IP Power 9255
User Manual

Release Date: 02/14/2012
Manual Version: 1.0
Firmware: Ver. 4.0

Ref#92550216001

Warning: Any changes made to this equipment without permission may cause damages to the device!

IMPORTANT NOTICE

1. IP Power 9255 was designed to be used with a protective covering, the user is responsible for any damages caused from misuse, or use under inappropriate conditions.
2. Please use the power adapter provided by the dealer, the manufacturer is not responsible for any damage caused from using power adapters not.
3. Do not shake the IP Power 9255 in any fashion
4. Please contact the dealer If IP Power 9255 is not working properly.

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1.) Welcome

Introduction

The 9255 is an industrial grade single port relay perfect to power management through an Ethernet connection. This device can easily integrate with other devices and allow power control with your integrated system. With the 9255 robust design and high quality components it provides an added incentive to other devices or can be used independently. The 9255 brings an economical solution to a professional industry.

Minimum System Requirements

CPU Minimum Requirements
- Intel(R), Pentium(R), DUAL Core (D),CPU 3.0GHz or equivalent

Operating Systems:
- Windows Operating Systems (IE5.0+SPI & Firefox)
- 512 MB system memory or above
- 10/100 Ethernet switch/hub
- Sound Card: DirectX 9.0c compatible sound card
- Ethernet network port/card
- Network cable
- Internet (For remote access) or Ethernet Network (Internal Network use) with some type of Internet connection, (i.e. ADSL, Cable, Dial up or any other forms of Internet service)

Software

Windows XP Service Pack 2 or above.
Resolution of screen setting: 800x600 or higher

2.) Product Overview

Features

1.)   Inrush Current relay design for extra protection.
2.)   Designed to control T5 fluorescent lighting.
3.)   Industrial single port Relay design network controller.
4.)   Accessible with popular web browsers - IE, Google Chrome, Netscape & Firefox.
5.)   Supports up to maximum current: 8 Amp.
6.)   Power surge protection design to protect against high voltage power surge.
7.)   Designed to meet high voltage and current safety standard design and regulation.
8.)   Reliability and testing certification MBTF +200,000 hrs+
9.)   Comes in 5 standard global socket types.
10.) Network protocols supported: Http, DDNS, DHCP, Virtual and Dynamic IP.
11.) SNMP for trap – send message to manage server.
12.) SDK for own software development.
13.) Smartphone and IOS supported.
14.) Embedded web server - No PC is required for it to work.

Specification

Power Cable Input:
Specification: 10AMP 18AWG 0.75 x 3C (Standard PC Power Cable)

Weight:
192.6 grams without packaging.

Dimensions:
(L x W x H): 8.5 x 7 x 8.5 cm

Casing: Plastic

Relay Specification:
Regular Use: Max. 8A / port
T5 fluorescent light control: 240Watt

Ref#92550216001

Package Contents

1.) 9255 Unit x 1	
2.) 9255 Installation CD	CD will provide manual, software, and documentation on the 9255
3.) Standard PC Power Cable (Optional)	Specification: 10AMP 18AWG 0.75 x 3C

