IP Power 9850XX

User Manual



Version: 1.01A

Firmware Version: 1.13

Date Released: March 2020

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

IMPORTANT NOTICE

- 1. IP Power 9850XX 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 provided by us.
- 4. Do not shake the IP Power 9850XX in any fashion
- 5. Please contact the dealer If IP Power 9850XX is not working properly.

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Welcome

Introduction

IP Power 9850XX is a new generation of the Power Distribution Unit (PDU) & Remote Power Control (RPC) system.

With embedded web server and **HTTPS** protection, 9850XX supports higher grade security as working on Internet. User can control power easily and more safely through the web browser in Windows, Android or iOS system, like Internet Explorer (IE), Google Chrome, Safari web browser or control through APP in Android or in iOS system.

With 4 buttons on device top, it allows user to direct control manually to each port ON/OFF with fingertip without web browser / APP , also allows remote control power on/off up to **4 separate** devices via network .

As support **SSL & SNMP**, user can use public email like Gmail / Hotmail / Yahoo Mail to get the email as the ON/OFF status changed . User can also **control** by **e-mail** without doing port forwarding / port mapping and search the other IP Device in webpage directly and quick .

9850XX supports **Auto Ping**, **Time Scheduler** which is more suitable for factory / commercial / office / home automation . User can get the device status in LOG information or in remote IP address which sent to get LOG message from 9850 (SYSLOG) . .

For system integrator, there are several popular developing tolls like HTTP/CGI command, **SSH/Telnet**, **SNMP**, Modbus TCP/IP & BACnet TCP/IP.

The various applications of the 9850XX includes:

Power Management, Server Management, Internet Controllable Timer,
System Integration, Remote Power Control in Remote locations etc.

User Friendly . Convenience & Powerful ,





Product Overview

Features :

- 1. 4 port Remote power controller for power On, Off and Reboot.
- 2. Web Server built-in design, directly control by web browser in Windows , Android or iOS system like Internet Explore (IE), Google Chrome and so on.
- 3. 4 Buttons Control: Direct manual hardware control each outlet without working on Web browser.
- 4. Support HTTPS, SSL, TCP/IP, DHCP, DDNS, SMTP, SSH/Telnet, SNMP, Modbus/TCP and BACnet/IP .
- 5. Power Surge protection & FUSE embedded in .
- 6. SYSLOG: Support Log function & send to assign IP address
- 7. Time Schedule can pre-set a suitable time to turn power on / off automatically .
- 8. Auto Ping for network control & segment management automatically
- 9. High grade components for long stability and performance
- 10. Back Up for quick setup for multiple devices like Time Schedule, Network Setting.
- 11. Support public e-mail -- @gmail.com, @yahoo.com, @hotmail.com.....etc. E-mail Control & Advice:
 - Receive e-mail with IPs device boot up.
 - POP3 Control-Control each outlet ON/OFF via E-mail. No need to do Port Forwarding.
- 12. Specific software developed by Aviosys and provided free of charge:
 - SDK Available: HTTP Command
 - Windows software "IP Power Center": Control Multiple Aviosys IP Power devices in one software
 - CNT software (Cross Network Technology)- allows user eliminate set up work on any Router without port forwarding, simply Plug & Play.
 - Support MQTT protocol.
- 13. 7 models for different power plugs available
 - IP Power 9850-FR France (NF C61-31)
 - IP Power 9850-UK United Kingdom (BS1363)

 - IP Power 9850-GE German (Schuko) IP Power 9850-AU Australia (AS/NZS 3112)
 - IP Power 9850-US USA (NEMA5-15R)
 - IP Power 9850-SW Switzerland (SEV 1011)
 - IP Power 9850-DK Demark (Type D)
- 15. Support APP for Android or iOS system:
- Android APP -- name "IP Power " free download in Google Play .
- iOS APP -- name "IPPOWER+ " free download in Apple App Store







Specification

Power input: 15A / 90-120VAC, 10A / 210-240VAC, 50-60Hz.

Maximum loading of each output: 10Amp

• Maximum of Total loading : **10Amp**

• Fuse protection : 10Amp

Dimensions: 200 x 140 x 50 mm (L x W x H)

Weight: 990g

Enclosure – Matel case in deep Gray color

• Operation **Temperature**: -10 \sim 60 $^{\circ}$ C or 14 \sim 104($^{\circ}$ F)

Minimum System Requirements

- Network & Web Browser & Internet Connection
- Ethernet Cable & Power Cord

Package Contents

- 9850XX Unit
- Installation CD: include Manual with SDK and IP Search Software

Interface Description

Outlook





9850FR





The above picture are model 9850GE /

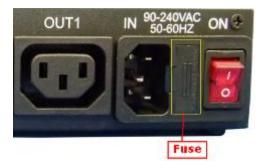
9850UK

Buttons Control	There are 4 buttons . As outlet turn ON , the buttons light will be ON
	RESET function: Please keep pressing the two buttons #1 and #2 for 7 seconds and then release. Then you will hear a long beep sound and 3 short beep sound which show the reset Successfully. After reset, all the settings will be back to Default.
4 Outlets	There are 7 models - 9850FR (NF C61-31) - 9850UK (BS1363) - 9850GE (Schuko) - 9850AU (AS/NZS 3112) - 9850US (NEMA5-15R) - 9850SW (SEV 1011) - 9850-DK
Power input	In this socket, there is power input and Fuse socket . The input power sends power to the 9850XX. Fuse: To prevent electrical surges from damaging the unit. The 9850XX comes with one spare fuse in the unit.
	Fuse TYPE: U/C GFE 10A 250V (PF)

	IN 90-240VAC 50-60HZ
Power Switch:	The Power switch turns on the input power.
Network: LAN	LAN 10/100 Mbps network

Fuse replacement

1.) The fuse is located between the power switch and the power input plugs.

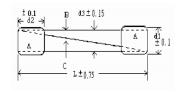


2.) Carefully remove the fuse holder with a flat screwdriver.



3.) The fuse can be purchased from electronic shops.

Specification: U/C GFE 10A 250V (PF)





Setting up your device

Before Starting

*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.
- Check the power input cable is working correctly.
- 3.) Check all cables to make sure there are no problems with it.

Hardware Connection

Before hardware connection, please make sure that there is no more than 2 net work card (include dynamic network card). If there are morn than two network card in your PC. You may not get the IP address of 9850XX

The default setting for 9850XX to get IP is DHCP mode - get IP form Router. If user do not use router and connect the 9850XX to your PC directly or connect to HUB which have no DHCP function , the connection sequence of network cableand power cord are different . Please refer following procedure :

A. 9850XX ----- Router ----- PC (with Web browser)

- 1.) Connect the Ethernet cable (RJ45) to the 9850XX to your local area network.
- 2.) Then connect the power cable into the power input port of the 9850XX.
- 3.) Connect the device that you would like to control to the output plug on the top of the 9850XX.
- 4.) Switching the power source to ON status, this switch is located at the rear of 9850XX.
- 5.) After power on for around 45 seconds, there is a short beep sound for 9850XX which means the system reboot successfully

B. 9850XX ----- PC (with Web browser)

If you select to connect to PC directly , please connect the RJ45 cable to 9850XX after 1 minutes as power on of the 9850XX device . power hear the beep sound of 9850XX DO NOT connect the RJ45 as power ON

1.) Connect the power cable to 9850XX and press the power switch to ON

- 2.) After 9850XX power on for around 45 seconds, there is a short beep sound for 9850XX which means the system reboot successfully
- 3.) Then Connect the Ethernet cable (RJ45) to the 9850XX to your PC.

