# Ampeg BA-115T BASS AMPLIFIER

### **TECHNICAL SPECIFICATIONS:**

OUTPUT POWER RATING	100 Watts at 4 ohms
MAX INPUT LEVELS	0dB Input: 1.75V RMS
	-15dB Input: 9.75V RMS
	CD Input: 5V RMS
LINE OUT LEVEL	120mV RMS
HEADPHONE OUT LEVEL	3.75V RMS
GAIN	39dB
PREAMP TUBE TYPE	(1) 12AU7
STYLE	1 = -25dB @500Hz
	2 = -12dB @500Hz
	3 = flat
	4 = +5dB @2kHz and above
	5 = -6dB @50Hz and below
TREBLE	40dB range @10kHz
ULTRA MID	30dB range @500Hz
BASS	40dB range @50Hz
SPEAKER SPECS	15", 250 w, 4 ohm, 2.5" voice coil dia., 56 oz. magnet;
	Piezo tweeter
POWER REQUIREMENTS	120VAC, 60Hz, 70VA
	100/115VAC, 50/60Hz, 70VA
	230VAC, 50/60Hz, 70VA
SIZE AND WEIGHT	21" W x 21" H x 15-1/2" D; 62 lbs.

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.

#### Declaration of Conformity

Manufacturer's Name:	SLM Electronics
Corporate Headquarters:	1901 Congressional Drive, St. Louis, Missouri 63146
Primary Production Facility:	700 Hwy 202 W, Yellville, Arkansas, 72687

Product Type: Audio Amplifier

#### Products meet the regulations for compliance marking under:

ETL standards UL6500, UL60065, or UL813 CSA standards E60065 or C22.2 No.1-M90 CE safety standard EN60065 CE EMC standards EN55103 or EN55013 and EN61000 FCC standards 47CFR 15.107 and 15.109 Class A C-tick designation Level 2, ABN #56748810738, ARBN# N222 KETI standard K60065 (limited model approval)

Compliance Support Contact: SLM Electronics, Attn: R&D Compliance Engineer 1901 Congressional Drive, St Louis, Missouri, 63146 • Tel.: 314-569-0141, Fax: 314-569-0175



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**BA-115T** 



# **BASS AMPLIFIER**

User's Guide

# O Hompeg BA-115T BASS AMPLIFIER

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# Important Information About Tubes and Tube Products (continued):

#### 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, the preamp tube may need to be replaced. Remember to use only high quality, low mocrophonic tubes.

If you're on the road a lot, we recommend that you carry replacement tubes.

#### 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.

# O - Hompen BA-115T BASS AMPLIFIER

# Important Information About Tubes and Tube Products:

#### A Brief History Of The Tube:

In 1883, Edison discovered that electrons would flow from a suspended filament when enclosed in an evacuated lamp. Years later, in 1905, Fleming expanded on Edison's discovery and created the "Fleming Valve". Then, in 1907, Dr. Lee de Forest added a third component – the grid – to the "Fleming's Valve" and the vacuum tube was a fact of life. The door to electronic amplification was now open.

During World War II, data gleaned from their intensive research on the detectors used in radar systems led Bell Telephone Laboratories to the invention of the transistor. This reliable little device gained quick support as the new component for amplification. The death of the vacuum tube seemed imminent as designers, scientists, and engineers reveled in the idea of replacing large, fragile glass tubes with these small, solid-state devices.

However, there were (and still are) many serious listeners who realized that the sound produced by a "transistor" amplifier is significantly different from that produced by a tube amplifier with identical design specifications. They considered the sound produced by these new solid-state devices to be hard, brittle, and lifeless. It was determined that solid-state devices produced a less musical set of harmonics than tubes. When pushed past their limits, they tend to mute the tone and emphasize the distortion.

Tubes, on the other hand, produce a more musical set of harmonics, the intensity of which can be controlled by the player. This characteristic adds warmth and definition to the sound which has become the hallmark of tube amplifiers. When tubes are driven into clipping, the harmonic overtones can be both sweet and pleasing or intense and penetrating, depending on the musician's musical taste and playing technique.

Over the years, application engineers have designed a number of outstanding solid-state amplifiers that sound very, very good. Some use special circuitry which enables them to simulate the distortion characteristics of a tube amplifier. However, the tube amplifier, still held in the highest esteem by many musicians, offers a classic "vintage" sound in a contemporary market.

