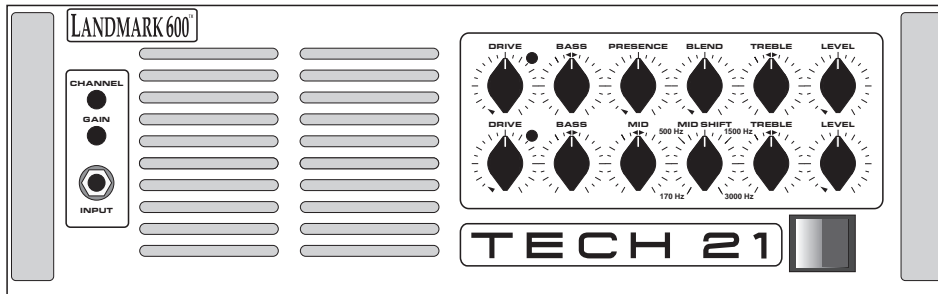


# LANDMARK 600™

---

## TECH 21·NYC



### WARNINGS

- Attempting to repair this unit is not recommended and may void its warranty.
- Missing or altered serial numbers automatically void the warranty. For your own protection, be sure the serial number labels on the unit and exterior box are intact.

### ONE-YEAR LIMITED WARRANTY

Manufacturer warrants unit to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. 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, Inc. will elect to repair or replace it free of charge. After warranty period expires, manufacturer will repair defective unit for a fee.

### PROOF OF PURCHASE IS REQUIRED FOR ANY REPAIR

For residents of the U.S. and Canada, please call Tech 21's main headquarters for shipping instructions and a Return Authorization Number. Tech 21 will not accept packages without prior authorization, pre-paid freight (UPS preferred), and proper insurance.

### FOR PERSONAL ASSISTANCE & INQUIRIES

Contact Tech 21, Inc., weekdays from 10:00 AM to 5:00 PM, Eastern Standard Time.

### DESIGNED AND MANUFACTURED IN THE U.S.A.



Fill in the following information for future reference:

Serial Number \_\_\_\_\_

Dealer's Name \_\_\_\_\_

Dealer's Address \_\_\_\_\_

Date of Purchase \_\_\_\_\_

**Owner's Manual**

# TECH 21

## NEW YORK CITY

333 West 52nd Street, New York, NY 10019

Tel: 212-315-1116 / Fax: 212-315-0825

E-Mail: [info@tech21nyc.com](mailto:info@tech21nyc.com)

Website: [www.tech21nyc.com](http://www.tech21nyc.com)

© 1999 Tech 21, Inc.

## Tech 21, the Company

Tech 21, Inc., was formed by a guitarist possessing the unusual combination of a trained ear and electronics expertise. In 1989, B. Andrew Barta incorporated Tech 21 and made his unique 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. While there have since been many entries into this niche, SansAmp continues to maintain its reputation as the industry standard.

After developing a full line of SansAmp models, Tech 21 expanded its offerings to include effect pedals; a compact, battery operable MIDI footcontroller, the *MIDI Mouse*; as well as “traditional” style amplifiers. Each product is thoughtfully and respectfully designed by Andrew 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 professional quality sound, studio to studio, club to club, arena to arena.

## Landmark 600, an Overview

Tech 21's proprietary, 100% analog circuitry has been adapted from its SansAmp configuration into a 600-watt bass amp system with 2 distinctively different channels. The Landmark 600 offers a wide range of the most desirable tube amp sounds, including Fender® and SVT® styles, as well as a variety of overdriven tones --the ones that typically require a complex mass of rack effects that haven't really been tailored for bass in the first place. The interactive controls give you access to specific tone shaping characteristics to create your own custom sounds as well.

An Optional Footswitch further expands the amp's capabilities. In addition to being able to remotely change channels, there is a MIX function to *simultaneously* engage both channels, giving you 3 footswitchable sound options, and a MUTE switch which allows you to silently tune your instrument.

