IP Power 9858 MT User Manual



Version: V1.00 (Firmware Version: 1.1.5) Date Released: DEC. 2019

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

IMPORTANT NOTICE

1. IP Power 9858MT 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 9858MT in any fashion

5. Please contact the dealer If IP Power 9858MT is not working properly.

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1. Introduction

IP Power 9858MT is a new generation of the Power Distribution Unit (PDU) & Remote Power Control (RPC) system. Its able to control in the network

With embedded web server and HTTPS protection, 9858MT supports higher grade security as working on Internet. User can control power easily and more safely through the web browser in most OS like Windows / iOS / Android system , like Internet Explorer (IE), Firefox, Google Chrome, Safari and so on.

9858MT allows user to remote control power up to 4 individual devices on/off / reboot 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 change . User can also **control** by **e-mail** without doing port forwarding / port mapping and search the other IP Device in webpage directly .

Besides control through web browser, there are specific APP for Android / iOS user to control the outlet ON or OFF and quick search device in LAN / WAN of iOS / Android system. No need PC system environment or emergency use for quick response in second.

Not only control manually, 9858MT supports Auto Ping, Time Scheduler which is more suitable for factory / commercial / office / home automation . There is LOG information & send LOG to assign IP (SYSLOG) in webpage. User can BACKUP the setting and export the same setting to multiple IP POWER to make the installation procedure more efficient .

9858MT has QR code of different network to log in fast and easy.

Apply Own Langrage display in webpage.

UPNP **

For system integrator developing , there are several popular tolls like , MQTT * , TelNet , SNMP and HTTP / CGI Command (SDK) for $\ .$

The various applications of the 9858MT includes: Power Management, Server Management, Internet Controllable Timer, System Integration, Remote Power Control in Remote locations etc.

User Friendly . Convenience & Powerful ,

* MQTT 1.3.1 Cloud IoT protocol - supports Cloud IoT Server of Microsoft AZURE, Google Cloud IoT & Amazon AWS IoT

** UPNP -- No need to do " port forwarding " from router , simply enter webpage via Wan (user's router need to support UPNP)



2. Product information

2.1 Features :

- 1. 4 ports individual Remote power switch for power On, Off and Reboot.
- Web Server built-in design, directly control by web browser in PC & Smartphone (WIN, Android & iOS), like IE, Google Chrome, Safari.
- 3. Network connection : DHCP, Static IP & UPNP (**)
- 4. Network Protocol -- HTTPS / HTTP, SNMP(MIB), NTP, DHCP, TCP/IP, SMTP, UDP, DDNS.
- 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. Higher grade Component & Relay for better quality / performance / durability
- 10. Back Up for quick setup for multiple devices like Time Schedule, Network Setting.
- 11. Support public e-mail -- @gmail. , @yahoo , @hotmail. cometc.
- 12. E-mail Control & Advice :
 - Receive e-mail with IPs device boot up.
 - POP3 Control-Control each outlet ON/OFF through E-mail.
 - No Need to do Port Forwarding .
- 13. Green Power Module -- no load power consumption < 0.3W -- energy savings
- 14. Protection of "Inrush Current " & " Power Surge ".
- 15. App "IP Power " free download in Google play or App Store
 Controls the outlet power ON/OFF without doing Port Forwarding / Port Mapping
 - Quick search in LAN / WAN (like IPEDIT & IP Service)
- 16. QR Code detection for easy & fast apply on
- 17. Arrange own langrage display in webpage
- 18. Second Developing tool (SDK) : CGI / HTTP command , SNMP(MIB) , Telnet , Modbus TCP/IP , BACnet/IP & MQTT (***)

** UPNP -- No need to do " port forwarding " from router , simply enter webpage via Wan (user's router need to support UPNP)

*** MQTT 1.3.1 Cloud IoT protocol - *Cloud IoT Server of Microsoft AZURE , Google Cloud IoT & Amazon AWS IoT*.

- 19. Specific software developed by Aviosys and provided free of charge :
 - SDK Available : HTTP Command (Compatible with 9858DX)

- IP Power Center - control multiple Aviosys IP devices in same AP.

- CNT software (Cross Network Technology) - allows user eliminate set up work on any Router without port forwarding, simply Plug & Play.

2.2 Specification

- Power input : 100 240VAC , 50-60Hz ,
- Maximum loading of each output: 10A
- Maximum of Total loading : 10A / 240VAC , 15A / 100VAC
- Fuse protection : 10A / 250VAC (with spare fuse in socket)
- Dimensions: 195 x 116 x 45 mm (L x W x H)
- Weight: 1 kg
- Enclosure Matel case in blue color
- Operation **Temperature**: 15°C ~ 60°C or 5°F~ 140 °F

• INLET

Input plug	IEC 320 C14 . 50 - 60Hz	
Voltage	100-240VAC Auto sensing	
Maximum input current	10 Amp	
Protection	Fuse 250VAC 10 Amp	
	(removable with spare one in socket)	

OUTLET

Output plug	IEC 320 C13 * 4 - individually switched
Maximum current per outlet	10 Amp
Total current	10 Amp
Overoad protection	Fuse 10 ^a / 250VAC

• PHYSICAL & ENVIRONMENT

Dimention (WxDxH)	195 x 116 x 45 mm
Unit Weight	1 kg
Operating Temperature	- 15°C ~ 60°C or 5°F~ 140 °F
Regukatory Approvals	CE(LVD)
Warranty	Standard 1 year

2.3 Minimum System Requirements

Web Browser of WINDOWS / iOS / Android : Google Chrome , Safari , **IE and so on .** Network connection for Internet connection . Internet HUB & Switch (with RJ45 port)

