

Remote Power Control

User Manual

PCR8

PCS12

PCS20



This page intentionally left blank

User Manual

PCR8

PCS12

PCS20

Copyright © 2003 Raritan Computer, Inc.
RPC-0B-E
August 2003
255-30-3150



Raritan Computer Inc.
400 Cottontail Lane
Somerset, NJ 08873
USA
Tel. 1-732-764-8886
Fax. 1-732-764-8887
E-mail: sales@raritan.com
<http://www.raritan.com>

Raritan Computer Europe, B.V.
Eglantierbaan 16
2908 LV Capelle aan den IJssel
The Netherlands
Tel. 31-10-284-4040
Fax. 31-10-284-4049
E-mail: sales.europe@raritan.com
<http://www.raritan.com>

Raritan Computer Japan, Inc.
Kuga Building 7F
11-6, Kuramae 4-chome
Taitoo-ku, Tokyo 111-0051, Japan
Tel. 81-3-5833-6360
Fax. 81-3-5833-6336
E-mail: sales.japan@raritan.com
<http://www.raritan.co.jp>

Raritan Computer Taiwan, Inc.
5F, 121, Lane 235,
Pao-Chiao Rd., Hsin Tien
Taipei Hsien, Taiwan, ROC
Tel. 886-2-8919-1333
Fax. 886-2-8919-1338
E-mail: sales.asia@raritan.com
<http://www.raritan.com.tw>

This page intentionally left blank.

COPYRIGHT AND TRADEMARK INFORMATION

This document contains proprietary information that is protected by copyright. All rights reserved. No part of this document may be photocopied, reproduced, or translated into another language without express prior written consent of Raritan Computer, Inc.

© Copyright 2003 Raritan Computer, Inc., Remote Power Control™, Paragon®, Reach®, Dominion™, Powerboard™ are trademarks of Raritan Computer, Inc. All rights reserved. Java® is a registered trademark of Sun Microsystems, Inc. Internet Explorer® is a registered trademark of Microsoft Corporation. Netscape® and Netscape Navigator® are registered trademarks of Netscape Communication Corporation. Other trademarks or registered trademarks are the property of their respective holders.

*Contact the Raritan Technical Support Team at (732) 764-8886 for assistance or email support@raritan.com
Ask for Technical Support – Monday through Friday, 8:00am to 5:00pm, EST.*

This page intentionally left blank.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	1
PRODUCT FEATURES.....	1
PACKAGE CONTENTS.....	1
PRODUCT PHOTOS.....	2
CHAPTER 2: QUICK START.....	3
PCR8 QUICK START	4
EIA-232 Serial Connection	4
PCR8 Operation.....	5
Viewing the Status Menu	5
Controlling Outlets.....	5
PCR8 Configuration	6
PCS12 QUICK START	7
EIA-232 Serial Connection	7
PCS12 Operation	8
Viewing the Status Menu	8
Controlling Outlets.....	8
PCS12 Configuration.....	9
PCS20 QUICK START	10
EIA-232 Serial Connection	10
PCS20 Operation	11
Viewing the Status Menu	11
Controlling Outlets.....	11
PCS20 Configuration.....	12
CHAPTER 3: INSTALLATION	13
UNPACKING.....	13
PREPARING THE INSTALLATION SITE.....	13
RJ-45 CABLES AND ADAPTERS.....	13
CONNECTING THE REMOTE POWER CONTROL UNIT	14
Power	15
Power On/Off State	15
Power Up Sequence	15
Circuit Breaker	16
Serial Connection.....	16
The EIA-232 Serial Connection.....	16
CHAPTER 4: OPERATION AND CONFIGURATION.....	17
REMOTE POWER CONTROL OPERATION	17
Viewing the Status Menu.....	17
Controlling Outlets.....	18
On	18
Off	18
Reboot.....	19
Help.....	19
Changing Passwords	19

REMOTE POWER CONTROL CONFIGURATION	20
Manage Users	20
Add a User	20
Delete a User	21
Rename a User	21
Add and Remove Outlets	22
Change Outlet Names	23
Enable/Disable Confirmation	24
Enable/Disable Status Menu	24
Change Unit ID	25
Change Overload Audible Alarm Threshold	25
APPENDIX A: SPECIFICATIONS	27
REMOTE POWER CONTROL / SCS232 CONNECTION SPECIFICATION	27
APPENDIX B: EQUIPMENT SETUP WORKSHEET	29
APPENDIX C: TROUBLESHOOTING.....	31

Safety Instructions

1. This unit is intended for indoor use only.
2. Do not install near water or expose this unit to moisture.
3. To prevent heat buildup, do not coil the power cord when in use.
4. Do not use extension cords.
5. Do not attempt to make any internal changes to the power source. Do not attempt to modify any portion or component of a Remote Power Control unit unless specifically directed to. Raritan must perform any internal operations.
6. High-voltage surges and spikes can damage this equipment. To protect from such power surges and spikes, this unit must have a good earth ground. There is an earth ground connection next to the circuit breaker.
7. Before removing or replacing any cables or power cords, power off the Remote Power Control unit. Communication to the unit will be disrupted while power is off.
8. Do not exceed the AC current rating for the selected model. (Please refer to **Appendix A: Specifications** for further information).
9. Although the power switch is turned OFF, the unit is not totally isolated from the power supply. In order to be absolutely removed from the power supply, the power cord must be unplugged from the unit.
10. For PERMANENTLY CONNECTED EQUIPMENT, a readily accessible disconnect device shall be incorporated in the fixed wiring. For PLUGGABLE EQUIPMENT, the socket-outlet shall be installed near the equipment and easily accessible.

This page intentionally left blank.

CHAPTER 1: INTRODUCTION

The Raritan Remote Power Control unit is a full-featured AC power management solution that provides an easy way to control power of remote equipment. It provides system administrators with the capability to securely monitor and control power to data center devices from any location via web browser, serial, or out-of-band access. From the office or from anywhere, the Remote Power Control unit will power on, power off, or reboot remote equipment, as well as monitor current, voltage, power, and temperature.

The Remote Power Control unit offers the ability to recover systems remotely in the event of system failure and/or system lockup. It eliminates the need to perform manual intervention or dispatch field personnel, reduces downtime and mean time to repair, and increases productivity.

There are three Remote Power Control models; model PCR8, a rack-mountable eight outlet model that operates at 115VAC, 15 Amps; model PCS12, a vertical-mount twelve-outlet model that operates at 115VAC, 20 amps; and model PCS20, a vertical-mount twenty-outlet model that also operates at 115VAC, 20 amps.

