

# Quilter™

Performance Amplification

## OWNER'S MANUAL

# BASS BLOCK 800



## IMPORTANT SAFETY INSTRUCTIONS

- 1 – Read and keep these instructions.
- 2 – Heed all warnings and follow all instructions.
- 3 – **WARNING:** To prevent fire or electric shock, do not expose this equipment to rain or moisture. Do not use this apparatus near water.
- 4 – Clean only with a dry cloth.
- 5 – **WARNING:** To prevent excessive temperature rise, operate product only in free air with unrestricted ventilation. Do not install in confined spaces or near heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- 6 – 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 plug has two blades and a grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit your outlet, consult an electrician for the replacement of the obsolete outlet.
- 7 – Protect the power cord from being walked on or pinched, particularly plugs, convenience receptacles, and the point where they exit from the apparatus.
- 8 – Unplug the apparatus during lightning storms or when unused for long periods of time.
- 9 – The appliance coupler (or attachment plug) is the mains disconnect device and should remain readily accessible when amplifier is in use.
- 10 – 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.
- 11 – 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.
- 12 – Changes or modifications made by the user that are not expressly approved by the manufacturer may void your authority to operate the amplifier.

### Explanation of symbols



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 of electric shock to humans.



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



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



**WARNING:** To prevent fire or electric shock, do not expose this equipment to rain or moisture.

# THE QUILTER BASS BLOCK 800

## Serious Power in a Small Package

The Bass Block 800 compact bass head provides exceptional power and tone for the modern bass player. The proprietary 800-watt power section provides a “big stick” to get full performance from any speaker, with a quiet, variable-speed fan for heavy duty usage. Innovative tone controls are voiced specifically for bass guitar, and internal limiting provides the feeling of “bottomless” power resources without suppressing musical dynamics. The power amplifier is “tighter” than our guitar amps, for better control of large bass speakers, while retaining the warmth and smooth power flow that Quilter is famous for.

**DUAL INPUTS** provide two appropriate input levels for traditional passive pickups, as well as hotter active pickups. The **GAIN** control regulates drive and sensitivity. **DEPTH** regulates only the frequencies below 100Hz, providing control over the lowest strings, and adjusting the overall roundness of the sound. **CONTOUR** regulates the midrange voice of the bass guitar, ranging from a crisp scoop to a mellow treble rolloff. The **MASTER** control regulates the overall peak power delivered to the speaker, for matching any size and speaker rating. A **MUTE** button allows temporary silencing for changing instruments, with a bright red LED as an alert. A **HEADPHONE** outlet supports quiet practicing. The **AC POWER LED** also acts as a thermal warning light, “winking” if the amplifier is limiting itself due to overload.

The rear panel provides **DUAL QUARTER-INCH SPEAKER JACKS**, plus a **SPEAKON™** connector, for compatibility with all popular bass cabinets. **XLR LINE INPUT** and **LINE OUTPUT** connect to external preamps and/ or consoles. A **LOCKING AC CORD** ensures uninterrupted service. Please consult this manual for further details on these features, to obtain the best results.

Quilter Labs uses the latest Class-D power technology to maximize warmth and dynamics without the weight and drawbacks of traditional technology. We receive advice from musicians far and wide, but our constant goal is to make products that we ourselves are proud to use. The result is a serious professional tool with performance that meets or beats handmade amps costing several times as much.

We hope you enjoy your new amplifier. May it give you many years of flawless service and provide a source of inspiration and creativity.

**CARTON CONTENTS:**

- QUILTER BASS BLOCK 800
- IEC AC POWER CORD
- OWNER'S MANUAL
- DUST COVER

## DUAL INPUTS

The Bass Block 800 provides a full-gain PASSIVE input for conventional passive pickups. The ACTIVE input has 10dB less gain to allow convenient use of hotter active bass pickups without having to make big changes in your Gain setting.

## INPUT MUTE

A small pushbutton between the INPUTS and the GAIN control mutes the input for noise-free instrument changes. A bright red LED above MUTE will illuminate during muting. Avoid accidental muting while adjusting GAIN.