2.4 Package Contents



2.5 Interface

Front View

From Left to right :	IP POWER 9858NT
LED of Outlet Status	The outlet status #1 ~ #4 Indicator - Green light ON as outlet ON. Light OFF as outlet OFF
Reset	To set back the setting to factory default , please keep pressing the reset button with a sharpen pin and release the pressing until device beeper alarm. It will need at least 10 seconds for the action keep pressing reset button.
Reboot	For device power reboot by one click. It will take 70 seconds for the system boot up.
Network	LAN 10/100 Mbps network

Rear View ● 9858MT-S :	● 9858MT-T :		
• 9050111-5.	• 900011-1.		
Interface from Lef	t to right :		
4 outlets	Connect up to 4 individual outlets to be controlled by the 9858MT. Ports sequence as 4 / 3 / 2 / 1. 9858MT-S : IEC320 socket, 10A / 240VAC 9858MT-T : NEMA socket, 15A / 100VAC		
Power Input &	In this socket, there are one power input and one fuse socket .		
Fuse socket	 Power input : 100-240VAC. 10A 240VAC or 15A 100VAC Fuse : To prevent electrical surges from damaging the unit. The 9858MT comes with two fuses in the socket ,one is usage and another one is a spare for replacement . TYPE : 10A 250V (9858MT-S) or 15A 250V (9858MT-T) 		
	The Power switch turns on the input power. For device power reboot by		
Power Switch	one click. It will take 70 seconds for the system boot up.		

- 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 : 10A 250VAC



3. Setting up your device

3.1 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.
- 2.) Check the power input cable is working correctly.
- 3.) Check all cables to make sure there are no problems with it.

3.2 Hardware Connection

Please refer following procedure :

- 1.) Connect the Ethernet cable (RJ45) to the 9858MT to your local area network.
- 2.) Then connect the power cable into the power input port of the 9858MT.
- 3.) Connect the device that you would like to control to the output plug on the top of the 9858MT.
- 4.) Switching the power source to ON status, this switch is located at the rear of 9858MT.
- 5.) After power on for around 45 seconds , there is a short beep sound for 9858MT which means the system reboot successfully
- 6.) Go to page #14 for software installation guide use IP EDIT to log in the webpage of 9858MT.

3.3 Software Installation

Please Go to <u>WWW.aviosys.com/cd</u>. The note with this online CD link comes with the package.

IP Power Software:

IP Edit (Required)

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



1.) Select the IP Power 9858MT

IP POWER	
	IP Power 9858 NEW
	IP. Power 9858-Ping NEW
	IP Power 9858DX NEW

- 2.) All the available downloads for the 9858MT will be shown
- 3.) <u>Download</u> the required software **IPEdit.exe** by clicking on the download button.



Then you can select to connect 9858MT.

3.3.1 LAN connect by IP Search software "IPEDIT "



IP Edit is a search tool designed to search, configure, or access the IP Power 9858MT from a local networked computer.

IP Power 9858MT Default Login / Password

Default IP: 192.168.1.168 (if there is no DHCP router assigned IP) Default Login username : admin Default Password: 12345678

1.) In the local devices section user will see user device show up if connection correctly.

IP POWER 192 168 1.10	Change Device	e to yourself			Â	RE	ĒF		
		Name	-		IP PO	WER			-
		Gateway	192	- 22	168	187	100	38	1
		IP Address	192	3	168	3	100	39 -	34
		Netmask	255	12	255	13	0	95	0
		HTTP Port1	-			80			
		HTTP Port2				0			
		MAC		4	00:9	2:90	00:00:	7.A	
			E(ADSL)	C		P ubmit	12	Static) Rei	
Comma	and & Suggestion	Update	S B B	(F1] Help		X	Ex	it

Notice :

If can't see the IP in the area of Local Devices of IPEDIT.exe. Please check the following situation

- 1. **Boot up successfully** : Please reboot the 9858MT and check if there are 1 short beep after 1 minutes . This beep means the device boot up successfully . If not , the device may have issue.
- 2. **Network card** : Please check if there are morn that two network card include wire / wireless / dynamic in the PC which used IPEIT software . IPEDIT only support single network PC , please disable the other network connection / functions.
- 3. **Anti Virus software / Firewall** : Please turn off the antivirus software firewall temporary.
- 4. **Power** : If there is no power go to 9858MT , please check the fuse part . There will be no power for 9858MT if the fuse buttons is pup up not easy/flexible to press as it was by over loading for long time , please press the fuse back and the power will go to 9858MT to boot up .
- 5. **Connection** : Please make sure that the 9858MT is under same router with the PC used IPEDIT . It is fine to connect across multiple routers but it need to setup the MASK part which need some knowhow .
- 2.) Select the 9858MT device and the device information will pop up on the right.

3.) Check to see that the gateway IP and the IP Address (9858MT) match user current network.

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

For example: If user have the following information regarding the 9858MT *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 9858MT in IPEDIT : 9858MT 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 9858MT is : 192.168.100.34

User will need to make sure that the first 3 segments of user 9858MT 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 9858MT should be: 192.168.1.X <u>New Network Information</u>

9858MT 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 9858MT. It will take few minutes to show the suggest wizard.

ocal Devices	Change Device to yourself	
P.Powsr		REF
	1	STAND.
	Name	IP Power 🔶

Name	IPPOWER
Gateway	192.168.100.1
IP Address	192.168.100.2
Netmask	255.255.255.0

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 " $\,$ is 192.168.100. x (X can the value of 1~252) , user PC can get into the webpage of 9858MT .