Notice: This is very important for this procedure. Please do not plug the network cable to 9850first under this connection. (without Router assigned the IP to 9850)

- 6.) Execute the software IPEDIT.exe to get the IP as 192.168.1.169
- 7.) Please make sure the IP address of you PC is also 192.168.1.X / XX/XXX or you may not log in the 9850XX wepage in 192.168.1.169

Software Installation

The **Media Link - IP Family CD** comes with the device , it has all the necessary software to run and setup the device.

IP Power Software:

IP Edit (Required)

IP Power Center *(For multiple IP Power devices control purpose)

A. Installing Software

1.) Place the **Media Link-IP Family CD** into the CD/DVD Rom drive. The CD will auto run the file if user had pre-set, if not, please open the file "**autorun.html**"



- 2.) Click on the IP Power Section Bar
- 3.) Select the IP Power 9850XX
- 4.) All the available downloads for the 9850XX will be shown
- 5.) Download the required software **IPEdit.exe** by clicking on the download button.



B. Network Connecting by LAN

LAN connect by IP search software "IPEDIT"

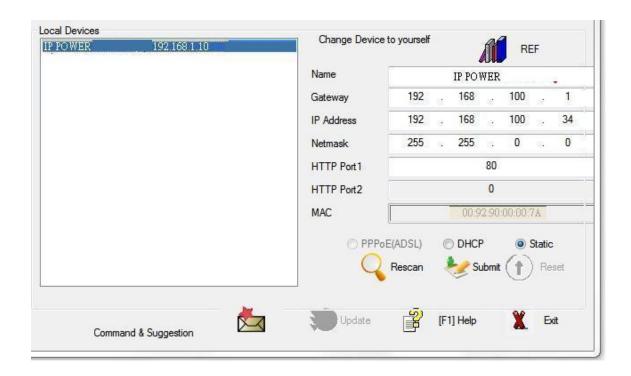


IP Edit is a search tool designed to search, configure, or access the IP Power 9850XX from a local network computer.

IP Power 9850XX Default Login / Password

Please use our IP Search tool "IPEDIT.exe " to get the IP address of 9850XX.

1.) In the local devices section user will see user device shows up if connection is correct.



Default as DHCP status, 9850XX will auto get the IP address from user's router by the suggest hardware connection as following:

9850XX ----- Router ----- PC (with Web browser)

If there is no assigned IP to 9850XX by the connection , the 9850XX will change to FIX IP address:

• **Default IP**: 192.168.1.168 (While this is no DHCP apparently)

If can't see the IP in the area of Local Devices of IPEDIT.exe. Please disable the Firewall and Anti Virus software temporally and try again.

- 2.) Select the 9850XX device and the device information will pop up on the right.
- 3.) Check to see that the gateway IP and the IP Address (9850XX) match user current network.

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

For example:

If user has the following information regarding the 9850XX and user network

User PC Network:

Computer IP Address: 192.168.1.122

Gateway: 192.168.1.1

Sub Net mask: 255.255.255.0

Port: 80

User 9850XX in IPEDIT:

9850XX IP Address: 192.168.100.34

Gateway: 192.168**.100**.1 **Sub Net mask:** 255.255.**0**.0

Port: 80

Since the IP Address of the 9850XX is: 192.168.100.34

User will need to make sure that the first 3 segments of user 9850XX IP Address must match the first 3 segments of user gateway IP.

First 3 Segment of Gateway Address: 192.168.1.X

So user new IP Address for the 9850XX should be: 192.168.1.XXX

New Network Information

9850XX IP Address: 192.168.1.26 Gateway Address: 192.168.1.1

Local Computer IP Address: 192.168.1.122

Sub Net mask: 255.255.255.0

Port: 80

4.) Press the "Rescan" button to see if changes have been made.

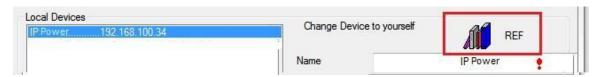
5.) Double click on the device in the local device section and an IE web browser with the device login will pop up.

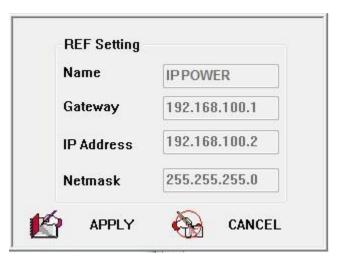
6.) Type in the default Login and IP Address to enter the device.

Default Login: admin Default: 12345678

Notice:

* User can click " REF " in IEPDIT to auto search proper IP setting for 9850XX. It will take few minutes to show the suggest wizard.





Please click "APPLY" as seeing the suggest wizard, click yes to ignore the remind message of IP being used and then type the Username and Password to change the IP setting.

Username: admin Password: 12345678

Notice:

Segment: The first 9 digits of the IP Address.

EX: The IP of user PC is 192.168.100.122. If the "Local IP Address" at WiFi Info is 192.168.100.

x (X can the value of 1~252), user PC can get into the webpage of 9850XX.

Please press "Rescan" to search the router nearby again if can not see user router in the list.

C. Internet Setup

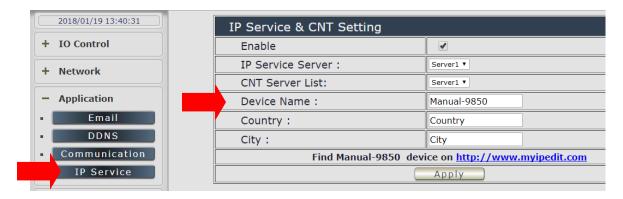
To connect the IP Power 9850XX on Internet, there are two ways

- Setup Port Mapping / Port Forwarding in your router. Please check your Router owner's manual.
- Use our own software "IP Power Center": Please refer to the "IP Power Center" manual in the CD

D. Using IP Service

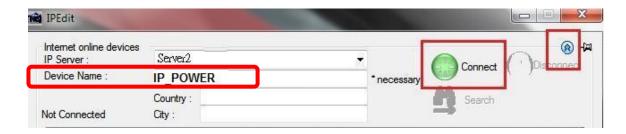
IP Service is a function which allows user to search for the device easily without having to remember long complicated IP address. Instead, if user know the device's name of user's IP Power device and user can easily find IP Address with IP Service. To log in the webpage of 9850XX on Internet, user still need to do the "Port Forwarding" in own router.

Before using "IP Service ", please change the device name of user 9850XX to avoid similar name in Host Server.



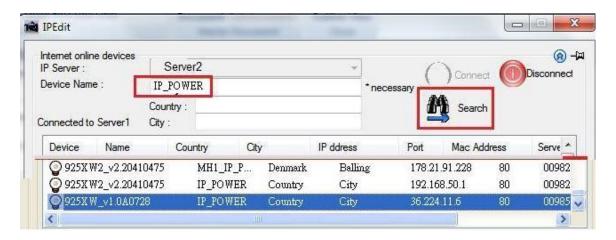
1.) Open IP Edit and select the server that user's 9850XX is designated to.

Hit the "Round Green color Connect button" on the top of IP Edit screen shot below.



- **2.)** Then type in the 9850XX Name that user have selected for the device and press the Search button.
- **3.)** Find user device and double click on the screen and a IE window will pop up connecting to user device. *User device must be Port Forwarded for the login screen to appear.

