# 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 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 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 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 weekdays from 9:00 AM to 5:00 PM, Eastern Standard Time.

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

# CE

Fill in the following information for future reference:

Serial Number\_\_\_

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

Dealer's Address	

Date	of	Purchase	
------	----	----------	--



T: 973-777-6996 E: info@tech 21nyc.com W: www.tech21nyc.com © 2011 Tech 21 USA, Inc.



# TECH 21.NYC



# IMPORTANT SAFETY INSTRUCTIONS. READ AND SAVE THESE INSTRUCTIONS. HEED ALL WARNINGS.



This symbol, wherever it appears, alerts the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol, wherever it appears, alerts the user to important operating and maintenance instructions in the accompanying literature. Read the manual.

This unit is powered by potentially hazardous voltage. Therefore, observe the following safety precautions:



**1.** Read and follow all instructions before using product.

**2.** Do not use product near water (such as near a bathtub, washbowl, kitchen sink, swimming pool, in a wet basement, etc.).

**3.** Unit should be located so that its location or position does not impede the flow of air through the ventilation openings.

**4.** Product should be located away from heat sources such as radiators, heat registers, or other products, including amplifiers, that produce heat.

 5. Product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
 6. Protect the power cord from being walked

on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the unit.

- 7. Do not allow objects or liquids to penetrate the enclosure through openings.
- 8. During heavy use, chassis may get hot to the touch. Handle with care.
- 9. Protect unit from strong impact.

**10.** Unplug product before cleaning. Never spray liquid cleaners into the amp: wipe with a clean, lint-free cloth to remove dirt and film.

**11.** Only use attachments/accessories specified by the manufacturer.

**12.** This product should be used only with a cart or stand that is recommended by the manufacturer. When a cart is used, use caution when moving the cart/product combination to avoid injury from tipping over.



**13.** Amplifiers may be capable of producing high volume levels that could cause permanent hearing loss or damage, if the expo-

sure to such levels is prolonged. Such damage is progressive and irreversible! If you experience any hearing loss or ringing in the ears, consult an audiologist.



**14.** Unplug unit during lightning storms or when unused for long periods of time.

**15.** This unit must be earth grounded. To reduce the risk of electric shock, NEVER remove or otherwise attempt to defeat the ground pin of the power cord. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

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

**CAUTION:** Never modify the power cord. If original power cord becomes damaged, frayed, or has exposed wires, replace immediately with same rating and gauge, or higher. Replacements are commercially available or you can contact Tech 21 directly.

**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.

# **FUSE**



Fuse holder is located inside A/C cord receptacle. **You must disconnect** and remove power cord to change fuse. Replace with similar type and same value: 100V and 117V units: use F 6A L 230V and 240V units: use F 3.15A L

# **QUICK START AND STOP INSTRUCTIONS**

**QUICK START:** Here's how to get your VT Bass 1969 up and running before reading the entire manual. Note: By not reading the manual, you'll miss out on how to get the most out of your new investment!

1. Plug the VT Bass 1969 head into speaker cabinet(s). If you're not using Tech 21's B410s, use cabinets rated for minimum of 300W RMS at  $4\Omega$  or 200W RMS at  $8\Omega$ .

- 2. Attach the AC cord to the amp and plug into a wall socket.
- 3. Plug your instrument into the front panel Input jack (on the left side).

4. Make sure the Level control on each channel is turned down. Then turn on the VT Bass 1969 and adjust the Level controls accordingly.

5. Play your bass 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.

**QUICK STOP:** After shutting off the VT Bass 1969 (or any amplifier), wait at least 10 seconds before turning it back on.

#### 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**<sup>™</sup> 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.

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 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.

#### VT Bass 1969, an Overview

The VT Bass 1969 bass amp head is a 2-channel, 2-rackspace adaptation of its pedal counterpart, the SansAmp Character Series VT Bass. The heart of the VT Bass 1969 is the analog warmth of the SansAmp emulation circuitry that was designed to recreate the powerful tones of Ampeg<sup>®</sup>-style stacks.

Each channel features a powerful 3-band *active* EQ section and a full-range Drive control to dial in your desired tone. The unique, continuously-variable Character control moves seamless between decades of different voicings. It alters the entire sonic structure of the sound, from thick flip-top funk, to indie rock snarl, to deep tectonic distortion.

For studio and live applications, our proprietary, 100% analog SansAmp Tube Amplifier Emulation technology enables you to go straight into the mixer of a recorder or PA system via the XLR Direct Output.

The included Footswitch further expands the VT Bass 1969's capabilities. In addition to being able to remotely change channels, there is a MUTE switch which allows you to silently tune your instrument, and a MIX function to *simultaneously* engage both channels, yielding 3 footswitchable sounds.

