually impossible to quickly obtain a consistent sound every time you set up. For years I wondered why couldn't the sound of an amplifier be created on an electronic level in a compact unit?

Based on my own needs as a guitarist and my extensive experience as a modifier and customizer of amplifiers, I set out to answer my own questions. Spanning a ten-year period of research and development, I have probed stages of design addressing the full character of sounds particular to various amplifiers (i.e., Marshall®, Fender®, Mesa Boogie®, etc.) in conjunction with speakers and microphones.

The end result is SansAmp --"sans" meaning "without" in French. By design, SansAmp has extremely low noise, is compact and portable, and is able to quickly and consistently reproduce a wide range of sounds for a variety of uses.

It is important to understand the nature and interaction of the controls on SansAmp. It is not a device simplified to a few presets that makes all guitars, pickup combinations and players sound the same. Much like a Moog® synthesizer, its programmability lets the user explore fine and important nuances within the tube amp sound spectrum to achieve a personal voice.

The switches and knobs are designed to be interactive in a way that makes sense; they affect each other enough to build a wide range of sounds, but they are tailored to remain within the tube amp "vernacular" in order to be as useful and easy to use as possible. SansAmp was designed to recreate the ***natural*** sound of tube amplifiers without effects. Signal processing (including distortion, compression, etc.) can be added creatively to complement the sound of SansAmp.

Historically, nothing has been able to match the sound of a tube amplifier --until now. SansAmp stands alone as a tool that gives you the freedom to explore, define and refine sound right at your fingertips. It is with great pride that I bring you SansAmp in the hopes it will complement and contribute to the evolutionary process of your self expression.

B. Andrew Barta
1989

Special thanks to Dale for all her help.

GUIDE FOR INDIVIDUAL CONTROLS

INPUT SWITCH:

LEAD: Marshall®-style pre-amp sound, with mid-range and highs emphasized.
NORMAL: Mesa Boogie®-style pre-amp sound, with a basically flat EQ.
BASS: Fender®-style pre-amp sound (excellent for rhythm as well as bass).

CHARACTER CONTROLS:

#1. Mid-Boost I

#2. Mid-Boost II

Achieves various pre-amp EQ curves in the mid-range, for example:

#1 and #2	OFF	=	Brightest Sound
#1	ON	=	In-Between Sound
#2	ON	=	In-Between Sound
#1 and #2	ON	=	Fattest Sound

#3. Low Drive

Achieves different pre-amp EQ curves on the low spectrum.
When ON, it has a flat frequency response.
When OFF, acts as High pass Filter. For fuller body, keep setting ON.

#4. Clean Amp

Cleans up overdrive. Excellent for achieving chunky rhythm sounds.

#5. Bright Switch

Adds brightness when Amp Drive is on lower settings. Best results are when Amp Drive is half-way up, as there will be no effect when Amp Drive is on full.

#6. Vintage Tubes

Final sound becomes a touch softer and mellower.

#7. Speaker Edge

Adds extra presence to the final sound.

#8. Close Miking

Duplicates the sound of a microphone being placed closely to the speaker cabinet, and slightly boosts the bottom end.

IMPORTANT NOTE: The Character Controls were not designed to be adjusted during live performances. They were developed for extra versatility to give you total freedom of expression of your individual tonal taste. Once desired programming is achieved, settings should remain constant. If used during live performances, amplification should be set WITHOUT distortion.

GUIDE TO KNOB CONTROLS

PRESENCE DRIVE

Shapes pre-amp contours in the upper mid-range. For maximum crunch, set on full.

AMP DRIVE

Shapes power amp contours. For heaviest distortion, set on full.

OUTPUT

Controls overall volume. Balance with Bypass signal for best sound. For headphones, insert jack half-way and boost Output.

HIGH

Balances final EQ. Compensates extra high-end of guitar amplifiers during live use; suggest setting half-way or less. When recording direct in a studio, recommend setting be on full.

USING SANSAMP WITH EFFECTS

When using SansAmp with effects, remember that EQ can be placed before or after SansAmp to achieve different results. Otherwise, place the following effects:

BEFORE SansAmp:	AFTER SansAmp:
Compression	Chorus
Distortion	Delay
Envelope Follower	Harmonizer
Wah-wah	Reverb

Special Note: SansAmp contains a F.E.T. buffer which improves the guitar signal even in Bypass mode; your instrument will sound better through SansAmp even when not using its sound-shaping capabilities.

