

RPS16



OWNERS MANUAL

*MULTIPLE VOLTAGE
RACK MOUNTED
CCTV POWER SUPPLY*

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CONGRATULATIONS

You have purchased a practical solution to CCTV power problems. The Juice Goose RPS16 is a two space, rack mountable 120 VAC, 24 VAC and/or 12 VDC power distribution and protection module that features patented AC filter technology.

FEATURES SUMMARY

RPS16 features include:

RACK MOUNT
POWERS 8 OR 16 CAMERAS
12VDC @ 60 WATTS PER 8 CAMERAS
24VAC @ 84 WATTS PER 8 CAMERAS
120VAC @15 AMPS
4 INDIVIDUALLY FUSED POWER BANKS
FUSES ACCESSABLE FROM THE FRONT
LED POWER INDICATORS
REMOTE ALARM CONTACT
ALL EXTERNAL POWER CONNECTIONS
7 FOOT POWER CORD
OPTIONAL 120VAC SURGE PROTECTION
REINFORCED CHASSIS

SAFETY PRECAUTIONS

The RPS16 is designed to operate with 120VAC, 60 Hz. Operation with 220 or 240 volts will damage the unit and possibly cause personal injury.

CAUTIONS

1. The RPS16 should always be grounded. Defeating the unit's grounding capability could create a hazard.
2. There are no user serviceable parts inside the RPS16. Do not attempt service yourself. Contact Juice Goose as directed in this manual if service is required.
3. Do not expose the RPS16 to moisture. Avoid severe physical impacts to the unit.

DISCLAIMER

Juice Goose shall under no circumstances be held responsible for any loss, damage or injury resulting from the use of the RPS16 in a manner inconsistent with any of the procedures outlined in this document. The user is responsible for determining whether this product is appropriate for the intended application.

Juice Goose is not responsible for any indirect, secondary or ancillary loss or damage, including personal injury, loss of or damage to property or loss of income resulting from the operation or failure of this unit.

SPECIFICA-

DIMENSIONS (INCHES)	3.47 x 19.00 x 10.00
WEIGHT (LBS) (Dependent on Features)	12 to 20
POWER INPUT	120 VAC, 60Hz
POWER OUTLETS	5 SINGLE NEMA 5-15R 4 or 8 BANKS of 4 POSITION BAR-
CURRENT CAPACITY	15 AMPS @ 120 VAC 3.5 AMPS @ 24 VAC / 8 CAMERAS
POWER CORD	7 FOOT, 14/3 SJT
CURRENT OVERLOAD PROTECTION	15 AMP MASTER CIRCUIT
FUSE ALARM INDICATIONS	REMOTE – N .O. CONTACT CLO-
TRANSIENT ENERGY ABSORPTION (JOULES) *	1020
MAXIMUM APPLIED SURGE CURRENT (AMPS) *	3000
MAXIMUM APPLIED SURGE VOLTAGE (VOLTS) *	6000
SURGE LET THROUGH RATE (VOLTS) *	
L-N	10
N-G	0.5
COMMON MODE (N-G) LINE NOISE REJECTION (dB)	
100 kHz	30
300 kHz	77
1 MHz	80
10MHz	80
30MHz	80
NORMAL MODE (L-N) LINE NOISE REJECTION (dB)	
100 kHz	21
300 kHz	56
1 MHz	60
10MHz	60
30MHz	60
CHASSIS DESIGN	TOUR CLASS – UNIBODY
CHASSIS FINISH	POWDER COAT ENAMEL

* NOTE: Power protection is only available for RPS16-RX units with optional PoweRX

RPS16 FEATURES DETAIL

FRONT PANEL

Fuse Holders – Either 2 or 4 four camera power supplies are protected by individual fuses. These fuses should be rated at no more than 2 amps for AC power and 3 amps for DC power.

Power Indicator Lights – Each of four LEDES located on the front panel indicate the presence of power to each of the four fuse banks: A, B, C and D.

AC Power Outlet – A single NEMA 5/15R electrical outlet is available for use with tools or accessories. This outlet will feature PoweRX AC protection if this option has been included in this particular RPS16 unit.

REAR PANEL

Camera Power Terminals – Depending on the model, the RPS16 will have two or four sets of terminals. Each set can power up to four cameras. The terminals are labeled: A, B, C and D. Each letter corresponds to the label on the front of the chassis of the fuse that protects that terminal. Each terminal is labeled to indicate its voltage: either 24VAC or 12VDC .

Remote Alarm Terminal – This two position terminal provides a dry contact closure which can trigger a remote alarm in the event of failure of any of the RPS16 power supplies. This contact is open during normal operation and closes in the event of a power fault.

AC Outlets – These four outlets (NEMA 5-15R) are rated for current loads up to 15 amps at 120 volts. PoweRX protection from dangerous voltage surges is available in models with a RPS16-**RX**– model number.

Circuit Breaker – A 15 amp resettable, thermal circuit breaker protects the unit from current overloads.

