# RECTIFIED LEVELER

### User's Guide

Thank you for supporting our little hand-made in the USA Company. This guide has been put together to help you set up your new Rectified Leveler and assist you in getting the most out of your purchase.

Upon opening your newly arrived package you will find 5 vacuum tubes, 5 tube shields and a Lightning Boy Audio T4LB optical cell along with your Rectified Leveler. Your limited lifetime warranty information is also enclosed. There are two 12AX7 tubes, one 12BH7 tube, one EL90 and one 6X4. Be careful handling the tubes as they are fragile. The tubes can only fit into their respective sockets one way, so be sure to line up the pins with the holes. If you don't line up the pins with the sockets you could bend the pins and potentially damage the vacuum tube.

After you have installed the tubes and their shields, install the T4LB into the large octal socket. Like the tubes, it only goes in one way, so line up the key when inserting.

#### **Controls:**

Limit/Compress,
Bass Byp/Normal
Gain
Threshold
Tube/Silicon
On/Off
Out +10/GR/Out +4
Stereo adjust

There is one control on the rear panel, which is used specifically for stereo operation (a pair of Rectified Levelers). If you are not using the Rectified Leveler in a stereo configuration, it is best to keep the knob turned completely clockwise to the "mono" setting. For stereo operation, there is a ¼" jack which can be utilized to link a pair of Rectified levelers together using a standard instrument cable (ie. Guitar cable). It is very important that this cable is no longer than 2' in length or noise can become an issue.

To use two units in stereo you will need to adjust the knob on the rear panel. This knob is the stereo balance adjustment. Follow these steps:

- 1. Set each VU meter to display GR (Gain Reduction) on both Rectified Levelers.
- 2. Turn the Threshold down all the way on both units (counter clockwise).
- 3. Adjust the Threshold on the left channel until it reaches about -5dB of gain reduction.
- 4. Adjust the stereo balance knob on the unit displaying the most gain reduction until the gain reduction displayed is the same on both units.
- 5. In use, keep the Threshold knobs set to the same position on both units.

On the front panel you will find all of the main controls. Starting on the left hand side at the top is the VU meter adjustment control. This may or may not need adjusting when the unit arrives to you. It is possible some jostling during shipping moved the control, but it left Lightning Boy Audio calibrated. Directly below this control are two switches. The first is the Limit/Compress switch. When set to compression the Rectified Leveler has a gentle compression slope and when set to Limit it gives you a harder knee.

The switch to the right of the Limit/Compress switch is the Bass Byp/Normal switch. Normal is just what the name implies. With the Bass Byp engaged, low frequency content is not sent to the T4LB and so the compressor is ignoring this content when doing its job. This feature can give the Rectified Leveler a more transparent sound by preventing low frequencies from controlling when high frequencies are getting compressed.

The next control is Gain, which needs no introduction. This is the output volume of the unit.

Next is the Threshold control, which also needs little introduction. The more you turn this knob, the more compression you get.

To the right of the Threshold control is the switch for Tube/Silicon. When set to silicon, the Rectified leveler's power supply will utilize a silicon rectifier to convert incoming AC power to DC. This has a sonic effect that can be described as "up-front" and "punchy." When the switch is set to Tube, the Rectified leveler uses a 6X4 rectifier tube to convert AC power to DC instead. The tube has a different effect on the sound of the Rectified leveler than the silicon rectifier, which can be described as sounding "Really Big and Warm."

The control just to the right of the Tube/Silicon switch is easy enough and requires no explanation... power On/Off. Above this switch is the control for the VU meter. Center position displays GR or Gain Reduction. This will show you a visual representation of how much compression is happening. The other two positions monitor output volume of the unit.

## Servicing:

Having the Rectified Leveler serviced by anyone other than Lightning Boy Audio will void the Limited Lifetime Warranty. In the unlikely event that something should malfunction with your Rectified Leveler, please contact Lightning Boy Audio for instructions. The best method of contact is email <a href="mailto:sales@lightningboyaudio.com">sales@lightningboyaudio.com</a> or call Mike at 716-472-6739.

## Warning:

**Do not remove the lid of the Rectified Leveler! HIGH VOLTAGES!!!! LETHAL!** Aside from containing deadly voltages stored in the electrolytic caps, there's a lot of lead based solder inside. There are no user serviceable parts inside, so there's no reason to open the lid. Stay safe and keep it tight.

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