3.3.2 Internet Setup

To connect the IP Power 9858MT 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 software section of <u>www.aviosys.com/cd</u>

3.3.3 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 IP Power device and user can easily find IP Address with IP Service. **To log in the webpage of 9858MT on Internet**, user still need to do the "Port Forwarding" in own router.

Before using "IP Service ", please change the device name of user 9858MT to avoid similar name in Host Server.

2019/11/6 16:59:42	IP Service Setting			
- Power Control	Enable			
Control	IP Service Server :	Server1 V		
Schedule	Device Name :	IP_POWER		
Ping	Country :	Country		
- Network	City :	City		
Setting	Find IP_POWER device on http://www.myipedit.com			
- Setting		Apply		
- Application				
- Email	CNT(MQTT)			
DDNS	MQTT Serivce	Aviosys 🔻		
Communication	Enable			
IP Service	Status			
		Apply		
- Custom				

1.) Open IP Edit and select the server that user's 9858MT is designated to.

2.) Hit the Green Connect button on the top of IP Edit.

101 IPEdit		
Internet online devices IP Server : Device Name :	Server2 IP_POWER	• necessary Connect
Not Connected	Country : City :	Search

- **3.)** Then type in the 9858MT Name that user have selected for the device and press the Search button.
- **4.)** 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 9858MT device name as IP_POWER , and user can search the device easily :

Internet online devices IP Server :	Server2		*	(Connec	. 6	Disconnect
Device Name :	IP_POWER		*nec	essary	J COLLING		
	Country :				Search	1	
	2.11				-		
connected to Server1	City :				~		
Device Name	City : Country	City	IP ddress	Port	Mac Ad	dress	Serve ^
	Country		IP ddress Balling	1.57.010	Mac Adi 91.228	dress 80	Serve ^
Device Name	Country 475 MH1_IF	_P Denmark	and the second	178.21	11535556.045	- 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 199 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993 - 1993	
Device Name	Country 475 MH1_IF 475 IP_POW	_P Denmark TER Country	Balling	178.21	.91.228 8.50.1	80	00982

5.) After user have connected to user device, type in the Login and Password for user device

4. Web Interface

Once the 9858MT has been setup correctly, log into the device.

The default Username and Password for the 9858MT

Username : admin Password: 12345678

The Control Console

The Right side Menu of the Web Interface control the functionality and setup of the IP Power 9858MT.

2019/11/6 17:18:23			Ac	lvance Setup
+ Power Control				
+ Network				
+ Application				
+ System				
Logout	power1	power2	power3	power4
	60 Power Cycle I ON •	60 Power Cycle I ON V	GO Power Cycle Con •	60 Power Cycle I on •
		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	off Apply	Invert

The IP Power 9858MT Console consists of six main sections which will be explained in details below.

Top Column : Device name & Column Display (for smart phone application) & Time Information

Power Control: Controls, Schedule & Ping.

Network : Setting

Application : Email , DDNS, Communication & IP Service

System : Management, Information, SysLog & Firmware

Logout

4.1 Top Column

4.1.1 Device name

This section show the device name . You can change the device name here : Application \rightarrow IP Service \rightarrow Device name Change name " IP POWER 9858MT " as "Enjoy 9858MT "

IPPOWER		AVIOSYS
2019/11/6 17:23:08	IP Service Setting	
- Power Control	Enable	
Control	IP Service Server :	Server1 -
 Schedule 	Device Name :	IPPOWER
- Ping	Country :	Country
- Network	City :	City
Setting	Find IPPOWER devi	ce on http://www.myipedit.com
Setting		Apply
- Application		
- Email	CNT(MQTT)	
DDNS	MQTT Serivce	Aviosys •
 Communication 	Enable	
IP Service	Status	
		Apply

Notice : Please do not use symbol like !@#\$%^&*()_+ as the character of the device name .

After apply the change, please click "Refresh" of the webpage to get the display update .



4.1.2 Column Display :

For Smartphone user to control 9858MT easily , user can select to show or to hide the left control section by pressing the blue area near device name for Smartphone control :

- With left control section :

			//	
IP POWER	9858MT			AVIOSYS
2019/11/28 14:42:05 + Power Control + Network + Application + System Logout	power1	power2	Ac	vance Setup
	-	Cycle Don Sec Cycle Don	off	For Power I on .

Without left control section :

IP POWER 9	858MT	AVIOSYS
power1	60 Power ON •	
Group Control	$ \begin{array}{cccc} 1 & 2 & 3 & 4 \\ O \text{ off} & O \text{ off} & O \text{ off} & O \end{array} $	off Apply Invert

4.1.3 Time :

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

2014-03-10 18:18:40

To setup the Time , Please go to "System \rightarrow Management \rightarrow NTP Settings ", please press "Apply" to save the new setting . There are 3 time sync sultion :

Time - Manual setting, Current time - sync with Local PC or NTP Server

2019/11/28 14:44:38	System Management						
Power Control	You may configure admi	You may configure administrator account and password, NTP settings, and Dynamic NTP settings here.					
Network	Adminstrator S	Settings					
- Application	Account	admin Operator Oviewer					
- System	Password	Apply					
Management	Language Sett	tings					
Information	Language	English • Apply					
SysLog	NTP Settings						
Firmware	Date	11 / 28 / 2019 (MM/DD/YY)					
Logout	Time	14 : 44 : 38 (HH:MM:SS) Apply					
Logout	Current Time	Thu Nov 28 14:44:37 GMT 2019 Sync with local time					
	Time Zone	Time Zone (GMT+0800)ChinaCoast,HongKong					
	NTP Server	NTP Server pool.ntp.org ex: time.nist.gov					
	Sync with NTP	Every 1 hours Apply Cancel					

- 1. Time Manual setting : fill the assigned time and then click "Apply" in time section
- 2. Current time sync with the local PC log into 9858MT.
- 3. NTP Server sync with the assigned sever and can setup the times for sync

Notice : As using NTP server , as webpage time count will be slower than the device time , please refresh the webpage or use the telnet command " to confirm the device time.



