

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.

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Fill in the following information for future reference:

Serial Number_____

Dealer's Name _____

Dealer's Address _____

Date of Purchase



NEVVYORK CITY 333 West 52nd Street, New York, NY 10019 Tel: 212-315-1116 / Fax: 212-315-0825 E-Mail: info@tech21nyc.com Website: www.tech21nyc.com © 2001 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 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 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 120, AN OVERVIEW

The 100% analog Trademark 120 merges the preamp format of our exceptionally popular SansAmp GT2 pedal with the look and feel of the Trademark 60 into a 2x12 stereo configuration with 3 channels.

Go from sparkling clean to semi-dirty to mega overdrive or from crunchy to crunchier to crunchiest in three easy steps. The included Footswitch allows you to select channels, activate the Reverb and Boost functions, and engage the Effect Loop. It is engineered to utilize any standard 1/4" instrument or speaker cable which can easily be replaced, in any length you want.

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 Outputs. In addition to each channel's 3 amplifier/speaker styles you can choose with the flick of a switch, the Trademark 120 can also be miked.

This handsome, touring-sized combo delivers a truckload of the industry's most desirable tube amp sounds and provides sensitive controls with a unique responsiveness to create your own trademark sounds as well. As is customary with all Tech 21 products, the Trademark 120 is a multi-functional, super cost-effective package suitable for any player's repertoire.

IMPORTANT SAFETY INSTRUCTIONS

This unit 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 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.

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 120 up and running before you read the entire manual. By not reading the manual, however, 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. Connect the Footswitch.
- 4. Turn on the Trademark 120.

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

6. 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 120 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

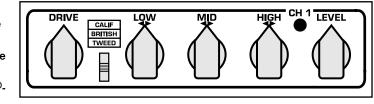
Faithful to the original designs of traditional tube amplifiers, this 1/4" Input is high impedance 1M. An additional low sensitivity input isn't necessary due to each channel's trimmable Drive control.

CHANNEL SECTIONS

PRE-AMP STYLE

For each channel, there is an independent Character switchable pre-amp with a choice of 3 styles. 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[®]-style BRITISH: Marshall[®]-style CALIF: Mesa/Boogie[®]style



DRIVE

Adjusts the overall amount of gain and overdrive.

LOW, MID and HIGH

Specifically voiced for guitar, these *active* controls set the tonal balance of the amp relative to your environment. Boost or cut ± 12 dB from center point (12 o'clock). We recommend starting with 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).

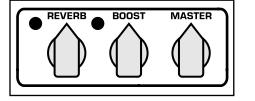
LEVEL

Adjusts the volume of the particular channel.

MASTER SECTION

REVERB

The top-of-the-line, full-length Accutronics[®] 3-spring reverb can be remotely activated via the Footswitch. Increase from minimum (7 o'clock). We recommend starting at 12 o'clock and then adjusting to



taste. NOTE: If the Footswitch is not connected, the Reverb function will be on, so remember to adjust its level accordingly.

BOOST

For solos, you can remotely increase your output level via the Footswitch. This "clean" boost only changes the volume level, not the tonality or amount of overdrive. Increase from minimum (0dB) to maximum (9dB). NOTE: If the Footswitch is not connected, the Boost function will be on. You should then turn Boost off (7 o'clock) and increase the Master volume control as desired.

MASTER

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.

FUSE

REAR PANEL

Fuse holder is located inside A/C cord receptacle. You must remove the power cord to change the fuse. Replace with similar type and same value. Amps from 100-120V: use 6A. Amps from 220-240V: use 3.15A.

HEADPHONE

The Headphone output overrides the speakers 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).

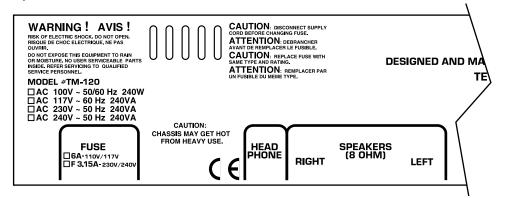
SPEAKERS

By incorporating Tech 21's exclusive technology with our special design 12" speakers, the Trademark 120 gives you the speaker cabinet configuration associated with

each tube amp style --ranging from a tightly focused open-back 2x12 to a big and smooth closed-back 4x12.

If you want to use an external speaker cabinet, simply plug in the speaker cables from the external cabinet. This will defeat the internal speakers. 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 120 speakers are specifically designed to complement our specialized circuitry. Therefore, using standard commercial speakers may result in a significant change of the sound. For more information, please contact Tech 21's technical support department.

Matching 4x12 speaker cabinets (in straight or slant versions) are available through Tech 21. For more information, refer to Optional Accessories in the Specifications.



STEREO EFFECT LOOP

The Effect Loop allows you to connect external effects between the pre-amp and power amp section of the Trademark 120.

Connect the Effect Loop Send to the input of your effect and the output(s) of your effect to the Return(s). When using a mono effect, you can set the effect unit to 100% wet and return to one side. If your processor only allows a maximum blend of 50/50, we suggest using a Y-cable to connect to both Left and Right Returns. Please refer to the Hook-Up Diagrams in this manual for more detail.

