

# E300 Bass Amplifier

Owner's Manual

# EDEN



THE STANDARD IN BASS SOUND.

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Congratulations on your purchase of the Eden E300 Bass Instrument Amplifier. You have purchased what we feel is one of the finest bass amplifiers in the world. The E300 produces 300 watts of pure power into 4 ohms (175 watts into 8 ohms) with 3db of dynamic headroom. The preamp section, with it's enhance control, powerful tone control system, and gentle auto-compression circuit allows you to achieve a wide array of sounds. This compact, rack mountable package houses modular circuits made with superior components and designed for years of trouble-free service.

Thank you for choosing Eden. Please take the time to review this manual and to send in your warranty registration card.

# CAUTION!

Your ears are your most important piece of equipment. Unfortunately, they cannot be replaced as easily as your other gear. Please take the following warning seriously.

This product, when used in combination with a sound source and loudspeakers or headphones, may be capable of producing sound levels that could cause permanent hearing loss. DO NOT operate at high volume levels or at a level that is uncomfortable. DO NOT place your ears next to the speakers. If you experience any discomfort or ringing in the ears or suspect hearing loss, you should consult a health care professional.

Please complete for your records:	
Date of Purchase:	
Model:	
Serial Number:	
Dealer:	

# FRONT PANEL FEATURES

Input Jack – Designed to accept a standard ¼ inch mono phone plug. For best results, use a high-quality, shielded cable to connect your instrument to the amplifier.

Gain Control – Regulates the first gain stage of the preamplifier and controls the amount of signal available to the system.

Set Level Indicator – Lights to indicate that the signal has crossed the threshold of the compression circuit and that compression is taking place.

Enhance Control – Called the "Magic Knob" by some, this complex control simultaneously boosts the very low-bass, upper middle, and high frequencies while putting a dip in the lower middle frequencies. It is flat when set to its minimum level.

#### Tone Control Section

Bass – This traditional shelving tone control provides 15 db of boost or cut at 30Hz. The control is flat at the 12:00 position.

Mid – Provides 15dB of boost or cut at 800Hz. The control is flat at the 12:00 position.

**Treble** – This is a traditional shelving-type tone control. It provides 15 db of boost or cut. The knee of the filter is at approximately 2 kHz. The control is flat at the 12:00 position.

Master Level Control – Adjusts overall system output.

Line Out – This fully balanced XLR output allows you to send a post-EQ/pre-master signal to a recording or sound reinforcement mixing console. This output is designed to allow use with phantom powered systems.

Headphone Jack – Accepts standard ¼ stereo or mono headphone plugs.

On/Off Switch - This switch turns the system power on or off. The switch illuminates to indicate the presence of current prior to the fuse.

### **REAR PANEL FEATURES**

Combination Power Cord Jack and Fuse Holder – The removable power cord is attached here. Pulling the holder out of the top of the power inlet accesses the fuse carrier. Your unit was shipped with a spare fuse inserted in the fuse carrier. USE ONLY THE SAME SIZE AND TYPE FOR REPLACMENT. The standard fuse for U.S. use is (5) Amp slow blow or time delay. Do not use fast blow fuses.

Amp Out – This ¼ inch jack accept the speaker connection cable. The total speaker system impedance should not exceed 4 ohms.

### **OPERATING INSTRUCTIONS**

#### MECHANICAL AND THERMAL

ISSUES – Your amplifier should always be placed for operation away from sources of moisture or heat. Care should be taken not to obstruct the ventilation holes on the top and sides of the unit. In the event of thermal shutdown, you should eliminate the cause of the thermal problem (poor ventilation, speaker loads lower than 4 ohms) immediately.

ELECTRICAL CONNECTION - The E300 requires at least 10 Amps of correctly wired alternating current for proper operations.

CONNECTIONS – All line connections (everything but the speakers) should be made with high-quality shielded cables. The use of speaker cables for line connections will result in excess noise. Speaker connections should be made with high-quality 16 gauge or larger unshielded speaker cables. We recommend 10 or 12 gauge cables. The use of shielded line or instrument cables for speaker connections can damage your amplifier. The speaker cable should be as short as possible.

TURN ON – We recommend turning your system on with the master volume control

set to its minimum position. This will prevent any unexpected signal from being sent to your speakers.