The VT Bass 1969 offers bootylicious tones for fearless pro players yearning to jump ship from the status quo.

#### **FRONT PANEL**

The VT Bass 1969 is designed with *active* controls, which boost and cut, rather than traditional passive controls which 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 the included Footswitch or any standard passive footswitch. It 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  $1M\Omega$ . The typically additional low sensitivity input, however, is not needed due to the Gain switch.

#### **GUIDE TO CONTROLS**

#### 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.

#### **Bass, Mid and Treble**

This powerful EQ section is like having a studio mixing board at your fingertips. Bass, Mid and Treble are active tone controls that cut or boost  $\pm 12dB$  from unity gain at 12 o'clock. Bass is tuned to 125 Hz; Mid is tuned to 12dB @ 500 Hz; Treble frequency is 3.2 kHz.



#### Character

Sweeps through an entire range of tonal possibilities associated with the Ampeg<sup>(R)</sup>style family of amplifiers. In addition to modifying the frequency response, the Character control also influences the attack and drive that are characteristic to this particular amplifier style. Therefore, you may need to adjust your gain and tone settings after tweaking the Character control.

#### Level

Acts as a master volume and is interactive with the Drive control. For clean sounds, set Level at max and control the overall level with the Drive control. For dirty sounds, use Drive to set up the overall amount of distortion and Level for the overall output.

#### **REAR PANEL**

#### FUSE



Replace with similar type and same value: 100 and 117V units use: F 6A L 230 and 240V units use: F 3.15A L

**IMPORTANT REMINDER:** Fuse holder located inside A/C cord receptacle. You must disconnect and remove power cord to change fuse.

**Speaker Outputs:** Wired in parallel. Total load: Min.  $4\Omega$ , 345W RMS.

•Speakon<sup>®</sup> 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<sup>™</sup> 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 VT Bass 1969 via the XLR Output to other equipment with a variety of signal levels:

OdB position. Line-level output.

-10dB position. Pads down the line-level signal by 10dB.

# **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 Footswitch. This output can also be used as a buffered out to send a transparent signal to other outboard gear.

# **TRIPLE-FUNCTION FOOTSWITCH**

The Footswitch further expands the VT Bass 1969's capabilities:

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



Corresponding LED indicators let you know the status of each switch. The Footswitch is powered via the cable, so batteries are not 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.

#### **USE WITH ACTIVE BASSES**

Active electronics have higher output and typically generate more noise. To compensate, we recommend lowering the volume on your bass. Additionally, experiment with using flat EQ settings and/or decreasing the Drive, Character and Treble controls.

#### 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.).

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

- 8Ω / 400 watts handling
- Four cast frame, customdesigned 10" speakers
- Rear vented
- Speakon<sup>®</sup> connectors
- 1/4" connectors
- Dimensions: 24"w x 24"h x 16"d
- Weight: 70 lbs.



# **VT Bass 1969 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

**VTB-69** 

information, please contact your authorized dealer or Tech 21.

Model Number: Input Impedance: Nominal Input Level: Optimal Output Load: Power Output:

Power Amp Input Impedance: Power Amp Input Level: Pre-Amp Output Impedance: Pre-Amp Output Level: XLR Output Level (selectable): Maximum Power Consumption:

AC Input Power (factory set):

Cycles: Dimensions: Weight:

**Optional Accessories:** 

**1M**Ω -20dBm 4Ω 345 watts RMS @  $4\Omega$  (minimum load) 210 watts RMS @ 8Ω **1M**Ω approx. -20dBm **1M**Ω approx. -10dB\* 0 to -10dBm approx. 600VA Forced-air cooled 100V, 117V, 230V, 240V NOTE: AC power cannot be switched. Each unit is constructed for specific voltages. 50/60 Hz 17"w x 3.5"h x 16"d / Overall depth: 17.75" 21 lbs.

• 4x10 Speaker Cabinet (Model #B410-VT) and corresponding optional black vinyl cover with white logo (Model #VC-B410)

\*Actual levels will vary with your settings.

<sup>®</sup>Registered trademarks.



These settings are an approximate guide to get you started. Levels should be adjusted to taste and environment. Sample Settings were written using a standard Fender<sup>®</sup> Precision<sup>®</sup> bass and Fender<sup>®</sup> Jazz<sup>®</sup> bass, both with passive pickups and the GAIN switch engaged.

<sup>®</sup>Registered trademarks of their respective companies. <sup>©</sup>Copyright. Names of sample settings are intended for descriptive purposes only and should not be construed as an endorsement or affiliation with the companies, products, songs or artists named.

# **CUSTOM SETTINGS**

