the pro's tone since 1967

## B450 USER'S MANUAL 450 WATT BASS COMBO



www.acousticamplification.com

450 WATT BASS COMBO

### **IMPORTANT SAFETY INSTRUCTIONS**

EXPOSURE TO HIGH NOISE LEVELS MAY CAUSE PERMANENT HEARING LOSS. INDIVIDUALS VARY CONSIDERABLY TO NOISE-INDUCED HEARING LOSS BUT NEARLY EVERYONE WILL LOSE SOME HEARING IF EXPOSED TO SUFFICIENTLY INTENSE NOISE OVER TIME.

The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures:

 DURATION PER DAY (HOURS)
 8
 6
 4
 3
 2
 1
 1/2hr. or less

 SOUND LEVEL (dB)
 90
 93
 95
 97
 100
 103
 110



This symbol is intended to alert the user to the presence of non-insulated dangerous voltage within the product's enclosure.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the unit.



Apparatus shall not be exposed to dripping or splashing. Objects filled with liquids, such as vases, shall not be placed on the apparatus.

- 1. Read all safety and operating instructions before using this product.
- 2. All safety and operating instructions should be kept for future reference.
- 3. Read and understand all warnings listed on the operating instructions.
- 4. Follow all operating instructions to operate this product.
- 5. This product should not be used near water, i.e., bathtub, sink, swimming pool, wet basement, etc.
- 6. Only use dry cloth to clean this product.
- Do not block any ventilation openings, it should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
- 8. Do not install this product near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Do not break the ground pin of the power supply cord.
- 11. Only use attachments specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, exercise caution when moving.
- 13. Unplug this apparatus during lightning storms or when unused for a long period of time.
- Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation ports or any other openings.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE CHASSIS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

According to OSHA, any exposure in the above permissible limits could result in some hearing loss. Hearing protection must be worn when operating this amplification system in order to prevent permanent hearing loss.

- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way.
- WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- 17. When a mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- An apparatus with CLASS 1 construction shall be connected to a MAINS socket outlet with a protective grounding connection.

#### **FCC Statement**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions.

- 1. This device may not cause harmful interference and
- 2. This device must accept any interference received including interference that may cause undesired operation.

All trademarks and registered trademarks mentioned herein are recognized as the property of their respective holders.

#### California Prop 65 Warning

This product may contain a chemical[s] known to the state of California to cause cancer, birth defects, or other reproductive harm.

1103-9010





### TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS	1
WARRANTY	2
WELCOME AND CONGRATULATIONS	3
TAKING CARE OF YOUR BASS AMPLIFIER	4
FRONT PANEL LAYOUT	5
REAR PANEL LAYOUT	6
SUGGESTED TONE SETTINGS	7
PRODUCT SPECIFICATIONS	8
SIGNAL FLOW DIAGRAM	8

## THREE (3) YEAR LIMITED WARRANTY

Subject to the limitations set forth below, Acoustic® hereby represents and warrants that the components of this product shall be free from defects in workmanship and materials, including implied warranties of merchantability or fitness for a particular purpose, subject to normal use and service, for three (3) years to the original owner from the date of purchase.

Retailer and manufacturer shall not be liable for damages based upon inconvenience, loss of use of product, loss of time, interrupted operation or commercial loss or any other incidental or consequential damages, including but not limited to, lost profits, downtime, goodwill, damage to or replacement of equipment and property, and any costs of recovering, reprogramming, or reproducing any program or data stored in equipment that is used with Acoustic® products. This guarantee gives you specific legal rights. You may have other legal rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

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450 WATT BASS COMBO

### **WELCOME AND CONGRATULATIONS**

Congratulations on your purchase of the B450 Bass Amplifier. Since the founding of the Acoustic brand in California in 1967, many legendary musicians — including some of music's premier rock, jazz and funk players — have chosen Acoustic as their amplifier of choice.

The Acoustic design philosophy is "simplicity," allowing you to dial up great sound in an instant. The B450 continues the great Acoustic tradition of simply great sound — so turn it up and discover what players have known for decades: Acoustic, the Pro's Tone since 1967™.



### TAKING CARE OF YOUR BASS AMPLIFIER

#### **LOCATION**

• To avoid deformation, discoloration, or more serious damage, do not expose the unit to direct sunlight, high temperature sources, or excessive humidity.

