IP Power 9212 Delux

User Manual



USER MANUAL



IP POWER 9212 Delux Firmware Version: V1.11 Oct. 21, 2008 Warning: Any changes made to this equipment without permission may cause damages to the device!

IMPORTANT NOTICE

- 1. IP POWER 9212 Delux was designed for indoor use, we carry no responsibility for possible damages caused by outdoor use, especially in the rain.
- 2. Please use the power adapter provided by the dealer, we carry no responsibility for the possible damage from using power adapters not .
- 4. Do not shake the IP POWER 9212 Delux in any fashion
- 5. Please contact the dealer If IP POWER 9212 Delux is not working properly.

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1. Introduction

The IP Power 9212SDelux is a Network Controller & Sensor with 8 DI & 8 DO. No specific PC or software is needed to use the device. You can easily control devices remotely and check their status via the Internet from anywhere in the world.

Using a Browser such as Internet Explore or Netscape, you can securely access the unit. It includes 8 Digital Inputs (**Dry / Wet contact which can be switched**), 8 Digital Relay Outputs that works like an IO Server. You can integrate it for Home, Office security, Personal entertainment, and Industrial field applications.

The API program is supported to help the integrator to easily program any software to integrate it with existing application systems in local computers. The IP POWER 9212 can be flexibly applied to Home entertainment & industry security & systems with integrated management.

1.1 Features:

- Embedded web server So the device does not need to be connected to a PC Uses Ethernet or Internet (LAN / WAN)
- Accessible with popular web browsers- IE (Internet Explore) or Netscape DO NOT need specific Software
- Comes with 8DI & 8DO: Directly control relay output (DO) and detects digital input (DI)
 * 8 Set Sensor Default 4 Set Source mode (Dry Voltage Input) & 4 Set Sink mode (Wet-Resistance Input). Source & Sink mode can be switched.
 * 8 Set Controllers Default 4 Set NO Normal Open & 4 Sets NC Normal Close
- 4. Network protocols supported: HTTP, DDNS, DHCP, Virtual and Dynamic IP.
- Supports RS232 to control.
- 6. Security code identification and Hardware reset functions.
- 7. Individual LED indicates switch-working status.
- 8. Safe, durable, non-electric leakage and anti flammable design.
- 9. Polar protection will even connect contrary port.
- 10. Digital inputs provide de-bouncing function.
- 11. Update firmware by the TCP/IP network.
- 12. Embedded "WATCH DOG",
- 13. Support SMTP & SNMP: Send IP address as log in and send e-mail as detecting sensor trigger.
- 14. Auto Internal Control: DI Control DO (Own or other 9212Delux).
- 15. Time Scheduler -- pre-set the time schedule to turn power on / off thru Internet / Ethernet
- 16. Support NTP (Network Time Protocol) synchronize the time of 9212 Delux to the Internet web
- 17. WAP Mobile Phone Control can use the GPRS cell phone via WAP to control
- 18. Setup up own outlet default: set DO status as regain power.
- 19. Provide **SDK (VB & VC)** for own Software develop and application.
- 20. Supply Exclusive **IP Service** for easily location of device on Internet by name.

Specification: 1. DC 5V (AC90-240 input) 2. D-SUB In & out port. 3. RJ45

Application field: can be used with any kind of electrical equipments, no matter household appliances or security equipments. It can manage the power supply through the web page; make it safer for the security equipment and more convenient for digital control at the far end.

Industrial application field: Bank, financial security system, jewels, casino, cash register in supermarket, park, traffic control, military equipment and airport.

2. Before You Start

2.1 Package Contents:

■ One set of IP POWER 9212

One set includes 3 separate units:

9200: Network Module (Base)

9201 Input: Input/Sensor Module

9202 Output: Control Module



- One network wire with RJ45 port
- One 1A, 110~220V adaptor
- TWO D-Sub 15 Pin cable
- One install CD
- One rapid install manual

2.2 Minimum System Requirements:

- * Minimum Intel Pentium II 300MHz/compatible AMD processor
- * WINDOWS operating system (IE5.0+SP1)
- * Minimum 64MB RAM
- * VGA Card: with capability of displaying full-Colors and DirectDraw support
- * Network card with RJ45 port
- * Ethernet Hub / Router
- * Internet network (Ethernet, xDSL or other ways, depends on whether you need far end control ability or not)

3. Interface Description

IP Power 9212 has three units, 9200 is the network module (base), the picture below shows the three units of the IP Power 9212:



9201 Input is the input /sensor module and 9202 Output is the output / control module

4. Hardware & Software Installation

Before you star using the IP Power 9212, please follow the steps below:

- Check the package to make sure the contents are complete.
- Prepare one Ethernet HUB, or Router
- Check the voltage of the power supply to make sure it is AC 110-240 volt

4.1 Hardware Installation: (Plug RJ45 first before Power Jack!):

- 1. Connect the 9200 to HUB through RJ 45 netting cable.
- Connect the 9200 (IN-BLACK) to 9201(BLACK port) & 9200 (OUT-BLUE) to 9202 Output (BLUE) through D-SUB

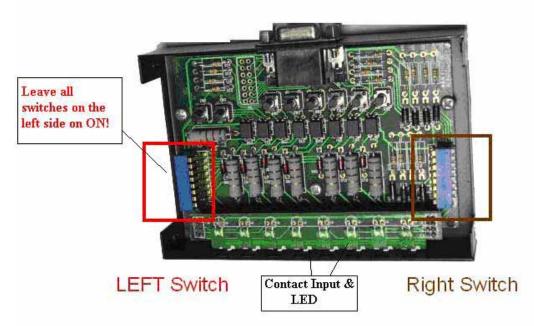
cable.

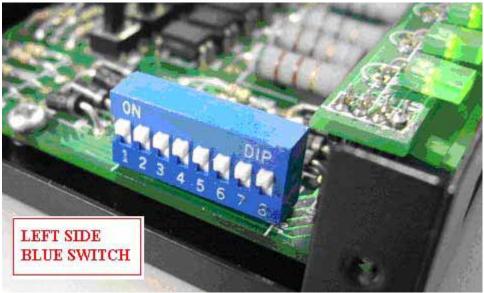
- 3. Connect the HUB to the Internet (May through ADSL/XDSL modem).
- 4. Connect the power adapter to the 9200.

4.2 9201 Digital Input Hardware:

4.2.1 Dry & Wet Setting

In the 9212 Delux, the DRY or WET contact of each input (in 9201) can be selected. To setup the Dry or Wet contact of each input signal, please open 9201 Input case and adjust the right blue switch only (The left switch was developed for further device enhancement and all signals must be kept on **ON**).





There are two blue switches in the 9201.

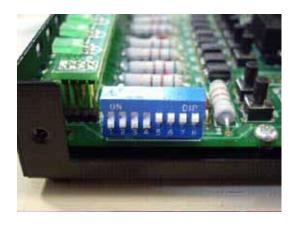
Please arrange or leave all the setups in the Left Switch to ON.

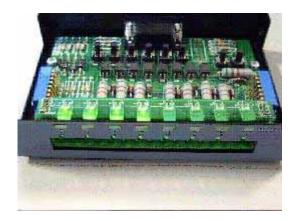
You can setup the Dry/Wet contact in the left blue switch:

Switch Set on Off = Wet Switch Set on On = Dry

Default Settings (when no device attached):

Wet Contact: 1-4 = LED Off Dry Contact: 5-8 = LED on





Note:

- * When a wet contact device is attached to output set to wet the LED will turn off.
- * When a dry contact device is attached to output set to dry the LED will turn on.

4.2.2 Connection Illustrations:

For different request of normal state of electric equipment, 9201 Input offers four sets of voltage signal IN1-IN4 and four sets of shortcut circuit signals IN5-IN8. 9201 Input Pro provide 4 set

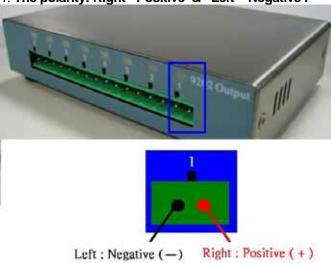
Source mode - Voltage Input - Out 1 ~ Out 4

ON: 4V~24V OFF: 0V ~ 3V

4 set Sink mode - Resistance input - Out 5 ~ Out 8.