115 VAC, 50/60 Hz, 15 AMP	
PCR8	Eight outlets, 1U rack mount, and an EIA-232 connection

115 VAC, 50/60 Hz, 20 AMP	
PCS12	Twelve outlets, “zero-U” vertical mount, and an EIA-232 connection
PCS20	Twenty outlets, “zero-U” vertical mount, and an EIA-232 connection

Product Features

- Total integration with Raritan’s Paragon, Reach, and Dominion solutions
- True RMS current monitoring with Overload Audible Alarm and indicator LED
- Outlet status retention during power loss
- Individual or collective control of outlets
- Programmable unit ID and outlet names
- Voltage and temperature monitoring
- 1U or “zero-U” form factor
- 15 or 20 Amp Power Rating

Package Contents

The complete Remote Power Control unit package includes:

- (1) Remote Power Control unit (PCR8, PCS12, or PCS20)
- (1) User Manual and/or User Manual CD ROM
- (1) Cat5e Cable
- (1) DB-9 (9 pin) female PC com port adapter (part #APCSDB9F)
- (1) DB-25 (25 pin) male PC com port adapter (part #APCSDB25M)

Product Photos



PCR8



PCS12



PCS20

CHAPTER 2: QUICK START

This chapter is designed for users who want fast setup and familiarization of the Remote Power Control unit. Detailed information on each of the functions and steps of operation and configuration outlined here are found in **Chapter 4: Operation and Configuration**.

Note: On the PCR8, the RJ-45 port is located on the front panel of the unit. On both the PCS12 and PCS20, the RJ-45 port is located on the end panels of the units.



RJ-45 Port on the PCR8

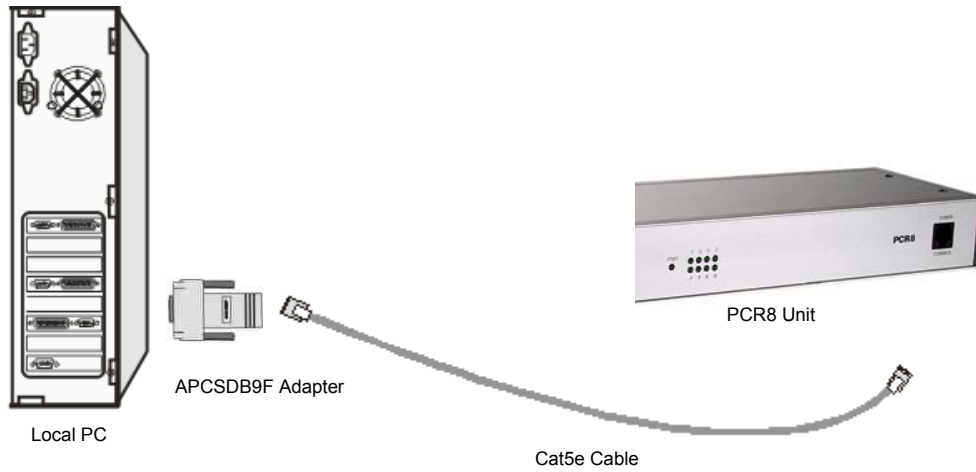


RJ-45 Port on the PCS12 and PCS20

PCR8 Quick Start

EIA-232 Serial Connection

1. With the computer powered ON, connect the included APCSD9F adapter into the serial port of the computer. Connect one end of the included Cat5 cable to the APCSD9F adapter and the other end to the RJ-45 port on the PCR8 unit. Plug the PCR8 into the nearest wall outlet.



Connecting the Computer to the PCR8

2. Load serial port communications software.
3. Set serial communications parameters to:
 - 9600 bps
 - 8 data bits
 - 1 stop bit
 - No Parity

PCR8 Operation

Viewing the Status Menu

The PCR8 unit powers ON once it is plugged in. The Status menu appears on the monitor of the connected computer:

```
Raritan PCR8
(C) 2003 Raritan Computer, Inc.
F2.07

Unit ID: Raritan PCR8

Average Power: 36 Watts    Apparent Power: 62 VA
True RMS Voltage: 116.4 Volts
True RMS Current: 0.5 Amps    Maximum Detected: 0.5 Amps
Internal Temperature: 28.0 C

Outlet Circuit Breaker: Good

1) . . . Outlet 1 : Off
2) . . . Outlet 2 : Off
3) . . . Outlet 3 : Off
4) . . . Outlet 4 : Off
5) . . . Outlet 5 : Off
6) . . . Outlet 6 : Off
7) . . . Outlet 7 : Off
8) . . . Outlet 8 : Off

PCR8>
```

PCR8 Status Menu

Note: If the Status menu does not appear, ensure that the correct cables and adapters are being used and that they are connected properly, and verify the serial communication parameters are correctly configured.

Controlling Outlets

To set or change the status of the outlets, enter one of the following commands, where “n” is the outlet number to command:

- ON n
- OFF n
- REBOOT n

Entering an outlet number of “0” sends the command to all outlets.

Important! Reboot works **only** on those outlets that are “On.”

PCR8 Configuration

At the **PCR8>** prompt, type **CONFIG** and press the **<Enter>** key. The Configuration menu appears:

```
PCR8> CONFIG
1)...Manage Users
2)...Change Outlet Name
3)...Enable/Disable Confirmation
4)...Enable/Disable Status Menu
5)...Change Unit ID
6)...Change Alarm Threshold
X)...Exit
Enter Request:
```