4.2 Power Control :

The IO Control Section allows you to directly / automatically control the outlets of the 9858MT as well as schedule Daily, Weekly, and Monthly power cycles.

There are 3 sections : Control , Schedule & Ping .



4.2.1 Control

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

A. Power Control :

Advance Setup						
powerl	power2	power3	power4			
5 Power J Sec Cycle J	5 Sec Power J	5 Power Sec Cycle	5 Power J Sec Cycle J			
Group Setting	1 2 3 • on • on •	on on A	pply			

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

1. Manually Control : Each port ON or OFF directly by pressing the button.



For example : The following pictures means that Power #1 & #4 is ON , Power #2 & #3 is OFF

2 Power Cycle : Manually Control the relay delay some times to turn ON or OFF . The relay cycle time can be set from 1 to 9999 seconds



- As ON, Select OFF and press "Power cycle " then the outlet status is $ON \rightarrow OFF$. -
- As ON, Select ON and press "Power cycle" then the outlet status is $ON \rightarrow OFF \rightarrow ON$. As OFF, Select ON and press "Power cycle" then the outlet status is $OFF \rightarrow ON$. -
- -
- -As OFF, Select OFF and press "Power cycle " then the outlet status is OFF→ON →OFF

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



For example : (sec = seconds)



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.

B. Advance Setup :

In this page, user can setup Name of each port , Notification , Power cycle , Shutdown On LAN Settings , Wake On Lan Settings

	Power Control						
Port Name Setting			57 				
Outlet1	Outlet	2		Outlet3		Outle	et4
power1	power	power2		power3 pow		/er4	
Notification Setting							
Name	power1	p	ower2		power3		power4
Forbidden off manually							
Forbidden Power cycle							
Email Alerts							
Beep Alert							
Default Power Status	LAST V	L	AST V		LAST V		LAST V
			Appl	Y			
Power Cycle Time Settin	g						
Name	power1	p	ower2		power3		power4
Power Cycle Time	60 Seconds	6	0 Seconds		60 Seconds		60 Seconds
			App	ly.			
Shutdown On Lan Settin	gs						
Name	power1	p	ower2		power3		power4
Delay Time	60 Seconds	6	0 Seconds		60 Seconds		60 Seconds
			Appl	y .			
Wake On Lan Settings							
Control Outlet		MAC					
power1		000000000000				Send	
power2		000000000000000000000000000000000000000				Send	

B.1 Name of each port

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 $!@#\$\%^{*}$.

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

Example : Change the outlet #1 from " power1 " to " server-001 "

server-001 power2 power3 power4						
Outlet1 Outlet2 Outlet3 Outlet4						
Port Name Setting						

58191	Please enter Power1 name:		AVIOSYS
Port Name S		確定取消	Power Control
Outlet1			Outlet4
power1	power2	power3	power4

After click confirm , the page will go to " power control " page to shpwthe update name.

IP POWER 9	9858MT			
				AVIOSYS
2019/11/28 15:29:54			Ad	vance Setup
+ Power Control				
+ Network				
+ Application				
+ System				
Logout	server-001	power2	power3	power4
	60 Power D ON V Sec Cycle D ON V	60 Power _ ON V	60 Power _ ON ▼ Sec	60 Power □ ON ▼ Sec Cycle □ ON ▼

B.2 Notification setting

User can do several notification here .

Notification Setti	ng				
Name	power1	power2	power3	power4	
Forbidden off manually					
Forbidden Power cycle					
Email Alerts					
Beep Alert					
Default Power Status	LAST V	LAST V	LAST V	LAST V	
		Apply			

• Forbidden off manually : Select by port will disable the power control in webpage . The disable is for the control in webpage only .The control through HTTP command is still working .

For Example : Select the control in webpage of power 1 & power4 for be disable

Notification Settir	ıg				
Name	power1	power2	power3	power4	
Forbidden off manually	\checkmark				

Then the page will be as following :



• Forbidden power cycle : Select by port will disable the power cycle control in webpage . The disable is for the control in webpage only .The control through HTTP command is still working .

For Example : Select the power cycle control in webpage of power 1 & power 2 for be disable

Notification Settir	ng				
Name	power1	power2	power3	power4	
Forbidden off manually	0				
Forbidden Power cycle	\checkmark				



• Email Alerts :

Use can enable /disable the e-mail alarm here .The e-mail alarm section allows 9858MT to notify user by following situation :

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

To get E-mail about of power status , please go to "Application \rightarrow E-mail.

Notification Setti	ng			
Name	power1	power2	power3	power4
Forbidden off manually				
Forbidden Power cycle				
Email Alerts		\checkmark	\checkmark	
	1			

Beep Alarm Setting:

User can setup the operation beep (short time beep) sound here.

Notification Setti	ng			
Name	power1	power2	power3	power4
Forbidden off manually				
Forbidden Power cycle				
Email Alerts				
Beep Alert			\checkmark	\checkmark

Default Power Status : The control section allow user to set the power status on ON or OFF or LAST when the device get power rebooted . As select "Last ", the output will be at the same status ON / OFF before the device power turn off . To save the setting here , please click "Apply" button .