3.) Interface Description

Hardware Interface
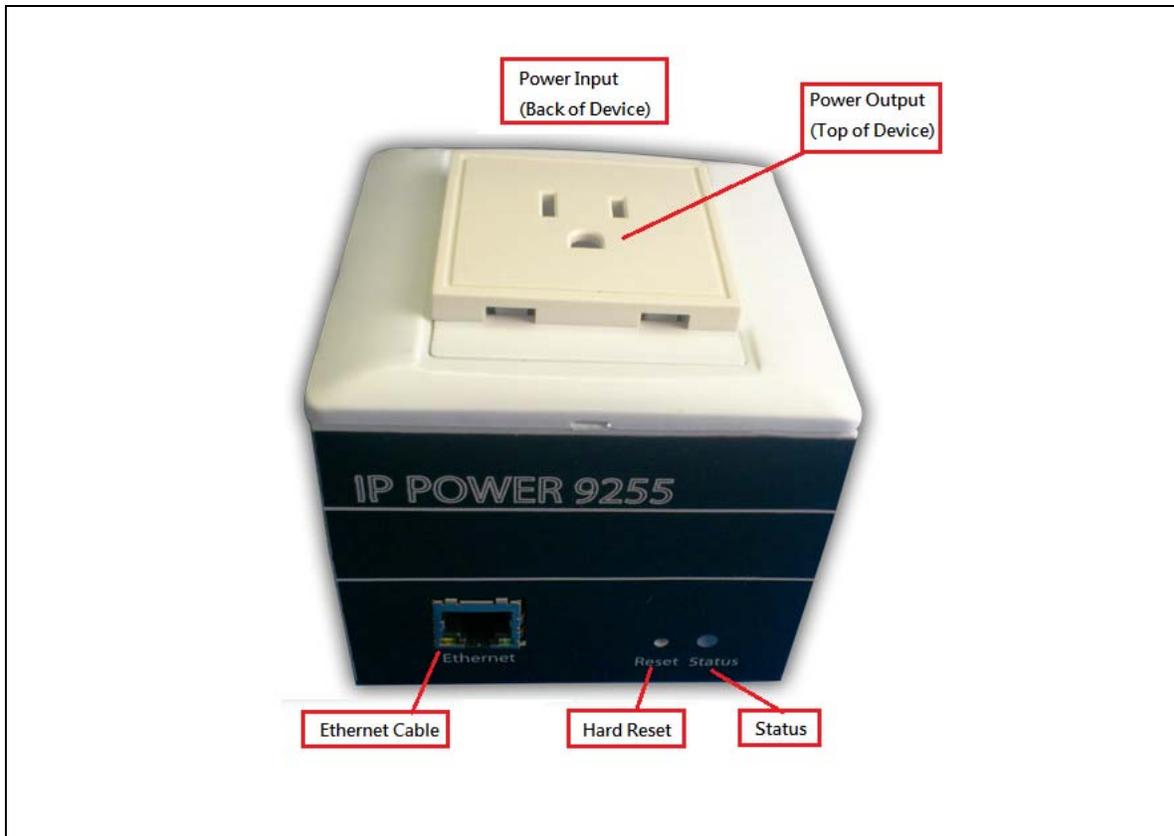
Power Cable Input:	The Power Input is found on the back of the device.
Power Output	The Power output is on the top of the device. Simply plug in the device that you would like to power control. (Comes in different plug standards)
RJ45 Ethernet:	Plug in the RJ45 Ethernet cable to the Ethernet port
RESET	To revert to manufacturer default, hold down for 7-9 seconds until you hear 2 long beeps.
Status Indicator	**Red Status Indicator**: Output port is set to off **Green Status Indicator**: Output is On

4.) Setting up your Device

Before we Start

*Before setting up the device make sure of the following:
1.)   All the package contents are all included if anything is missing please contact the dealer where the device was purchased from.
2.)   Check that the power input cable is working correctly.
3.)   Check the cables to make sure there are no problems with the cable.

Setup for Internet Access

To access the 9255 from the internet, the router will require port forwarding to be activated for your IP Power device.

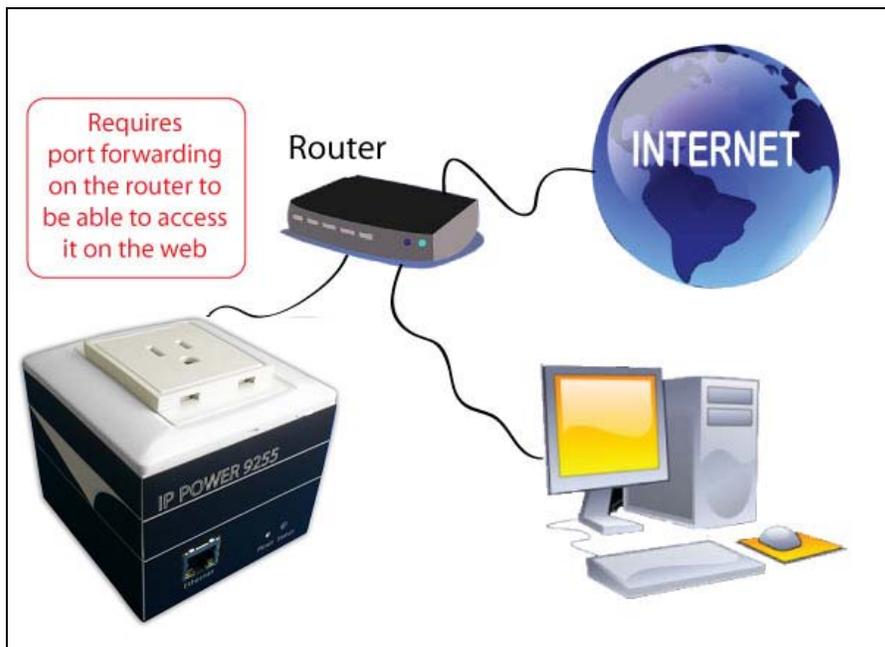* Please refer to your routers manual on how to port forward the device.

For example

9255 IP Address: 192.168.100.200
Port: 8080

* On the router you will need to port forward both TCP / UDP to the IP Address 192.168.100.200 on Port 8080.