ON: 200 ohm \sim 0 ohm OFF: 500 ohm $\sim \infty$

1. The polarity: Right - Positive & Left - Negative.



NOTE: The polarity protective function, will protect your device if you reverse the polarity during installation. But your device will not work correctly if the polarity is incorrect.

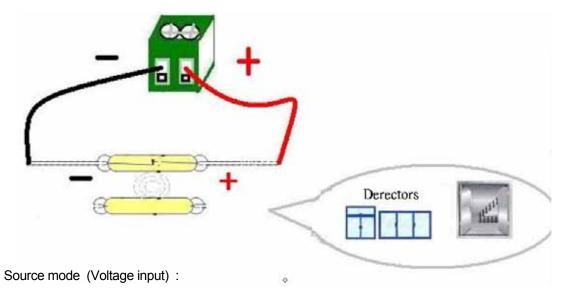
2. Source mode (Voltage signal) -- IN1 & IN4: can be connected to voltage signal detectors such as smoke detector, light detector and gas detector.



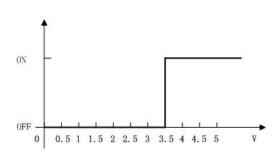
3. Sink mode (Resistance signal) —IN5 & IN8: can be connected to magnetic reed switch as the follow figures



It can be installed in the entrance guard or security equipment such as doors, windows, drawers and safe case.



IN1-IN4 contacts are active signal sensor. If the voltage difference between the two contacts in one set within 0V~3V, 9212 shows ON. It the voltage difference within 4V~24V, 9212 shows OFF. So user can detect the change of equipment. Such as smoke detector, light detector and gas detector.

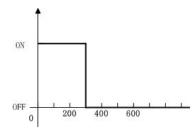


NOTE:

- 1. The data in this figure is the average measure value. To ensure the correct detection, we suggest user set the voltage lower than 3V when it shows OFF and higher than 4V when it shows ON
- 2. The maximum measure voltage is 24V.

Slink mode (Resistance Input):

IN5-IN8 contacts are short circuit sensors. If the resistance between the two contacts in one set within $0\Omega\sim200\Omega$, 9212 shows ON. If the resistance within $500\Omega\sim\infty$, 9212 shows OFF. So the users can detect the movement of equipment through the magnetic reed switch or other kind of reactive sensors.



NOTE:

- 1. The data in this figure is the average measure value. To ensure the correct detection, we suggest the user set the voltage lower than 200Ω when it shows ON and higher than 500Ω when it shows OFF.
- 2. When measuring the resistance of web contacts, the maximum voltage is 5V and the maximum currency is no more than 10mA..

PS: magnetic reed switch: using the magnetic field of the magnet to produce a signal when there is a movement happened in switch. Low cost and easy to use is the chief characteristic of magnetic reed switch. Most of them are used in security equipment, living product and automatic mechanism.

4.3 9202 Digital Output Hardware:

- 1. Connect the 9200 to HUB through RJ 45 netting cable.
- Connect the 9200 (IN-BLACK) to 9201(BLACK port) & 9200 (OUT-BLUE) to 920
 Output (BLUE) through D-SUB cable.
- 3. Connect the HUB to the Internet (May through ADSL/XDSL modem).
- 4. Connect the power adapter to the 9200.
- 5. Power on your computer and power adapter of IP POWER 9212.

IP Power 9202 Output Pro has predefined Relay Statuses.

Outputs 1 - 4: Normal Closed Relay (NC)
Outputs 5 - 8: Normal Open Relay (NO)

(The relay status of the outputs cannot be changed: Meaning that Output 1-4 will always be Normally closed and Outputs 5-8 will always be Normally Open)

Maximum Rated Voltage: 240V/AC, 60V/DC Maximum Rated Currency: 12A AC/DC

Maximum rated voltage for Single relay: 24V/ 10A, 120V/ 10A, 250/ 7A

Maximum Switch time: Max 10ms

Environment Temperature: -30°C~ + 55°C

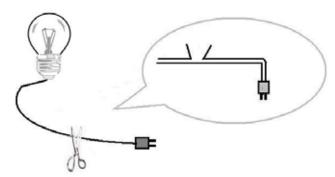
4.3.1 Setting up devices for 9202

NOTICE: Only the electronic professionals should operate the following operations in this section! Use this to your own discretion

For an example using a Light bulb

1.) Use the electrical wire of the equipment:

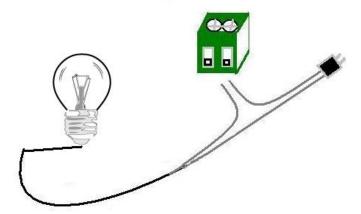
Step 1: Cut off the live wire. (Use a test pencil or screwdriver with voltage tester to identify the **live wire** between the two wires of electrical wire.)



NOTE: For this method you must cut off the electrical wire of the household appliance. Please make the decision after reading method 5-2 and 5-3.

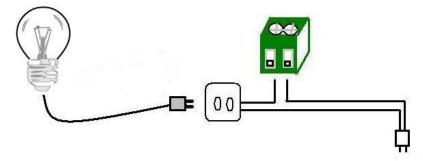
Step 2: Use a test pencil or screwdriver with voltage tester to identify the **live wire** between the two wires of electrical wire. Cut off the live wire and connect to the port of IP Power 9212. **Use the test pencil or screwdriver with voltage tester again to make sure the connection is correct**.

NOTICE: BE CAREFUL IN THIS OPERATION AND DO NOT TOUCH THE WIRE UNDER VOLTAGE WITH ANY PART OF YOUR BODY, ESPECIALLY WITH YOUR HANDS



2. **Use additional electrical wire**: Buy some electrical wire and outlet in the electrical shop to cooperate with IP Power 9212, avoid cutting off the electrical wire of the equipment and can be used flexible in all kind of electrical equipment.

NOTICE: Use a test pencil or screwdriver with voltage tester to identify the live wire between the two wires of electrical wire and make sure of connecting the live wire to the port of IP Power 9212.



3. You can control multi power by use the power extension cord.



NOTICE: Do not connect too much energy intensive electrical equipment such as air conditioner, electrical heater, microwave over or over in the same electrical outlet. Too much electrical currency may cause fire. This product not guaranty the possible damage caused from too much electrical currency.

4.4 Connecting to the Internet:

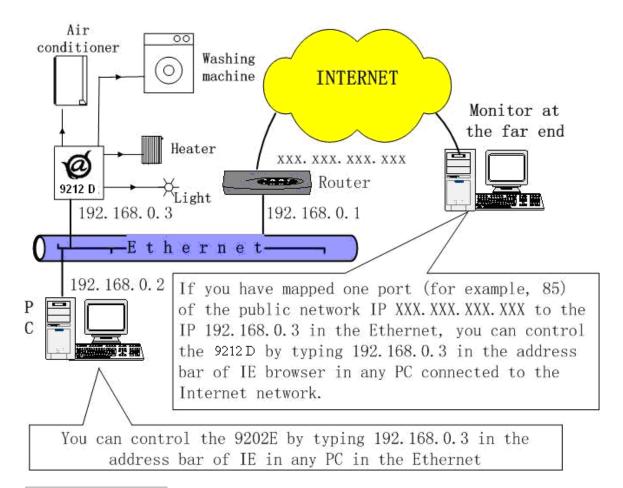
After the Ethernet and router have been set correctly, you can access the IP Power 9212 Delux from the Internet. It will provide all kinds of convenience.

To correctly setup the device:

- Assign the right IP addresses and make sure that you can connect to your 9212 Delux via local network.
- 2.) If a router/firewall is used, the router must be **port mapped** or **port forwarded** to the port of the 9212 Delux. Please refer to your routers manual in the port forwarding section.

