

ServPower Freelancer



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Safety instructions: read before use!



Remark: In the following instructions, the term "ServPower Freelancer" designates all the products that hold the name ServPower Freelancer.

- ▶ The ServPower Freelancer devices can only be installed by qualified people with the following installation and use instructions. The vendor disclaims all responsibility in case of an improper utilisation of the ServPower Freelancer devices and particularly any use with equipments that may cause personal injury or material damage.
- ▶ This equipment is designed to be installed on a dedicated circuit that must have a circuit breaker or fuse protection.
- ▶ The electrical power sockets used to plug the power cords of the ServPower Freelancer devices must be close to the ServPower Freelancer devices and easily accessible.
- ▶ Check that the power cords, plugs and sockets are in good condition.
- ▶ The ServPower Freelancer devices can only be connected to three-wire 220-230 VAC / 50Hz sockets.
- ▶ Always plug the Power Switch devices into properly grounded power sockets (two poles plus ground).
- ▶ Never exceed the maximum total load as indicated in the technical specifications or the datasheet of the ServPower Freelancer device.
- ▶ The ServPower Freelancer devices are intended for indoor use only. Do NOT install them in an area where excessive moisture or heat is present.
- ▶ Always disconnect the power cord(s) of the ServPower Freelancer device if you want to intervene on the ServPower Freelancer device or on the equipment powered from the ServPower Freelancer device.
- ▶ The power outlets of the ServPower Freelancer devices are not circuit breakers! If you want to intervene on equipment connected to a ServPower Freelancer device you must disconnect this equipment from the ServPower Freelancer device.
- ▶ The ServPower Freelancer devices contain potentially hazardous voltages. Do NOT attempt to disassemble them.

The Power Switch devices contain no user serviceable parts and repairs are to be performed by factory trained service personnel only.

Introducing ServPower Freelancer

What is ServPower Freelancer

The ServPower Freelancer is an Internet ready device designed to allow administrators to remotely and individually control the AC power for up to eight connected devices, such as: servers, workstations, routers, switches, PBXs, etc. By daisy chaining (cascading) up to 16 client units, administrators can control a total of 128 devices from the same management interface.

The ServPower Freelancer offers easy configurable and user-friendly communication and control methods. The most common connection of all is using a standard HTTP connection. Once the unit is powered and properly set up, the administrator can manage the power of the devices from anywhere in the world via a web browser.

The other option is to connect an external modem to the built in RS 232 port to allow dialing up of the Internet.

The superiority of the ServPower Freelancer over other power management products is the control over a telephone connection (DTMF tone signals) with no need of modem. So even if networks lock up or Internet crashes, there is always a back up telephone control option for administrators to control devices. With such powerful features, administrators can be sure that they will always gain access to their devices no matter where they are in the world.

Contents of Your ServPower Freelancer Package

The standard ServPower Freelancer package contains a Remote Power Manager Unit with supporting hardware and software. The components of your package are:

- 1 ServPower Freelancer Unit
- 1 pair of rackmount brackets
- 1 piece of IEC320 C13 / C14 AC Power Cord.
- 8 pieces of 1.8m RJ-11 to DB9/RS232 cables for PC communication.
- 1 piece of 10cm RJ-11 cascade cable for ServPower Freelancer daisy chaining
- CD-ROM (only for Master models)
 - Configuration tool: Configure management card's IP address and upgrade firmware.
 - MIB: Management Information Base for Network.
 - User's Guide (PDF document)
 - Adobe Acrobat Reader.
- 1 terminator for the cascading port

ServPower Freelancer Features

- Turns ON/OFF any AC powered device via network, modem and phone.
- Supports manually turning on or off connected equipment
- Single (PSE606) or dual (PSE608) 7A input circuits
- Integrated 10/100Base-T Ethernet port for connection to your TCP/IP network.

- Address-Specific IP security masks prevent unauthorized sources from accessing the ServPower Freelancer through the network.
- Supports NMS to control ServPower Freelancer through MIB. User also can use MIB to develop their application interface.
- Downloads data and events log list to server.
- Daisy chain expandable up to 16 units.
- When events occur, ServPower Freelancer can notify user by email and trap according to the preset conditions.
- Configurable sequence in which power is turned on or off for each outlet. This helps avoid in-rushes at start-up, which can cause overloaded circuits and dropped loads. Sequencing also allows to predetermine which piece of equipment is turned on first so other equipment depending on that unit will function properly.
- Supports Windows NT, 2000 and XP to execute safe shutdown and reboot.
- Scheduled turn on and off of the connected equipment.

Hardware setup

This section will guide you through the quick installation of the ServPower Freelancer.

Front and Back Panels

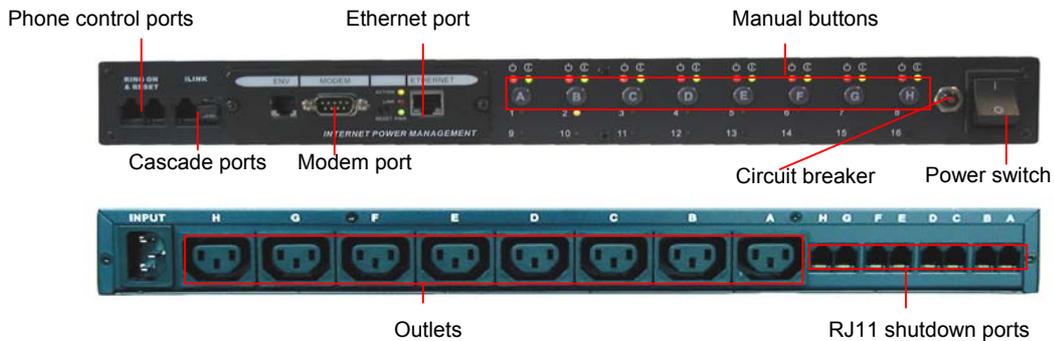


Figure 1 - Front and back views

The rear-panel contains eight server ports from A-H. These ports provides controlled shutdown for a Windows host. (Port A controls receptacle A; Port B controls receptacle B, etc...)