For studio and live applications, our SansAmp Tube Amplifier Emulation technology enables you to go straight into the mixer of a recorder or PA system via the XLR Direct Output.

With the Landmark 600, you get a truckload of big amp sounds in a single cost-effective package.

## IMPORTANT SAFETY INSTRUCTIONS

The Landmark 600 is powered by potentially hazardous voltage. Therefore, observe the following safety precautions:

**WARNING:** To avoid the risk of fire, electric shock or injury, do not expose this unit to moisture. Do not remove cover from chassis. Removing the cover exposes extremely dangerous high voltages. There are no user-serviceable parts inside. Hazardous voltages are present inside the chassis. Refer all servicing to qualified service personnel.

**CAUTION:** Never modify the power cord. If the original power cord becomes damaged, refer servicing to qualified service personnel.

**WARNING:** Attempting to repair this unit is not recommended and may void its warranty. NOTE: In the U.S. and Canada, servicing is performed at factory only. In other countries, please refer repairs to the local Tech 21 authorized distributor.

### ADDITIONAL PRECAUTIONS:

1. Do not allow liquids or objects to penetrate unit.
2. When in use, provide proper ventilation at front and back of unit.
3. During heavy use, chassis may get hot to the touch. Handle with care.
4. Protect unit from strong impact.
5. Do not locate near heat.
6. This unit must be earth grounded.

## QUICK START INSTRUCTIONS

Here's how to get your Landmark 600 up and running before reading the entire manual. Note: By not reading the manual, you'll miss out on getting the most out of your new investment!

1. Plug the Landmark 600 head into speaker cabinet(s). If possible, we recommend using Speakon® cables and high wattage cabinets to avoid damage to the speakers. If you're not using Tech 21's B410s, we recommend cabinets be rated for minimum of 400W RMS at 8 or 600W RMS at 4 .
2. Plug the Landmark 600's AC cord into a wall socket.
3. Plug your instrument into the top-panel Input jack (on the left side).
4. Make sure the Level control on each channel is turned down. Then turn on the Landmark 600 and adjust the Level controls accordingly.
5. Play your guitar and you should hear a sound coming through the amp. If not, check that your guitar's volume control is turned up, recheck your connections, and be sure your cable isn't faulty. If there is still no sound, refer to factory or qualified technician.

## FRONT PANEL

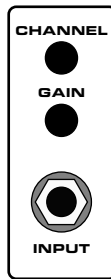
The Landmark 600 is designed with **active** controls, which either boost, or cut and boost, rather than traditional passive controls which can only cut. This effectively doubles many of the control's capabilities, giving you a much larger range of adjustability and, ultimately, more variety. It should be noted that you need not necessarily set everything at max to achieve maximum results. As you experiment and become familiar with the interrelationship of the controls, you'll easily be able to customize your own sounds.

### Channel Selector Switch

Manually switches between channels when there's no cable plugged into the rear panel Footswitch jack. To remotely change channels, use any standard passive footswitch or Tech 21's Optional Footswitch (Model #BFSW) which will override the manual selector switch. (For more information, refer to page 8.)

### Gain

A 10dB gain boost to set up the pre-amp for different pickups. For example, with lower output passive pickups, you can have punchier sounds with Gain engaged. Conversely, with higher output active pickups, you can have a cleaner sound with Gain disengaged. Of course, you can also obtain over-the-top distortion by using high output pickups with Gain engaged.



### Input Jack

Faithful to the original designs of traditional tube amplifiers, this 1/4" Input is high impedance 1M . The typically additional low sensitivity input, however, is not needed due to the Gain switch.

## CHANNEL 1

Channel 1 offers an entire sound spectrum of the most coveted traditional bass amp rigs, from vintage to modern styles. You can also obtain *overdriven* sounds without having to invest in a complex system with multiple rack effects.

