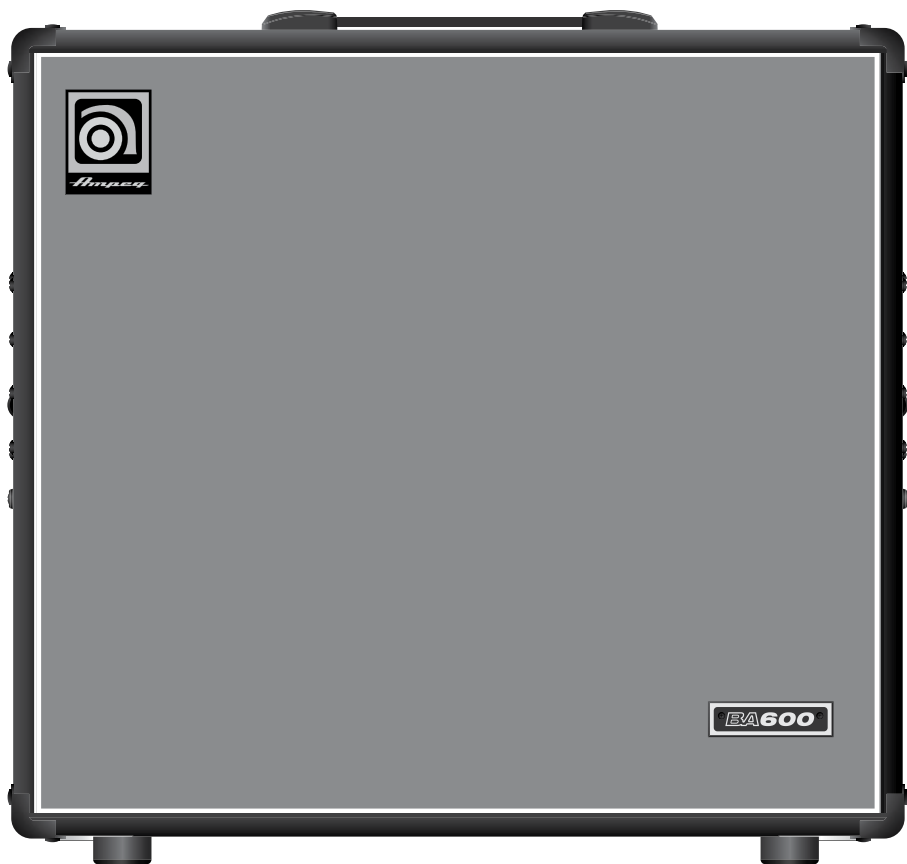


# ***Ampeg***

## **BA600** **Bass Guitar** **Combo Amplifier**



**Owner's Manual**



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### CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



### PRECAUCION

RIESGO DE CORRIENTAZO  
NO ABRA



PRECAUCION: PARA REDUCIR EL RIESGO DE INCENDIOS O DESCARGAS ELECTRICAS, NO PERMITA QUE ESTE APARATO QUEDE EXPUESTO A LA LLUVIA O LA HUMEDAD PARA DISMINUIR EL RIESGO DE CORRIENTAZO, NO ABRA LA CUBIERTA. NO HAY PIEZAS ADENTRO QUE EL USUARIO PUEDA REPARAR DELE TODO MANTENIMIENTO A LOS TECNICOS CALIFICADOS.



### ATTENTION

RISQUE D'ELECTROCUION  
NE PAS OUVRIR



ATTENTION: PROTEGEZ CET APPAREIL DE LA PLUIE ET DE L'HUMIDITE AFIN D'EVITER TOUT RISQUE D'INCENDIE OU D'ELECTROCUION. POUR REDUIRE D'ELECTROCUION NE PAS ENLEVER LE COUVERCLE. AUCUNE PIECE INTERIEURE N'EST REPARABLE PAR L'UTILISATEUR. POUR TOUTE REPARATION, S'ADRESSER A UN TECHNICIEN QUALIFIE.