Outlet LED Table

ServPower Freelancer LED Table			
LED	ON	OFF	FLASHING
GREEN	The momentary switch is disabled and the output receptacle is programmed for remote control.	The momentary switch is active and the receptacle may be turned on or off by pressing and releasing the switch	Pressing and holding the momentary switch for three seconds will change the state from remote to local control.
RED	The receptacle is on and providing power to devices	The receptacle is off and doesn't provide power.	The receptacle has internal fault.
YELLOW	Indicate the ServPower Freelancer ID number. The master one-plugged with SNMP card, will display all the connected ServPower Freelancer ID numbers		

Management card LED Table

Management card LED Table			
YELLOW	RED	GREEN	STATUS
Solid Off	Solid Off	Solid On	Power ON
Flashing	Solid On	Solid On	System initial
Solid On	Solid Off	Solid On	Normal Operation
Solid On	Flashing	Solid On	No Connection to UPS
Flashing	Flashing	Solid On	Writing data to flash memory
Green Light : Power state			
Red Light : Connection state with UPS			

Basic Connection Scheme

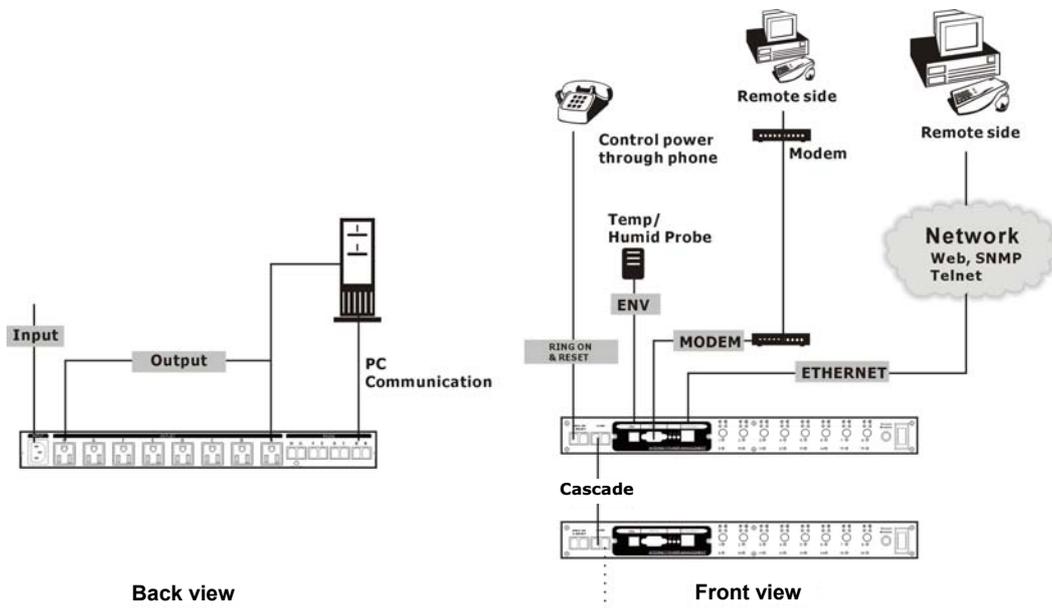


Figure 2 - Basic connection scheme

Hardware Installation Procedure

1. Install mounting brackets.

The ServPower Freelancer comes with brackets for mounting in a standard 19-inch rack. To mount the ServPower Freelancer into a rack perform the following procedure:

- Attach the mounting brackets to the unit as shown, using the four retaining screws provided for each of the brackets.
 - Choose a location for the brackets. A notched hole on the vertical rail denotes the middle of a U slot.
 - Align the mounting holes of brackets with the notched hole on the vertical rail and attach with the retaining screws.
2. If installing more than one ServPower Freelancer, repeat step 1 for each unit.
 3. Connect all input and output connectors. (Refer to next section for daisy chain configuration)
 4. Connect Ethernet cable to ServPower Freelancer Master.
 5. Program the IP address using Netility. (Refer to pages 9-12 for IP configuration).
 6. Set ServPower Freelancer's front control buttons for Internet/remote or manual control. (Please check LED Table above for the operation)
 7. Use browser, modem or phone connection to monitor and control the outlets.

Daisy chain setup procedure

The ServPower Freelancer can be daisy chained up to a maximum of sixteen units (1 Master and up to 15 Satellites). Each unit in the chain must have its own unique identification number. The default ID# is "01". The first unit must be a Master model (PSE606MA or PSE608MA) and must be configured before you can begin daisy chaining any additional Satellite units. Please follow the procedure below to daisy chain the ServPower Freelancer units:

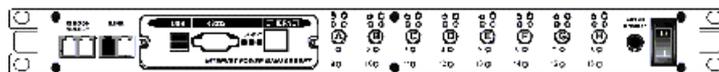


Figure 3 - First ServPower Freelancer

1. Make sure that the terminator is plugged into the first ServPower Freelancer's cascade port (see Figure 3).
2. Plug the first ServPower Freelancer's power cord into utility power.
3. Turn the power switch on.
4. Setup the ServPower Freelancer (see Hardware Installation Procedure above).
5. Configure the first ServPower Freelancer's ID number (each unit must have its own unique ID#, the default ID# is "01").

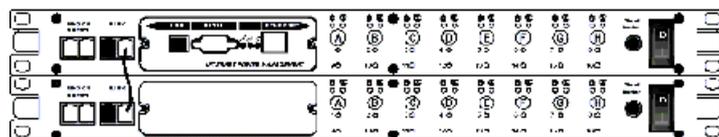


Figure 4 - Cascading two units

6. Make sure that the second unit has the terminator plugged into the cascade port (see Figure 4).
7. Connect the first and second unit together with the cascade cable.
8. Plug the second ServPower Freelancer's power cord into utility power.
9. Turn its power switch on.
10. Configure the second unit's ID number (each ServPower Freelancer must have its own unique ID#, the default ID# is "01").
11. If there are only two units required for this application, then this completes the daisy chaining procedure and the ServPower Freelancers are ready for use.
12. If your application requires additional ServPower Freelancers, then continue on with the daisy chaining procedure.

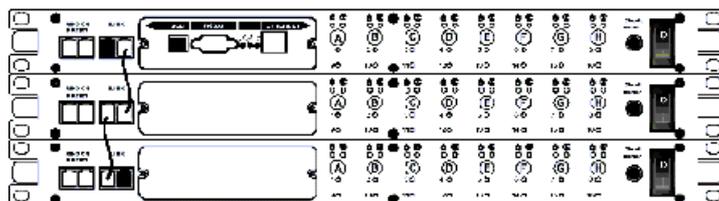


Figure 5 - Cascading three units

13. Make sure that the third ServPower Freelancer has the terminator plugged into the cascade port (see Figure 5).
14. Remove the terminator from the second ServPower Freelancer.
15. Connect the second and third units together with the cascade cable.
16. Plug the third unit's power cord into utility power.
17. Turn the power switch on.
18. Configure the third unit's ID number (each ServPower Freelancer must have its own unique ID#, the default ID# is "01").
19. If there are only three units required for this application, then this completes the daisy chaining procedure and the ServPower Freelancers are ready for use.
20. If your application requires additional ServPower Freelancers (maximum of sixteen), then repeat steps 13-19 of the Daisy Chaining procedure.

Device configuration

Installing Netility

1. Insert the Utility CD into the CD-ROM driver, change to directory “Setup” and execute “Netility.exe”
2. After installation is completed, ‘Netility’ group will appear in Windows program groups list. Click “Netility” to start the program.

Using Netility for IP Configurations

The Netility main menu is shown below. The selection menu is located on the left. The device, hardware, firmware and IP addresses of all ServPower Freelancer connected to the LAN are displayed on the right.



Figure 6 - Configuration utility main window

NETWORK SELECTION

Once Netility starts up, it will automatically search for the computer’s network card (If not, click on “Network Selection” on the main menu to start the search). A pop-up window will show the available Network Adapter(s).