9255 Quick Installation

1.) Connect the Ethernet cable (RJ45) to the 9255 to your local area network.
2.) Then connect the power cable into the power cable input of the 9255.
3.) Connect the device that you would like to control to the output plug on the top of the 9255.
4.) Open the IP Edit device search tool from the CD.
5.) The device will automatically be set to DHCP and will show on IP Edit. (Refer to Using IP Edit for more details)

     a. If no DHCP is detected the default IP and Login for the device will be the following

        Default IP: 192.168.1.100 (When no DHCP is apparent)
        Default Login: admin
        Default Password: 12345678

6.) Then on IP Edit double click on your device and a Internet Explorer window will appear with the login screen.

7.) Simply login with the default login and password.

        Default Login: admin
        Default Password: 12345678

Using IP Edit

IP Edit is a search tool designed to search, configure, or access the IP Power 9255 from a local networked computer.
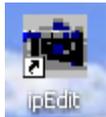
IP Power 9255 Default Login / Password

Default IP: 192.168.1.100 (When no DHCP is apparent)
Default Login: admin
Default Password: 12345678

1.) Insert the CD provided with the product
2.) Install the software IP Edit to the desktop of your computer.
3.) Open IP Edit by clicking on the icon

4.) In the local devices section you will see your device show up if connected correctly.

5.) Select the 9255 device and the device information will populate on the right.
6.) Check to see that the gateway IP and the IP Address (9255) match your current network.

If not, type in the correct information, then hit the submit button to save changes.

For example:
If you have the following information regarding the 9255 and your network

Gateway: 192.168.1.1
Computer IP Address: 192.168.1.122
9255 IP Address: 192.155.2.26
Sub Netmask: 255.255.255.0
Port: 8080

Since the IP Address of the 9255 is the following: 192.155.2.26

You will need to make sure that the first 3 segments of your 9255 IP Address must match the first 3 segments of your gateway IP.

First 3 Segment of Gateway Address: 192.168.1.X
So your new IP Address for the 9255 should be: 192.168.1.26

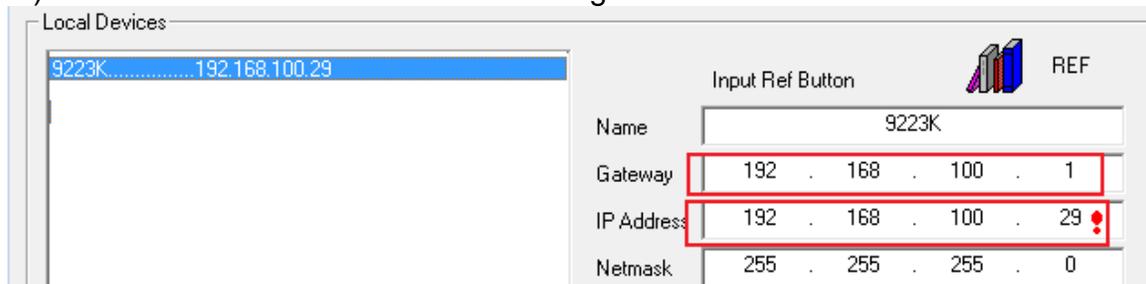**New Network Information**

9255 IP Address: 192.168.1.26
Gateway Address: 192.168.1.1
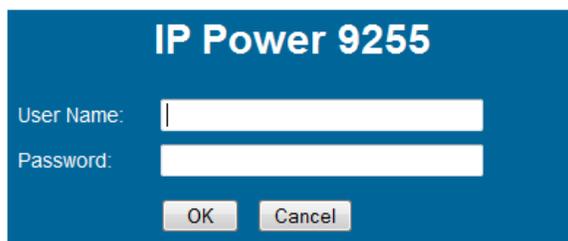**Local Computer IP Address**: 192.168.1.122
Sub Netmask: 255.255.255.0
Port: 8080

7.) Press the rescan button to see if changes have been made.

8.) Double click on the device in the local device section and an IE web browser with the device login will pop up.

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9.) Type in the default login and IP Address to enter the device.

New Network Information

9255 IP Address: 192.168.1.26
Gateway Address: 192.168.1.1
Local Computer IP Address: 192.168.1.122
Sub Netmask: 255.255.255.0
Port: 8080

Default Login/Password: admin/12345678

Using IP Service

IP Service is a feature which allows you to search for the device easily without having to remember long complicated IP addresses. Instead, all you need to know is the device name of your IP Power device and you can easily find it on IP Service.

In the IP 9255 under the system configuration page, you can select the IP server that you would like the 9255 to go to. You can select from the Aviosys server or the Cloud Server. This function must be turned on to work.

* IP Power 9255 must be port forwarded for IP Service to work correctly.