#### **POWER SUPPLY**

- Turn the power switch off when the Amplifier is not in use.
- The Amplifier (main plug) should be unplugged from the AC outlet if the Amplifier will not be used for an extended period of time.
- Avoid plugging the Amplifier (main plug) into an AC outlet that is also powering highconsumption appliances such as electric heaters or televisions. Also avoid using multi plug adapters since these can reduce sound quality, cause operation errors, and result in possible damage.
- To avoid damage, turn off the Amplifier power switch and all related devices prior to connecting or disconnecting cables.

#### **HANDLING AND TRANSPORT**

- Never apply excessive force to any parts.
- Unplug cables by gripping plugs firmly. Do not pull on cables.
- Physical shocks caused by dropping or bumping the product can result in serious damage.

#### **CLEANING**

- Clean with a dry, soft cloth.
- A slightly damp cloth may be used to remove stubborn grime and dirt.
- Never use cleaners such as alcohol or thinner.

#### **ELECTRICAL INTERFERENCE**

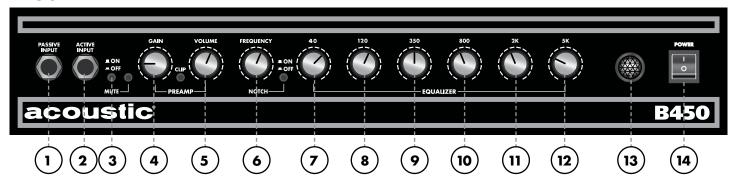
• The Amplifier contains electronic circuitry that may cause interference if placed too close to radio or television receivers. If this occurs, move the Amplifier further away from theaffected equipment.

#### **SERVICE AND MODIFICATION**

- There are no user serviceable parts in any units covered in this manual.
- Do not attempt to open the units or make any change to circuits or parts. This will void the warranty.

## **FRONT PANEL**

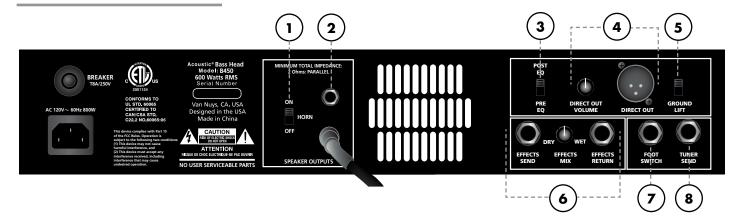
#### **B450**



- 1. 1/4" Passive input for bass guitars with passive pickups.
- 2. 1/4" Active input for bass guitars with active pickups. This input is -10 dB from the passive input.
- 3. Push mute button to activate mute circuit. The red light will come on.
- 4. Set gain control so clip indicator is not lit, otherwise distortion may occur.
- 5. Set volume level control to your desired level. If distortion occurs, reduce level.
- 6. Active -10 dB notch (at frequencies from 50Hz to 1kHz) set to approximately 250Hz with the frequency knob at 12 o'clock. Notch on/off switch is foot-switchable.
- 7. Active low frequency control set to boost (+12 dB) or cut (-12 dB) frequencies centered around 63 Hz.

- 8. Active low-mid frequency control set to boost (+12 dB) or cut (-12 dB) frequencies centered around 150 Hz.
- 9. Active low-mid control set to boost (+12 dB) or cut (-12 dB) frequencies centered around 350 Hz.
- Active high-mid control set to boost (+12 dB) or cut (-12 dB) frequencies centered around 800 Hz.
- 11. Active high frequency control set to boost (+12 dB) or cut (-12 dB) frequencies centered around 2 kHz.
- 12. Active high frequency control set to boost (+12 dB) or cut (-12 dB) frequencies set centered around 5 kHz.
- 13. When this jewel on/off light is lit, your amp is on and ready to play.
- 14. Power switch turns the amp on or off.

### **REAR PANEL**



- 1. Horn on/off switch. Push to activate or de-activate horn
- 2. Two-conductor, 1/4" Speaker Output Jacks, 2 Ohms minimum load, parallel. The B450 operates at 450 watts with the internal speakers, and a full 600 watts with an additional speaker (4 ohm minimum).
- Direct Out EQ Switch determines whether your direct out signal will include your EQ settings or not.
- 4. Direct Out with Volume Control sends a linelevel signal to a PA system or recording device.

