

# Octal Six Manual

Model: ZA-53

www.drzamps.com



This symbol warns the user of dangerous voltage levels localized within the enclosure.



This symbol advises the user to read all accompanying literature for safely operating the unit

#### **Important Safety Instructions**

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Maintain at least 3 feet of distance around all sides of amplifier. Do not block any ventilation openings with items such as newspapers, tablecloths, curtains, etc.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, 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.
- 15) Avoid placing any liquids on or near the amplifier that may splash or drip such as those contained in bottles, cans, glasses, etc.
- \*Dr Z amplifiers are capable of producing very high sound pressure levels which can cause temporary or permanent hearing damage.
- \*If any screw that is actually on the amp chassis needs to be replaced contact Dr Z Amps for the proper size. Screw size is critical for inner chassis clearances.

### **General Information**

One of the greatest challenges of having 36 years of amplifiers, music, and business under your belt is maintaining the spark of inspiration. Sometimes that spark jumps from the embers of Dr. Z's oldest collaborators, so when the phone rings and Joe Walsh, legendary solo artist and guitarist/songwriter for the Eagles, is on the other line, one can be assured there is a wellspring of ideas, interests, and inspiration to be tapped.

The Octal Six is result of the 4th collaboration between Dr. Z and Joe Walsh, birthed from the need to go somewhere different, untread upon and new, then road-mapped through Dr. Z's 36 years of experience designing and building guitar amps. Joe is no stranger to electronics, being a hobbyist HAM radio operator and having played countless amps through his storied career. He always brings a unique, informed perspective to the drawing board while sending Z down uncharted territory; the Octal 6 is no different in this regard. Yet, under the hood, this amp is uncanny in almost every other regard in the history of Dr. Z Amplifiers.

Starting with a pair of octal preamps, the 6SL7 and 6SN7, the guitar signal is amplified by these large bottle tubes that are more commonly used as power tubes than preamp, marked by a their distinctive 8-pin octal base as opposed to the 9-pin 12ax7 types seen in 95% of all other amplifiers. These are supplied with their own independent DC heater supply, resulting in extremely low noise operation in ratio to gain. The distortion signature and compression character is simultaneously smooth, yet harmonically dense with a churning overdrive texture reminiscent of the 50s Tweed amplifiers, without the mush or lack or articulation common in those more archaic designs. The Octal Six has a recognizably vintage sound with expressive, blooming compression but with a string articulation and dynamic bandwidth only these octal tubes can supply. Play-feel and volume knob clean up, even at the high-overdrive settings rival the lauded Dr. Z Z Wreck, with a delicate balance between gain and fidelity.

After Joe first suggested the 6V6 as power tube, Dr. Z found these octal tubes to be exceptionally lively in the audio spectrum and needed a power tube to match their vigorous output. Striving for efficiency in both the top and bottom of the signal, he settled on the less common 7591 power tube, the last major power tube designed before the end of the vacuum tube era and the transition into solid state transistors. These are noted for their high sensitivity input resulting in unparalleled playing dynamics, with a clean and robust output with no loss in detail, seen by hi-fi and tube aficionados as the "perfected" form of the classic 6L6 tube.

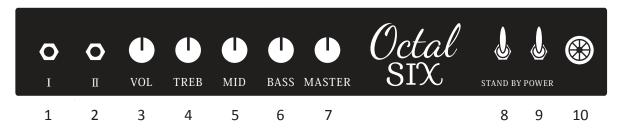
A paper-wound, vintage spec'ed output transformer manufactured by Heyboer Transformers drives the speaker, while our Mk. II style Post-Phase Inverter Master Volume offers smooth volume operation at any level. Two guitars inputs are included to optimize for the amount of clean headroom desired. Joe requested a transparent FX loop for his bevy of guitar pedals, so the ever-reliable Metro "Zero-Loss" FX loop was included in the Octal Six.

Finally, debuting in the combo version of the Octal 6 is a Warehouse Guitar Speaker G12C/S orange basket speaker, a versatile American-voiced speaker with a very punchy, forward response and a smooth, silky top end. This is a speaker that was carefully selected through numerous candidates, and matched the distinguished quality of the Octal Six while also making in its exclusive debut in this design.