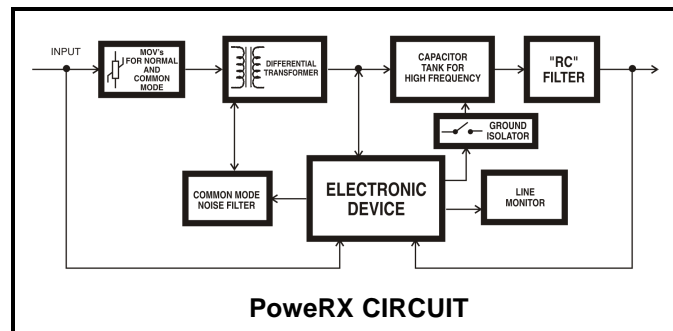
Power Cord – The RPS16 connects to utility power with a grounded 6 foot long 14 gauge power cord with a NEMA 5-15P plug.

INTERNAL PROTECTION COMPONENTS

RPS16-**RX** models feature Juice Goose PowerRX AC power protection. PowerRX protection uses a patented Transformer Based Filter™ technology to clean up both normal mode and common mode noise while protecting against dangerous high voltage surges. Normal mode noise occurs between the line and neutral leads of an electric power circuit. Common mode noise occurs between either the line or neutral and the safety ground lead.

The Transformer Based Filter, by using a differential transformer and capacitors, acts as a low pass, "line conditioning" filter which performs in the same way as a series mode inductor. These components, along with a capacitor between neutral and ground comprise the foundation of the Transformer Based Filter design which conditions incoming AC power, removing normal and common mode noise without adversely affecting the ground line. Incoming surges of as high as 6,000 volts are reduced to no more than 10 volts on normal mode and less than 1 volt on common mode.

This enhanced circuitry is valuable for protecting DVRs and other sensitive equipment which may be prone to malfunction or damage as the result of power disturbances, particularly common mode surges.



INSTALLATION

1. Make sure the RPS16 is unplugged when installing it and making connections with cameras.
2. Rack mount the RPS16 in the desired location.
3. Connect cameras to the screw terminals on the back of the RPS16. Both leads from a single camera should be connected to the same terminal bank (e.g. both to A or both to B). Take care to match the voltage required by a camera with the correct terminal. Do not power AC cameras with DC voltage. Do not power DC cameras with AC voltage. Note the polarity (+/-) indicated for any 12VDC connections.
4. For remote alarm monitoring, the two position screw terminal on the back of the RPS16 provides a normally open contact. When the RPS16 is powered and there are no

power supply or fuse faults, the terminal will be **open**. In the event of a failure there will be a contact between the two terminals which can be used to complete a remote circuit and activate an alarm. There is no voltage potential between these terminals.

5. Plug any additional 120 VAC equipment such as recorders and monitors into the four NEMA receptacles on the back of the RPS16.

6. Plug the RPS16 power cord into a grounded 120 VAC utility receptacle. Power will be supplied to connected equipment as soon as the RPS16 is plugged in. (Note – with the PowerRX protection option the RPS16 must be grounded to operate.) Green power LEDs on the front of the chassis will illuminate when power is present.

TROUBLESHOOTING

Always unplug the RPS16 before performing any maintenance or adjustment.

The RPS16 is ruggedly designed and constructed from high quality components to give years of dependable power for your equipment. It requires neither maintenance nor adjustment. It is unlikely to malfunction. However, there are potential events to note:

One of the LEDs on the front is not lighted. This will normally indicate a blown fuse in the indicated fuse holder. Unplug the RPS16. Remove, examine and replace as necessary the suspicious fuse. Plug in the RPS16.

More than one LED on the front is not lighted. Fuse and terminal positions A and B are both connected to a single power supply – as are positions C and D. If LEDs A and B or C and D are unlighted. Unplug the RPS16. First remove and examine the fuses and replace if necessary. If the fuses are not blown the problem is probably a failed power supply. Contact Juice Goose for service support.

The RPS16 with the PowerRX option will not come on or turns itself off.

a. Check the status of the power supplied to the unit. If line voltage exceeds 165 volts for 3 seconds protection circuitry will disconnect power to the AC power outputs. This will also occur if the ground is disconnected or if line and neutral leads are reversed. Use a voltage meter and/or polarity tester to examine the status of incoming power.

b. Check that the circuit breaker is not tripped and that the current load on the unit does not exceed its rated 15 amp capacity. If the breaker is tripped, remove sufficient current load to reduce the total to no more than 15 amps, wait approximately 30 seconds after the tripping and push in the circuit breaker button.

If an observed problem can not be remedied, particularly if the problem seems severe or dangerous, discontinue use of the RPS16 and contact Juice Goose directly.

REPAIR

Should your RPS16 need service contact Juice Goose for assistance and authorization to return the unit. PLEASE NOTE: a return authorization number is required in order for the service personnel to correctly and promptly identify, repair and return your unit.

You may obtain a Return Authorization Number by calling: 713-772-1404 or sending email to info@juicegoose.com.