### 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 \_\_\_\_\_



NEVY YORK CITY 333 West 52nd Street, New York, NY 10019 Tel: 212-315-1116 / Fax: 212-315-0825 E-Mail: info@tech 21nyc.com Website: www.tech21nyc.com © 1999 Tech 21, Inc.





**Owner's Manual** 

## **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 invention commercially available to players and studios around the world. His highy-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.

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 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 professional quality sound, studio to studio, club to club, arena to arena.

## **TRADEMARK 10, AN OVERVIEW**

The overall design is far more than just a scaled-down version of its big brother 60-watt, 2-channel Trademark 60 amp. The 100% analog Trademark 10 merges the simple-to-operate format of our exceptionally popular SansAmp GT2 pedal with the look and feel of the Trademark 60, and provides the totally *professional* sound quality for which Tech 21 is known.

Despite its humble stature, the Trademark 10 delivers a truckload of the most desirable, big tube amp sounds --most obviously, Fender,<sup>®</sup> Marshall,<sup>®</sup> and Mesa/ Boogie,<sup>®</sup> and does so even at low levels. The interactive controls give you access to specific tone shaping characteristics to create your own trademark sounds as well.

For studio and live applications, our proprietary SansAmp Tube Amplifier Emulation technology enables you to go straight into the mixer of a recorder or PA system via the XLR Direct Output. In addition to the 3 preset speaker styles you can choose with the flick of a switch, the Trademark 10 can also be miked. For recording, you have the advantage of being able to employ different microphones and miking techniques for even greater versatility. So you can capture all the nuances of multiply-miked, large, loud stage rigs without excessive volume.

The Trademark 10 is an affordable, multi-functional, super cost-effective package weighing just over 14 lbs. Whether you're a beginner, road warrior, about-to-be, or already a big star, this truly useful amp is capable of fulfilling a variety of needs, even as they change, throughout your entire career.

### **IMPORTANT SAFETY INSTRUCTIONS**

The Trademark 10 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 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 the original power cord becomes damaged, refer your Trademark 10 for servicing.

**WARNING:** Attempting to repair this unit is not recommended and may void its warranty. NOTE: In the U.S. and Canada, servicing of Trademark 10 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 top 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 you can get your Trademark 10 up and running before you read 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 your instrument into the top-panel Input jack (on the left side).
- 2. Plug the AC cord into a wall socket.
- 3. Turn on the Trademark 10.

4. Use the quick start sample settings provided on the amp. If missing, please refer to the Sample Settings in this manual.

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.

### TOP PANEL

The Trademark 10 is designed with *active* controls, which cut and boost, rather than traditional passive controls which can only cut. This gives 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 controls' interrelationships, you'll easily be able to customize your own sounds.

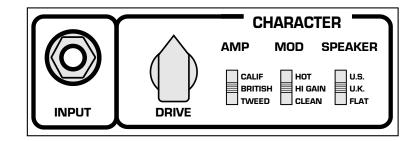
### **INPUT JACK**

Faithful to the original designs of traditional tube amplifiers, this 1/4" Input is high impedance 1M. An additional low sensitivity input isn't necessary due to the trimmable Drive control.

## **CHARACTER SECTION**

#### Overview

You should begin building your sound foundation with the Character Switches. We've taken the best parts of the most-wanted tube amp set-ups and broken them down into "components." You can mix and match them in intriguing ways that would otherwise be physically improbable, probably impractical, and definitely not financially feasible. First choose the amplifier tonal character you want. Then select the modification that suits your musical preferences. Then match it up with the speaker style to taste.



#### AMP

Each of the three positions affects multiple dimensions of the individual personality traits inherent to each amplifier type. This switch is not merely a simple EQ change, nor does it just affect the gain structure. Each amplifier type has its own tonality and its own input sensitivity. Each reacts differently to the dynamics of your playing style and to the signal level of the instrument.