#### Preamp Tube Types And Usage:

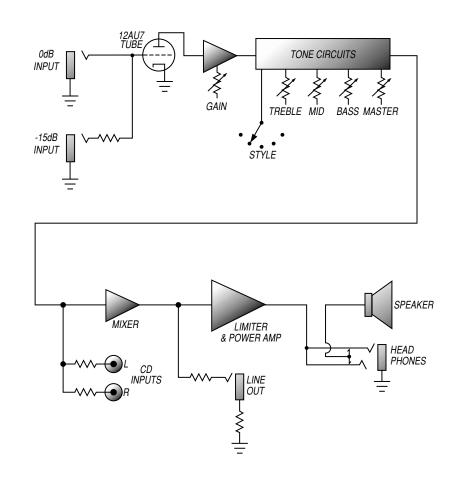
The tubes used in the preamplifier (12AX7, 12AU7, 12AT7, etc.) amplify the signal from your instrument and shape the sound. They are inherently microphonic (mechanically pick up and transmit external noises). Since these tubes are used in the critical first stages of a tube amplifier's circuitry, it is very important to use high-quality, low noise/low microphonic tubes for this application. Although tubes of this quality may be difficult to find and typically cost more than "off-the-shelf" tubes, the improvement in performance is worth the investment.



### Introduction:

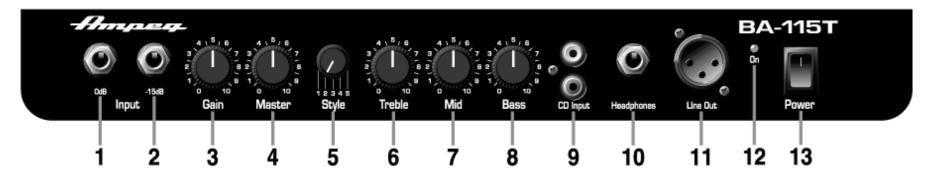
Thank you for selecting the Ampeg BA-115T Bass Amplifier. The BA-115T employs a tube-driven preamp for optimum sound and represents Ampeg's quest to provide you the finest instrument amplification systems available. In order to get the most out of your new amplifier, please read this user's guide prior to its use.

## System Block Diagram:





### THE TOP PANEL:



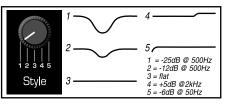
**1. 0dB INPUT:** Connect your "passive" bass guitar here using a shielded instrument cable. This input is not padded and is best suited for basses without active electronics or "hot" pickups.

**2. -15dB INPUT:** Connect your "active" bass here using a shielded instrument cable. This input is padded 15dB and is best suited for basses with active electronics and/or "hot" pickups.

**3. GAIN:** Use this control in conjunction with your instrument's volume controls to adjust the level of the signal sent to the BA-115T's tube-driven preamp.

**4. MASTER:** Use this control to adjust the overall listening level of the amplifier. This control is also used to adjust the signal level at the Line Out jack (#11).

**5. STYLE:** This five-position switch is used to control the tone of the amplifier. Experiment with the Style and other eq controls (#6,7,8) for the results which suit you best. The settings of the Style control are as follows:



**6. TREBLE:** This control is used in conjunction with the style control to adjust the high frequency level of the amplifier.

**7. MID:** This control is used in conjunction with the style control to adjust the midrange level of the amplifier.

**8. BASS:** This control is used in conjunction with the style control to adjust the low frequency level of the amplifier.

**9. CD INPUT:** These jacks (RCA type) are used to connect the line level (or head-phones) output of a CD player or tape deck. The inputs to these jacks are summed into a mono signal which is fed into the BA-115T just prior to its power amplifier. Use the volume control on the CD or tape player to control the output level.

**10. HEADPHONES:** The internal speaker is disconnected when the headphones jack is used.

**11. LINE OUT:** This jack supplies a post-eq, balanced line level signal for connecting to a house sound board, recording unit or external amplifier. The amplitude of this signal is adjusted by the Master control (#4).

**12. ON LED:** This LED is illuminated when the amplifier is plugged in and turned on.

**13. POWER:** This switch is used to turn the amplifier on or off.

AC LINE CORD: (rear panel, not shown) This grounded power cord is to plugged into a grounded power outlet, wired to current electric codes and compatible with voltage, power and frequency requirements stated on the rear panel. Do not attempt to defeat the safety ground connection.