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	



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

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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. *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 introduced the *XXL*, an overdrive/distortion/vintage fuzz pedal, and the *MIDI Mouse*, a compact, battery operable MIDI footcontroller. Each product is thoughtfully and respectfully designed 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 quality sound, studio to studio, club to club, arena to arena.

Trademark 60, an Overview

Tech 21's proprietary, 100% analog circuitry has been adapted from its SansAmp configuration into a completely different format: a 2-channel, 60-watt combo amp.

The Trademark 60 offers a wide range of the most desirable tube amp sounds, from Fender® to Marshall®, Mesa/Boogie® and Vox AC30® styles. The interactive controls give you access to specific tone shaping characteristics to create your own trademark sounds as well. The remotely activated Boost function increases each channel's volume level up to 9dB, giving you 4 footswitchable sound options.

For studio and live applications, our highly-acclaimed 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 Trademark 60, you get a truckload of big amp sounds in an affordable, cost-effective **36 lb.** package.

IMPORTANT SAFETY INSTRUCTIONS

The Trademark 60 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, replace with same rating and gauge, or higher, or contact Tech 21 for replacement.

WARNING: Attempting to repair this unit is not recommended and may void its warranty. NOTE: In the U.S. and Canada, servicing of Trademark 60 is performed at factory only. In other countries, please refer repairs to the local Tech 21 authorized distributor.

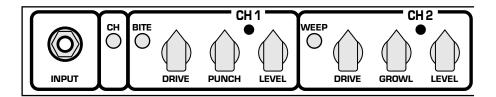
ADDITIONAL PRECAUTIONS:

- 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.

OUICK START INSTRUCTIONS

Here's how you can get your Trademark 60 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 60.
- 4. Use the quick start sample settings provided on the amp. If missing, see the first sample setting (Clean Fender® and Dirty Marshall®).
- 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 gualified technician.



TOP PANEL

The Trademark 60 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 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. The typically additional low sensitivity input, however, is not needed due to the trimmable Drive control in Channel 1.

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, which will override the manual selector switch.

CHANNEL 1

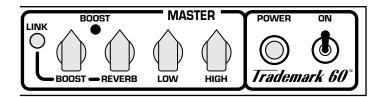
Channel 1 offers a range of Fender $^{\circledR}$ styles, from sparkling clean to semi-dirty to saturated Tweed $^{\circledR}$ -style.

Bite™

Changes the sound from jazzy and mellow to a more "biting," overdriven style. Going beyond a normal bright switch, it also tightens the low end to give more definition to the low strings.

Drive

Like the volume control on a non-master-volume tube amp, Drive adjusts the amount of "power amp" distortion. However, unlike such a control, you can *cut or boost* from 12 o'clock. In regular use, we recommend you start by setting Drive at unity gain. If you have an extremely hot pickup and want a clean sound, trim towards the left.



Punch

The Punch control sets the amount of mid-range break-up and overdrive. Cut or boost from 12 o'clock. Decreasing from the center point produces a softer break-up. Increasing its setting creates a harder, heavier, more nasal distortion, similar to a wah pedal at mid position placed before a tube amp.

Level

Adjusts the volume level of Channel 1.

CHANNEL 2

Channel 2, always a little dirty, offers a range of Marshall $^{@}$, Mesa/Boogie $^{@}$ and Vox AC30 $^{@}$ styles.

Weep™

Increases the amount of even harmonics and thickens the sound. It provides a "singing" quality like that of a Class A tube amp and is particularly responsive to the attack of individual notes. For the most pronounced effect, we recommend setting Drive at least half-way (12 o'clock).

Drive

Adjusts the amount of "power amp" distortion. Since Channel 2 is not designed for clean sounds, this Drive has no unity gain position, and increases from the minimum point (7 o'clock).

GrowI™

This is a powerful and sophisticated mid-range control. It gives you that scooped-out, heavy sound without making your guitar sound thin --and without any loss of volume. Increase from the minimum point (7 o'clock).

Level

Adjusts the volume level of Channel 2.

MASTER SECTION EO

The two technologically coordinated channels enable them to share the Master EQ section. Specifically voiced for guitar, these *active* controls set the tonal balance of the amp relative to your environment. The Trademark 60 is designed for optimal sound quality with Low and High at 12 o'clock. If your taste differs or if you are in a less than optimal environment, you can compensate accordingly.

In addition to Punch in Channel 1 and Growl in Channel 2, Low and High work together to alter the mid-range content. By boosting Low and High, you get a "smiling" frequency curve (mid-range cut), while cutting Low and High gives you a bell-shaped curve (mid-range boost).

Low

Boost or cut ±12dB by turning from the center point (12 o'clock).

High

Boost or cut ±12dB by turning from the center point (12 o'clock).

Boost

For solos, you can remotely increase your output level via the footswitch. This "clean" boost changes only the volume level, not the tonality or amount of overdrive. Increase from minimum (0dB) to maximum (9dB). Note: When the footswitch is not connected, the Boost function will be on, so remember to adjust its level accordingly.

Reverb

The top-of-the-line, full-length AccutronicsTM 6-spring reverb can be remotely activated via the footswitch. Increase from the minimum point (7 o'clock). Note: When the footswitch is not connected, the Reverb will be on, so remember to adjust its level accordingly.

Link

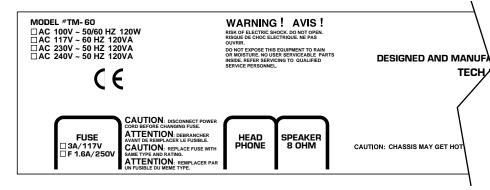
Link works in conjunction with the Footswitch to remotely activate Boost and Reverb. This unique feature connects the two functions. When Link is engaged, Boost and Reverb **work in tandem**. For solos, in particular, this gives you the ability of not only increasing your volume, but increasing the **size** of your sound as well. Depending on its orientation, Link gives you 3 options:

- 1. Boost only: Disengage Link. Adjust Boost to desired level.
- 2. Reverb only: Engage Link. Set Reverb to desired level; set Boost at minimum.
- 3. Boost and Reverb: Engage Link. Set each at desired amount.

For separate footswitchable Boost and Reverb functions, there's a 4th option:

Use an outboard reverb unit through the Effect Loop. The Trademark 60's Footswitch can then control each separately: Effect Loop for Reverb; Boost/Reverb for Boost.

Remember: if the footswitch is not connected. Boost and Reverb will both be on.



REAR PANEL

Fuse

Fuse holder located inside A/C cord receptacle. You must remove power cord to change fuse. Replace with similar type & same value. Amps from 100-120V: use 3A. Amps from 220-240V: use 1.6A.

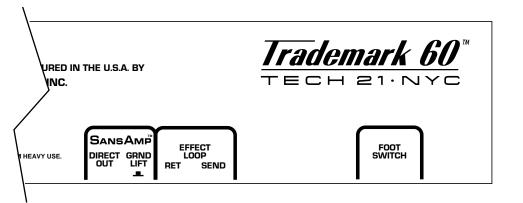
Headphone

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.

Speaker

By incorporating Tech 21's exclusive technology with our special design 12" speaker, the Trademark 60 gives you the speaker cabinet configuration associated with each tube amp style --ranging from a tightly focused open-back 1x12 to a big and smooth closed-back 4x12.

If an external speaker cabinet should be desired, simply plug in the speaker cable from the external cabinet. This will defeat the internal speaker. We do not recommend using a speaker rated at less than 8 Ohms, as a 4-Ohm speaker could cause undesirable distortion and potentially overheat the amp. Using a 16-Ohm speaker may result in loss of power. **Note:** The Trademark 60's speaker is specifically designed to complement our specialized circuitry. Therefore, using a standard commercial speaker may result in a drastic change of sound. For recommendations, please contact Tech 21's technical support department.



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

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. In larger venues, you'll be able to utilize the PA monitors to supplement your stage volume.

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.

Effect Loop

The Effect Loop allows you to connect external effects between the pre-amp and power amp section of the Trademark 60. And with the Footswitch, you can remotely activate them. You can then keep the effect(s) either on top of the amp for easy access, or stashed neatly in the back of the amp.

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 60.

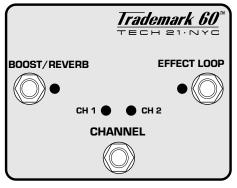
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On the next page, you'll find some helpful Effect Loop diagrams for chaining Trademark 60s to increase your stage volume, adding a remote volume control, as well as how to hook-up two Trademark 60s for stereo.