We recommend that time-based effects (chorus, delay, reverb, harmonizer, flanger, phaser) be inserted in the Effect Loop and external distortion, wah and compression be placed between the guitar and the Trademark 120's front panel Input.

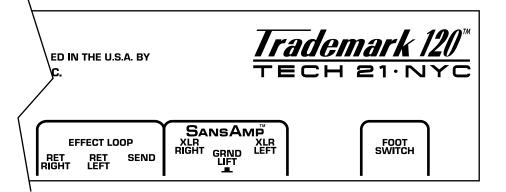
Be aware that you can also use the Send as an alternate 1/4" direct out, should an XLR input not be available on your recorder.

SANSAMP™ DIRECT OUT

For recording in a home studio or pro facility, the SansAmp XLR outputs are 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. You can plug straight into the board and get the same sound that comes out of the Trademark 120 speakers directly onto tape.

The mic level, -20dB output is matched to the output volume of the speakers, as determined by the setting of the Master control. If you were to place a microphone in front of the speakers, the volume level of the XLR Direct Outs would be approximately the same.

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



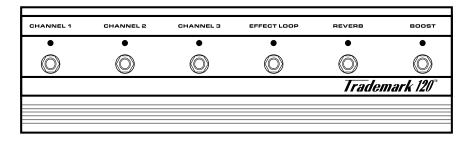
For live gigs, you can use this output to go direct into a PA system or to chain with our own **Power Engine 60[™]** *powered* extension cabinets, in mono or stereo. (See sample Hook-up Diagrams and refer to Optional Accessories in the Specifications for more information.)

GROUND LIFT

Connects or disconnects the ground circuits between the XLR Direct Outs of the Trademark 120 and the mixer. We recommend starting with the ground lifted. If necessary, connect the ground by pushing the button in.

FOOTSWITCH (included)

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 included cable should you lose it, or you can purchase a different cable length to suit your particular needs.

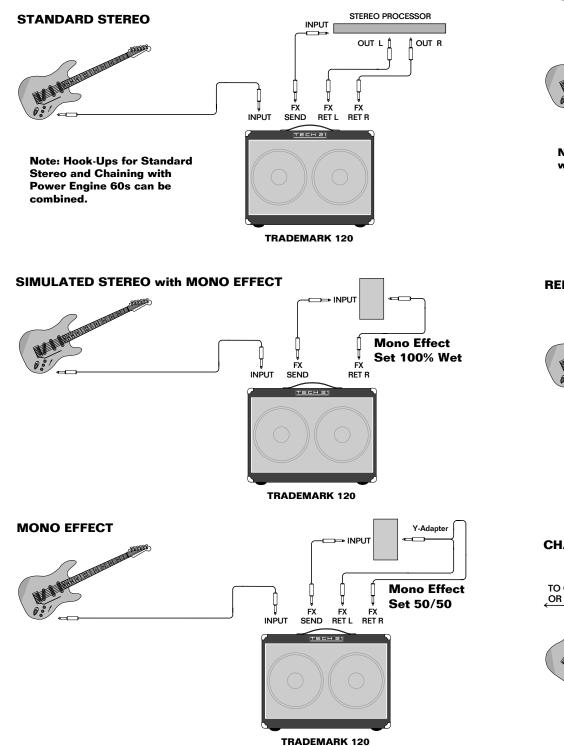


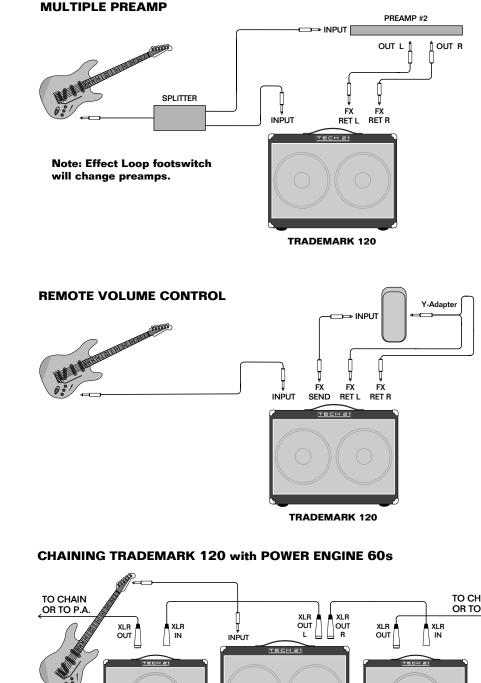
The Footswitch allows you to step through each channel, activate the Boost and Reverb functions, and engage the Effect Loop. Corresponding LED indicators let you know the status of each switch. The Footswitch is powered via the cable, so no batteries are required. Replacement Footswitch is available through your local authorized dealer or Tech 21 directly. In a pinch, you can use any standard alternating/ latching footswitch to change channels. Rather than going On, Off, On, it will just advance through each of the 3 channels. If you lose or forget the Footswitch, be aware that the Reverb, Boost (refer to *Master Section* under *Reverb* and *Boost* on page 5) and Effect Loop functions will not be switchable and they will be on all the time.