## GAIN CONTROL AND LIMITING

The GAIN control regulates the overall volume and sensitivity of the bass. The Bass Block 800 is designed not to distort on peaks, and incorporates an effective but transparent limiter. Depending on your playing style and pickup volume, you will start encountering limiting somewhere in the upper half of the control's range. The limiting action is subtle and easy to overlook, but it prevents abrupt bottoming and can be used to stretch notes. To get the “feel” of this interaction, set the MASTER very low, and increase GAIN until you feel the volume holding back on peaks. This is the limiter in action. You will also notice a tendency to “auto-equalize” the volume of high and low tones when pushed well into limiting. All these behaviors can be used as musical effects, or can be avoided by reducing GAIN below the limiting threshold. Once you have found the sweet spot that works for your tone, adjust the MASTER for the desired overall volume.

## DEPTH CONTROL

The DEPTH control is a highly selective low frequency boost/cut that acts only on the lowest half of the bass guitar's range. Boosting DEPTH will produce a deep rounded tone. If pushed into limiting, the overtones and higher notes will “catch up” with the bass foundation, preserving dynamics and attack without bottoming out.

## CONTOUR CONTROL

The higher strings and harmonics are shaped in two distinct directions. Turning to the left introduces a mid scoop that produces a crisp snappy tone. Turning to the right progressively reduces treble for a rounded vintage tone.



## MASTER CONTROL - MATCHING AMP TO YOUR SPEAKER POWER

After you have adjusted your tone as described on the left, use the Master control to match the overall output power to your speaker's capacity. The wattage markings will provide initial guidance, but if you hear any popping or other signs of speaker overload, reduce the Master wattage until the speaker is operating comfortably. This allows the amp to be matched to a wide range of speaker ratings. On full MASTER the amplifier can be driven to its maximum power of 800W/4 ohms by using sufficient gain, although limiting will begin to cushion the peaks at about 80% of full power. If you are unable to achieve the desired bass output with only one speaker, consider adding an additional speaker for more capacity.

## USING HEADPHONES

Headphones may be plugged into the mini-jack located under the input jacks. The speaker may be unplugged for silent practice. It will normally be more comfortable to keep the Master below about 50%.

## THERMAL LIMITING AND FAN CONTROL.

A thermal sensor is embedded in the heat sink to monitor temperature rise. As the amp is worked increasingly hard, the fan will gradually speed up to improve cooling. If temperature continues to rise, either due to extreme power demands, or lack of ventilation, the amp will eventually reduce volume until temperature recovers. Thermal limiting is indicated by the **POWER LED** "winking". Ensure that side vents are clear and the amp has access to cool air.

## SPEAKER CONNECTIONS (rear panel)

The Bass Block 800 provides dual 1/4-inch speaker jacks, as well as a **SPEAKON™** outlet, for compatibility with all popular bass cabinets. The Bass Block is ideal for driving 4-8 ohm loads. 16 ohm power will be reduced, and the amplifier will begin to protect itself as described above if driven hard into impedances less than 4 ohms. However, no harm should result. Be sure to monitor speakers for signs of distress and reduce MASTER level if required to prevent popping or bottoming.

## LINE IN (rear panel)

An XLR balanced line input may be connected on the rear of the amp. The signal enters prior to the Master control, but bypasses all preamp EQ and limiting. Thermal limiting and short circuit protection are still effective.



### LINE OUT (rear panel)

An XLR line output may be connected to outboard power amps, powered speakers, or consoles to reinforce the output of the Bass Block.

### LOCKING IEC POWER CORD

The power cord that comes with your amplifier is designed to lock into the AC inlet to reduce the chance it will come unplugged during use. Press the yellow button on the cord to release it. Any normal 3-prong IEC cord may also be used with the amplifier. Always ensure that the ground contact is intact on both the cord and receptacle.

### UNIVERSAL AC POWER (rear panel)

The Bass Block can be used on all known worldwide AC voltages (100-250V), which allows you to play just about anywhere on the planet. Nothing to change but your AC cord type.



## **CARING FOR YOUR AMPLIFIER:**

Clean the outer surfaces with a clean, damp cloth or vacuum with a soft brush. Never use any abrasives, harsh cleaners or solvents. The Tone Block amplifier is manufactured with high quality components using modern industrial processes that greatly reduce production defects. Each amplifier goes through an intensive testing process before it leaves the factory ensuring that your amplifier will give you years of flawless service. There are no user-serviceable parts inside the amplifier. Any repairs should be performed by a trained service professional. Always use the amplifier in a well-ventilated environment and protect from external heat sources such as furnaces or direct sunlight. Prolonged high-volume playing causes heat buildup in the speaker which reduces its working lifetime. If you find it necessary to consistently use the amp at full volume, we recommend using an extension speaker to prolong speaker life and improve sound coverage.