EX: The 9850XX device name as IP_POWER, and user can search the device easily:



4.) After user has connected to user device, type in the Login and Password for user device

Web Interface

Connect to your Device

Once the 9850XX has been setup correctly, log into the device.

First Option

- 1.) Go to IP Edit to find the device that is being used
- 2.) Double click on the device linked and an IE window will appear with the loading screen

Second Option

1.) Open Internet Explorer type in the IP Address of the device followed by the : sign. For example: http:192.168.122.188:9258

192.168.122.188 – IP Address

2.) Once you have typed in the IP address of the 9850XX and it is ready to be worked.



The default Username and Password for the 9850XX

Username: admin Password: 12345678

The Control Console

The Right side Menu of the Web Interface for controlling the functionality and setup of the IP Power 9850XX.



The IP Power 9850XX Console consists of six main sections which will be explained in details below.

- Device name & Hide or Display the left setting column (for smart phone control)
- Power Control: Controls, Schedule & Ping.
- Network: Setting
- Application: Email, DDNS, Communication & IP Service
- System: Management, Information, SysLog & Firmware
- Logout

Device name:

This section show the device name

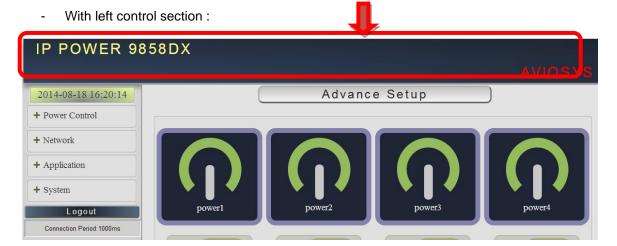
IP_POWER

You can change the device name here : Application \rightarrow IP Server \rightarrow Device name Change name "IP POWER 9850XX " as "Enjoy 9850XX "

Please change the name in English only and do not use symbol like !@#\$%^&*()_+

A. Device Name & Display / Hide the left setting section :

For Smartphone user to control 9850XX easily , user can select to show or to hide the left control section by pressing the blue area near device name for Smartphone control :



Without left control section:



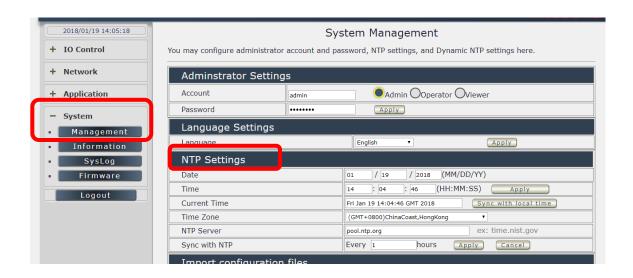


Information:

In this section, it shows Time at Year - Month - Date , Hours: Minutes: Seconds .



To setup the Time , Please go to "System \rightarrow Management \rightarrow NTP Settings " , please press "Apply" to save the new setting .



IO Control:

The IO Control Section allows you to directly / automatically control the outlets of the 9850XX as well as schedule Daily, Weekly, and Monthly power cycles.

There are five sections: Control, Schedule, Ping, Timeline and History.



A. Control

There are 2 setting pages in this Section. One is "Power Control" and another one is "Advance Setup"

A-1. Power Control:

User can do the following 3 basic operation in this page:

- 1. Manual control each port ON or OFF directly by pressing the power sign.
- 2 Power Cycle control: Manually Control the relay delay to turn ON / OFF. The relay cycle time can be set from 1 to 9999 seconds



User can seutp the time and the final status in power cycle as ON / OFF



For example: (sec = seconds)

Original Outlet as "OFF", select final status as "ON " & fill 15sec:
 After press power cycle button, the outlet will turn OFF for 15 seconds and then turn ON.

- Original Outlet as "ON ", select final status as "ON " & fill 10sec: After press power cycle button, the outlet will turn OFF for 10 seconds and then turn ON.

$$ON --> OFF (10 sec) \rightarrow ON$$

Original Outlet as "OFF", select final status as "OFF" & fill 8 sec:
 After press power cycle button, the outlet will turn ON for 8 seconds and then turn OFF.

$$OFF \rightarrow ON(8 sec) \rightarrow OFF$$

- Original Outlet as "ON ", select final status as "OFF " & fill 5 sec : After press power cycle button, the outlet will be ON for 5 seconds and then turn OFF.

Notice:

As use Latching Relay in IP 9850, there is no difference of **Normal Closed Relay** (NC) or **Normal Open Relay** (NO). As there is no power for 9850 device, **the relay status will keep as it is at ON or at OFF**.

3 Group Setting: User can control more than one outlet by press the right side "Apply "button. For safety concern, each port of 9858MT will turn ON or OFF one after one.



- Apply: Setup the ON/OFF by the buttons status.
- Inverter: Change the outlet status from ON to OFF, or form OFF to ON by one button contorl.

A-2 Advance Setup:

User can do the following 4 advance operation in this page:

Port Name setting

User can name each power by click the name above the power button The number of character is max. 12 characters and Please change the name in English only and do not use symbol like !@#\$%^&*()_+



Notification Setting :



Forbidden off manually:
 Stop to control ON/OFF in the webpage manually.
 9850 will follow control by HTTP/CGI command or by Schedule setting.

Forbidden Power cycle:
 Stop to "power cycle" control in the webpage manually . 9850 will follow control by HTTP/CGI command or by Schedule setting.

For example:

Forbidden outlet #1 & power cycle # 2. The manual control button will be grey and can not control as following:



- E-mail Alarm Setting:

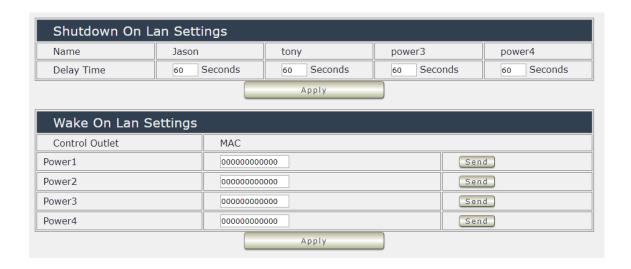
Use can enable /disable the e-mail alarm here. Please refer the page 33 to setup the email information in "Application " → Email .

The e-mail alarm section allows 9850XX to notify user by following situation:

- Receive E-mail with IP information & MAC Address as 9850XX device boot up.
- Receive E-mail as ON/OFF status change in each output.
- Beep Alert: User can setup the operation beep (short time beep) sound here.
- Default Power Status: The control section allow user to set the power status on ON or OFF or LAST when the device power Rebooted. The output will be same status as choose LAST before the device power turn off. To save the setting here, please click "Apply" button.

Note: Please change the name in English only and do not use symbol

Shutdown on LAN & Wake On Lan setting :



Shutdown on LAN

9850XX can be used to safely turn off the **WINDOWS or LINUX** system through Network. With this feature you can remotely shutdown any system which that is connected to the IP Power 9850XX through normal Windows / LINUX shut down procedure. Before operating the software shutdown function it is essential to install our software.

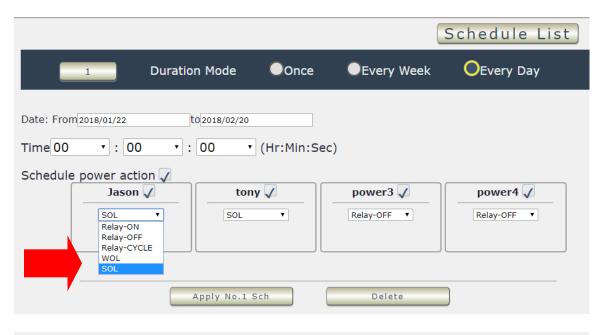
Please check the software in the SDK section of package CD.