Next, select the Network Adapter which is connected to the internet and click ‘OK’ to return to the main menu. The ServPower Freelancer’s current IP address will now appear in the main menu display area.

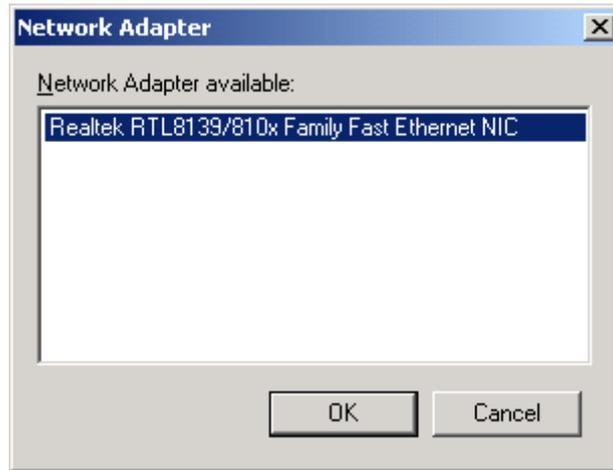


Figure 7 - Network Adapter selection

CONFIGURE IP

Select the IP on the right display screen, and then click “Configure”. This will bring up the IP Address Configuration window. The user can now set;

- IP Address
- Advanced (for port setting configuration)

1. IP Address

This section determines ServPower Freelancer’s IP Address. When using ServPower Freelancer for the first time, the IP address, subnet mask and gateway will have to be set. Enter the IP Address of your choice.

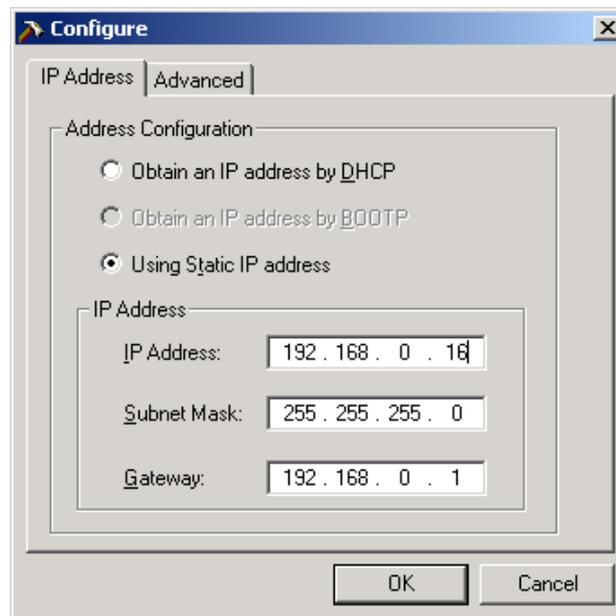


Figure 8 - Setting the IP address of the ServPower Freelancer

Address
Configuration

Once the IP address is set, you will be able to connect to the ServPower Freelancer webpage from a standard browser.

Obtain an IP address by DHCP or BOOTP – the IP address, subnet mask and gateway are acquired via the network from the appropriate servers

2. Advanced

In order to increase security to ServPower Freelancer, Netility offers two additional security features:

Password

Use this to set an access password for Netility.

NOTE:

Do not lose this password. If the password is lost, the SNMPUtility will not be able to perform future firmware upgrades.

Management Protocol

The administrator can determine the parameter settings when providing access via HTTP (web) or Telnet to ServPower Freelancer. For security reasons, the administrator can choose to use either the standard or a custom port setting to control the access. Alternately, these services can be enabled/disabled independently to match your security policy.

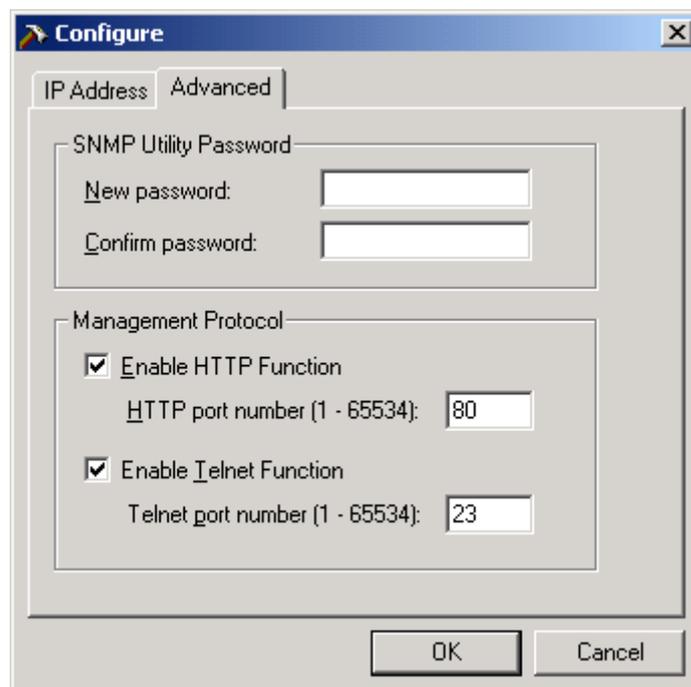


Figure 9 - Advanced settings

The default values are set to port number 80 for HTTP and 23 for Telnet Function.

If set to other port values, the full IP Address must be entered in order to Telnet or access the Website. For example:

- a) Set a value of 81 as the HTTP port number, then
http://192.168.0.177:81
 must be typed as the web address in order to access the ServPower Freelancer website.
- b) Set a value of 24 as Telnet port number, then
telnet 192.168.0.177 24
 must be typed in order to access the ServPower Freelancer Telnet screen.

FIRMWARE UPDATE

Netility offers a convenient firmware upgrade. When a new firmware is available;

1. Click "Download Firmware" from the Netility main menu,

2. Click “Browser”,
3. Select new firmware file (*.bin) and,
4. Click “Start”.

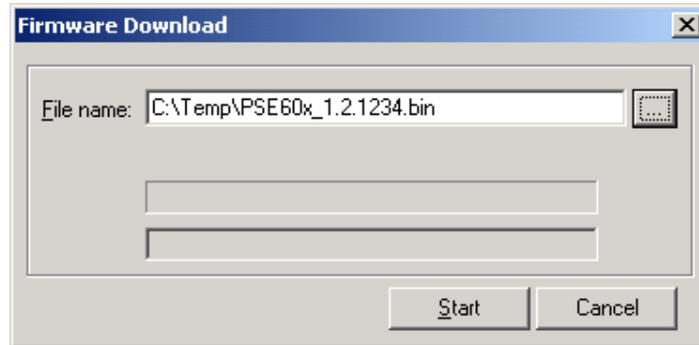


Figure 10 - Firmware update

NOTE:

If the downloading / upgrade process is interrupted or the data is corrupted, ServPower Freelancer will keep its default firmware to avoid complete data loss. Repeat the above firmware upgrade procedure if your upgrade process was interrupted.