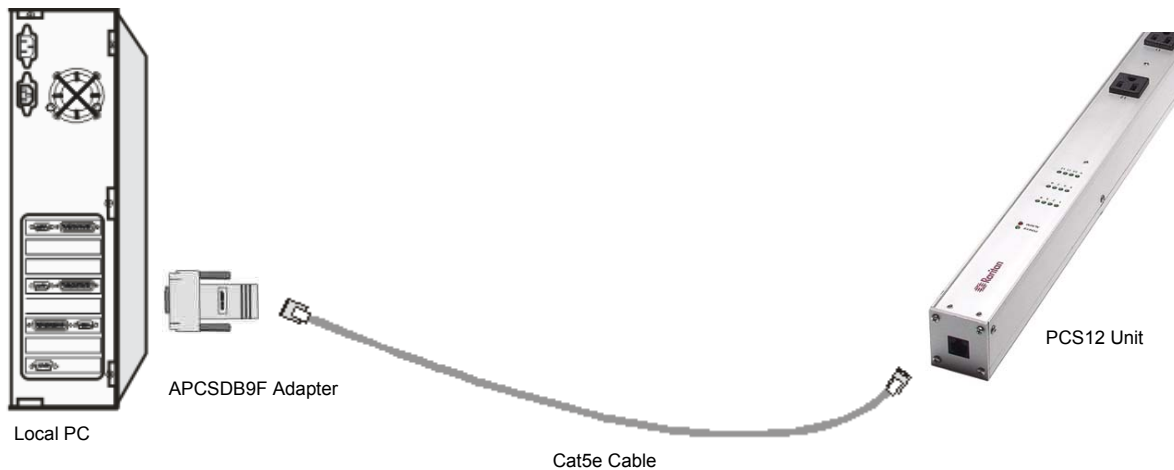
PCR8 Configuration Menu

1. **Manage Users** – Manage Users allows an Administrator to add or delete users and assign control of selected outlets.
2. **Change Outlet Name** – Change Outlet Name allows a user to personalize each outlet for easy identification. Maximum field length is ten (10) alphanumeric characters; default Outlet Names are Outlet 1, Outlet 2, and so on.
3. **Enable/Disable Confirmation** – Enable/Disable Confirmation prompts a user for a Yes/No response before a command is executed; default setting is **Disabled**.
4. **Enable/Disable Status Menu** – Enable/Disable Status menu toggles the status menu on/off; default setting is **Enabled**.
5. **Change Unit ID** – Change Unit ID allows a user to name the Remote Power Control unit. Maximum field length is sixteen (16) alphanumeric characters; default unit ID is **PCR8**.
6. **Change Alarm Threshold** – Change Alarm Threshold allows a user to set a threshold for the volume of the Overload Audible Alarm; default setting is **12.0 Amps**.

PCS12 Quick Start

EIA-232 Serial Connection

1. With the computer powered ON, connect the included APCSD9F adapter into the serial port of the computer. Connect one end of the included Cat5 cable to the APCSD9F adapter and the other end to the RJ-45 port on the PCS12 unit. Plug the PCS12 into the nearest wall outlet.



Connecting the Computer to the PCS12

2. Load serial port communications software.
3. Set serial communications parameters to:
 - 9600 bps
 - 8 data bits
 - 1 stop bit
 - No Parity

PCS12 Operation

Viewing the Status Menu

The PCS12 unit is powered ON once it is plugged in. The Status menu appears on the monitor of the connected computer:

```

Raritan PCS12
(C) 2003 Raritan Computer, Inc.
F1.01

Option(s) Installed:
True RMS Current

True RMS Voltage: 116 Volts

True RMS Current: 0.0 Amps
Maximum Detected: 0.0 Amps

1) . . . Outlet 1 : Off
2) . . . Outlet 2 : Off
3) . . . Outlet 3 : Off
4) . . . Outlet 4 : Off
5) . . . Outlet 5 : Off
6) . . . Outlet 6 : Off
7) . . . Outlet 7 : Off
8) . . . Outlet 8 : Off
9) . . . Outlet 9 : Off
10) . . . Outlet 10 : Off
11) . . . Outlet 11 : Off
12) . . . Outlet 12 : Off

Type "Help" for a list of commands

PCS12>

```

PCS12 Status Menu

Note: If the Status menu does not appear, ensure that the correct cables and adapters are being used and that they are connected properly, and verify the serial communication parameters are correctly configured.

Controlling Outlets

To set or change the status of the outlets, enter one of the following commands, where “n” is the outlet number to command:

- ON n
- OFF n
- REBOOT n

Entering an outlet number of “0” sends the command to all outlets.

Important! Reboot works **only** on those outlets that are “On.”

PCS12 Configuration

At the **PCS12>** prompt, type **CONFIG** and press the **<Enter>** key. The Configuration menu appears:

```
PCS12> CONFIG
1)...Manage Users
2)...Change Outlet Name
3)...Enable/Disable Confirmation
4)...Enable/Disable Status Menu
5)...Change Unit ID
6)...Change Alarm Threshold
X)...Exit
Enter Request:
```

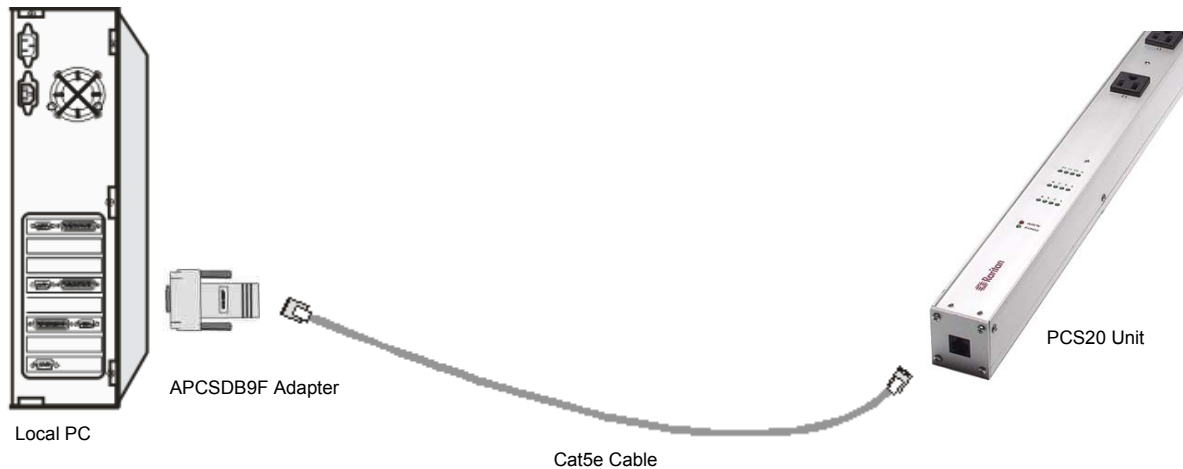
PCS12 Configuration Menu

1. **Manage Users** – Manage Users allows a user to add or delete users, and assign control of selected outlets.
2. **Change Outlet Name** – Change Outlet Name allows a user to personalize each outlet for easy identification. Maximum field length is ten (10) alphanumeric characters; default Outlet Names are Outlet 1, Outlet 2, and so on.
3. **Enable/Disable Confirmation** – Enable/Disable Confirmation prompts a user for a Yes/No response when changes are made; default setting is **disabled**.
4. **Enable/Disable Status Menu** – Enable/Disable Status menu toggles the status menu on/off; default setting is **enabled**.
5. **Change Unit ID** – Change Unit ID allows a user to name the Remote Power Control unit. Maximum field length is sixteen (16) alphanumeric characters; default unit ID is **PCS12**.
6. **Change Alarm Threshold** – Change Alarm Threshold allows a user to set a threshold for the volume of the Overload Audible Alarm; default setting is **16.0 Amps**.

PCS20 Quick Start

EIA-232 Serial Connection

1. With the computer powered ON, connect the included APCSD9F adapter into the serial port of the computer. Connect one end of the included Cat5 cable to the APCSD9F adapter and the other end to the RJ-45 port on the PCS20 unit. Plug the PCS20 into the nearest wall outlet.