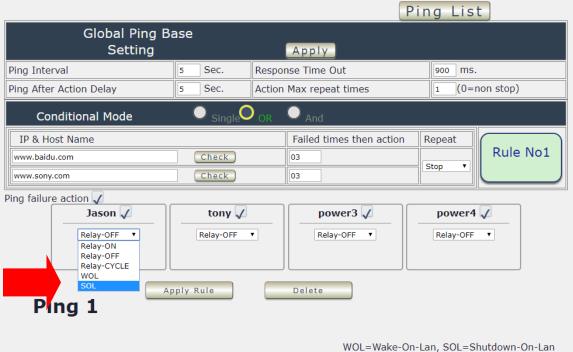
File name: Shutdown_On_LAN

NOTE: The delay time setup in this section is for "Shutdown ON LAN" procedure. Not for outlet ON/OFF function

- Wake up on LAN

This is a application for PC / Server / Main board which had been enable the "WAKE ON LAN" function in own setting. User need to know the MAC address of the PC /Server to be wake up.





B-1 Schedule

In this section , user can see the setting schedule list first up to 29 rules . To setup each schedule , please press "Schedule Setting", then user can get the "Schedule List" page as following:

Please click the button to switch between "Schedule Setting" & "Schedule list":



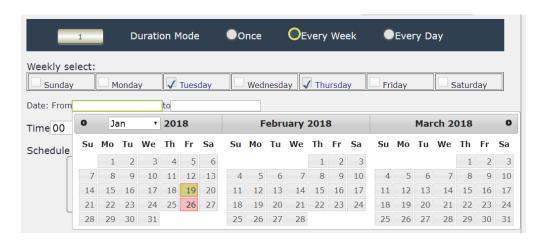


The schedule allows you to control the power outlet or turn ON / OFF/ RESET at assigned time

- Adding a Scheduled Event
- 1. Select the Action Duration:

There are 3 setting - Once , Every Day . Every Week

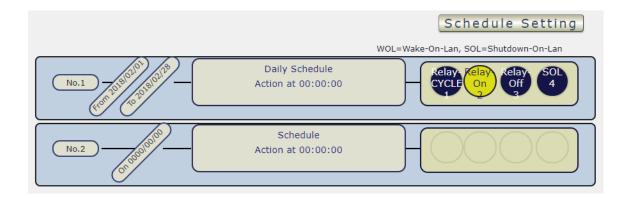
2. Select a Specific Date Range where the device will repeat the desired actions during the time specified.



- 3. Select the Time Period.
- 4. Choose the Action: Enable power # by clicking in the small square to mark " v ", and select one from the power action of OFF/ON/RESET as you need..



Once the scheduler has been Set Up , hit the "ADD No.:X Power Schedule" button and you will see your setting located on the bottom of the Action section .



Apply / Edit a Schedule Event :



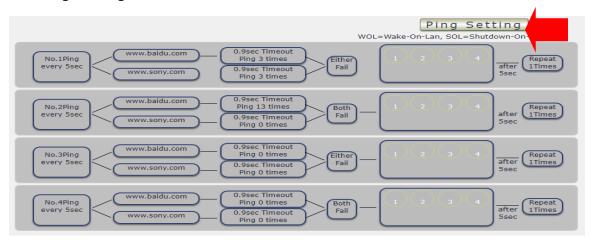
Please select the Rule you want to edit in Scheduler Table. , Change the setting like Duration , Date , Time and Action. Then Press "Apply Np. X Sch " button to confirm the setting and you will see the page refresh and new setting display in Scheduler list

- Delete - Click "Delete" button to remove a rule from the list .

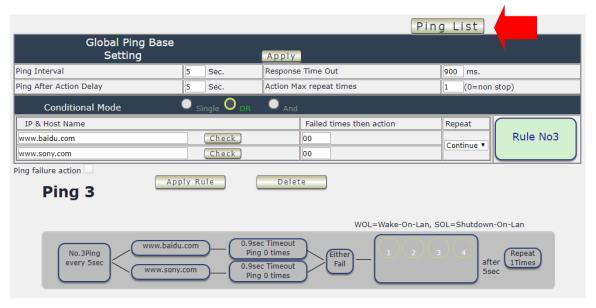
B-2 Ping

The Ping function allows the device to Ping an IP Address automatically to act as a watchdog to make sure the device getting Ping and working properly. Please Click the button to switch between "Ping Setting" & "Ping List". User can hide the setting section by press "Ping List" There are 4 rules for Ping.

Ping List Page :



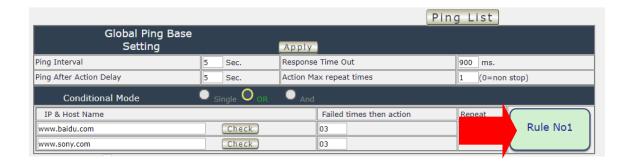
- Ping Setting Page:



There are 3 sections of the setting area:

1. Setting Rule Numbers:

User can click to select different rules numbers at the right side button "Rule No: X" as following pictures . There are 29 rules available.



2. Ping Base Setting:

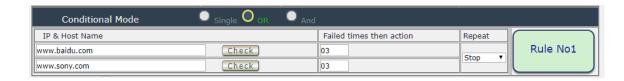


- Ping Interval: The number of seconds (Sec.) between each ping.
- Respond Time Out: The number of milliseconds (= ms.) of the device will wait for a
 response from the Pinged device if no ping is detected within this time it will be considered a
 Ping failure.
- Ping After Action Delay: After ping finished, do the action after setting seconds (Sec.)
- Action Max. repeat times: Set the times to execute the Ping Failure action
 Set 0 means action non stop Keep action & no limit times.

As setting finished, please click "Apply" to save the setting in this area, the webpage will refresh and user can see the final setting result. Ten different set up rules for different port.

3. Other Setting:

The setting here is for each rule.

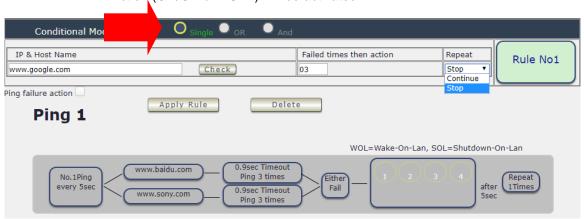


Logic Mode :

User can select the action activate by one / two IP Host failure or either one fail

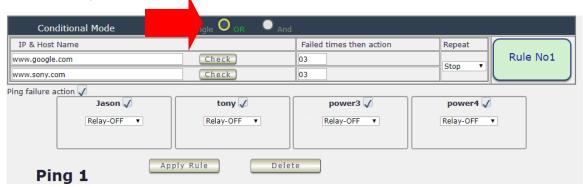
- Single: Execute Action by one IP Host failure.
- OR: Execute Action by either one IP Host failure as setting 2 pcs IP Host
- And : Execute Action by both IP Host failure as setting 2 pcs IP Host

Single: 9858MT will Ping one IP address. As the IP fail times reach to the setting times . Action (ON/OFF/RESET) will be activated .



OR: 9858MT will Ping 2 IP address. Either one IP fail times reach to the setting times. Action (ON/OFF/RESET) will be activated.