- Use the Direct Out Volume knob to prevent clipping.
- 5. Ground Lift Switch lifts ground on pin 1 on XLR.
- 6. Unbalanced, 1/4" Effects Loop Send & Return jacks allow a signal to be sent to an external effects device or equalizer, then patched back in before the power amp section.
- 7. Footswitch Jack controls mute and notch filter.
- 8. Tuner Send feeds a dedicated signal to your tuner.

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## SUGGESTED TONE SETTINGS



The following setting suggestions will help you find your signature tone. They are designed to get you close to the sound you are looking for. You take it from there. The key to achieving your own personal sound is experimentation.



TRADITIONAL ELECTRIC BASS SETTING - In this setting, the amplifier will deliver a standard electric bass sound. Whether you are playing rock, country, blues or gospel, this setting will get you close. If you play with a pick and want less top end attack on the notes, roll off a bit of the high frequencies. If it's a deeper bottom you're looking for, add more low and low-midrange frequencies.



FUNK "SLAP" SOUND - This style of music needs a strong attack with lots of top end. Usually a hollowed out middle will produce the extra top end necessary for this style of music. If you are using a "thumb" style, add a bit more low end and extra volume – or less if you really hit it hard.



ALTERNATIVE STYLE - This setting is designed for an upper end punch and edge that will cut through most any sound. This style will work well with pick or fingers and will add a touch of distortion to the sound as well. Make sure your instrument's volume control is up all the way. Since you are adding volume, you need to be careful with the actual amount of E.Q. you use as it can also add distortion to the sound. As in all the settings above, it is strictly a matter of personal taste in achieving the sound you are looking for, so experiment.

## **PRODUCT SPECIFICATIONS**

**MODEL: B450** 

POWER: 450 Watts @ 4 Ohms, 600 Watts @2 Ohms

EQUALIZER: 6-Band w/ Notch

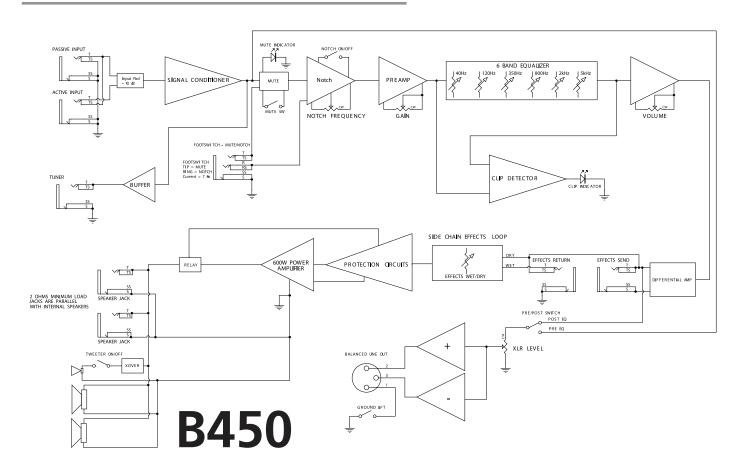
SPEAKERS: 10" (x2) Heavy Duty Drivers

HIGH FREQUENCY DRIVER: Tweeter with on/off switch

**DIMENSIONS:** 26.8"H x 19.8" W x 15.2"D

WEIGHT: 71 lbs.

## **SIGNAL FLOW DIAGRAM**



the pro's tone since 1967

New combo amplifiers, powerful heads, toneful and durable cabinets, and lush-sounding acoustic quitar amps — to see them all, visit us at acousticamplification.com.



Versatile acoustic stage amp

- 60 Watts
- Dual 8" coaxial speakers & tweeters
- 3-Band EQ with sweepable mid
- For instruments and microphones



Ideal portable rehearsal amp

- 20 Watts
- 12" custom speaker
- 4-Band EO
- Dual instrument inputs

**AG60** 

**B20** 



Huge bass tone for larger venues

- 200 Watts
- 15" heavy-duty speaker
- Hi-freq driver with on/off switch
- 6-Band EQ with notch filter
- Passive and active inputs



Powerful bass combo for any venue

- 100 Watts
- 15" heavy-duty speaker
- 4-Band EQ with notch filter
- Passive and active inputs

**B200** 

**B100** 



Massive output for stadium sound

- 600 Watts
- 6-Band EQ and notch filter
- Passive and active inputs
- Direct out with level control



The ultimate in tone, power and protection

- 8x10"
- 800 Watt power handling @ 4 Ohms
- 1/4" & Speakon inputs
- Heavy-duty casters

**B600H** 

**B810**