

# **MESA/BOOGIE**

**MARK II-B**

**OPERATING MANUAL**

Congratulations! You have purchased the finest musical instrument amplifier that modern technology and old world craftsmanship can produce. Nothing has been spared in terms of cost or care to make this unit the most versatile, most reliable, and best sounding amplifier available. The MESA/Boogie itself is more like a fine musical instrument than a piece of commercial gear, and as such it will continue to reward you richly as you gain more practiced in its use. With only reasonable care it should last a lifetime and, as experience has shown, a well kept Boogie will maintain or increase in value as it ages.

Here is a list of controls and features and sample settings to help you gain familiarity with your new amplifier. You are encouraged to experiment every way possible with speakers, controls and external effects; your Boogie has been made virtually foolproof so damage in the event of accident or misuse is quite unlikely. First, plug the AC cord into a wall socket and turn the Power switch ON. It is not always necessary to have the three pin power plug grounded, and in some situations (such as multiple-amp setups) a ground float adaptor may reduce line buzz. The Ground switch located on the amplifier rear panel should be set to the middle position and switched to right or left only when buzzing line conditions warrant its use. With the amplifier on STANDBY, plug the footswitch box into the lower front panel jack using the cord supplied, though any cord will work. If the red LED indicator on the footswitch box does not light up, press the footswitch, also check that all five pullout switches on the control knobs are fully pushed in. When the red LED is lit, the amplifier is in the Rhythm mode (Red=Rhythm). Set Volume 1 to about 7 and Master 1 to about 2. These are the two gain controls used primarily for rhythm playing. Generally you will want to run the Volume 1 control as high as possible without causing unwanted distortion, in order to have available the most possible sustain when switching into the Lead mode. The Master 1 will control the playing loudness without changing the tone. The Bright switch pullout on the Volume 1 control has less and less effect as the control is turned up higher and will have no noticeable effect from about 8 to 10. Set the Treble control to about 7. When the knob is pushed in, the tone control equalization is similar to that on old Fender™ amplifiers; when pulled out, the Treble control frequency center point is shifted downward to give a more robust sounding mid range. Treble Shift, when pulled, is automatically switched on in Lead mode to give a hotter, fatter lead sound. Set the Bass and Middle controls to about 2 each. The Master 1 control (already set to 2) also incorporates the Gain Boost pull switch which can be used for adding extra bottom to the amp's tone as well as a slight increase in gain.

The Lead Drive controls the amount of overdrive sustain and distortion; set it to about 8. The Pull Lead switch built into this control performs the same function as the footswitch, namely triggering the relay. You will see the LED indicator on the box go out when the Lead Drive knob is pulled. The Lead Master controls the playing loudness in the Lead mode - set it to about 2. The Pull Bright on this control only has effect on the Lead mode and not the Rhythm mode, and adds gain and sustain as well as brightness. So, to summarize briefly: Volume 1 and Master 1 regulate the gain and the loudness of the Rhythm mode, Lead Drive and Lead Master regulate the overdrive distortion and loudness of the Lead mode where Volume 1 still provides the initial signal strength. Or, in other words, the amp uses two volume controls for Rhythm (Volume 1, Master 1) and three volume controls for Lead (Volume 1, Lead Drive and Lead Master). Please note, however, that the Master 1 is always active in the circuit and will limit the maximum volume of the Lead mode when it is set too low. With only a little practice you should be able to work these controls to provide just the right rhythm tone and just the right lead tone with the loudness of both independently adjustable by the Master controls. So hit the Standby and go ahead and try it!

The Slave Level control and Slave Output jack located on the rear panel of the amplifier give you a direct output feed which faithfully captures the entire sound of the amp and preamp and can be regulated to properly match anything from a mixing board to a power amp to another Boogie for a linked up arrangement. Although a few mixing boards (mainly Yamaha) won't properly accept the Slave Output signal and cause distortion, an absolutely noise free recording can be made with most other mixers. Set the amp normally. Start with the Slave knob off. While playing, turn it up to provide sufficient signal for your power amp or Line In on your mixer. Higher Slave settings and lower Master settings will result in lower overall noise. Always run the Boogie with a speaker or load resistor (8 to 20 ohms, 50 watts) if you are using the Slave Out. A Pre Amp Out - Pwr Amp In jack is located on the bottom of the chassis and provides access to the junction of the preamp and the output power amp. With it, another Boogie can be linked up (Slave Out of the first amp to Pwr Amp In of the second), or it can allow you to use the Boogie as a preamp only. A volume pedal can be plugged into this pre-amp/power amp junction jack using just one cable and will operate like a pedal operated remote Master 1 control. For weaker incoming signals, the Effects Return can be used as an input and then the Graphic would be functional. For Effects Loop use the jacks mounted on the back panel. The Effects Return Jack will interrupt the signal flow while the Effects Send can be used as an output without affecting signal flow. If your Boogie should ever lose power or die out, always first run a cable between the two Effects Jacks before proceeding to test tubes, etc., as such a problem could likely be caused by faulty switch contacts in the Effects Return Jack.

Also on the back panel are the Reverb (optional) and Presence controls. The Presence control used from 0 to 3 will cut highs resulting in a smooth, mellow tone at a lower overall volume. Used from 4 to 10 it will boost both volume and highs. Three speaker jacks are provided: one 8 ohm and two 4 ohm. With 60 watt models, plug the single 8 ohm speaker into the 8 ohm jack for the most power and clarity. If two 8 ohm speakers are used, plug each one into a 4 ohm jack for proper balance. But you may also try other combinations if you want one speaker slightly louder or happen to prefer the tone caused by a slight mismatch; it will do no harm to the amplifier. With 100/60 watt models we recommend that when you run a single 8 ohm speaker you use the 60 watt position and plug into a 4 ohm jack. This will give the strongest possible output without damaging the speaker. You may get more clean power by switching to 100 watts, and still more by also plugging into the 8 ohm jack but remember to avoid lead tone distortion as it increases power dramatically (though not so much the apparent loudness) and may cause speaker damage. With two 8 ohm speakers, one in each 4 ohm jack, the 100 RMS can be safely used.

A cabinet with four 8 ohm speakers can be wired in series-parallel to give a total load of 8 ohms, or a 16 ohm Marshall™ box may be wired in parallel to obtain 4 ohms. Use a speaker jack for headphones. Again, no harm can be done to the amplifier by mismatched speaker loads and we encourage you to experiment, if you want, with various combinations.

Also located beneath the chassis is a stereo socket for the optional Dual Footswitch. This will be wired to activate, when applicable, the Graphic EQ and Reverb. When an amplifier is built with only Reverb or Graphic, a mono 1/4" guitar jack is mounted for use with our Single Footswitch and Cable Set. If your amplifier is equipped with a cooling fan and you wish to turn it off for quiet studio playing, then unplug the fan power cord where it plugs into the chassis on the extreme left end.

Most of all, this amp was made for your enjoyment - so go for it!!