After these steps have been correctly setup, you should be able to access the device through the internet without any problems.

Below is a picture of what the setting may look like.



4.5 Software Setup:

Please follow the steps below to install the software.

- 1. Insert the CD that came in the package and windows will auto-run. If not please browse for the Autorun.html file in CD.
- 2. Click IP KamVid 1070 in driver of CD and click OPEN top install the driver procedure.



- 3. Please follow the installation wizard and install all the recommended programs.
- 4. After installation is complete, a shortcut of "IPEDIT" & "INFINITY Cam" will be created on the Desktop and in program list of start of your computer

NOTE:

* For NEW function - TO Record in "WMV" format, install IP KamVid 1070.

5. Connecting to the Device

5.1 Initial Setup using IPEDIT

1.) Click "ipEdit.exe".

(Please check the 9212A-SL for power and Ethernet connection.)

A. LOCAL Devices area:

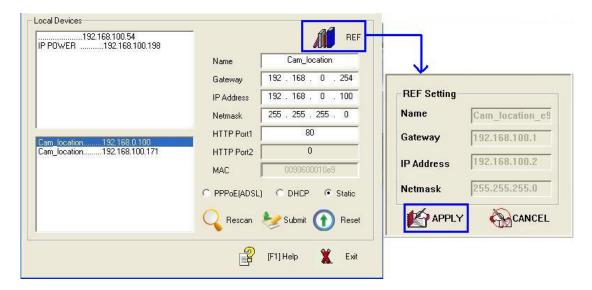
IPEDIT will search for all IP Products 9XXX series in the same local Ethernet. The default name of the 9212Delux is "**IP Power**"

1. Double click the IP address, it will highlight the device name, and IP information will be displayed to the right of the screen.

The IP address of 9212Delux should be in the same subnet with your PC, subnet mask, and default gateway must be the same as 9212Delux also.

For example, the IP address of 9212Delux is 192.168.10.9, so your computer needs to add an IP address looks like 192.168.10.XXX to get connection to 9212Delux.

- 2. User can change the device name (please use numbers or letter) or IP (please set in the same subnet as your PC) in the text window to the right. Then click **Submit** after setting finish. After about 20 seconds, the new setting will work. Click **Update**, the new setting of equipment will display in text window.
- 3. You can also click "REF" in IPEDIT to check your PC to get the subnet information. And directly press "APPLY to" update the new IP settings of selected 9212A-SL



NOTICE:

- 1. Make sure the power and Ethernet connection of the 9212 are connect properly.
- 2. It can automatically obtain the virtual IP address after you run the ipeditv3.exe but only if your Ethernet supports DHCP. Click the IP address to enter the web page.

If your Ethernet does not support DHCP, IP92XX you will change its IP address to fixed IP address. Please follow the steps below to change the subnet of your PC:

- 3. If can not get in the 92XX web page, please set the segment of IP 9212Delux to be same as your PC.
- * You can get your PC network information IP Addres, Subnet Mask and Default Gateway by step: start → execute → key "cmd" in dialog → key "ipconfig" in MS-DOS mode

The last digit of IP address can be any number between 1~254, but can not be same as your PC. If using in any PC, just use HUB and type the 192.168.0.100 in Browser or use "ipedit.exe " then you can get in the webpage.

* **Note**: The first 3 segments of IP address of your device needs to be the same as your default gateway.

For Example: The IP address of the Gateway is **192.168.1**.100, then the first 3 segments of the IP address of your device will be **192.168.1**.123.

4. The default username and password of IP Power 9212 are:
Username: admin Password: 12345678

If forget the new password:

Login: super user (There is a space between super and user

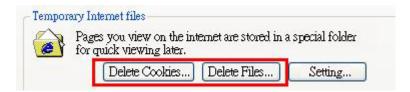
Password: 1234568

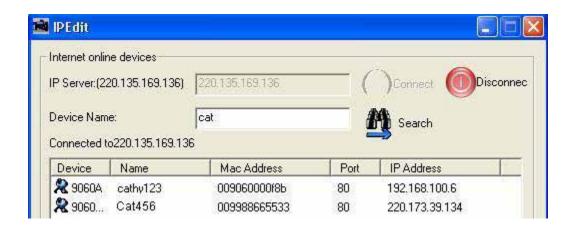
Note: If the webpage does not load properly, and you see a error message which states" Cookie

time out "

Please delete your temporary internet files and cookies.

To do this go to IE: "Tools "→ "Internet Options", please click "Delete Cookies" and "Delete files" in "Temporary Internet file".





By setting the server address in IP server of advanced setup page, the user can easily search for his/her IP Power 9212Delux on internet just by searching for the name of the device. The **default IP address of IP server is 220.135.169.136.**

Step1: Click the green "connect" button

Step2: In the device name section: Type in the name of your device (Min of 3 letters)

IP Server

IP Server gives the user the ability to easily search for the name of the device other than searching for a long IP number. This flexibility allows the user to easily just remember the name of their device so they can access it with ease.

To Enable IP Server: Go to Setup on the Left hand side of the Webpage and then make sure you have enabled **Transmit IP Address to IP Server**. The default IP server IP Address is provided but the user can also setup his/her own IPServer system and use that address as well

System Configuration

IPServer IP Address: (Ex. 220.135.169.136)	220 . 135 . 169 . 136
Transmit IP Address to IPServer	

6. Control and settings through the Webpage

Logging In

Double click the IP address in IPEDIT and you can enter the login web page. Input the default password 12345678 (you can change the password after log in), click the **OK** and then you can enter the Web Control page.

Username: admin / Password: 12345678

IP9212 Delux Login

User Name:	admin
Password:	•••••



6.1 Sensor of IP Power 9212: Read IO

IPServer IP Address: (Ex. 220.135.169.136)	220 . 135 . 169 . 136
Transmit IP Address to IPServer	● Enable ○ Disable

Source mode (Voltage input):

IN1-IN4 contacts are active signal sensors. If the voltage difference between the two contacts in one set within 0V~3V, 9212 shows ON. It the voltage difference within 4V~24V, 9212 shows OFF. So user can detect the change of equipment. Such as smoke detector, light detector and gas detector.

Sink mode (Resistance Input):

IN5-IN8 contacts are short circuit sensors. If the resistance between the two contacts in one set within $0\Omega\sim200\Omega$, 9212 shows ON. If the resistance within $500\Omega\sim\infty$, 9212 shows OFF. So user can detect the movement of equipment through the magnetic reed switch or other kind of reactive sensors.

NOTE:

- 1. The data in this figure is the average measure value. To ensure the correct detection, we suggest user set the voltage lower than 200Ω when it shows ON and higher than 500Ω when it shows OFF.
- 2. When measuring the resistance of wet contacts, the maximum voltage is 5V and the maximum currency is no more than 10mA.



Click the **refresh** button and you will see the similar figure like this. It represents the state of the four sets of input signals (there may be some delay, it up to your network).

Source mode (Voltage input):

IN1-IN4 contacts are active signal sensors. If the voltage difference between the two contacts in one set within 0V~3V, 9212 shows ON. It the voltage difference within 4V~24V, 9212 shows OFF. So user can detect the change of equipment. Such as smoke detector, light detector and gas detector.

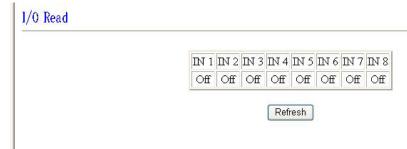
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NOTE:

1. The data in this figure is the average measure value. To ensure the correct detection, we suggest user set the voltage lower than 200Ω when it shows ON and higher than 500Ω when it shows OFF. 2. When measuring the resistance of wet contacts, the maximum voltage is 5V and the maximum currency is no more than 10mA.





Click the **refresh** button and you will see the similar figure like this. It represents the state of the four sets of input signals (there may be some delay, it up to your network).

6.2 Control of IP Power 9212: SET IO

IP Power 9212 now can control 8 outputs at the same time.

