

FAQ Version 1.20





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FAQ

Q1: PWR LED indication of M2M-720-A is always turned off

A1: The power supply of M2M-720-A has some problems. Please check the wire connection of the power and the voltage is between 10~30 VDC

- Q2: SA1 and SA2 of M2M-720-A is always turned on
- A2: Application program has some errors. Please reset the M2M-720-A and check license whether it is OK or not in "information" page.

Client: Please check server's DNS and network settings whether they are all correct or not in "Standard Config" page.

- Q3: SA1 and SA2 LED of M2M-720-A flash slowly at the same time and keep the state long.
- A3: It means M2M-720-A can't establish the connection with the other M2M-720-A. Please check the network settings and M2M-720-A is working well on Ethernet.

Client: Please check server's IP/DNS and network settings whether they are all correct or not in "Standard Config" page.

- Q4: The audio quality of M2M-720-A is bad.
- A4: Please turn audio quality output volume and input volume of server and client in "Audio Config" page.
- Q5: M2M-720-A can't send event report
- A5: Please check the settings whether they are all correct or not in "Event Report" and "Mail Server Setting" page.

Q6: If I forgot the network settings, how can I do?

A6:

[One solution]

a. If the M2M-720-A is in a local network. The user can use the VxComm Utility or MiniOS7 Utility to scan the network settings of the M2M-720-A.

About VxComm Utility =>

- 1. please refer to <u>http://www.icpdas.com/products/Software/VxComm/vxcom</u> <u>m.htm</u>
- 2. The user can click "Search Servers" button to start the scan function.

YxComm Utility [v2.9.13, Jan.18, 2010] File Server Port Tools Configure S Vector remote Servers Made Server(s)	Server Configure Port Port Virtual COM Baudrate
Where remote some part of your PC	
Add Server(s)	
Remove Server Web Search Servers Configuration (UDP)	
Exit Name Alias IP Address Market Name Alias IP Address Market Name Alias IP Address Nam	/ ·/

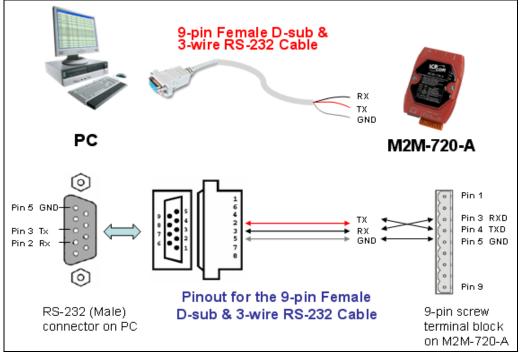
About MiniOS7 Utility =>

- 1. please refer to http://www.icpdas.com/download/minios7.htm
- 2. The user can click "Search" button to start the scan function.

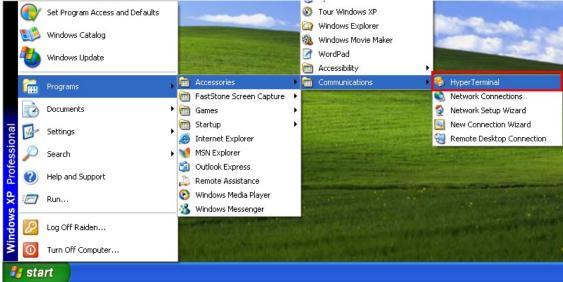
🚵 MiniOS7 Utility Yerion 3.1.6								
🗔 File 🌔 Co	nnection 🝷 🚸 Com	mand 🛐 Cont	figuration 📑 Too	ls 🥪 Help	÷			
Look jn: 🛅 M	liniOS7_Utility	~	0000		Lock i	n: Disk A		8
Name		Size T	уре	Modi	No Na	me	S	ize Modified
bin FIRMWARE	🚵 MiniOS7 Scan	<u>I</u>						
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🥺 MiniOS7 Util	Туре		/Port	Name		Alias	Mask	Gateway
MiniOS7_Util	TCP BroadCast	19:	2.168.1.217	M2M-720-	A	N/A	255.255.0.0	192.168.0.254
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	Search available UDF	·						
<								
Connection	F2) 🗊 Upload(F5)	💐 DiskTool((F6) 📑 Info(F7)	🙆 Delete	(F8) 🛃 Refr	esh(F9) 📇 C	onsole(F10) 🔤 DOS(F	11) 🏟 Search(F12)

b. If the M2M-720-A has a real IP and has an internet connection. The user can print current network settings by Com Port (RS-232).





