

Remote Power Switch

Installation Guide



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1. Welcome

The Remote Power Switch system is produced by Minicom Advanced Systems Limited.

Technical precautions

This equipment generates radio frequency energy and if not installed in accordance with the manufacturer's instructions, may cause radio frequency interference.

This equipment complies with Part 15, Subpart J of the FCC rules for a Class A computing device. This equipment also complies with the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of the Canadian Department of Communications. These above rules are designed to provide reasonable protection against such interference when operating the equipment in a commercial environment. If operation of this equipment in a residential area causes radio frequency interference, the user, and not Minicom Advanced Systems Limited, will be responsible.

Changes or modifications made to this equipment not expressly approved by Minicom Advanced Systems Limited could void the user's authority to operate the equipment.

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Languages

This Installation Guide is translated into German, French and Italian. The translations appear on the supplied CD or on our website at www.minicom.com under Support / User guides.

2. Introduction

The Remote Power Switch (RPS) is an Internet ready device that remotely controls the AC power of up to 8 connected devices, such as: servers, routers, modems and telephone networks. You can cascade up to 15 Slave units to control a total of 128 devices via a 10/100 Base-T Ethernet TCP/IP connection.

A user can power on/off, reboot or safe shutdown any server or hardware device that is physically connected to the RPS.

3. RPS components

The RPS system has the following components:

- RPS Manager - 115VAC or 230VAC model
- RPS Slaves - 115VAC or 230VAC models (optional)
- Rack-mount brackets
- 2 AC Power cords
- 8 Serial cables (RJ-11 - RS232 connectors). To perform safe shutdown.
- 1 RJ-11 cascade cable. For RPS cascading or UPS connection
- 2 terminators
- On the Marketing & Documentation CD you will find:
 - SNMP Utility: To configure an IP address and update firmware
 - MIB: Management Information Base for SNMP
 - Linux safe shutdown utility

4. The RPS units

The figures below illustrate the RPS Manager and Slave front and rear panels. The Slave is the same as RPS Manager without the SNMP card.

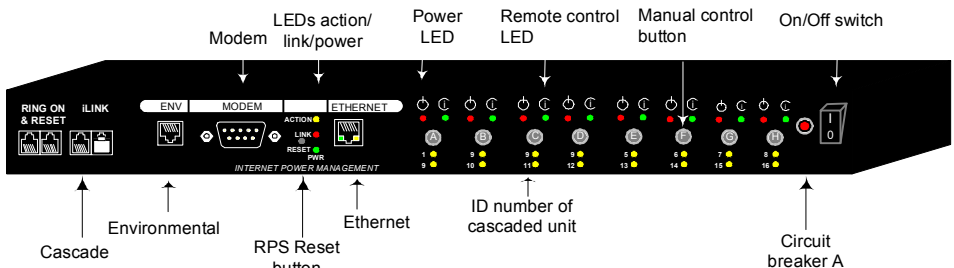


Figure 1 RPS Manager front panel

REMOTE POWER SWITCH

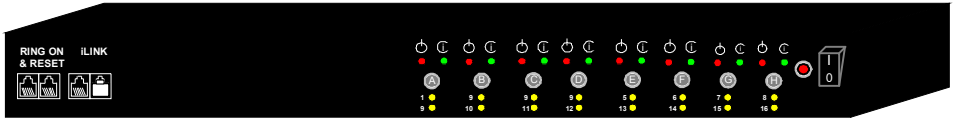


Figure 2 RPS Slave front

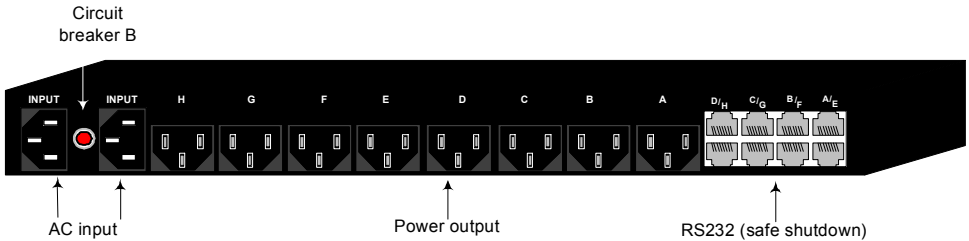


Figure 3 RPS Manager and Slave rear panel

Note: The letter on the manual buttons at the front corresponds to the outlet with the same letter at the rear.