AND: 9858MT will Ping 2 IP address. Both IP fail reach to the setting times. Action (ON/OFF/RESET) will be activated.



- IP & Host Name : Input the IP Address (ex: 122.116.123.138) or Host web address (ex: www.google.com) user would like to Ping.
 User can use the "ping test" bottom to check the address valid or not
- Failed times then action: Setup the ping failure times for 9858MT to execute the setup ON/OFF / Reset action of setting.
- Repeat: After the ON/OFF/Reset action, user can setup the Ping action to keep ping (Continue) or to Stop Ping (Stop).
- Enable Ping function: In the selected Rules number, please select the outlet number power
 to activate as ping fails and then press "Apply Rule Action" button to confirm the setting.

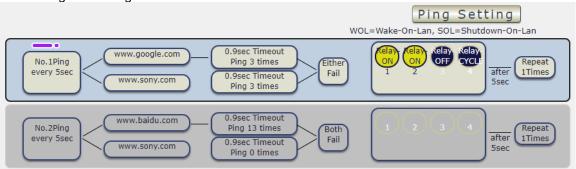
Ping failure action :

When the number of Ping Failures times have been reached. The device can be set to "ON, OFF or Reset "function

Reset: Can set up the time gap from OFF to ON. The "Sec "section is for action as Reset only.



The setting times range is 1 to 999 sec.



Select the number of Ping Failures that user prefer to do before the action is activated.

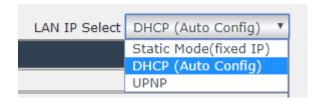
EX: Result of setting

Network:

There are 3 sections in this port: LAN Network, DNS setting and Port setting

LAN Network Settings :

The network status is connected by ether cable with RJ45 connector . There are 3 network connection way: Static IP / DHCP / UPNP



A. STATIC (fixed IP):

Setup IP address, DNS and Port manually. This allows the 9858MT to obtain an IP Address automatically from user's server connected to Internet. Recommended for users who need to control through Internet.

Please do fill up the correct gateway / port for login from Internet.

Please do fill up the correct DNS server for sending / receiving email (alarm) .



B. DHCP Mode:

Obtain IP address via DHCP mode . setup the DNS and port

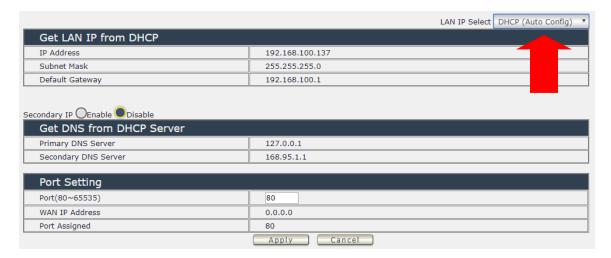
This allows the 9858MT to obtain an IP Address automatically from user's server connected to Internet. Recommended for non-advance users.

User can only revise the Host Name under DHCP mode. This is also the default setting for fast LAN connection solution.

As the IP from DHCP Service of user's router will be changed by router . 9858MT will remember last IP of 9858MT assigned by user's router in "Last DHCP state" for information

Please do fill up the correct gateway / port for login from Internet.

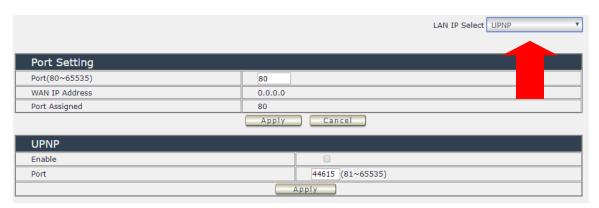
Please do fill up the correct DNS server for sending / receiving email (alarm).



C. UPNP:

With UPNP function , user can log in webpage through Internet without setting Port forwarding / port mapping in your router . No matter use "FIX IP " or "DHCP" , user can enable this UPNP function .

Notice: It support to pass through one router and may not work as 9858MT under multiple routers.



Please do fill up the correct gateway / port for login from Internet .

Please do fill up the correct DNS server for sending / receiving email (alarm) .

Application Settings:



A. Email

There are 2 sections in this part -- E-mail setting and POP3 Control:



Email Setting :

User can get e-mail advice as one of the following situation happen:

- Receive E-mail with IP information & MAC Address as 9858MT device boot up.
- Receive E-mail as ON/OFF status change in each output .

Notice : To send out the e-mail successfully , please double check the setting of user DNS . (Network → DNS setting)

The 9858MT allows user to send from public e-mail account, such as @gmail or @hotmail or @yahoo.com

SMTP Server: This is the mail server of sender.

If user select @gmail or @hotmail account as SMTP Server , 9858MT will fill the SSL & Port automatically

Port: This is the port of SMTP Server. Most common port to send out e-mail is port 25

• Start TLS: It depends on the inquire of the email server to enable or disable this inquire.

As use Gmail account, please enable this function.

• User: Login for the e-mail address. Ex: 9858MT@gmail.com

Password: Password for the e-mail address. EX: 12345678.

● From: Mail sender address to send the E-Mail out . Ex.: <u>9858MT@gmail.com</u>

• To: Mail receiver address to get the E-Mail in Ex.: 9223@hotmail.com

E-mail test: Can help to check if the e-mail setting works.

Apply: To store the setting in this section .

For example:

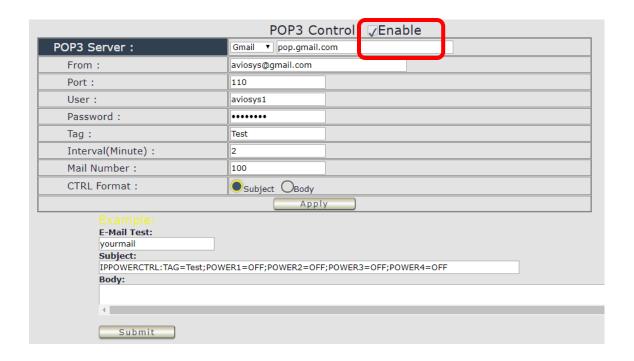
1. Get Email alarm as outlet changed:



POP3 Control

User can control each port turn ON or turn OFF by e-mail. The command format is limited .

Please enable the function first.



Settings Section:

To set up 9858MT be controlled by e-mail, user need to know the both sender's e-mail address and receiver's e-mail account Name and Password.

- POP3 Server: This is receiver's mail server
- From: Sender's email address. Ex.: aviosys@gmail.com
- **Port**: This is the port of POP3 Server.

If user select @gmail or @hotmail account as SMTP Server, 9858MT will fill the SSL & Port automatically.

- User: Username to login the receiver's e-mail Ex.: aviosys1 or aviosys1@gmail.com
- Password: Password for the e-mail address. EX.: 12345678
- Tag: User can use any message for 9858MT to recognize this mail as 9858MT command mail.

