CyberPower®

Reliability. Quality. Value.

User Manual

Power
Distribution
Unit

K01-0000104-00

Table of Contents

Introduction

Model List:

PDU15SW8RNET
PDU20SW8RNET

Package Contents
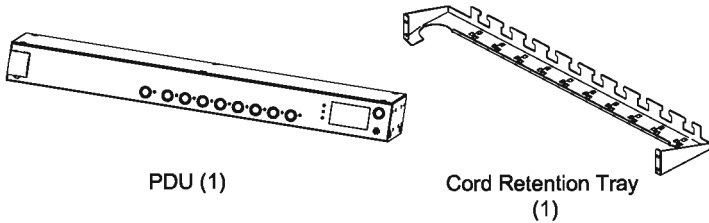
PDU (1)

Cord Retention Tray (1)

Mounting Brackets (2pcs)

Cord Organizers for Cord Retention Tray (8pcs)

Bracket Mounting Screws M4 X 6mm (5pcs)

Cord Retention Tray Mounting Screws M3 X 6mm (5pcs)
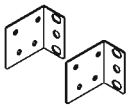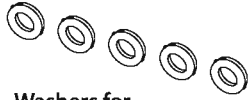

Washers for rack mounting (5pcs)

Screws for rack mounting (5pcs)

Documentation:

User Manual

Registration Card

Check

Before using, please check to ensure the package contains all the items shown above. If there are missing parts please contact CyberPower technical support at www.CPSww.com or call 1-877-297-6937.

Safety Precautions -
### Read the following before installing or operating the Power Distribution Unit (PDU):

1. Use only the supplied hardware to attach the mounting brackets.
2. The PDU must be plugged into a three-wire, grounded outlet on a circuit protected by a fuse or circuit breaker. Connection to any other type of power outlet may result in a shock hazard.
3. Do not use extension cords or adapters with this PDU.
4. Never install a PDU, or associated wiring or equipment, during a lightning storm.
5. Check that the power cord, plug, and socket are in good condition.
6. CAUTION! To prevent the risk of fire or electric shock, this PDU should be installed in a temperature and humidity controlled indoor area free of conductive contaminants. Do not install this PDU where excessive moisture or heat is present..

Product Features

Front View
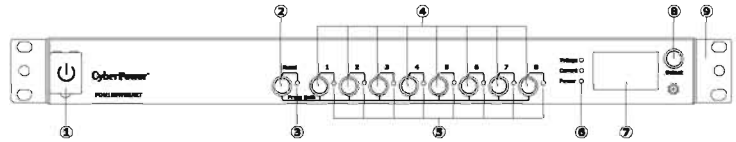
1. On/Off Switch - Master On/Off switch protected with a cover to prevent accidental shut off.
2. Manual Button - Safeguard button. Must be pressed concurrently with the individual outlet On/Off buttons.
3. Manual Button Indicator- Indicates when the Manual Button is pressed.
4. Outlet Buttons- Local On/Off buttons for individual outlets.
5. Outlet Indicator- Indicates the On/Off status of each outlet.
6. Voltage & Current & Power Indicators- Indicates what category the value displayed on the LCD belongs to.
7. Metered Readout - Displays PDU information including Voltage, Current, and Power.
8. Selection Button - Changes the information displayed on the LCD.
9. Mounting Brackets- Brackets for rackmount installation.

Back View

PDU15SW8RNET

PDU20SW8RNET
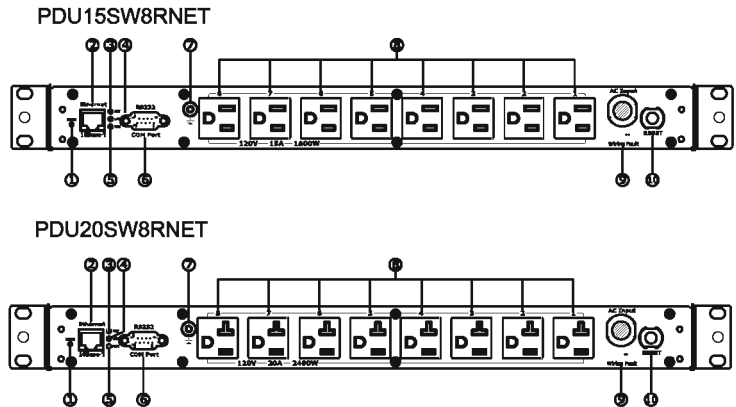
1. Reset Button- Resets all system values to default values.
2. LAN Port- RJ45 10Base-T Ethernet connection for local network.
3. Link Indicator- Indicates the status of the network connection.
4. ACT Indicator- Indicates when data is transmitting.
5. MSG Indicator- Indicates when a network connection problem exists.
6. Serial Port- Serial connectivity for communication with a PC/Server.
7. External Site Ground- Used for additional external grounding.
8. AC Output Outlets- These outlets provide AC power to connected equipment.
9. Wiring Fault Indicator- LED notification for site wiring faults.
10. Input Circuit Breaker- Resettable circuit breaker that provides input overload protection.

Metered Readout
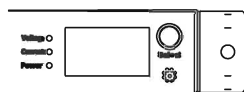
The Metered Readout provides instant status updates of the PDU's Voltage and Current power conditions. It also gives the administrator the local IP address of the unit.

Basic Operation

Screen Selection- To toggle the different status screens, press the Select button which is located directly next to the LED.

- ◉ Pressing the Select once will toggle to the next status screen.
- ◉ Pressing and holding the Select button for 3 seconds will display the local IP address of the unit.

PDU Status Screens

Input Voltage
The Input Voltage screen measures the AC voltage that the PDU system is receiving from the utility wall receptacle. This can be used as a diagnostic tool to identify poor quality input power. Units are listed in Volts.

Current Level
The Current Level screen shows the total current draw of the connected equipment. Units are listed in Amps.

IP Address
The IP Address screen displays the local IP address of the PDU unit. Note: If the PDU is not connected to a LAN, the readout will display the default IP address.

Remote Management

The remote management function of the CyberPower PDU provides for monitoring the PDU vitals, controlling outlets, and utilizing SNMP functionality. Remote management is performed via the CyberPower Management Console. To access the CyberPower Management Console, follow the instructions below:

1. Enter the IP address of the PDU into a web browser (Internet Explorer, Firefox)
2. Enter the user name and password of the PDU device at the authentication screen. Note: The default username is "cyber" and the default password is "cyber".

For additional information about the features and functionality of CyberPower Management Console, see the section titled CyberPower Management Console.

Local On/Off

CyberPower PDU's are equipped with a safety button (Manual) that is used to prevent accidental local on/off. To locally turn the outlets on or off, press and hold the Manual button, then press the button of the outlet you wish to turn on or off.

LED Indicators

Indicator	Status	Description
Power	On	The PDU is on.
Manual	On	The Manual button is pressed.
Outlet	On	The outlet is turned on and receiving power.
Wiring Fault	On	A wiring problem exists within the AC receptacle.
ACT	Flashing	Data is transmitting.
LINK	On	Indicates the PDU is connected to the LAN.
	Off	Indicates the PDU is not connected to the LAN.
MSG	Off	Normal condition.
	On	The network gateway is invalid.
	Flashing	The reset button is pressed.