TRIPLE-FUNCTION FOOTSWITCH (included)

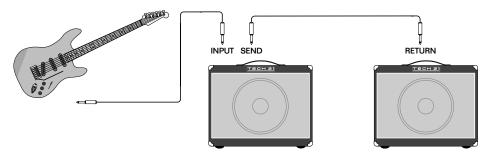
Unlike most amps which require a custom multi-pin connector, this Footswitch is engineered to utilize *any* standard 1/4" instrument or speaker cable. You can easily replace the included cable should you lose it, or you can easily purchase a different cable length to suit your particular needs.

The Footswitch alternates between channels, activates the Boost/Reverb function, and engages the Effect Loop. Corresponding LED indicators let you know the status of each switch. The Footswitch is powered via the cable,

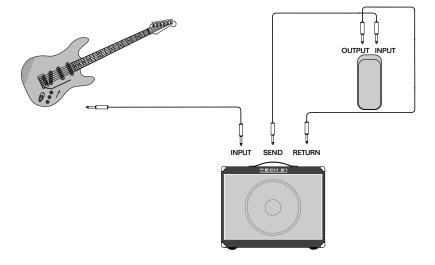


so no batteries are required. Replacement Footswitch (Model #TM60-FSW) is available through your local Tech 21 authorized dealer. In a pinch, you can use any standard alternating footswitch to change channels. In this case, be aware that the Effect Loop and Boost/Reverb function will not be switchable and they will remain on as if in manual mode.

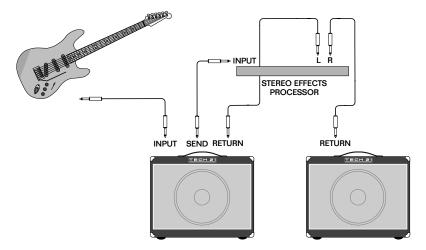
Chaining the Trademark 60



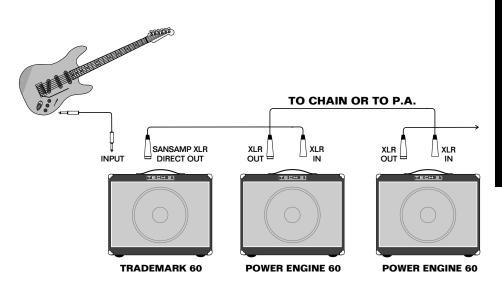
Remote Volume Control Hook-Up



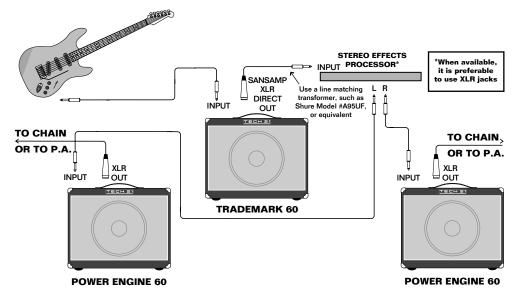
Stereo Hook-Up



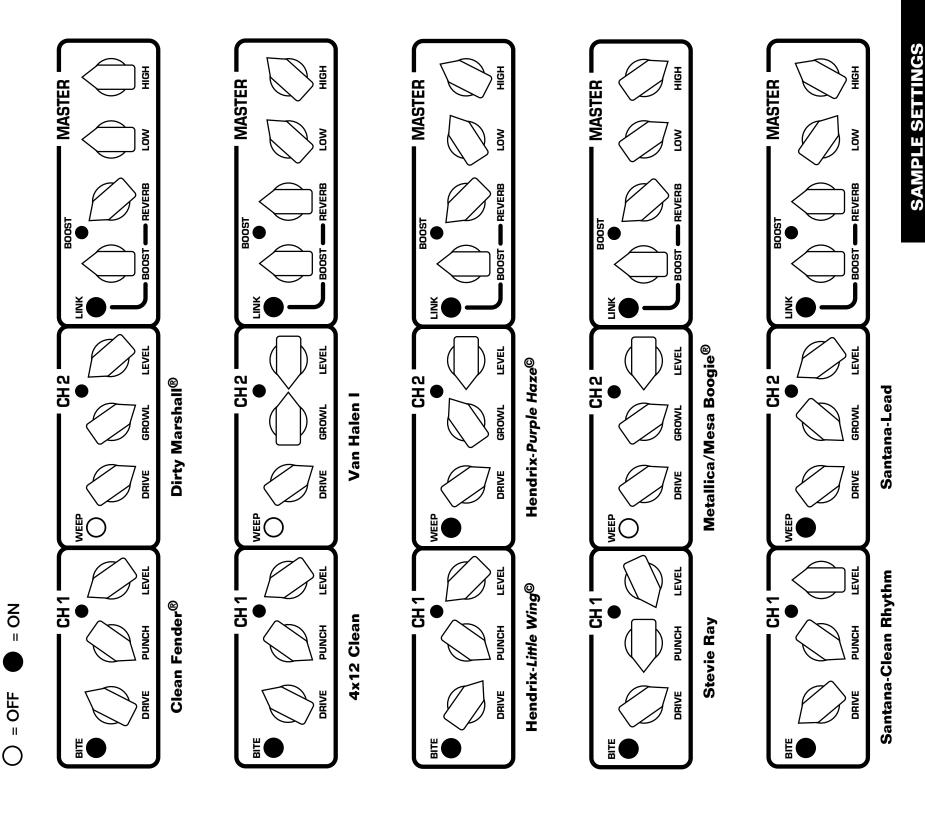
Trademark 60 Hook-Up with Optional Power Engine 60s (Mono)