5. Rack mounting the RPS

The RPS comes with brackets for mounting onto a standard 19-inch rack.

To rack mount the RPS:

1. Choose a location for the brackets. A notched hole on the vertical rail denotes the middle of a U slot.
2. Connect the mounting brackets to the unit, using the screws provided. See Figure 4

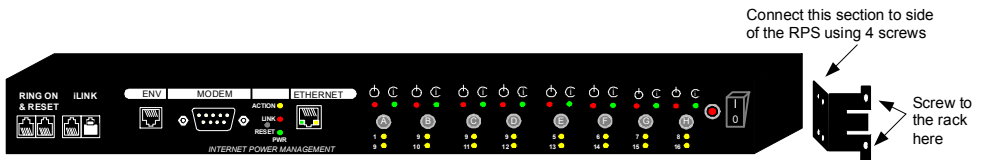


Figure 4 Connecting the mounting brackets

6. Installing the RPS

You can connect the RPS to a LAN using the Ethernet connection. Another option is to connect an external modem to the built-in RS 232 port for Internet dial up. Once set up, the administrator can power the devices on and off via a Web browser.

Connecting the RPS

1. Connect the power cord sockets of the computers and other devices to the Output ports of the RPS.

2. Connect the socket of any Uninterruptible Power Supply (UPS) to the Input ports of the RPS, or connect the RPS to the power supply using the power cord.
3. Connect an Ethernet cable to Ethernet port of the RPS – see Figure 5.
4. Plug a Terminator into one of the iLINK ports.
5. Where you have an environmental sensor, connect the sensor's connector to the ENV port on the RPS Manager.

Connection diagram

The figure below illustrates the basic RPS connections.

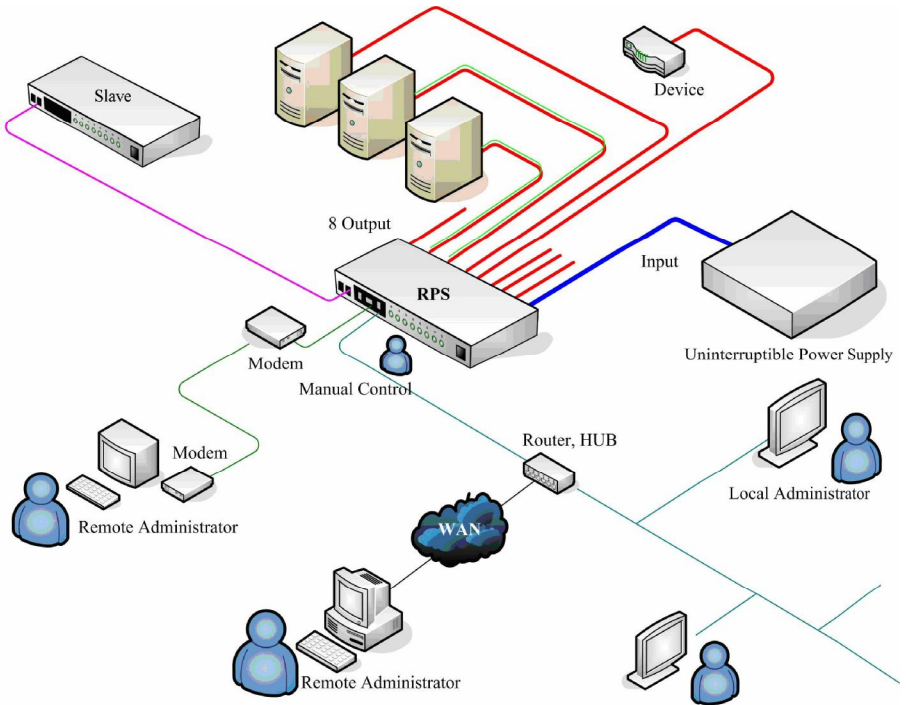


Figure 5 RPS connection diagram

7. Installing the SNMP Utility

Assign an IP address for the RPS using the SNMP Utility.

1. Install the SNMP Utility located on the CD onto a Windows based computer.
2. Click Start/ Programs/ SNMP Utility. The SNMP Utility appears, see Figure 6.