Name	power1	power2	power3	power4
Forbidden off manually				
Forbidden Power cycle				
Email Alerts				
Beep Alert				
Default Power Status	LAST V	LAST V	LAST V	LAST V
	OFF ON LAST	Apply		1

• Power cycle time setting :

Name	power1	power2	power3	power4
Power Cycle Time	60 Seconds	60 Seconds	60 Seconds	60 Seconds

Shutdown On Lan Settings :

Name	power1	power2	power3	power4
Delay Time	60 Seconds	60 Seconds	60 Seconds	60 Seconds

9858MT 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 9858MT 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 on Lan settings :

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 do the wake up on LAN function \cdot .

Control Outlet	MAC	
power1	0000000000	Send
power2	0000000000	Send
power3	0000000000	Send
power4	0000000000	Send

			(Schedule List
1	Duration Mode	Once	Every Week	OEvery Day
Date: From 2018/01/22 Time 00 • : 00	to2018/02/20 • : 00 •	(Hr:Min:Sec)		
Schedule power action Jason Sol Relay-OFF Relay-OFF Relay-CYC WOL SOL	v tony	 ✓ ✓ 	power3 🗸 Relay-OFF 🔻	power4 V Relay-OFF V
	Apply No.1 S	ch	Delete	

		P	ing List
Global Ping B Setting	ase	Apply	
Ping Interval	5 Sec.	Response Time Out	900 ms.
Ping After Action Delay	5 Sec.	Action Max repeat times	1 (0=non stop)
Conditional Mode	Single	OR And	
IP & Host Name		Failed times then action	Repeat
www.baidu.com	Check	03	Stop V Rule No1
www.sony.com	Check	03	
Ping failure action 🗸			
Jason Relay-OFF Relay-OFF Relay-OFF Relay-CYCLE WOL	tony 🗸	Relay-OFF V	power4 V Relay-OFF
Ping 1	pply Rule	Delete WOL=Wake-On	-Lan, SOL=Shutdown-On-Lan

4.2.2 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 ":



				Schedule List
1	Duration Mode	Once	Every Week	Every Day

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.

	1		D	urati	on №	lode		0	nce	1	OE	very	We	ek	•	Eve	ry D	ay			
Weekly se Sunday	lect:	M	onda		to	Tues	day		Wed	nesda	ay 🗸	Thu	irsda	у	Fri	day		s	aturo	lay	
Time 00 Jan 7 2018				F	ebru	bruary 2018 March 2018 O															
Schedule	Su	Мо	Tu	We	Th	Fr	Sa	Su	Мо	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
Genedale		1	2	3	4	5	6					1	2	3					1	2	3
	7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10
	14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17
	21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
_	28	29	30	31				25	26	27	28				25	26	27	28	29	30	31

- 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 .

		Schedule Setting WOL=Wake-On-Lan, SOL=Shutdown-On-Lan
No.1 - 19882 (1990) 18	Daily Schedule Action at 00:00:00	Aelay, Kelay, Sol CYCLF On 2 Off 4
No.2 Ordenfeld	Schedule Action at 00:00:00	-0000

Apply / Edit a Schedule Event :

pply No.1 Sch	Delete
---------------	--------

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 .

4.2.3 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 :

		Pi	ng List
Global Ping Base Setting	A	pply	
Ping Interval	5 Sec.	Response Time Out	900 ms.
Ping After Action Delay	5 Sec.	Action Max repeat times	1 (0=non stop)
Conditional Mode	🔍 Single 🔍 OR	O And	
IP & Host Name		Failed times then action	Repeat
www.yahoo.com	Check	00	Stop V Rule No1
www.google.com	Check	00	
Ping failure action	oply Rule	Delete	n —

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.

				F	Ping List		
Global Ping I Setting	Base		Apply				
Ping Interval	5	Sec.	Response	e Time Out	900 ms.		
Ping After Action Delay	5	Sec.	Action M	Action Max repeat times		(0=non stop)	
Conditional Mode	🔍 s	ingle O OF	R O And				
IP & Host Name				Failed times then action	Repeat		
www.baidu.com		Check		03		Rule No1	
www.sony.com		Check		03			

2. Ping Base Setting :

				Ping L	ist
Global Ping Setting	Base		Apply		
Ping Interval	5	Sec.	Response Time Out	900	ms.
Ping After Action Delay	5	Sec.	Action Max repeat times	1	(0=non stop)

- 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 .

Conditional Mode	🔍 Single 🔍 OR 🛛 🔘 Ar	nd		
IP & Host Name		Failed times then action	Repeat	
www.yahoo.com	Check	00	Stop 🔻	Rule No1
www.google.com	Check	00	Stop 1	
Ping failure action	Apply Rule Del	ete		

• 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 .

Conditional Mod	O Single O OR O A	nd		
IP & Host Name		Failed times then action	Repeat	Rule No1
www.google.com	Check)	03	Stop 🔻	i i i i i i i i i i i i i i i i i i i
<u></u>			Continue	
Ping failure action			Stop	
	Apply Rule De	lete		
Ping 1		iete		
		WOL=Wake-On-La	n, SOL=Shutdown-	On-Lan
No.1Ping every 5sec	w.baidu.com 0.9sec Timeo Ping 3 times w.sony.com 0.9sec Timeo Ping 3 times	ut Fail L1/2/	3 4 afte	

- **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.

Conditional Mode		gle 🔘 _{OR} 🛛 🔍 And	±	
IP & Host Name			Failed times then action	Repeat
www.google.com		Check	03	Stop V Rule No1
www.sony.com		Check	03	
Ping failure action Jason C Relay-OFF		tony 🗸 Relay-OFF 🔻	power3 V Relay-OFF V	power4 🗸 Relay-OFF 🔻
Ping 1	Apply R	ule Dele	ete	

- 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 " ${\sf ON}$, OFF or Reset " function

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

	Jason 🗸	tony 🗸	power3 🗸	power4 🗸
	Relay-ON V Relay-ON	Relay-ON V	Relay-OFF 🔻	Relay-CYCLE 000 sec
	Relay-OFF Relay-CYCLE			
· · · · ·	WOL	ply Rule Dele	to	

The setting times range is 1 to 999 sec.