TWEED:	Fender <sup>®</sup> -style
<b>BRITISH:</b>	Marshall <sup>®</sup> -style
CALIF:	Mesa/Boogie <sup>®</sup> -style

### MOD

Influences the gain structure of the AMP selected.

CLEAN:	Stock tube amp set-up.

HI GAIN:	Gives you an extra gain stage, as if you were to install an
	additional 12AX7 tube in the pre-amp section.

HOT: Produces a "spitty, tube-driven-past-the-brink texture."\*
\*This descriptive quote is taken from Tom Mulhern's review of the
SansAmp Classic pedal, published in *Guitar Player Magazine*.

### SPEAKER

**FLAT:** Yields the transparent, natural characteristic of the built-in Tech 21 special design 8" speaker.

**UK:** Achieves the sound of a "green back" Celestion<sup>®</sup>-style speaker associated with early Marshall<sup>®</sup> 4x12 closed-back cabinets. There is greater high mid-range content and increased low end. It is recommended for big, mega crunch, balls-to-the-wall results.

**US:** Achieves the sound of an Electro-Voice<sup>®</sup>-style speaker used in early Mesa/Boogie<sup>®</sup> amps. Similar to UK, but it gives a little more extended range. It produces a smoother sound with more low-end punch and less upper midrange content.

### DRIVE

Adjusts the overall amount of gain and overdrive.

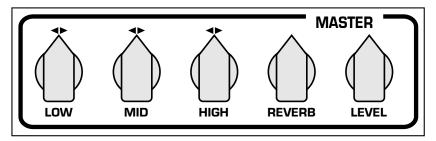
# EQ

Specifically voiced for guitar, these *active* controls set the tonal balance of the amp relative to your environment.

MASTER SECTION

### LOW, MID and HIGH

Boost or cut  $\pm 12dB$  from the center point (12 o'clock). We recommend starting with the EQ controls flat, at 12 o'clock. Then try a slight Low boost (2 o'clock) with a slight Mid cut (10 o'clock), and a slight High boost (2 o'clock).



### REVERB

Rich, full sounding Accutronics<sup>®</sup> 3-spring reverb. Increase from minimum (7 o'clock). We recommend starting at 12 o'clock and then adjusting to taste.

### LEVEL

Adjusts the overall volume. It also affects the XLR Direct Out, allowing you to block the signal to the audience or recording console when you want to tune or unplug your guitar.

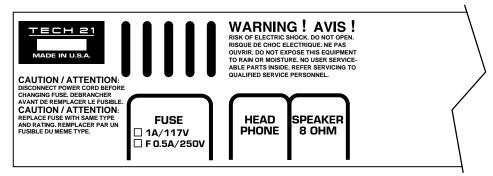
# **REAR PANEL**

## FUSE

Replace with similar type and same value: 1A/110-120V; 0.5A/220-240V. IMPORTANT REMINDER: Disconnect power cord before changing fuse.

### HEADPHONE

The Headphone output overrides the speaker for undisturbed (and non-disturbing) practicing. It can also be used as a 1/4" direct out, should an XLR input not be available on your recorder. You can then use your headphones through the mixer. Be aware, however, to provide better audibility through headphones, there is slightly more high end with this output than the XLR Direct Out. Therefore, you should compensate accordingly (or you can opt to use the Effect Loop Send instead).

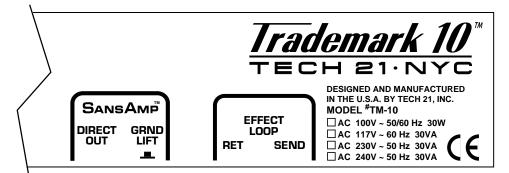


### SPEAKER

By incorporating Tech 21's exclusive technology with our special design 8" speaker, the Trademark 10 gives you a choice of speaker styles associated with each of the most desirable cabinet styles.