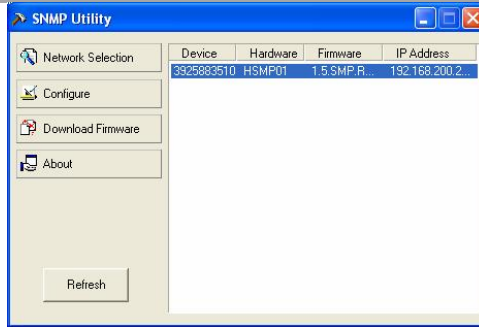


Figure 6 SNMP Utility

Network Selection

SNMP Utility automatically searches for the computer’s network adapter.

1. From the menu click **Network Selection**. The Network Adapter box appears, see Figure 7.
2. Choose the network adapter that connects your computer to the LAN.
3. Click **OK**. The Main window reappears. SNMP Utility searches for all RPS on the same LAN and displays all RPS available.

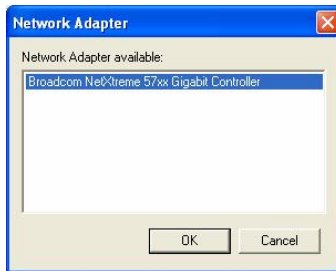


Figure 7 Network Adapter box

Configure

You must configure an IP address for the RPS Web interface.

1. Click one of the displayed RPS and click **Configure** or double-click the RPS directly. The IP Address page appears, see Figure 8.
2. Set the IP address; subnet mask; and gateway manually or use DHCP or BOOTP.

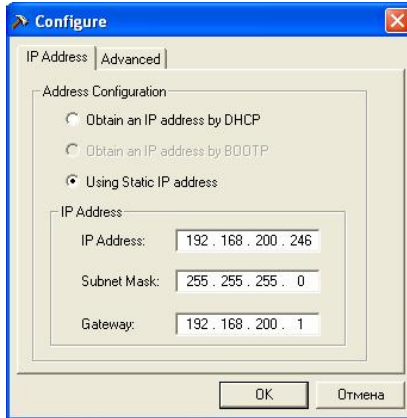


Figure 8 IP address for RPS

Advanced tab

Click the **Advanced** tab. Figure 9 appears.

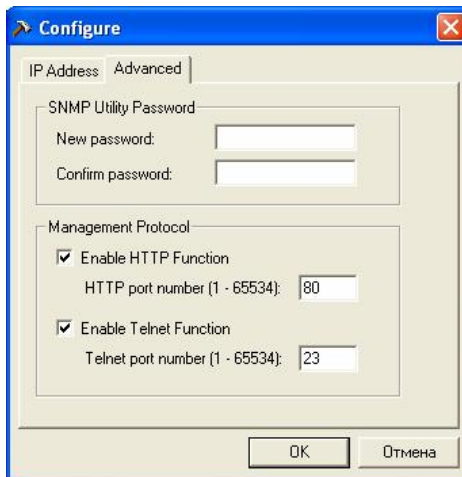


Figure 9 Advanced tab

SNMP Utility provides the following security features.

SNMP Utility Password

By inputting a password, firmware updates to RPS by the SNMP Utility will require a password.

Note! If you lose the password, you will not be able to update the RPS firmware.

Management Protocol

You can manage the RPS through the Web or a Telnet application. For security reasons we recommend that you change the default port numbers.

Type a new port number. The full Address must then be entered to access via the Web or Telnet. For example:

For the HTTP port number type 81. The URL is <http://192.168.0.177:81>.

For the Telnet port number type 24. The Telnet address is 192.168.0.177 24.

Download firmware - discussed in the Operating Guide.

Refresh button

When you add a new RPS to the network, press **Refresh** to rescan the network. The new RPS appears.

8. Safe shutdown

To perform safe shutdown via the RPS, connect the Serial cable to the desired computer as follows:

1. Connect the RJ11 connector to the appropriate RS232 port on the rear of the RPS. See Figure 3 above. For example, if the computer is connected to power outlet D, connect the RJ11 connector to the RS232 D port.
2. Connect the RS232 connector to the computer's Serial port.

Safe shutdown for Linux

Use the following instruction to setup safe shutdown for Linux.

1. Decompress the RPS1Linux.tar.gz (found on the CD).
2. Run Setup.
3. Select the Serial port to which the RS232 cable is connected.

Safe shutdown for Windows

Configure the UPS service as follow:

1. Select Start/Settings/Control Panel. The Control Panel appears.
2. Double-click the Administrative Tools icon. The Administrative Tools appear.
3. Double-click the Services icon. The Services window appears see Figure 10.