### Drive

Adjusts the overall amount of gain and overdrive, similar to when the output section of a tube amp is being pushed.

### Bass and Treble

These active tone controls cut or boost  $\pm 12\text{dB}$  from unity gain at 12 o'clock. This powerful EQ section effectively reduces the need for a fixed frequency mid control and enables you to achieve an extensive variety of curves, including a "mid-cut" as well as a "mid-boost."

**Adjusting Mid-Range Content:** The mid-range level of Channel 1 is preset.

**Boosting Bass and Treble** gives you the equivalent of a "mid-cut" @ 750HZ where the relative mid-range level is lower than the *Bass* and *Treble* frequency levels.

**Cutting Bass and Treble** is the equivalent of a "mid-boost" @ 750HZ where the relative mid-range level is higher than the *Bass* and *Treble* frequency levels. NOTE: The overall output level will change in relation to the adjustments you make with the EQ controls. You can compensate accordingly with the *Level* control.

### Presence

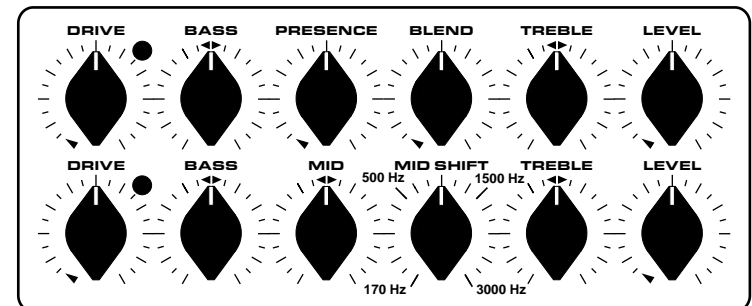
Brings out the upper harmonic content and attack. For a smoother high end and for clean settings, decrease to taste.

### Blend

Allows you to blend the direct instrument signal with SansAmp Tube Amplifier Emulation circuitry. In most cases, you will probably have this set at maximum (100% SansAmp). For certain applications, however, such as an ultra-transparent sound or for use with piezo pickup-equipped instruments, you may want to blend-in the direct signal to achieve your desired sound. While the SansAmp Tube Amplifier Emulation circuitry is bypassed when *Blend* is at minimum, the *Bass*, *Treble* and *Level* controls remain active.

### Level

Adjusts the volume level of Channel 1.



## CHANNEL 2

Channel 2 offers a different approach to sculpting your sound. The parametric EQ allows you to bring out particular frequencies to get maximum output and dynamics with natural warmth and presence.

### Drive

Adjusts the overall amount of gain and overdrive, similar to when the output section of a tube amp is being pushed.

### Bass and Treble

These active tone controls cut or boost  $\pm 12\text{dB}$  from unity gain at 12 o'clock.

### Mid Shift and Mid

Sweepable, semi-parametric EQ controls range from 170 Hz to 3.0 kHz,  $\pm 16\text{dB}$ , respectively. With the *Mid Shift* control, you can select the center frequency of the mid-range control. With the *Mid* control, you can then cut or boost that frequency.

NOTE: If you set *Mid Shift* at 1kHz, *Mid* operates as a traditional mid-range control.

### Level

Adjusts the volume level of Channel 2.

## REAR PANEL

### Fuse

Replace with similar type and same value as marked on the unit's rear panel.

**Speaker Outputs:** Wired in parallel. Total load: Min. 4 , 600W RMS.

- **Speakon® Connectors.** These high quality plugs lock securely to ensure maximum power transfer and provide fool-proof connections.
- **1/4" Connectors** provide a backup connection, should your cables not be available or if you use a conventional cabinet that does not use Speakon plugs.

### SansAmp™ XLR Direct Out

For recording, the SansAmp XLR output is like having a built-in direct box. You can go direct to the board and get the same sound you hear coming out of the speakers right onto tape or disc. The SansAmp circuitry not only captures the warm, rich, natural harmonics and sweet overdrive characteristics inherent to tube amplifiers, its speaker emulation encompasses all aspects of multiply-miked tube amp rigs.