If you want to use an external speaker cabinet, simply plug in the speaker cable from the external cabinet. This will defeat the internal speaker. The Trademark 10 is capable of driving a 2x12 cabinet or 4x12 cabinet<sup>\*</sup>, but we do not recommend using speakers rated at less than 8 Ohms, as 4-Ohm speakers could cause undesirable distortion and potentially overheat the amp. Using 16-Ohm speakers may result in loss of power. **Note:** The Trademark 10's speaker is specifically designed to complement our specialized circuitry. Therefore, using a standard commercial speaker may result in a significant change of the sound. For recommendations, please contact Tech 21's technical support department.

\*Matching 2x12 and 4x12 cabinets (in straight or slant versions) are available through Tech 21. For more information, refer to Optional Extension Cabinets in the Specifications.



### SANSAMP™ DIRECT OUT

For recording in a home studio or pro facility, the SansAmp XLR output is like having a built-in direct box. 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. So you can plug straight into the board and get the same sound that comes out of the Trademark 10 directly onto tape.

The mic level, -20dB output is matched to the output volume of the speaker, as determined by the setting of the Level control. If you place a microphone in front of the speaker, the volume level of the XLR Direct Out will be approximately the same.

If you need to consider family and neighbors, you can defeat the internal speaker by plugging a dummy cable into either the Speaker jack or the Headphone jack. You can then use headphones through your mixer.

For live gigs, you can use this output to go direct into a PA system or to chain with our own **Power Engine 60<sup>™</sup>** *powered* extension cabinets, in mono or stereo. (See sample Hook-up Diagrams and refer to Optional Extension Cabinets in the Specifications for more information.)

#### **GROUND LIFT**

Connects or disconnects the ground circuits between the XLR Direct Out of the Trademark 10 and the mixer. We recommend starting with the ground lifted. If necessary, connect the ground by pushing the button in.

#### EFFECT LOOP

The Effect Loop allows you to connect external effects between the pre-amp and power amp section of the Trademark 10.

Connect the input of your effect to Send; output of your effect to Return. We recommend that time-based (i.e., chorus or delay) effects be inserted in the Effect Loop and external distortion/wah pedals be placed between the guitar and the Trademark 10.

Be aware that you can also use the Send as an alternate 1/4" direct out, should an XLR input not be available on your recorder.

On the next page, you'll find some helpful Effect Loop diagrams for chaining Trademark 10s, adding a remote volume control, and how to hook-up two Trademark 10s for stereo.