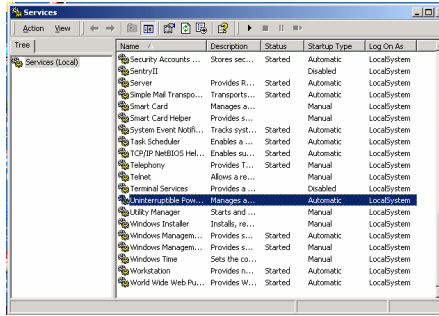


Figure 10 Services window

4. Double-click Uninterruptible Power Supply (UPS). The UPS properties box appears.

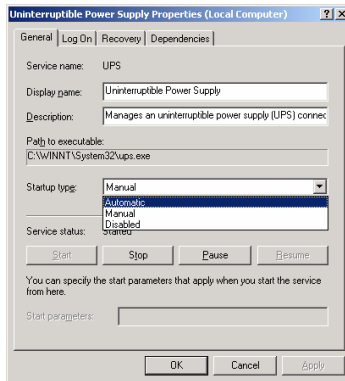


Figure 11 UPS properties box

5. From the Startup type Drop-down menu, select Automatic.
6. Click the **Log On** tab, Figure 12 appears.

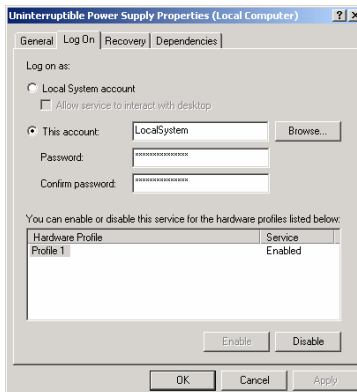


Figure 12 UPS properties box

7. Check **This account** and input the appropriate account information.

8. Click **OK**.
9. From the Control Panel, double-click the Power Options icon. See Figure 13. The Power Options properties box appears.

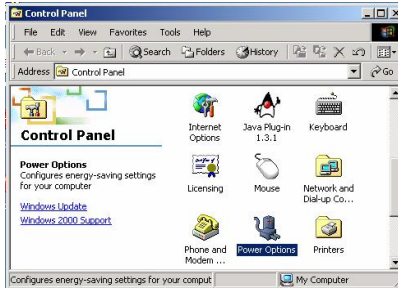


Figure 13 Power Options icon

10. Select the UPS tab, the following appears.

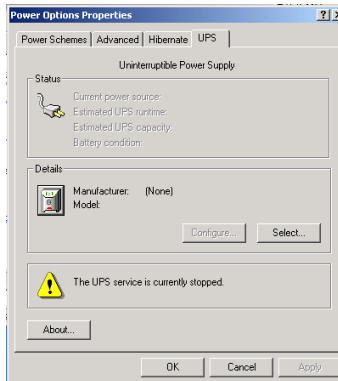


Figure 14 UPS tab

11. In the details section click **Select...**The UPS Selection box appears. See Figure 15.

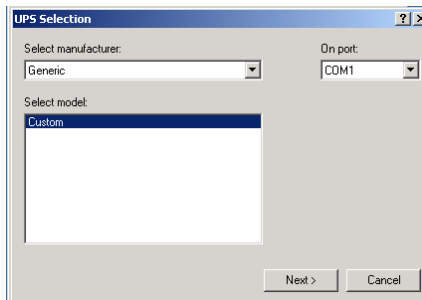


Figure 15 UPS Selection box

12. From the Select manufacturer drop-down list choose the manufacturer.

13. Choose the correct COM port, and click **Next**. The following figure appears.

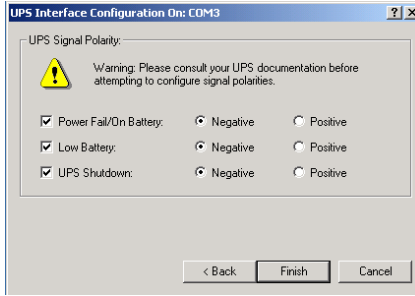


Figure 16 UPS interface configuration

14. Check all 3 boxes, as shown in Figure 16, and choose **Negative** for the 3 voltage settings.

15. Click **Finish**.

9. Operating the RPS

To configure and control the outlets via a Web browser see the softcopy Operating Guide on the supplied CD.

To cascade the RPS system, see the section below.

10. Cascading RPS units

You can cascade up to 16 RPS units. Each RPS must have its own unique ID number. The default ID no. is RPS00.

Before you begin cascading you must change the RPS Manager ID number. To do so see the RPS Setting section of the Operating Guide.

