# Amplified Nation

# Wonderland Overdrive v2

**OWNER'S MANUAL** 



Congratulations on purchasing an amplifier from Amplified Nation. Whether you acquired the amp new or used, we hope that you will enjoy your experience as an Amplified Nation customer. Our products are designed to deliver great tone and be an inspiring extension of your instrument.

The Wonderland Overdrive v2 is a remarkable amp, equipped with two channels and built-in tube reverb. You will immediately feel how flexible the amp can be, and so many of the iconic tones are very easy to dial in.

The Wonderland Overdrive v2 comes in different power levels, from 22w to 100w and can be found in head or combo form factor. The higher wattage amps have increased headroom as you get higher in wattage; and increased sonic presence. The head and combo amps are identical in function, so this manual will serve them both equally. All power levels also function the same with the exception of bias settings.

Please read through the control layout functions and make note of the instructions on general operation before attempting to operate your new amp. This instruction manual includes essential safety information regarding the use and maintenance of the amplifier.

If you have any questions about the amp that are not answered in this guide, please reach out to us at **sales@amplifiednation.com** and we will be glad to assist you.

Thank you, Taylor Cox CEO, Amplified Nation

# **About Amplified Nation**

Located in Hudson, MA, Amplified Nation is a boutique brand of guitar amplifiers and speaker cabinets. We have built our business on four core values: Integrity, knowledge, attention to detail and quality. We provide an excellent experience for our customers and are committed to constant communication and adherence to time lines.

Our passion for the craft of hand-building amplifiers can be seen in every piece of gear that leaves our shop. Thank you for choosing to work with us.

Amplified Nation 120 Central Street, Suite 4 Hudson, MA 01749 781-499-2677 sales@amplifiednation.com www.amplifiednation.com

#### **Important Safety Instructions**



- 1. Follow all instructions
- 2. Do not use this amplifier near water
- 3. Clean only with dry cloth
- 4. Do not block any ventilation openings
- 5. Do not install near any heat sources such as radiators, heat registers or vents.
- 6. Protect the power cord from being walked on or pinched particularly at plugs and the point where they exit from the amplifier
- 7. Only use attachments/accessories specified by the manufacturer
- 8. Unplug this amplifier during lightning storms or when unused for long periods of time
- 9. Refer all servicing to qualified service personnel. Servicing is required when the amplifier has been damaged in any way, such as blown tubes, blown fuse, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped
- 10. To disconnect the unit completely from the MAINS, unplug

#### 11. DANGEROUS VOLTAGE WARNING:

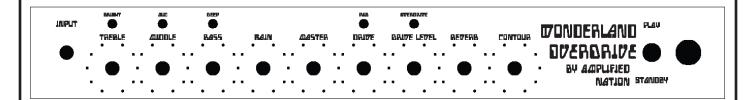
A tube amplifier chassis contains lethal high voltage even when unplugged--sometimes over 700 volts AC and 500 volts DC. Do not attempt to service, repair or conduct tube biasing unless you are qualified to do so. Please contact Amplified Nation beforehand with questions in this regard. Amplified Nation takes no responsibility or shall be held liable for any personal harm caused or damage to this amplifier as a result of unauthorized service, repair or internal adjustments made to this amplifier.

#### Please Read Before Powering Up Your Wonderland Overdrive v2

- 1. Inspect to make sure power and pre-amp tubes are intact and snuggly seated in their sockets
- 2. Make certain a speaker (load) is plugged into the correct speaker input jack on the back of the amplifier. Failure to have a speaker connected to the amp will result in damage to the output tubes. Your amplifier is supplied with multiple speaker inputs for various impedances; select the one closest to or transition your speaker(s) impedance.
- 3. Install cable into footswitch and then connect into rear panel input marked FOOTSWITCH
- 4. Install instrument cable from guitar into front panel INPUT
- 5. Be sure both POWER and STANDBY switches are in DOWN position
- 6. Install power cord to amplifier (AC POWER IN) and to AC power source
- 7. POWER UP amplifier by:
  - 1. flipping POWER switch UP. WAIT at least 1 minute for tubes to heat up
  - 2. Flip STANDBY switch UP, amplifier will now operate
- 8. The amplifier is now fully on and ready to use. Feel free to adjust all controls as you see fit
- TO PUT AMP IN STANDBY MODE Simply flip the STANDBY switch DOWN
- TO PUT AMP IN PLAY MODE Simply flip the STANDBY switch UP
- <u>TO TURN AMP OFF</u> Flip the STANDBY switch DOWN. We then recommend (as a kindness to the output tubes) waiting at least 1 minute before flipping POWER switch DOWN hence fully shutting the amp down.