Trademark 60 Hook-Up with Optional Power Engine 60s (Stereo)



SAMPLE SETTINGS

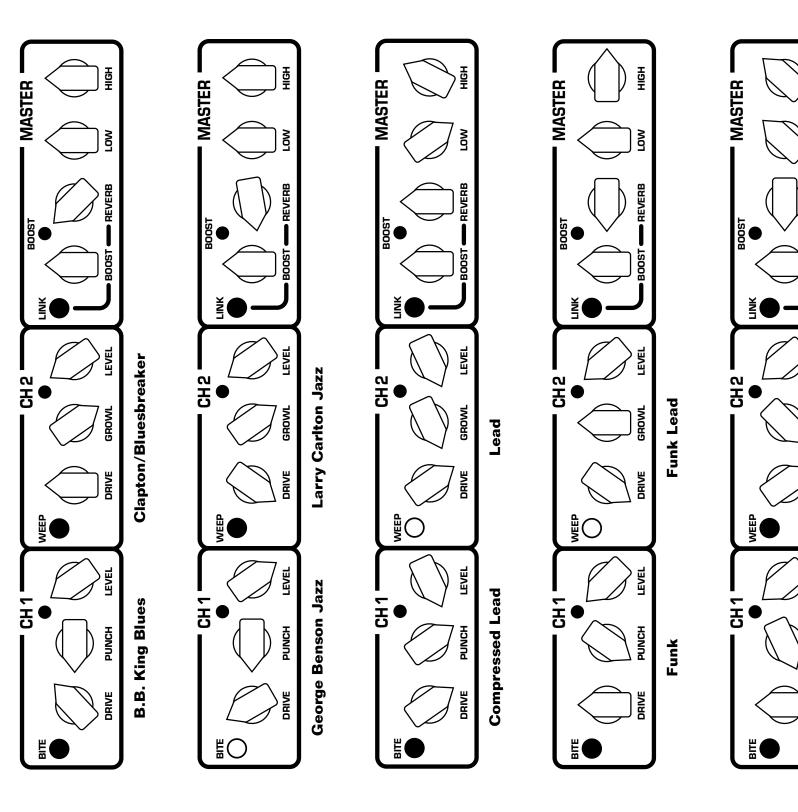


SAMPLE SETTINGS

NO =

= OFF

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SAMPLE SETTINGS

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№

■ REVERB

BOOST

GROWL

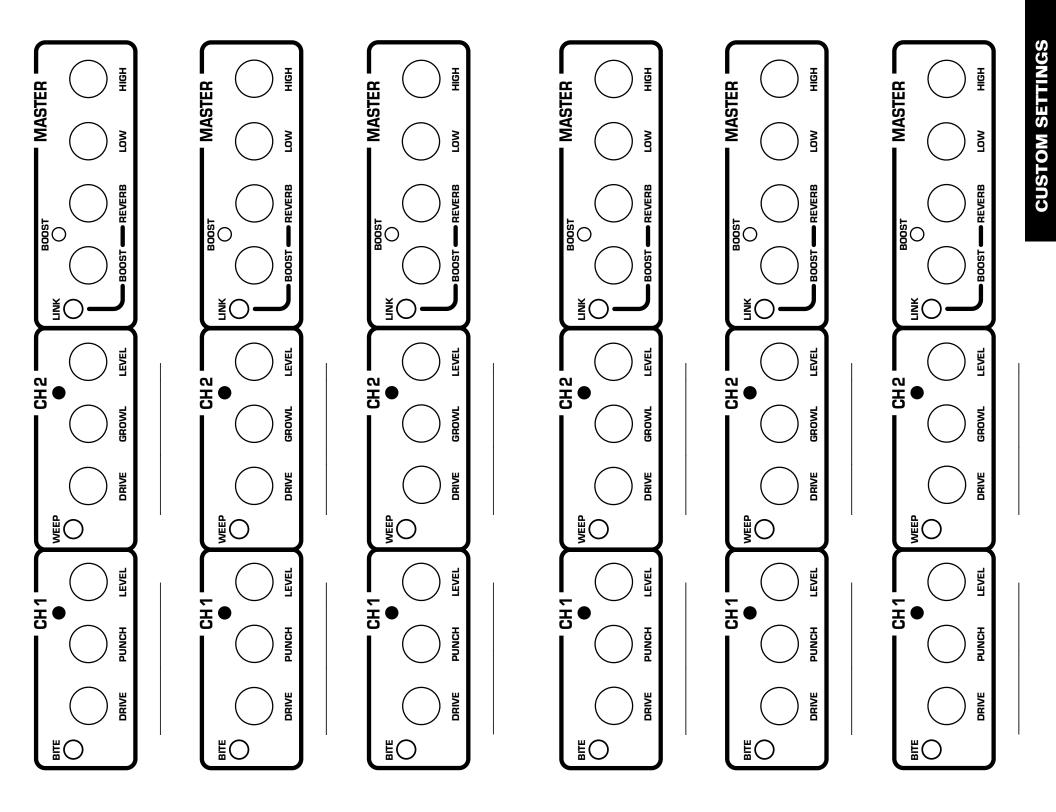
DRIVE

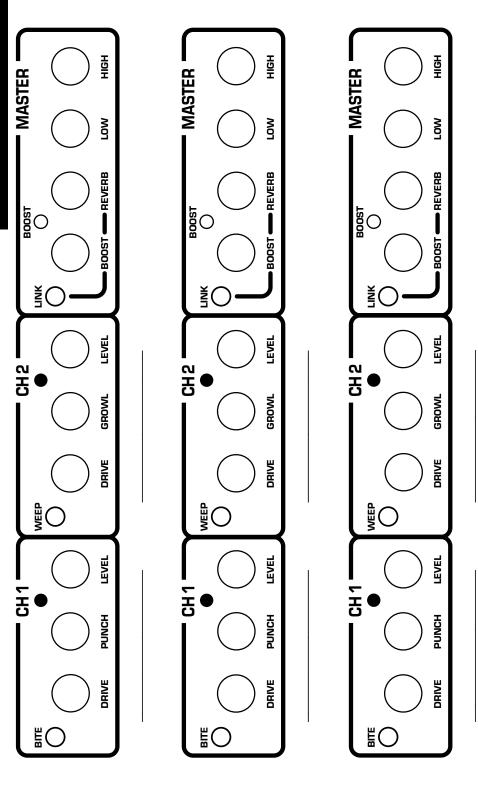
PUNCH

DRIVE

Vox AC30[®]-Queen (Bohemian Rhapsody[©])

Vox AC30[®].Queen (Crazy Little Thing Called Love[®])





TRADEMARK 60 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: TM60
Input Impedance: 1M
Nominal Input Level: -10dBm
Optimal Output Load: 8
Power Output: 60W

Effect Loop Input Level: approx. -10dBm

Effect Loop Output Impedance: 1K

Effect Loop Input Impedance:

Effect Loop Output Level: approx. -20dBm

Maximum Power Consumption: 120W

AC Input Power: 100V, 117V, 220V, 230V, 240V

1 M

Cycles: 50/60 Hz

NOTE: AC power cannot be switched. See authorized dealer/distributor for

voltage modification information.

Speaker: Model #2112-A, Special design 12"

100 Watts - 8

Dimensions: 20"w x 18"h x 11"d

Weight: 36 lbs.

Optional Accessories: •Black vinyl cover with white logo

•Flight case with hammered aluminum finish,

lock and casters

Optional Extension Cabinets:

- •Power Engine 60: matching 1x12 open-back cabinet with 60 watts of transparent power 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, Footswitch, etc. For more information, contact your authorized dealer or Tech 21.

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