* Out1 - Out4 are normally closed switches. When it is on, the corresponding LED lights up, the circuit between the two connects is turn off.

When it is off, the corresponding LED light off, the circuit between the two connects is turn on.

* Out5 - Out8 are normally open switches. When it is on, the corresponding LED lights up, the circuit between the two connects is turn on. When it is off, the corresponding LED light off, the circuit between the two connects is turn off.

1/0 Control

PIN I/O	Control	Timer
OUT1 (NC)	On Off	0 Sec ○ On ⊙ Off
OUT2 (NC)	On Off	0 Sec ○ On ⊙ Off
OUT3 (NC)	On Off	30 Sec ⊙ On ○ Off
OUT4 (NC)	On Off	0 Sec ○ On ⊙ Off
OUT5 (NO)	On Off	0 Sec ○ On ⊙ Off
OUT6 (NO)	On Off	0 Sec ○ On ⊙ Off
OUT7 (NO)	On Off	0 Sec ○ On ⊙ Off
OUT8 (NO)	On Off	0 Sec ○ On ⊙ Off
		Apply Reset

Control:

Set the output's state to ON/OFF

Select the **output** you want to change and set it to ON or OFF state then click the apply button.

Timer:

Use the timer to set off or on the output after a specific amount of time. Once you hit the apply button the timer starts counting down.

Example shows in the figure above means the OUT3 will be in ON state when it starts and will changes the state to OFF after 30 seconds.

Reset the ON/OFF settings:

Click the **reset** button you can cancel the previously output settings.

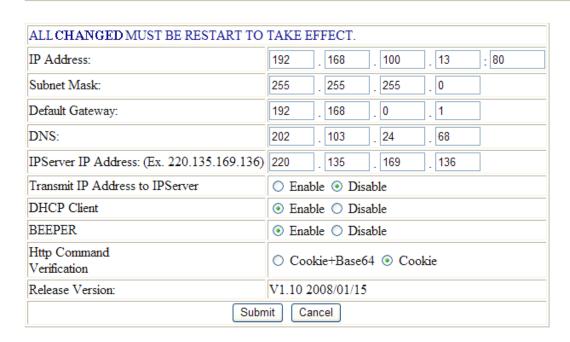
6.3 System Configuration

Setting the IP address for IP Power 9212Delux:

Click the "Setup" button on the left side under system.

Fill in the proper **IP** address, **Subnet Mask**, **Default Gateway**, and **DNS**. If you choose to use DHCP, please make sure that your network supports DHCP service so the IP Power 9212 will automatically find an IP address when it starts. You can also control the Beeper sound in system configuration..

System Configuration



IP Server: Register 9212Delux in our IP Server then user can easily get online IP address by "Name "search. Please refer page16 for this function.

Http Command Verification: Setup the control possibility from HTTP command or SDK (VB & VC)

- 1. Select "Cookie +Base64": Enable Http command & SDK control
- 2. Select "Cookie": Disable Http command & SDK control

6.3.1 IP address Settings: Ethernet (LAN) and Internet (WAN)

Local Area Network (LAN):

In LAN, you can set a fixed IP address or gain it from a DHCP server automatically. We suggest to use a fixed IP address in order to let the other computers can visit the 9212 Delux.

Now type the new IP address in the address field of IE, you can visit the 9212 Delux. You also can use the ipedit.exe to find the IP Power 9212 and modify its IP address.

From the Internet (WAN):

User can set the IP provided by your ISP. If the 9212 Delux has a public IP address, you can control it through the Internet. 9212 Delux supports fixed IP, DHCP.

IP Address: Type in the IP address provided by your ISP. If IP Power 9212 Deluxe is working with a Router, please refer to the network settings of the Router.

Subnet Mask: Type in the Subnet Mask provided by your ISP. If IP Power 9212 Delux is working with a Router, please refer to the network settings of the Router.

Default gateway: Type in the Default Gateway provided by your ISP. If IP Power 9212 Delux is working with a Router, please refer to the network settings of the Router.

DNS Server: Fill in the IP address of DNS server. If you are in Taiwan, you can set it to 168.95.1.1.

DHCP Clients:

Enable – Activate DHCP service. DHCP will assign IP address for each PC. **Disable** – Shut down the DHCP service. You can set the IP address by yourself.

Beeper: Enable – activate the beeper. Disable – turn off the beeper.

If you control the IP Power 9212 Delux through the web page, the beeper will beep once when the operation work.

Note:

- 1) IP address format is: xxx.xxx.xxx.xxx: yyyyy. yyyyy represents the port number which ranges from 1 to 32767.
- 2) Subnet Mask: from 0 to 254 (xxx.xxx.xxx.0 ~ xxx.xxx.xxx.254)
- 3) If DHCP is disabled, user must set the TCP Port and default Gateway .If DHCP is enabled, then the TCP port will be preset to 80(xxx.xxx.xxx.xxx: 80) and the The DHCP server will set default gateway, too.
- 4) If the TCP port you set is not 80, your should type in the whole IP address and port in IE or Netscape, such as http://xxx.xxx.xxx.xxx.xxx.yyyyy, or you can use the ipedit.exe to login into the virtual IP of IP Power 9212 Delux.

6.4 Change Password

Click the **change password** option at the left window and you can enter the change password page. Follow the instructions, fill in the old password and new password, then click the **apply** button to confirm.

Change Password

Old Password:	
New Password:	
Confirm New Password:	

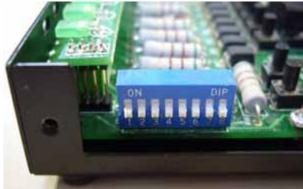
6.5 Advance Setup

Advance Setup Configuration

IP Kamera 9060 IP Address:	255 . 255 . 255 . 255
ir Kailera 7000 ir Address.	Name: Password:
IP Kamera 9060 snapshot when DI has trigged	○ Enable ⊙ Disable
Manager IP Address:	192 . 168 . 100 . 13
Trap when DI has trigged	○ Enable ⊙ Disable
Send e-mail when DI has trigged	○ Enable ⊙ Disable
	192 . 168 . 100 . 13 : 80
IP Family 92series IP Address:	Name: admin Password: •••••
	O Auto Search - MAC Address: Manual
IP Family 92series controlled when DI has trigged	○ Enable ⊙ Disable ⊙ Dynamic ○ Static
	Submit Cancel Reset Setting IN 1~8

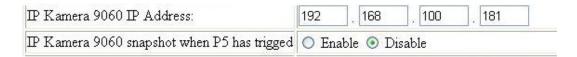
To use the internal control function which we are going to introduce in following page, please set all the pin on left switch to OFF and the light on DI will be all off.

Please check the light status on DI board for the function it supports: We call "light turn ON" in DI board as "LO", and "light turn off " in DI board as "LF".



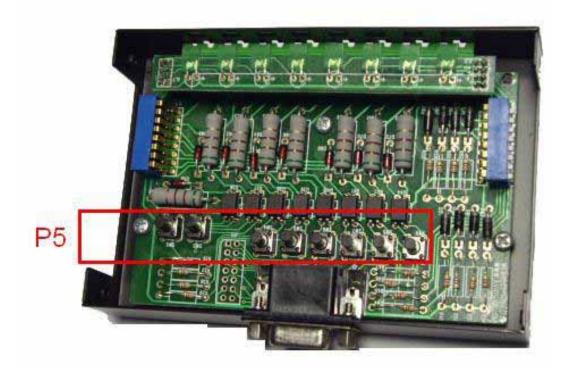
2. As LO in either one each channel, 9212 Delux will ask the setting IP (9060A) take pictures.

You can also use the P5 area bottom of 9201 Input (of 9212Delux) to control the LO.



When the function is enabled, as the DI status changes, 9212A will access the 9060 IP camera to take pictures.

You can also take pictures Hardware control. Set the Input as User can just press the bottom (=P5) in 9201 Input to change status of any DI and the IP address of 9212A-SL to do SNAP shot.



