

LADNER

ENGINEERING GROUP



OWNER'S MANUAL

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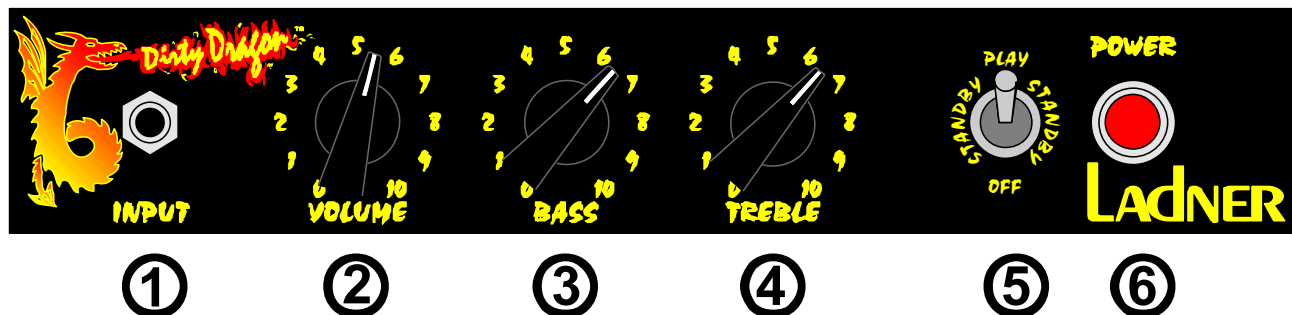
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INTRODUCTION

The old saying, big things come in small packages is captured in amplifier form. Requested by players looking for a simple and portable amplifier with massive tone that won't break your back loading in. Stripped down to the bare essentials, the Dirty Dragon is all killer no filler. American voiced with a unique tone stack combined with a touch sensitive preamp allows the player to find his own tonal personality. Where did the name come from? It was suggested by a long time friend and player David Dyas, it had the perfect ring and description and it stuck. An amp that is simple and pure doesn't need a lengthy introduction. Best way to experience this 16 watts of bliss is to turn it up and let it sing! Enjoy your Dirty Dragon and as always be sure to play it loud!

Andrew & D. C. Ladner

FRONT PANEL

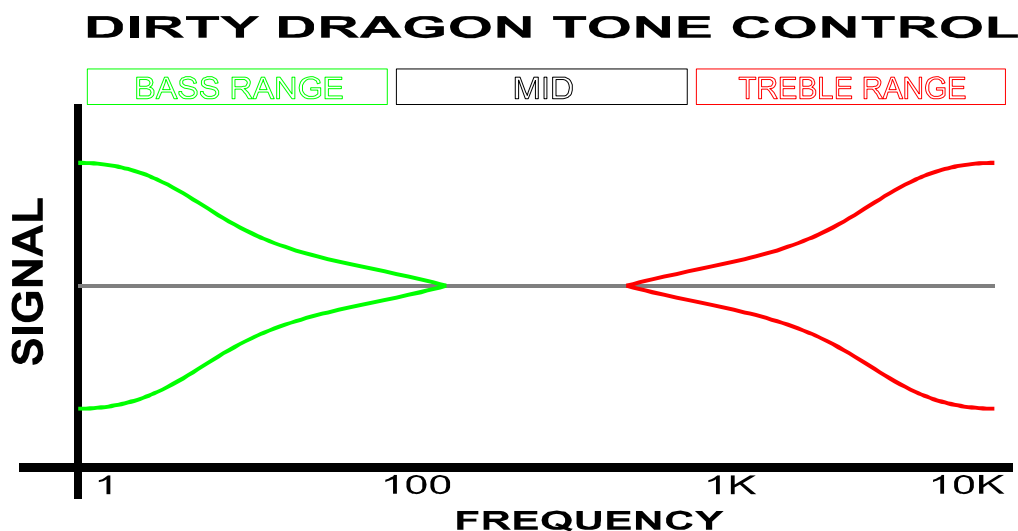


1 - INPUT - 1/4" jack that delivers the signal from the guitar to the first stage of gain in the amplifier.