REFRESH

Netility automatically searches for any ServPower Freelancer connected to the LAN. However, the user can do a manual search by clicking the “Refresh” icon.

Operation

Logging in

After you have setup the hardware and set an IP address for ServPower Freelancer, you will then be able to go to its web site to monitor and control the devices. All you have to do is enter the IP address or hostname (if entered into the hosts table or registered with a DNS server) into any standard web browser.

1. Start the web browser
2. Enter the ServPower Freelancer IP Address that was set earlier using Netlity and press [ENTER]
3. A login screen will appear, press [ENTER]. By default the username and password are left blank.



Figure 11 - Login window

The web interface

The ServPower Freelancer's webpage main menu is divided into two sections: the selection menu on the left and display menu on the right.

The selection menu consists of the following options:

- Information
- Configuration
- Log Information
- Device Selection

When using ServPower Freelancer for the first time, you must first set the necessary parameters in the "Configuration" menu. This will ensure that the ServPower Freelancer will work properly.

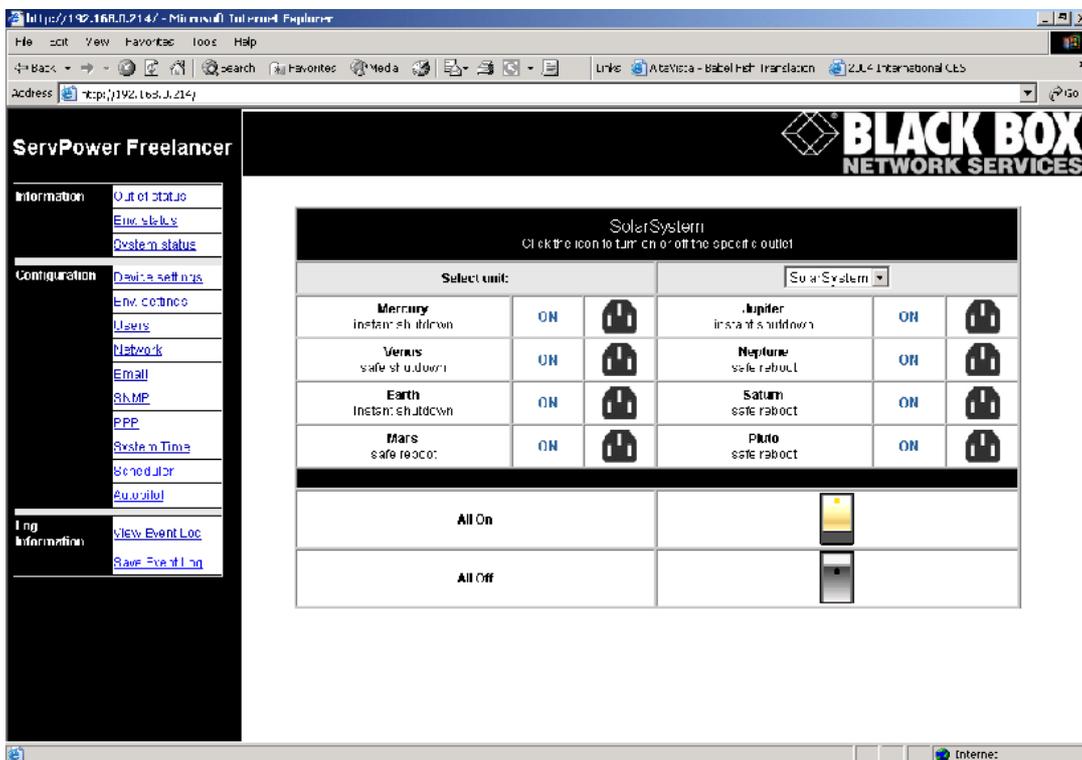


Figure 12 - ServPower Freelancer Main Menu

INFORMATION

This tab displays the System Information and ServPower Freelancer Status. The information is either provided by ServPower Freelancer or comes from the values set in the "Configuration" section. Click on "System Status" to view the information.

1. Outlet Status

This section gives you remote control over the ServPower Freelancer unit and its individual outputs. Click on the individual power input icon to switch on, off, or reboot the device.

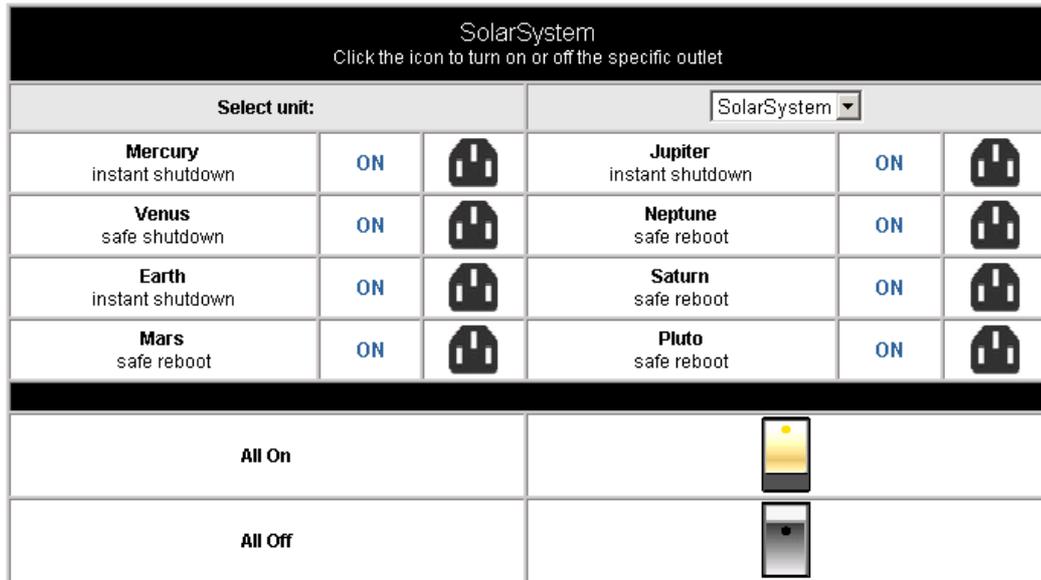


Figure 13 - ServPower Freelancer Status Menu

2. Env. Status

This option is available only if the external optional environmental control unit is connected to the ServPower Freelancer. It will show the current readings for the measured parameters (temperature, humidity)

3. System status

This section shows you the System Information and Network Status, such as the Firmware Version, the system name, uptime, IP Address, Gateway, PPP Server, Login IP and the like.

CONFIGURATION

Please ensure that each of the following option is set correctly. Otherwise, ServPower Freelancer may not work properly.

- Device settings
- Env. settings
- Email
- PPP
- Web/Telnet
- System Time
- ServPower Freelancer Setting
- ServPower Freelancer Schedule

1. Device settings

This section determines the settings of the ServPower Freelancer.