1.) Open IP Edit and Select the server that your 9255 is designated to.
2.) **Hit the green connect button on the top of IPEdit.**
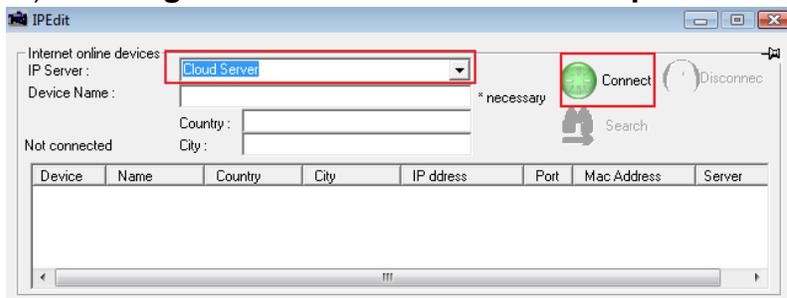
3.) Then type in the 9255 Name that you have selected for the device and press the search button.
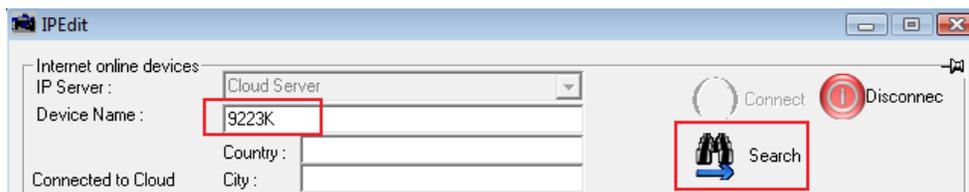
4.) Find your device and double click on the screen and a IE window will pop up connecting to your device.
   Your device must be Port forwarded for the login screen to appear.
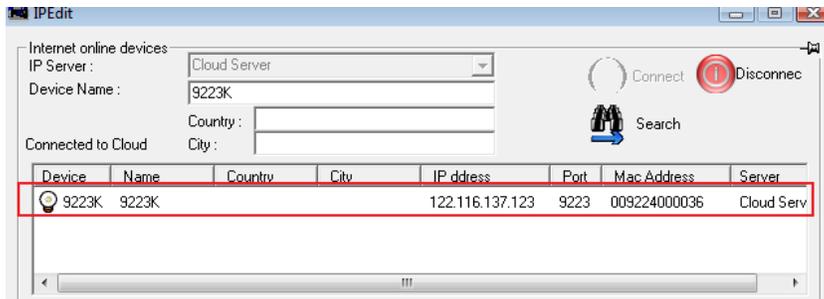
5.) After you have connected to your device, type in the login and password for your device

5.) Web Interface

The web interface on the IP Power 9255 consists of 4 main sections. Power Controls, Scheduler, Ping Settings, and Setup
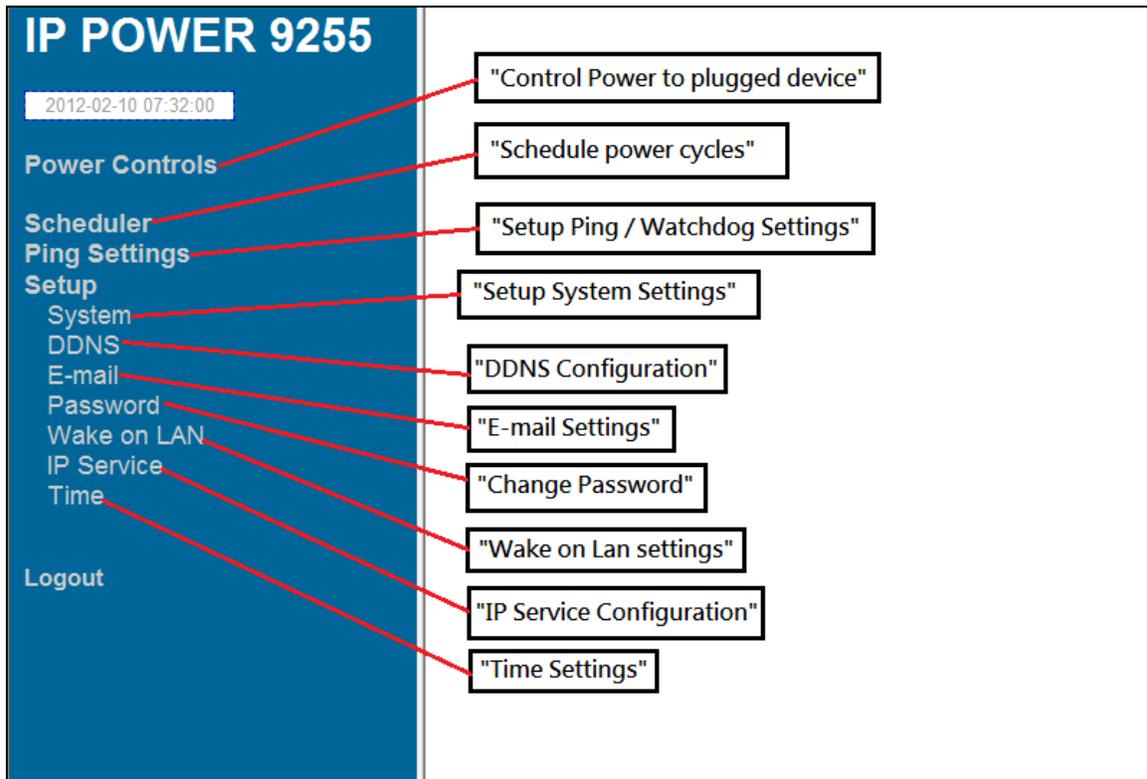
Power Controls: Turn off, Turn on, the socket to provide power to the device.
Scheduler: Schedule specific dates or time to call an action to the IP Power 9255.
Ping Settings: Watchdog function to make sure your devices are responding normally.
Setup: System Configuration
System: Adjust main settings to device including IP Address, Gateway, Subnet Mask, and etc.
DDNS: Configure DDNS functionality
E-mail: Setup E-mail information
Password: Change password
Wake on Lan: Wake devices up that support wake on lan
IP Service: Configure IP Service functionality to find devices by name
Time: Setup time and date of device
Logout: Logout of the device