#### **Front Panel Functions**



**Input Jack:** High impedance input to the amplifier. Plug in your instrument here.

**Treble:** Adjusts the high frequency response. In the full counter-clockwise position, high frequencies are bypassed to ground. In the full clockwise position, high frequencies are increased.

**Middle:** Adjusts the mid-range response. In the full counter-clockwise position, the tone will be somewhat "scooped" of mid-range response, emphasizing the highs and lows. In the full clockwise position, mid-range frequencies are increased.

**Bass:** Adjusts the bass response. In the full counter-clockwise position, low frequencies are cut. In addition, the response of the treble and mid-range controls is greatly reduced. In the full clockwise position, low frequencies are increased.

**Bright Switch:** Boosts the treble frequency response.

**Mid Switch:** Boosts the mid range frequency response.

**Deep Switch:** Cuts high end frequency response as a low frequency contour switch.

**Gain:** Adjusts the gain of the amplifiers clean channel. Keep in mind that the amount of gain set here determines the signal level feeding the lead channel. Low gain settings of this control will require higher lead gain settings for the same amount of overdrive.

**Master:** Adjusts the overall output level of the amplifier.

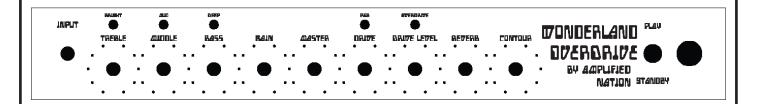
**Drive:** Adjusts the amount of gain of the overdrive channel.

**Drive Level:** Adjusts the overall volume level of the overdrive channel.

(CONTINUED ON TO NEXT PAGE)



### Front Panel Functions (CONTINUED)



**Overdrive Switch:** Switches the amplifier's channel, sending the instrument signal through the overdrive channel. To enable foot switch control of this function, this switch must be down.

**PAB Switch:** This switch bypasses the tone controls, increasing both level and mids. To enable foot switch control of this function, switch must be down.

**Reverb:** The reverb control sets the level of reverb in the mix. The reverb effect is eliminated with this control in the full counter clockwise position and increased when turned clockwise.

**Contour Control:** The contour control is similar to a 'cut' control. In the 12 o'clock position, the amp's frequency response is flat. Counterclockwise rotation reduces high end response and increases low frequencies. Counterclockwise rotation decreases low end and increases the high frequency response.

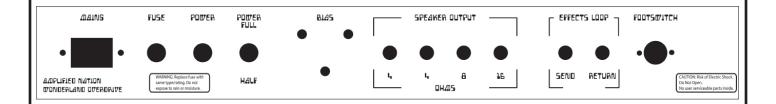
**Stand-by Switch:** Should be in the "down" or "stand-by" position when you apply power to the unit. After turning the A/C mains on, place the switch in the "up" position to use the amplifier. You may leave the unit "powered up" and place this switch in the "stand-by" position to mute the output. Do not leave the amp in standby for more than 30 minutes at a time.

**Power Indicator Lamp:** The replacement light bulb is a 6.3v A/C.

**NOTE:** All switches are ON in the "up" position



#### **Rear Panel Functions**



Mains: Connects the amplifier to A/C power with included IEC power cord.

