

CRATE

B20 XL



BASS AMPLIFIER

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We would like to take this opportunity to thank you for selecting a Crate product, and to tell you of our commitment to the design and manufacture of only the finest musical instrument amplification equipment; built for you, the musician.

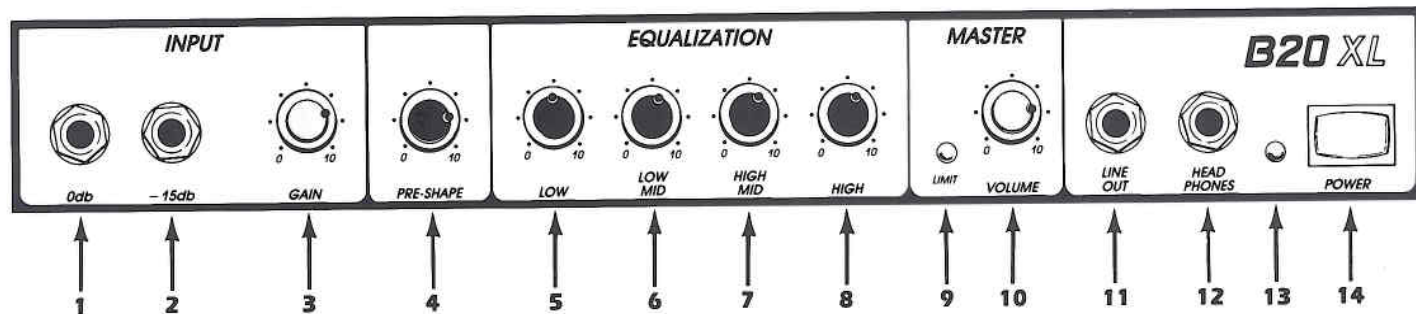
You have purchased one of the most innovative sound amplification devices available today. Your Crate amplifier gives you more performance features than ever before; features that you, the musician, have asked for.

Your Crate amplifier is an American product, manufactured at our factory in St. Louis, Missouri. Only the finest available components and materials are used in the manufacture of each amplifier.

All Crate amplifiers are subject to seven or more inspection and testing steps to assure you of a high quality product. The final test for each amp is conducted by a trained musician with the instrument the amp was designed for. Any unit that does not meet the standards of his discriminating ear will not be passed.

Since all Crate products are designed, developed, and manufactured through the cooperative efforts of engineers and professional musicians, the end result is a product that responds to the musician's audio requirements, and a product that will serve your needs for years to come.

OPERATION



FRONT PANEL FEATURES AND FUNCTIONS

INPUT SECTION

- 1. INPUT JACK:** This input accepts a standard 1/4" phone plug and is suitable for any low to line level signal source such as an electric bass.
- 2. -15dB INPUT JACK:** This input also accepts a standard 1/4" phone plug but is padded 15dB for "hotter" inputs such as tape decks or active basses. If both jacks are used, this input is not padded and will be equal to the "0dB" input.

- 3. GAIN CONTROL:** This control sets the amount of gain to the preamp. A low output instrument or soft playing style requires high gain (5-10 setting), while a high output instrument or hard playing style requires low gain (1-5 setting). Too high of a setting with the tones boosted can cause distortion or harshness of sound. If this is not desirable, simply reduce the gain with this control.
- 4. PRE-SHAPE CONTROL:** This is a pre-EQ "master" tone control. With the control set at 1/2, the signal will pass

to the equalization section "flat" (with no modification of tone). As the control is turned clockwise, high frequencies will be boosted. And as the control is turned counterclockwise, the low frequencies will be boosted. This control could be used to "dial in" a general tone setting which can be fine tuned by the EQ section or to instantly modify an existing EQ setting with one knob.

EQUALIZATION SECTION

- 5. LOW CONTROL:** The desired amount of "bottom" or "warmth" may be in-

creased with this knob. For additional effect, use this control in conjunction with the Pre-shape control.

6. **LOW MID CONTROL:** The knob will affect the lower harmonic range of the bass. When turned up, it adds a mellow sound by adding more definition to the lower harmonics. When reduced, it creates a hollow, "thin" sound.
7. **HIGH MID CONTROL:** Boosting this control will give the bass more "edge" in distinguishing notes, especially in fast music passages. Reducing this control enables a more flat mellow sound.
8. **HIGH CONTROL:** This control adds "bite" and "sizzle" to the bass by adding only the extreme high frequencies.
9. **LIMIT INDICATOR LED:** The B20XL contains a power amp limiter which automatically limits the signal to the power amp to a point just below clipping or distortion. This is to assure a clean, undistorted sound at full power. The limit indicator LED will be lit when full power is reached.
10. **MASTER VOLUME CONTROL:** This

control sets overall listening level of the B20XL.

OUTPUT SECTION

11. **LINE OUTPUT JACK:** This jack provides a high impedance output for connecting the B20XL to another amplifier or tape recorder. Simply run a cable from this jack to the input of another amplifier or tape deck.
12. **HEAD PHONE JACK:** Standard headphones may be plugged into this jack for private practicing. The speaker is automatically disconnected when head phones are inserted into this jack.
13. **ON/OFF INDICATOR LED:** This LED will be lit when the unit is on.
14. **POWER SWITCH:** Pushing this switch to the right turns the B20XL "ON".

REAR PANEL FEATURES

POWER CORD: Your B20XL is equipped with a heavy-duty grounded three-wire power cord. Be sure this cord is properly plugged into a safely wired grounded 120 volt 60Hz AC power outlet before use. (If your B20XL was purchased outside the United States, refer to the rear panel for power ratings). For your safety, never attempt to defeat the ground connection on this cord.

B20XL TECHNICAL SPECIFICATIONS

| | |
|--------------------------------------|---|
| Output Power Rating | 20 watts RMS @ 5% THD 8 ohm load—120 VAC line |
| Speaker Size and Rating: | Custom Designed 10" with 1" voice coil power handling 20 Watts RMS |
| Low Control | ± 10 dB @ 50 Hz |
| Low Mid Control | ± 10 dB @ 500 Hz |
| High Mid Control | ± 10 dB @ 1.0KHz |
| High Control | ± 10 dB @ 4KHz |
| Pre-Shape Control | 25 dB @ 700 Hz 40 dB @ 2.5KHz |
| Input Impedance | 220K ohms |
| Maximum Signal Level Accepted | 15 volts peak-to-peak |
| Gain @ 1KHz | 32 dB with tones flat |
| Line Output Jack | 2.3 volts, peak-to-peak |
| Signal to Noise Ratio | 60 dB with gain and volume at "10", tones flat |
| Input Power Requirements | 120 VAC, 60 Hz, 100 Watts max. |
| Cabinet Type | Rear ported tuned enclosure |
| Cabinet Size and Weight | 18"H x 16-1/2"W x 12-1/2"D 35 lbs. |

Specifications subject to change without notice.

CAUTION: To reduce the risk of electric shock, do not remove chassis. No user serviceable parts inside. Refer servicing to qualified service personnel.

CAUTION: This equipment is capable of producing sound pressure levels greater than 110 dB SPL. Continued exposure to such high sound pressure levels can cause permanent hearing impairment or loss. User caution is advised, and ear protection is recommended.