Connecting the Computer to the PCS20

2. Load serial port communications software.
3. Set serial communications parameters to:
 - 9600 bps
 - 8 data bits
 - 1 stop bit
 - No Parity

PCS20 Operation

Viewing the Status Menu

The PCS20 unit is powered ON once it is plugged in. The Status menu appears on the monitor of the connected computer:

```

Raritan PCS20
(C) 2003 Raritan Computer, Inc.
F1.01

Option(s) Installed:
True RMS Current
Internal Temperature
True RMS Voltage

Enter user name: Raritan
Unit ID: RPS20

Average Power: 0 Watts           Apparent Power: 177 VA
True RMS Voltage: 110.6 Volts   Maximum Detected: 8.4 Amps
True RMS Current: 1.5 Amps

Internal Temperature: 26.5 C

Outlet Circuit Breaker: Good

1)...Outlet 1 : Off      2)...Outlet 2 : Off
3)...Outlet 3 : Off      4)...Outlet 4 : Off
5)...Outlet 5 : Off      6)...Outlet 6 : Off
7)...Outlet 7 : Off      8)...Outlet 8 : Off
9)...Outlet 9 : Off      10)...Outlet 10 : Off
11)...Outlet 11 : Off    12)...Outlet 12 : Off
13)...Outlet 13 : Off    14)...Outlet 14 : Off
15)...Outlet 15 : Off    16)...Outlet 16 : Off
17)...Outlet 17 : Off    18)...Outlet 18 : Off
19)...Outlet 19 : Off    20)...Outlet 20 : Off

Type "Help" for a list of commands

PCS20>

```

PCS20 Status Menu

Note: If the Status menu does not appear, ensure that the correct cables and adapters are being used and that they are connected properly, and verify the serial communication parameters are correctly configured.

Controlling Outlets

To set or change the status of the outlets, enter one of the following commands, where “n” is the outlet number to command:

- ON n
- OFF n
- REBOOT n

Entering an outlet number of “0” sends the command to all outlets.

Important! Reboot works **only** on those outlets that are “On.”

PCS20 Configuration

At the **PCS20>** prompt, type **CONFIG** and press the **<Enter>** key. The Configuration menu appears:

```
PCR20> CONFIG
1)...Manage Users
2)...Change Outlet Name
3)...Enable/Disable Confirmation
4)...Enable/Disable Status Menu
5)...Change Unit ID
6)...Change Alarm Threshold
X)...Exit
Enter Request:
```

PCS20 Configuration Menu

1. **Manage Users** – Manage Users allows an Administrator to add or delete users, and assign control of selected outlets.
2. **Change Outlet Name** – Change Outlet Name allows a user to personalize each outlet for easy identification. Maximum field length is ten (10) alphanumeric characters; default Outlet Names are Outlet 1, Outlet 2, and so on.
3. **Enable/Disable Confirmation** – Enable/Disable Confirmation prompts a user for a Yes/No response when changes are made; default setting is **disabled**.
4. **Enable/Disable Status Menu** – Enable/Disable Status menu toggles the status menu on/off; default setting is **enabled**.
5. **Change Unit ID** – Change Unit ID allows a user to name the Remote Power Control unit. Maximum field length is sixteen (16) alphanumeric characters; default unit ID is **PCS20**.
6. **Change Alarm Threshold** – Change Alarm Threshold allows a user to set a threshold for the volume of the Overload Audible Alarm; default setting is **16.0 Amps**.

CHAPTER 3: INSTALLATION

Unpacking

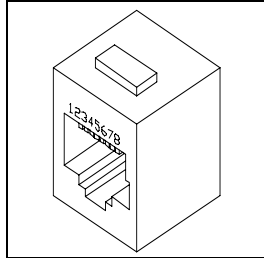
Compare the unit and serial number of the equipment to the number on the packing slip located on the outside of the box and make sure they match. Log the information on the worksheet in **Appendix B: Equipment Setup Worksheet**. Inspect equipment carefully. If there is damage to the equipment or if materials are missing, contact Raritan technical support at 732-764-8886.

Preparing the Installation Site

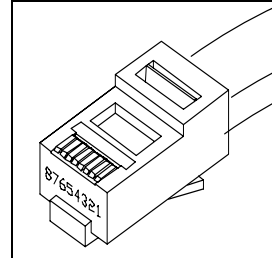
The installation area should be clean and free of extreme temperatures and humidity. Allow sufficient space around the Remote Power Control unit for cabling and outlet connections. Please review the Safety Instructions listed in the beginning of this manual.

RJ-45 Cables and Adapters

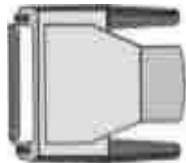
Important! All Remote Power Control models have an RJ-45 port for connecting to a local EIA-232 device such as a computer terminal or external modem. Most serial computers do not have RJ-45 connections, therefore, an adapter (Raritan Part No. APCSDB9F) to convert from a DB-9 connector to an RJ-45 connector and an adapter (Raritan Part No. APCSDB25M) to convert from a DB-25 connector to an RJ-45 connector are included with each Remote Power Control unit.



RJ-45 outlet



RJ-45 plug



APCSDB25M Adapter



APCSDB9F Adapter

The Power Control Units RJ-45 control port uses the following signals:

EIA-232 RJ-45 PIN/SIGNAL DEFINITION			
PIN	EIA-232 SIGNAL	DIRECTION	DESCRIPTION
1	DTR	Output	+10V when activated by DCD; toggles upon logout for modem disconnect.
2	GND	----	Signal Ground
3	RTS	Output	+10V when powered is applied; not used as a handshake line
4	TX	Output	Transmit Data (data out)
5	RX	Input	Receive Data (data in)
6	N/C	N/C	No Connection
7	GND	----	Signal Ground
8	DCD	Input	DCD into the Remote Power Control unit

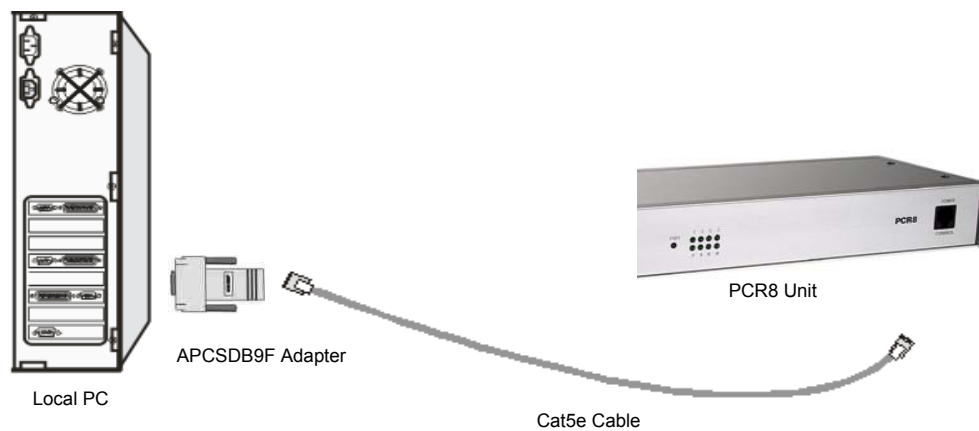
Connecting the Remote Power Control Unit

Note: On the PCR8, the RJ-45 port is located on the front panel of the unit. On both the PCS12 and PCS20, the RJ-45 port is located on the end panels of the units.