Power Controls

The Power Controls page is the panel where the user can directly turn off / on power to the attached device, set timers and name the outlet.

Power	Name	Control	Timer
1		○ On ◉ Off	0 Sec ◉ On ○ Off
		Apply	

Name

In the name section the device name can be set. Simply type in a name you would like for the deice and hit the apply button. Name does not support special characters (eg. ! *%)

Control

The control section allows the user to directly turn on or turn off the device. Select the control that you would like to execute and hit apply to apply the settings. This will turn the device on or off.

Timer

The timer allows the user to set an amount of time before a control is activated. To do this, simply enter the amount of delay time in seconds you would like the action to occur. Select the On or Off and hit the apply button. When the timer has reached the time set it will execute your command.

For example if Port 1 is on and I would like to turn it off in 30 seconds, the command may look something like the following.

Power	Name	Control	Timer
1	Router	◉ On ○ Off	30 Sec ○ On ◉ Off
		Apply	

* The maximum number of seconds that can be set on the timer of the device is 9999.

Scheduler

The power schedule offers flexibility so the user can easily schedule events to control the power of the device.

Power	Date	Time	Repeat	ON/OFF
1	2006 - 06 - 06	06 : 06 : 06	Off ▼	○ ON ◉ OFF
	2006 - 06 - 06	06 : 06 : 06	Off / Just Once / Every Days / Work Days / Weekend / Mon.&Thu. / Tue.&Fri. / Wed.&Sat.	○ ON ◉ OFF
	2006 - 06 - 06	06 : 06 : 06		○ ON ◉ OFF
	2006 - 06 - 06	06 : 06 : 06		○ ON ◉ OFF
	2006 - 06 - 06	06 : 06 : 06		○ ON ◉ OFF
	2006 - 06 - 06	06 : 06 : 06	Off ▼	○ ON ◉ OFF
	2006 - 06 - 06	06 : 06 : 06	Off ▼	○ ON ◉ OFF
	2006 - 06 - 06	06 : 06 : 06	Off ▼	○ ON ◉ OFF
Submit				

Date: Enter the date in which the action will occur needs to be set.
Time: Enter the time of the action will occur.
Repeat: Select the frequency of this action.
Just Once (Just one time)
Everyday (Sunday thru Saturday)
Workdays (Monday thru Friday)
Weekend (Saturday, Sunday)
Mon. & Thu. (Monday, Thursday)
Tue. & Fri. (Tuesday, Friday)
Wed. & Sat. (Wednesday, Saturday)

How to use:
If you would like to turn on the device at 8AM and turn off the device at 8PM, the device may be set in this fashion.