Select ServPower Freelancer	Select the ServPower Freelancer that is currently connected and switched on
Address Change	Use this to assign a new number or change the currently assigned number for the ServPower Freelancer unit. You have a choice of 01 to 16. Note: You cannot choose a number that is already assigned to another ServPower Freelancer.
Identification	To give a unique name for the ServPower Freelancer.
Outlet	Indicate outlets A-H
Name	To set a unique name for the Outlets
Phone Controllable	Option of "Yes" or "No"
Control Type	Select a control type for the outlet. Option of; Safe shutdown Safe reboot, and Instant shutdown (refer to Control Type Table for examples)
Power off Delay	Sets the power off delay time in seconds (value from 0 to 9999)
Power Resume Delay	Sets the power resume/on delay time in seconds (value from 0 to 9999)

Device settings

Select unit:

Address Change:

Identification:

Outlet	Name	Phone Controllable	Control Type	Power Off Delay	Power Resume Delay
A	<input type="text" value="Mercury"/>	<input type="text" value="YES"/>	<input type="text" value="instant shutdown"/>	<input type="text" value="2"/> sec	<input type="text" value="1"/> sec
B	<input type="text" value="Venus"/>	<input type="text" value="YES"/>	<input type="text" value="safe shutdown"/>	<input type="text" value="2"/> sec	<input type="text" value="2"/> sec
C	<input type="text" value="Earth"/>	<input type="text" value="YES"/>	<input type="text" value="instant shutdown"/>	<input type="text" value="2"/> sec	<input type="text" value="3"/> sec
D	<input type="text" value="Mars"/>	<input type="text" value="YES"/>	<input type="text" value="safe reboot"/>	<input type="text" value="2"/> sec	<input type="text" value="4"/> sec
E	<input type="text" value="Jupiter"/>	<input type="text" value="YES"/>	<input type="text" value="instant shutdown"/>	<input type="text" value="2"/> sec	<input type="text" value="5"/> sec
F	<input type="text" value="Neptune"/>	<input type="text" value="YES"/>	<input type="text" value="safe reboot"/>	<input type="text" value="2"/> sec	<input type="text" value="6"/> sec
G	<input type="text" value="Saturn"/>	<input type="text" value="YES"/>	<input type="text" value="safe reboot"/>	<input type="text" value="2"/> sec	<input type="text" value="7"/> sec
H	<input type="text" value="Pluto"/>	<input type="text" value="YES"/>	<input type="text" value="safe reboot"/>	<input type="text" value="2"/> sec	<input type="text" value="8"/> sec

Figure 14 - Device settings

Table of Control Type and Resulting ServPower Freelancer Action:

Power Mode	Control Type	Power Off Delay (sec)	Power Resume Delay (sec)	Action By ServPower Freelancer
ON-OFF	Instant Shutdown	0	0	Instant Shutdown
ON-OFF	Instant Shutdown	10	0	Instant Shutdown
ON-OFF	Instant Shutdown	0	10	Instant Shutdown
ON-OFF	Instant Shutdown	10	10	Instant Shutdown
OFF-ON	Instant Shutdown	0	0	Instant ON
OFF-ON	Instant Shutdown	0	10	On within 10 sec.
OFF-ON	Instant Shutdown	10	0	Instant ON
OFF-ON	Instant Shutdown	10	10	On within 10 sec.
ON-OFF	Safe Shutdown	0	0	Instant Shutdown
ON-OFF	Safe Shutdown	10	0	Shutdown in 10 sec.
ON-OFF	Safe Shutdown	0	10	Instant Shutdown
ON-OFF	Safe Shutdown	10	10	Shutdown in 10 sec.
OFF-ON	Safe Shutdown	0	0	Instant ON
OFF-ON	Safe Shutdown	0	10	On within 10 sec.
OFF-ON	Safe Shutdown	10	0	Instant ON
OFF-ON	Safe Shutdown	10	10	On within 10 sec.
ON-OFF	Safe Reboot	0	0	Inst S/D, reboot in 10
ON-OFF	Safe Reboot	10	0	S/D in 10, reboot in 10
ON-OFF	Safe Reboot	0	10	Inst S/D, reboot in 20
ON-OFF	Safe Reboot	10	10	S/D in 10, reboot in 20

Note

If the Control Type were changed from Instant or Safe Shutdown to Safe Reboot and for the first time only, the following will occur

Power Mode	Control Type	Power Off Delay (sec)	Power Resume Delay (sec)	Action By ServPower Freelancer
OFF-ON	Safe Reboot	0	10	Starts in 20 sec.
OFF-ON	Safe Reboot	10	0	Starts in 10 sec.

2. Env. Settings

This option is visible only if the external optional environmental monitoring device is connected to the ServPower Freelancer.

3. Users

This section is to set the user list for ServPower Freelancer. Once set, a user will have to enter the given username and password in order to access ServPower Freelancer webpage.

Users			
User Account			
User Name	Password	Permission	IP Filter
bbox	*****	Read/Write	***
		Read/Write	***

Apply Reset

Figure 15 - Users

User Account

User Name	This section is to set a user name for web access. You can define up to 8 users.
Password	This section is to set a password for the user.
Permission	Determine the user’s authorization type. The user can either “Read only” or “Read and Write” after gaining entry to the webpage.
IP Filter	An additional security feature. Once specified, the user can only login from the specified IP address. Leave blank to allow user to login from any place.

4. Network

Network	
IP Address *	
IP Address	192.168.0.215
Subnet Mask	255.255.255.0
Gateway	192.168.0.2
Obtain an IP Address*	By manual
DNS Server IP	
Primary DNS Server IP	192.168.0.1
Secondary DNS Server IP	
Ethernet	
Connection Type*	Auto Sense
*: Changing this value will force the unit to reboot.	
Apply Reset	

Figure 16 - Network

This option determines the ServPower Freelancer network settings. Once you changed the IP Address, you will have to redirect your browser to the new IP address manually. In addition, changing the option between “manually” and “using DHCP” to “Obtain an IP Address” will cause the unit to reset once you click the <Apply> button.

DNS Server IP

Primary DNS Server IP	This is to set the primary DNS Server IP address.
Secondary DNS Server IP	This section is to set the secondary DNS Server IP address. This is used when the Primary DNS Server IP address is not working

Ethernet: Connection Type

This item sets the communication speed of the network connection. If you change the Connection Type settings, the unit will reboot.

5. E-mail

This option sets the following Email details for ServPower Freelancer

Email

Email Setting

Email Server	<input type="text"/>
Sender's Email Address	<input type="text"/>
Email Server Requires Authentication	NO ▾
Account Name	<input type="text"/>
Password	<input type="password"/>
Send Email When Event Occurs	NO ▾

Recipient's Email Address (for Event Log)

No.	Email Address	Events Selection
Account 1	<input type="text"/>	Select
Account 2	<input type="text"/>	Select
Account 3	<input type="text"/>	Select
Account 4	<input type="text"/>	Select
Account 5	<input type="text"/>	Select
Account 6	<input type="text"/>	Select
Account 7	<input type="text"/>	Select
Account 8	<input type="text"/>	Select

Recipient's Email Address (for Daily Report)

No.	Email Address
Account 1	<input type="text"/>
Account 2	<input type="text"/>
Account 3	<input type="text"/>
Account 4	<input type="text"/>

Send Email for Daily Report (hh:mm:ss) NO ▾ at

Figure 17 - Email

E-mail Settings

E-mail Server	This is to set the email server
Sender's Email Address	This item determines ServPower Freelancer Email address
Email Server Requires Authentication	If set to "YES", the user will have to provide the account name and password in order to access the Email server. Otherwise, enter "NO".
Account Name	Enter the account (login) name for the email server.
Password	Enter the password for the above account name
Send Email	If set to "YES", ServPower Freelancer will send an email to the recipient's email

When Event Occurs	address (set below) when an event occurs.
-------------------	---

Recipient's Email Address (for Event Log)

The user can determine which 8 email addresses will receive warning email when an event occurs.