## IMPORTANT SAFETY INSTRUCTIONS

- READ, FOLLOW, HEED, AND KEEP ALL INSTRUCTIONS AND WARNINGS.
- DO NOT OPERATE NEAR ANY HEAT SOURCE AND DO NOT BLOCK ANY VENTILATION OPENINGS ON THIS APPARATUS. FOR PROPER OPERATION, THIS UNIT REQUIRES 3" (75mm) OF WELL VENTILATED SPACE AROUND HEATSINKS AND OTHER AIR FLOW PROVISIONS IN THE CABINET.
- DO NOT USE THIS APPARATUS NEAR SPLASHING, FALLING, SPRAYING, OR STANDING LIQUIDS.
- CLEAN ONLY WITH LINT-FREE DRY CLOTH AND DO NOT USE CLEANING AGENTS.
- ONLY CONNECT POWER CORD TO A POLARIZED, SAFETY GROUNDED OUTLET WIRED TO CURRENT ELECTRICAL CODES AND COMPATIBLE WITH VOLTAGE, POWER, AND FREQUENCY REQUIREMENTS STATED ON THE REAR PANEL OF THE APPARATUS.
- WHERE THE MAINS PLUG OR AN APPLIANCE COUPLER IS USED AS THE DISCONNECT DEVICE, THE DISCONNECT DEVICE SHALL REMAIN READILY OPERABLE.
- PROTECT THE POWER CORD FROM DAMAGE DUE TO BEING WALKED ON, PINCHED, OR STRAINED.
- UNPLUG THE APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.
- ONLY USE ATTACHMENTS, ACCESSORIES, STANDS, OR BRACKETS SPECIFIED BY THE MANUFACTURER FOR SAFE OPERATION AND TO AVOID INJURY.
- WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK OR FIRE, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.
- SERVICE MUST BE PERFORMED BY QUALIFIED PERSONNEL.
- OUR AMPLIFIERS ARE CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS. CONTINUED EXPOSURE TO HIGH SOUND PRESSURE LEVELS CAN CAUSE PERMANENT HEARING IMPAIRMENT OR LOSS. USER CAUTION IS ADVISED AND EAR PROTECTION IS RECOMMENDED IF UNIT IS OPERATED AT HIGH VOLUME.
- WARNING: THIS UNIT REQUIRES A SAFETY GROUNDED OUTLET WIRED TO CURRENT ELECTRIC CODES HAVING THE LINE SUPPLY VOLTAGE, POWER, AND FREQUENCY IDENTIFIED ON THE REAR OF THE UNIT. THE OUTLET MUST REMAIN ACCESSIBLE TO DISCONNECT THE UNIT IF A FAULT SHOULD ARISE WHILE IN USE. THIS UNIT SHOULD BE UNPLUGGED WHEN NOT IN USE.

EXPLANATION OF GRAPHICAL SYMBOLS:

EXPLICACION DE SIMBOLOS GRAFICOS:

EXPLICATION DES SYMBOLES GRAPHIQUES:



"DANGEROUS VOLTAGE"

"VOLTAJE PELIGROSO"

"DANGER HAUTE TENSION"



"IT IS NECESSARY FOR THE USER TO REFER TO THE INSTRUCTION MANUAL"

"ES NECESARIO QUE EL USUARIO SE REFIERA AL MANUAL DE INSTRUCCIONES."

"REFERREZ-VOUS AU MANUAL D'UTILISATION"

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**CAUTION:** Changes or modifications to this device not expressly approved by LOUD Technologies Inc. could void the user's authority to operate the equipment under FCC rules.



**Correct disposal of this product:** This symbol indicates that this product should not be disposed of with your household waste, according to the WEEE directive (2002/96/EC) and your national law. This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, or your household waste disposal service.



## Introduction

**Congratulations!** You are now the proud owner of an Ampeg BA600 high-powered bass guitar combo amplifier. This no-compromise bass amplifier packs 600 watts of power, with a tube preamplifier, a Class-D power amplifier, and a switching power supply.

The BA600 comes in two versions: the BA600-115 has a single 15" speaker, and the BA600-210 has two 10" speakers. Both versions are otherwise identical, with a high-frequency horn, a variable compressor, an effects loop, and selectable pre/post XLR and 1/4" direct outputs, in a compact ported enclosure.

The switching power supply keeps the BA600's weight low, without sacrificing power output or our legendary sound quality.

You can switch between two channels: One is our vintage B-15 channel tube design, and the other is a more modern tone. A footswitch output allows easy switching between channels.

Like all Ampeg products, your BA600 amplifier is designed by musicians, and built using only the best of components. Each amplifier is tested to confirm that it meets our specifications, and we believe that this amplifier is the absolute best that it can be.

In order to get the most out of your new amplifier, please read this manual before you begin playing.

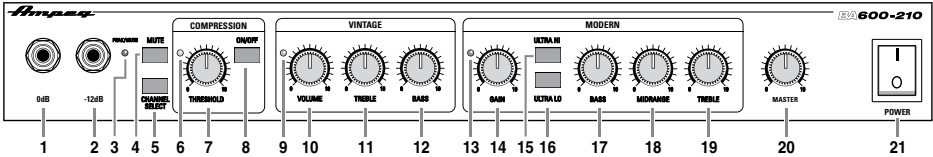
And **thank you** for choosing Ampeg.

