

# **Jackson Labs Product Liability**

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## 1.1 Scope

The following certifications and warranties apply to all Jackson Labs Instruments including the FireFox Desktop Signal Generator, and the FireFox OEM Signal Generator PCB.

## 1.2 Certification

Jackson Labs certifies that its products met their published specifications at time of shipment.

### 1.2.1 Warranty

Jackson Labs hardware products are warranted against defects in material and workmanship for a period of 1 (one) year from date of delivery. During the warranty period Jackson Labs will, at its discretion, either repair or replace products that prove to be defective. Jackson Labs does not warrant that the operation for the software, firmware, or hardware shall be uninterrupted or error free even if the product is operated within its specifications.

For warranty service, Jackson Labs products must be returned to Jackson Labs or a service facility designated by Jackson Labs. Customer shall prepay shipping charges (and shall pay all duties and taxes) for products returned to Jackson Labs for warranty service. Except for products returned to Customer from another country, Jackson Labs shall pay for return of products to Customer. If Jackson Labs is unable, within a reasonable time, to repair or replace any product to condition as warranted, the Customer shall be entitled to a refund of the purchase price upon return of the product to Jackson Labs.

### 1.2.2 Limitation of Warranty

The foregoing warranty shall not apply to defects resulting from improper or inadequate maintenance by the Customer, Customer-supplied software or interfacing, unauthorized modification or misuse, opening of the instruments enclosure or removal of the instruments panels, operation outside of the environmental or electrical specifications for the product, or improper site preparation and maintenance. **JACKSON LABS SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Jackson Labs products are not intended for use in medical, life saving, or life sustaining applications.**

### 1.2.3 Exclusive Remedies

**THE REMEDIES PROVIDED HEREIN ARE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES. JACKSON LABS SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY.**

## 1.2.4 Safety Summary

The following general safety precautions must be observed during all phases of operation of Jackson Labs instruments. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design manufacture, and intended use of the instrument. Jackson Labs assumes no liability for the customer's failure to comply with these requirements.

## 1.3 General

### 1.3.1 Environmental Conditions

Jackson Labs instruments are intended for indoor use. They are designed to operate at a maximum relative non-condensing humidity of 95% and at altitudes of up to 4000 meters. Refer to the specifications tables for the ac mains voltage requirements and ambient operating temperature range.

### 1.3.2 Line Power and Grounding

The FireFox Desktop unit operates on a 100V to 220V, 43Hz to 65Hz AC power input with typically less than 20W power consumption. The FireFox OEM unit operates on a 12.0V regulated DC input with typically less than 1A input current. Both units are designed to be continuously powered to keep the GPS receiver and OCXO warmed-up and locked.

The FireFox desktop unit requires a three-pronged AC power plug with proper grounding to prevent electrocution hazards. All BNC and SMA connector shields are grounded, and should not be connected to any voltage sources. To minimize shock hazard, the instrument chassis and cabinet must be connected to an electrical ground. The instrument must be connected to the ac power supply mains through a three-conductor power cable, with the third wire firmly connected to an electrical ground (safety ground) at the power outlet. Any interruption of the protective (grounding) conductor or disconnection of the protective earth terminal will cause a potential shock hazard that could result in personal injury. If the instrument is to be energized via an external autotransformer for voltage reduction, be certain that the autotransformer common terminal is connected to the neutral (earthed pole) of the ac power lines (supply mains).

### 1.3.3 Line Fuse

Fuses are internal to the instrument and are not user-serviceable. All repairs should be referred to a qualified service technician. The FireFox OEM PCB uses a self-resettable Polyfuse that will correct itself once the fault or overload condition is removed.

### 1.3.4 Do not operate the Instrument in an Explosive Atmosphere

Do not operate the instrument in the presence of flammable gases or fumes. The instrument contains mechanical switches and relays that could cause sparks and thus ignition of flammable gases or fumes.

### **1.3.5 Keep away from Live Circuits**

Operating personnel must not remove instrument covers. Component replacement and internal adjustments must be made by qualified service personnel. Do not replace components with power cable connected. Under certain conditions, dangerous voltages may exist even with the power cable removed. To avoid injuries, always disconnect power, discharge circuits and remove external voltage sources before touching components.

### **1.3.6 Do not Service or Adjust alone**

Do not attempt internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.

### **1.3.7 Do not exceed Ratings**

Jackson Labs instruments are equipped with a line filter to reduce electromagnetic interference and must be connected to a properly grounded receptacle to minimize electric shock hazard. Operation at line voltages or frequencies in excess of those stated on the data plate may cause unsafe leakage currents.

### **1.3.8 Do not substitute parts or modify the Instrument**

Do not install substitute parts or perform any unauthorized modifications to Jackson Labs instruments. Return the instrument to Jackson Labs for service and repair to ensure that safety features are maintained. Instruments that appear damaged or defective should be made inoperative and secured against unintended operation until they can be repaired by qualified service personnel.

### **1.3.9 Operational Warning**

Do not operate Jackson Labs instruments without their covers and face plates in place. Life line voltages are present inside the case, and could cause bodily harm or death when the units are operated without their covers in place.