Device Reset

- ◉ To reset all the settings to default except for the IP address, press and hold the Reset Button for 4 seconds. Note: the MSG indicator light will blink 2 times continuously and the alarm will emit a short beep at the end.
- ◉ To reset all the settings to default, press and hold the Reset Button for 6 seconds. Note: the MSG indicator light will blink 3 times continuously and the alarm will emit a short beep at the end.

Unattended/ Automatic Shutdown

PowerPanel Business Edition software automatically saves open files and gracefully shuts down the operating system in an intelligent and orderly fashion. PowerPanel must be installed on every PC for which the shut down is to take place. The PC receives SNMP messages directly from the PDU. The software can be configured to perform actions based on the type of SNMP trap received from the PDU. Follow the directions below for configuring Unattended/Automatic Shutdown.

Step 1 – PC Configuration

1. Install PowerPanel Business Edition Client on every PC that will be powered and controlled by the PDU.(Follow the instructions in the PowerPanel Business Edition Client user manual).
2. Configure the settings in PowerPanel Business Edition Client. See the PowerPanel Business Edition Client User Manual for additional help.

Step 2 – PDU Configuration

1. Verify that the IP address of all PCs that will be part of the shut down process are included in the Trap Notification Menu of CyberPower Management Console. (For help, see the section on the CyberPower Management Console)

Step 3 – Notification
Notifying the PCs of a potential outlet shutdown can be accomplished using the following methods:

- ◉ Outlet Control Menu: Performing the task of turning off or rebooting outlets.
- ◉ Scheduling Menu: Setting the scheduler to perform the task of turning off or rebooting outlets. The notification will occur prior to the scheduled date/time.
- ◉ Outlet Overload: In the event of a PDU overload, notification will be sent prior to the PDU shutting down.

Technical Specification

Model Name	PDU15SW8RNET	PDU20SW8RNET
Input		
Voltage	120V	
Max Current	15A	20A
Circuit Breaker	15A	20A
Plug Type	NEMA 5-15P	NEMA 5-20P
Power Cord Length	10 ft	
On/Off Switch	Yes, with safety cover	
Output		
Voltage	120V	
Max Current	15A	20A
Outlet Type	NEMA 5-15R	NEMA 5-20R
Filters & Protection		
EMI/RFI Filtration	30K Hz to 1G Hz	
Surge Suppression	1050 Joules	
Indicators		
LED Indicators	Power On, Wiring Fault	
Metered Readout	Voltage, Current, IP	
Audible Alarms	Low Load, Overload, Near Overload	
Physical		
Dimensions (WxDxH)	17.5" x 4" x 1.7"	
Weight (lbs)	5.5	6.6
Environmental		
Temperature	Operating: 0 to 95% Non-condensing Non-Operating: 0 to 95% Non-condensing	
Humidity	Operating: 0ft to 3000ft Non-Operating: 0ft to 3000ft	
Altitude	Operating: 32F to 95F Non-Operating: 32F to 95F	
Safety Approvals		
Certifications	UL1419, FCC Class B	
Warranty		
Warranty	Lifetime	
Connected Equipment Guarantee	N/A	
CEG Amount	N/A	

Installation

Horizontal Installation
Step 1 – Mounting bracket installation
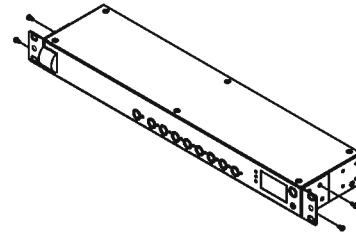
Using the provided Mounting Bracket Screws (4), attach the Mounting Brackets (2) to the PDU. Install 2 screws per side opposite of each other.

Step 2 – PDU Mounting
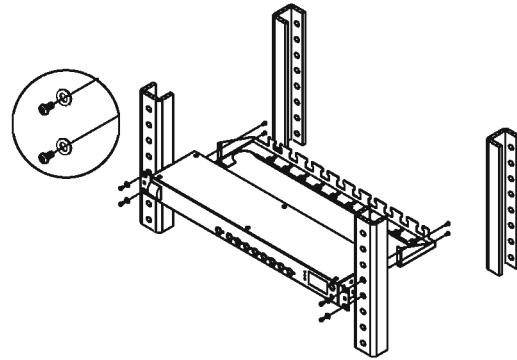
Secure the PDU to your existing rack system using fasteners that are designed for your rack system.

Step 3 – Cord Retention Tray installation (optional)
Attach the Cord Retention Tray to the PDU with the 4 supplied Cord Retention Tray Mounting Screws.

Attach the Cord Organizers to the Cord Retention Tray.

Vertical Installation (for specific rack systems only)
Step 1 – Using the provided Mounting Bracket Screws (4), attach the Mounting Brackets (2) to the PDU. Install 2 screws per side opposite of each other.

Step 2 – Secure the PDU to your existing rack system using fasteners that are designed for your rack system.

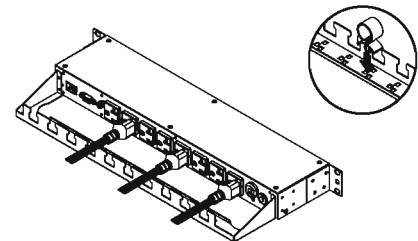## Electrical Installation

Step 1 – Receptacle evaluation
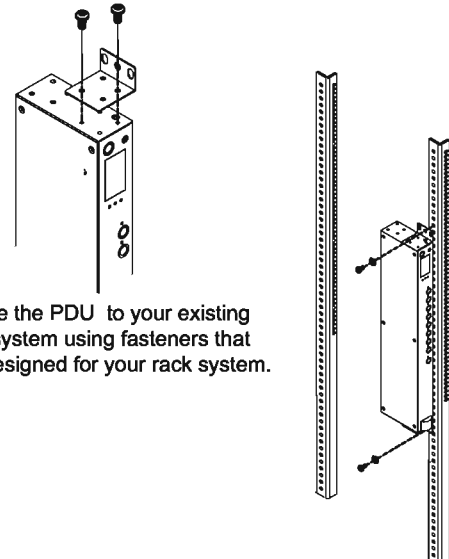
Ensure that the plug type of your PDU unit (e.g. NEMA 5-15P, NEMA L5-30P) matches the wall receptacle type that you are using.

⚠️ **CAUTION!!** PDU must be plugged into a three-wire, grounded wall receptacle only. The wall receptacle must also be connected to an appropriate branch circuit/main with fuse or circuit breaker protection. Connection to any other type of wall receptacle may result in a shock hazard.