## SPECIFICATIONS:

<b>AMPLIFIER MODULE SPECIFICATIONS</b>	
Power Output:	450 watts-8 ohms, 800-watts, 4 ohms
AC Power Req.:	100–240Vac, 50–60 Hz, 250 W typical, 1000W peak.
Input Connections:	PASSIVE: ¼" mono (full gain), 2 meg ACTIVE: ¼" mono (-10dB gain), 30K LINE INPUT: XLR 10K balanced, 1V full scale.
Line Output:	XLR, quasi-balanced, 400 ohms, 1V full scale
Speaker Output:	4-8 ohms, 90V, 25A peak
Headphone Out:	3.5mm mini-jack, 20 ohms per side, 2V peak.
<b>DIMENSIONS</b>	
H x W x D	8.5"(218mm) x 7.5" (190mm) x 3" (76mm)
Weight	4.5 lbs (2kg)

## TROUBLESHOOTING:

<b>Symptom</b>	<b>Action</b>
No power, no lights	<ul style="list-style-type: none"><li>• Ensure that the AC cord is fully seated and connected to a live source.</li><li>• Check the AC source by trying another device such as a lamp.</li></ul>
Amp shuts off then after a short time, turns back on	<ul style="list-style-type: none"><li>• Automatic thermal protection is activating. Reduce the volume at least 30% and keep the amplifier out of direct sunlight or tightly enclosed spaces.</li></ul>
No audio (using a guitar)	<ul style="list-style-type: none"><li>• Check the MUTE switch: confirm that the red LED over the MUTE button is not illuminated.</li><li>• Confirm that the MASTER control and the GAIN controls are turned up.</li><li>• Ensure the guitar plug is inserted fully at each end.</li><li>• Try using a different guitar cable.</li><li>• Check that the pickup selector switch and volume on the guitar are set correctly.</li><li>• Ensure that the rear panel speaker plug is fully inserted into the SPEAKER jack.</li></ul>
Volume level slowly reduces.	<ul style="list-style-type: none"><li>• Thermal protection may be activating. The Power LED "winks" every 1-2 seconds when thermal protection is active. Check that side vents have full air flow, check the load impedance and look for cable shorts. If everything is normal, reduce Master about 25% to reduce overload.</li></ul>

## TROUBLESHOOTING:

Background hum	<ul style="list-style-type: none"> <li>• Ensure the guitar plug is fully inserted.</li> <li>• Try using a different guitar cable. Make sure it is properly shielded.</li> <li>• Connect AC powered accessories to the same receptacle as the amplifier to avoid ground loops.</li> </ul> <p>IF HUM GOES AWAY WHEN GUITAR IS TURNED DOWN:</p> <ul style="list-style-type: none"> <li>• Single coil pickups can be a source of hum, especially if near RF sources like light dimmers or neon lights.</li> <li>• Check that the guitar's cavities are well shielded.</li> </ul>
Bass is too thin or thick	<ul style="list-style-type: none"> <li>• Adjust the DEPTH control.</li> </ul>
Harmonics or high notes don't sound right	<ul style="list-style-type: none"> <li>• Adjust the CONTOUR control</li> </ul>
Amp sounds garbled at all volumes	<ul style="list-style-type: none"> <li>• Check speaker by temporarily trying an external speaker. Caution: reduce MASTER volume until sound level has been confirmed.</li> </ul>
Desire clean tone, getting too much overdrive	<ul style="list-style-type: none"> <li>• Turn down the GAIN control and turn up MASTER.</li> <li>• Plug active bass guitar into ACTIVE input to reduce input overdrive.</li> </ul>
Desire overdrive tone, not getting enough overdrive	<ul style="list-style-type: none"> <li>• The Bass Block is designed to remain clean but the limiting system can be overdriven with extreme Gain settings.</li> <li>• Using an active bass on the PASSIVE input will provide more gain.</li> <li>• "Lead bass" players should consider a Quilter Tone Block or Pro Block which are designed to produce vintage-style overdrive tones.</li> </ul>
Tone sounds "dull" with no high frequencies	<ul style="list-style-type: none"> <li>• Confirm EQ settings.</li> <li>• Check your guitar's tone controls.</li> </ul>
<b>Amplifier Requires Service</b>	<p>If any of the below occur, immediately unplug the amplifier and refer to a service technician.</p> <ul style="list-style-type: none"> <li>• Amplifier or AC cord emits smoke</li> <li>• Amplifier is dropped or chassis is dented or bent</li> <li>• Liquid has been spilled into the amplifier</li> <li>• Loose parts inside the amplifier are heard</li> <li>• AC service breaker trips</li> </ul>