To cascade the RPS Slave units:

1. Power off the RPS Manager and Slave units.
2. Plug a Terminator into one of the RPS Manager's iLINK ports and one into one of the Slave's iLINK ports.

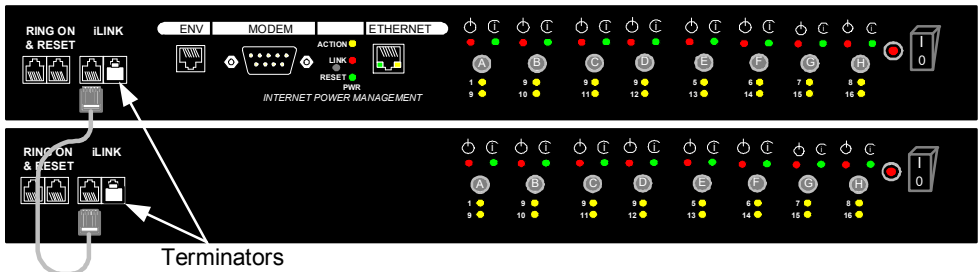


Figure 17 Connecting the iLink cable

3. Connect the iLink cable to the iLINK ports of the 2 units. See Figure 17
4. Power on the RPS Manager and the Slave.
5. Go to the RPS Setting section of the Operating Guide and change the Slave's ID number. The RPS system is ready for use.

To cascade a third and subsequent Slaves:

1. Power off the RPS Manager and Slave units.
2. Plug a terminator into the Manager iLINK port and the iLINK port of latest Slave to be cascaded.

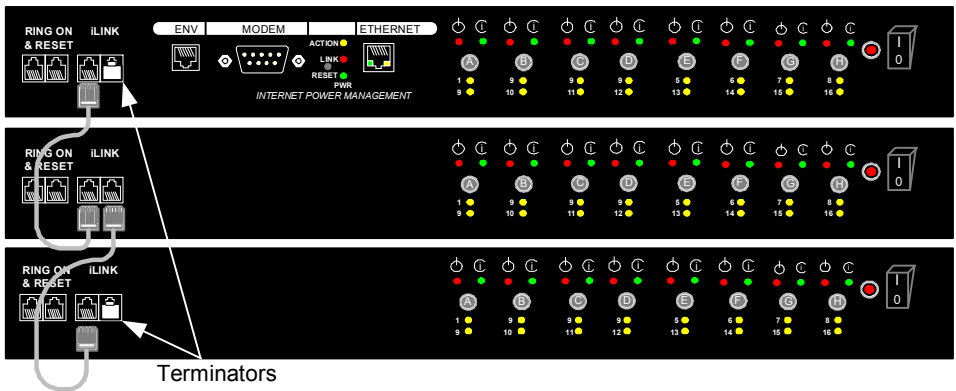


Figure 18 Adding more Slaves

3. Connect another iLink cable to the iLINK ports of the latest Slave to be added and the previous Slave. See Figure 18.
4. Power on all RPS units.
5. Go to the RPS Setting section of the Operating Guide and change the Slave's ID number.
6. Follow the above procedure to add more Slaves.

11. Technical specifications

	Remote Power Switch Manager	Remote Power Switch Slave
LAN interface	RJ45; 10/100M Auto-detect	N/A
Modem	RS232	N/A
ENV	RJ11	N/A
Reset button	Yes	N/A
iLink interface	2 x RJ11, connection to cascaded unit	
NT safe shutdown	8 x RJ11	
Power control	2 AC inputs each feeding 4 outputs	
Input	2 input connectors IEC320P	
Output	8 x IEC320R	
Power protection	7 Amp circuit breaker	
LEDs - Red	On/Off status 1 LED for each outlet	
LEDs - Green	Indicates internet/non internet control 1 LED for each outlet	
LEDs - yellow	Indicates the ID no. of iLink cascade - 16 LEDs	
Nominal input voltage	220V model and 110V model	
Frequency	50/60HZ full range	
Maximum output capacity	2 x 7Amp	
Operating temperature	0° to 40°C/32° to 104°F	
Storage temperature	-40°C to 40°C/-40°F to 104°F	
Relative humidity	0 - 95% non - Amp circuit breaker	
Dimensions (H x L x D)	4.4 x 43.1 x 16.2 cm / 1.73 x 16.96 x 6.37	
Weight	2.5 kg / 5.51 lb	
Regulatory compliance	UL, FCC	

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