For live gigs, you can use this output direct into the PA system and you won't need a microphone in front of the amp. And you won't have to subject the audience to a sterile, muddy, or boomy bass tone.

### Level Selector Switch

Allows you to connect the Landmark 600 via the XLR Output to other equipment with a variety of signal levels:

**0dB position.** Line-level output.

**-20dB position.** Pads down the line-level signal by 20dB.

### Ground Lift

Connects or disconnects the ground circuits between the XLR Output of the amp and the mixer. We recommend starting with the ground lifted. If necessary, connect the ground by pushing the button in.

### Pre-Amp Output

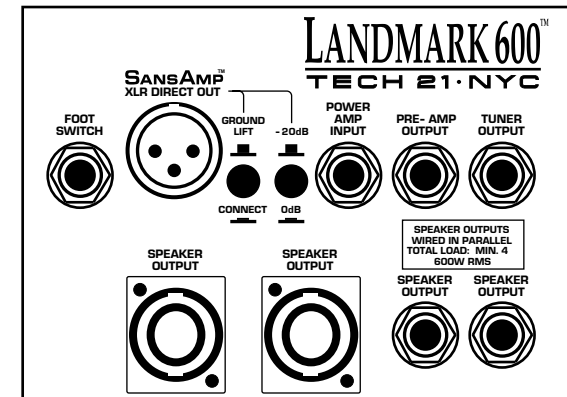
Effects Loop Send.

### Power Amp Input

Effects Loop Return.

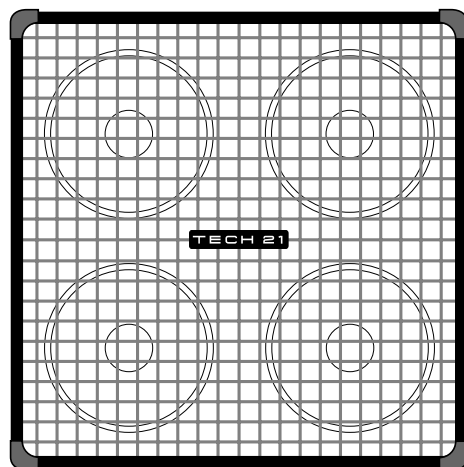
### Tuner Output

As long as the unit is plugged in, the tuner output provides a constant, unaffected signal at all times, regardless of the position of the Level controls or the status of the Mute button on the Optional Footswitch (see next page). This output can also be used as a buffered out to send a transparent signal to other outboard gear.



## OPTIONAL 4x10 SPEAKER CABINET (Model #B410)

- 8 / 400 watts handling
- Four cast frame, custom-designed 10" speakers
- Chrome-plated steel grill
- Rear vented
- Speakon® connectors
- 1/4" connectors
- Dimensions: 24" w x 24" h x 16" d
- Weight: 70 lbs.



## OPTIONAL TRIPLE-FUNCTION FOOTSWITCH (Model #BFSW)

The Footswitch further expands the Landmark 600's capabilities:

- **CHANNEL** remotely switches between the two channels.
- **MIX** engages both channels simultaneously, giving you three footswitchable sound options.
- **MUTE** allows you to silently tune your guitar or change instruments.



Corresponding LED indicators let you know the status of each switch. The Footswitch is powered via the cable, so no batteries are required. And, unlike most amps which require a custom multi-pin connector, this Footswitch is engineered to utilize **any** standard 1/4" instrument or speaker cable. You can easily replace the cable should you lose it, or purchase different cable lengths to suit your particular needs.

Footswitch (Model #BFSW) measures 3.5" x 4.5" x 1.5" and is available through your local authorized dealer or directly through Tech 21.