## **LIMITED TRANSFERABLE WARRANTY:**

**IMPORTANT: PLEASE READ THIS DOCUMENT COMPLETELY. IT CONTAINS IMPORTANT INFORMATION ABOUT YOUR RIGHTS AND OBLIGATIONS, AS WELL AS LIMITATIONS AND EXCLUSIONS THAT MAY OR MAY NOT APPLY TO YOU. BY ACCEPTING DELIVERY OF THE PRODUCT(S), YOU AGREE TO BE BOUND BY AND ACCEPT THESE TERMS AND CONDITIONS.**

Quilter Laboratories, LLC (Quilter Labs) guarantees its products to be free from defective material and/or workmanship and will replace defective parts and repair malfunctioning products under this warranty when the defect occurs under normal installation and use—provided the unit is returned to our factory via pre-paid transportation with a copy of proof of purchase. (i.e. sales receipt). This warranty provides that the examination of the return product must indicate, in our judgment, a manufacturing defect. This warranty does not extend to any product which has been subjected to misuse, neglect, accident, or where the date code or serial number has been defaced or removed. Quilter Labs shall not be liable for incidental and/or consequential damages. This warranty gives you specific legal rights.

This limited warranty is freely transferable during the term of the warranty period. The warranty on Quilter products is NOT VALID if the products have been purchased from an unauthorized dealer/online e-tailer, or if the factory serial number has been removed, defaced, or replaced in any way.

Customers may have additional rights, which vary from state to state or from country to country. In the event that a provision of this limited warranty is void, prohibited or superseded by local laws, the remaining provisions shall remain in effect. The Quilter Labs limited warranty in the United States is valid for a period of three (3) years from date of purchase except that footswitches, covers, cabinets, handles, and cabinet hardware are warranted for a period of one (1) year and speakers, and all other included accessory products for a period of ninety (90) days from date of purchase.

**IMPORTANT: PLEASE RETAIN YOUR SALES RECEIPT OR ONLINE ORDER RECORD, AS IT IS YOUR PROOF OF PURCHASE COVERING YOUR LIMITED WARRANTY. TO TRANSFER THE WARRANTY TO A SUBSEQUENT PURCHASER, YOU MUST ENDORSE THE SALE OF THE PRODUCT TO THE SUBSEQUENT PURCHASER ON THE FRONT OF THE SALES RECEIPT. THIS LIMITED WARRANTY IS VOID WITHOUT SUCH ENDORSED SALES RECEIPT.**

Defective products that qualify for coverage under this warranty will be repaired or replaced, (at Quilter Labs' discretion) with a like or comparable product, without charge. To receive warranty service, return the complete product to Quilter Labs, LLC, with proof of purchase, during the applicable warranty period. The Quilter Labs Dealer from whom you purchased your product may also be authorized for warranty service and should be the first point of contact when service is required. **TRANSPORTATION COSTS ARE NOT INCLUDED IN THIS LIMITED WARRANTY.** Any repair or service performed by any person or entity other than an Authorized Quilter Labs Electronics Service Center is not covered by this limited warranty.

Other questions regarding this warranty can be answered by calling (714) 519-6114 or by contacting your authorized Quilter distributor.

Email: [info@quilterlabs.com](mailto:info@quilterlabs.com)

## **FACTORY SERVICE:**

To return an amplifier to Quilter Labs for service under the warranty policy, please visit [www.quilterlabs.com](http://www.quilterlabs.com) and fill out the Return Request Form. If you do not have access to the website, you may send a request by letter to Quilter Labs at 1700 Sunflower, Suite A, Costa Mesa, CA 92626. Please include the serial number of the amplifier and a copy of your sales receipt. Instructions on how to send your amplifier will be provided. Do not attempt to open the amplifier and service it yourself. Any attempt to service the amplifier by a non-authorized service technician may void your warranty.

## **FCC NOTICE:**

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 receiver
- Connect the product 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.

**Quilter Laboratories, LLC**  
**1700 Sunflower, Suite A**  
**Costa Mesa, CA 92626**  
**(714) 519-6114**  
**[www.quilterlabs.com](http://www.quilterlabs.com)**



**Quilter**™

Performance Amplification

P/N 000734 Rev. A