3. As LO in either one each channel, 9212Delux will send TRAP message of 9212Delux to IP address in Manager IP address.

You can use the P5 area bottom of 9201 Input (of 9212Delux) to control the LO.

Manager IP Address:	192	. 168	, 100	. 7	
Trap when P5 has trigged	O Ena	able 💿 D	isable		

4. As LO in either one DI, 9212Delux will send E-mail to inform the user of any input status changes.



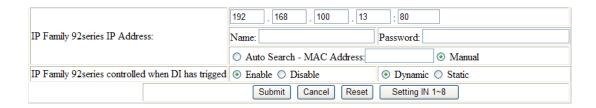
You can use the P5 area bottom of 9201 Input (of 9212Delux) to control the LO.

User can Auto control the DO of 9212Delux by DI status change
 One DI can control 1~ 8 DO. You can also control other 9212Delux devices and units.

The P5 area bottom of 9201 Input (of 9212Delux) can be used to control the LO.

- Dynamic: as LO for one time, the DO part changes one time.
- Static: as LO for one time, the DO keeps changing.

Note: When you enable this function - DI controls DO, "SET I/O" will be disable.



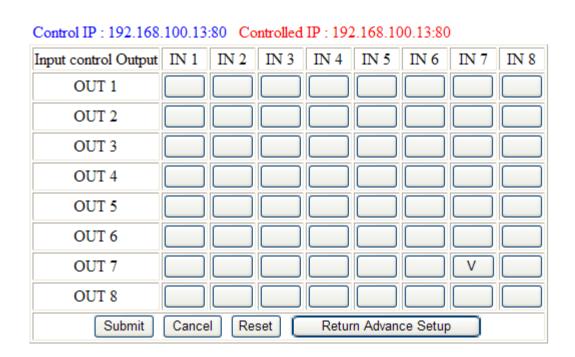
6. Control function by MAC address: The device (Output of 9212 Delux, 9222, or 9060 Series) is controlled by the Input of the **9212 Delux** or **9211**.

This feature allows the user to search for the device within LAN or WAN with just a MAC address without the need to **port forward or port trigger** the device.

	192 . 168 . 1 . 145	: 80
IP Kamera 9060 IP Address:	Name: admin	Password:
	⊙ Search by MAC 009060123456	C Search by IP
IP Kamera 9060 snapshot when DI has trigged	C Enable © Disable	
Manager IP Address:	192 . 168 . 1 . 31	
Trap when DI has trigged	C Enable © Disable	
Send e-mail when DI has trigged		
	192 . 168 . 1 . 81	: 80
IP Family 92series IP Address:	Name: admin	Password:
	⊙ Search by MAC 009222123456	C Search by IP
IP Family 92series controlled when DI has trigged	C Enable © Disable	C Dynamic ⊙ Static
	Submit Cancel Reset	Setting IN 1~8

If press the button "Setting IN 1-8" then you will get following page so you can setup DI and DO settings.

Setting IN 1~8 Configuration



In this screen you can select which Inputs activate which Outputs. From the picture above, when the DI (IN7) is detected the DO(Out7) will be activated.

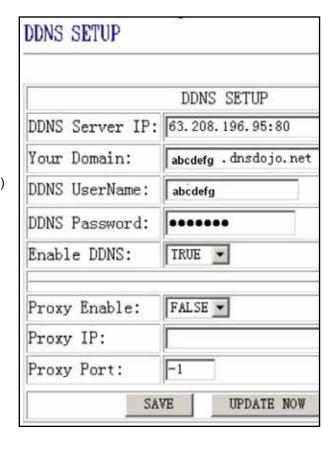
6.6 DDNS Settings

DDNS Server Settings: when your network connects to the Internet through ADSL, your ISP will give you a dynamic IP address. This might pose a problem for people who might want to access your 9216 in the local network because the IP is always changing This DDNS feature was added to solve this problem. Let's explain that using the DDNS service provided by www.dyndns.com:

First, we apply a domain name (for example, ippower 9212) in www.dyndns.com for 9212, set the domain password and select propel DNS server (for example, dnsdojo.net) for domain name resolve. Then input the Domain Name Server (host name), username, password, and etc in the DDNS web page of the 9212. Every time after that the 9212 will start or the user May select select to submit,

9212 will send a message package including its current IP address, domain name to www.dyndns.com, then the DNS server you choose will link the domain name of 9212 to its current IP address. So, the visitor can visit See the 9212 webpage by input the domain name of 9212 (aviosys.dnsdojo.net) In the address column in browser.

Note: When finish setting up the DDNS click SAVE to make sure changes are kept. Then press the UPDATE NOW button to send DDNS message package to DDNS Server immediately.



- 1. DDNS IP: Please fill in the IP address of DDNS Server and port number.
- 2. Domain: Please fill in your total domain name in Your Domain column.
- 3. DDNS user: Please fill in the DDNS domain name you applied here.
- DDNS password: Fill in the DDNS password, which you applying domain process in DDNS Server.
- 5. Enable DDNS: You can select true to enable DDNS function or select false to disenable it.
- 6. Proxy server setting: Sometimes the message package can not send to DDNS directly, you can transmit

DDNS message package through proxy server. You can use the proxy server by selecting TRUE in Proxy enable column. You can find the usable IP address and port of proxy server in some BBS, or you can use some proxy server searching software to search for usable IP address and port of proxy server.

- 7. PROXY IP: Please fill in the IP address of proxy server here.
- 8. PROXY PORT: Please fill in the proxy port here.

6.7 Email Setup

IP Power can setup the e-mail address so that the user can receive status changes from the sensors. When setting up the receiver e-mail address, IP Power will send its IP Address to the receiver.

Setup Email

MailServer:	123.com
Pop3Server:	abc.com
UserName:	9212delux
Password:	••••
Sender:	guest@123.com
Receiver1:	custo@ertedc.com
Receiver2:	
Receiver3:	
Subject:	9212 Delus
MailBody:	
	Save Send

For example:

- 1.) Mail Server: The server that sends e-mails out.

 Please make sure that the server is an available mail server.
- 2.) Pop3 Server: The server receive IP address (in Internet WAN) from your ISP for sending Internet IP address by E-mail when 9212 in Internet.

 To receive IP address in WAN, please fill your ISP e-mail receive server. In this part, please also set the DNS of your ISP in system configuration.
- 3.) Password: The password of this mailbox is no longer than 8 English characters.
- 4.) Sender: Please fill in the name of sender. The Mail Server must support SMTP and these fields must be entered correctly.

- 5.) Receiver: No longer than 50 English letters. Please use blank space to separate each receiver's e-mail address. After you have finished setting up this portion you will receive an email to inform you of the IP address of the IP Power 9212 every time you enter the webpage.
- 6) Subject: The subject of the mail to be no more than 50 English letters.
- 7) Mail Body: Please type the content of the mail here, it cannot be left empty.

After you have finished all of the above settings, click "SAVE" button to save your settings.

6.7 Time Scheduler

User can control the time ON or OFF of the 9212Delux DO through a preset time scheduler. Click the power schedule on the left side of the webpage. You can select and enter the time schedule settings.

Click "power schedule" to control outlet 1-4.

PIN 1/0 - 1 Schedule

PIN I/O	Date			Time	PARAMETER		I/O OFF
OUT1 (NC) _A	2005 ₋ 05	_	05 05	: 05	Disable	OON	⊙ OFF
OUT1 (NC) _B	2005 ₋ 05	_	05 05	: 05	Disable 🔻	OON	⊙ OFF
OUT2 (NC) _A	2005 ₋ 05		05 05	: 05	Disable 💌	OON	⊙ OFF
OUT2 (NC) _B	2005 ₋ 05	_	05 05	: 05	Disable 💌	OON	⊙ OFF
OUT3 (NC) _A	2005 ₋ 05		05 05	: 05	Disable 🔻	OON	⊙ OFF
OUT3 (NC) _B	2005 ₋ 05		05 05	: 05	Disable 🔻	OON	⊙ OFF
OUT4 (NC) _A	2005 ₋ 05	_	05 05	: 05	Disable 🔻	OON	⊙ OFF
OUT4 (NC) _B	2005 ₋ 05	_	05 05	: 05	Disable v	OON	⊙ OFF
	Sy	ystem Sta	rtup Po	wer Default Va	alue:		
	OUT1 (NC)	OUT2	(NC)	OUT3 (NC)	OUT4 (NC))	
	○ ON ⊙ OFF	ON	OFF	○ ON ⊙ OF	F ON O OF	F	
			Sub	omit			

If user wishes to control the power in one outlet of IP Power 9212, you can fill in the time in the power control column and choose on or off.