EX.:

As type "Test "in TAG area, the command contents is as following:

IPPOWERCTRL:TAG=Test;POWER1=OFF;POWER2=OFF;POWER3=OFF;POWER4=OFF

- Interval (minutes): The period of time between Send and Receive the command e-mail.
- Mail Number: For 9858MT to search as command mail in the number of your email receiver latest. EX.: setup 20 that 9858MT will check the latest 20pcs email in receivers mail box for the 9858MT command mail

• CTRL format : Control format by subject or by body (e-mail contents)

For example: Use Gmail as sender and receiver

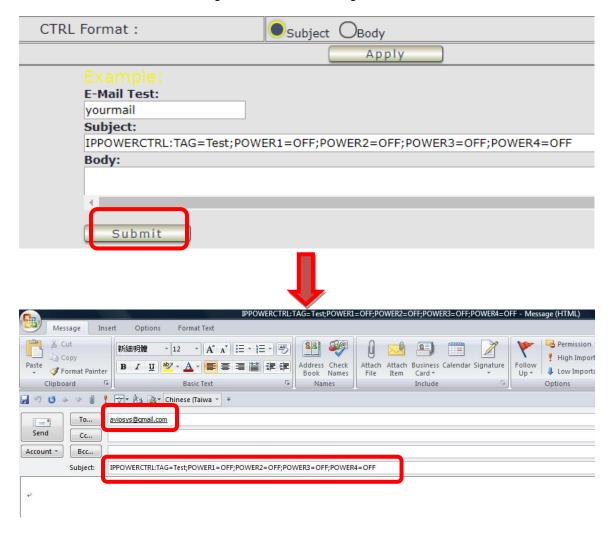
- Sender`s e-mail: 123@gmail.com

- Username to log in sender's @gmail : 123@gmail.com or abc@def.com

- Password to log in sender's @gmail: 12345678

Command format & Example:

User can get the e-mail command contents in the section . And execute an e-mail as press "Submit " if user has e-mail setting in the PC as following :



Command format:

IPPOWERCTRL:TAG=Test;POWER1=OFF;POWER2=OFF;POWER3=OFF;POWER4=OFF

There are 2 section of the command

1. IPPOWERCTRL:TAG=Test

This is command part. Beside the tag message part (like Test on above example) user can change in setting section, the other command must be **CAPITAL** and are fixed content.

2. ;POWER1=OFF;POWER2=OFF;POWER3=OFF;POWER4=OFF

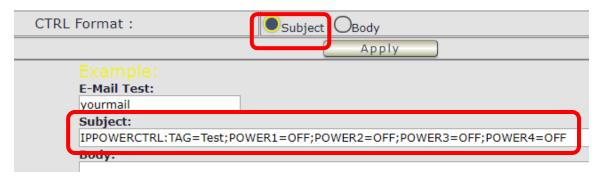
This is to set the outlet number (POWER1=) and action (ON/OFF) , user can only control 1~4 port ON/OFF by e-mail. Do each outlet command

EX.: Put "14ON" in tag section and place the command as following: (at subject or body depends one user's setting):

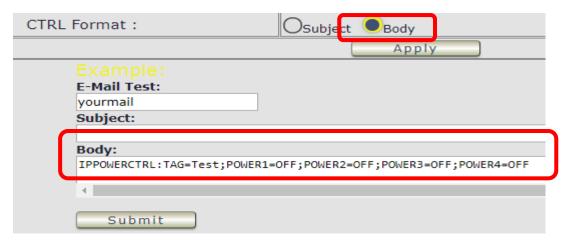
IPPOWERCTRL:TAG=14ON;POWER1=OFF;POWER4=ON

E-mail example:

Execute e-mail command by "Subject "



Execute e-mail command by "Body "



B. DDNS

The DDNS section allows user to setup the 9858MT with a DDNS server (i.e. www.dyndns.com). After the server has been setup correctly, enter the necessary information into the 9858MT DDNS settings.

Note: The DNS server will have extra change as apply new account.

	DDNS		
DDNS Setting			
Service Provider :	None ▼		
Account :	None Dyndns.org freedns.afraid.org www.zoneedit.com		
Password :			
Domain Name :	www.zoneedit.com www.no-ip.com		
Apply	Cancel		

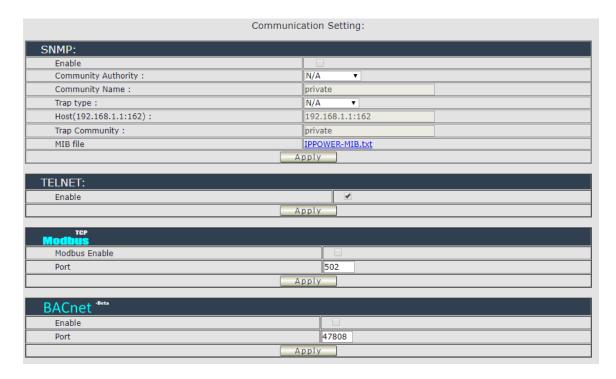
Account: the Username / account name of DDNS account

Password: the Password of DDNS account

Domain name: The DDNS name user apply. Ex.: abc.dyndns.org

C. Communication

9858MT supports SNMP, SSH/Telnet, Modbus TCP and BACnet TCP

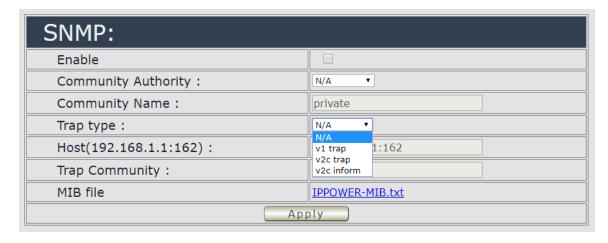


1. SNMP

This section is for development of system integrator who is familiar with SNMP knowledge. In community Authority, user can select "Read only" or "Read / Write"



In "Trap "type, user can select "v1 trap", "v2c trap" or "v2c inform"



In MIB file section, user can get MIB information.

2. SSH/Telnet

In This section is for development of system integrator who is familiar with SSH/Telnet to enable /disable the

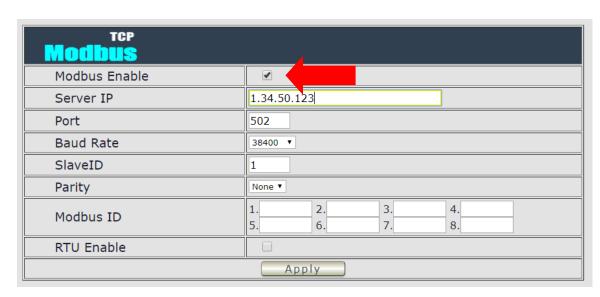


Please refer page 50 for SSH/Telnet contents .

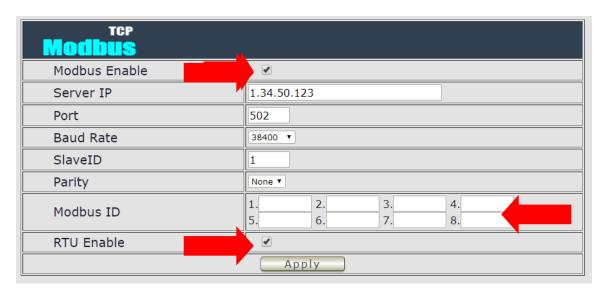
3. Modbus TCP

A. **Modbus**: We supply 3 models of ModBus control

C-1 ModBUS TCP: Just Enable or disable this function



- C-2 Modbus Gate way model : Need to Enable Modbus , Enable RTU & fill Modbus ID .
 - C-3 Modbus RTU: Need to Enable Modbus, Enable RTU & fill Modbus ID.