Here are some of the features packed into your new BA600 Combo Amplifier:

- 12AU7A and 12AX7A vacuum tube preamp
- Two-channel operation:
  - Vintage: Tube preamp with two-band EQ and volume control
  - Modern: Solid-state preamp with three-band EQ, gain control, and Ultra Hi and Ultra Lo switches
- Compressor with variable threshold control and on/off switch
- Effects loop with separate send and return jacks
- Tuner output
- XLR and 1/4" TS direct outputs with level control, and pre/post EQ switch
- Switching power supply
- Class D solid-state power amplifier rated at 600 W into 4 ohms
- Single 15" bass guitar speaker (BA600-115) or two 10" bass guitar speakers (BA600-210)
- High-frequency horn with level control
- 14-ply Baltic birch cabinet
- Footswitch-selectable mute and channel select
- Included accessories: removable casters



## The Front Panel



- 1. 0 dB INPUT:** This input accepts a standard 1/4" instrument plug from your bass. Connect your guitar to the amplifier using a shielded instrument cable. This input is suited for use with instruments that have passive electronics.
- 2. -12 dB INPUT:** This input accepts a standard 1/4" instrument plug from high-output basses. This input is padded by 12 dB to compensate for higher output sources, and is suited for use with basses that have active electronics or high-output pickups. Use this input if you notice the peak LED [3] comes on regularly when using the 0 dB input.
- 3. PEAK/MUTE LED:** This red LED flashes when the input signal peaks, and lights continuously when Mute is active.
- 4. MUTE:** This mutes the signal input. Only the tuner output will have a signal from your guitar, so you can tune while muted. Mute can also be activated with a footswitch.
- 5. CHANNEL SELECT:** This selects between the vintage and modern preamplifiers. Channel selection can also be activated with a footswitch.

### COMPRESSOR SECTION

- 6. LED:** This lights when the signal level is above the compressor threshold and gain reduction is active.
- 7. THRESHOLD:** Adjusts the compressor threshold through a range of -6 dBV (fully counter-clockwise position) to -30 dB (fully clockwise position).

- 8. ON/OFF:** Activates/deactivates the compressor.

### VINTAGE SECTION

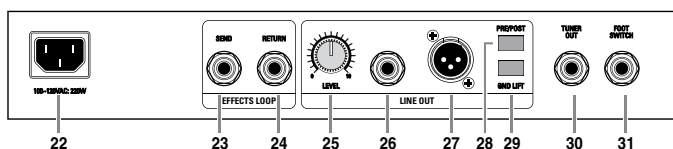
- 9. LED:** This lights when the vintage tube preamplifier is selected.
- 10. VOLUME:** This adjusts the overall level through the vintage preamplifier section.
- 11. TREBLE:** Provides an adjustment range of +12/-20 dB at 4 kHz.
- 12. BASS:** Provides an adjustment range of ±12 dB at 40 Hz.

### MODERN SECTION

- 13. LED:** This lights when the modern solid-state preamplifier is selected.
- 14. GAIN:** This varies the amount of signal driving the modern preamplifier.
- 15. ULTRA HI:** This switch activates a high frequency boost circuit, resulting in a +9 dB boost at 8 kHz.
- 16. ULTRA LO:** This switch activates a low frequency boost circuit, resulting in a +9 dB boost at 100 Hz.
- 17. BASS:** This provides an adjustment range of ±18 dB at 40 Hz.
- 18. MIDRANGE:** This provides an adjustment range of ±18 dB at 400 Hz.
- 19. TREBLE:** This provides an adjustment range of ±18 dB at 10 kHz.
- 20. MASTER:** Use this to control the overall system volume.
- 21. POWER SWITCH:** Use this illuminated switch to turn the overall system power on or off.



## The Rear Panel



### 22. IEC POWER INPUT CONNECTOR:

This is where you connect the supplied AC power cord. Connect it to an AC mains power supply that has the correct voltage and current suitable for your BA600.

**23. EFFECTS LOOP SEND JACK:** Use this 1/4" TS unbalanced output to send a line-level output to an external effects processor (for example). Use the loop return jack to feed the returned processed signals back into the BA600.

**24. EFFECTS LOOP RETURN JACK:** Use this 1/4" TS unbalanced input to return the processed line-level output of an external effects processor (for example). Note: Anything plugged in here will break the internal signal path of your guitar to the internal power amplifier.