Step 2 – Plug the PDU into the wall receptacle
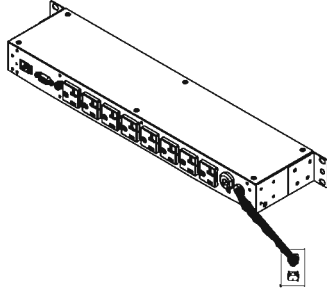
Step 3 – Attach equipment

It is extremely important not to exceed the PDUs maximum current load (as outlined in the Specifications section). In order to determine your total load, simply use the Metered Readout [Current function] on the front of the PDU.
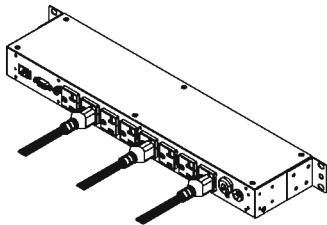
Network Installation

Step 1 – Attach LAN Cable

Using a CAT5 RJ45 cable, attach one end to the LAN port on the back of the PDU, and the other end to a network port.

Step 2 – Reset the PDU IP Address

Turn on the PDU. Press and hold the Reset button for six seconds. (At this time, the MSG Indicator will also blink three times and the PDU will emit a short beep at the end). Turn the PDU off, then turn back on again.

Step 3 – Establish the PDU IP address

Assigning an IP address to the CyberPower PDU requires the user to have an available IP address that is valid on the respective network. If an available IP address is unknown, contact the network administrator to obtain one.

There are multiple methods for setting up the IP address on the PDU. Please follow the instructions below for the method that is suitable for your application.

Please make sure the PDU is turned on during this process.

Option 1 (recommended): Power Device Network Utility

1. Use the included CD "PDU Software Installation CD" to install the Power Device Network Utility program.
2. Open the Power Device Network Utility software (Start> Power Device Network Utility).
3. Highlight the PDU device from the list and select Edit and Setup device> Assisted Setup from the menu.
4. Configure the IP Address, Subnet Mask, and Gateway Address to match your network settings.
5. Enter the user name and password of the PDU device at the Authentication menu. The default username is "cyber" and the default password is "cyber".

For further information and installation instructions, see Appendix B.

Option 2: Address Resolution Protocol (ARP) Command

1. Obtain the MAC address from the sticker on the PDU.
2. At a command prompt, type the following: "arp-s [available IP address] [MAC address of PDU]".
   Example: arp -s 192.168.20.240   00-0c-15-80-00-01
                         IP Address   MAC Address
3. Verify the installation by pinging the IP address. If a reply is received, the IP address was setup successfully.
4. Open a web browser and type the IP addressed assigned in step 4.
5. Log into the PDU using the default username "cyber" and default password "cyber".
6. Configure the IP Address, Subnet Mask, and Gateway Address to match your network settings.

Option 3: Hyper Terminal

In order for Hyper Terminal to interface with the PDU, the PC/ server must be connected directed to the PDU via the serial port.

1. Using a standard 9-pin RS232 serial cable, attach one end to the serial port on the back of the PDU, and the other end to the PC/ server.
2. Open the Hyper Terminal software on your PC and select a name and icon for the connection.
3. Setup the COM port settings using the following values
   * Bits per second: 4800
   * Data bits:8
   * Parity: None
   * Stop bits: 1
   * Flow control: None
4. Type "setup" and press Enter to enter the Authentication menu.
5. Enter the user name and password of the PDU device at the Authentication menu. Note: The default username is "cyber" and the default password is "cyber".

Option 4: DHCP Server

1. Ask your administrator if there is DHCP server on LAN.
2. Set the DHCP to Enable. (see Page15)
3. Make sure the network connection is ready and turn on the PDU.
4. The PDU will obtain an IP address from the DHCP server automatically.

For further information and configuration via Hyper Terminal, see Appendix A- Hyper Terminal.

PDU Status Menu

The PDU Status Menu gives an overview of the PDU and system vitals.

Main		**PDU Status**
PDU Status		
Outlet Status		**System information**
		Name: Power Manager
Outlet		Location: Server Room
Outlet Control		Rating: 120V, 1ϕ, 15A
Configuration		IP Address:192.168.10.139
Load Management		
Scheduling		Date: Wednesday, 04/15/2009
		Time: 06:18:04 AM
PDU System		Contact: Administrator
Event Logs		
Event Settings		**Electrical**
Identification		Load Current: 0 A
System Time		Input Voltage: 119.0 V
User Accounts		
		Status
Network / SNMP		Outlets On: All
Network Settings		Outlets Off: None
SNMP Settings		
Trap Notification		UpTime: 0 Day 0 Hour 18 Minutes
		Status: OK
Help		System Message: Alarms present, Current draw has crossed the low
About		load threshold.
Logout		

System Information- Displays identification, names, contacts, and system date/time.
Electrical- Displays Input Voltage and the Load Current of the PDU.
Status- Displays the current status of the and displays system messages.

Outlet Status Menu

The Outlet Status Menu displays the power status of each individual outlet.

Outlet Status

Outlet	Status	Device Name
# 1*	OFF	Outlet1 Name
# 2	ON	Outlet2 Name
# 3	ON	Outlet3 Name
# 4	ON	Outlet4 Name
# 5	ON	Outlet5 Name
# 6	ON	Outlet6 Name
# 7	ON	Outlet7 Name
# 8	ON	Outlet8 Name

Note: * command pending

• Status options are On and Off.
• An asterisk (*) to the right of the outlet number indicates that an executed command is pending.
• Click on the individual outlets to enter the Outlet Control Menu.

Outlet Control Menu

The Outlet Control menu gives users the ability to control outlets.

Outlet Control

Select which outlets to control:
☐ #All ☐ #1 ☐ #2 ☐ #3 ☐ #4 ☐ #5 ☐ #6 ☐ #7 ☐ #8
Select Task: Turn On
Select Delay: Sequenced

Apply Cancel

Outlet Control- Allows for switching on/off the outlets immediately, or after a specific duration.
Task- Options are Turn On, Turn Off, Reboot, and Cancel Command. Cancel command will attempt to cancel a command that is in progress.
Delay- Options are Sequenced and Immediate. Sequenced will execute the task after a specific duration defined in the Configuration menu.
Apply/Cancel- The selected command will be executed only by clicking the Apply button. The Cancel button will clear/refresh the selected options.

Configuration Menu

Configuration

Outlet	Turn On Delay (sec)	Turn Off Delay (sec)	Reboot Duration (sec)
# 1*	0	0	5
# 2*	0	0	5
# 3*	0	0	5
# 4*	0	0	5
# 5*	0	0	5
# 6*	0	0	5
# 7*	0	0	5
# 8*	0	0	5

Note: (*) Local On/Off enable, Time (-1) never on/off

Outlet Configuration Menu

Outlet Configuration

Outlet Settings
Outlet: # 1
Device Name: Outlet Name
Turn On Delay(sec): 5
Turn Off Delay(sec): 10
Reboot Duration (sec): 5
Local On/Off: Enable

Save Changes Cancel

• A plus (+) to the right of the outlet number indicates that Local On/Off for the outlet is enabled.
• Click on the individual outlets to enter the Outlet Configuration Menu.