With the computer powered ON, connect the included APCSD9F adapter into the serial port of the computer. Connect one end of the included Cat5 cable to the APCSD9F adapter and the other end to the RJ-45 port on the Remote Power Control unit. Plug the Remote Power Control unit into the nearest wall outlet. The unit will automatically power ON.



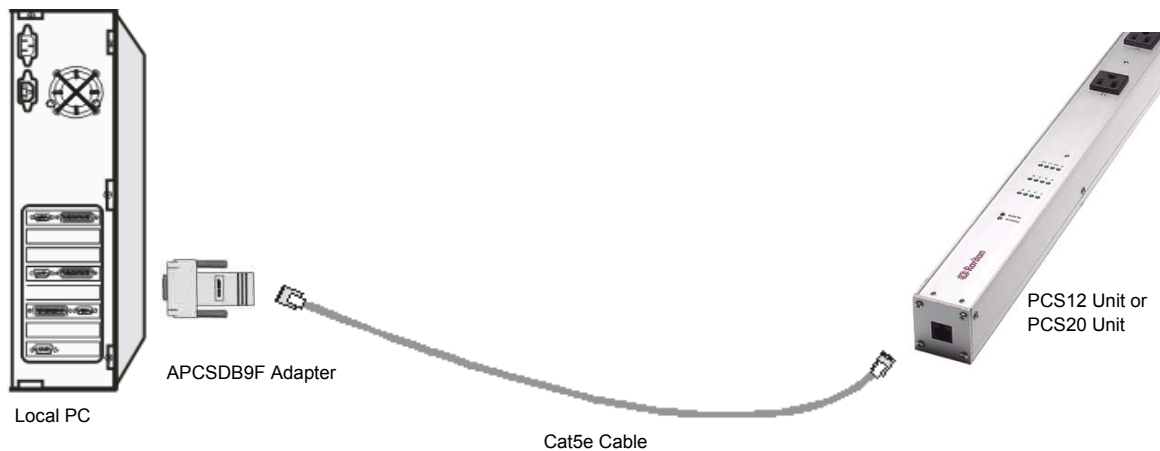
PCR8 RJ-45 Port



Connecting the Computer to a PCR8



PCS12 and PCS20 RJ-45 Port



Connecting the Computer to a PCS12 or a PCS20

Power

As soon as the Remote Power Control unit is plugged into a wall outlet, it powers ON. A green LED on the front panel is illuminated. If disconnected from a power source, the unit's LED is not lit, and devices connected to the unit are not receiving power.

Power On/Off State

Each outlet on the Remote Power Control unit is individually controlled by an internal relay. Upon initialization of power, the status of each outlet will return to the state it was in prior to losing power. For example, if Outlet 1 and Outlet 2 are On and power is removed from the Remote Power Control, when power is restored to the unit, the status of Outlet 1 and Outlet 2 will return to On.

Power Up Sequence

In order to minimize power surges, the Remote Power Control unit sequences power to each outlet in the On state in 0.3-second intervals. When power is applied to the Remote Power Control unit, the initialization sequence requires a delay of 10 seconds before power is available at the service outlets. Following the 10-second delay, the Remote Power Control unit sequences power to each outlet that is turned On. If the REBOOT command is entered for all outlets of the unit, the Remote Power Control unit sequences power to each outlet turned On in 0.1-second intervals.

Circuit Breaker

In the case of power overload, the circuit breaker automatically trips. Determine the cause of the tripped circuit breaker, correct the problem, and reset the circuit breaker by depressing the circuit breaker button. This button is located on the back panel of the PCR8 unit, and on the front panels of the PCS12 and PCS20 units. Power to the unit (electronics, EIA-232 port, etc.) does not go through the circuit breaker. This circuit is protected by a ¼ amp hardwired fuse. If an overload condition occurs, the Remote Power Control unit status menu is still accessible.

Circuit Breaker status is reflected on the Status menu. If the breaker is operating properly, the **Outlet Circuit Breaker:** status will read "Good." When there is a problem with the circuit breaker, or if it is tripped, its status will read "Fault."

Serial Connection

The EIA-232 Serial Connection

Once the Remote Power Control unit is connected to the local computer, load serial port communications software and configure host terminal's serial communications parameters to match the Remote Power Control unit:

- 9600 bps
- 8 data bits
- 1 stop bit
- No Parity

CHAPTER 4: OPERATION AND CONFIGURATION

Note: Please type all commands carefully. Inaccurate entries can cause error messages and the return to the previous menu.

Remote Power Control Operation

The PCR8, PCS12, and PCS20 models are configured in the same manner. This detailed **Operation and Configuration** section will use PCR8 screens for illustration and assume that the Confirmation is enabled. Programming differences for the PCS12 and PCS20 pertain to the number of outlets shown in the menus (12 and 20, respectively).

There are eight numbered green LEDs on the front of the PCR8 unit, twelve on the PCS12, and twenty on the PCS20, which correspond with each of the Remote Power Control unit's numbered outlets. When any or all of the LEDs are illuminated, corresponding outlet(s) are ON and attached equipment is receiving power. If any or all of the LEDs are not illuminated, corresponding outlet(s) are OFF. The PCS12 and PCS20 units also have a red LED that works in conjunction with the Overload Audible Alarm and will illuminate if the unit is overloaded.

Viewing the Status Menu

The Remote Power Control Status menu allows users to monitor and control the equipment attached to each of the unit's outlets. From this menu, equipment can be turned on, turned off, or rebooted individually or simultaneously.

