

*Suhr*<sup>®</sup>

**REACTIVE LOAD™**  
USER GUIDE



## WHAT IS A REACTIVE LOAD?

The Reactive Load is a passive analog model of an actual speaker cabinet. It is comprised of resistive, inductive, and capacitive elements and has each of its various elements arranged in empirically derived proportions so as to generate the exact response a popular 8 ohm 4x12 speaker cabinet presents at the output of a guitar or bass amplifier. As a result, the Reactive Load is able to produce the same non-linear impedance vs frequency characteristics as a typical speaker cabinet. The amplifier then responds exactly as it would to a real speaker cabinet. The signal produced at the Line-Out is then a scaled down electrical duplicate of the signal the amp normally delivers to a speaker. Even more impressively, it results in the guitar retaining the same feel and dynamics.



Thank you for purchasing the **Suhr Reactive Load**. Please take some time to read through this guide to familiarize yourself with its features and applications.

#### **OVERVIEW**

The Suhr Reactive Load delivers a simple solution to capture all of the warmth and dynamics of your playing, without the hassle of miking a speaker cabinet during a live or recorded performance.

The Reactive Load takes the place of your speaker cabinet in your signal chain. It provides an 8Ω load for your tube amplifier (maximum 100 watts) and produces a balanced and unbalanced signal that interfaces with recording devices, effects, and power amplifiers.

**CAUTION! - SURFACE MAY GET HOT. DO NOT OBSTRUCT VENTILATION.**





## FRONT PANEL

### DI LEVEL

Adjusts the output level of the balanced and unbalanced DI / Line Out outputs (located on the rear panel). DI Level is used to optimize the amount of signal the Reactive Load delivers to your device.

**NOTE:** The maximum DI signal voltage is approximately 17% of the amp's output voltage.

**IMPORTANT:** When using the Reactive Load without a speaker cabinet connected, there may be a tendency to push your amplifier's output level higher than normal. We recommend using settings you are familiar with to avoid damaging your amplifier.

### LED

This indicator provides a visual representation of the signal flow from your amplifier to the Reactive Load.

**NOTE:** The LED's strength is based on the amplifier's output power. At lower power levels, it is normal for the LED to appear dim.

### FAN

The Reactive Load contains an internal fan which is powered by your amplifier's speaker output voltage and designed to maintain the temperature of the Reactive Load's external surfaces. The fan automatically turns on/off based on the amount of power delivered to the unit's Input.

**NOTE:** The fan will begin to operate when the input power is greater than 25 watts.



## BACK PANEL

### DI / LINE OUT

The Reactive Load is equipped with balanced and unbalanced outputs. Use these to connect the Reactive Load to a recording device, effect, or power amplifier.

### INPUT - From Amp (8 Ohm/100 Watts RMS Max.)

Connect the speaker output from your amplifier to the Input on the Reactive Load using a speaker cable.

**IMPORTANT:** Do not use an instrument cable when connecting your amplifier to the input of the Reactive Load.

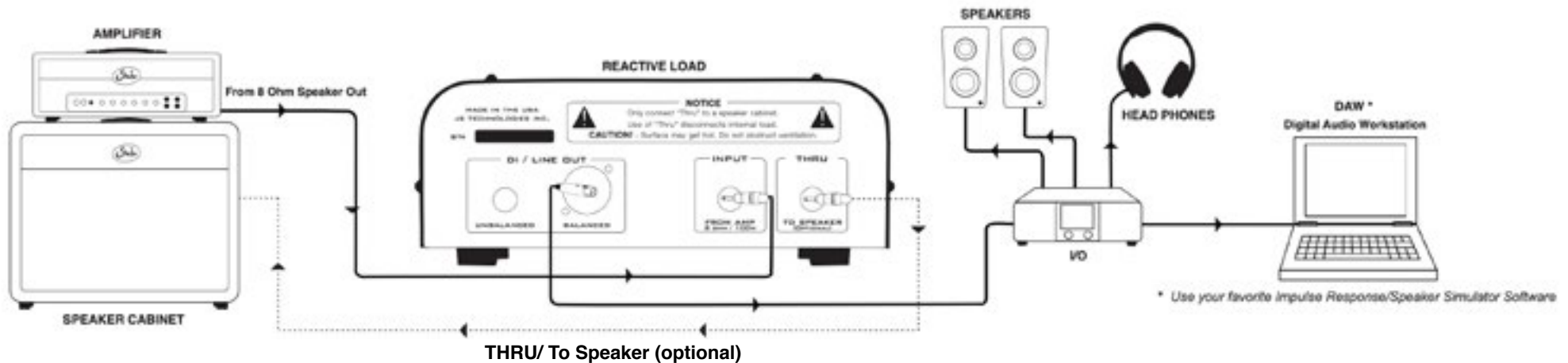
### THRU TO SPEAKER (Optional)