### **NOTEWORTHY NOTES & CONSIDERATIONS**

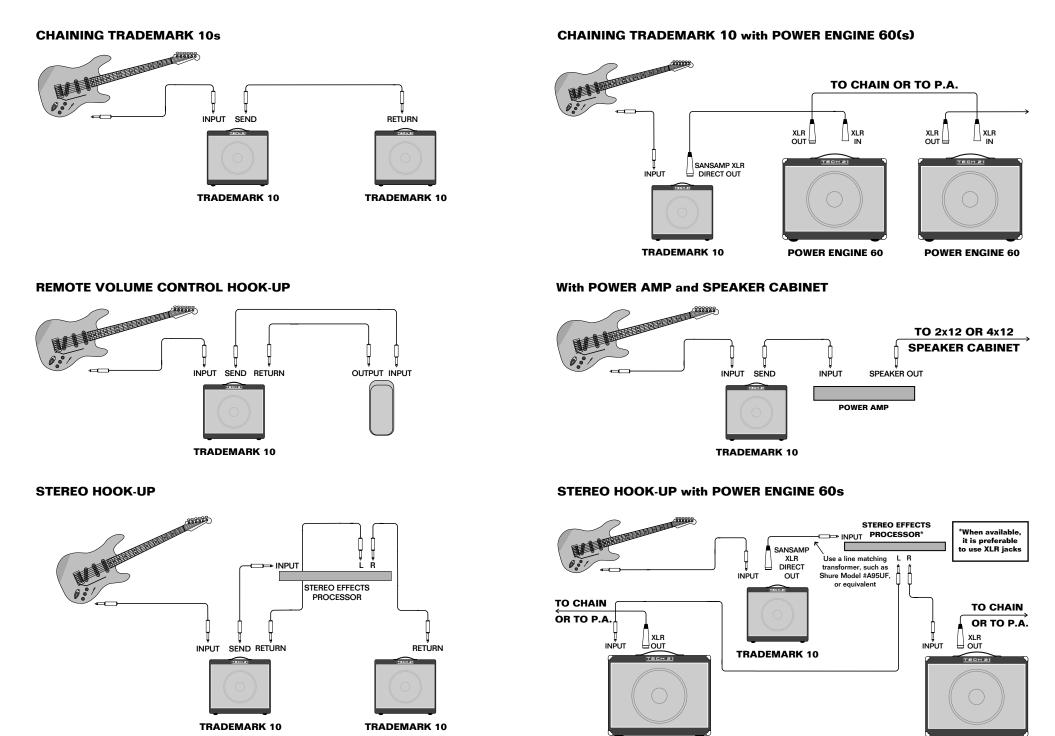
1) Use a condenser mic (or even a ribbon mic) to record. This will give you a truer representation of the sound in the room. Dynamic mics do not have a flat response and will color the sound, making it darker and mid-rangey. While we never discourage experimentation, it is our intention only to make you aware of how the results will differ.

**2) You need not crank up the amp to record.** The power amp distortion is predetermined by the Character settings. You can use medium volume and close miking for an intimate sound, or back the mic off for more "room."

**3) If you use the XLR Direct Out and a mic:** you may experience a thin sound, caused by phase cancellation. Try repositioning the mic until it goes away or invert the phase of one of the signals.

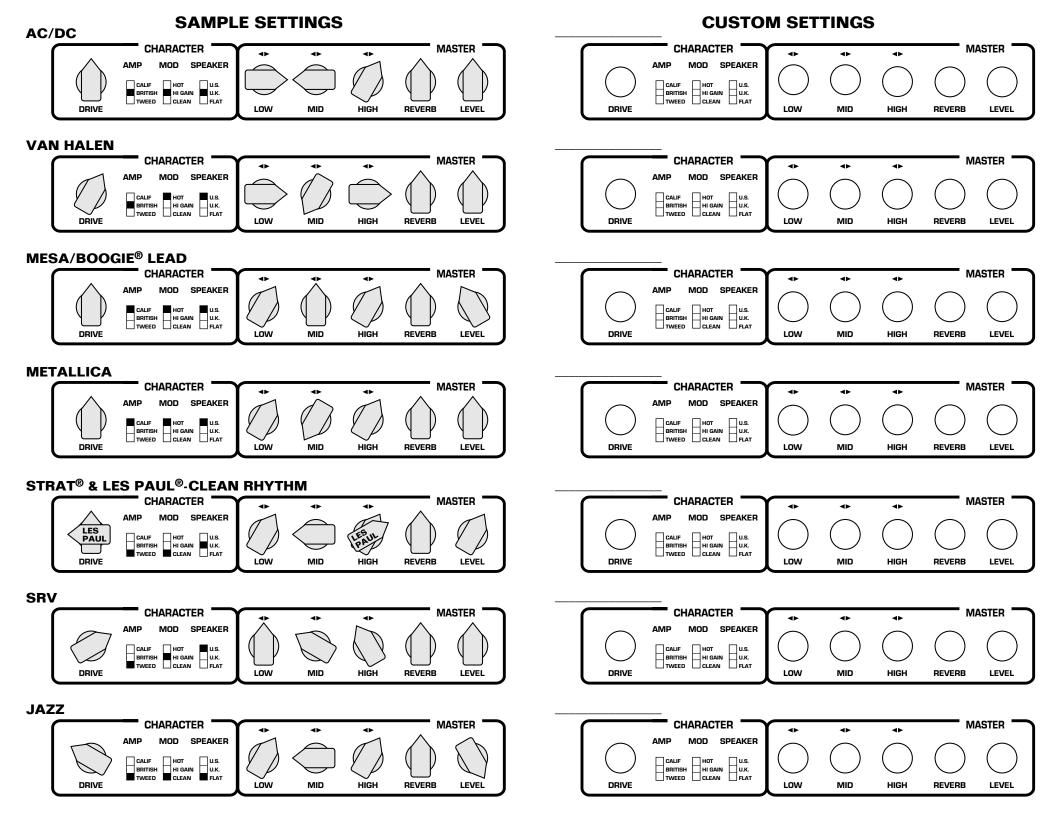
4) Enjoy your new amp!

