

GENZ·BENZ



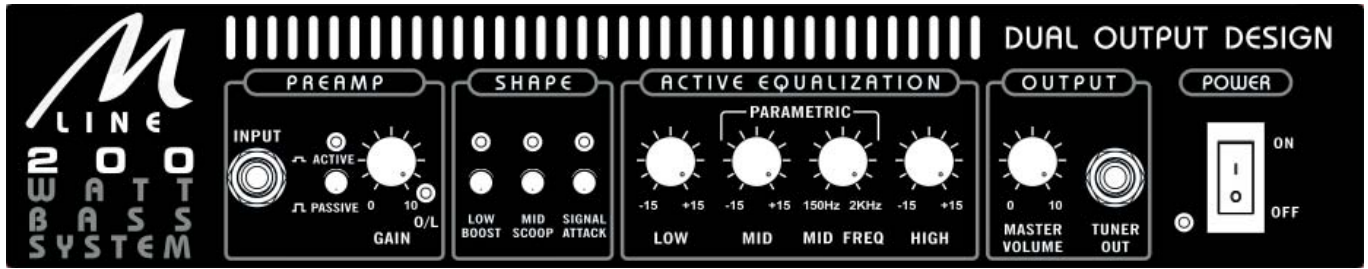
OWNERS MANUAL



AVAILABLE MODELS: ML 200HEAD, ML 200-112T, ML 200-115T, ML 200-210T

- ◆ DUAL OUTPUT DESIGN
- ◆ 200 watt Power Amp
- ◆ Active/Passive Input
- ◆ Shape Circuit w/ Low Boost, Mid Scoop & Signal Attack
- ◆ 3-band EQ with parametric mids
- ◆ XLR Direct Out
- ◆ Internal "Soft Limit" Circuitry

PRODUCT DESCRIPTION – The M-LINE-200™ series has been designed with our unique DUAL OUTPUT DESIGN, single channel, 200 watt bass guitar amplifier. It is equipped with 1/4" unbalanced instrument input, active/passive switch with LED indicator, variable input gain, 3 switched signal pre-shape filters with LED indicators, 3 band active equalization with parametric midrange, master volume control, 1/4" tuner output, effects loop, balanced direct out with ground lift switch, and a dual mode 200 watt power amplifier with three 1/4" speaker jacks.



FRONT PANEL

INPUT – The ML-200 is equipped with a standard ¼” unbalanced input. Input sensitivity can be switched from approximately 300 mV(Passive) to 1.25 volt(Active). The input impedance is 500k ohms. If your bass guitar has “hot” pickups or uses an internal battery for the preamp then select the active gain setting. The precision input scaling preamp contains a 36 Hz, 12 dB/octave high pass filter and an “RFI” filter (radio frequency interference) to eliminate unwanted noise.

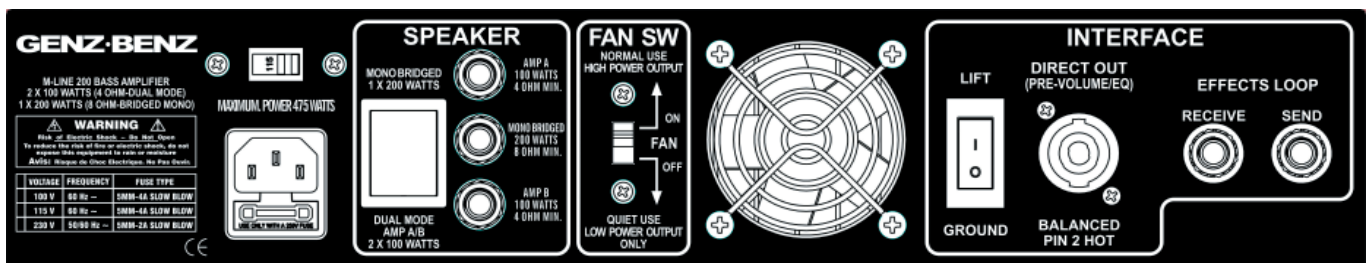
TUNER OUPUT – The ML-200 is equipped with a parallel and fully isolated tuner output. This jack is located after the front end scaling preamplifier, is pre-signal shape and pre-eq and may also be used to drive a separate direct box or high impedance-recording device.

SIGNAL SHAPE – The ML-200 is equipped with 3 signal shape circuits that are factory programmed. The LOW BOOST adds low frequency peaking gain in the 38-67 HZ band. This filter is especially effective when used with a 5 string bass. The MID SCOOP switch generates midrange cut, the SIGNAL ATTACK adds a peaking high frequency boost in the 2.25-8kHz band. LED indicators are provided to visually show when each filter is engaged.

EFFECTS LOOP – The ML-200 is equipped with an effects loop, allowing commonly used “series” type effects (such as compression/limiting units) or parallel effects (such as chorus or flange units that contain an on-board “mix” control). The location of the effects loop is post signal shape and pre-equalization. The signal is routed through the loop automatically if an effects unit is not plugged in. An additional feature of the effects loop is that the effects send jack can be used as a post-signal shape, pre-EQ line output. Plugging into the effects return jack will break the signal path and provides for a pre-EQ line input.

ACTIVE EQUALIZATION – The ML-200 contains an active 3 band equalizer with sweepable parametric midrange control. This equalizer, similar to those found on professional sound consoles, is a very useful tool. The low frequency EQ section is an 80 Hz, shelving curve with 15dB of cut or boost. The high frequency EQ section is a 3.5 kHz, shelving curve with 15dB of cut or boost. The parametric sweepable-mid section features 12 dB of cut or boost with a bandwidth approximately 1 octave wide. The center frequency of this filter is continuously user adjustable from 150 Hz to 2 kHz with a single control. This filter is typically (but not always) used to reduce or remove offending frequencies in the instrument’s pick-up response, or boosting response to achieve a particular voicing. Spend some time experimenting so that the process becomes creative as well as corrective.