	W	OL=Wake-On-Lan, SOL=Shutdown-On-Lan
No.1Ping every 5sec www.sony.com	0.9sec Timeout Ping 3 times 0.9sec Timeout Ping 3 times	ON OF CYCL 1 2 OF CYCL after 5sec Repeat 1Times
No.2Ping every 5sec www.sony.com	0.9sec Timeout Ping 13 times 0.9sec Timeout Ping 0 times	(1)(2)(3)(4) after Repeat 1Times 1

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

EX: Result of setting

4.3 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 $% 10^{-1}$. There are ~3 network connection way : Static IP / DHCP / UPNP

LAN IP Select	DHCP (Auto Config)	Ŧ
	Static Mode(fixed IP)	
	DHCP (Auto Config)	
	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) .

	LAN IP Select Static Mode(f	ixed 1
Setup LAN Static IP		
IP Address	192.168.1.168	
Subnet Mask	255.255.255.0	
Default Gateway	192.168.1.1	
Setup Static DNS		
Setup Static DNS Primary DNS Server	168.95.1.1	
ondary IP OEnable ODisable Setup Static DNS Primary DNS Server Secondary DNS Server	168.95.1.1 8.8.8.8	
Setup Static DNS Primary DNS Server		
Setup Static DNS Primary DNS Server Secondary DNS Server Port Setting		
Setup Static DNS Primary DNS Server Secondary DNS Server	8.8.8.8	

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) .

		LAN IP Select DHCP (Auto Config
Get LAN IP from DHCP		
IP Address	192.168.100.137	
Subnet Mask	255.255.255.0	
Default Gateway	192.168.100.1	
ondary IP 🔵 Enable 🔍 Disable		
Get DNS from DHCP Server		
	127.0.0.1	
Get DNS from DHCP Server	127.0.0.1 168.95.1.1	
Get DNS from DHCP Server Primary DNS Server		
Get DNS from DHCP Server Primary DNS Server Secondary DNS Server		
Get DNS from DHCP Server Primary DNS Server Secondary DNS Server Port Setting	168.95.1.1	

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.

	LAN IP Select UPNP
Port Setting	
Port(80~65535)	80
WAN IP Address	0.0.0.0
Port Assigned	80
	Apply Cancel
UPNP	
Enable	
Port	44615 (81~65535)
	Apply

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) .
4.4 Application Settings :



4.4.1 Email

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

	E-mail Setting		
SMTP Server :	Gmail 🔻 smtp.gmail.com		
Port :	587 🗸 StartTLS		
User :	aviosys1		
Password :	•••••		
From :	aviosys1@gmail.com		
To :	aviosys101@gmail.com		
	Email Test Apply		

• 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 \rightarrow 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: <u>9858MT@gmail.com</u>
- **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 :

2018/01/22 16:30:51					Power Co	ntrol	
- IO Control	Port Name Sett	ing					
Control	Outlet1	Outlet2	Outlet:	3	Outlet4		
Schedule	Jason	Jason tony		power3		power4	
Ping	Notification Set	ting					
Network	Name		Jason	tony	power3	power4	
	Forbidden off manual	ly					
Application	Forbidden Power cycle	e					
Email	Email Alerts			\checkmark		\checkmark	
DDNS	Beep Alert		\checkmark	\checkmark	\checkmark	\checkmark	
Communication	Default Power Status		ON V	ON V	OFF V	OFF •	
IP Service		(Apply				

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 .

	POP3 Control
POP3 Server :	Gmail 🔻 pop.gmail.com
From :	aviosys@gmail.com
Port :	110
User :	aviosys1
Password :	•••••
Tag :	Test
Interval(Minute) :	2
Mail Number :	100
CTRL Format :	Subject OBody
	Apply
Example: E-Mail Test: yourmail Subject: IPPOWERCTRL:TAG=Test;POWE Body:	ER1=OFF;POWER2=OFF;POWER3=OFF;POWER4=OFF
4	
Submit	

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 : <u>123@gmail.com</u> or <u>abc@def.com</u>
- 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 :

CTRL Format :	Subject OBody
	Apply
Example: E-Mail Test: yourmail Subject:	
IPPOWERCTRL:TAG=Test;POW	ER1=OFF;POWER2=OFF;POWER3=OFF;POWER4=OFF
Body:	
4	
Submit	
	ERCTRL:TAG=Test;POWER1=OFF;POWER2=OFF;POWER3=OFF;POWER4=OFF - Message (HTML)
Message Insert Options Format Text → Cut → Copy Paste → Format Painter Clipboard 「3」 ● 文 ▲ → ● 書 書 篇 B I 및 ● 文 ▲ → ● 書 書 篇 Basic Text	High Impor
J 9 0 → → 0 P ∀ 23 2 Chinese (Taiwa ▼ ▼	
Send Cc	
Account - Bcc	
Subject: IPPOWERCTRL:TAG=Test;POWER1=OFF;POWER2	=OFF;POWER3=OFF;POWER4=OFF
- el	

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 "

Subject OBody
Apply
=Test;POWER1=OFF;POWER2=OFF;POWER3=OFF;POWER4=OFF

Execute e-mail command by "Body "