Use this output to connect your amplifier through to a speaker cabinet.

**IMPORTANT:** Using this output disconnects the internal load of the Reactive Load.

To optimize performance and avoid damage, match the impedance of your amplifier to the connected speaker cabinet. **NEVER CONNECT THIS OUTPUT TO INSTRUMENT, MIC OR LINE LEVEL INPUTS.**

## Connecting The Reactive Load



\* Use your favorite Impulse Response/Speaker Simulator Software

When in use, this disconnects the Reactive Load

# SPECIFICATIONS\*

**Impedance :** 8 $\Omega$

**DI / Line Out Level:** +4 dBu at 7 watts input, maximum level setting.

**Balanced Line Output Impedance:** 10K $\Omega$  (Maximum)

**Unbalanced Line Output Impedance:** 10K $\Omega$  (Maximum)

**Maximum recommended input power:** 150 Watts RMS

**Dimensions:** 8.8" Width x 8.9" Depth x 3.6" Height

**Weight:** 6.6 lbs.

**ROHS Compliant:** Yes

*\*All specifications subject to change without prior notice.*

# SUHR.COM

## WARRANTY FOR SUHR AMPLIFIERS AND ELECTRONIC PRODUCTS

JST warrants for lifetime from date of purchase by the initial retail purchaser that this product shall be free from defects in workmanship. Electronic components such as capacitors, resistors, filters, transformers, jacks, and pots are covered for 5 years. Any parts determined defective by JST within the five (5) year term shall be repaired or replaced by JST without charge for parts and labor provided the unit is returned, transportation costs prepaid, to JS Technologies, Inc., 601 Crane Street, Unit A & B, Lake Elsinore, CA 92530, or to such facility authorized by JST. JST will pay shipping costs to return the unit to its owner. Defects in workmanship will be determined by JST for limited lifetime coverage.

This warranty does not cover damage caused by accident, misuse, abuse, neglect, unauthorized or improperly performed repairs, alterations, and/or wear and tear occasioned by use of the product, and does not include any expense for inconvenience or loss of use while the product is being repaired or replaced. JST expressly disclaims any liability for consequential damages arising from the sale, use, or inability to use the product. Any warranty implied by law, including any warranty of merchantability or fitness, is expressly limited to the one (5) year warranty term for the parts on our amplifiers and electronic products. The foregoing statements of warranty are exclusive and in lieu of all other remedies. Workmanship lifetime warranty is limited strictly to the original retail purchase of the instrument registered with JST within 10 days of purchase from an authorized JST dealer or distributor. JST will pay shipping costs to return the unit to its owner within the mainland U.S.

The above warranty policy only applies to customers in USA. If you are an international customer, please check with your distributor and the dealer in your country for warranty matters. Warranty issues must be handled through your dealer or distributor. If you are an international customer who purchased (or plan to purchase) from a US dealer, we can handle warranty matters direct but you will be responsible for shipping both ways. We encourage international customers to purchase through your local distributor or dealer for this reason. Our international distributors are setup to handle warranty issues in their respective countries. If you do not have an authorized Suhr dealer in your country, please contact us direct for further details.