Power Schedule

Power	Date	Time	PARAMETER	Power ON/OFF
	2006 - 06 - 06	08 : 00 : 00	Just Once ▼	◉ ON ○ OFF
	2006 - 06 - 06	20 : 00 : 00	Just Once ▼	○ ON ◉ OFF
	2006 - 06 - 06	06 - 06 - 06	Disable ▼	○ ON ◉ OFF

Ping Settings

The Auto-ping functionality allows the 9255 to check if the device have malfunctioned or needs to be restarted. If the device is no working correctly the 9255 Ping will activate the action that you have selected to reinstate the state of the device

Relay	Enable	Ping IP	Ping Failures	Delay Before Action (Seconds)	Delay After Action (Seconds)	Continue Ping	Action
1	DISABLE ▾		2	2	2		
	DISABLE ▾		2	2	2	Continue ▾	OFF ▾
	DISABLE ▾		2	2	2		OFF
	DISABLE ▾		2	2	2		ON
							Reset

Global Setting		
Ping Type:	◉ OR ○ AND	
Ping Interval:	2	Seconds
Ping EchoWait:	20	Millisecond

Submit

Relay: A description of which on let to use Ping function

Enable: Disable or Enable ping settings

Ping IP Address: Specify the IP Address to Ping

Ping Failures: The number of ping failures before the Action is activated.

Action Delay (Seconds): After the Ping Failures has been reached, you can set the delay time (seconds) before the action is activated.

Some uses of this function would be for systems or computers that require a shut down time

Delay after action (Seconds): The number of seconds it takes the attached devices to startup. Once those devices start, the Startup Action will be activated to *continue pinging or stop pinging.*

Continue Ping: After start up Delay has been reached the start up action will either *Continue Pinging or Stop Pinging*

Action: When the number of Ping Failures have been reached. The device can be set to perform a Off, On, or Reset function.

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Ping Type: Ping type sets a condition in the case where either all or 1 of the conditions are met the action will be activated. For instance, if you set Ping Type to "ALL", all the Ping IP's must fail for the action to be activated. On the other hand if you set Ping Type to "OR" as long as one of the Ping IP fails it will cause the action to be activated.

Ping Time Interval (Seconds): The number of seconds between each ping
Ping Response Time (Milliseconds): The number of milliseconds the device will wait for a response from the pinged device if no ping is detected within this time it will be considered a ping failure.

Please view the example below for more details:

Ping Setting

Relay	Enable	Ping IP	Ping Failures	Delay Before Action (Seconds)	Delay After Action (Seconds)	Continue Ping	Action
	ENABLE ▼	www.sample.com	3	3	3		
1	ENABLE ▼	www.google.com	3	3	3	Continue ▼	Reset ▼
	DISABLE ▼	www.yahoo.com	3	3	3		
	DISABLE ▼	www.facebook.com	3	3	3		

Column markers above table: 1.) Enable, 2.) Ping IP, 4.) Ping Failures, 5.) Delay Before Action, 7.) Delay After Action, 8.) Continue Ping, 6.) Action

Global Setting	
Ping Type:	⦿ OR ◯ AND
Ping Interval:	3 Seconds
Ping EchoWait:	3000 Millisecond

3.) markers the Ping Interval and Ping EchoWait rows

Submit
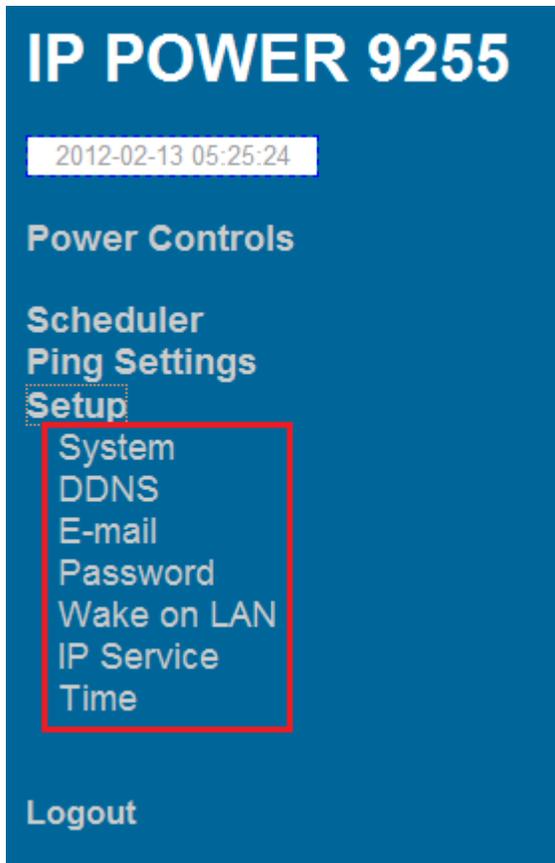
In the picture above:
1.) **Power 1 Ping** function is **enabled for two websites**
2.) The 9255 will ping the web address www.sample.com & www.google.com
3.) If there is a response within the **Ping Response Time** the 9255 will send another ping signal the set **Ping Time Interval** which is 3 seconds for this example.
4.) If the 9255 does not receive a response from the device it will constitute a **Ping Failure**.
5.) After 3 consecutive failure the device will go to the **Action Delay** section. In this case the device will delay for 3 seconds.
6.) When action delay has been reached the **Action** will be set off. Here we have set the 9255 to **Reset** the device.
7.) Once the device has been reset the 9255 will go into **Startup Delay** mode. In this case it is 3 seconds.
8.) After the startup delay mode has been reached the 9255 will check the **Startup Action** whether to continue or stop pinging the device. Here we have it set to Continue.
9.) Then the process starts all over.

10.) Since the Ping Type is set to or if any of the Ping IP constitute a failure then the action will be committed. If the Ping Type was set to "AND" all conditions must be met for the action to be activated.

Setup

The setup page allows the user to configure the system settings of the 9255. This includes network information, IP Server, CNT, CGI commands, and the firmware version.

IP POWER 9255

2012-02-13 05:25:24

Power Controls

Scheduler
Ping Settings
Setup
System
DDNS
E-mail
Password
Wake on LAN
IP Service
Time

Logout

System

The system section allows you to make changes to the network information of the 9255. This includes changes to the IP Address, Gateway, Subnet Mast, and DNS. In additional under the system section you will also find other features including SNMP, Telnet, DHCP, Beeper configuration and more.

IP Address:	192 . 168 . 50 . 157 : 9223
Subnet Mask:	255 . 255 . 255 . 0
Gateway:	192 . 168 . 50 . 1
DNS:	168 . 95 . 192 . 1
SNMP	○ On ● Off
TELNET	○ On ● Off
DHCP	○ On ● Off
Beeper	● On ○ Off
CGI Command	● On ○ Off
Delay	0 Sec ▼
Device Name:	IP Power 9255
Firmware:	V4.00 2012/02/08
	Submit Cancel

IP Address: IP Address of the 9255 device.
Subnet Mask: The subnet mask information can be populated here
Default Gateway: Enter the gateway for the router.
DNS: Enter the DNS information here.
Note: Not having the correct DNS information will affect the NTP and SMTP mail server.
SNMP: Enable or Disable SNMP functionality
Telnet: Enable or Disable Telnet functionality
DHCP: This will enable or disable the DHCP on the device
Beeper: This will enable or disable the beep on the device
CGI Command: This will enable or disable the http commands for the 9255
Delay Switch: The Delay switch will delay the device to activate the command to a designated amount of time. If set to 10 seconds after commands during scheduler or http commands are sent there will be a 10 second delay.
Device Name: Select the name for the device here, and this name will be used for registering the device on IP Service.
Firmware: Will provide information on the current firmware for the device

DDNS

The DDNS Setup allows the user to setup the 9255 with a DDNS server. This way instead of having to remember long IP Addresses, the user now can easily use a WWW link to connect to the device. This also is a good solution for users to have a dynamic IP Address where the IP continually changes and is not constant.

Note: We recommend using free services like www.dyndns.com for this portion. The device may react differently to other ddns services.

DDNS:	OFF ▾
Server IP:	204.13.248.109
Domain:	
UserName:	
Password:	
Proxy Settings	
Proxy Server:	OFF ▾
IP Address:	
Port:	-1
	SAVE UPDATE

DDNS Server IP: The DDNS server IP
Domain: Type in the dyndns domain name
Username: Enter the DDNS username here
Password: Enter the DDNS password.
Enable DDNS: When using DDNS make sure that it is enabled.

If user is using a proxy account, you will need to enable it here.

Proxy Enable: Select true of false to enable or disable the proxy server
Proxy IP: The Proxy IP is the IP Address of the Proxy Server
Proxy Port: Enter the port of the proxy server here.

E-mail

This section is where email settings are inputted. After the information is populated the 9255 will send notifications regarding the device when activated.

MailServer:	sample.com
Port:	25
Pop3Server:	sample.com
User Name:	login@sample.com
Password:	••••••••••
Sender:	login@sample.com
Receiver1:	receiver@sample.com.tw
Receiver2:	
Receiver3:	
Subject:	IP Power 9255
Body:	mailbody IP Power 9255

Save   Send

Mail Server: Enter the mail server of email that you are using
Port: Enter the port of the mail server
Pop3 Server: Enter the pop3 server name
User Name: Enter a valid username for the email server
Password: Enter a password
Sender: Enter the sender email address
Receiver 1, 2, 3: Enter the receiver email address
Subject: Enter a subject line for the email so that the received would be able to identify the email
Mail Body: Enter the information that is in the body of the device

Note: Not all email servers may be compatible with the 9255. Please see the FAQ section of the manual for a list of compatible Email providers.

Change Password

The change password function, will allow the user to change the current password of the device.

Old Password:	
New Password:	
Confirm New Password:	
Submit	

Changing the password of the device:
1.) Type in the old password for the device
2.) Then type in the new password maximum of 8 characters
3.) Repeat the new password again
4.) Then hit the submit button.

The login required option allows the user to choose whether they would like to disable login capabilities for the device.

Wake on Lan

The network wake up function allows the 9255 to wake up computers, servers or systems that have a wake on lan capability. This functionality is not available on all PC's and requires the motherboard or Ethernet card to have Wake on Lan support for this functionality to work correctly.

MAC:	FFFFFFFFFFFF
Save Send	

Simply just type in the Mac address of the system that you would like to start up and hit the send button and the device will be activated.

IP Server Configuration

The IP Server Configuration page is where the 9255 can be configured to connect to IP service.

Country:	
City:	
CNT ON/OFF:	OFF ▾ Server1 ▾
IPSrv ON/OFF:	OFF ▾
IPSrv ServerAdr:	122 . 116 . 138 . 129
	Save Cancel

IP service allows you to easily find your device off the web or off the google cloud server without the need to remember long IP Addresses. Instead you can find your device easily just by searching with the name of your device.

Time
The date and time settings allow the user to synchronize the 9255 with their local time or a NTP server.

Date / Time

Date / Time:(yyyy-mm-dd HH:MM:SS)					
2012	- 2	- 13	6	: 3	: 14

NTP Server IP Address:				
192	.43	.244	.18	TimeZone: 0

SAVE	NTP	Local-Time

NTP: Network Time Protocol can be entered into the 9255. Simply just enter the IP Address of the NTP Server and hit the NTP button to synchronize. Then press save .
* For NTP to work correctly the DNS server must be configured correctly on your System configuration page
Local Time: The local time gets the time of the PC that is currently being used.

Logout

Click on the Logout link after you finish each session of using the IP Power 9255. This will ensure that any other person that uses the device next will not be able to control the devices without logging in.

6.) Controlling the Device

CGI HTTP Commands

Http commands allow you to control the device with commands. The basic commands are provided below.

There are two ways to input http commands with authorization required
Password in http:
http://login:password@ipaddress:port/command

Password not in http:
http://ipaddress:port/command

Note: If you use the password not in http: command you will need to enter it when the browser asks for the password.

a.) Set Power Command

The Set Power command allows you to control the devices on/off through the http commands. With this command you can integrate can integrate the 9255 with any other system.

Outlet	Power On	Power Off
Output 1	61 = 1	61 = 0

Ex. For Single Port Control On
http://192.168.1.3/set.cmd?cmd=setpower+p61=1
Output: P61=1

Ex. For Single Port Control Off
http://192.168.1.3/set.cmd?cmd=setpower+p61=0
Output:P61=0

b.) Power Delay

The Power delay command allows you to delay the set power command.

Ex. For 5 Seconds Delay then On
http://ip/set.cmd?delay=5+cmd=setpower+p61=1
Delay range = 1 - 9999 seconds

EX: http://192.168.1.52/set.cmd?delay=158+cmd=setpower+p61=1

c.) Read Power Command

1. Set Port On/Off
   http://192.168.1.3/set.cmd?cmd=setpower+p61=1 (relay open) ,
   setpower+p61=0(relay closed)

   P61=1

2. Read Port
   http://192.168.1.3/set.cmd?cmd=getpower

   P61=1

7.) Frequently Asked Questions (F.A.Q)

Please visit our FAQ section on our website for the latest and most updated
information on this product. You can visit our site at: **www.Aviosys.com**

Q1: Which email providers are compatible with the 9255?

Ans: If you are having problems getting your email address to work, we
recommend try using the following email providers for the 9255.

lavabit.com
POP3: lavabit.com
port: 110
SMTP: lavabit.com
port: 25

inbox.com
POP3: my.inbox.com
port: 110
SMTP: my.inbox.com
port:25

gawab.com
POP3: ppop.gawab.com
port: 995
SMTP: psmtp.gawab.com
port: 465

gmx.com
POP3: pop.gmx.com
port: 110
SMTP: mail.gmx.com
port: 25

Q2: Why can I not find my device in IP edit?

Ans: Please make sure to turn off any antivirus, firewall, and messaging software, that may be blocking the device. Then re-open IP Edit and hit the rescan button.

Q3: What can I do if I forget my password?
Ans:

a.)   In the login field enter the "super user": do not enter the quotation marks and there is a space between super and user

b.) Then make sure to power off the device within 60 seconds, by unplugging the device and then plugging it back in.

c.) Then login to the device with the default login and password

Default Login: admin
Default Password: 12345678

Q4: How to I revert back to Manufacturers default settings?
Ans**:** Hold the reset button for at least 5-7 seconds and you will hear two long beeping sound. Then use IP Edit to re-setup the device.

Default IP: 192.168.1.100 (When no DHCP is apparent)
Default Login: admin
Default Password: 12345678