Device Name- Allows the user to enter a description of the device that is connected to the respective outlets. This makes it easier for the user to identify which equipment is plugged into which outlet.
Turn On Delay- Sets the delay (in seconds) for turning on outlets.
* Valid values are: -1, 0-7200
* A value of "-1" will set the device to always be off.
Turn Off Delay- Sets the delay (in seconds) for turning off outlets.
* Valid values are: -1, 0-7200
* A value of "-1" will set the device to always be on.
Reboot Duration- Sets the duration (in seconds) for the delay time to reboot a device.
* Valid values are between 5 and 60.
Local On/ Off- Allows the user to enable/disable the local on/off capabilities of the PDU. If the option is set to Disabled, the manual buttons on the front panel of the PDU are disabled.
Save Changes/Cancel- Options will only be saved by clicking the Save Changes button. The Cancel button will clear/refresh the selected options.

Delays are compounded; they do not override.
See chart below for example (base on Reboot command):

Setting	Description
Turn On Delay (sec): 5	5 second delay time to turn on the device.
Turn Off Delay (sec): 10	10 second delay time to turn off the device.
Reboot Duration (sec): 8	8 second delay time to reboot the device.

In the above example, if the sequenced reboot command is executed, the device would wait for 10 seconds to turn off and then wait for 13 (8+5) seconds to turn on.

Load Management Menu

The Load Management Menu allows for configuration of the load thresholds for the PDU. Audible Alarms and Cold Start Delay can also be configured.

Load Management

Main
PDU Status
Outlet Status

Outlet
Outlet Control
Configuration
Load Management
Scheduling

PDU System
Event Logs
Event Settings
Identification
System Time
User Accounts

Network / SNMP
Network Settings
SNMP Settings
Trap Notification

Help
About

Logout

Thresholds
Overload: 12 Amps
Near Overload: 8 Amps
Low Load: 2 Amps
Outlet Restriction On: None

Alarms
Audible: None

Cold start
Cold start Delay: ● Delay 0 seconds [0-300] ○ Never

[Save Changes] [Cancel]

Thresholds
* Overload: Sets the Overload threshold (in amps).
   Valid values are: Whole numbers which are >= the value in the Near Overload field, and also are <= the Current Rating of the PDU (see the Technical Specifications section of user manual).

* Near Overload: Sets the Near Overload threshold (in amps).
   Valid values are: Whole numbers which are > the value in the Low Overload field, and also are <= the value in the Overload field.

* Low Load: Sets the Low Load threshold (in amps).
   Valid values are: Whole numbers which are >= 0, and also are < the value in the Near Overload field.

* Outlet Restriction On: Options are Near Overload and Overload, this function prevents outlets from turning on.

Alarms
* Audible: Options are Overload, Near Overload, and Low Load.

Cold start
* Cold Start Delay: The delay duration of all outlets turning on after power on.

Save Changes/ Cancel: Options will only be saved by clicking the Save Changes button. The Cancel button will clear/refresh the selected options.

Scheduling Menu

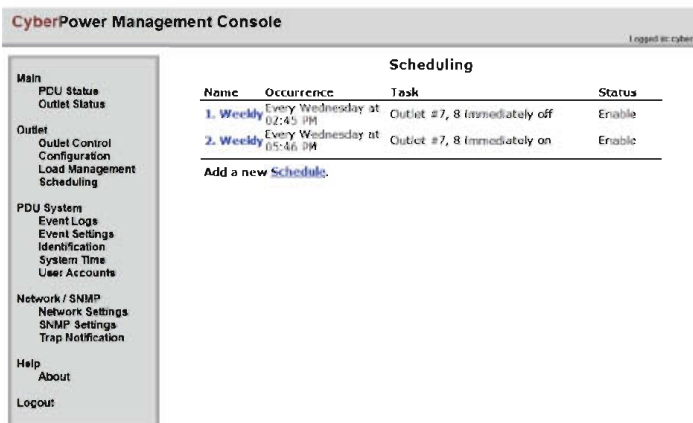The Scheduling Menu displays the schedules that are currently saved in the system.

Scheduling

Main
PDU Status
Outlet Status

Outlet
Outlet Control
Configuration
Load Management
Scheduling

PDU System
Event Logs
Event Settings
Identification
System Time
User Accounts

Network / SNMP
Network Settings
SNMP Settings
Trap Notification

Help
About

Logout

Name	Occurrence	Task	Status
1. Weekly	Every Wednesday at 02:45 PM	Outlet #7, 8 immediately off	Enable
2. Weekly	Every Wednesday at 05:46 PM	Outlet #7, 8 immediately on	Enable

Add a new Schedule.

• Status options are Enabled and Disabled.
• Click on the Name of the schedule to view/edit the schedule's properties.
• To add a new schedule, click Add a new Schedule.
Note: CyberPower Management Console allows a maximum of 10 schedules to be set.

Scheduling Submenu - Add Schedule

Schedule Time is used to configure the PDU to automatically execute the oulet actiont (setted in the following submenu) at consistent times, daily, weekly, or once.

Step1: Schedule Time

Main
PDU Status
Outlet Status

Outlet
Outlet Control
Configuration
Load Management
Scheduling

PDU System
Event Logs
Event Settings
Identification
System Time
User Accounts

Network / SNMP
Network Settings
SNMP Settings
Trap Notification

Help
About

Logout

Schedule Time Settings
Set Occurrence
● Daily
○ Weekly on Wednesday
○ Once on 04 / 15 (MM/DD)
Set Time
06 : 34 (HH:MM) AM

[Apply] [Cancel]

Add Schedule- Allows users to create and save Schedules.
Occurrence- Sets the frequency the task should be performed.
   * Daily- a specific time of the day
   * Weekly- a specific day and time of the week
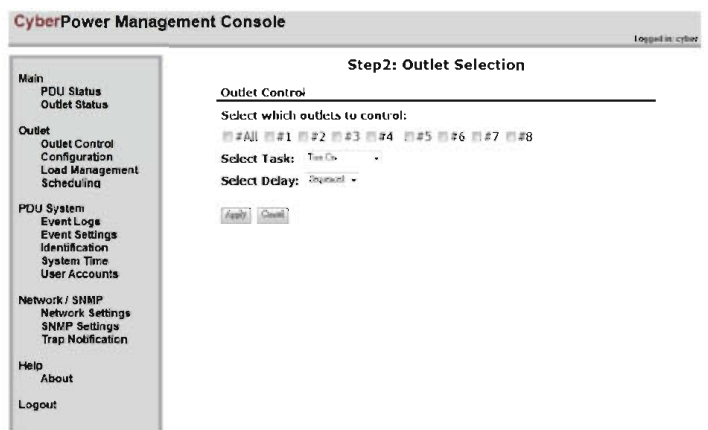   * Once- a specific date and time
Time- Sets the time of day at which the task should be performed.
Note: Time is entered using 12Hr clock format (HH:MM) (AM/PM).
Apply / Cancel: Options will only be saved by clicking the Apply button. The Cancel button will clear/refresh the selected options.

Scheduling Submenu - Outlet Selection

The Outlet Selection Submenu allows users to set the outlet action.