2 - VOLUME - Adjust the overall loudness and gain of the amplifier.

3 - BASS – Adjust the low frequency response of the amplifier. The unique Baxandall tone stack implemented provides minimum interaction of the Bass and Treble controls. In this configuration, the Mid frequencies are relatively fixed providing significant range control of the low frequencies.

4 - TREBLE – Adjust the high frequency response of the amplifier. The unique Baxandall tone stack implemented provides minimum interaction of the Bass and Treble controls. In this configuration, the Mid frequencies are relatively fixed providing significant range control of the high frequencies.



REFERENCE Baxandall, P.J. "Negative feedback tone control – independent variation of bass and treble without switches" *W.W.* 58.10 (Oct. 1952) 402. Correction 58.11 (Nov. 1952) 444.

5 – PLAY/STANDBY/OFF – An all-inclusive function control - go from **OFF** to **STANDBY** to **PLAY**, with one switch. When powering the amplifier on, the unit should be switched to the **STANDBY** position for at least five (5) minutes before switching to the **PLAY** position. Additionally, when shutting down the amplifier, place this switch in the **STANDBY** position for at least five (5) minutes before switching to the **OFF** position. After placing the unit in the **OFF** position, allow the unit to cool down before transporting, as the tubes are still hot and more likely to be damaged due to shock or vibration. Taking these precautions can help to greatly extend the life of the tubes, especially the output tubes.

Rear Panel



1 – FUSE- This is the line fuse for the amplifier. The proper fuse should be installed as indicated on the rear panel of the unit. The table below shows the proper fuse to be used with the indicated line voltage. **NOTE: Failure to install the proper fuse based on the line voltage noted can result in personal injury, fire, damage to the amplifier or other nasty things too numerous to mention here.**

LINE VOLTAGE	FREQ	FUSE	FUSE TYPE
120 VAC	50/60 Hz	1 A	AGC
230 VAC	50/60 Hz	0.5 A	AGC

2 - AC POWER – an IEC standard removable power cable. The unit should only be plugged into a proper AC Line Voltage as indicated on the rear panel of the unit.

4 – POWER SELECT – Power OutPut selector Full or Half – This selector should only be changed when the unit is in the **STANDBY** or **OFF** position **ONLY!!!**

3 – SPEAKER OUT - ¼" jack that delivers the amplifiers output signal to a speaker cabinet.

SPECIFICATIONS

OUTPUT POWER >16 Watts Class A/B

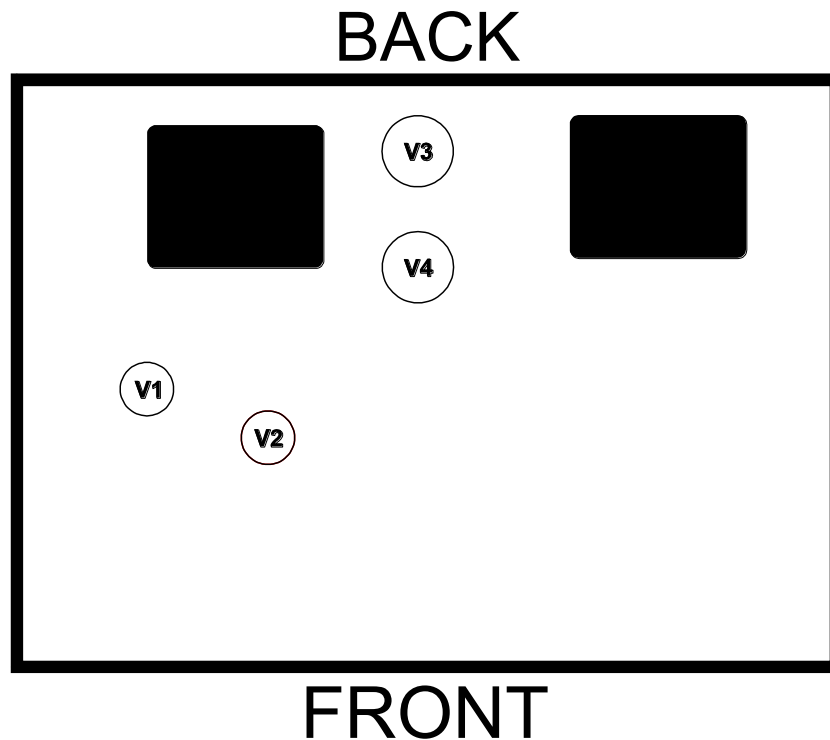
OUTPUT IMPEDENCE 4 Ω Minimum Load ONLY!!