**25. LINE OUT LEVEL CONTROL:** Use this to adjust the output level of the 1/4" TS and XLR line outputs.

**26. LINE OUT 1/4" TS JACK:** You can connect this unbalanced line-level output to an effects unit, or another power amplifier (for example). Usually, these would be nearby components, connected with short cable runs.

**27. LINE OUT XLR JACK:** Typically, you would connect this balanced output to the balanced input of an external mixer, or a recorder. In this way, you do not have to mic the BA600 in order to add it to the main mix, or to record. It can also connect to external power amplifiers, or powered loudspeakers. Balanced connections allow long cable runs to be used, as hum and noise pickup in the line is minimized.

**28. LINE OUT PRE/POST:** Using this switch, the line outputs can be either:

**Pre** (pre-EQ/compressor/preamp/effects-loop)

**Post** (post-EQ/compressor/preamp/effects-loop)

The line outputs are not affected by adjustments to the master level [20].

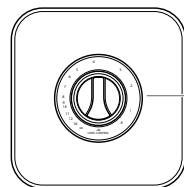
**29. GROUND LIFT:** Use this to lift the ground connection of the XLR output.

**30. TUNER OUTPUT JACK:** This 1/4" TS unbalanced output is pre-EQ, pre-compression, and pre-mute. It is typically used to feed an external tuner.

**31. FOOTSWITCH:** This 1/4" TRS jack is used for connecting a footswitch. This will allow you to mute the input, and/or select between the vintage or modern preamplifier sections. Any two-button on/off footswitch will work.

### 32. HORN LEVEL CONTROL:

Use this L-Pad control to adjust the level of the high-frequency horn compared to the woofer level. Adjust it to suit your preference.

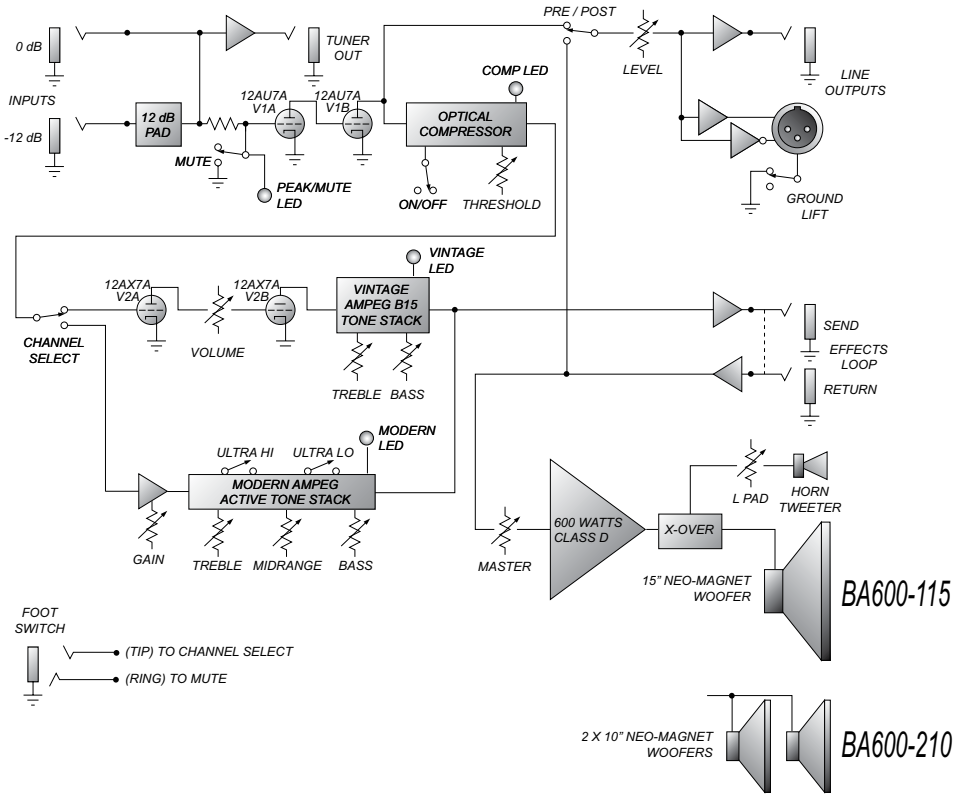


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The horn can be completely turned off by rotating this control fully counter-clockwise. (The woofer output level and its frequency range are not affected by this control.)