Step2: Outlet Selection

Main
PDU Status
Outlet Status

Outlet
Outlet Control
Configuration
Load Management
Scheduling

PDU System
Event Logs
Event Settings
Identification
System Time
User Accounts

Network / SNMP
Network Settings
SNMP Settings
Trap Notification

Help
About

Logout

Outlet Control
Select which outlets to control:
☐ #All ☐ #1 ☐ #2 ☐ #3 ☐ #4 ☐ #5 ☐ #6 ☐ #7 ☐ #8
Select Task: Turn On
Select Delay: Sequenced

[Apply] [Cancel]

Outlet Control
Select Task- Options are Turn On, Turn Off, Reboot, and Cancel Command. Cancel Command will attempt to cancel a command that is currently under way.
Select Delay- Options are Sequenced and Immediate. Sequenced will execute the task after a specific duration defined in the Configuration menu.
Apply / Cancel- Options will only be saved by clicking the Apply button. The Cancel button will clear/refresh the selected options.

Event Logs Menu

The Event Logs Menu displays a list of events along with a date/time stamp. A brief description of the event is also given.

CyberPower Management Console tracks the following events:

Event	Event Type
Administrator user login from xxx.xxx.xxx.xxx	INFORMATIONAL
Administrator user logout from xxx.xxx.xxx	INFORMATIONAL
device user login from xxx.xxx.xxx.xxx	INFORMATIONAL
device user logout from xxx.xxx.xxx.xxx	INFORMATIONAL
Web authorization fail from xxx.xxx.xxx.xxx	WARNING
All outlets turned on.	INFORMATIONAL
All outlets turned off.	INFORMATIONAL
Outlet #? turned on.	INFORMATIONAL
Outlet #? turned off.	INFORMATIONAL
A device configuration change has been made on a PDU	INFORMATIONAL
An outlet configuration change has been made on a PDU.	INFORMATIONAL
Current draw has crossed the low load threshold.	WARNING
The low load condition on a PDU has been cleared.	INFORMATIONAL
Current draw has crossed the near overload condition.	WARNING
The near overload condition on a PDU has been cleared.	INFORMATIONAL
Current draw has crossed the overload condition.	SEVERE
The overload condition on a PDU has been cleared.	INFORMATIONAL

CyberPower Management Console stores a maximum of 222 events.

Event Settings Menu

The Event Settings Menu allows users to select which type of Events and SNMP Traps are logged in the Event Log.

Place a check mark in the box of each type of event to be logged.
Save Changes/ Cancel- Options will only be saved by clicking the Save Changes button. The Cancel button will clear/refresh the selected options.

Identification Menu

The Identification Menu allows the user to configure the PDU Name, Contact, and Location.

PDU Name, Contact, and Location- Stores the PDU name, the name of the person to contact, and the location of the PDU.
Save Changes/ Cancel- Options will only be saved by clicking the Save Changes button. The Cancel button will clear/ refresh the selected options.

System Time Menu

The System Time Menu allows the user to change the system date and time.

System Time
Date- Sets the current date (MM/DD/YYYY).
Time- Sets the current time (HH:MM:SS) using a 12-hour (AM/PM) clock.
Save Changes/Cancel- Options will only be saved by clicking the Save Changes button. The Cancel button will clear/refresh the selected options.

User Accounts Menu

The User Account Menu allows users to view, modify, and create user accounts.

CyberPower Management Console

Main
  PDU Status
  Outlet Status

Outlet
  Outlet Control
  Configuration
  Load Management
  Scheduling

PDU System
  Event Logs
  Event Settings
  Identification
  System Time
  User Accounts

Network / SNMP
  Network Settings
  SNMP Settings
  Trap Notification

Help
  About

Logout

User Accounts

Account Settings

User Group:	Administrator
User Name:	
User Password:	
Confirm Password:	

Save Changes   Cancel

* A maximum of 1 Administrator and 2 User accounts can exist.

User Group- Users can be setup as either Administrator or User. View the chart below for User Group permissions.

User Name- Enter a username for the account. User names can be 1 to 15 characters length.

User Password- Passwords can be 1 to 15 characters length.
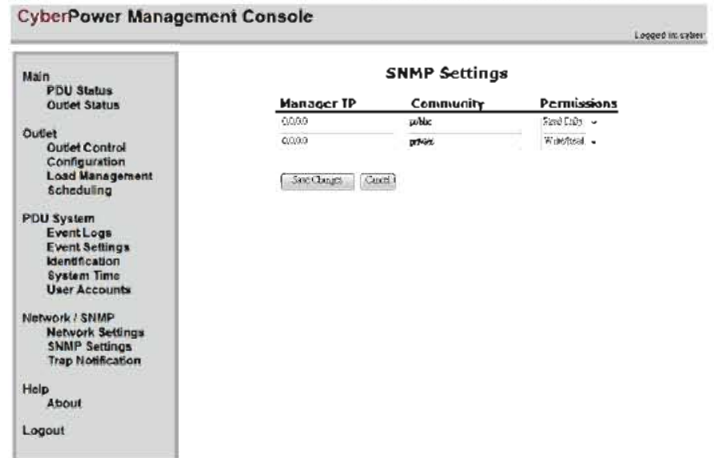
Confirm Password- Retype the password to confirm it.

Save Changes/ Cancel- Options will only be saved by clicking the Save Changes button. The Cancel button will clear/ refresh the selected options.

All the menus available in CyberPower Management Console are listed:

Menu		Administrator	User
Main	PDU Status	v	v
	Outlet Status	v	v
Outlet	Outlet Control	v	v
	Configuration	v	v
	Load Management	v	---
	Scheduling	v	—
PDU System	Event Logs	v	v
	Event Settings	v	—
	Identification	v	—
	System Time	v	---
	User Accounts	v	—
Network/SNMP	Network Settings	v	---
	SNMP Settings	v	—
	Trap Notification	v	—
Help	About	v	v
Logout		v	v

Network Settings Menu

The Network Settings Menu allows users to configure various network settings for the PDU.

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Network Settings

Settings

DHCP Status:	Enable
System IP:	192.168.10.199
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.10.1
Web Port (80, 5000-65535):	80

Save Changes   Cancel

Settings

DHCP Status- Set the DHCP to either Enable or Disable

System IP- The IP address of the PDU.

Subnet Mask- The subnet mask of the PDU.

Default Gateway- The gateway of the PDU.

Web Port- The web port of the PDU. Default is set to 80.
  * Valid values are: 80, 5000-65535

Save Changes/Cancel- Options will only be saved by clicking the Save Changes button. The Cancel button will clear/refresh the selected options.

SNMP Settings Menu

This SNMP Settings Menu serves to control which IP addresses (devices) have access to the CyberPower Management Console on the PDU.

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SNMP Settings

Manager IP	Community	Permissions
0.0.0.0	public	Read Only
0.0.0.0	private	Write/Read

Save Changes   Cancel

Manager IP- Enter the IP address of the device of which to control access.
  * Valid values are: 0.0.0.0 to 255.255.255.255
  * Values of 0.0.0.0 or 255.255.255.255 allow access for all IP addresses.