INPUT 1 M Ω

EQUALIZATION Bass, Treble - *Modified Baxandall Tone Stack*

NOTICE: *Ladner Engineering reserves the right to change, modify or eliminate any and all specifications as it deems appropriate, without notice.*

TUBE PLACEMENT



V1: Input stage (Mullard 12AX7A)

V2: Tone (Sovtek 12AX7LPS)

V3-V4: Output (Tung Sol 6V6)

CAUTION: Tubes are **HOT** when in use, and for a while after the unit has been turned off, use extreme caution when changing.

WARRANTY

All Ladner amplifiers sold by authorized Ladner dealers are warranted by Ladner Engineering Group to be free from defects in material or workmanship under normal use and service for a period of **five (5) years*** on parts and **three (3) years*** on labor from the original date of purchase. Speaker cabinets are covered for a period of **three (3) years*** on parts and labor from the original date of purchase.

Any products found to be defective within the applicable period will be repaired or replaced at the option of the Ladner Engineering Group, without any charge provided that; (1) the product was not misused, abused, improperly maintained, or repaired by any person not authorized by Ladner Engineering Group; (2) its failure resulted from a defect in material or workmanship and was not damaged due to use other than its intended use; (3) the product was not used under abnormal, excessive, or unusual operating conditions and (4) the product is promptly delivered prepaid to the seller at the place of purchase or to an authorized Ladner Engineering Group warranty service center together with proof of purchase within the applicable period.

There are no warranties, expressed or implied, other than those expressed herein. Further, there is no warranty of merchantability or fitness for a particular purpose. This warranty does not cover units used for loan or rental.

Limitation of Liability: the above warranty represents purchaser's exclusive remedy and Ladner Engineering Group, LLC shall not be liable for any special, incidental, or consequential damages relating to the product sold.

Some states do not allow limitations on the duration of implied warranty or the exclusion may not apply to some purchasers. This warranty gives purchasers specific legal rights and purchasers may also have other rights that vary from state to state.

* Exceptions:

Speakers	1 Year
Sound Reinforcement Products	3 years
Tubes, Cables	90 days
Vinyl Covers/Bags/Accessories	No Warranty

**ALWAYS TURN POWER OFF WHEN CHANGING OR
REPLACING TUBES**



SAFETY INFORMATION

- Do not expose this amplifier to moisture or water (i.e. avoid dropping into swimming pools, most lakes, water ways or use during times of excessive storm surge)** or extreme heat.
- Turnoff and unplug before any tube change.
- Only use the proper, AGC fuse. *Remember ONLY!!!!*
- Keep the back of the amplifier away from curtains or other flammable materials.
- Remove speaker and power cables before moving to avoid damage.
- Only clean with a soft towel and mild cleaner. *Remember ONLY!!!!*
- Unlike Trix, these amplifiers are NOT for kids, so keep it away from them.
- Unplug during lightning storms, hurricanes, tsunamis or the like.

*** ... unless it's a competitors amplifier, of course.*

This amplifier produces **EXTREME SOUND VOLUMES** and can cause
PERMANENT HEARING DAMAGE, handle with care.

... THIS MEANS YOU!

Some things are never a good idea ...



Common sense is a valuable tool,

So Use It!!!

Always have this Amplifier serviced by a

QUALIFIED SERVICE PROFESSIONAL ONLY!

... Again please remember ONLY!!!!



Thank you for your purchase, and welcome to the Ladner Engineering family. We wish you many years of great tonal bliss with your hand-built Dirty Dragon.

Andrew and D.C Ladner