Event Selection This section determines the type of event. Click on "Select" to open the "Select Events List" and choose the appropriate event for the respective email accounts.

Outlet Events	Yes	No
Communication Lost	<input checked="" type="radio"/>	<input type="radio"/>
Outlet On	<input checked="" type="radio"/>	<input type="radio"/>
Outlet Off	<input checked="" type="radio"/>	<input type="radio"/>
Outlet Reboot	<input checked="" type="radio"/>	<input type="radio"/>
Outlet Fault	<input checked="" type="radio"/>	<input type="radio"/>
Environmental Events	Yes	No
Environmental Temperature Overrun	<input checked="" type="radio"/>	<input type="radio"/>
Environmental Temperature Underrun	<input checked="" type="radio"/>	<input type="radio"/>
Environmental Humidity Overrun	<input checked="" type="radio"/>	<input type="radio"/>
Environmental Humidity Underrun	<input checked="" type="radio"/>	<input type="radio"/>

Figure 18 - Event Selection List

Recipient's Email Address (for Daily Report)

The user can determine which 4 email addresses will receive a Daily Report sent by ServPower Freelancer.

Send Email for Daily Report (hh:mm:ss)

This section determines the time of the day, the report is sent.

6. SNMP

This page is to configure the SNMP settings so that the ServPower Freelancer can be used by a NMS (Network Management System). (Eg: HP OpenView, SUN SunNet Manager, IBM Tivoli, etc...)

SNMP					
MIB System					
System Name		<input type="text" value="SPF Agent"/>			
System Contact		<input type="text" value="Administrator"/>			
System Location		<input type="text" value="My Office"/>			
Access Control					
Manager IP Address	Community	Permission	Description		
<input type="text" value="****"/>	<input type="text" value="public"/>	Read/Write ▾	<input type="text"/>		
<input type="text" value="****"/>	<input type="text" value="public"/>	No Access ▾	<input type="text"/>		
<input type="text" value="****"/>	<input type="text" value="public"/>	No Access ▾	<input type="text"/>		
<input type="text" value="****"/>	<input type="text" value="public"/>	No Access ▾	<input type="text"/>		
<input type="text" value="****"/>	<input type="text" value="public"/>	No Access ▾	<input type="text"/>		
<input type="text" value="****"/>	<input type="text" value="public"/>	No Access ▾	<input type="text"/>		
<input type="text" value="****"/>	<input type="text" value="public"/>	No Access ▾	<input type="text"/>		
<input type="text" value="****"/>	<input type="text" value="public"/>	No Access ▾	<input type="text"/>		
Trap Notification					
Receiver IP Address	Community	Severity	Acceptance	Description	Events
<input type="text"/>	<input type="text" value="public"/>	Information ▾	No ▾	<input type="text"/>	Select
<input type="text"/>	<input type="text" value="public"/>	Information ▾	No ▾	<input type="text"/>	Select
<input type="text"/>	<input type="text" value="public"/>	Information ▾	No ▾	<input type="text"/>	Select
<input type="text"/>	<input type="text" value="public"/>	Information ▾	No ▾	<input type="text"/>	Select
<input type="text"/>	<input type="text" value="public"/>	Information ▾	No ▾	<input type="text"/>	Select
<input type="text"/>	<input type="text" value="public"/>	Information ▾	No ▾	<input type="text"/>	Select
<input type="text"/>	<input type="text" value="public"/>	Information ▾	No ▾	<input type="text"/>	Select
<input type="text"/>	<input type="text" value="public"/>	Information ▾	No ▾	<input type="text"/>	Select
<input type="button" value="Apply"/> <input type="button" value="Reset"/>					

Figure 19 -SNMP

MIB System

System Name	Give a name to the unit.
System Contact	Name the administrator.
System Location	Name unit location.

Access Control

Manager IP Address	This section is to fix the IP address from which the administrator can access the Environment Control Management webpage. You can set up to 8 IP addresses. To access this webpage from any IP address leave this space as *.*.*.* (default)
Community	This section is to set a Community name for NMS. Note: The community name has to be the same as the setting in NMS.
Permission	This section is to set the authorities of accessing administrator. There is an option of Read, Read/Write, and No Access (for banning / restricting access from certain IP Address).
Description	This section is for an administrator to make notes.

Trap Notification

Receiver IP Address	This section is to set receivers IP address for receiving traps sent by ServPower Freelancer. It is valid for up to 8 IP Addresses.
Community	This section is to set a Community name for NMS. The community name has to be as the same as the setting in NMS.
Severity	This section is to set Trap receiver levels. There are three levels of Trap receiver: Information: To receive all traps. Warning: To receive “warning” and “severe” traps. Severe: To receive only “severe” traps. (Please refer to NMS manual for Trap levels).
Acceptance	Determines if the IP will receive a trap or not.
Description	This section is for an administrator to make notes.
Event	This section is to select events for ServPower Freelancer to send traps. Clicking on Select will open a “Select Events List”. Event Traps may be selected from this list.

7. PPP

This section determines the modem dial-in settings for ServPower Freelancer.

PPP	
PPP Dial-in	
Login Name	<input type="text"/>
Login Password	<input type="password"/>
PPP Server IP	<input type="text" value="10.0.0.1"/>
Login IP	<input type="text" value="10.0.0.2"/>
Modem Script	<input type="text" value="\N AT&KDM1S0=1 OK \N"/>
<input type="button" value="Apply"/> <input type="button" value="Reset"/>	

Figure 20 - PPP

PPP Dial-in

Login Name	Determine the username of visitors who can log in.
Login Password	Set a password for the visitor's account
PPP Server IP	Default set at 10.0.0.1
Login IP	Default set at 10.0.0.2
Modem Script	Default / Standard modem script.

8. System Time

This section is to set ServPower Freelancer System Time. You can provide ServPower Freelancer with up to two time servers or alternatively you can set the time zone yourself.