**Fuse:** See Fuse Chart page 7

**Power Switch:** Turns the A/C mains power on to the amplifier.

**Half Power Switch:** Selects low power mode for the amplifier, approximately 22w in half power.

Bias Test Points: See bias adjustment section

**Speaker Output Jacks:** There are 4 speaker output jacks, two 40hm, one 80hm and one 160hm. You should only use one speaker impedance at a time, or two 40hm outputs are to be used to power two 80hm cabinets.

\*\*Never operate your amplifier without a connected speaker load, and be sure to match the impedance of your cabinet with the corresponding value on the amp.

**Effects Loop:** The effects loop of the Wonderland Overdrive is a passive signal access point. Any effects plugged into the loop will be run in series with the preamp and power amp.

**Footswitch Jack:** The footswitch connects with the included 7 pin locking cable. The functions of the Wonderland Overdrive v2 include channel switching and preamp boost.



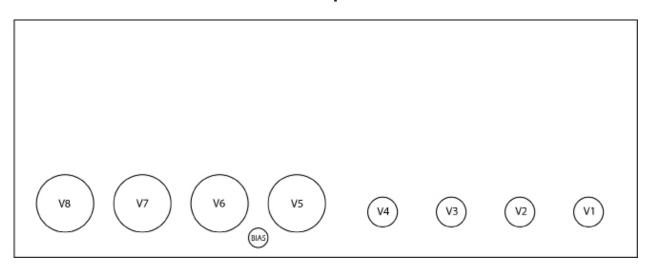
#### **Fuse Chart**

All Fuses are 3AG Type 250 Volt, SLO-BLO

Domestic 120v Fuses: Export 230v, 240v Fuses:

2A – 22 Watt 3A - 50 Watt 3A - 100 Watt 1.5A - 100 Watt

#### **Tube Complement**



- V1- 12AX7, Input and Tone Stack Recovery
- V2- 12AX7, Overdrive Stages
- V3- 12AT7, Reverb Driver and Return
- V4- 12AX7, Phase Inverter

#### Power Tubes:

22 Watt- V5 & V6 6V6GT

50 Watt- V5 & V6 6L6GC, V7 & V8 optional GZ34 rectifiers tubes

100 Watt- V5, V6, V7, V8, 6L6GC-STR

Each fine production tube is tested and matched to our exacting specifications. External bias test points are located on the chassis near the output tube sockets. A digital multi-meter and insulated screwdriver are required for the bias adjustment pot in between the power tubes.



# **Bias Adjustment Procedure**

All of our amps are equipped with external bias test points and an external bias adjustment pot. The adjustment pot is located in between the power tube sockets and should be adjusted using an insulated flat tip screwdriver.

- Power up unit connected to proper speaker load
- Do not have an instrument connected to the amp
- Take the amp off of standby and let it stabilize
- Set your multi meter to mV
- Connect the meter to corresponding black and red test points, black is ground
- Using an insulated screwdriver adjust the bias pot to get the proper mV reading

#### Tube types and bias level:

- 22w 6VGGT 19-21mV per tube
- 50w 6L6GC 33-35mmV per tube
- 100w 6L6GC 66-70mV per pair

**DO NOT** set bias higher than recommended levels as it can lead to tube failure or damage to the amplifier.

WARNING: No user serviceable parts inside. If the amplifier is blowing fuses or not operating properly, please take it to a qualified technician for repair.

Use grounded A/C receptacle only



# **Servicing Warranty**

Amplified Nation offers a 2-year non-transferrable warranty on amplifiers excluding: tubes, speakers, damage from tube failure, and abuse/modification.

It is the customer's responsibility to pay to ship the product to us, and if it is determined the warranty doesn't apply, the customer is responsible for the return shipping.

If the product is a warranty repair, Amplified Nation will cover the return shipping.

# **CONTACT US**

This manual is a resource for some of your questions. Please contact us with any other questions or comments that you may have. We look forward to hearing from you!

Phone: 781-499-2677

**Email:** sales@amplifiednation.com

Website: www.amplifiednation.com

**Address:** 120 Central Street, Suite 4, Hudson, Massachusetts 01749