CTRL Format :	Osubject Body
	Apply
Example:	
E-Mail Test:	
yourmail	
Subject:	
Body: IPPOWERCTRL:TAG=Tes	t;POWER1=OFF;POWER2=OFF;POWER3=OFF;POWER4=OFF
*	
Submit	

4.4.2 DDNS

The DDNS section allows user to setup the 9858MT with a DDNS server (i.e. <u>www.dyndns.com</u>). 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 :	Dyndns.org
Password :	freedns.afraid.org
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

4.4.3 Communication

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

Communication Setting:

SNMP:	
Enable	
Community Authority :	N/A 🔻
Community Name :	private
Trap type :	N/A 🔻
Host(192.168.1.1:162):	192.168.1.1:162
Trap Community :	private
MIB file	IPPOWER-MIB.txt
	Apply
TELNET:	
Enable	
	Apply
TCP Modbus	
Modbus Enable	
Port	502
	Apply
BACnet	
Enable	
Port	47808
	Apply

A.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"

SNMP:			
Enable			
Community Authority :	N/A T		
Community Name :	N/A Read Only		
Trap type :	Read/Write		
Host(192.168.1.1:162):	192.168.1.1:162		
Trap Community :	private		
MIB file	IPPOWER-MIB.txt		
Apply			

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

SNMP:	
Enable	
Community Authority :	N/A T
Community Name :	private
Trap type :	N/A T
Host(192.168.1.1:162):	N/A v1 trap 1:162
Trap Community :	v2c trap v2c inform
MIB file	IPPOWER-MIB.txt
Ар	bly

In MIB file section , user can get MIB information.

B.Telnet

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

TELNET:	
Enable	
Apply	

Please enable the telnet function in "Application " \rightarrow " Communication "

```
CN Telnet 192.168.1.18
```

IP login: admin Password:

ex Telnet 192.168.1.18	_ 🗆
# # ioctrl -h	
Usage: ioctrl [-h help]: display this help [-s setpower p6=0011 or p6x=1(x=1,2,3,4)]: turn on/off p evice [-p getpower]: get the on/off status of the device [-c current]: get the current value of the device [-t temp]: get the temperature value of the device [-v version]: display version information	ports on the d
<pre># ioctrl -s p6=1111 p61 ok,p62 ok,p63 ok,p64 ok, # ioctrl -c Current value: 0.000000, 0.0000000, 0.0000000, 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 #</pre>	

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

C.Modbus TCP

- A. Modbus : We supply 3 models of ModBus control
 - C-1 ModBUS TCP : Just Enable or disable this function

TCP Modbus	
Modbus Enable	
Server IP	1.34.50
Port	502
Baud Rate	38400 •
SlaveID	1
Parity	None
Modbus ID	1. 2. 3. 4. 5. 6. 7. 8.
RTU Enable	
	Apply

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 .

TCP Modbus	
Modbus Enable	
Server IP	1.34.50.123
Port	502
Baud Rate	38400 •
SlaveID	1
Parity	None T
Modbus ID	1. 2. 3. 4. 5. 6. 7. 8.
RTU Enable	
	Apply

D.BACnet TCP

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

BACnet Bet	
Enable	
Port	47808
Apply	

4.4.4. IP SERVICE

In this section , user can setup

A. IP Server & CNT (Cross Network Technology),

B. CNT (MQTT)

IP Service Setting	
Enable	
IP Service Server :	Server1 V
Device Name :	IP_POWER
Country :	Country
City :	City
Find	IP_POWER device on <u>http://www.myipedit.com</u>
	Apply
CNT(MQTT)	
MQTT Serivce	Aviosys 🔻
Enable	
Status	
	Apply

A. 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.

IP Service Setting		
Enable		
IP Service Server :	Server1 V	
Device Name :	Custom	
Country :	Country	
City :	City	
Find IP_POWER device on http://www.myipedit.com		
Apply		

- Enable : Enable or Disable this function by clicking the small box .
- IP Service Server : use our server or custom server .
- 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

nternet onlin P Server :	e devices	erver1		•	(Connect	Disconnect
)evice Nam	e: 92	258		*nec	essary 📥		Disconneci
	Co	untry :			1	Search	
onnected to	Server1 City						
unnected to	Jerveri Citj						
Device	Name	Country	City	IP ddress	Port	Mac Address	Serve ^
			City Franconia	IP ddress 71.168.75.96	Port 80	Mac Address 00925800d65f	Serve A
Device	Name	Country USA					1.00

B. CNT (MQTT) -

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

CNT(MQTT)	
MQTT Serivce	Aviosys 🔻
Enable	Aviosys Custom
Status	Google
	Azure

4.5 System Setting :



4.5.1 Management

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

System Management

You may configure administrator account and password, NTP settings, and Dynamic NTP settings here.

Adminstrator Settings			
Account	admin	Admin Ooperator Oviewer	
Password		Apply	
Language Settings			
Language		English	
NTP Settings			
Date		11 / 29 / 2019 (MM/DD/YY)	
Time		15 : 48 : 15 (HH:MM:SS) Apply	
Current Time		Fri Nov 29 15:48:14 GMT 2019 Sync with local time	
Time Zone	(GMT+0800)ChinaCoast,HongKong		
NTP Server	pool.ntp.org ex: time.nist.gov		
Sync with NTP		Every 1 hours Apply Cancel	
Import configuration files			
Location	選擇檔案 未選擇任何檔案	Import Cancel	
System reset			
Export configuration file		Apply	
Factory Reset		Apply	
Reboot	A	pply	

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.