Support parameter to operate scheduler:

- * Disable / Just Once / every day
- * Work Day: every Monday to Friday.
- * Weekend: every Saturday and Sunday

6.8 Clock Settings & NTP (Network Time Protocol)

- * User can enter the internal clock settings: year, month, day, hour, minutes and second.
- * NTP function: customer can synchronize the time of 9212 to the Internet web address time.

Setup DateTime

2006	_ 11	_ 29	11	: 22	: 27
P Server	IP Addre	ess:	e of a le	AVOV	11/22
192	43	244	18	TimeZ	ο n a: Π

Please refer following the NTP server IP address:

- * 131.246.9.116
- * 139.18.25.34
- * 128.176.191.9

Note: To work NTP, please do set up in e-mail and have to receive e-mail from 9212.

6.9 Network Wakeup

Remote Wake up PC by MAC address in Ethernet (LAN) Use Network port (RJ45), you can wake PC on WAN by PC `s MAC address.

Wake On LAN (WOL) premise:

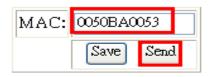
- (1) The main board needs to support "WOL" function. There must be a port to connect to your network card. If your Main board supports WOL, you can enable this function in BIOS setting, you could find this function in Power Management of BIOS setting.
- (2) Your network card must support "WOL", remember to connect your connect cable to Main board or the network card can not send "power on" message to your main board.

After setup in main board and network card, you can use WOL function by following two-step:

Step 1: Log in 9212 web page and go to "Network Wakeup"

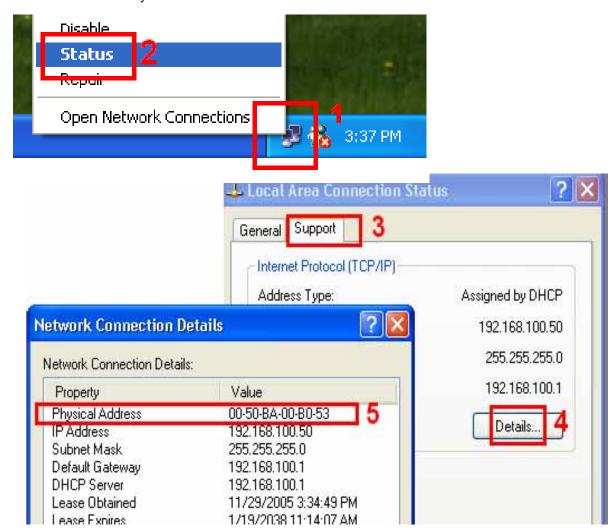
Step 2: Type in your MAC address then press "send" – the PC will be power ON.

Network Wake Up Setup



Note:

- If the Network card is not onboard card, it needs to connect with your Main board by cable. Please refer your network card connection
- You can get your MAC address in PC, please refer following pictures: Go to Network sign → Status → Support → Details Then the value in Physical Address " is the PC` MAC address.



6.10 Firmware Update

If no firmware to update please do not go to this page.

As received new firmware, user can gain more functions for IP Power 9212 through firmware update. Click the firmware update on the right side of the page; the following window will pop up.

Step1 : Click "firmware update ", you will see follow webpage :

Firespre Opdate				
request to being	Update button, please walt while the upda processed. After update is completed, the automatically. You can re-login afterward			
	Update Cancel	ī		

Note: Do not click "update" if no firmware file update.

Step2: Click update button, the following window will pop up.



Step3: Click the Brower button to find the corresponding update file (you can download it from our web site or ask it from the dealer), then click Update button to start update firmware. When the update is finished, you must wait one minute before you restart the IP Power.

NOTICE:

- * Due to network transfer unstable, to update the firmware (BIN) file, please arrange in Ethernet-Local LAN.
- * Please check with your reseller /distributor / importer for the update news.
- * If update fail please refer chapter 11 " Webpage Customization "

Step 4 after finish update please waits some second and then re-log in



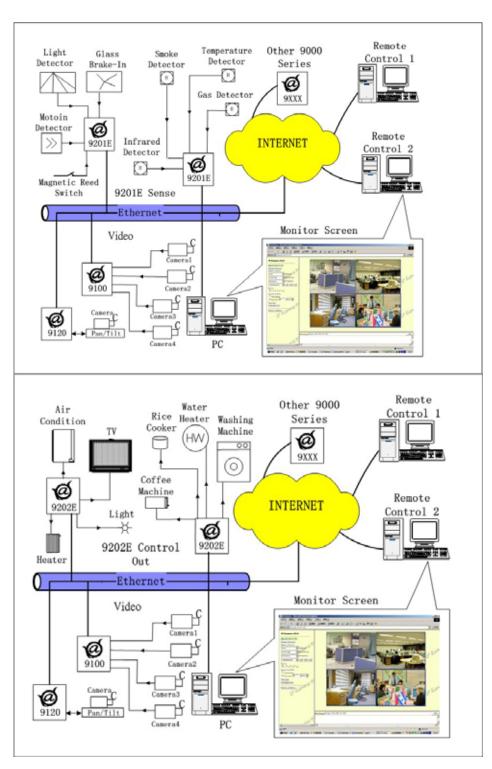
PS: If use DHCP please enable DHCP

Note:

- 1) If the Port is 80 then you can directly update.
- 2) If update fail, you can manual reset the device and update again.

7. Associated with other IP network product

You can associate the IP Power 9212 with other IP network product of OUR in your home Ethernet, such as IP Kamera 9000 network camera, IP Video 9100 network video server and IP Sensor 9201, IP POWER 9202 Output E to monitor the equipments or sensors installed in the doors or windows. This is an economic solution to achieve the network monitor, detection and control.

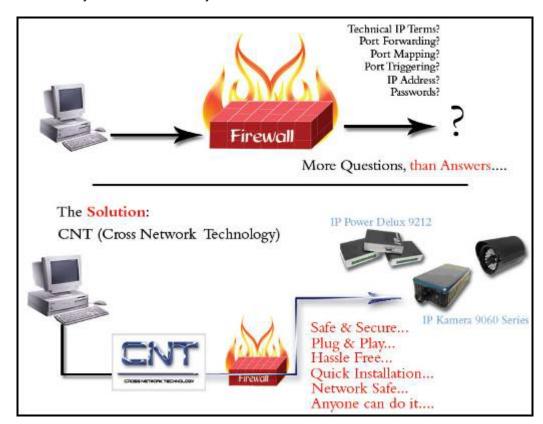


8. CNT (Cross Network Technology)

8.1 What is CNT?

What is CNT?

CNT or Cross Network Technology was developed to create a hassle free and networking safe system which allows IP Products to be setup with minimal network knowledge and minimal setup time. With CNT anyone can setup the device without the technical knowledge like TCIP, Port Forwarding, Static and Dynamic IP, and other confusing networking terms. CNT ultimately save users time, manpower, frustration and unnecessary costs. It makes everyone's life easier.

