



Surgical Steel Manual

Model: ZA-39

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

I have always loved the haunting, sustaining tones that a pedal steel guitar added to a recording. This is why I was prone to design an amp for pedal steel use. The challenges were many... to build an amp that would clearly reproduce notes from an instrument with 70 gauge strings, to accurately generate correct frequencies when bending strings and using alternate tunings, and to output a rich and sustaining tone with adequate wattage.

I have succeeded in designing the perfect amp for the modern pedal steel player. The Surgical Steel incorporates my unique EF86 front end. This pentode tube can accept inputs of various voltages, like those from volume pedals, and reproduce them with accurate symmetry without distorting the signal disproportionately as 12AX7 input tubes do.

A full balance EQ section inputs a pair of ultra-linear connected KT88 power tubes. These powerful tubes (approximately 90 watts per pair) produce a rich, warm, and thick tone which is not possible with a solid state amp.

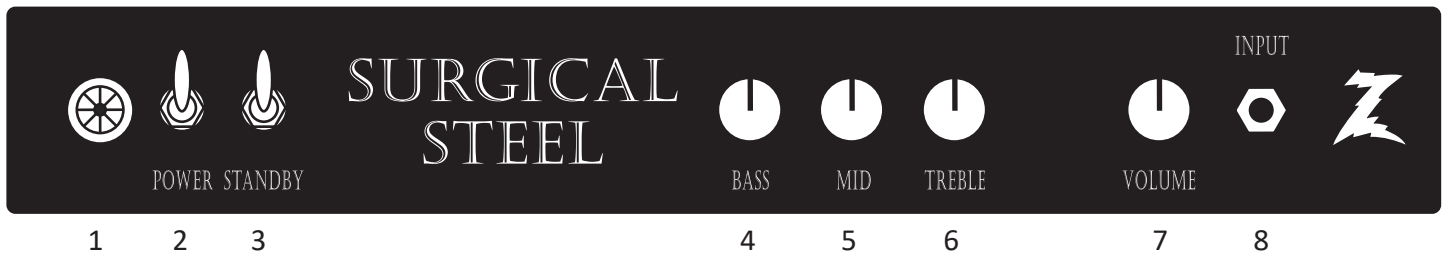
In 2016, while on tour, Joe Walsh came to the doctor and asked for an amp as a solid foundation for the array of pedals he was using live. I prescribed the Surgical Steel and it immediately went on stage to compliment his Z-Lux. We have found the Surgical Steel to be a stellar pedal platform for 6 string guitar, as it's high headroom and near endless sustain offers the perfect canvas for a variety of pedal configurations. A full balance EQ section feeds a pair of ultra-linear connected KT88 power tubes. These powerful tubes (approximately 90 watts per pair) produce a rich, articulate, and thick tone that is unattainable with a solid state amp.

This amp has 4, 8, and 16 Ohm speaker outs as well as a tube-buffered effects loop. I coupled the amp head with our Z Best 2x12 cabinet loaded with Celestion G12-65 speakers for a punchy, clear, and neutral frequency response.

Specifications

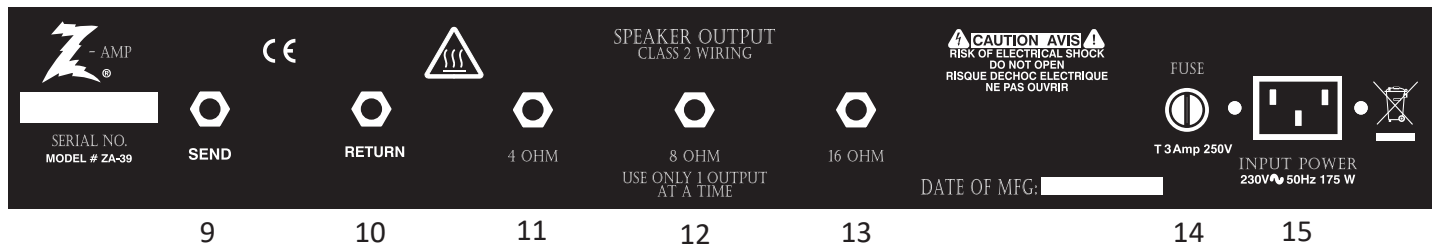
Power Output	90 Watts
Output Tubes	2 - KT88
Preamp Tubes	1 - EF86, 1 - 12DW7, 1 - 12AX7
Rectifier	Solid State
Controls	Volume, Treble, Mid, Bass
Other	4, 8, 16 Ohm speaker outs Tube-buffered effects loop
Configurations	Head
Speaker Cab (optional)	Z-Best 2x12 loaded with two Celestion G12-65 speakers: 28 ¼" H, 19 ¼" W, 13 ¾" D, 50lbs.
Colors	Black, Blonde, Red
Dimension & Weight	Head: 19"W x 9 ¾"H x 9 ½"D 32 lbs.

FRONT PANEL



- 1. Power Indicator:** Lights up when power is switched on. If bulb fails replace with type T47.
- 2. Power:** Switch up to turn on amplifier. Switch down to turn off amplifier.
- 3. 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.
- 4. Bass:** Controls overall low frequency response.
- 5. Mid:** Controls overall mid frequency response.
- 6. Treble:** Controls overall high frequency response.
- 7. Volume:** Controls loudness of the amp.
- 8. Input:** Input jack for your guitar.

REAR PANEL



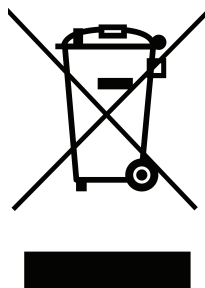
- 9. Send:** This will send the signal from the amp to the “in” of your effects chain.
- 10. Return:** Plug the “out” of your effects chain to return the signal back to the amp.
- 11. 4 OHM Speaker Jack:** Plug in 4 ohm speaker here. Always have a speaker plugged into the amp when it is powered on. Always match the speaker impedance to the proper speaker out jack. This will allow the amp to sound its best and avoid damage.
- 12. 8 OHM Speaker Jack:** Plug in 8 ohm speaker here. Always have a speaker plugged into the amp when it is powered on. Always match the speaker impedance to the proper speaker out jack. This will allow the amp to sound its best and avoid damage.
- 13. 16 OHM Speaker Jack:** Plug in 16 ohm speaker here. Always have a speaker plugged into the amp when it is powered on. Always match the speaker impedance to the proper speaker out jack. This will allow the amp to sound its best and avoid damage.
- 14. Fuse:** The fuse protects the amp from electrical faults. Replace only with the same rating and type stated below fuse holder (3 AMP 250v SLO BLO). If the amp repeatedly blows the fuse contact your dealer or Dr Z Amps.
- 15. 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.



MODEL: _____

SERIAL NUMBER: _____

INPUT VOLTAGE: _____



MADE IN USA