

**JUICE GOOSE™**

## RX 50 AC Line Surge Protection

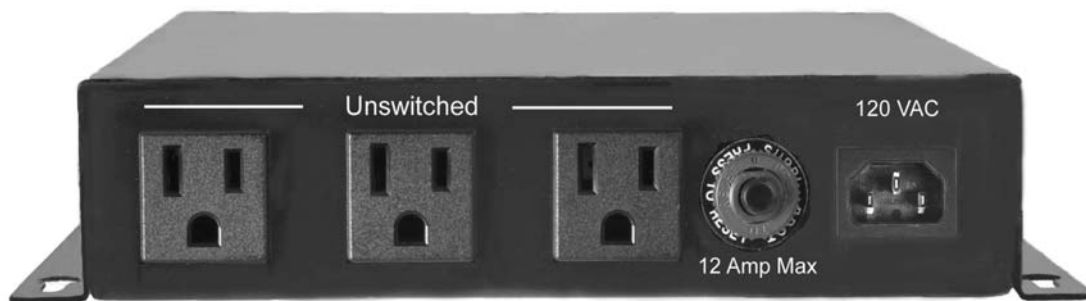


Juice Goose RX Series technology has been tested and proven superior in protecting against AC line surges on hot, neutral and ground. (Go to [www.juicegoose.com/rx-series](http://www.juicegoose.com/rx-series) for test results.) Surges of 6,000 volts / 3,000 amps are reduced to 10 volts between line and neutral and 1/2 volt on the ground line.

A combination of non-sacrificial components and patented, advanced circuitry provide power line protection that has been demonstrated superior to others in the commercial audio video market.

The RX 50 is housed in a slim line enclosure, only 1.75" x 9" x 9.5" and weighing only 6 pounds. Side mounting brackets and a detachable power cord increase the convenience of using this product to protect video display panels and other non- rack mounted components.

Front panel LEDs indicate a) when the unit is connected to live AC power, b) the presence of an external wiring fault that prevents the unit from conducting power and c) the status of RX Series protection.



## SURGE PROTECTION

Juice Goose RX Series products use a patented Hybrid Filter Technology to clean up both normal mode (between line and neutral) and common mode (between neutral and ground) noise without contaminating the ground line. Many popular power conditioners are less effective on normal mode and provide little or no protection from common mode interference. "Series mode" protection circuits are not designed to protect against common mode disturbances on the ground line.

The Hybrid Filter Technology includes components that act as a low pass filter which reduces high frequency interference. Other components absorb or divert high speed, high energy normal and common mode surges that can cause immediate or eventual damage to electronic components. Energy impulses as great as 6,000 volts are reduced to no more than 10 volts between hot and neutral and only 0.5 volts between neutral and ground.

The RX Series circuit also protects against structural wiring problems. Relays in the RX Series unit prevent operation in conditions of incorrect hot, neutral or ground wiring connection or in the event of dangerously high voltage. If this unit is plugged into an outlet that is not properly wired - if hot, neutral and ground are not properly connected - power will not pass to the receptacles and a light on the front of the unit will indicate a wiring fault. Therefore, a functioning ground connection is required to operate any RX Series product. This same safety measure functions when incoming voltage exceeds 150 volts. In this over voltage situation the unit will not pass power to connected equipment.

Juice Goose RX Series power protection technology is particularly valuable because it works against common mode (ground line) as well as normal mode events. While common mode surges and disturbances don't typically cause catastrophic damage, they can result in operating failures and improper performance of digital processing equipment.

Compared with the low operating voltage of processor logic, a power anomaly of even 1 or 2 volts on data lines or logic ground can cause problems. That's why the RX Series products have a voltage surge let through of only 1/2 volt between neutral and ground. These products also protect against more dramatic events. Connected equipment is safe from surges up to 6,000 volts at 3,000 amps on hot, neutral and ground.

The RX 50 design also includes protection from external wiring faults including hot-neutral reversal, missing ground and over voltage. LEDs on the chassis indicate when surge protection is functioning and when there is an external wiring fault that prevents power output.

## DETAIL SPECIFICATIONS

Chassis.....16 gauge steel  
Dimensions (including mounting flange).....1.75"H x 9"W x 9.5"D  
Weight.....6 lbs

Circuit Breaker (thermal).....15A  
Technical Current Rating.....12A  
Power Output.....Three unswitched NEMA 5/15R  
Power Input.....Detachable NEMA 18 AWG power cord with right angle plug  
Input Voltage.....120 VAC @ 60Hz

LED Indicators.....power, external fault (RX model only), protection status

### Surge Protection

Transient Energy Absorption (Joules).....1,020  
Max Applied Surge Pulse Voltage.....6,000  
Max Applied Surge Current (Amps).....3,000  
Max Surge Let Through (Volts)  
Line - Neutral (Normal Mode).....10  
Ground (Common Mode).....0.50



www.juicegoose.com  
Houston, Texas  
713-772-1404

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