When the Remote Power Control unit is plugged into an active power source, it is automatically powered ON. The unit's Status menu appears on the monitor of the computer to which it is connected.

```

Raritan PCR8
(C) 2003 Raritan Computer, Inc.
F2.07

Unit ID: Raritan PCR8

Average Power: 36 Watts   Apparent Power: 62 VA
True RMS Voltage: 116.4 Volts
True RMS Current: 0.5 Amps   Maximum Detected: 0.5 Amps
Internal Temperature: 28.0 C

Outlet Circuit Breaker: Good

1) . . . Outlet 1 : Off
2) . . . Outlet 2 : Off
3) . . . Outlet 3 : Off
4) . . . Outlet 4 : Off
5) . . . Outlet 5 : Off
6) . . . Outlet 6 : Off
7) . . . Outlet 7 : Off
8) . . . Outlet 8 : Off

PCR8>

```

Note: If the Status menu fails to appear, ensure the correct cables and adapters are being used and they are connected properly and verify the serial communication parameters are correctly configured.

Important! To access the Status menu from the Configuration menu or any sub-menu, press the <Enter> key at the command prompt until the Status menu appears.

Controlling Outlets

Any of the commands on the Help menu shown in this and the next section, **Help**, can be executed from the Status menu. The primary commands to set or change the status of an outlet are ON, OFF, and REBOOT. Enter one of the following commands, where “n” is the outlet number to command:

- ON n
- OFF n
- REBOOT n

Important! Enter an outlet number of zero (“0”) to send the command to **all** outlets.

On

Type **ON n** at the **PCR8>** prompt and press the <Enter> key to turn Outlet “n” On. Confirm the command, and the outlet powers ON.

For Example:

To power ON Outlet 3, type **ON 3** at the **PCR8>** prompt and press the <Enter> key. A confirmation screen will appear:

```
Turn On Outlet 3 (Y/N)?
```

Type the letter <Y> to confirm the request and Outlet 3 will be turned On. The status of Outlet 3 will change to **On** in the Status menu, as shown:

```
1) . . . Outlet 1 : Off
2) . . . Outlet 2 : Off
3) . . . Outlet 3 : On
4) . . . Outlet 4 : Off
5) . . . Outlet 5 : Off
6) . . . Outlet 6 : Off
7) . . . Outlet 7 : Off
8) . . . Outlet 8 : Off

PCR8>
```

Off

Type **OFF n** at the **PCR8>** prompt and press the <Enter> key to turn Outlet “n” Off. Confirm the command, and the outlet will be turned Off.

For Example:

To power OFF Outlet 3, type **OFF 3** at the prompt and press the <Enter> key. A confirmation screen will appear:

```
Turn Off Outlet 3 (Y/N)?
```

Type the letter <Y> to confirm the request and Outlet 3 will be turned Off. The status of Outlet 3 will change to **Off** in the Status menu.

Reboot

Type **REBOOT n** at the **PCR8>** prompt and press the <Enter> key to reboot or reset equipment attached to Outlet “n.” When the **REBOOT** command is sent from the prompt, the Remote Power Control unit powers OFF the corresponding outlet for approximately 10 seconds, and then powers it ON again. If all outlets are powered OFF, they will be powered ON again in sequence.

Note: This command works only on outlets that were “ON” prior to executing the Reboot command.

Important! Typing **ON 0** (zero), **OFF 0**, or **REBOOT 0** at the command prompt causes the Remote Power Control to turn ON, OFF, or REBOOT **ALL** outlets. Entering a 0 (zero) indicates that the command should be executed for ALL outlets.

Help

Type **HELP** at the prompt and press the <Enter> key to view a list of commands and functions for the Remote Power Control unit. These commands can be typed at the Status menu prompt at any time:

```

PCR8>help

On n <cr>          --Turn on an Outlet, n=0,1...8,all
Off n <cr>         --Turn off an Outlet, n=0,1...8,all
Reboot n <cr>      --Reboot an Outlet, n=0,1...8,all
Status <cr>        --PCR8 Status
Config <cr>        --Enter configuration mode
Lock n <cr>        --Locks Outlet(s) state, n=0,1...8,all
Unlock n <cr>      --Unlock Outlet(s) state, n=0,1...8,all
Current <cr>       --Display True RMS Current
Clear <cr>         --Reset the maximum detected current
Temp <cr>          --Read current temperature
Voltage <cr>       --Display True RMS Voltage
Logout <cr>        --Logoff
Logoff <cr>       --Logoff
Exit <cr>          --Logoff
Password <cr>     --Changes the current user password
Whoami <cr>       --Displays the current user name
Unitid <cr>       --Displays the unit ID
Help <cr>         --This Command
  
```

Note: <cr> indicates a carriage return or <Enter>

Changing Passwords

When the Remote Power Control unit leaves the factory, no password is programmed; the password field is blank. Once a password is programmed, the Remote Power Control unit requires password entry before allowing a user to execute any commands.

Type **Password** at the **PCR8>** prompt and press the <Enter> key. Enter the new Password, then re-enter the new Password for confirmation, and press the <Enter> key. Once a password is in place, it will be required to issue commands to the Remote Power Control unit in the future.

```

Enter new Password>*****
Re-Enter new Password>
  
```

Important! Passwords are case sensitive.

Remote Power Control Configuration

The Remote Power Control unit's Configuration menu allows users to set or change passwords and customize outlet names in order to easily identify attached equipment. Users can also enable or disable command confirmation, enable or disable the Status menu, change the unit name, and adjust the threshold level for sounding the alarm.

To access the Configuration menu, type **CONFIG** at the **PCR8>** prompt (Status menu prompt) and press the <Enter> key. The Configuration menu appears:

```

PCR8>config

Unit ID: Raritan PCR8

1)...Manage Users
2)...Change Outlet Name
3)...Enable/Disable Confirmation
4)...Enable/Disable Status Menu
5)...Change Unit ID
6)...Change Alarm Threshold
X)...Exit

Enter Request>

```

Manage Users

Users can add, delete, or rename users of the Remote Power Control unit and assign users to control selected outlets. In addition to the Administrator user, or Admin (generally the first user added to the User list), the Remote Power Control unit can maintain up to twelve (12) users. Any of the users may be deleted or renamed at any time.

At the Configuration menu prompt, type the number <1> and press the <Enter> key. The Manage Users screen appears:

```

-----
|  User   |  Assigned Outlets  | | | | | | | | |
|         |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|         |  |-----|
-----

A)...Add User
D)...Delete User
R)...Rename User

Enter user number to assign Outlets, A, D or R.

Enter Request>

```

Add a User

To add a user, type the letter <A> at the **Enter Request:** prompt and press the <Enter> key.

```

-----
|  User   |  Assigned Outlets  | | | | | | | | |
|         |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|         |  |-----|
-----

A)...Add User
D)...Delete User
R)...Rename User

Enter user number to assign Outlets, A, D or R.

Enter Request> A

```

Type in the **new user name** and press the <Enter> key.