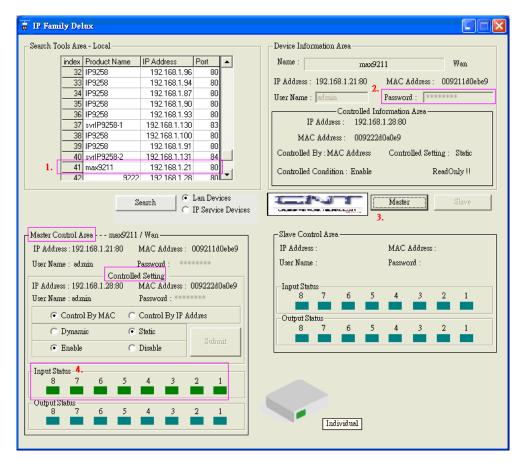


8.2 IOTracker Software

Note: IP Server must be enabled on your device's webpage. By default IP Server is enabled.

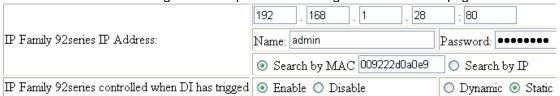
8.2.1 Setting up Master Control IOTracker

* Only 9211 and Input box of 9212 Delux



- 1.) Execute I/O Tracker.exe: In Search Tool Area, device(s) located in LAN will display automatically. Select the 9211 device
- 2.) Type in the device username & password in the section on the right.
- Press "Master" and your settings will be displayed at the left bottom corner for Master Control Area.

*These Master Control settings will correspond to the setting in the devices webpage.

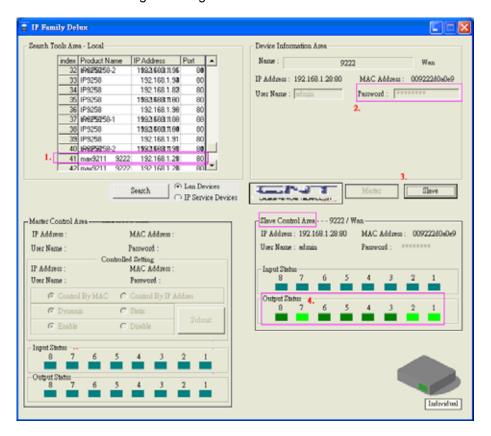


4.) After the connection has been made, to test the device the user can control Input status button in Master Control Area. This basically mirrors the manual test buttons located on the 9211. The Input status button in Slave control area can not be pressed or controlled.

8.2.3 Setting up Slave in IOTracker

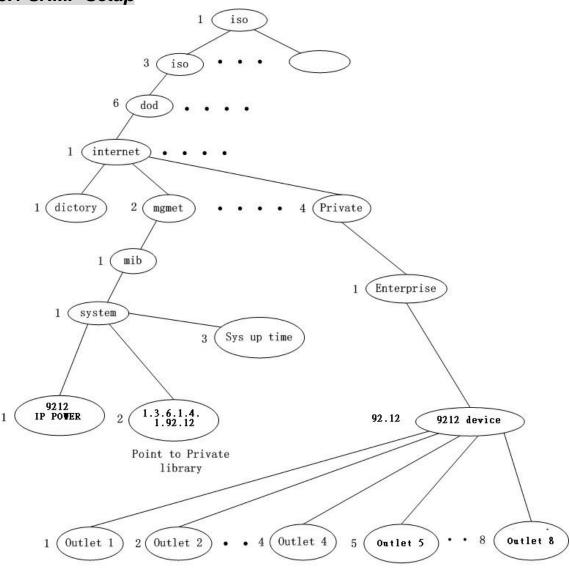
- * Only 9222 and Output box of 9212 Delux
- 1.) Execute I/O Tracker.exe: In Search Tool Area, the any device(s) in LAN will display automatically. Select the 9222 device
- 2.) Type device password in the section on the right.

3.) Press "Slave" and a message at the right corner for Slave Control Area



9. Customization & Integration

9.1 SNMP Setup



Return value =1; the relevant outlet is power on Return value =0; the relevant outlet is power off

9.2 Http Commands

Http Commands Syntax:

- a.) http://IP Address/Set.cmd?CMD=Command {Http Command syntax or format}
- b.) http://username:password@IPAddress/Set.cmd?CMD=Command {Adds username and password in command line} For IE6.0 and under version
- c.) http://IP Address/Set.cmd?user=usename+pass=passwordCMD=command {Add username and password in command line.} For all IE version, include 7.0 and above

Note:

IP Power 9202 Output Pro has predefined Relay Statuses.

Outputs 1 - 4: **Normal Closed Relay** (NC)
Outputs 5 - 8: **Normal Open Relay** (NO)

(The relay status of the outputs cannot be changed: Meaning that Output 1-4 will always be Normally closed and Outputs 5-8 will always be Normally Open)

can contr ol the 9212 's

actio

User

n directly though the HTTP orders.

The syntax of the HTTP commands are listed below:

Command format: http://admin:password@ipaddress/Set.cmd?CMD=CmdType

*Http Function of 9212:

1. SetPower: to control I/O -

Command format: http://admin:password@ipaddress/Set.cmd?CMD=setpower+Oulet=On/Off

Example 1.

Place command

http://192.168.1.147/Set.cmd?CMD=setpower+P63=1+P64=1+P65=1

Returns the following message:

P63=1,P64=1,P65=1,

HTTP/1.0 200 OK Connection: close

What this means is:

P6X: Represents that this output message is from 9202 Output Module (The P61 corresponds to the output port number. **P61** = Output Module Port 1 **P62** = Output Module Port 2 and so on up to **P68**).

The 0/1 after each Output: Represents whether there has been a status change or not.

0 = Keep Current Status

1 = Change Current Status

So for our current output message:

P61=0, P62=1, P63=0, P64=0, P65=0, P66=0, P67=0, P68=1 HTTP/1.0 200 OK Connection: close

P62 = 1: Output 2: Relay status - Closed P68 = 1: Output 8: Relay status - Open Please refer to the chart provided for more information:

Output Number	Output Status = 0	Output Status = 1	
Output 1: (NC)	Status = Closed	Status = Open	
Output 2: (NC)	Status = Closed	Status = Open	
Output 3: (NC)	Status = Closed	Status = Open	
Output 4: (NC)	Status = Closed	Status = Open	
Output 5: (NO)	Status = Open	Status = Closed	
Output 6: (NO)	Status = Open	Status = Closed	
Output 7: (NO)	Status = Open	Status = Closed	
Output 8: (NO)	Status = Open	Status = Closed	
NO = Relay Normally Open NC = Relay Normally Closed			

GetPower: To read Output status - read parameter as follow

Command format: http://admin:password@ipaddress/Set.cmd?CMD=getpower

http://admin:12345678@192.168.1.100/Set.cmd?CMD=getpower

Output message will return the follow:

P61=0,P62=1,P63=0,P64=0,P65=0,P66=0,P67=0,P68=1 HTTP/1.0 200 OK Connection: close

What this means is:

P6: Represents that this output message is from 9202 Output Module (The P61 corresponds to the output port number. P61 = Output Module Port 1 P62 = Output Module Port 2 and so on).

The 0/1 after each Output: Represents whether there has been a status change or not.

0 = Keep Current Status

1 = Change Current Status

So for our current output message:

P61=0, P62=1, P63=0, P64=0, P65=0, P66=0, P67=0, P68=1 HTTP/1.0 200 OK Connection: close

P61 = 0: Output 1: Off P62 = 1: Output 2: On

P68 = 1: Output 8: Not Connected (Output Status Relay Open)

Please refer to the chart provided for more information:

Output Number	Control Status = 0 (Off)	Control Status = 1 (On)
Output 1: (NC)	Status = Relay Closed	Status = Relay Open
Output 2: (NC)	Status = Relay Closed	Status = Relay Open
Output 3: (NC)	Status = Relay Closed	Status = Relay Open
Output 4: (NC)	Status = Relay Closed	Status = Relay Open
Output 5: (NO)	Status = Relay Open	Status = Relay Closed
Output 6: (NO)	Status = Relay Open	Status = Relay Closed
Output 7: (NO)	Status = Relay Open	Status = Relay Closed
Output 8: (NO)	Status = Relay Open	Status = Relay Closed
0 = No change to the relay status 1 = The relay status has been changed		

3.Getlo: To read Input status: Read P5 (Input status)

Note: For Input Status

Switch Set on Off = Wet Switch Set on On = Dry

Default Settings (when no device attached):

Wet Contact: 1-4 = LED Off Dry Contact: 5-8 = LED on

Command format: http://admin:pasword@ipaddress/Set.cmd?CMD=getio

http://admin:12345678@192.168.1.100/Set.cmd?CMD=getio

Output Message will return:

P51=0, P52=1, P53=0, P54=1, P55=0, P56=1, P57=0, P58=1

What this means is:

P5: Represents that this input message is from 9201 Input Module

(The P51 corresponds to the output port number. P51 = Input Module Port 1 P52 = Input Module Port 2 and so on).