## **Trademark 10 Hook-Up Diagrams**

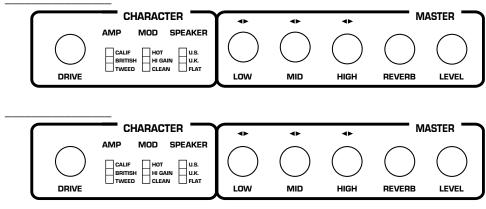


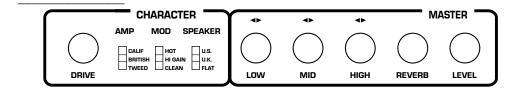
**POWER ENGINE 60** 

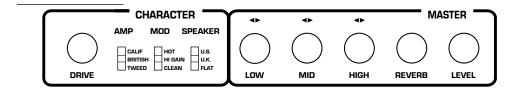
**POWER ENGINE 60** 

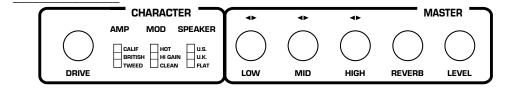


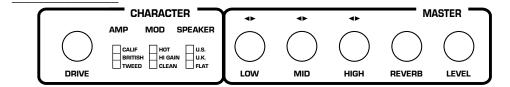
# **CUSTOM SETTINGS**

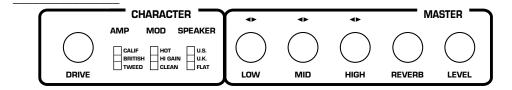












#### **TRADEMARK 10 SPECIFICATIONS**

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

Model Number:	TM10
Input Impedance:	1 M
Nominal Input Level:	-10dBm
Optimal Output Load:	8
Power Output:	10W
Effect Loop Input Impedance:	1 M
Effect Loop Input Level:	approx20dBm
Effect Loop Output Impedance:	1 K
Effect Loop Output Level:	approx20dBm
XLR Output Level:	approx20dBm
Maximum Power Consumption:	30W
AC Input Power:	100V, 117V, 220V, 230V, 240V
Cycles:	50/60 Hz
	NOTE: AC power cannot be switched.
	See authorized dealer/distributor for voltage
	modification information.
Speaker:	Model #2108-A, Tech 21 Special Design 8"
	15 Watts - 8
Dimensions:	14.5"w x 13.25"h x 8"d
Weight:	14.25 lbs.

#### **Optional Extension Cabinets:**

- •**Power Engine 60:** matching 1x12 open-back, powered cabinet with 60 watts and Tech 21 special design 12" speaker.
- •2x12TM: matching 200-watt, 8 closed back cabinet with two Tech 21 special design 12" speakers.
- •4x12TM: matching 400-watt, 8 closed back cabinet with four Tech 21 special design 12" speakers, available with straight or slant front.

**Replacement parts are available,** i.e., knobs, grill panel, speaker, logo plate, handle, vinyl cover, etc. For more information, please contact your authorized dealer or Tech 21, Inc.

<sup>®</sup>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 or artists named.