1. Administrator (Admin) : 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.

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

3.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	1 to 8 characters.	d as number or English character from

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

Langrage Settings

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

Language Settings		
Language	Chinese/繁體中文 ▼	Apply
NTP Settings	English Chinese/繁體中文	
Date	Chinese/简体中文	/ 2018 (MM/DD/YY)

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 .

NTP Settings	
Date	01 / 23 / 2018 (MM/DD/YY)
Time	14 : 49 : 22 (HH:MM:SS) Apply
Current Time	Tue Jan 23 14:49:21 GMT 2018 Sync with local time
Time Zone	(GMT+0800)ChinaCoast,HongKong
NTP Server	pool.ntp.org ex: time.nist.gov
Sync with NTP	Every 1 hours Apply Cancel

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

Import configuration file

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 .

Import configu	iration files	
Location	選擇檔案 未選擇任何檔案	Import Cancel

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

System Information

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 .

System reset	
Export configuration file	Apply
Factory Reset	Apply
Reboot	Apply

- Export configuration file : Export the settings into DAT file for import to other 9858MT
- Factory Reset : set back to factory default .
- Reboot : 9858MT device power reboot

4.5.2 System Information

User can get the system information here .

System			10			
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	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				
Local IP Address		192.168.100.137				
Local Netmask		255.255.255.0				
Other Information						
SNMP		Disable				
ModBusTCP		Disable				
BacnetIP		Disable	Disable			
Telnet		Enable	Enable			
UPNP		Disable	Disable			
IPSERVICE & CNT		Disable	Disable			
CNT2		Disable	Disable			

System Information

4.5.3 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.

	System Log
Syslog: Syslog Server IP Address	
Refresh Clear	
System Log:	
Jan 23 18:16:04 IP_POWER syslog.info syslogd started: Jan 23 18:16:04 IP_POWER kern.notice kernel: klogd sta Jan 23 18:16:04 IP_POWER kern.alert kernel: [9.016 Jan 23 18:16:04 IP_POWER kern.err kernel: [9.78000 Jan 23 18:16:04 IP_POWER kern.err kernel: [9.78000	arted: BusyBox v1.12.1 (2017-12-07 01:17:44) 0000] PROC INIT OK! 00] gre: can't add protocol

Please click the IP and save by click "Apply"

4.5.4 Firmware

Please only use the file supply from Aviosys distributor or Aviosys .

There are two sections : Bootloader & Firmware

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

	upload upgrade flash and be patient please. Caution! A
corrupted image will hang	up the system.
	Upgrade Firmware
Upgrade selected firmware to obtain new fu It takes about 1 minute to upload & upgrac	unctionality.Caution! A corrupted image will hang up the system. le flash and be patient please.
Version:Old	
Update Bootloader	
Location:	選擇檔案 未選擇任何檔案
	Apply
Firmware	
Location	選擇檔案 未選擇任何檔案
	Apply

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
- 10) **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 :

5.Other ways to control

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

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

5.1 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 <u>http://admin:12345678@192.168.1.18/set.cmd?cmd=getpower</u>
- 1.2 <u>http://192.168.1.18/set.cmd?user=admin+pass=12345678+cmd=getpower</u> 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 <u>http://192.168.1.18/set.cmd?cmd=getversion</u>

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

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

5.2 Telnet Control

Please enable the telnet function in "Application " \rightarrow " Communication "

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

TELNET:		
Enable		
Apply		
ex Telnet 192.168.1.18		
IP login: admin Password:		
I ASSWUFU -		
M Telnet 192.168.1.18		- 🗆 X
		-
t ioctrl -h		
(X	**	
lsage: ioctrl		
[-h ¦help]: display this help		
[-s setpower p6=0011 or p6x=1(x=1,2,3,4)]: turn on/off	f ports on	the d
vice		_
[-p getpower]: get the on/off status of the device		
[-c current]: 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		
o61 ok,p62 ok,p63 ok,p64 ok,		
ioctrl -c		
Current value: 0.000000, 0.000000, 0.000000, 0.000000		
ioctrl -t		
'emperature value: 32.299999		
t ioctrl -v		
O CONTROL Version: 1.0		
Compilation Date: May 14 2013		
Compilation Time: 10:44:47		
t ioctrl -p		
Power Status: 1, 1, 1, 1		

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

6.FAQ :

Q1: Why can't I see the 9858MT's IP address in IPEDIT.exe ?

Ans.: Please check the PC you use is under same LAN/ network / segment as 9858MT. Please turn off some Anti-Virus / online chatting software. 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 IP9858MT.

Please refer the following possible parts for this 9858MT not been searched by IPEDIT

- Boot up successfully : Please reboot the 9858MT and check if there are 1 short beep after 3 seconds . This beep means the device boot up successfully . If not , the device may have issue.
- Network card : Please check if there are morn that two network card include wire / wireless / dynamic - in the PC which used IPEIT software . IPEDIT only support single network PC , please disable the other network connection / functions.
- Anti Virus software / Firewall : Please turn off the antivirus software firewall temporary.
- Power : If there is no power go to 9858MT , please check the fuse part . There will be no power for 9258 if the fuse buttons is pup up not easy/flexible to press as it was by over loading for long time , please press the fuse back and the power will go to 9258 to boot up .
- Connection : Please make sure that the 9858MT is under same router with the PC used IPEDIT. It is fine to connect across multiple routers but it need to setup the MASK part which need some knowhow.

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.

Q4: How can I reset to default:

Ans : Keep pressing the button of "RESET for 10 seconds at least

To reset to original manufacture settings : press the reset button with a sharpen pin for 10 seconds then RELEASE. There will be 3 beeps sound which means reset start and 9858MT will be rebooted itself -there is one beep after reboot) and most information go back to default setting (LAN IP).