Community- Enter the community. (Community functions as the password).
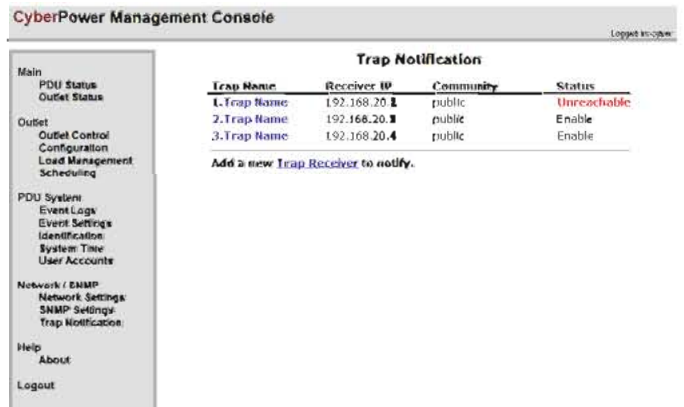 * Community field must be 1 to 15 characters length.

Permissions- Select which permissions to give to the device.
  * Read Only- The device can read data at any time but can never write data.
  * Write/ Read- The device can read and write data at any time unless another user is logged in.
  * No Access- The device cannot access the PDU.

Trap Configuration Menu

CyberPower Management Console

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  Outlet Control
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Trap Notification

Trap Name	Receiver IP	Community	Status
1.Trap Name	192.168.20.1	public	Unreachable
2.Trap Name	192.168.20.1	public	Enable
3.Trap Name	192.168.20.4	public	Enable

Add a new Trap Receiver to notify.

* Status options are Enabled, Disabled, and Unreachable.
Unreachable: If a trap is unreachable, it means the device on the setting IP can not be reached in the network.
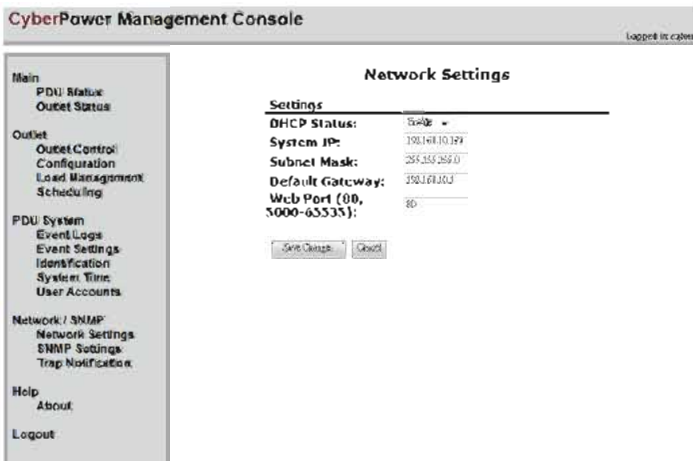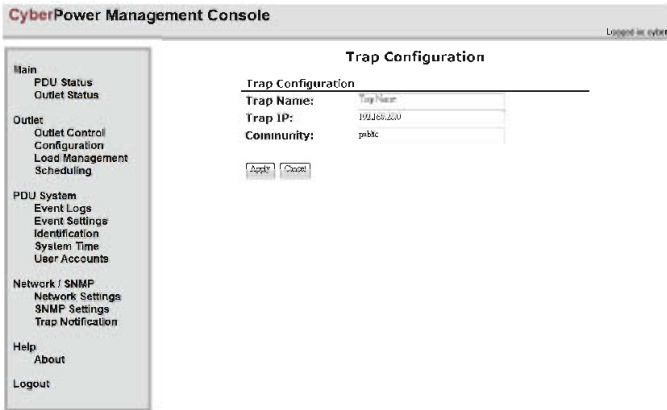* Click on the Name of the trap to view/edit the trap's properties.
* To add a new trap, click Add a new Trap Receiver.
Note: CyberPower Management Console allows a maximum of 10 schedules to be set.

Trap Notification Submenu- Add Trap

The Trap Notification Menu displays a list of current traps and allows users to configure new traps.

Trap Name- Enter in a description of the trap. Trap Names can be a maximum of 15 characters.

Trap IP- Enter in the IP address of the device receiving the trap.
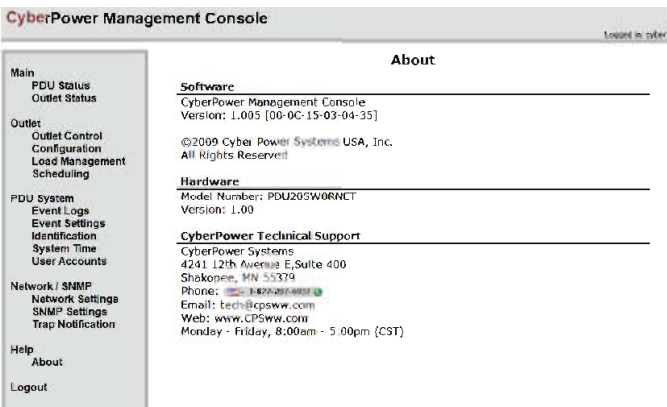 * Valid values are: 0.0.0.0 to 255.255.255.255
  * Values of 0.0.0.0 or 255.255.255.255 allow all NMS to receive Traps.

Community- Enter the community. (Community functions as the password).
  * Community field must be 1 to 15 characters length.

Trap Configuration Submenu

Traps can be enabled, disabled, and deleted from this section. Users can also remain the traps or make modifications to its configuration.
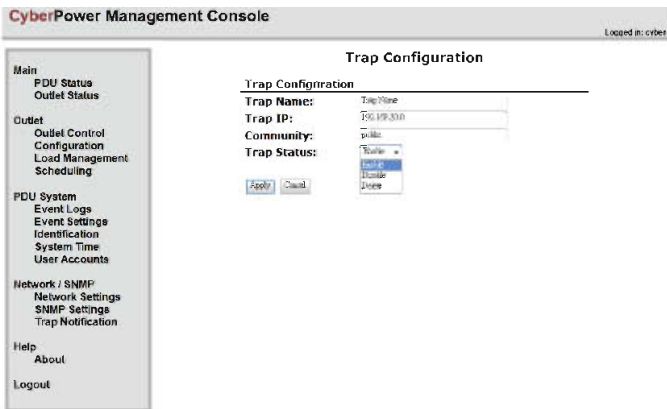
See section "Trap Notification Submenu - Add Trap" for menu definitions and restrictions.

About Menu

The About Menu displays the hardware/software version, and also gives contact information for CyberPower Technical Support.

Troubleshooting

Problem	Possible Cause	Solution
PDU Outlets do not provide power to connected equipment	1. Open breaker 2. Loose power cord	Reset Breaker, check if plug is completely connected. If the problem remains contact tech support.
Amperage displayed on Metered Readout exceeds the units capability.	1. Overload	The Metered Readout will flash when overloaded. Reduce the load on the PDU until the overload is gone. If the problem remains contact tech support.
Circuit breaker has tripped	1. Sustained overload 2. Excessive ambient or internal temperatures. 3. Faulty breaker	Reset Breaker. If the problem remains contact tech support.