SETTING YOUR LEVEL - Effective use of the gain control will ensure the best signal-to-noise ratio. The Set Level indicator is provided to assist you in setting your level correctly. You should begin the process with your master control set to a low, or off position, and your tone controls set flat. While playing your instrument normally, bring the gain control up until the Set Level light winks on the peaks that result from your strongest normal attack. This will generally show up most on your lower strings. If the action of the compressor seems premature or excessive for your taste, you can lower the gain control a bit to delay the onset of compression. Having set your initial level. you are now ready to proceed with setting up your tone controls. Since tone adjustments have an impact on the overall preamp gain level, you may well need to return to the gain control and repeat this process once you have completed your EQ adjustments.

#### SETTING UP YOUR EQ

Begin with all tone controls set flat and with the Enhance Control set to its minimum position. After setting your Gain level, bring the Master control up to a moderate level. Slowly bring the Enhance control up, playing as you make each adjustment. Many players find that there is a small amount of boost on the Enhance control that will get them very close to the sound they are after. If it doesn't, return it to its minimum or 0 position.

Overall bass and treble adjustments can be made with the Bass and Treble controls. These controls cover a fairly broad range of the frequency spectrum. Many players use these controls to compensate for acoustic situations, relying on the Enhance and Mid controls to achieve their basic sound.

The frequencies that you will need to boost or cut are dependent upon your instrument, playing style, speaker cabinets, and venue. Extreme settings of boost or cut are unlikely to be necessary or helpful.

We are frequently asked to provide suggested settings for various styles of play. We have discovered though, that most of our endorsers tend to set their EQ generally flat, using varying amounts of the Enhance Control. We encourage you to experiment with different settings to obtain the sound you desire.

Other EQ Considerations – If you find yourself running out of amplifier headroom, cut a little in the lower frequencies, which require the most power from your amp.

Two areas are a frequent source of frustration for bassists trying to achieve their sound: frequency masking and frequency enhancement. Frequency masking occurs when other instruments (particularly cymbals and electric guitars) obscure the important upper harmonic content of your sound. As a result, you find that the EQ settings that were so perfect at home lack definition in a live setting. On the other hand, the stage settings that worked so well sound harsh and/or thin in the absence of other instruments. Frequency enhancement results from cabinet placement and room acoustics. A cabinet placed on the floor will have the lower frequencies boosted by about 3 db. Placement against a wall adds another 3 db. A corner adds 3 db more. Consequently you may find a surprising boominess to your sound. Certain qualities in the room itself can also enhance the lower frequencies, further contributing to this problem. Frequently this effect is more noticeable in the audience than it is on stage. Compensating for it may result in a stage sound that may seem a little thin. However the sound is actually quite full out in front.

# OTHER CONSIDERATIONS

Suggested Speaker Systems – Your speaker system should be chosen to accommodate the characteristics of your amplifier and your predominant application. If you will only be using one cabinet, a 4 Ohm model will draw the most current from your amplifier. If you will generally be using two cabinets, they should be 8 Ohm models so their combined impedance will be 4 ohms. If you are uncertain about your future needs always go with the 8 Ohm speaker option so

that you can add another speaker later if you need to.

Using the E300 without Speakers
This amplifier is designed to be used safely
with headphones only, without the loud
speaker plugged in. No harm will result from
using the amplifier in this fashion. This
allows the use of the unit for practice with
headphones and as a preamplifier with other
amplifiers.

#### **MAINTENANCE**

Your Eden amplifier has been designed to require minimal routine maintenance.

Attention to the following areas will ensure optimum performance of your amplifier.

Contact Point Cleaning – One of the weakest links in most bass amplification systems are the solder-less connection points where instruments, speaker cabinets, effects, and other devices are connected to the amplifier. (The most vulnerable of these types of connection is the jack on your instrument). In addition to contamination from airborne pollutants, these points are frequently assaulted by connectors that have picked up debris from dirty stages, cases, etc. These points should be cleaned regularly with a cotton swab soaked in denatured alcohol or a commercially available de-oxidant. Frequent cleaning of

the plugs on your cords is also recommended.

**Dust Removal** – You should periodically inspect the ventilation openings on the top and sides of the unit to ensure that they have not become blocked by accumulated dust. Vacuum the openings to remove any dust buildup.

Service – In the event of amplifier malfunction or questions about your unit's operating features, you should contact your Dealer, the factory, or one of our authorized service centers for assistance.

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## WHAT IS THE MEANING OF THIS?

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk to persons.



#### WHAT IS THE MEANING OF THIS?

The exclarnation point, within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature.

# IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install 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.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



# Portable Cart Warning

- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING-To reduce the risk of fire or electric shock ,do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that object filled.

WARNING-The mains plug/appliance coupleris used as disconnect device, the disconnect device shall remain redly operable.

WARNING-The apparatus should be connected to a manis socket outlet with a protective earthing connection.