



# Congratulations!

Your purchase of a new Gallien-Krueger Legacy Series amplifier is surely the result of much careful consideration on your part. For our part, we at Gallien-Krueger are pleased that you chose us, and are determined that you will be a satisfied customer. In choosing a Legacy Series amplifier, you now own an amplifier with many unique features which will allow you to create your own distinct sound.

Your amplifier should have come with the following items, please check the contents of the box to ensure that you have everything.

# Included with your Legacy Series Amplifier:

Power cord	1
Owner's manual	1
One button foot switch	1
Footswitch cable	1

If your Legacy Series amplifier did not come with all the items listed, or if you encounter problems while setting up your new equipment, please contact your local dealer or GK as soon as possible.

# We wish you a lifetime of good playing and remember to always have fun!

For product registration please go to **www.gallien-krueger.com.** 



# **GK Philosophy**

I have never seen the point in doing things the way others have done them. I also have not been very interested in following the latest fad. I'm a Stanford educated engineer who worked my way through school as a musician. Like all musicians, I have lugged amplifiers up stairways and into car trunks, always wondering why these things had to be so heavy, bulky, and hard to handle.

As the principal innovator at GK, our products reflect my attitudes and life experiences. I don't model my designs after other manufacturers' products. Instead, I believe new and old problems are best solved with new solutions. Having taken our own path, GK products enjoy a unique, unmatched sound, allowing you every opportunity to make an original statement.

Having supported my products for over fifty years, I have learned from the story they tell. Gallien-Krueger is a reflection of that story, and has a commitment to support that legacy. Just as the products I created over fifty years ago are still telling their story, the products we create today will be talking to us tomorrow.

We'll be listening,

Robert Gallien
Founder and President

## **Table Of Contents**

Safety Instructions	4
Safety Information	5
Quick Start	6
Front Panel Features	7
Rear Panel Features	8
Installation and Maintenance	9
Specifications	10

Please read the Safety Information section on page 4 and installation instructions on page 9 before continuing.

Gallien-Krueger 2234 Industrial Drive Stockton, CA 95206 phone: 209.234.7300 fax: 209.234.8420

email: info@gallien-krueger.com internet: www.gallien-krueger.com

# Warning!

This amplifier is capable of producing high sound pressure levels. Continued exposure to high SPL's can cause damage to your hearing. Always set the volume at a safe listening level or use hearing protection if the unit is operated at higher levels.



<sup>\*</sup>All Features and specifications are subject to change without notice

# Read First!

# Important Safety Instructions!

# CAUTION

## RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: To prevent electric Shock, do not remove the grounding plug on the power cord, or use any plug or extension cord that does not have a grounding plug provided. Make certain that the AC outlet is properly grounded. Do not use an adapter plug with this product



The Lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of non-insulated "dangerous voltage" within the apparatus's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

#### 1. Read these instructions

All the safety and operating instructions should be read before the apparatus is operated.

The safety and operating instructions should be kept for future reference.

All warnings on the apparatus and in the operating instructions should be adhered to 4. Follow all instructions

All operating and use instructions should be followed

#### 5. Water and moisture

Do not use this apparatus near water. For example, near a bathtub, wash bowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.

Clean only with dry cloth. Unplug this apparatus from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.

#### 7. Ventilation

Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Slots and openings in the cabinet are provided for ventilation, and to ensure reliable operation of the apparatus, and to prevent it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed,

sofa, rug, or other similar surfaces. This apparatus should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided.

#### Heat sources

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

#### Grounding or polarization

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. Power-cord protection

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. Attachments

Only use attachments/accessories specified by the manufacturer.

#### 12. Place Carefully

Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when mo moving the cart/apparatus combination to avoid injury from tip-over.



#### 13. Nonuse periods

Unplug this apparatus during lighting storms or when unused for long periods of time.

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. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards.

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For product intended to operate from battery power, or other sources, refer to the operating instructions

#### 16. Overloading

Do not overload wall outlets, extension cords, or integral convenience receptacles, as this can result in electrical shock.

#### Object and liquid entry

Never push objects of any kind into this apparatus through openings, as they may touch dangerous voltage points or short-out parts that could result in fire or electrical shock. Never spill liquid of any kind on the apparatus.

### 18. Damage requiring service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. The power-supply cord or the plug has been damaged; or
- b. Objects have fallen into, or liquid has been spilled into, the product; or
- c. The product has been exposed to rain or
- d. The product does not operate normally when following the operating instructions. Adjust only those controls that are covered by the operating instructions, as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation; or
- e. The product has been dropped or damaged in any way; or
- f. The product exhibits a distinct change in performance - this indicates a need for service.

#### 19. Replacement parts

When replacement parts are needed, be sure the service technician has used replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards. 20. Safety check

Upon completion of any service or repairs to this apparatus, ask the service technician to perform safety checks to determine that the apparatus is in proper operating condition.

The apparatus is not to be mounted to a ceiling or wall in any way.

# **EX GALLIEN-KRUEGER**

GK160-0000-D

# **Safety Information**

Please read all enclosed safety precautions before connecting or operating this product.

**Verify Line Voltage and Amperage:** Your amplifier has been factory configured to use with the line voltage 100-240Vac 50/60 Hz.

100-120 Volt/60Hz 15A circuit for USA and Canada.

220-240 Volt/(50/60Hz) 10A circuit for UK and Australia.

220-240 Volt/(50/60Hz) 10A circuit for Europe.

100-120 Volt/50Hz 15A circuit for Japan. 220-240 Volt/50Hz 10A circuit for Korea. Proper AC circuit for all other countries.

Connecting the amplifier to a line with specifications other than indicated above can create safety and fire hazard, and may damage the amplifier. If you have any questions about the voltage requirements for your specific model, or about the line voltage in your area, contact your dealer before plugging the unit into a wall outlet.

Verify AC Circuit Capacity Before Use: The high power output of your amplifier may require heavy current draw under full-load conditions. To insure proper performance and avoid potential safety hazards, we recommend connection to line circuits with amperage specified above". Connecting to the same circuit used by other heavy power devices, such as high wattage lights, may cause circuit breakers to trip. It is always a good idea to avoid using any audio equipment on the same AC circuit as equipment with motors, such as air conditioners or refrigerators. This will lessen the possibility of power variation and electrical start-up noise affecting your sound.

# Please refer to page 9 for more instructions concerning installation.

AC Power Cord: To avoid safety hazards, use only the power cord supplied with your unit. If a replacement cord is needed, make certain to use a standard IEC compliant cord. Damaged power cords should be replaced immediately. When setting up, make certain that the AC plug is easily

accessible. If you do not intend to use the amplifier for a considerable length of time, disconnect the plug from the AC mains socket. Do not use an extension cord.

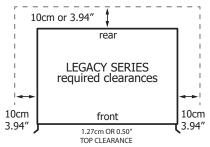
Earth Grounding Connection: To prevent electric shock, do not remove the grounding plug on the power cord, or use any plug or extension cord that does not have a grounding plug provided. Make certain that the AC outlet is properly grounded as well. Do not use an adapter plug with this product.

# Do Not Open the Amplifier Enclosure:

There are no user serviceable parts inside this product. Opening the amplifier enclosure may present a shock hazard. Modification to the product will void your warranty. If liquid enters the unit, or any metal object such as a paper clip accidentally falls inside the enclosure, disconnect the unit from the AC power source immediately and consult an authorized service station.

**Setup:** To insure proper operation and to avoid potential safety hazards, place the unit on a firm, level surface. Do not plug or unplug the instrument or speaker cable while the amplifier power is on.

Heat & Ventilation: Make sure there is space provided for proper ventilation. Avoid using in extremely hot or cold locations and areas that are exposed to direct sunlight or near heating equipment. Avoid using in moist or high humidity areas.



NEVER BLOCK THE FAN VENT HOLES ON THE SIDES OF THE UNIT!

**USA:** Indoor use only.

Norway: Apparatet må tilkoples jordet stikkontakt

**Sweden:** Apparaten skall anslutas till jordat uttag **Finland:** Laite on liitettävä suojakoskettimilla varus

Finland: Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan

**Denmark:** "Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord." **China:** 在海拔高度 2000 米或更低和非热带位置仅用



# Front Panel Features

- 1 Input: 1/4" analog input to receive 13 OC: Indicates unit is experiencing a fault instrument signal.
- 2 Trim: Attenuates the level of signal 14 Clip: Flashes when incoming signal coming in from the 1/4" input. \*The default position is full clockwise. Lower settings or the Trim knob indicator flashes red more than occasionally as the instrument is played aggressively.
- 3 Drive: Adjusts the amount of saturation when Overdrive is active.
- 4 Level: Adjusts the output level when the Overdrive circuit is active.
- 5 Bass: Boosts or cuts bass frequencies (18 Contour: Reduces mid frequencies and centered at 60Hz.
- low-mid 6 Lo-Mid: Boosts frequencies centered at 250Hz.
- **7 Hi-Mid:** Boosts or cuts hi-mid frequencies centered at 1kHz.
- 8 Treble: Boosts or cuts treble frequencies centered at 7 kHz.
- **9 Master:** Sets the output volume of the speaker and headphone outputs.
- 10 Stby: Indicates unit is attached to mains power.
- 11 Pwr: Illuminated when unit is powered on.
- 12 OT: Indicates unit is experiencing a fault related to over temperature.

- related to over current draw.
- exceeds the input circuit's capability.
- should only be used if clipping is audible **(5)** Overdrive: Engages the Overdrive curcuit when placed in the up position. LED indicator is lit when Overdrive is active.
  - **16** Edge: Adjusts the high freq. response of the Overdrive circuit.
  - **17** Bump: Applies low frequency enhancement when placed in the up position.
  - boosts low and high frequencies when placed in the up position.
  - 19 Presence: Applies high frequency enhancement when placed in the up position.
  - 20 Mute: Mutes main speaker and all other outputs except the tuner output. LED indicator is lit when Mute is enabled.



# Rear Panel Features

- 1) AC Input: The detachable power cord 1) Send: 1/4" unbalanced output from the attaches here.
- 2 Power Switch: Turns the unit on and off. power.
- 3 Pin 1 Lift: Lifts or grounds pin 1 of the direct output.
- 4 Direct Out: Balanced XLR output for direct connection to P.A. or recording console.
- **5** Source: Selects the signal sent to the direct output to be before or after the EO controls.
- **6 Phones**: 3.5mm output for headphones.
- Aux In: 3.5mm input for external playback device such as an MP3 player.
- 8 Tuner: 1/4" unbalanced output for a tuner. This output is active at all times, even when Mute is selected on the front panel.
- 9 Foot Sw: 1/4" unbalanced input for RF-I footswitch. Allows the Overdrive function to be activated remotely. \*Overdrive switch on the front panel must be in the up position for the footswitch to function.
- 10 Return: 1/4" unbalanced input for outboard effects devices.

- preamp for connecting outboard effects devices.
- \*This does not disconnect the mains 12 Cabinet Impedance: Selects the attached speaker load (500 and 800 watt models only) \*see page 8 for recommended speaker loads.
  - 13 Speaker Outputs: Twist-lock connectors for connecting speaker cabinets.

**Quick Start:** These directions will take you through the basics and give you a good start for setting up your sound.

Connect your speakers: Connect your speaker cabinets to the amplifier outputs marked SPEAKER using a standard two conductor speakon cable or Gallien-Krueger four conductor speaker cable. Using the Cabinet Impedance Switch, select the speaker load that matches the total impedance of the attached speaker cabinets as outlined below.

# Recommended speaker loads: 500W and 800W models:

(2 ohm total minimum load)
One 4 ohm cabinet
One 8 ohm cabinet
One 4 and one 8 ohm cabinet in parallel
(2.7 ohms)
Two 8 ohm cabinets in parallel (4 ohms)

Two 4 ohm cabinets in parallel (2 ohms)

#### 1200 watt models:

(4 ohm min. load per output)
One 4 ohm cabinet
One 8 ohm cabinet
One 4 and one 8 ohm cabinet
(one cab per output)
Two 8 ohm cabinets
Two 4 ohm cabinets (one cab per output)

\*Higher ohm loads and no load are acceptable for all 500, 800 and 1200 watt models

Initial front panel control settings: Trim knob to the full clockwise position. Drive, Level and Master to full counter clockwise position. All EQ and Edge controls to the 12 o'clock position. Overdrive, Bump, Contour, Presence and Mute switches to the down position.

Connect your Instrument: Using a shielded 1/4" instrument cable, connect your bass to the Input Jack and press the Power Switch to the on (up) position. If you have active tone controls on your bass, turn all of the controls to the middle or "flat" position

and turn the volume all the way up. If you have conventional, passive tone controls, turn all tone and volume controls all the way up.

# Level and Master Volume settings:

Place the Mute in the up position.

Turn the Master up as you play until the desired volume is reached. If distortion is audible or the Clip Indicator flashes red more than occasionally, turn the Trim counter clockwise until there is no distortion and the clip indicator activates occasionally as the instrument is played aggressively. You can now experiment with the EQ, Bump, Contour, and Presence settings.

# **Drive Settings:**

Place the Overdrive switch to the up position. Turn the Drive to the 12 o'clock position. Turn the Level up as you play to the desired volume. You can now experiment with various Drive and Edge settings. \*As Drive is adjusted it may be necessary to adjust the Level knob to maintain consistent volume level.

### Installation

To insure proper operation and to avoid potential safety hazards, place the unit on a firm, level surface.

Ventilation: Make certain that proper space is provided for ventilation. Never block the fan vent holes located on the sides of the amplifier (see the diagram on pg. 5). If the amplifier will be installed in a rack or other enclosed area, make sure that there is sufficient air movement within the enclosure to allow proper cooling. Consult vour dealer for more information. Avoid installation in extremely hot or cold locations, and areas that are exposed to direct sunlight, or near heating equipment. Avoid moist or humid locations. Remember, power amplifiers generate heat. The ventilation slots on the enclosure are specifically designed to remove this heat. Blocking or placing other electronic equipment near the heat dissipation system may possibly affect the long term reliability of both your amplifier and the other equipment.

Moving the Unit: Before moving the unit, be certain to disconnect any cords connected to other components, and make sure that you disconnect the unit from the AC outlet.

Cleaning: When the unit gets dirty, clean only with a dry cloth. Never use benzene, thinner, alcohol, or other volatile cleaning agents. Do not use abrasive cleaners, as they may damage the finish of metal parts. Avoid spraying insecticides near the unit.

Maintenance: Your new amplifier is rugged. It was built to give you a lifetime of trouble free operation, if it is operated in accordance with the instructions contained in this manual. The only maintenance required is cleaning. If you are going to move your amplifier around frequently, we recommend a road case to protect it from scratches and road wear.

Packaging: The carton and packing materials used in shipping your new amplifier were specifically designed to cushion it from the shocks and vibration that occur during transport. We suggest that you save the carton and packing materials for use in shipping, in the event you move, or the amplifier needs repair.

# **Output Power:**

Legacy 500:

190W @ 1% THD+N, 8Ω 300W @ 1% THD+N,  $4\Omega$ 450W @ 1% THD+N, 2.7Ω 300W @ 1% THD+N, 2Ω

#### Legacy 800:

400W @ 1% THD+N, 8Ω 800W @ 1% THD+N,  $4\Omega$ 800W @ 1% THD+N, 2.7Ω 800W @ 1% THD+N, 2Ω

### Legacy 1200:

1 CHANNEL: 400W @ 1% THD+N, 8Ω

800W @ 1% THD+N,  $4\Omega$ 

2 CHANNEL: 800W TOTAL @ 1 %THD+N, 8Ω PER CHANNEL

> 1200W TOTAL @ 1%THD+N  $4\Omega$  PER CHANNEL.

950W TOTAL @1%THD+N  $4\Omega$  ON ONE CHANNEL  $8\Omega$ ON THE OTHER CHANNEL

### **Input/Output Specs:**

Maximum Input Level 0.6V RMS Input Impedance 1M Ohms Send Output Impedance 220 Ohms Return Input Impedance 50K Ohms Tuner Output Impedance 10K Ohms Direct Output Impedance 500 Ohms

## Noise:

Legacy 500 -90 dB reference to 300W/450W.

'A' weighted

-90 dB reference to 400W/800W, Legacy 800

'A' weighted

-90 dB reference to 800W/1200W, Legacy 1200 'A' weighted

#### Equalizer:

Bass +/-10dB @ 60Hz Lo-Mid +6dB/-10dB @ 250Hz Hi-Mid +6dB/-10dB @ 1KHz Treble +/-14dB @ 7KHz

## **Voicing Filters:**

Contour +2dB @ 50Hz/ -10dB @ 500Hz/

+3dB @ 7 KHz

Amplifier Protection: Full short circuit, thermal and RF protection. Stable into reactive and mismatch loads. 16 second muted warm-up. Cooling: Two 40X40X20 mm Variable Speed Fan

12Vdc, 1.6Watt Per Fan

8500 RPM 10.91 CFM / FAN

**Dimensions:** (HxWxD):

2.4"(61mm) X 11.5"(291.3mm) X 10.7"(271mm)

### Weight:

Legacy 500 5 Lbs (2.3 kgs) Legacy 800 5.8 Lbs (2.6 kgs) Legacy 1200 6.5 Lbs (2.9 kgs)

## Power requirements:

U.S.A./Canada 120V/60Hz.

Legacy 500 552W(full pwr.), 74W(avg. pwr.) Legacy 800 1199W(full pwr.),168W(avg. pwr.) Legacy 1200 1432W(full pwr.), 215W(avg. pwr.)

### Europe 230V/50Hz/60Hz.

Legacy 500 552W(full pwr.), 74W(avg. pwr.) Legacy 800 1199W(full pwr.), 168W(avg. pwr.) Legacy 1200 1432W(full pwr.), 215W(avg. pwr.)

#### Japan 100V/50Hz.

Legacy 500 552W(full pwr.), 74W(avg. pwr.) 1199W(full pwr.), 168W(avg. pwr.) Legacy 800 1432W(full pwr.), 215W(avg. pwr.) Legacy 1200

# LR110409

This device has been tested and found to comply with: CAN/CSA 60065-03 Safety Requirements. UL std. No. 60065-2007 Safety Requirements.

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.

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.