OTHER INSTRUMENTS & APPLICATIONS

Be creative! SansAmp is not just for guitar. We encourage you to experiment with other instruments, such as bass, keyboards, drums, sax, harmonica, vocals, etc., and in other applications, such as in mixdowns to liven up existing tracks.

LIVE USE WITH GUITAR AMPLIFIERS

When using SansAmp in live performances with a guitar amplifier, it is advisable to have Amp Drive at a lower setting to compensate the higher level of sustain and overdrive associated with guitar amplifiers. The lower setting will also avoid microphonic feedback. To equalize brightness of live amplification, it is suggested to set High half-way or less.

ADVANTAGES

•Eliminates the need for an effects loop. Put effects between SansAmp and amplifier input.
•Obtain a Vintage Hot-Wired Marshall®-style sound (see sample settings) through ANY amplifier.
•"Channel switching." You can use the Bypass switch on SansAmp to obtain a clean sound.

SAMPLE GUIDELINES FOR GUITAR AMPLIFIER SETTINGS:

Marshall® 800 Series		**Fender® Twin Reverb**		**Roland® JC120**	
Presence	5	Bright	OFF	Bright	OFF
Bass	5	Volume	1-10*	Volume	1-10*
Middle	5	Treble	5	Treble	5
Treble	5	Middle	5	Middle	5
Master	1-10*	Bass	5	Bass	5
Pre-Amp	10	Master	10	Distortion	0
Low sensitivity input in use		Low sensitivity input in use (#2)		Low sensitivity input in use (#2)	

*according to desired volume

FREQUENTLY ASKED QUESTIONS

1. I'm getting too much noise. What's wrong? Check for pickup interference caused by lights, etc., by moving guitar. Single coil pickups are more likely to generate hum, and EMG-style active pickups can be hissier than humbuckers. With a mixing board, try a line input, if available, instead of a mic input.

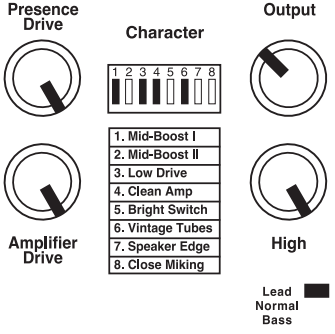
2. Should I use my amp's built-in distortion with SansAmp? Probably not. Since the last distortion in the signal chain determines the sound, any additional distortion should be placed before SansAmp, taking care not to overload SansAmp's input. (This will not harm the unit, however it will adversely alter the sound.) Use the guitar amplifier's low-gain input, if available.

3. Why are SansAmp's Character Switches so small? Primarily to keep the unit compact. Larger switches would not only increase SansAmp's size, but they would also raise the cost and effect its reliability. Remember, this product was not designed to have settings changed during live use. Hint: use the edge of a guitar pick or pen cap to move the switches up or down.

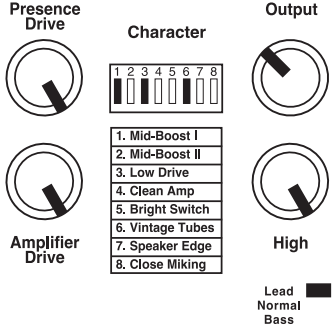
4. Why isn't the headphone output louder? SansAmp is designed to be multi-purpose as well as compact. Therefore, the output serves a variety of uses. For headphones, simply insert the stereo headphone jack approximately half-way into the SansAmp output and you will get sound left and right. Then boost the output to desired volume. Suggest using AKG K141 or comparable headphones.