System Time	
Internet Time Setting	
Time Between Automatic Updates	<input type="text" value="1 Hour"/>
Primary Time Server	<input type="text" value="128.118.46.3"/>
Secondary Time Server	<input type="text" value="128.250.36.2"/>
Time Zone (Relative to GMT)	<input type="text" value="GMT+2:00"/>
<input type="button" value="Apply"/> <input type="button" value="Reset"/>	
System Time	
System Time (mm/dd/yyyy hh:mm:ss)	<input type="text" value="08/26/2004 17:50:25"/>
<input type="button" value="Apply"/> <input type="button" value="Reset"/>	

Internet Time Setting

Time Between Automatic Updates	This section is to set an interval for the time synchronization. Select either nil, 1, 3, 12 hours or 1, 10 & 30 days.
Primary / Secondary Time Server	Set the primary and secondary time servers for ServPower Freelancer.
Time Zone (Relative to GMT)	Select the appropriate time zone for your area.

System Time (Manually)

System Time (mm/dd/yyyy hh:mm:ss)	This section is to set ServPower Freelancer System Time manually. The format is pre-determined to: mm/dd/yyyy hh:mm:ss
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9. Scheduler

Use this section to manage your ServPower Freelancer schedules. You can choose to add a new schedule, Edit the existing schedule or delete a schedule.

Click on [New] to enter a new schedule event.

New Scheduler	
Unit	RPM02
Outlet	OutletA
Outlet Action	<input checked="" type="radio"/> ON <input type="radio"/> OFF
Date(yyyy/mm/dd)	<input checked="" type="radio"/> Once: <input type="text"/> <input type="radio"/> Every: Monday
Time(hh:mm)	<input type="text"/>
Please check the Device settings for the RPM outlet action type: 1. Instant shutdown. 2. Safe shutdown. 3. Safe reboot.	
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

Figure 21 - Scheduler

10. Autopilot

This option is visible only if the external optional environmental monitoring device is connected to the ServPower Freelancer.

LOG INFORMATION

This section keeps track of device events. It will record the time and date, device, ServPower Freelancer unit, and details of the event that occurred. You can also opt to save the event log. Up to 99 events can be logged. When the limit is reached the device will delete the earliest record and continue logging new events.

ServPower Freelancer Events List:

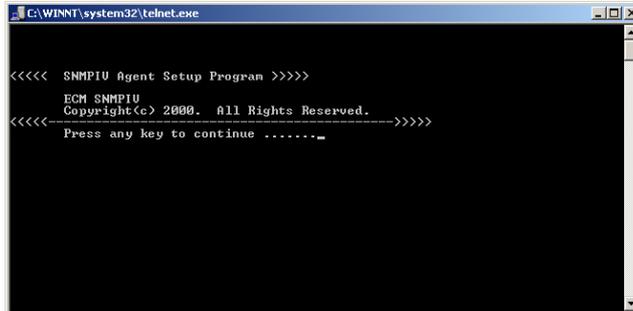
- ServPower Freelancer Communication Lost
- Outlet On
- Outlet Off
- Outlet Reboot
- Outlet Fault

Changing the settings using telnet

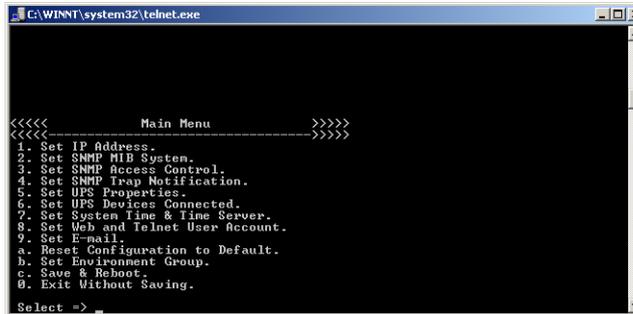
ServPower Freelancer supports multiple network management systems as well as LAN protocols. Once you have finished the hardware installation and have assigned an IP to the ServPower Freelancer, you will be able to use Telnet to configure the ServPower Freelancer.

To access ServPower Freelancer using the telnet option, follow these steps;

Successful link-up display. For first time login only, press <Enter> for User Name and Password.



Main screen is as follows



Once you can access ServPower Freelancer using telnet you will be able to change its settings. The following details the individual menu option available using telnet.

1. Set IP Address	This function allows you to setup IP Address, Gateway Address and Subnet Mask parameters. Similar to that on the webpage.
2. Set SNMP MIB System	This function allows you to set the MIB system group parameters.
3. Set SNMP Access Control	This function allows you to set the Manager IP, Community, Access Permission. Note: The configuration of ‘Set SNMP Access Control’ is only used for SNMP Network Manager.
4. Set SNMP Trap Notification	If you want to use a PC and perform the ‘Trap’ function of SNMP manager to manage ServPower Freelancer, the IP address of the PC must be added in this list. Note: The configuration of ‘Set SNMP Trap Receiver’ is only used for SNMP Network Manager.
5. Set UPS Properties	For future use
6. Set UPS Devices Connected	For future use.
7. Set System Time & Time Server	This allows you to setup the System date, time and two time servers.
8. Set Web and Telnet User Account	This is allows to set users account’s authority.
9. Set E-mail	This is allows to set e-mail accounts to receive power event notification for emergency management.
a. Reset Configuration to Default	Set all values to their default settings.
b. Set Environment	Set the Environment group settings

Group	
c. Save & Reboot	Save the current configuration data, including any changes you have made, and reset the SNMP card.
0. Exit Without Saving	All changes will be lost.

Telephone access

This section guides you through control of ServPower Freelancer using a telephone.

Telephone Control

1. Dial up the ServPower Freelancer.
2. After three rings the ServPower Freelancer will respond by sending out three short beeps to the caller. Then the ServPower Freelancer waits for the user to enter the password.
3. The user enters an access password (default password is 123456789#).
The ServPower Freelancer will send out three short beeps to confirm a successful login, or one long beep to deny access. The ServPower Freelancer will disconnect after three unsuccessful access password attempts.
4. Once logged in, the remote user can enter 4-8 digits. The first two digits specify which ServPower Freelancer, the next digit specifies which output receptacle and the next digit specifies which command. The last four digits specify the amount of time:

Command format: *XXNA[DDDD]#*:

XX: 01 - 16 is the ServPower Freelancer's device number for a daisy chain, if there is no daisy chain, then any number is accepted.

N: Outlet number 1(A)—8(H), 9 controls all the outlets.

A: Action type 0=off, 1=on, 2=reboot

[DDDD]: optional, sets a delay time in minutes before executing the action. The max value is 9999, which is about 166 hours or 6.94 days.

Examples:

Command	Effect
0111#	ServPower Freelancer #01 turn on Outlet A.
0120#	ServPower Freelancer #01 turn off Outlet B
0212#	ServPower Freelancer #02 reboot Outlet A
01113600#	ServPower Freelancer #01 turn on Outlet A after 3600 minutes
01103600#	ServPower Freelancer #01 turn off Outlet A after 3600 minutes
01123600#	ServPower Freelancer #01 reboot Outlet A after 3600 minutes

Use the "*" key to cancel a command at any time.

The 9 command set is for the administrator:

0190# to turn every port off.

0191# to turn every port on.

0192# to reboot every port with a delay of 8 minutes, which will allow safe shutdowns. The delay can be changed by command 888911XXXX#, where XXXX can range from 1 to 9999 minutes.

