

# X-RAY Manual

Model: ZA-52

[www.drzamps.com](http://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

The X-RAY is the long-awaited response to the demand of two different Legacy amps that were discontinued many years ago. It was conceived as an amalgamation of two amps country legend Brad Paisley helped popularize in the 2000s and 2010s, the Stang Ray and the DB4, both of which are still featured his live backline today. Over the years, a few modifications, tweaks, and design evolutions took place in both of these amps, those of which have all been included in this latest advancement.

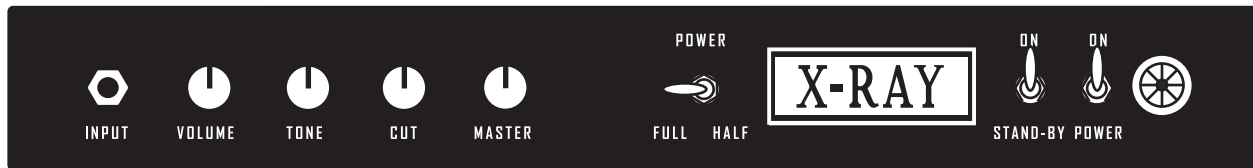
Powered by Dr. Z's favorite NOS 6n14n power tubes, the X-RAY models the same chiming clean headroom of the original Stang Ray, showcasing an articulate, snappy, British Invasion inspired jangle that the Fab Four would have fallen in love with. Twisting the knob clockwise unleashes a rush of mid-forward saturation, the uncanny overdrive signature provided by the 5879 pentode preamp tube featured in the X-RAY and first introduced into the Z roster by the DB4. Combining the chewy, churning overdrive of the DB4 with the snap and sparkle of the Stang Ray was the goal; evolving the design to be flexible with today's breed of player takes the X-RAY over the top. Both of its predecessors were non-master volume designs, AKA loud! The X-RAY delivers the same 30 Z-watts of its forebearers but its new post-phase inverter master volume adds welcome flexibility to the design, pleasing sound techs, housemates, and neighbors that may be a tad volume sensitive. Further, a front panel mounted half-power switch allows the player to alter the compression and dynamics of the power amp for a smoother, silkier feel at 15 watts. Finally, Dr. Z included a tube-driven FX loop to push the X-RAY's signature voicing through the effects signal path of your choice, with no loss in high end, dynamics, or tone.

The X-RAY is available in two configurations, head and 1x12 combo, the latter of which sports a striking quantum silver front valance and is loaded with a WGS Retro 30, a 75 watt speaker that has become an overwhelming favorite in the Z test room and was specifically stocked for this amp at the Doctor's request. Dr. Z's stalwarts are all present here: a custom welded, aircraft grade aluminum chassis is the skeletal structure, hand-selected, high quality components are the viscera, and all systems are sutured together in-house in Cleveland, OH by technicians with a quarter century of experience under the proverbial knife. As usual, Heyboer Transformers are the iron heart of the X-RAY and NOS mil-spec tubes breathe life into the lungs of the amp.

## Specifications:

<b>Power Output</b>	30/15 watts
<b>Output Tubes</b>	4- 6n14n (EL84 variant, cathode biased)
<b>Preamp Tubes</b>	1-5879, 1-12AX7, 1-12AU7
<b>Rectifier</b>	5AR4
<b>Controls</b>	Volume, Tone, Cut, Master, 1/2 power switch, FX loop send/return
<b>Speaker Outputs</b>	4, 8, 16 Ohm Outputs
<b>Configurations</b>	Head, 1x12 Combo
<b>Dimensions &amp; Weight</b>	Head: 20 5/8"W x 9 1/2"D x 9 1/8"H, 34 lbs. Combo: 22 1/2"W x 10 1/2"D x 20"H, 48 lbs.

## FRONT PANEL



**1. Input:** Input jack for your guitar.

**2. Volume:** Controls the amp input signal. As you turn the volume up natural overdrive will occur along with an increase in volume.

**3. Tone:** Controls overall frequency response. Clockwise increases bass content and lowers treble. Counter-clockwise increases treble and lowers bass.

**4. Cut:** Controls the high end response of the power section. Clockwise will increase the high end and give more “cut” to your sound in a mix. Counter-clockwise will decrease the overall top end content.

**5. Master:** Controls the overall volume of the amp.

**6. Half-power Switch:** Changes the output power from full (30 watts) to half (15 watts) for a decrease of approximately 3 dB in volume. More importantly, it will change the overall clean headroom and compression characteristics with full power having more headroom and a faster response and half having a more compressed response that will overdrive at lower volume levels.

**7. 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.

**8. Power:** Switch up to turn on amplifier. Switch down to turn off amplifier.

**9. Power Indicator:** Lights up when power is switched on. If LED fails replace with a 6.3 volt #44 Bayonet Base(BA9S).

## REAR PANEL



**10. AC Inlet:** (Class I Wiring). This device is used for disconnection from power mains and must remain readily operable. The power indicator light does not indicate connection to power mains. The power cord must be disconnected to disconnect amplifier from power mains.

**11. Fuse:** The fuse protects the amp from electrical faults. Replace only with the same rating and type stated below fuse holder (3A 250v FAST). If the amp repeatedly blows the fuse contact your dealer or Dr. Z Amps.

**12. 16 Ohm Speaker Jack:** Plug in the external or internal 16 Ohm speaker here. Always have a load connected to your amp. ONLY USE ONE SPEAKER OUT AT A TIME.

**13. 8 Ohm Speaker Jack:** Plug in the external or internal 8 Ohm speaker here. Always have a load connected to your amp. ONLY USE ONE SPEAKER OUT AT A TIME.

**14. 4 Ohm Speaker Jack:** Plug in the external or internal 4 Ohm speaker here. Always have a load connected to your amp. ONLY USE ONE SPEAKER OUT AT A TIME.

**15. Return Jack:** Plug the “out” of your effects chain to return the signal back to the amp.

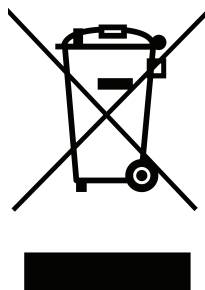
**16. Send Jack:** This will send the signal from the amp to the “in” of your effects chain.



MODEL: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

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



MADE IN USA



## EC/EU Declaration of Conformity

Document: CE – ZA-52

Manufacturer: Dr. Z Amplification  
17011 Broadway Ave.  
Maple Heights, OH 44137 -3407  
USA

We declare that the designated product (s)  
DR. Z X-RAY  
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 , 9.FEBRUARY.2024

Legally binding signature:

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



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



## DECLARATION OF CONFORMITY

We, Dr. Z Amps, declare, taking this declaration under our total responsibility, that guitar amplifier model X-RAY (ZA-52) 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.

2-9-2024

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Michael Zaite, General Manager Dr Z Amps