SAMPLE SETTINGS

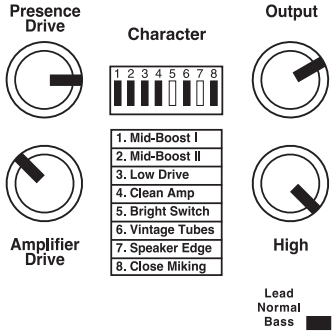
VINTAGE MARSHALL® (AC/DC STYLE)



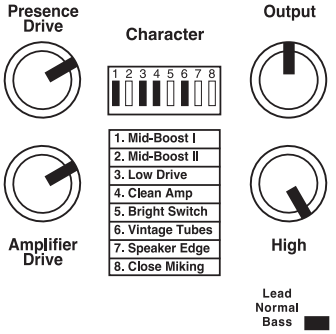
VINTAGE HOT-WIRED MARSHALL® (VAN HALEN STYLE)



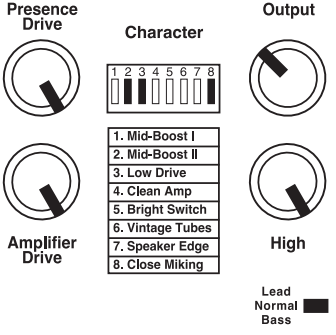
WARM FENDER®



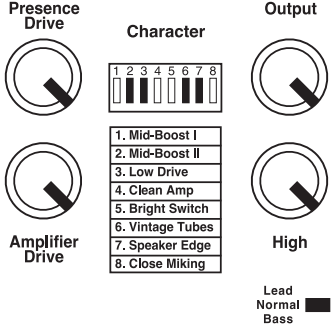
FENDER® (B.B. KING STYLE)



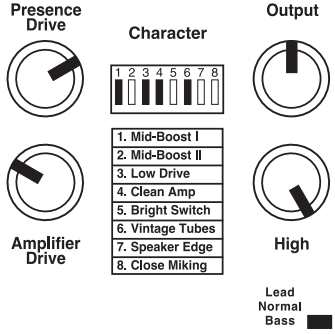
MESA BOOGIE® (SANTANA STYLE)



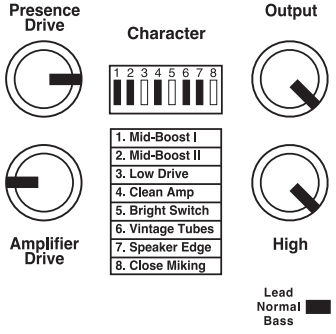
KILLER METAL (BOOGIE®-STYLE)



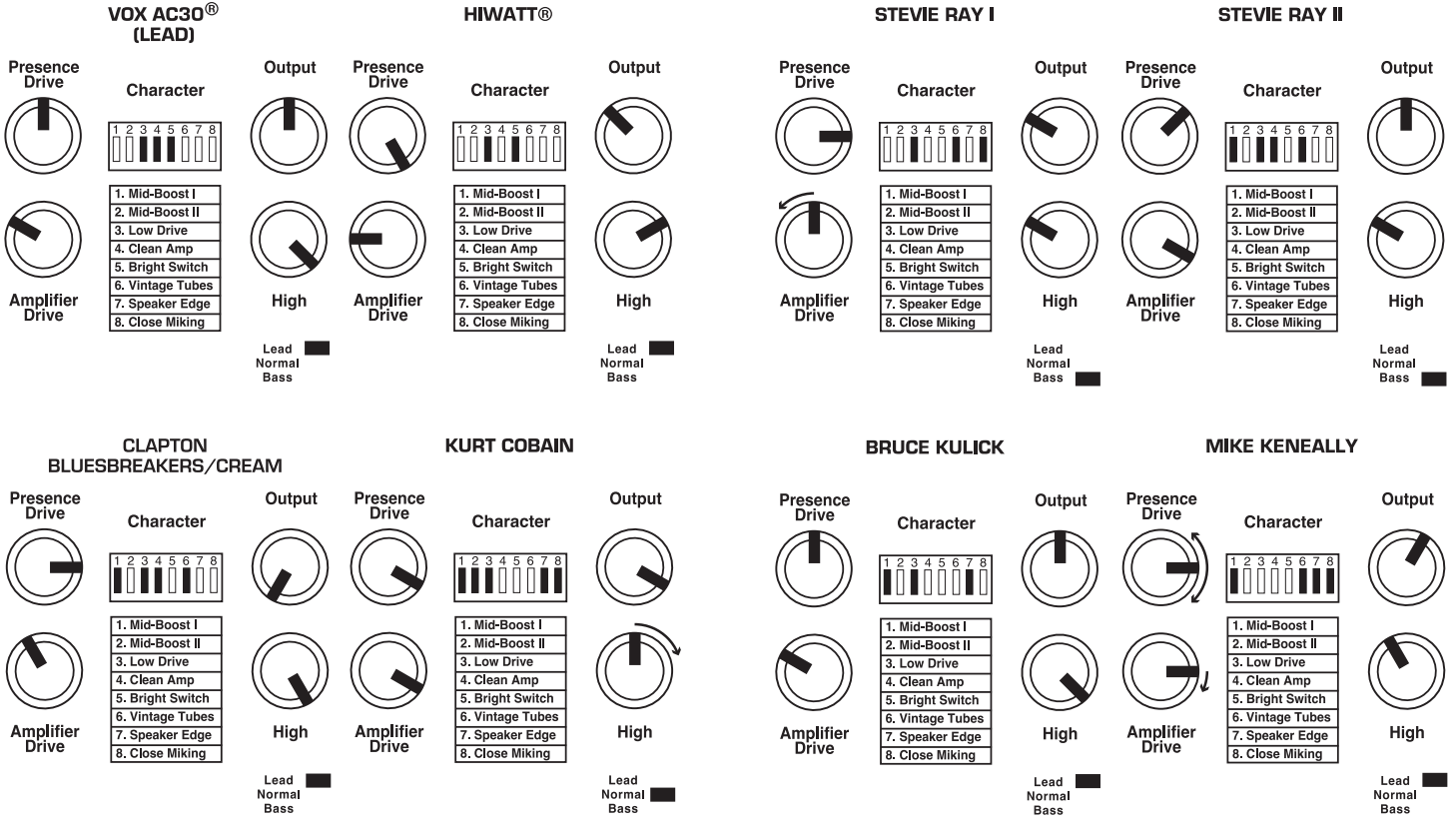
FENDER® (RHYTHM or BASS GUITAR)



'60s TUBE AMP (SIMILAR TO VOX AC30®)

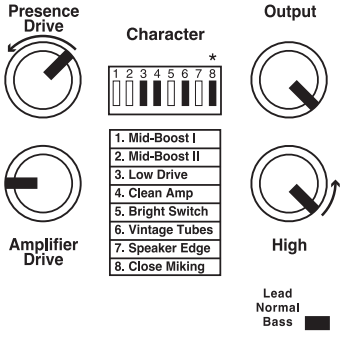


NOTE: Darkened Character Switches Indicate "ON" (UP position). Don't forget to adjust the INPUT switch.

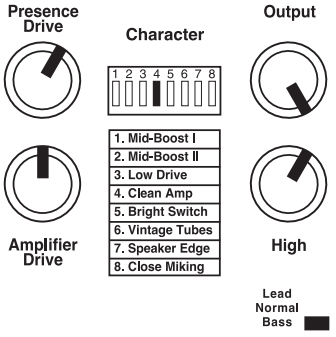

VOX AC30®
(LEAD)
HIWATT®
STEVIE RAY I
STEVIE RAY II
CLAPTON
BLUESBREAKERS/CREAM
KURT COBAIN
BRUCE KULICK
MIKE KENEALLY
Presence Drive
Character
Output
Amplifier Drive
High
Lead
Normal
Bass
1 2 3 4 5 6 7 8
1. Mid-Boost I
2. Mid-Boost II
3. Low Drive
4. Clean Amp
5. Bright Switch
6. Vintage Tubes
7. Speaker Edge
8. Close Miking

CLEAN I (Guitar or Bass)

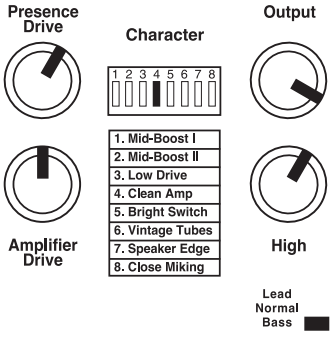
(Note: #8 switch* is optional)



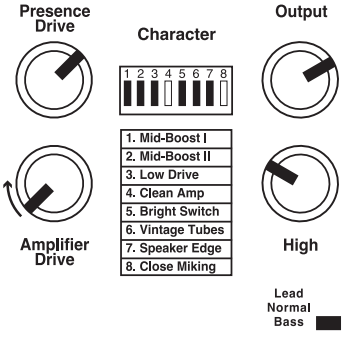
CLEAN II (Guitar or Bass)