5. The ServPower Freelancer will acknowledge the receipt of the commands by issuing 2 short beeps. A long beep indicates a failure or a non-recognizable command.

NOTE

The ServPower Freelancer is in a waiting loop to receive the command string. Each command string should be entered within 20 seconds. After 180 seconds without any user input, the ServPower Freelancer will logout the user.

6. Hang up to close any access.

NOTE

The user can enter 000# to force breaking the connection with ServPower Freelancer.

Change the phone password.

The default password is 123456789#. The user has to enter the current password in order to change it.

NOTE

The Password has to have a minimum of 7 digits and can have a maximum of 10 digits.

The user must first enter the current password, then the ServPower Freelancer responds with three short beeps acknowledging access granted. The user then enters the new password as follows: <old password><new password> #, and the ServPower Freelancer acknowledges with 2 short beeps. Then user inputs <old password><new password> # the second time to confirm the new password. The ServPower Freelancer acknowledges with 4 short beeps, indicating that the password has been changed.

Reset phone password

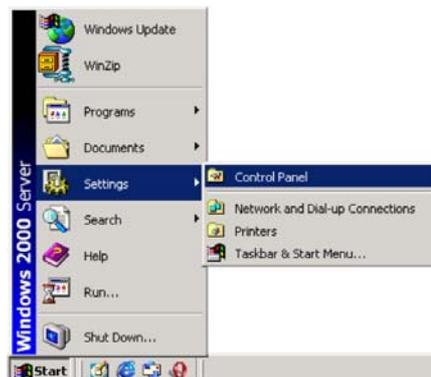
Please do the following steps to restore the default password.

1. Dial up the ServPower Freelancer.
2. After three sequence rings, the ServPower Freelancer will respond by sending out 3 short beeps to the caller and waiting for user to enter password. Then pressing the button A and H simultaneously on the ServPower Freelancer within twenty seconds.
3. When the LEDs A and H are blinking, release the two buttons, the ServPower Freelancer will respond by sending out 4 short beeps to the caller. The password will be restored to default.

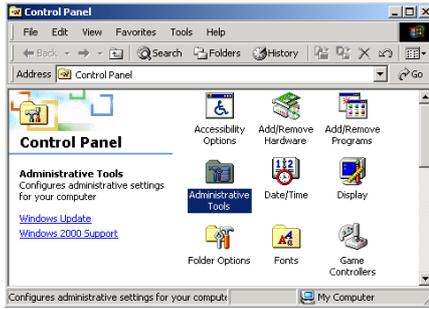
Appendix A – Configuring a Windows system for safe shutdown

For Windows shutdown setup, please use the RJ11 to DB9 serial cable to connect with the host and use the following instruction to configure the UPS service.

Open your Windows Control Panel by clicking on “Start”, “Setting”, “Control Panel”.



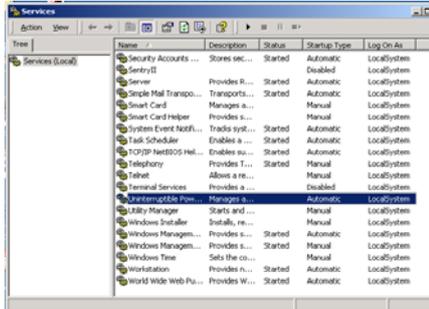
Double-click on the Control Panel’s “Administrative Tools” icon.



Double-click the “Services” icon.



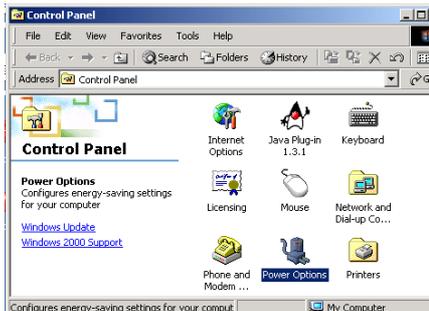
Double-click on the Uninterruptible Power Supply service



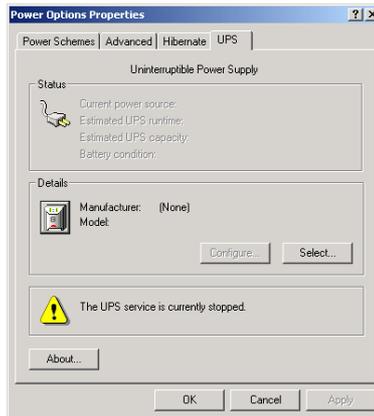
Select the “Log On As: This Account” button, input the appropriate account information, and then click “OK”.



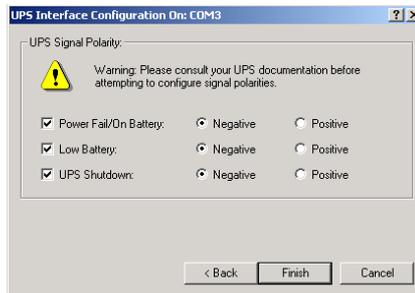
Double-click on the Control Panel’s “Power Options” icon



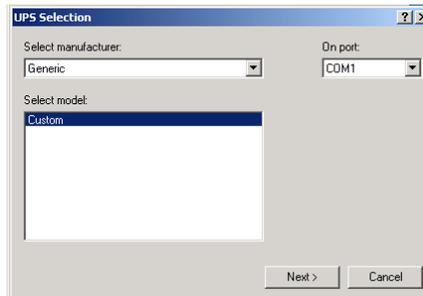
Select the UPS page, and then click on “Select...”



Choose the correct manufacturer from the “Select manufacturer” pull-down list, choose the correct COM port, and then click on “Next”



Click on the boxes, as shown, and then choose “Negative” for the three voltage settings. Click on “Finish” to keep these settings.



Click “OK” at bottom of the “Power Options Properties” window to finish.

Appendix B – Troubleshooting

Question	Answer(s)
All the LEDs are off and all of the output receptacles are dead	Turn the master power switch ON. Reset the AC circuit breaker.
All the LEDs are off and all of the output receptacles are on	The ServPower Freelancer needs to be reset. Turn the ServPower Freelancer off and wait for approximately one minute, then turn the ServPower Freelancer back on.
The ServPower Freelancer will not communicate and all of the LEDs on the web card are ON	There has been a collision of the packets. The ServPower Freelancer needs to be reset. Turn the ServPower Freelancer off and wait for approximately one minute, then turn it back on.
Cannot connect to the ServPower Freelancer web management page	Make sure the network connection to the ServPower Freelancer is good (cable, port speed and mode). Make sure the IP settings are correct and try to ping the unit. Check if the web server is enabled and the port setting is non-standard (different from 80), using the configuration utility on the setup CD.
The connected server shuts down immediately after it boots up	Verify that the RJ-11/DB9 cable between the ServPower Freelancer and the server is properly secured. Boot the server in safe mode and check if the UPS signal polarity is correct (see Appendix A)
I forgot my Supervisor's name/password	The ServPower Freelancer needs to be serviced.