## **Specifications:**

Power Output	28 watts
Output Tubes	2-7591 (Cathode Biased)
Preamp Tubes	1- 6SN7, 1-6SL7
Rectifier	Solid State
Controls	Volume, Treble, Middle, Bass, Master, FX loop send/return
Speaker Outputs	8 Ohm Output
Configurations	Head, 1x12 Combo
Dimensions	Head: 19" W, 9 3/4" H, 9 1/2" D; 26 lbs.
& Weight	Combo: 22 1/2" W, 20 1/8" H, 10" D; 36 lbs.

#### **FRONT PANEL**



- **1. Input I:** Input jack for your guitar. This is a non-attenuated input. It will send the full signal of your guitar through the amp, great for edge of breakup and fully overdriven tones, and for lower output signal coils.
- **2. Input II:** Input jack for your guitar. This is a slightly attenuated input. This input is useful to maximize the headroom for clean sounds, or higher output humbucker guitars.
- **3. Vol:** Controls the input gain of the amp. Set lower for clean sounds and higher overdriven tones.
- **4. Treble:** Controls the high frequency response of the amp.
- **5. Mid:** Controls the midrange response of the amp. At higher settings, this powerful control will also increase the gain of the amp.
- **6. Bass:** Controls the low frequency response of the amp.
- **7. Master:** Controls the overall volume of the amp.
- **8. Stand-By:** Leave in off position for 1 minute when powering up the amp. Turn on for play. Place in off position for extended break periods.
- **9. Power:** Switch up to turn on amplifier. Switch down to turn off amplifier.
- **10. Power Indicator:** Lights up when power is switched on. If LED fails replace with a 6.3 volt #44 Bayonet Base(BA9S).

#### **REAR PANEL**



- **11. AC Inlet:** (Class I Wiring). This device is used for disconnection from power mains and must remain readily opearable. The power indicator light does not indicate connection to power mains. The power cord must be disconnected to disconnect amplifier from power mains.
- **12. Fuse:** The fuse protects the amp from electrical faults. Replace only with the same rating and type stated below fuse holder (2A 250v FAST). If the amp repeatedly blows the fuse contact your dealer or Dr. Z Amps.
- **13. 8 Ohm Speaker Jack:** Plug in the external or internal 8 Ohm speaker here. Always have a load connected to your amp.
- **14. Send Jack:** This will send the signal from the amp to the "in" of your effects chain.
- **15. Return Jack:** Plug the "out" of your effects chain to return the signal back to the amp.



MODEL:									

SERIAL NUMBER:

INPUT VOLTAGE: \_\_\_\_\_









# MADE IN USA



Document: CE – ZA-53

Manufacturer: Dr. Z Amplification

17011 Broadway Ave.

Maple Heights, OH 44137 -3407

**USA** 

We declare that the designated product (s)

DR. Z OCTAL SIX

is/are in conformity with the European Directives:

2014/30/EU EMC Directive of 26 February 2014

2011/65/EU RoHS Directive of 8 June 2011

2014/35/EU Electrical equipment designed for use within certain voltage limits

This declaration certifies compliance with the indicated directives but implies no warranty of properties. The safety instructions of the accompanying documentation shall be observed. This declaration of conformity is issued under the sole responsibility of the manufacturer.

Issuer: Dr. Z Amplification

17011 Broadway Ave.

Maple Heights, OH 44137 -3407

**USA** 

Place, date: Maple Heights, OH USA , 15.AUGUST.2024

Legally binding signature:

M.D. Zaite, General Manager, Dr. Z Amps



Dr. Z Amps 17011 Broadway Ave. Maple Heights, OH 44137 USA

# CE

### **DECLARATION OF CONFORMITY**

We, Dr. Z Amps, declare, taking this declaration under our total responsibility, that guitar amplifier model OCTAL SIX (ZA-53) is in conformity with EN 55013, EN 61000-3-2, EN 61000-3-3, and EN 55020 in accordance with the Directive 2006/95/EC of 12 December 2006, even more declaring that the CE marking was affixed in the year 2001.

8-15-2024

Michael Zaite, General Manager Dr Z Amps