4. BACnet TCP

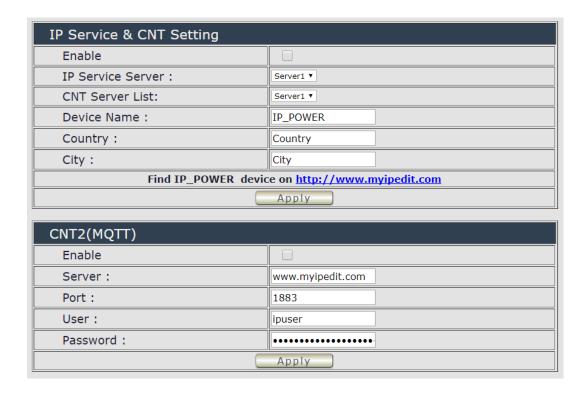
In this section is for development of system integrator who is familiar with SSH/Telnet to enable / disable the function and to setup it`s port .



D. IP SERVICE

In this section, user can setup

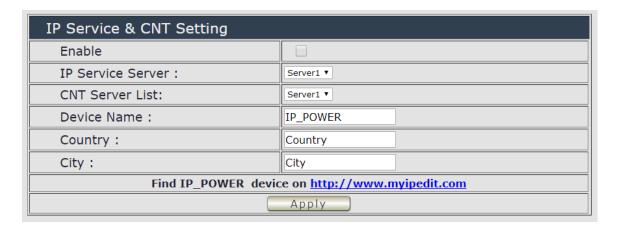
- IP Server & CNT (Cross Network Technology) ,
 - CNT2 (MQTT)



5. IP Service & CNT Setting:

The IP SERVICE allow 9858MT to be accessed easily on the internet by our IP Power Center or IP EDIT. With this feature anyone can find its device with no problems.

IP Service Server: Allows user can find user of 9858MT on the internet without having to remember long IP Addresses. Instead user can just remember the name of user device.

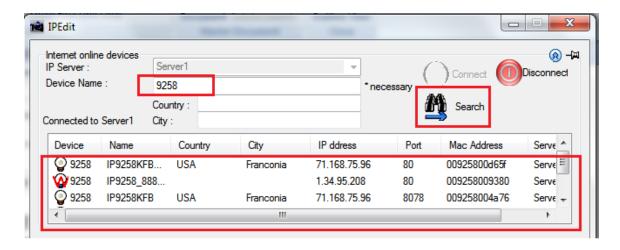


- Enable: Enable or Disable this function by clicking the small box.
- IP Service Server & CNT Server List: For easily setting, please select same server number for the 2 servers.
- Device name , Country & City :

User can search the 9858MT by Device name, Country or City.

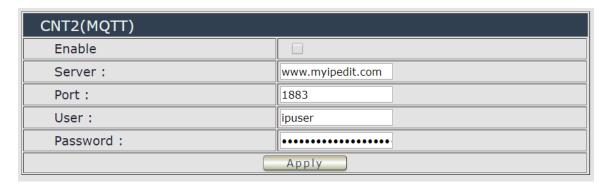
This allows the device to be accessed easily on the Internet, user no longer have to Port Forwarding, user device to be able to use it. Only some devices are CNT compatible.

Please refer page #14 for the function of IP Server



6. CNT2 (MQTT)-

For developing only. 9858MT supports MQTT fucniton. Please contact with your distributor for the details if you would like to develop own system.

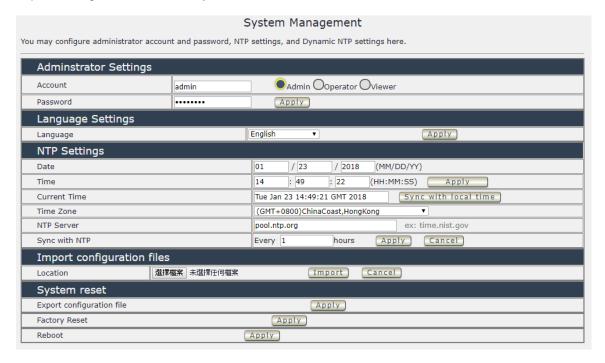


System Setting:



1. Management

In this section there are 5 settings: Administrator setting, Langrage Settings, NTP settings, Import Configuration files and System Reset .



1-1 Administrator setting

In this section allows user to change password for 3 different authorization level . The account name and password can be changed , but each Authorities only support one Account name & one password.

Administrator: The *Administrator* has the authority to create other users, remove users, and control the device. 9858MT will ask to log in again if change the Default Setting here.

Operator: The operator can only control the setting of "IO Control" section but can not see other page of 9858MT.

Viewer: The viewer can only see the "IO Control" section, but can not see other page of 9858MT.

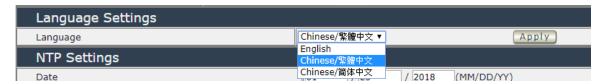
Default Setting of the Authorities:

Authority	Account name	Password	
Admin	Admin	12345678	
Operator	user	user	
Viewer	guest	guest	
Note	Please amend the password as number or English character from 1 to 8 characters. Do not use special symbol like ""; : ~! @ # \$ % ^ & * ()		

Please click "Apply" button after change the account name / password

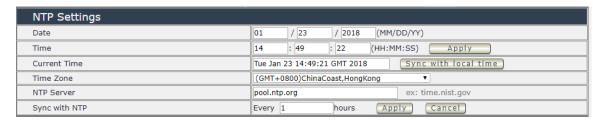
1- 2 Langrage Settings

There are 3 language option of 9858MT .The default langrage is English. The other two languages are "Traditional Chinese" and "Simple Chinese".



1-3 NTP setting

In this section , user can setup the date , time , current time , time zone , NTP server and sync with NTP to get the time synchronization .



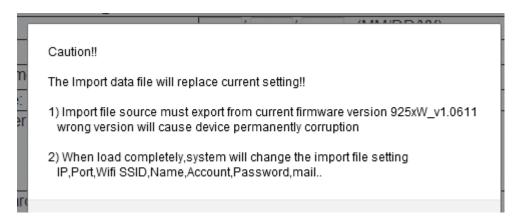
SYNC with NTP $\,:\,$ User can setup the time gap (1~300 hours $\,$) for 9858MT to check the time with the NET server $\,$.

1-4 Import configuration files

To setup multiple with same setting , user can import the settings of other 9858MT from a "DAT" file which is exported form another 9858MT. By import this file to other 9858MT device and shorten the setup time .



As press "Import", there is caution message show as following:



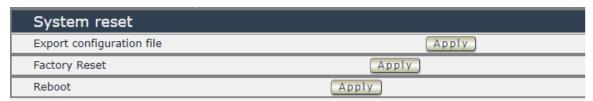
Before click " Ok " to import, please do read following notice:

- Do NOT import DAT file which is not export form 9858MT. The warranty will be invalided if any wrongdoing from "Import".
- Please do Import the file in LAN / Ethernet . To avoid Import fail , please do not Import file via Internet

1-5 System reset

User can click one button to set back the setting to default or restart the 9858MT without device nearby user side.

Note: The factory default setting of 9858MT IP is assigned by DHCP. It will change the IP if load factory defaults.



- Export configuration file: Export the settings into DAT file for import to other 98520

- Factory Reset : set back to factory default .
- Reboot: 9858MT device power reboot

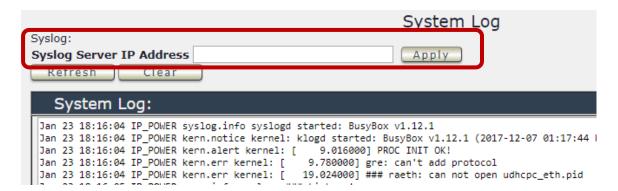
2.System Information

User can get the system information here .