Frequently Asked Questions (FAQ)

Q. What do I do if I've lost the Administrator username and/or password?
A. Resetting the PDU will set the username and password back to system default. See section on Device Reset to reset the PDU.

 FCC Notice:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING!! This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: (1) Reorient or relocate the receiving antenna. (2) Increase the separation between the equipment and receiver. (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. (4) Consult the dealer or an experienced radio/TV technician for help. Any special accessories needed for compliance must be specified in the instruction.

The Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.
Cet appareil numerique de la class B respecte toutes les exigencies du Reglement sur le materiel brouilleur du Canada.

Product Registration

Thank you for purchasing a CyberPower product.
Prompt product registration entitles coverage under the Limited Warranty and Connected Equipment Guarantee, and also allows the opportunity to be notified of product enhancements, upgrades, and other announcements.

Registration is quick and easy at www.cpsww.com/register

Additional Help

Feel free to contact our Tech Support department with installation, troubleshooting, or general product questions.

CyberPower Technical Support
Phone: 1-877-297-6937
Email: tech@cpsww.com
Web: www.CPSww.com
Mail: 4241 12th Avenue E, Suite 400 Shakopee, MN 55379

Hours of Operation: Monday – Friday, 8:00am – 5:00pm (CST)

Limited Warranty & Connected Equipment Guarantee

Read the following terms and conditions carefully before using the CyberPower PDU(the "Product"). By using the Product you consent to be bound by and become a party to the terms and conditions of this Limited Warranty and Connected Equipment Guarantee (CEG) (together referred to as this "Warranty"). If you do not agree to the terms and conditions of this Warranty, you should return the Product for a full refund prior to using it.

Who is Providing this Warranty?

CyberPower Systems (USA), Inc. ("CyberPower") provides this Limited Warranty.

What Does This Warranty Cover?

This warranty covers defects in materials and workmanship in the Product under normal use and conditions.
If the Technical Specifications indicate a dollar amount for Connected Equipment Guarantee (CEG), this Warranty also covers equipment that was connected to the Product and damaged because of the failure of the Product. If the Technical Specifications do not indicate that there is a dollar amount for Connected Equipment Guarantee (CEG), then that product does not have surge protection, and the Connected Equipment Guarantee (CEG) does not apply. In that case, damage to equipment that was connected to the Product and damaged because of a failure of the Product is not covered by the Limited Warranty, and any damage to that connected equipment is your responsibility, not ours.

What is the Period of Coverage?

This Warranty is for as long as the original owner owns the Product.

Who Is Covered?

This warranty only covers the original purchaser.
Coverage ends if you sell or otherwise transfer the Product.

How Do You Get Service?

1. Call us at (877) 297-6937 or write to us at Cyber Power Systems (USA), Inc., 4241 12th Ave. E., STE 400, Shakopee, MN 55379 or send us an e-mail message at claims@cyberpowersystems.com for instructions.
2. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment. Have information on all applicable insurance or other resources of recovery/payment that are available to the Initial Customer and Request a Claim Number.
3. You must provide a purchase receipt (or other proof of the original purchase) and provide a description of the defect.
4. Pack and ship the product to CyberPower and, if requested, the item(s) of Connected Equipment, a repair cost estimate for the damage to the Connected Equipment, and all claim forms that CyberPower provides to you. Show the Claim Number on the shipping label or include it with the product. You must prepay all shipping costs, you are responsible for packaging and shipment, and you must pay the cost of the repair estimate.

How Long Do I Have To Make A Claim?

All claims must be made within ten days of the occurrence.

What Will We Do To Correct Problems?

CyberPower will inspect and examine the Product.

If the Product is defective in material or workmanship, CyberPower will repair or replace it at CyberPower's expense, or, if CyberPower is unable to or decides not to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund to you the full purchase price you paid for the Product (purchase receipt showing price paid is required).

If it appears that our Product failed to protect any equipment plugged into it, and if this Product has Connected Equipment Guarantee (CEG) coverage (Look above at "What does this Warranty Cover?"), we will also send you forms for making your claim for the connected equipment. We will repair or replace the equipment that was damaged because of the failure of our Product or pay you the fair market value (NOT REPLACEMENT COST) of the connected equipment as of the time of the damage. We will use Orion Blue Book, or another a third-party valuation guide, or eBay, craigslist, or other source to establish that amount. Our liability is limited to the amount, if any, stated in the Technical Specifications. If there is no dollar amount for your model of the Product, then there is no Connected Equipment Guarantee (CEG) coverage for that Product.

Who Pays For Shipping?

We pay when we send items to you; you pay when you send items to us.

What Are Some Things This Warranty Does Not Cover?

1. This Warranty does not cover any software that was damaged or needs to be replaced due to the failure of the Product or any data that is lost as a result of the failure or the restoration of data or records, or the reinstallation of software.
2. This Warranty does not cover or apply to: misuse, modification, operation or storage outside environmental limits of the Product or the equipment connected to it, nor for damage while in transit or in storage, nor if there has been improper operation or maintenance, or use with items not designed or intended for use with the Product, such as laser printers, appliances, aquariums, medical or life support devices, etc.

What are the Limitations?

1. This Warranty does not apply unless the Product and the equipment that was connected to it were connected to properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code), without the use of any adapters or other connectors.
2. The Product must have been plugged directly into the power source and the equipment connected to the Product must be directly connected to the Product and not "daisy-chained" together in serial fashion with any extension cords, another Product or device similar to the Product, surge suppressor, or power tap. Any such installation voids the Limited Warranty.
3. The Product and equipment connected to it must have been used properly in a suitable and proper environment and in conformance with any license, instruction manual, or warnings provided with the Product and the equipment connected to it.
4. The Product must have been used at all times within the limitations on the Product's VA capacity.
5. The sole and exclusive remedies of the Initial Customer are those provided by this Warranty.

Hyper Terminal software can be used for basic PDU configuration. It utilizes a text-based interface and menu system. Navigation through the interface is done by typing the number of the menu option and pressing the Enter key. Note: The session will timeout and logout after three (3) minutes of inactivity. Menu options are shown below:

```
===========================================================
[Power Manager Configuration Main Menu ]
===========================================================
1. Network Settings
2. System Configuration
3. Account Settings
4. Configure System to Default
e. Exit
```

```
===========================================================
   [ Network Group Configuration Utility Menu ]
===========================================================
Ethernet Address : 00-0C-15-03-04-35
1. System IP     : 192.168.20.95
2. Subnet Mask   : 255.255.255.0
3. Default Gateway: 192.168.20.1
4. Web/Http Port : 80
5. BOOTP(DHCP)   : Enable
0. Return to previous menu
```

```
===========================================================
   [ System Group Configuration Utility Menu ]
===========================================================
1. Internal Date(mm/dd/yyyy): 04/15/2009
2. Internal Time(hh:mm:ss)  : 06:04:25
3. System Name        : Power Manager
4. System Contact     : Administrator
5. System Location    : Server Room
```

```
===========================================================
[Account Group Configuration Utility Menu ]
===========================================================
1. Web Administrator User Name : cyber
2. Web Administrator User Password : cyber
3. Web Device User Name : device
4. Web Device User Password : cyber
5. COM Port Configuration Password : cyber
0. Return to previous menu
```

```
===========================================================
[ Default Group Configuration Utility Menu ]
===========================================================
1. Reset System to Default
2. Reset System to Default Except IP
0. Return to previous menu
```

Overview

The CyberPower Power Device Network Utility is an easy-to-use interface which is used to configure the network interfaces on CyberPower PDU devices.