## LANDMARK 600 SPECIFICATIONS

**Note:** With on-going product development and improvements, specifications and/or the cosmetic appearance of this unit may change without prior notice.

**Replacement parts** are available, i.e., knobs, logo plate, handles, etc. For more information, please contact your authorized dealer or Tech 21, Inc.

Model Number:	LM600
Input Impedance:	1 M
Nominal Input Level:	-20dBm
Optimal Output Load:	4
Power Output:	600 watts RMS @ 4 (minimum load) 400 watts RMS @ 8
Maximum Power Consumption:	approx. 1KVA Forced-air cooled
AC Input Power:	100V, 117V, 230V, 240V NOTE: AC power cannot be switched. See authorized dealer/distributor for voltage modification information.
Cycles:	50/60 Hz
Dimensions:	17" w x 5.25" h x 16" d / Overall depth: 17.75"
Weight:	40 lbs.

Optional Accessories:	<ul style="list-style-type: none"> <li>• Rack ears*</li> <li>• 4' Speakon® cables</li> <li>• 5' Speakon® cables</li> <li>• Triple-function Footswitch (Model #BFSW)</li> <li>• 4x10 Speaker Cabinet (Model #B410) and corresponding optional black vinyl cover with white logo (Model #VC-B410)</li> </ul>
-----------------------	--

\*Instructions for rackmounting:

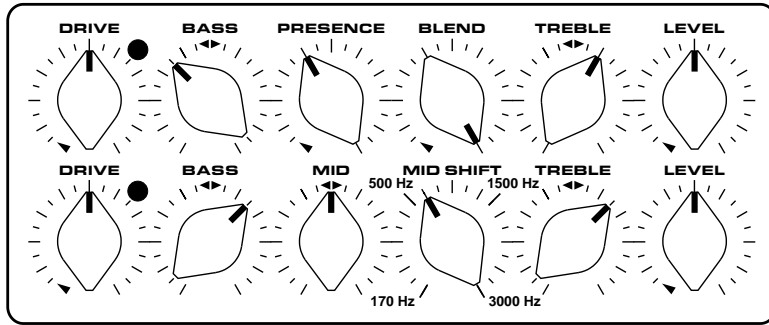
1. Unplug unit. Remove top cover. Install rack ears with provided hardware. Replace top cover.
2. Considering its weight, we recommend mounting unit on bottom of rack case.
3. If there isn't enough clearance at the bottom of the rack case, detach the rubber feet simply by removing the screws.
4. If there's too much clearance (with or without the rubber feet) and you have a gap, provide additional support to the rear of the unit (such as larger feet, wooden shims, etc.).

®Registered trademarks.

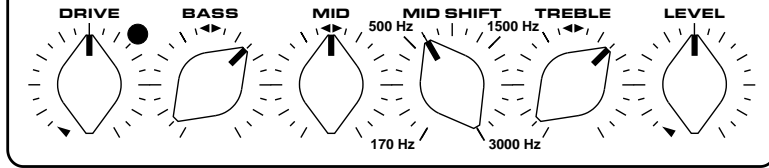
# SAMPLE SETTINGS

Sample Settings were written using a Fender® Precision® with the GAIN switch engaged.