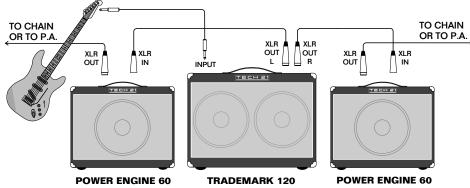
NOTEWORTHY NOTES & CONSIDERATIONS

1) Enjoy your new amp!

Trademark 120 Hook-Up Diagrams

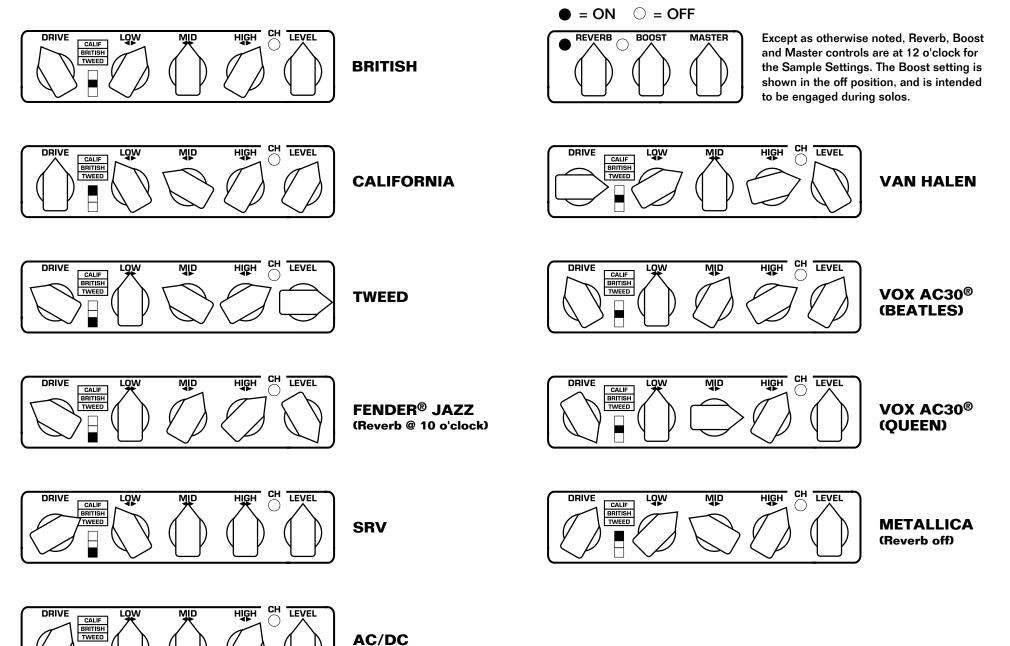






TRADEMARK 120 SAMPLE SETTINGS

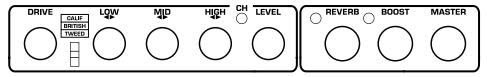
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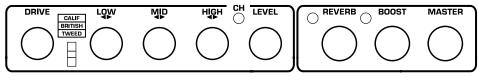
AC/DC (Reverb @ 10 o'clock)

CUSTOM SETTINGS

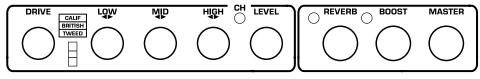
(Keep a Record of Your Own Favorites)



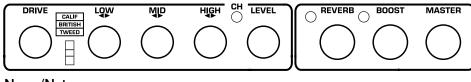
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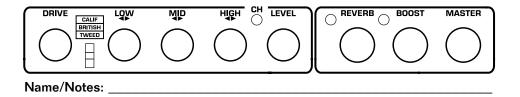
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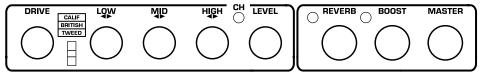


Name/Notes:



Name/Notes:





TRADEMARK 120 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:	TM120
Input Impedance:	1 M
Nominal Input Level:	-10dBm
Optimal Output Load:	2x 8
Power Output:	2x 60W
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:	160W
AC Input Power (factory set):	100V, 117V, 220V, 230V, 240V
Cycles:	50/60 Hz
	NOTE: Each unit is constructed for specific
	voltages. AC power cannot be switched.
Speaker:	2x Model #2112-A, Tech 21 Special Design 12"
	100 Watts - 8 each
Dimensions:	26"l x 11"w x 19"h
Weight:	50 lbs.

Optional Accessories:

•4x12TMS: matching 400-watt, 2x 8 closed-back cabinet with four Tech 21 special design 12" speakers, available with straight or slant front.

•Power Engine 60: matching 1x12 open-back, powered cabinet with 60 watts and Tech 21 special design 12" speaker. Note: For stereo

- operation, we recommend using two Power Engine 60s.
- •Black vinyl cover with white logo.
- •Pop-out caster kit.
- •Flight case with hammered aluminum finish.

Replacement parts (i.e., knobs, grill panel, speaker, logo plate, handle, Footswitch, etc.) are available through your authorized dealer, distributor or directly from Tech 21.

[®]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.

Name/Notes: