

# QUICK START & USER MANUAL

# opengear

## IP Power 9258



Quick Start	.....	2
User Manual	.....	5 (CD)

Rev: 1.3  
November 16, 2011

# Quick Start Guide

## 1) Check kit contents



- Part # 508000 IP Power 9258T (USA) or Part # 508001 IP Power 9258S (Europe/Australia)
- User Manual/Quick Start Guide and IP Power CD
- Power cable

## 2) Install hardware

- Connect power cables. For the USA model (NEMA5-15P 100-120V outlets), the individual max output current per outlet is 6A and the total max output current for the 4 outlets is 15A. Use a power IN cable with 15A current rating and use power OUT cables with 10A rating for each power outlet



For the European/Australian model (IEC320-C13 220-250V outlets) the individual max output current per outlet is 6A and the total max output current for the 4 outlets is 10A. Use a power IN cable with 10A current rating and use power OUT cable with 10A rating for each power outlet

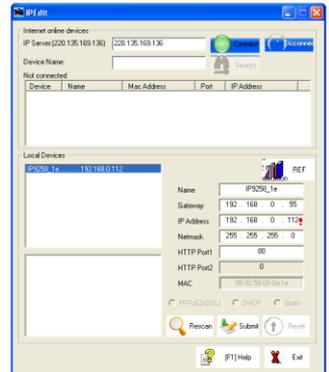
- Connect IP Power *NETWORK* port to your local 10/100 LAN

## 3) Set IP Power IP address

- The IP Power's default network settings are:  
IP address: **192.168.0.50**  
Subnet mask: **255.255.255.0**

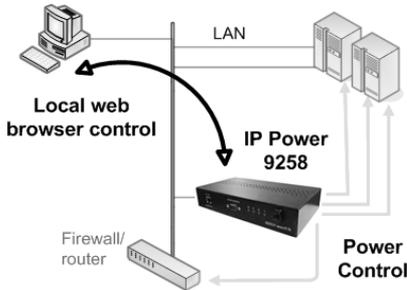
To set a new address, either:

- Connect your PC directly to the IP Power's Ethernet (*NETWORK*) port and run *IPedit.exe*. You first must copy the IPedit.exe program from the IP Power CD on to your PC; or
- With a PC in the same subnet as the IP Power (i.e. IP address of 192.168.0.xxx) open the IP Power control web pages as detailed in the next step and select **System: Setup**



#### 4) Update IP Power with your browser

- Enter **http://192.168.0.50** (or the IP address assigned using *IPEdit.exe*) in the browser of your locally connected PC and login:  
The default username is: **admin**  
The default password is: **12345678**
- You can now set the password and IP address, and modify the IP Power's other settings.



#### 5) Control power outlets

- Click **Set Power** under **Power** to display the current state of each power outlet. Select **On** or **Off** and click **Apply** to manually control power to each outlet
- Click **Power Schedule** under **System** to program when each power outlet is to be automatically powered on or off

opengear  
AVIOSYS  
**IPPower**  
IP9258

**Power**  
[SetPower](#)

**System**  
[Setup](#)  
[DDNS](#)  
[E-mail](#)  
[Change Password](#)  
[Power Schedule](#)  
[Network Wakeup](#)

[Firmware Update](#)

**Internal Time:**  
[Change Time](#)

2006-10-12 17:08:15

#### Power Schedule

Power	Date	Time	PARAMETER	Power ON/OFF
Power1A	2000 - 09 - 12	10 31 05	Disable	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power1B	2005 - 05 - 05	05 05 05	Disable	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power2A	2005 - 05 - 05	05 05 05	Disable	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power2B	2005 - 05 - 05	05 05 05	Disable	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power3A	2005 - 05 - 05	05 05 05	Disable	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power3B	2005 - 05 - 05	05 05 05	Disable	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power4A	2005 - 05 - 05	05 05 05	Disable	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power4B	2005 - 05 - 05	05 05 05	Disable	<input type="radio"/> ON <input checked="" type="radio"/> OFF

System Startup Power Default Value:

Power1	Power2	Power3	Power4
<input checked="" type="radio"/> ON	<input type="radio"/> ON	<input type="radio"/> ON	<input type="radio"/> ON
<input type="radio"/> OFF	<input checked="" type="radio"/> OFF	<input checked="" type="radio"/> OFF	<input checked="" type="radio"/> OFF

## Publishing history

Date	Revision	Update details
Feb 2007	1.1	Covers 1.38 firmware features
July 2009	1.2	Added Telnet and SNMP (firmware 1.5.2) and serial command line details (firmware 1.5.3)
Nov 2011	1.3	Telnet authentication (firmware 1.5.5)

## **WARNING**

Any changes to this equipment without permission may cause damages to your equipment! This equipment has been proven by CE & FCC to be prevented from the influence of harmful electronic jamming in normal business use conditions.

### **IMPORTANT NOTICE**

1. We have no responsibility for possible damage caused by improper usage or abnormal working environment
2. Do not use IP POWER in strong vibrating condition
3. Please contact the dealer If IP POWER works improperly

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# IP Power 9258 User Manual

## Table of Contents

1. Introduction .....	6
2. Interface Description .....	6
3. Hardware and Software Installation.....	7
4. Initial Settings.....	8
5. IP Power Control Using Browser.....	11
<b>Setting the password for IP Power</b> .....	13
<b>Setting the IP Power's IP address</b> .....	13
<b>Email settings</b> .....	15
<b>Power control using the time schedule</b> .....	16
<b>Default outlet settings</b> .....	16
<b>Clock settings &amp; network time protocol (NTP)</b> .....	17
<b>Wake on LAN (WOL)</b> .....	17
6. Firmware Update .....	18
7. DDNS Settings.....	19
8. Control Using Telnet, HTTP & SNMP Commands .....	20
9. Frequently Asked Question .....	27
10. Manual Control Mode.....	27
11. IP Power Control Using Console Server .....	28
12. General IP Power Control Using Serial Port .....	30

# 1. Introduction

The IP power 9258 is a web browser controlled power switch that can be used easily for industrial or commercial power control.

With the remote network control technology, a user connected to the local area network or Internet can query and control the power supply of attached equipment. There is no special software required.

- Maximum rated voltage for each of the 4 outlets: 250V AC, 24V DC
- Maximum rated current, **total**: 15A AC/DC (9258T), 10A AC/DC (9258S)
- Maximum rated current, per **individual outlet**: 6A AC/DC
- Action delay: max. 10ms
- Operating temperature: 0 ~ 70°C

**IP Power model 9258S** - for EU/AU/UK for 220-250V, use power (IN) cable at 10A current. Max output current: 10A (total), 6A (individual).



**IP Power model 9258T** - for US/TW/JP for 100-120V, use power (IN) cable at 15A current. Max output current: 15A (total), 6A (individual).



## 2. Interface Description



IP Power 9258 front interface (from left to right):

- **RESET**: Self-protect AC reset button. IP Power 9258 can cut off the power supply of outlets automatically if there is a short circuit or current

overload. After the user resolves the problem, push the **RESET** button and the AC power supply will resume.

- LED: 4 LED indicator lights. If the LED is on, the corresponding outlet is power on.
- RS232 port: During normal operation this displays the power output state. If a firmware update fails it displays an IP address where the firmware update can be re-applied. Also used for secure out-of-band control with CM/IM4000 console server.
- RJ45 Ethernet port: Connects the IP Power to the network.

Rear interface port description (from left to right):

- 90-240VAC power input port
- Power switch: The **ON/OFF** power switch for the IP Power 9258 itself.
- OUT1 - OUT4: Four individually switched AC outlets

### 3. Hardware and Software Installation

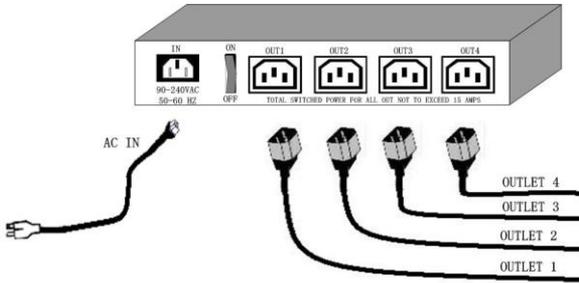
Before you start to use the IP Power 9258, please follow the steps below:

- 1) Check the package to make sure the contents are complete
- 2) Prepare an Ethernet hub or router for accessing the IP Power 9258
- 3) Check the voltage of the power supply to make sure it is AC 110-240 volt
- 4) Confirm the specifications of your power cable. (For IP Power 9258S: for **220-250V**, use the **10A** power cable. For IP Power 9258T: for **100-120V**, use the **15A** power cable.)

#### Hardware installation

- Connect the IP Power to the hub using a Cat5 network cable (for remote control, you may then connect the hub or router to the Internet)
- Connect the AC IN power adapter to the IP Power
- Connect the power adapters of equipment to be controlled to corresponding OUT port of the IP Power
- For 220-250V, please use power wire, which can support 10A current. Maximum output current: (total) 10A, (individual) 6A.

- For 100-120V, please use power wire which can support 15A current. Maximum output current: (total) 15A, (individual) 6A.
- Power on your PC and the power adapter of IP Power



## Software installation

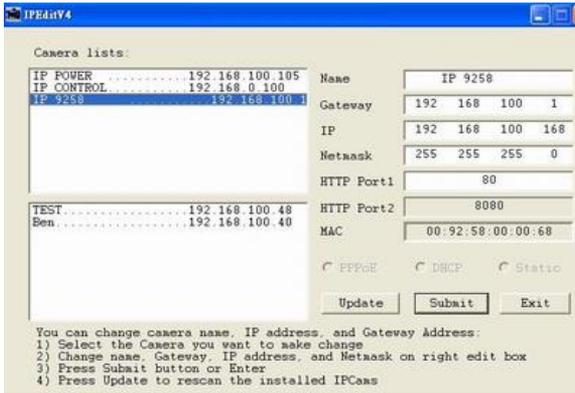
Once you've connected the power supply and network cable to the IP Power's RJ45 network port, install the software by following the steps below:

- Start your computer, insert the IP Power CD, and locate the file named ***ipEdit.exe***
- Copy the file to your desktop (or another directory if you prefer).

## 4. Initial Settings

- Ensure you have installed the ***ipEdit.exe*** program as described in the previous section, *Software Installation*.
- Ensure that your PC is connected to the same network as the IP Power, and that the IP Power is powered on.
- Run ***ipEdit.exe*** by double clicking the ***ipEdit*** icon. The default Ethernet address of the IP Power will be found and displayed. The default name of the IP Power is: *IP 9258*





- Click *IP 9258* in the left of the window and the IP Power's name and IP address will display in the right hand fields. You can rename the IP Power or change its IP address or default gateway address. Click *Update* to apply the new settings. The new settings will be working in 20 seconds.
- Double click the name of the IP Power, and your browser window will open and connect to the unit automatically. Alternately, manually type the IP address of the IP Power into your browser.

## NOTE

The IP Power 9258's default IP address is **192.168.0.50** and its subnet mask is **255.255.255.0**. The IP address of your computer should be in the same subnet with that of IP Power's (by default this subnet is **192.168.0.xxx**), so that you can access the IP Power control web pages.

Typically, you will want to find out the IP address of your PC and set the IP Power to reside on the same subnet. To find out the IP address of your PC:

- Select *Start* → *Run* → then type in *cmd* → in the MS-DOS window, type in *ipconfig*

```

C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Chiu>ipconfig

Windows IP Configuration

Ethernet adapter 區域連線:

    Connection-specific DNS Suffix . :
    IP Address . . . . . : 192.168.100.31
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.100.254

C:\Documents and Settings\Chiu>
  
```

- The IP address of the PC is **192.168.100.31**, so the IP Power has been set to **192.168.100.168**. Both of these addresses are on the **192.168.100.xxx** subnet.

Alternately you may change the PC's IP address to be on the same subnet as the IP Power (by default **192.168.0.50**), in *Control Panel* → *Network Connections* → *Local Area Connection* → *Properties* → *Internet Protocol (TCP/IP) Properties*.

---

The default username and password of IP Power 9258 are:

Username: **admin**  
 Password: **12345678**

## PC or server software shutdown

The IP Power 9258 can also safely shutdown a PC or server through the network before being powered off. This allows you to remotely shut down a PC/server attached to IP Power 9258 using the usual Windows safe shutdown procedure. Before using the software shutdown function, please note:

- You will need to install the **IP9258service.exe** program from the IP Power CD as detailed below
- If you are running programs such as Microsoft Office the safe shut down may not automatically save open documents or files which may result in lost data.
- To allow enough time for the PC/server to safely shut down before being powered off, please set the delay time at 30 or 60 second on the IP Power control web pages **Setup** → **Delay Switch**.

Http Command Verification	<input checked="" type="radio"/> Cookie+Base64 <input type="radio"/> Cookie
DelaySwitch	60 Sec ▾

- The PC/server to shut down must be on the same Ethernet network and on the same subnet as the IP Power.

## Installing **IP9258service.exe**

- Insert the IP Power CD in the PC/server which is to be enabled for software shutdown
- Install the **IP9258config.exe**, by selecting the **SDK** button on the LHS then selecting **9258 SDK** in the menu. Then double click Shutdown Program and run **IP9258config.exe**. On the install menu select the LHS bottom button to place the **IP9258Service** icon on your desktop. Click this icon then select the **IP9258config.exe** program



- Fill in the fields as follows:
  - IP9258 Address: The IP Power's IP address
  - HTTP Port: The port of the IP Power control web pages – this will be 80 unless you have changed it
  - Username: *admin*
  - Password: The IP Power admin password (default 12345678)
  - Power Number: The OUT power outlet the PC/server is connected through – if many PC/servers are connected through the one power outlet and are registered with the same IP Power unit, they will all be shutdown at the same time
- Click *Save Change*, *Install Service* then *Start Service*. Restart the PC/server, then it will be enabled for software shutdown.



## 5. IP Power Control Using Browser

To access the IP Power control web pages simply type the IP address of the IP Power into your web browser's address field.

The username is *admin* and the default password is *12345678*. Enter these credentials, or the password you have set. Click **OK** to enter the IP Power control web pages.

### IP9258 Login

Please enter user name and password.

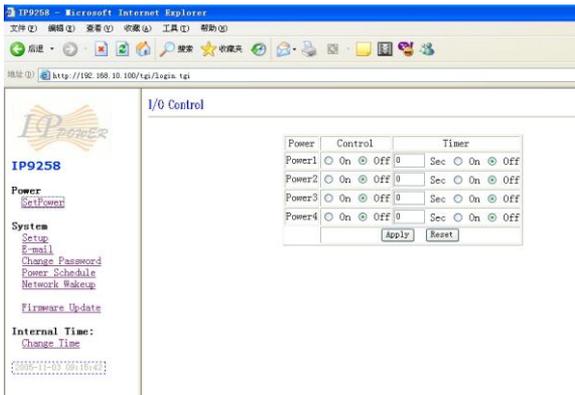
User Name

Password

### Control the power supply by outlet

IP Power 9258 can control 4 outputs individually or at the same time:

- Select the **Set Power** from the left hand menu



- You can choose to power off and power on an outlet. You may also set the time to delay before performing the chosen action under **Timer**, by entering the time to delay in seconds and selecting **On**.

### Querying the power state of the outlets

Click **Set Power** again to refresh the status. The state of each power outlet is displayed under the **Control** column

## System settings with browser

You may set the password, IP address, e-mail address, timer setting, perform an online firmware update, and set the time of the IP Power through the IP Power control web pages

### Setting the password for IP Power

Select **Change password** from the left hand menu. The default password *12345678*. You may change it to a password of your choosing (no longer than 8 characters). Click **Apply** to save the change.

#### Change Password

Old Password:	<input type="text"/>
New Password:	<input type="text"/>
Confirm New Password:	<input type="text"/>
<input type="button" value="Submit"/>	

---

### NOTE

If you lose or forget the admin password, enter the username *super user* at the log in webpage and then click OK. Then turn the power off for a few seconds before turning the power back on. The IP Power will be reset to using the default password of *12345678*. **Note:** There is space between *super* and *user*.

---

### Setting the IP Power's IP address

Select **Setup** from the left hand menu. Fill in the new IP Address, Subnet Mask, Default Gateway, and DNS server address. If your network has a DHCP server automatically allocating network settings, you may choose to enable the IP Power's DHP Client. The Beeper sound may also be enabled or disabled on this page.

IP Address:	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="100"/> . <input type="text" value="40"/>
Subnet Mask:	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
Default Gateway:	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="100"/> . <input type="text" value="1"/>
DNS:	<input type="text" value="168"/> . <input type="text" value="95"/> . <input type="text" value="1"/> . <input type="text" value="1"/>
DHCP Client	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
BEEPER	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Http Command Verification	<input checked="" type="radio"/> Cookie+Base64 <input type="radio"/> Cookie

- If the IP Power is connected to your Local Area Network (LAN):

You may set a fixed IP address or have it automatically assigned by a DHCP server. It is suggested that you use a fixed IP address so that it is always known.

After changing the IP Power's IP address, type the new address in the address field of your web browser. You can also use the *ipEdit.exe* tool to locate the IP Power.

- If the IP Power is connected to the Internet (WAN):

- IP Address: Enter the IP address provided by your ISP. If IP Power is working with a router, please refer to the network settings of the router. The IP address format is: xxx.xxx.xxx.xxx:yyyyy, where yyyyy means the port number ranging from 1 to 32767.
- Subnet Mask: Enter the Subnet Mask provided by your ISP. If the IP Power is working with a router, please refer to the network settings of the router. Subnet Mask: from 0 to 254 ( xxx.xxx.xxx.0 ~ xxx.xxx.xxx.254)
- Default gateway: Enter the Default Gateway provided by your ISP. If the IP Power is working with a router, please refer to the network settings of the router.
- DNS Server: Enter the IP address of the DNS server provided by your ISP.
- DHCP Client: Automatically obtain network settings from your ISP

If DHCP is disabled, you must set the TCP port and default gateway. If DHCP is enabled, then the TCP port is preset to 80 (xxx.xxx.xxx.xxx:80) and the default gateway will be assigned by the DHCP server.

If you specify a TCP port other than 80, enter it after the IP address of the IP Power when accessing the IP Power control web pages, e.g.  
<http://xxx.xxx.xxx.xxx:yyyyy>

- Beeper Setting: Enable – activate the beeper sounds. Disable – turn off beep sounds. When controlling the IP Power through the web pages, the beeper, if enabled, beeps once to indicate an action has been successful
- HTTP Command Verification specifies the HTTP authentication for the IP Power to use:

- *Cookie +Base64* (allows HTTP command & SDK control)
- *Cookie* (allows HTTP command & SDK control)

## Email settings

The IP Power can be set to email its IP address to multiple recipients:

### Setup Email

MailServer:	<input type="text" value="smtp.sample.com"/>
MailServerPort:	<input type="text" value="25"/>
Pop3Server:	<input type="text" value="pop3.sample.com"/>
User Name:	<input type="text" value="sample@sample.com"/>
Password:	<input type="password" value="●●●●●●"/>
Sender:	<input type="text" value="sample@sample.com"/>
Receiver1:	<input type="text" value="receiver1@sample.com"/>
Receiver2:	<input type="text" value="receiver2@sample.com"/>
Receiver3:	<input type="text" value="receiver2@sample.com"/>
Subject:	<input type="text" value="This is a sample email"/>
MailBody:	<input type="text" value="This is where you type the body of the email"/>
<input type="button" value="Save"/> <input type="button" value="Send"/>	

- Mail Server: The SMTP server for sending email. Please ensure that it is available.
- POP3Server: Incoming Mail Server. Enter IP address from your ISP for sending Internet IP address by E-mail
- Username: The SMTP username for sending email.
- Password: The password for *Username's* account. **Note:** the password can be no longer than 8 characters.
- Sender: The same of the sender to use. This will often be *username@yourdomain*.
- Receiver 1 – 3: The email addresses to receive the IP Power's IP address. They will receive an email containing the IP Power's IP address each time your log in to the IP Power control web pages. Each receiver may be no more than 50 characters.
- Subject: The subject of the mail, no more than 50 characters.
- Mail Body: Type the content of the mail here. It must not be left blank.

- Click **Save** to save your settings.

## Power control using the time schedule

The IP Power can be set to power on or off power outlets at specified times. Select **Power Schedule** from the left hand menu.

### Power Schedule

Power	Date	Time	PARAMETER	Power ON/OFF
Power1	2005 - 05 - 05	05 : 05 : 05	Disable <input type="button" value="v"/>	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power1	2005 - 05 - 05	05 : 05 : 05	Disable <input type="button" value="v"/>	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power2	2005 - 05 - 05	05 : 05 : 05	Disable <input type="button" value="v"/>	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power2	2005 - 05 - 05	05 : 05 : 05	Disable <input type="button" value="v"/>	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power3	2005 - 05 - 05	05 : 05 : 05	Disable <input type="button" value="v"/>	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power3	2005 - 05 - 05	05 : 05 : 05	Disable <input type="button" value="v"/>	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power4	2005 - 05 - 05	05 : 05 : 05	Disable <input type="button" value="v"/>	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Power4	2005 - 05 - 05	05 : 05 : 05	Disable <input type="button" value="v"/>	<input type="radio"/> ON <input checked="" type="radio"/> OFF

Each power outlet has two rows, one for the start of the schedule (e.g. powering an outlet on) and one for the end of the schedule (e.g. powering the outlet off two hours later). Additionally, the **Parameter** column determines how regularly the schedule should be applied:

- Disable
- Just Once
- Every day
- Work days: every Monday to Friday
- Weekend: every Saturday and Sunday

## Default outlet settings

When the IP Power is powered on, each outlet will have power applied according to the default outlet settings. In the example below, all power outlets default to **OFF** when the IP Power is initially powered on.

System Startup Power Default Value:			
Power1	Power2	Power3	Power4
<input type="radio"/> ON <input checked="" type="radio"/> OFF			
<input type="button" value="Submit"/>			

## Clock settings & network time protocol (NTP)

You may manually set the IP Power's internal clock by specifying the year, month, day, hour, minutes and seconds.

Alternately, you may choose to synchronize with an NTP server by entering its IP address and your numeric Time Zone (relative to UTC). If your network or ISP doesn't have an NTP server, lists of public NTP servers are available on the web.

### Setup DateTime

DateTime:(yyyy-mm-dd HH:MM:SS)					
2000	-	3	-	10	18
:	6	:	11		
NTP Server IP Address:					
192	.	43	.	244	.
18	TimeZone:	0			
<input type="button" value="SAVE"/>		<input type="button" value="NTP"/>			

## Wake on LAN (WOL)

Through its network port, the IP Power can send a Wake on LAN packet to a shutdown or hibernating PC on your network, causing it to power up. This facility presumes:

1. The PC's motherboard must support the WOL function, and it must be enabled in the BIOS (typically under Power Management). The PC must be connected to the same Ethernet network as the IP Power via its network port.
2. The PC's network card's WOL connector must be connected to the motherboard, or the network port must be integrated into the motherboard.