MASTER VOLUME – The master volume control adjusts the overall volume of the amplifier and the effects return. Typically, best results are obtained when this control is operated between the 9:00 and 3:00 positions.



REAR PANEL

DIRECT OUTPUTS – The ML 200 is equipped with a high quality balanced direct output with ground lift switch for pin 1. The output level is –10dB nominal line level, pin 2 hot, and the output impedance is 600 ohm. The direct output is fully protected from mixers providing phantom power up to 48 volts.

FAN SWITCH - The new ML 200 chassis provides a fan on/off switch so that the internal cooling fan can be switched off for those times when using the amp for low power use in a very quiet environment (ex: bedroom practice, studio recording, quiet church performances). The fan should be in the normal “on” position for any use other than the most quiet.

POWER AMPLIFIER/SPEAKER OUTPUTS – The ML 200 features our DUAL OUTPUT DESIGN, which contains two separate advanced monolithic power amplifier circuits that are fully protected against overloads, short circuits and thermal faults. Output is rated at 100 watts per channel into 4 ohms (dual mode), and 200 watts into 8 ohms (bridged mono mode) with excellent overload recovery characteristics. A unique feature of this amplifier is the “on silicon” temperature sensor that automatically tracks and adjusts the amplifier’s operating and protection parameters, a very cool feature that increases product reliability 10-fold over conventional designs. With the Mode Switch in the dual position, only the dual speaker jacks are active. Speaker Outputs: With the Mode Switch in the bridged mono position only the bridged mono jack is active. Driving speaker loads below the amplifiers rated minimum load (4 ohms each channel in dual mode and 8 ohms in the mono bridged mode) will result in distortion and possibly intermittent operation as the protection circuits are activated. The amplifier comes from the factory in the mono-bridged 200 watt mode.

POWER INPUT – The ML 200 is shipped from the factory with a standard IEC type power inlet connector and the appropriate power cable for the market the amplifier was shipped to. The toroidal power transformer is a universal input (115/230 volt, 50/60 Hz) with a voltage selector switch located above the inlet connector. Be sure that this switch is in the correct position (matching your local power system) BEFORE connecting the ML 200 to the power source. There is an AC mains fuse (with a spare fuse included!) located in the small slide out tray on the IEC power inlet connector. Always replace with the correct value fuse as indicated on the fuse chart located on the back of the amplifier.

CABINET DESIGN – The three models feature a bottom mounted tilt-back handle that allows the combo to be used in the upright position or tilted back for personal monitoring. The cabinets are constructed from lightweight, but sturdy, Baltic-birch plywood material and are designed for comfortable transport and use.

SPEAKER DESIGN – All combo models feature our tried and true high output woofers and conical compression bullet tweeter. All three combos are configured to be 8-ohm impedance and these combos come from the factory set to produce 200 watts from the ML DUAL OUTPUT DESIGN power amp.

CAUTION!

- Never set an amplifier on anything that will tip over or collapse under its weight.
- These amplifiers are capable of producing sound pressure levels that may cause hearing loss.
- There are no user serviceable parts inside these units. Always consult a qualified repair facility for service.

WARNING!

- The use and operation of this device constitutes an agreement of full release of any and all liability connected with it’s use. Only persons familiar with the operation of high-powered audio equipment should attempt to operate this device.
- In addition, by use of this device, the user agrees to hold Genz Benz Enclosures, Inc. and it’s designers, sales agents and all other affiliates and related parties harmless in the event of any accident, injury, damage or loss resulting from such use.
- Manufacturer’s sole responsibility is to provide a warranty on the specified performance of the product under normal operating conditions for a period of 3 years.

WARRANTY:

- Genz Benz Enclosures, Inc. warrants the model ML 200 to be free from defects in materials and workmanship for a period of 3 years from the date of purchase, when purchased from an authorized Genz Benz dealer.
- This warranty does not cover normal wear and tear incurred from the normally designed use of the product.
- This warranty is effective only if a copy of the original sales receipt is presented at the time of warranty service
- This limited warranty is completely transferable to any subsequent buyer as long as the original sales receipt is also transferred to such subsequent buyer.
- All warranty service must be performed by a Genz Benz authorized service center.
- Before returning any unit for service, a returned merchandise authorization number (RMA#) must be obtained by calling 480-941-0705.

Declaration of Conformity (89/336 EEC-EMC Directive)

Manufacturer's Name: Genz Benz, a division of Kaman Music
Manufacturer's Address: 7811 East Pierce Street
Scottsdale, AZ 85287, U.S.A.

Product Type: Audio Amplifier
Model Number: ML-200 (all versions)
Operating Power Condition: 115/230 V, 50/60 Hz
Effective Date: 01-01-2006

Conforms to the Following Standards:

- EN 55013: 2001 + A1: 2003
- EN 55020: 2002 + A1: 2003
- EN 60065
- IEC 61000-3.2: 2000
- IEC 61000-3.3: 1994 + A1: 2001
- IEC 61000-4.2
- IEC 61000-4.3
- IEC 61000-4.4
- FCC 47CFR Part 15-B, Class B
- RoHS Directive 2002/95/EC
- WEEE Directive 2002/96/EC
- CE Mark LV Directive 73/23 EEC

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