## System Block Diagram



(THE BA600-115 AND BA600-210 ARE IDENTICAL DESIGNS, EXCEPT FOR THE NUMBER AND SIZE OF THE WOOFERS)

## Service Information

If you are having a problem with your BA600, you can go to our website ([www.ampg.com](http://www.ampg.com)) and click on Support for service information, or call 1-800-898-3211 during business hours (7 am to 5 pm PST, Monday-Friday). If you are outside of the U.S., contact your local distributor for technical support and service.



## Important Information about Tubes and Tube Products:

### **The Nature Of Tubes — Why (And When) To Replace Them:**

Tubes are made up of a number of fragile mechanical components that are vacuum-sealed in a glass envelope or bubble. The tube's longevity is based on a number of factors which include how hard and often the amplifier is played, vibration from the speakers, road travel, repeated set up and tear down, etc.

If your amplifier squeals, makes noise, loses gain, starts to hum, lacks "sensitivity," or feels as if it is working against you, then a preamp tube may need to be replaced. Remember to use only high quality, low microphonic tubes in the preamplifier section.

### **Survival Tips For Tube Amplifiers:**

To prolong tube life, observe these tips and recommendations:

- After playing the amplifier, allow sufficient time for it to properly cool down prior to moving it. A properly cooled amplifier prolongs tube life due to the internal components being less susceptible to the damage caused by vibration.
- Allow the amplifier to warm up to room temperature before turning it on. The heat generated by the tube elements can crack a cold glass housing.
- Protect the amplifier from dust and moisture. If liquid gets into the amplifier proper, or if the amplifier is dropped or otherwise mechanically abused, have it checked out at an authorized service center before using it.
- Proper maintenance and cleaning in combination with routine checkups by your authorized service center will insure the best performance and longest life from your amplifier.

**CAUTION: Tube replacement should be performed only by qualified service personnel who are familiar with the dangers of hazardous voltages that are typically present in tube circuitry.**

### Declaration Of Conformity

<b>Manufacturer:</b>	LOUD Technologies Inc. 16220 Wood-Red Rd. NE Woodinville, WA 98072, USA
<b>Product Name:</b>	Ampeg BA600
<b>Product Type:</b>	Audio Amplifier
<b>Complies with Standards:</b>	
<b>LVD:</b>	92/31/EEC, 93/68/EEC, & 73/23/EWG
<b>Safety:</b>	EN60065
<b>EMC:</b>	EN55013, EN55020, EN55022, EN55103, EN61000-3-2, & EN61000-3-3

The official Declaration of Conformity for this product is kept on file at:  
LOUD Technologies Inc., 16220 Wood-Red Road NE, Woodinville, WA 98072 • Tel: 1-866-858-5832



## BA600 TECHNICAL SPECIFICATIONS

Output Power Rating		600 watts rms @ 4 ohms, 5% THD
Signal to Noise Ratio		70 dB (20 Hz–20 kHz, unweighted)
Gain	Vintage:	85 dB, tone controls flat
	Modern:	73 dB, tone controls flat
Compressor Threshold		–30 dBV to –6 dBV (0 dB input)
Tone Controls	Vintage:	Bass: ±12 dB @ 40 Hz Treble: +12 dB/–20 dB @ 4 kHz
	Modern:	Bass: ±18 dB @ 40 Hz Midrange: ±18 dB @ 400 Hz Treble: ±18 dB @ 10 kHz Ultra Lo: +9 dB @ 100 Hz Ultra Hi: +9 dB @ 8 kHz
Speaker Specs	BA600-210:	2 x 10", 8 ohm, 300 W, neodymium magnet high-frequency horn with level control
	BA600-115:	1 x 15", 4 ohm, 600 W, neodymium magnet high-frequency horn with level control
Preamp Tubes		12AU7A and 12AX7A
Power Requirements		100–120 VAC, 50–60 Hz, 720 VA 220–240 VAC, 50–60 Hz, 720 VA
Size (H x W x D)		20.75 in/52.7 cm x 22.8 in/57.8 cm x 15.5 in/39.4 cm
Weight		52.9 lb/24.0 kg

**The BA600 is covered with a durable fabric-backed vinyl material. Clean with a dry lint-free cloth. Never spray cleaning agents onto the cabinet. Avoid abrasive cleansers which would damage the finish.**

*Ampeg continually develops new products, as well as improves existing ones. For this reason, the specifications and information in this manual are subject to change without notice.*

*"Ampeg" is a registered trademark of LOUD Technologies Inc. All other brand names mentioned are trademarks or registered trademarks of their respective holders and are hereby acknowledged.*

[www.ameg.com](http://www.ameg.com)

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