Installation

Step 1: Insert the CD labeled "PDU Software Installation CD" into the CD/DVD drive.

Step 2: Select Power Device Network Utility from the installation menu.
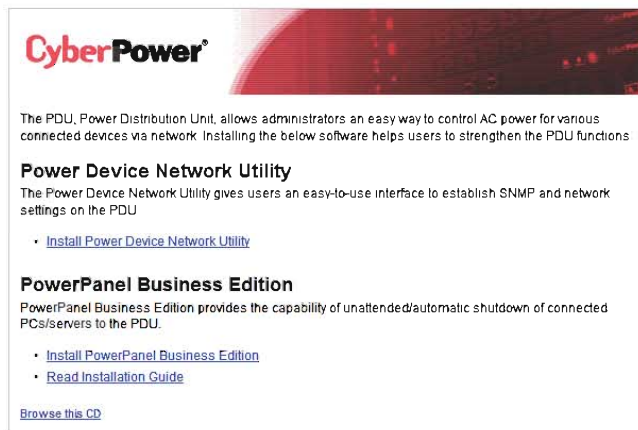

Figure 1: Installation Menu

Step 3: Select Next in the software wizard.

Step 4: Choose an installation directory and user settings. Select Next. [Figure 2]
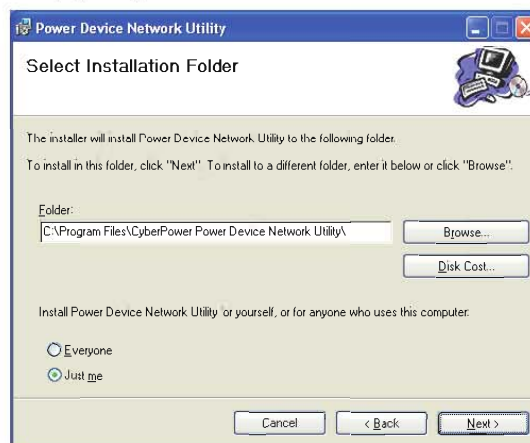

Figure 2: Installation folder & settings

Step 5: Select Next to confirm the settings and install.

Step 6: Select Close to finalize the installation.

Launch Program
To launch the Power Device Network Utility and get started, select Programs from the Start menu in windows and locate the new folder and icons for Power Device Network Utility. Select Power Device Network Utility from the program folder. [Figure 3]
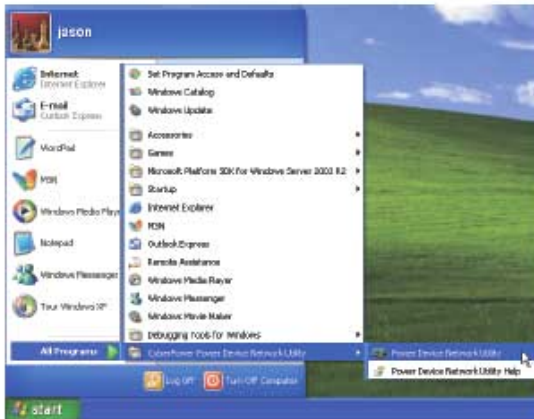
Figure 3: Power Device Network Utility

Getting Started
The Power Device Network Utility scans the network for devices with MAC addresses that match CyberPower network hardware. Once found, the device(s) can then be configured with a specific IP address, subnet mask, and gateway address. This allows the device(s) to function properly on the network and interface with CyberPower Management Console.

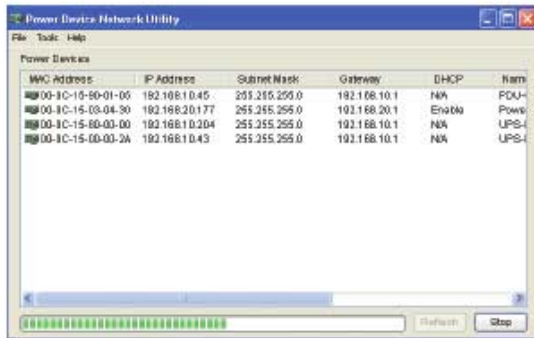Step 1: Select the appropriate PDU device from the Equipment List [Figure 4].

Figure 4: Equipment List

Note: If the PDU does not appear on in the list, click the Refresh button to rescan the network. If it still does not appear, ensure that the PDU is turned on and was installed correctly.

Pressing Stop will cancel the scan/refresh process.

Note: If your computer has a software firewall installed, you may see a Windows Security Alert message [Figure 5]. In Windows XP SP2, the default firewall alert message is shown as Figure 5. You need to allow the Power Device Network Utility access through the firewall.

Figure 5: Windows Security Alert

Step 2: Assign a valid IP Address to the PDU

Option 1: Assisted Setup (recommended)
With the appropriate device selected from the Equipment List, open the Network Settings menu [Figure 6] (Tools>Device Setup). In the Device Network Setting Menu, enter in a valid IP address, subnet mask, and gateway address to setup the PDU device.
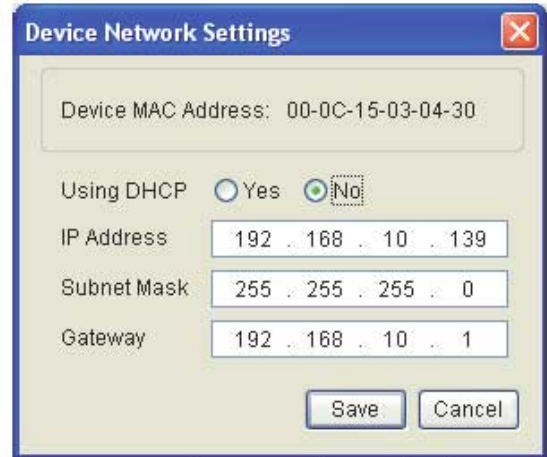
Figure 6: Network Setting Menu (Device Setup)

Note: The DHCP option is not available for all power device.

Step 3: Authentication

Enter the user name and password of the PDU device at the Authentication menu [Figure 7]. Note: The default username is "cyber" and the default password is "cyber".

Figure 7: Authentication screen

Advanced Settings

Timeout Settings

The Timeout Setting [Figure 8] (Edit>Timeout Settings) is used to specify the wait time when scanning for network PDU devices. When there are many devices on the local network, it may take extended periods of time to locate all the devices. The timeout function is used to limit the search time.

Default is 3 seconds. Valid values are 3 to 60 seconds.

Figure 8: Timeout Setting