For Example:

The new user's name is **Raritan**. Type <1> at the **Enter Request:** prompt and press the <Enter> key. Type <**Raritan**> at the **Enter User Name:** prompt and press the <Enter> key. Raritan appears as User 1. Remember that, as User 1, Raritan is also the **Admin** user:

```

Enter User Name> Raritan

-----
|   User   |   Assigned Outlets   |
|           | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----|
1) Raritan | N | N | N | N | N | N | N | N |
|-----|

A)...Add User
D)...Delete User
R)...Rename User

```

Continue to add users until the list is complete. Assign outlets at this time, or press the <Enter> key at the prompt to return to the Configuration menu. Press <Enter> once again to return to the Status menu.

Delete a User

To Delete a user, type the letter <D> at the **Enter Request:** prompt and press the <Enter> key.

```

-----
|   User   |   Assigned Outlets   |
|           | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----|
1) Raritan | N | N | N | N | N | N | N | N |
|-----|

A)...Add User
D)...Delete User
R)...Rename User

Enter user number to assign Outlets, A, D or R.

Enter Request: D

```

Enter the user's number at the **Enter the user number to delete:** prompt and press the <Enter> key. The user will be removed from the list of user names.

Rename a User

To Rename a user, type the letter <R> at the **Enter Request:** prompt and press the <Enter> key.

```

-----
|   User   |   Assigned Outlets   |
|           | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----|
1) Raritan | N | N | N | N | N | N | N | N |
|-----|

A)...Add User
D)...Delete User
R)...Rename User

Enter user number to assign Outlets, A, D or R.

Enter Request: R

```

Enter the user number at the **Enter user number to rename:** prompt, enter the new user name at the **Enter User Name:** prompt, and then press the <Enter> key. The updated name will be reflected in the list of user names.

Add and Remove Outlets

Once the user list is populated, specific outlets can be assigned or removed from any user's control.

When viewing the list of users, type the user number to assign outlets at the **Enter Request:** prompt and press the <Enter> key. The Add/Remove outlets menu appears below the user list.

Once a user is specified, type the numbers <1> or <2> at the **Enter Request:** prompt to add or remove specific outlet assignments. Type the numbers <3> or <4> to add or remove *all* outlet assignments with just one command. Assign or remove command of multiple outlets to the same user by typing the outlet numbers separated by commas at the command prompt.

When finished, press the <Enter> key at the **Enter Request:** prompt twice to return to the Configuration menu.

For Example:

To assign *all* outlets to user "Raritan," type the number <1> for user 1, "Raritan," at the command prompt and press the <Enter> key. "Raritan's" list of assigned outlets appears. As a new user, "Raritan" does not control any outlets, indicated by the N below each outlet number.

```

Enter User Number to Assign Outlets, A, D, R>

Enter Request: 1

-----
|   User   |   Assigned Outlets   |
|          | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
-----
1) Raritan | N | N | N | N | N | N | N | N |

1) Add an outlet
2) Remove an outlet
3) Add all outlets
4) Remove all outlets

```

Type the number <3> to assign all outlets to "Raritan" and press the <Enter> key. The status will change to read Y below each outlet number:

```

Enter Request: 3

-----
|   User   |   Assigned Outlets   |
|          | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
-----
1) Raritan | Y | Y | Y | Y | Y | Y | Y | Y |

1) Add an outlet
2) Remove an outlet
3) Add all outlets
4) Remove all outlets

Enter Request:

```


For Example:

If “Raritan” currently controls all outlets, to remove control of outlets 1, 4, 5, and 6, type <1, 4, 5, 6> at the **Enter Request:** prompt and press the <Enter> key. The status of the assigned outlet will change from **Y** to **N** below the removed Outlets.

```

Enter Request>1

-----
|   User   |   Assigned Outlets   | | | | | | | |
|---|---|---|---|---|---|---|---|---|
|         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----|-----|
| Raritan | N | Y | Y | N | N | N | Y | Y |
|-----|-----|

1) Add an outlet
2) Remove an outlet
3) Add all outlets
4) Remove all outlets

```

Press the <Enter> key at the **Enter Request:** prompt to return to the list of all users.

Change Outlet Names

Default outlet names are Outlet 1, Outlet 2, ... through Outlet 8 on the PCR8, Outlet 1 through Outlet 12 on the PCS12, and Outlet 1 through Outlet 20 on the PCS20. Change any outlet name for a customized configuration.

At the Configuration menu prompt, type the number <2> and press the <Enter> key. A list of all available outlets appears:

```

Enter Request> 2

1) . . . Outlet 1
2) . . . Outlet 2
3) . . . Outlet 3
4) . . . Outlet 4
5) . . . Outlet 5
6) . . . Outlet 6
7) . . . Outlet 7
8) . . . Outlet 8

```

Type the number of the outlet to be renamed at the **Enter Request:** prompt and press the <Enter> key. Confirm that the outlet name is to be modified, enter the new outlet name at the **Enter:** prompt, and press the <Enter> key. The new outlet name appears in the Outlet list.

Press the <Enter> key at the **Enter Request:** prompt to return to the Configuration menu.

For Example:

To change the name of Outlet 4 to “Router 4,” type the number <4> at the **Enter Request:** prompt and press the <Enter> key. A confirmation screen appears:

```

Current Outlet: Outlet 4
Modify (Y/N)?

```

Type the letter <Y> to confirm and press the <Enter> key. An **Enter** prompt appears:

```

Enter:

```

Type <Router 4> and press the <Enter> key. Outlet 4's new name, "Router 4" is reflected in the Outlet list.

```

Enter Request>

1) . . . Outlet 1
2) . . . Outlet 2
3) . . . Outlet 3
4) . . . Router 4
5) . . . Outlet 5
6) . . . Outlet 6
7) . . . Outlet 7
8) . . . Outlet 8

Enter Request>

```

Important! Outlet names can contain up to 10 characters.

Enable/Disable Confirmation

Enable/Disable Confirmation activates or deactivates a backup method that requires confirmation before the Remote Power Control unit will execute any commands (for a list of commands, please refer to the Help menu on page 19).

At the Configuration menu prompt, type the number <3> for Enable/Disable Confirmation and press the <Enter> key. If confirmation is enabled, the following screen appears:

```

Disable Confirmation? (Y/N)

```

Type <Y> to disable confirmation, thereby avoiding future confirmation dialogs from the Remote Power Control unit, and press the <Enter> key.

If confirmation is disabled, the following screen appears:

```

Enable Confirmation? (Y/N)

```

Type <Y> to enable confirmation, which will cause Remote Power Control to double-check all future commands, and press the <Enter> key.

Important! The Default status for Enable/Disable Confirmation is ENABLED.