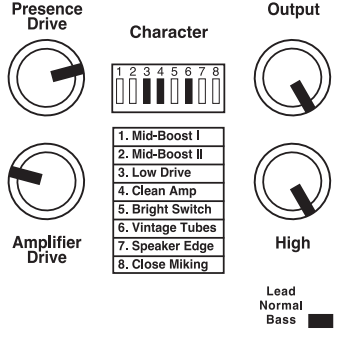
VOX AC100® (BASS)



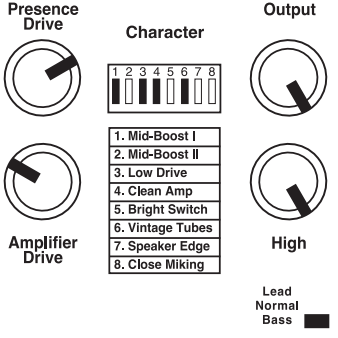
DOUG WIMBISH



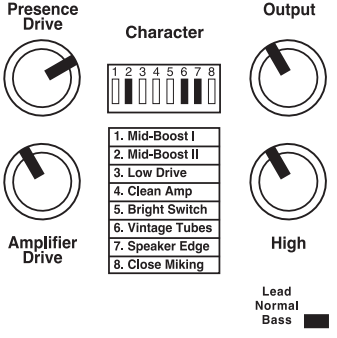
AMPEG SVT® (BASS or CLEAN GUITAR)



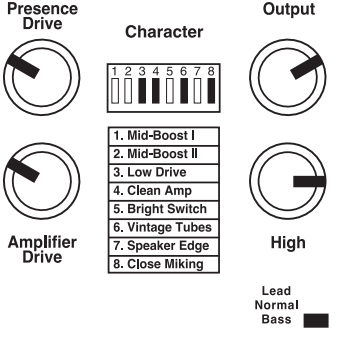
AMPEG SVT® HEAVY (BASS or CLEAN GUITAR)



JEFF AMENT



KENNY AARONSON



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

Keep a Record of Your Own Custom Settings

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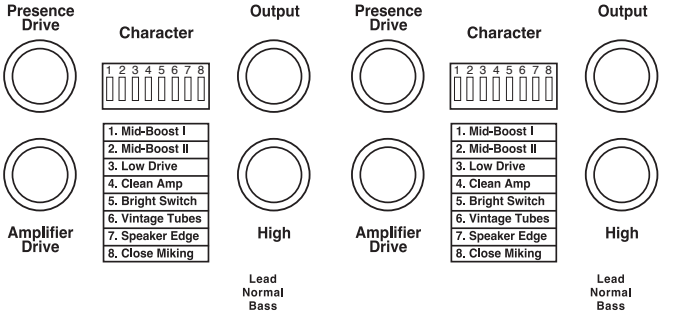

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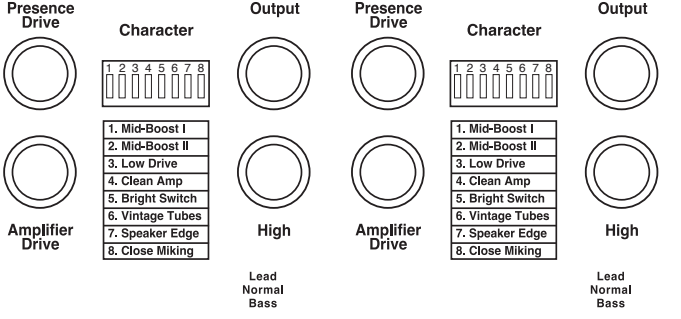

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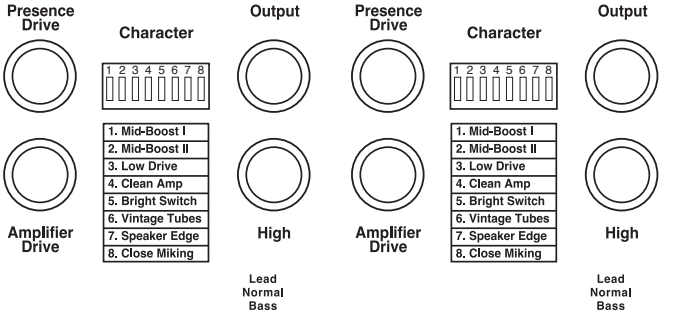

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