System Information				
System				
System Up Time	16 hours, 7 mins, 58 secs	MAC Address	00:76:50:00:00:FC	
Firmware Version	v1.00_291	Hardware Version	(Jan 10 2018)	
WAN				
WAN IP Address	0.0.0.0	Ethernet Port	80	
Default Gateway	192.168.100.1	Internet Port	80	
Primary DNS	127.0.0.1	Secondary DNS	168.95.1.1	
LAN				
Connected Type		DHCP	DHCP	
Local IP Address	Local IP Address		192.168.100.137	
Local Netmask		255.255.255.0	255.255.255.0	
Other Information				
SNMP		Disable	Disable	
ModBusTCP		Disable	Disable	
BacnetIP		Disable	Disable	
Telnet		Enable	Enable	
UPNP		Disable	Disable	
IPSERVICE & CNT		Disable	Disable	
CNT2		Disable		

3.System Log

In this section , user can get the 9858MT system operation information and send the information to assign Server IP address (not support name) . The system information will be deleted after 9858MT device power reboot.



Please click the IP and save by click "Apply"

4.Firmware

The firmware update function only support in LAN connection . Before update , please DO READ THE HI-LITE MESSAGE BLOW :

It takes about 1 minute to upload upgrade flash and be patient please. Caution! A corrupted image will hang up the system.

To update the 9858MT, please follow the instruction below to prevent anything happens like **update incomplete** or **hardware disable** which may be caused by wrongdoing of updating:

- 1) Turn off all chat programs including (Skype, FB. QQ, AIM, Yahoo messengeretc.)
- 2) Check to make sure that all devices are turned on safely and powered
- 3) While updating do not turn off the power
- 4) Make sure that the cable is connected firmly
- 5) Do not interrupt the update process, the update must be completely finished.
- 6) Turn off, any Spyware or antivirus software which may conflict with the update.
- 7) Update firmware in the Local Area Network (LAN)
- 8) Support update under 32bit Web Browser (32 bit version only) like IE, Google Chrome, . Do not use browser at 64 bit version
- 9) Please change the PORT as 80
- Reboot and Do the Hardware Reset (keep pressing RESET button for 10secs) after update successfully.
- 11) Clear the Cookies from the temporary file of PC to avoid get the old webpage.

Please also update the notice in webpage before update:



Other ways to control

Besides webpage control ,there are several ways to control the outlets: by HTTPS/CGI command or by SSH/Telnet . 9858MT also support SNMP (MIB) , Mudbus TCPIP and BACnet /TCP .

Please check page #41 to check and enable the function.

1. CGI HTTP Commands

CGI Commands allow you to easily integrate the 9858MT with other systems and programs. Please read the instructions carefully on how to use the Http:// Commands

To use http:// Commands open up a web browser and type in the command that you would like to use.

1. User authorization .There are 3 formats:

For example: IP address 192.168.1.18, Username: admin. Password: 12345678

- 1.1 http://admin:12345678@192.168.1.18/set.cmd?cmd=getpower
- 1.2 http://192.168.1.18/set.cmd?user=admin+pass=12345678+cmd=getpower
 The above 2 way also for HTTPS
- 2. Command

set.cmd?cmd=

All command do not separate capital / lower case , the connect symbol between commands can be "+" , "&" and "?".

2.1 To get firmware version: getversion http://192.168.1.18/set.cmd?cmd=getversion

System return: CGI Command: Data follows

Version=9258W_N_v1.0.0.1

2.2 To get MACaddress: getmac

http://192.168.1.18/set.cmd?cmd=getmac

System return: CGI Command: Data follows

mac=00929000008F

2.3 To get the status of power on/off: getpower

http://192.168.1.18/set.cmd?cmd=getpower

System return:

CGI Command : Data follows p61=0, p62=0, p63=0, p64=0

P61 to P64 means: POWER1 to POWER4

2.4 To set the power on / off: setpower&p6x=0 or 1

p6x=0 means off, p6x=1 means ON, x can be 1 to 4 (power1 to power 4)

Example: Turn on POWER1 and POWER2 and turn off POWER3: http://192.168.1.18/set.cmd?cmd=setpower&p61=1&p62=1&p63=0

System return: CGI Command: Data follows

p61=1,p62=1,p63=0

2.5 Setup power to reboot as RESET: setpowercycle& p6x=delayTime
X can be 1to 4 (power 1 to power 4),; dealyTime mean the time (second) waiting
for reset

For example:

http://192.168.1.18/set.cmd?cmd=setpowercycle &p61=5&p62=2&p63=4

System return: CGI Command: Data follows

p61 cycle ok,p62 cycle ok,p63 cycle ok

2. SSH/Telnet Control

Please enable the SSH/Telnet function in "Application " → " Communication "

Or Check page #41 to check and enable the function.



```
ov Telnet 192.168.1.18
# ioctrl -h
Usage: ioctrl
[-h | --help ].....: display this help
 I-s ; --setpower p6=0011 or p6x=1(x=1,2,3,4)1.....: turn on/off ports on the d
[-p | --getpower ]..: get the on/off status of the device
I-c | --current l...... get the current value of the device
 [-t | --temp ]...... get the temperature value of the device
 [-v | --version ].....: display version information
# ioctrl -s p6=1111
p61 ok.p62 ok.p63 ok.p64 ok.
# ioctrl -c
Current value: 0.000000, 0.000000, 0.000000, 0.000000
# ioctrl -t
Temperature value: 32.299999
# ioctrl -v
IO CONTROL Version: 1.0
Compilation Date....: May 14 2013
Compilation Time....: 10:44:47
# ioctrl -p
Power Status: 1, 1, 1, 1
```

Notice: The command "-C" & "-T" are for models 9858MT only.

FAQ:

Q1: Why can't I see the 9850XX IP address in IPEDIT.exe ?

Ans.:

Please check if your 9850XX had boot up successfully. There is a short beep sound to show 9828 boot up successfully after device power up for 45 second.

There are several possibilities for this issue as 9828 boot up successfully:

1. IP Segment of your PC:

Please check the PC you use is under same LAN/ network / segment as 9825.

2. Firewall / Antivirus protection :

Please turn off some Anti-Virus / online chatting software .

3. Network card:

IPEDIT can only work for the PC with one network card. If there are morn than 1 network card, include dynamic network card, please disable one and make sure the one you selected is Under the same segment with IP9825.

4. Connection sequence

9828 will stay DHCP mode – keep waiting for your router to assign the IP (DHCP) - if you connect the 9828 to PC directly and connect to network cable before the power of 9828 device turn on .

If connect to PC directly, please wait for the boot up beep first and THEN connect the network cable to your PC. And the IP should be fixed at 192.168.100.169

Notice: This is very important for this procedure. Please do not plug the network cable to 9850first under this connection. (without Router assigned the IP to 9850)

Q2: Why can't I receive e-mail?

Ans.: Please check the DNS and GATEWAY setting first (Check user router or ask user ISP company) .There is a test button for checking the setting success or fail to send e-mail.

Q3: How can I reset to default:

Ans: Keep pressing the button of "RESET for 5 seconds at least

To reset to original manufacture settings: press the reset button with a sharpen pin for 5-6 seconds then RELEASE. There will be 3 beeps sound which means reset start and

 $9825\ will$ be rebooted itself $% 100\ M_{\odot}$ -there is one beep after reboot) and most information go back to default setting (LAN IP).