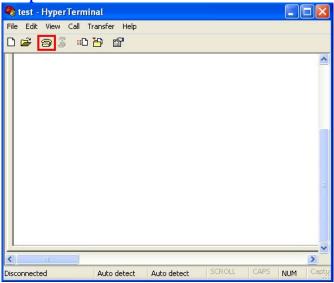
Step2: Open Com Port program. We used "Hyper Terminal" of Microsoft Window XP to test here.



Step3: Set communication setting of Com Port. (Baud rate = 115200, data bits=8, parity=none, stop bits=1, flow control=none).

OM1 Properties Port Settings	?
Bits per second:	115200
Data bits:	8
Parity:	None
Stop bits:	1
Flow control:	None
	Restore Defaults
0	K Cancel Apply

Step4: Press Call icon.



Step5: Set SW1=OFF, SW2=OFF. Step6: Press the Trigger Button about 40 second after power on.



Step7: It will show M2M-720-A's IP in "Hyper Terminal"(ex: IP Address = 192.168.0.211).

🍓 test - HyperTermir	nal					
File Edit View Call Tr	ransfer Help					
D 🖻 🎯 🌋 🕒	8					
						~
Print De OS Version : FW Version : IP Address : Subnet mask Mac Address	0.91 1.00 192.168 : 255.25	8.0.211 55.0.0				
						~
<						>
Disconnected	Auto detect	Auto detect	SCROLL	CAPS	NUM	Captu

[Another solution]

The user can recover the default network settings by DIP Switch and Trigger button (ex: SW2= ON, SW1= OFF and press the TB about 40 second after power on).



Option	State	Description
Recover default setting forever	SW2=ON SW1=ON To press the TB about 40 second after power on	All system settings will be cleared and recover default settings. (Warning: it will not restore settings after clear)
IP recover default setting for this time	SW2= OFF SW1= ON To press the TB about 40 second after power on	After power on, it will set IP to default setting (192.168.1.217) for this time, but it will restore original IP at next time.
IP recover default setting forever	SW2= ON SW1= OFF To press the TB about 40 second after power on	After power on, it will set IP to default setting (192.168.1.217) and save to flash.
Display the current IP and version	SW2=OFF SW1=OFF To press the TB about 40 second after power on	After power on, it will display the message about current IP and version information from Com Port(RS-232).
Normal setting	The other states	Normal state; It will not change any setting and data.

Dip switch and trigger button function

- Q7. I can't open the webpage of the M2M-720-A. A7.
 - Step1: Please confirm the network settings of the M2M-720-A. (The user can refer to "Q6. If I forgot the network settings, how can I do?")
 - Step2: Confirm the network settings of the PC have the same domain and different IP with the M2M-720-A.

Ex1=> M2M-720-A: IP-192.168.1.217, Mask-255.255.255.0 PC: IP-192.168.0.210, Mask-255.255.255.0 (Wrong settings)

Ex2=> M2M-720-A: IP-192.168.1.217, Mask-255.255.255.0 PC: IP-192.168.1.210, Mask-255.255.255.0 (Right settings)

Ex3=> M2M-720-A: IP-192.168.1.217, Mask-255.255.0.0 PC: IP-192.168.0.210, Mask-255.255.0.0 (Right settings)

- Q8. Client can't connect to Server.
- A8. Please follow the steps to check the network configurations are all correct.
 - Step1: Confirm the IP of Server and Client is the only. The IP is not the same with the other network device.
 - Step2: Please confirm the following settings are all correct.
 - "Server IP(*)" of client is the same with "IP Address" of server.
 - ➤ "Communication Port" of server and client are the same.
 - ➢ "Operation Mode" of client is "VSoIP Client".
 - ➤ "Operation Mode" of server is "VSoIP Server".