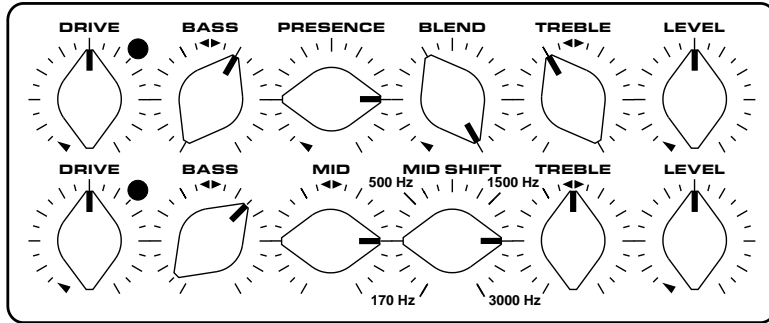
Bassman® I



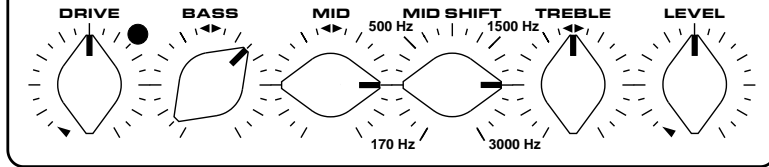
Bassman® II



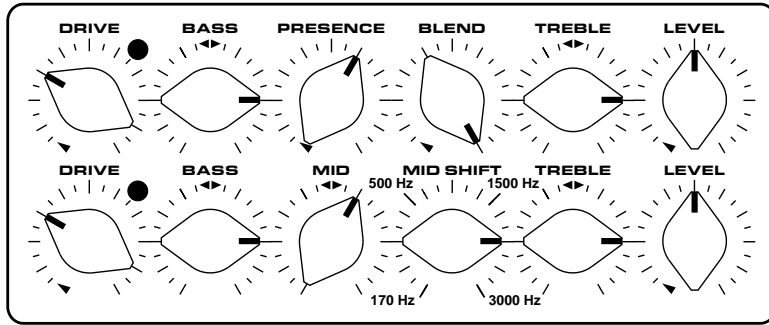
SVT® I



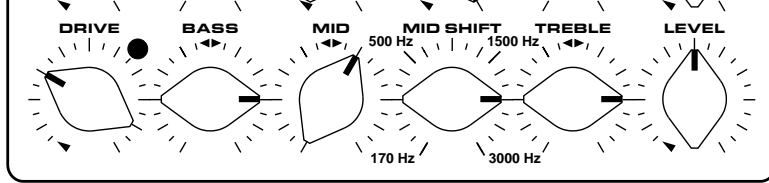
SVT® II



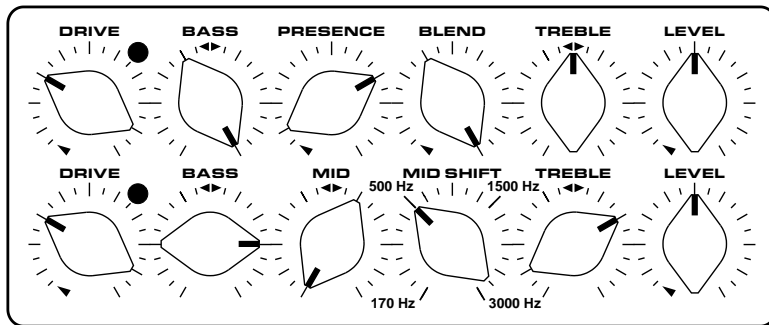
Slap I



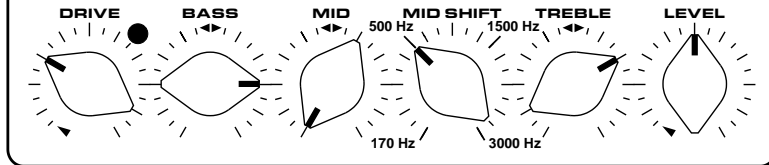
Slap II



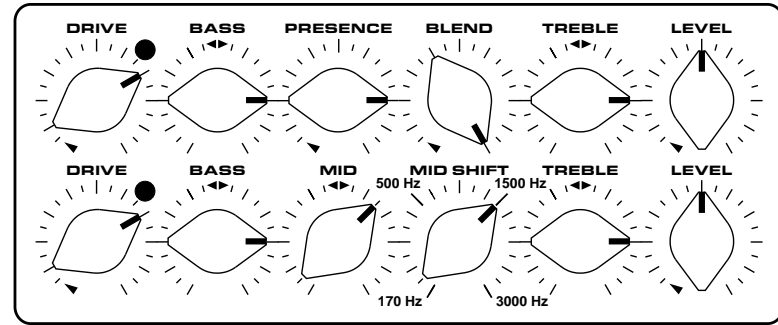
Reggae I



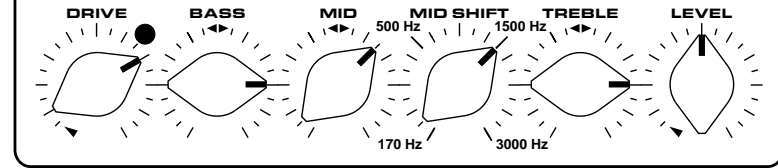
Reggae II



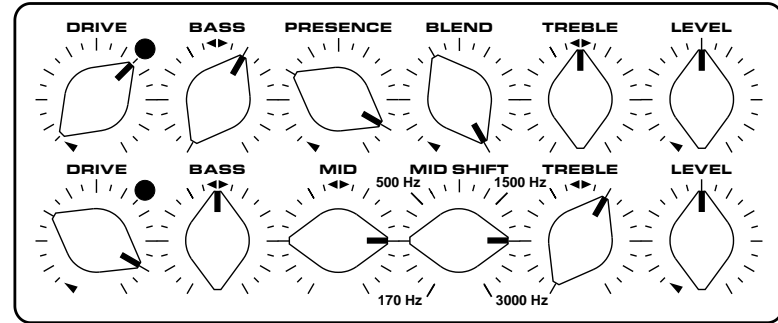
Crimson I



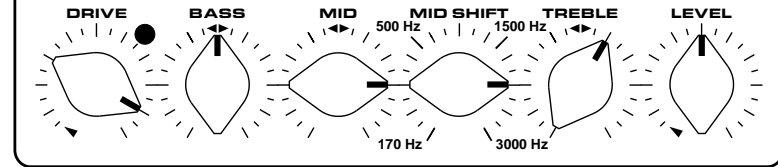
Crimson II



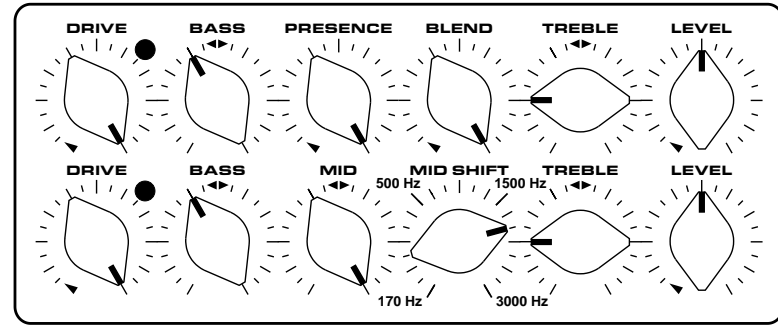
King's X I



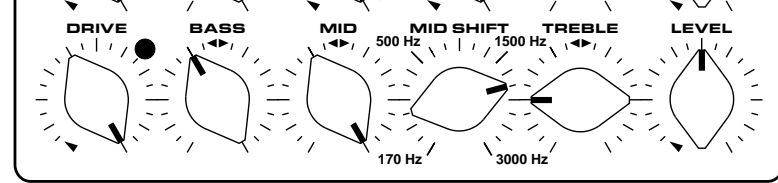
King's X II



Solo I



Solo II



**MIXED CHANNELS:**  
Clean Bottom w/Raspy Top (Uses opt. footswitch w/MIX function engaged.) Interesting texture, difficult to achieve any other way.

These settings are an approximate guide to get you started. Levels should be adjusted to taste and environment. Each style is shown for each channel, which offer slightly different characteristics in feel and harmonic content, i.e., different years of the same model amp.

®Registered trademarks of their respective companies. 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.

# CUSTOM SETTINGS