The 0/1 after each Output: Represents whether there has been a status change or not.

0 = Keep Current Status

1 = Change Current Status

So for our current output message:

P51=0,P52=1P53=0,P54=1P55=0,P56=0,P57=0,P58=1HTTP/1.0 200 OK Connection: close

P52 = 1: Output 2: Status - On P57 = 0: Output 7: Status - Off P58 = 1: Output 8: Status - On

http://admin:1234567@192.168.1.100/Set.cmd?CMD=Getlo

Please refer to the chart provided for more information:

Input Number (Default)	Default Status	Status Change
Input 1: Wet	Status = Off	Status = On
Input 2: Wet	Status = Off	Status = On
Input 3: Wet	Status = Off	Status = On
Input 4: Wet	Status = Off	Status = On
Input 5: Dry	Status = On	Status = Off
Input 6: Dry	Status = On	Status = Off
Input 7: Dry	Status = On	Status = Off
Input 8: Dry	Status = On	Status = Off
0 = Status Off & LED Off	1 = Status On & LED On	

9.3 Webpage Customization

Customer can use our Web page SDK to amend the word and background pictures for your 9212. If not familiar to write webpage, please do not do this amendment.

Important Notice:

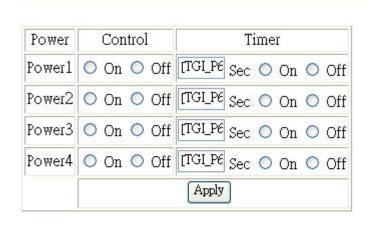
- 1. Each file does not over the original file size.
- 2. The character word part does not over the original amount. For instance: "setup " it is 5 characters.
- 3. Do not amend the structure of web page can only amend words and background picture.
- 4. Only support HTML langrage to amend the web page.

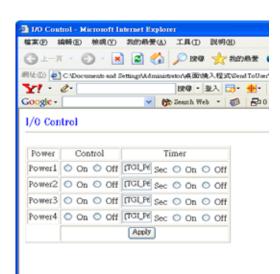
Step 1: Open the 9212 Web page SDK file, and choose the web page planned to amend. For example: web page "ipcontrol " html file "



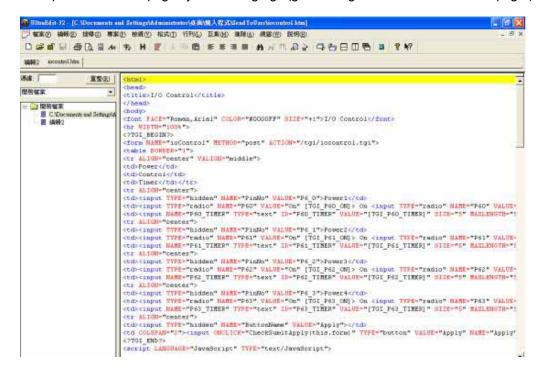
Step 2: Open amend web page "I/O control " html file:

1/0 Control

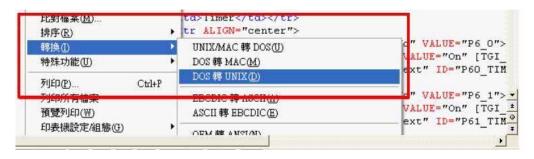




Step 3. Amend web page by HTML langrage (get from right click as in amend web page"):



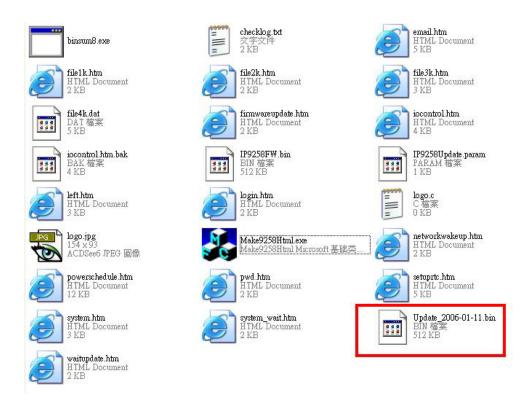
Step 4: Save file format as "UNIX": Like choose "DOS to UNIX



Step 5. After amend the other 9212 web page you plan to amend. Please open program "Make9212Html" in 9212 web page SDK and just press" make html patch".



Step 6. There will be a new file "Update_2006-01-11.bin" which is the BIN file include the amend web page. Please follow 9212-update procedure to update the firmware BIN file. Please note the Update procedure must be done in **port 80**.

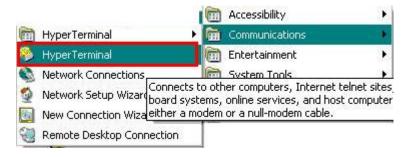


Note: program "Make9212Html.exe" and amend web page must in same file.

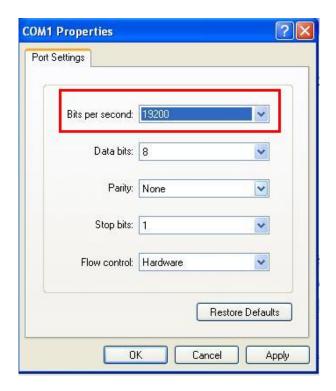
* If update fail and can not get IP address by IP EDIT, please use RS232 jack (DB 9 Cable) connect with the PC and 9212, and you can get IP address to log-in and update again. Please refer follow step:

1.POWER OFF the 9212

- 1. Use DB9 cable connect to the **COM1** of PC and the RS232 of 9212
- Execute WIN program " Hyper Terminal": please go to "Start" --> " program" " Accessories " --> " Communications " → "Hyper Terminal".



Set the "Bits per second" as 19200 at COM1 (Must at COM1)



- 3. Then power ON 9212 you will get message in Hyper Terminal.
- 4. Please check the message and get your IP address.

```
DHCP Not Enable!!!
config_g gateway ip:c0 a8 64 1
 dhcp client not enable
 date c0a8 6/01
 MyNowIP:192.168.100.104.
 config.ipaddr : 192.168.100.104:80
                 : 192.168.100.1
 config.gateway
 config.dnsserver: 168.95.1
            : 192.168.100.104
 MY_IP
             00-92-58-00-01-c3
 MY MAC
 ===== TF-33x WebControl SDK V1.30 ======
wapLogin Timeout, IP:0.0.0.0,153
 [***LastestUpTime:2006-02-17 08:43:27***]
 [****SystemUpTime:2006-02-17 11:26:59***]
```

- 5. Use this IP address to update again. We supply original firmware V1.22 for update f
- 6. Log in this address to update again.
- If still cannot finish update successful, please check if create BIN file too big.
 If need to ship BIN file, please use bin file V1.22.bin in SDK to update back to factory version.

10. FAQ (Frequently Asked Questions)

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

A1: Turn on the power normally, and then click the ipedit.exe program to enter the web page. Type in the username "super user" (there is a space between super and user) and press ok then press the reset button in 9200; it will back to the default settings. Now you can enter the administration page.

Q2: I cannot open the IE web page, why?

A2: Please update your IE or use the up-to-date version of Netscape browser.

Q3: Why the on/off operation can work immediately?

A3: if you operate the IP Sensor 9201 Input in Ethernet, the operation will work immediately. If you operate it through the Internet, the response speed depends on the situation of the network. Normally the delay is not obvious because the date need to be transported during operating the IP Sensor 9201 Input is very little.