

GBE series1

BASS COMBO

MODELS: GBE series1-12T, GBE series1-15T, GBE series1-210T

OWNER'S MANUAL

These GENZ BENZ combos have been designed with the professional working musician and week-end warrior in mind, and are great for rehearsals, small to medium sized clubs, church ensembles or studio work.

The Series 1 combines proven classic circuitry with state-of-the-art integrated electronic power modules to deliver the sound quality and features desired by today's sophisticated bass players.

The unique Bi-Amp Output feature divides the pre-amp signal with an asymmetrical built-in crossover and sends the low frequencies to the cone woofers and the high frequencies to the compression tweeter. This design allows each amplifier to work more efficiently and the result is a much more clear and dynamic sound, rivaling amps with much higher power ratings.

FEATURES:

130W RMS woofer amp and 45W RMS tweeter amp, internal 3K Hz crossover, Passive and Active inputs, XLR transformer balanced direct output with a rear-mounted ground lift, 3 bands of EQ, effects loop w/send control, Master volume control separate front panel Tweeter level control. All color coded level controls, premium GENZ BENZ speaker components, plywood construction, 18 gauge perforated metal grills, quality durable black carpeting.

OPERATION:

Passive Input - This input has an impedance of 300K ohms, twice the gain of the active input. This input is designed for the pick-ups on passive basses.

Active Input - This input has an impedance of 47K ohms. The lower impedance combined with this input's lower gain, improves noise rejection and reduces the chances of input overload from basses with active pick-up circuitry.

Input Gain Stage - The input gain stage uses a variable feedback divider circuit to reproduce the sound characteristics of the vacuum tube pre-amplifier across the gain spectrum. While this topology may cause a slight noise while moving the control at some gain positions, due to the open loop amplification of the divider circuit, this is a reliable way to create this desirable vacuum tube sound.

Equalization - 3 bands of EQ using passive multi-pole filters inserted in the feedback loop of the equalization amplifier give the bass player subtle and natural control over the instrument's sound.

Effects Loop - This insert loop, intended for use with many types of digital processing devices is post equalization and driven by its own buffer amplifier and send level control to insure reliable interface with all processors. Under most conditions, the level control will be used in the fully clockwise position. If this level produces overload in the effects device, reducing the send volume will eliminate the problem. It may be necessary to increase the output level of the effects device to recover some of the lost gain, if the processor does not do this automatically.

Master Volume - This post equalization, post effects volume control adjusts the overall volume of the signal sent to both the low and high frequency amplifiers. Under normal conditions, it is designed to produce optimum results when set at the TWO OR THREE o'clock position. At this position, all gain stages are effectively optimized for stage use. If the master volume is set too low, there will be inadequate gain

to fully drive the amplifiers to maximum output without overdriving the input stage.

Horn Level - This post master volume control adjusts the signal level sent to the high frequency amplifier. Adjust this control to suit your individual taste.

Internal Crossover - Part of what makes this bass combo unique is the built-in asymmetrical bi-amp crossover. Dividing the signal into low and high frequencies before the amplifiers results in an effective increase in volume and clarity compared to amplifiers of similar size.

Power Amplifiers - The Series 1 amplifiers utilize new high performance power modules with dynamic thermal management protection. This exciting process continually monitors all amplifier parameters to protect itself from faults. These features enable the amplifier to safely operate at a heat sink temperature of 225 degrees into a shorted load! The low frequency section delivers 130 Watts RMS and the high frequency section delivers 45 Watts RMS and all distortion products are less than 0.1% THD at rated power.

Under normal operation, the heatsink (finned aluminum device) on the back of the amplifier chassis will become quite warm to the touch. Care should be exercised not to block this area from free air circulation.

Balanced Line Output - This male 3 pin XLR jack provides a mu-metal shielded transformer isolated balanced output to send to a PA or recording console. The 600 ohm output impedance will easily drive a 20 foot balanced line without signal degradation. A ground lift is provided on the back panel to reduce hum. The selectable signal source features a **DIRECT** position that takes the signal from the input jack, feeds a high impedance buffer amp and the line transformer. None of the amplifiers controls will affect this signal when the switch is in the direct position. The **PRE-AMP** position takes the signal immediately **AFTER** the master volume control. Since the pre-amp output position is post master volume control, changing the master volume will also change the pre-amp output of the D.I.

ATTENTION:

Always make sure that you are using a safe grounded receptacle for the specific operation for the voltage rated, labeled on the rear of the amplifier. All U.S. models are rated at 115V AC 60Hz.

Always plug the AC power cord into the rear amp receptacle before plugging the cord into a power supply.

Always use caution against possible hearing loss when operating this unit.

TRANSFERABLE LIMITED WARRANTY

The electronics section of the Series 1 combos are warranted to be free from defects in materials and workmanship for 2 years. Items not covered are damage from: shipping, misuse, accident, modification, abuse or neglect.

The cabinet and speaker components are covered under the usual **GENZ BENZ TRANSFERABLE 3 YEAR WARRANTY** and all stipulations apply. See your warranty card for details.

ALL WARRANTY SERVICE MUST BE PERFORMED BY A GENZ BENZ AUTHORIZED CENTER.