Enable/Disable Status Menu

The Enable/Disable Status menu feature toggles the Status menu on or off. If there is not enough space on the monitor or there is no reason for or benefit of displaying the unit's status information, disable the Status menu so that it does not appear. Enable the Status menu to be kept aware of the unit's status.

At the Configuration menu prompt, type the number <4> and press the <Enter> key. If the Status menu is enabled, the following screen appears:

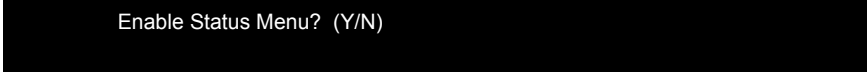
```

Disable Status Menu? (Y/N)

```

Type <Y> to disable the Status menu, and press the <Enter> key.

If the Status menu is disabled, the following screen appears:



```
Enable Status Menu? (Y/N)
```

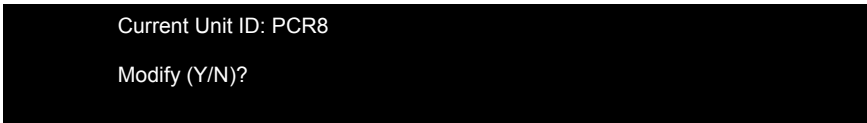
Type <Y> to enable the Status menu and press the <Enter> key.

Important! The Default status for Enable/Disable Status menu is ENABLED.

Change Unit ID

Change the Remote Power Control's Unit ID to eliminate confusion, especially if working with multiple units. Giving the unit an ID allows components to be located more easily in the event of technical problems or power outages, and also displays a personalized name every time the Status menu appears on the monitor.

At the Configuration menu prompt, type <5> and press the <Enter> key. The current Unit ID appears:



```
Current Unit ID: PCR8
Modify (Y/N)?
```

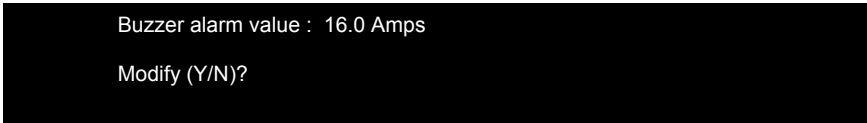
Type <Y> to confirm that the Unit ID is to be modified and press the <Enter> key. At the **Enter New Unit ID:** prompt, type a new ID and press the <Enter> key. The new Unit ID appears at the top of the menus that appear every time the unit is accessed.

Important! The Unit ID can contain up to sixteen characters.

Change Overload Audible Alarm Threshold

The Remote Power Control unit has a built-in Overload Audible Alarm that is triggered if the unit exceeds the electrical current threshold. The range of the PCR8 should not exceed 15 Amps, and the ranges of the PCS12 and the PCS20 should not exceed 20 Amps. Please refer to **Appendix A: Specifications** for further information.

At the Configuration menu prompt, type <6> and press the <Enter> key. The current threshold value appears:



```
Buzzer alarm value : 16.0 Amps
Modify (Y/N)?
```

Type <Y> to confirm that the Overload value is to be modified and press the <Enter> key. At the **Enter:** prompt, type a new threshold value and press the <Enter> key. The Remote Power Control unit accepts the new threshold automatically, and the Configuration menu is displayed once again. The new threshold displays the next time a user modifies the threshold.

APPENDIX A: SPECIFICATIONS

	PCR8	PCS12	PCS20
POWER OUTLET	8 each 115 VAC 60 Hz 15 Amp	12 each 115 VAC 60 Hz 20 Amp	20 each 115 VAC 60 Hz 20 Amp
CIRCUIT BREAKER	125 VAC 15 Amp	125 VAC 20 Amp	125 VAC 20 Amp
EIA-232 SERIAL PORT	8-pin modular connector (RJ-45)	8 pin modular connector (RJ-45)	8 pin modular connector (RJ-45)
DIMENSIONS	16.73w x 5.25"d x 1.72"h	1.75"w x 1.75"d x 56"h	1.75"w x 1.75"d x 65.76"h
SHIPPING WEIGHT	5 lbs.	8 lbs.	10 lbs.
MOUNTING (OPTIONAL)	19"	"zero-U" vertical	"zero-U" vertical
WARRANTY	Two years on parts and labor	Two years on parts and labor	Two years on parts and labor

Remote Power Control / SCS232 Connection Specification

When connecting a Remote Power Control unit to a Raritan ConsoleSwitch SCS232, these pin connections should be followed:

RPC UNIT PIN #	EIA SIGNAL	DIRECTION	SCS232 UNIT PIN #	EIA SIGNAL
1	DTR	Output	7	DSR
2	GND	---	4	GND
3	RTS	Output	8	CTS
4	TX	Output	6	RX
5	RX	Input	3	TX
6	N/C	N/C	2	DTR
7	GND	---	5	SG
8	DCD	Input	1	RTS

APPENDIX B: EQUIPMENT SETUP WORKSHEET

RPC Series Unit Model _____

RPC Series Unit Serial Number _____

OUTLET 1	OUTLET 2	OUTLET 3
MODEL	MODEL	MODEL
SERIAL NUMBER	SERIAL NUMBER	SERIAL NUMBER
USE	USE	USE
OUTLET 4	OUTLET 5	OUTLET 6
MODEL	MODEL	MODEL
SERIAL NUMBER	SERIAL NUMBER	SERIAL NUMBER
USE	USE	USE
OUTLET 7	OUTLET 8	OUTLET 9
MODEL	MODEL	MODEL
SERIAL NUMBER	SERIAL NUMBER	SERIAL NUMBER
USE	USE	USE
OUTLET 10	OUTLET 11	OUTLET 12
MODEL	MODEL	MODEL
SERIAL NUMBER	SERIAL NUMBER	SERIAL NUMBER
USE	USE	USE

Types of adapters _____

Types of cables _____

Name of software program _____

APPENDIX C: TROUBLESHOOTING

PROBLEM	SYMPTOM	POSSIBLE CAUSE	SOLUTION
No menu visible	Blank Screen	Cables Adapters Parameters	Ensure correct cables and adapters are being used and are connected properly. Verify serial parameters are correctly configured.
Password does not work	Returns to prompt	Caps Lock	Password feature is case sensitive. Type password exactly as it was originally entered.
Current alarm level exceeded	Continuous buzzer (current monitoring)	Unit is drawing current above the alarm trip point	Reduce the load being drawn; Reset the alarm trip point to a higher setting.
Can't exit Outlet Control	Returns to Outlet Control menu	Wrong command	Type MENU
Device not working	No power, dead		Call Raritan Tech Support
Need to download manual from web site			Visit www.raritan.com
Forgot password	Cannot access unit past password prompt		Call Raritan Tech Support



Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>