After setting up the motherboard and network card, use the WOL function by following two steps:

- Go to **Network Wakeup** on the IP Power control web pages
- Enter the MAC address (the network card's physical address) of the PC and click **Send** – the PC will be powered on

### Network Wake Up Setup

MAC:	0050BA0053
<input type="button" value="Save"/> <input type="button" value="Send"/>	

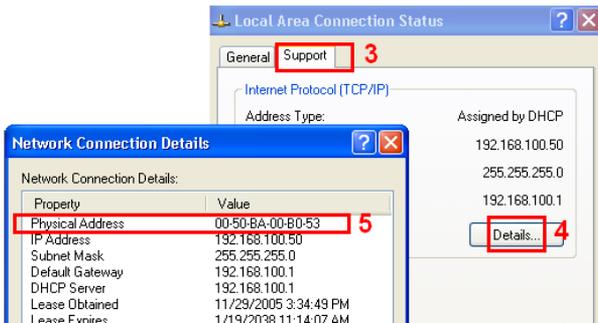
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## NOTE

To find out your network card's MAC address:



Right click on the network connection icon → **Status** → **Support** → **Details**. The value in *Physical Address* is the MAC address.



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## 6. Firmware Update

**Warning: If you have not been advised to update the IP Power's firmware and do not have a new firmware file, please do not go to this page**

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## NOTE

Before updating the IP Power's firmware, ensure the IP Power control web pages' TCP port is set to 80 (this is the default), otherwise the update may fail.

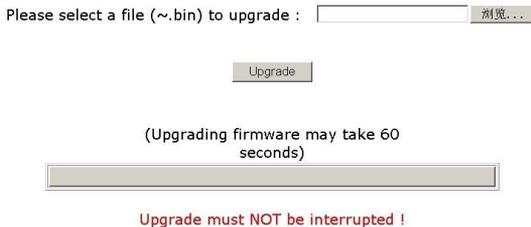
Firmware updates are periodically released to update the functionality of the IP Power. To update the IP Power's firmware, select **Firmware Update** from the left hand menu:

- The following warning is displayed:



**Warning: Do not click Update if you do not have a firmware update file.**

- Click **Update**, the following window is displayed:  
**Upgrade Firmware**



- Click **Browse** and locate the firmware update file. Click **Update** to begin the update

---

### Note

When the update is complete, you must **wait at least one minute** before you restart the IP Power

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## 7. DDNS Settings

When connecting to the Internet, the IP address you gain from ISP may be dynamically allocated, so it may change each time the Internet connection reconnects. This may result in the IP Power becoming uncontactable to remote clients, as the new address is unknown.

Dynamic DNS addresses this issue by updating DNS records whenever the IP address changes. The IP Power can utilize the free service provided by DynDNS (<http://www.dyndns.com>) for this purpose. The IP Power will always be contactable using its DynDNS address (e.g. ippower.dyndns.org), regardless of its IP address.

First, create a DynDNS account and create an account. Create a dynamic DNS host for the IP Power, e.g. [ippower.dyndns.org](http://ippower.dyndns.org).

## DDNS SETUP

On the IP Power, select **DDNS** from the left hand menu. Enter the IP address and port of the DynDNS server. You can find this out on your PC by selecting *Start* → *Run* → then type in *cmd* → and typing *ping* [www.dyndns.com](http://www.dyndns.com). Enter the number in brackets (e.g. *63.208.196.66*) followed by *:80* to denote the port.

DDNS SETUP	
DDNS Server IP:	63.208.196.95:80
Your Domain:	abcdefg.dnsdojo.net
DDNS UserName:	abcdefg
DDNS Password:	.....
Enable DDNS:	TRUE
Proxy Enable:	FALSE
Proxy IP:	
Proxy Port:	-1
[SAVE] [UPDATE NOW]	

In **Your Domain**, enter the IP Power's DynDNS address, e.g. [ippower.dyndns.org](http://ippower.dyndns.org). Enter the **Username** and **Password** for the DynDNS account you created. Ensure **Enable DDNS** is set to *TRUE*. Click **Save**.

Now, each time the IP Power is powered on or **Update Now** is clicked, the DynDNS address will be updated to the IP Power's current IP address. Note that the change may take several minutes to propagate to your local DNS server.

If the IP Power cannot reach the DynDNS server without going through a proxy server, select *TRUE* next to **Proxy Enable**. Enter the IP address of the proxy server in **Proxy IP** and the port in **Proxy Port**.

---

### NOTE

The first time you configure DDNS, click **Update Now** to set the DynDNS address.

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## 8. Control Using Telnet, HTTP & SNMP Commands

The IP Power is a principally a browser controlled unit, with power control effected over the LAN using HTTP commands or a browser. However it also provides alternate methods for directly setting and getting the status of the power outlets through Telnet commands and HTTP commands (which may be useful for controlling the IP Power's outlets using an automated script) and through SMNP.

### Power outlet status and control using HTTP commands

The format of the HTTP command is:

**`http://username:password@a.b.c.d/Set.cmd?CMD=command+outlet_id=1/0+outlet_id=1/0`**

Where:

*username* The username you use to login to the IP Power (default is *admin*)

*password* The password you use to login to the IP Power (default is *12345678*)

*a.b.c.d* The IP address of the IP Power (default is *192.168.0.50*)

*command* GetPower to read the status (specifying outlets is not required)

SetPower to turn on or off the ports (power setting for each outlet must be specified after the command)

<i>port_id</i>	(SetPower only)
P60	Port 1
P61	Port 2
P62	Port 3
P63	Port 4

### Example 1:

The HTTP command:

**`http://admin:12345678@192.168.0.50/Set.cmd?CMD=GetPower`**

Returns the power status for each outlet in the following format (outlets 5 to 8 may be ignored):

`<html>P60=0,P61=0,P62=0,P63=0,P64=0,P65=0,P66=0,P67=0</html>`

In the above example, all outlets are off.

### Example 2:

The HTTP command:

**`http://admin:12345678@192.168.0.50/Set.cmd?CMD=SetPower+P60=1+P61=0+P62=0+P63=1`**

Turns the power on for the first (P60) and fourth (P63) outlets, and turns power off for the second (P61) and third (P62) outlets. Returns the power status for each outlet in the following format:

```
<html>P60=1,P61=0,P62=0,P63=1</html?>
```

### Example 3:

The HTTP command: to control the 9258 operation at a specified time

```
http://username:password@XXX.XXX.XXX.XXX/Set.cmd?CMD=SetSchedule+Power  
=**+YY=****+MM=**+DD=**+HH=**+MN=**+SS=**+PARAM=****+ONOFF=*
```

Where:

Control parameters are 1A 1B 2A 2B 3A 3B 4A 4B.

A = connect power

B = disconnect power

YY=\*\*\*\*+MM=\*\*+DD=\*\*+HH=\*\*+MN=\*\*+SS=\* : time parameter

YY: year (20YY), 01 = 2001

MM: month (0 1-12)

DD: date (01-31)

HH: hour (24 hours: 0- 23)

MN: minute (1-60)

SS: second (1-60)

PARAM=\*: time schedule parameter. Parameter list as follows:

128 Once only

127 Every day

31 Week days (Monday to Friday)

96 Weekend days (Saturday and Sunday)

ONOFF=\*: operate parameter

0 open

1 close

For example:

**http://**

**/admin:12345678@192.168.1.10/Set.cmd?CMD=SetSchedule+Power=1A+YY=2009+MM=02+DD=16+HH=06+MN=02+SS=16+PARAM=128+ONOFF=1**

The above command controls the IP Power at IP address **192.168.1.0**, user name is **admin** and password is **12345678**. This 9258 will connect power of outlet 1 (p60), once only on 16<sup>th</sup> February 2009 at 6:02 am

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### NOTE

Use + to separate each parameter, e.g. to simply power on outlet 1:

<http://admin:12345678@192.168.1.10/Set.cmd?CMD=SetPower+P60=1>

The command syntax is case sensitive so be selective when using upper and lower case in command format. The free tool *wget* is useful for sending these HTTP commands. For example, to send the command in Example 1, you could use:

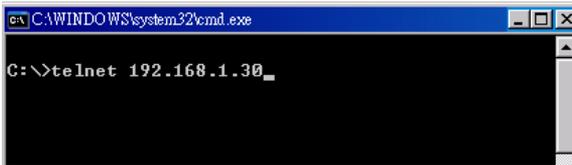
*wget -O -*

<http://admin:12345678@192.168.0.50/Set.cmd?CMD=SetPower+P60=1+P61=0+P62=0+P63=1>

---

## Power outlet status and control using Telnet

Under DOS mode type “C:\>telnet [IP9258]”



```
C:\WINDOWS\system32\cmd.exe
C:\>telnet 192.168.1.30_
```

To log in to the device use the syntax *login=password*



```
C:\ Telnet 192.168.1.9
9258Telnet-> help
Available commands:
setpower - Set port state
getpower - Read port status
exit - exit shell
```

Typing *help* will give you the other commands that are available for the 9258 in telnet

```
GA Telnet 192.168.1.9
9258Telnet-> help
Available commands:
setpower - Set port state
getpower - Read port status
exit    - exit shell
```

The *getpower* command reports the status of power outlets 1-4

The *setpower* command controls the power outlets 1-4, with “0” turning power off and “1” turning power on

Example 1: *setpower=11110000* (This will turn on power 1-4)

Example 2: *setpower=11000000* (This turns on power on 1 & 2 and turns off power 3 & 4)

```
GA Telnet 192.168.1.9
9258Telnet-> setpower=0000 Parameter Error!
9258Telnet-> setpower=00000000 Set Power Done!
```

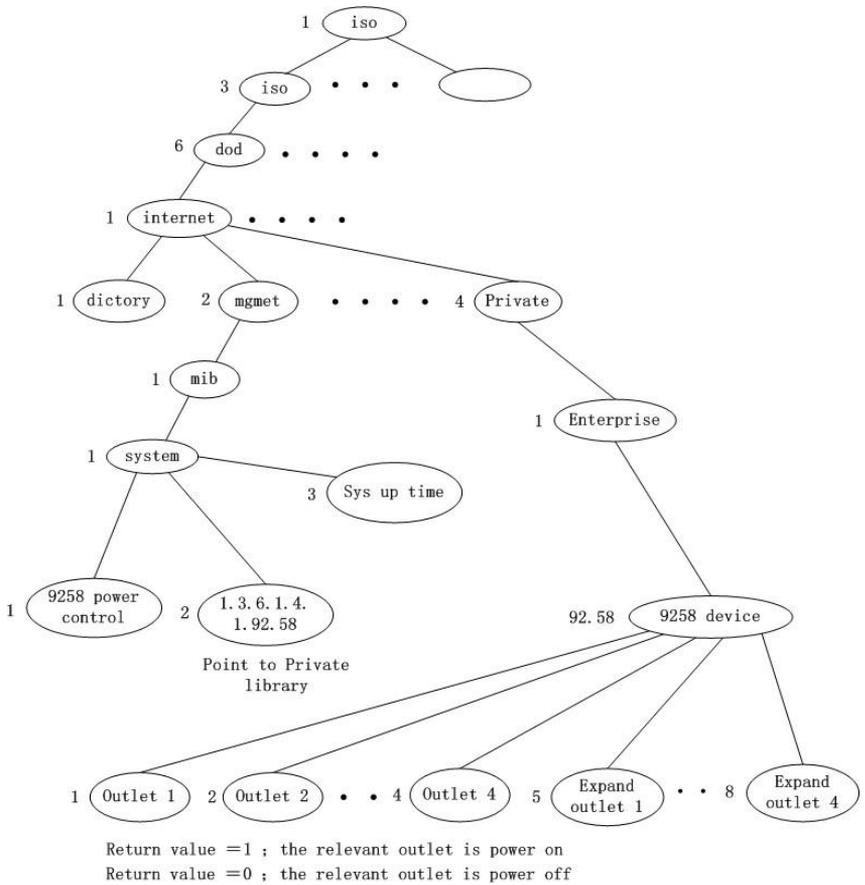
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### NOTE

Only the first four numbers are used. You can select from 0 to turn off the power to 1 to turn on the power. However with 1.5.5 the syntax requires to use eight separate digits. If you only use four digits the command will not work properly.

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## Power outlet status and control using SNMP



Reading status:

```
snmpget -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.2.1.0 (read status of Power1)
snmpget -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.2.2.0 (read status of Power2)
snmpget -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.2.3.0 (read status of Power3)
snmpget -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.2.4.0 (read status of Power4)
(Return value as "INTEGER: 1 : " means power ON
Return value as "INTEGER: 0 : " means power OFF)
```

```
C:\WINDOWS\system32\cmd.exe

C:\usr\bin>snmpget -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.2.1.0
SNMPv2-SMI::enterprises.92.58.2.1.0 = INTEGER: 0

C:\usr\bin>snmpget -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.2.2.0
SNMPv2-SMI::enterprises.92.58.2.2.0 = INTEGER: 1

C:\usr\bin>snmpget -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.2.3.0
SNMPv2-SMI::enterprises.92.58.2.3.0 = INTEGER: 0

C:\usr\bin>snmpget -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.2.4.0
SNMPv2-SMI::enterprises.92.58.2.4.0 = INTEGER: 1

C:\usr\bin>
```

Control outlet command :

```
snmpset -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.2.1.0 integer 1 (turn on Power1)
snmpset -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.2.2.0 integer 0 (turn off Power2)
snmpset -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.2.3.0 integer 1 (turn on Power3)
snmpset -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.2.4.0 integer 0 (turn off Power4)
```

```
C:\WINDOWS\system32\cmd.exe

C:\usr\bin>snmpset -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.2.1.0 integer 1
SNMPv2-SMI::enterprises.92.58.2.1.0 = INTEGER: 1

C:\usr\bin>snmpset -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.2.2.0 integer 0
SNMPv2-SMI::enterprises.92.58.2.2.0 = INTEGER: 0

C:\usr\bin>snmpset -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.2.3.0 integer 1
SNMPv2-SMI::enterprises.92.58.2.3.0 = INTEGER: 1

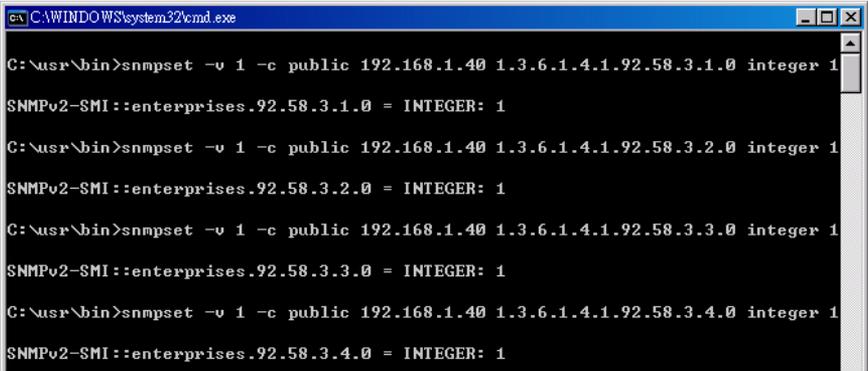
C:\usr\bin>snmpset -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.2.4.0 integer 0
SNMPv2-SMI::enterprises.92.58.2.4.0 = INTEGER: 0
```

Power cycle outlet command :

```
snmpset -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.3.1.0 integer 1 (powercycle No1)
snmpset -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.3.2.0 integer 1 (powercycle No2)
snmpset -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.3.3.0 integer 1 (powercycle No3)
```

**snmpset -v 1 -c public 192.168.1.55 1.3.6.1.4.1.92.58.3.4.0 integer 1** (powercycle No4)

If the power is on the outlet will turn “OFF to ON “ when the power cycle command is placed. However if powered off the outlet will turn “ON to OFF to ON “ when place power cycle command



```
C:\WINDOWS\system32\cmd.exe
C:\usr\bin>snmpset -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.3.1.0 integer 1
SNMPv2-SMI::enterprises.92.58.3.1.0 = INTEGER: 1
C:\usr\bin>snmpset -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.3.2.0 integer 1
SNMPv2-SMI::enterprises.92.58.3.2.0 = INTEGER: 1
C:\usr\bin>snmpset -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.3.3.0 integer 1
SNMPv2-SMI::enterprises.92.58.3.3.0 = INTEGER: 1
C:\usr\bin>snmpset -v 1 -c public 192.168.1.40 1.3.6.1.4.1.92.58.3.4.0 integer 1
SNMPv2-SMI::enterprises.92.58.3.4.0 = INTEGER: 1
```

## 9. Frequently Asked Question

**Q1:** I forgot the password and can not enter the administration page now, what can I do?

**A1:** Use the username *super user* when logging in to the webpage and then click **OK**. Turn the IP Power off for a few seconds, the turn it back on. The default username of *admin* and password of *12345678* will be restored. Note: there is a space between *super* and *user*.

## 10. Manual Control Mode

The IP Power is generally controlled from a local or remote computer however the outlets can also be controlled manually.

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### NOTE

**Before using the manual control function it is necessary to UNPLUG / DISCONNECT all of the 4 outlets.**

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To obtain manual control:

- Press and hold the **ON/OFF** button (depicted below) for a full 5 seconds or until a sustained beep noise is heard – this enables **manual control mode** which can be identified by the flashing outlet lights
- The outlet light that is not flashing is the one currently under manual control – this outlet can be turned on or off by pressing the **ON/OFF** button
- To select an alternate outlet to control, press the **Cycle** button (labeled with a circle with arrows on it)
- To disable manual control mode, press and hold the **ON/OFF** button for 5 seconds or until you can hear a sustained beep noise – signifying the deactivation of manual control mode



Cycle (left): Select power outlet to manually control

ON/OFF (right): Press and hold to enable/disable manual control mode, press to turn on/off the outlet selected by the cycle button

## 11. IP Power Control Using Console Server

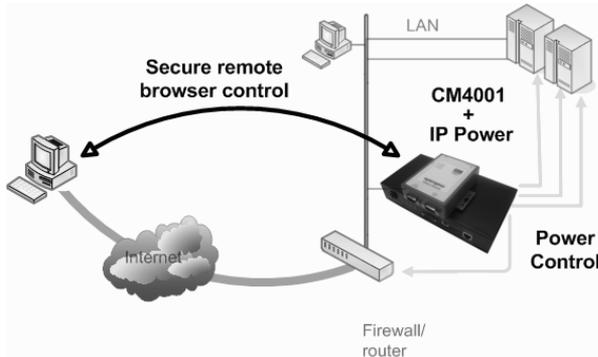
The IP Power 9258 is a simple browser controlled power switch, without the security features needed for open public network connection. Nor does it have any remote out-of-band dial-in support.

However the IP Power can be configured securely and its outlets can be controlled in-band and out of band when used in conjunction with an Opendgear console server.

### Out of band access

The Opendgear console server provides secure remote/out-of-band access through a dial in modem (or through an alternate broadband connection). To configure the console server for dial-in access:

- Connect a modem to the console/modem port and configure the console server for dial-in
- The IP Power can then be network or serially connected to the console server



## SSH tunneled control through the Console Server

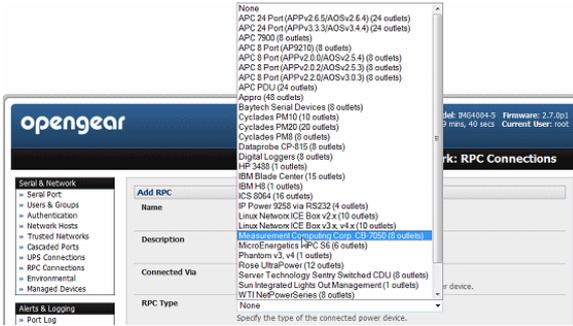
- If the IP Power is connected on the remote LAN with the console server then it can be browser controlled
- Configure the console server with the IP Power as a HTTP accessible Host. This Managed Device can then be remotely controlled securely using SSH tunneling (SDT)
- Configure the remote SDTConnector client to access the gateway (console server) and then to connect to the IP Power using HTTP (refer [www.opengear.com/faq267.html](http://www.opengear.com/faq267.html) for details)

## Console Server serial control

The IP Power is a principally a browser controlled unit, and its RS232 serial port mainly provides diagnostic and status information (e.g. sending out its IP address and power on messages during Power On Self Test).

However the IP Power serial port also supports emergency power control. To configure the IP Power for serial control:

- Connect the IP Power 9258's *CONSOLE RS232* port to one of the console server serial ports (for CM4001/ 2 this interconnection will use a standard UTP Cat 5 cable with a 319000 adapter at each end, and all other console servers will only require one 319000 adaptor).
- Configured the console server serial port with a serially controlled PDU



- The IP Power outlets are then controlled by securely (HTTPS) accessing the Manage: Power menu on the console server Management Console (refer [www.opengear.com/faq231.html](http://www.opengear.com/faq231.html) for details)



## NOTE

The outlet control commands are sent from the console server to the IP Power over the serial port. The combination of out of band access and IP Power serial port control can be particularly useful in managing remote sites where a DSL router (interconnect the office LAN and the internet) may have become dysfunctional requiring a power reset.

## 12. General IP Power Control Using Serial Port

The IP Power RS232 serial port mainly provides diagnostic and status information however the serial port can be used for emergency power control as covered in the previous section:

Usage: `power-ip9258 <port> "<outlet> [outlet..]" on/off/status`

The serial control script below is used in the console server and should work on a normal Linux box:

```
#!/bin/sh
out_udelay=50000
```

```

out_retries=3
in_udelay=100000
in_retries=10

port=$1
outlets=$2
cmd=$3
tmpfile=/tmp/tmp.$$

if [[ -z "$port" ]] || [[ -z "$outlets" ]] || [[ -z "$cmd" ]]; then
    appname=`basename $0`
    echo "Usage: $appname <port> \<outlet> [outlet.]" on|off|status"
    exit 1
fi

function ipp_chat () {
    out=$1
    in=$2

    cat "$port" > $tmpfile &
    cat_pid=$!
    trap "rm $tmpfile; kill $cat_pid" EXIT

    for (( i=0; i < $out_retries; i++ )); do
        for (( j = 0 ; j < ${#out} ; j++ )); do
            usleep $out_udelay
            echo -n ${out:$j:1} > $port
        done
        echo > $port
        for (( j=0; j < $in_retries; j++ )); do
            usleep $in_udelay
            line=`grep "$in" "$tmpfile"`
            if [[ -n "$line" ]]; then
                break 2
            fi
        done
    done

    rm $tmpfile
    kill $cat_pid

    if [[ -n "$line" ]]; then
        echo $line
    else
        echo "Command failed (${out})"
        exit 1
    fi
}

# Suppress error messages from the shell
exec 2> /dev/null

# Set up the serial port for the IP Power

```