Client's	"Stande	ard Co	nf	ïg"	wel	бра	ige
WebConfig - Microsoft			, in the second s	0			Ŭ
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ICP-I	DAS						
Login	System					>	
User Account Date/Time Config	Operation Mode	VSoIP Client	~				
Standard Config	NetWork						
Com Port Config	Host Name	Client1					
Audio Config Operation Mode	Connect to Server by (*)	IP	~				
Information	Server IP (*)	192.168.0.210					
Reboot	Server DNS (*)	icpdas.homelinux.org					
	Communication Port	443					
	Boot Protocol	Static IP	~				
	Static IP Config						
	IP Address	192.168.0.211					
	Net Mask	255.255.0.0					
	GateWay	192.168.0.254					
	DNS Server	168.95.1.1				¥	
http://www.icpdas.com	m					CP.	
http://www.icpdas.com/					網球網路		

Server's "Standard Config" webpage 编辑(图) 檢視(型) 我的最爱(法) 工具(图) 說明(图) 🄇 1 – A • 🕤 · 💌 🗟 🏠 🔎 1948 🤸 860 A 🗄 🚱 🤮 📃 🇱 📓 🦓 🔁 移至 连结 » 🏺 http://192.168.0.210/main.htt Operation Mode VSoIP Serve andard Config Host Name <u>fig</u> Tonfig Connect to Server by (*) Server IP (*) 220.130.62.111 vent Log Server DNS (*) icpdas.homelin ent Report Communication Port 443 nformation Boot Protoco Static II tic IP Confi IP Address 192.168.0.210 Net Mask 255.255.0.0 GateWay 192,168,0.254 DNS Server 168.95.1.1 tp://www.icpdas.com

Step3: If server and client are in the local network, please confirm the network settings of client have the same domain and different IP with server.

Ex1=> Server: IP-192.168.1.217, Mask-255.255.255.0 Client: IP-192.168.0.218, Mask-255.255.255.0 (Wrong settings) Ex2=> Server: IP-192.168.1.217, Mask-255.255.255.0 Client: IP-192.168.1.218, Mask-255.255.255.0 (Right settings) Ex3=> Server: IP-192.168.1.217, Mask-255.255.0.0 Client: IP-192.168.0.218, Mask-255.255.0.0 (Right settings)

Step4: If server has a real IP and has an internet connection, please confirm the network ability of the server and client.

The user can test the network ability by the webpage (ex: <u>http://192.168.1.217/</u>) of server or client.

Please click the "Network Tools" hyperlink text on the left window of the webpage and then click "Ping Command" hyperlink text.

Now the user must input an IP or domain name to test the network ability (ex: google.com or yahoo.com) and click "Start" button to start the test and then click the "Refresh" button to get the result. If the result is 0% packet loss, it means the network is available.

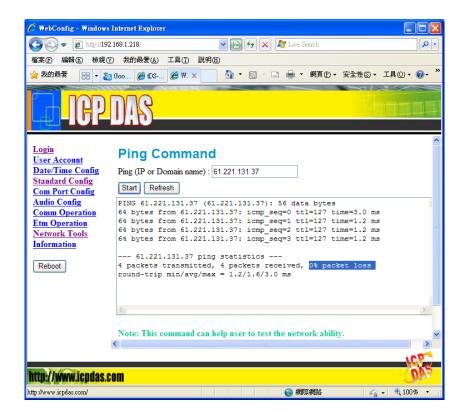


Step5: Please confirm the server's IP is effective.

The user can test by the webpage (ex: <u>http://192.168.1.218/</u>) of the client.

Please click the "Network Tools" hyperlink text on the left window of the webpage and then click "Ping Command" hyperlink text.

Now the user must input the IP (ex: 61.221.131.37) of the server on the webpage of the client and click "Start" button to start the test and then click the "Refresh" button to get the result. If the result is 0% packet loss, it means the server's IP is effective.



Step6: If Client connects to Server via internet, please confirm there is no firewall before the Server.

The Server uses several communication ports of Ethernet, as shown in the below.

Service	Port number	note
Web Server	80	
FTP Server	21	
Telnet Server	23	
SSH Server	22	
VSoIP function	443	default
VxComm function	10000, 10001	

Communication Port

Please make sure the communication ports are available. The user can contact with MIS or Internet Service Provider, or the user can test the communication ports are available or unavailable by network exploration utility. Ex: NMAP.

About the NMAP, please refer to <u>http://nmap.org/</u>, the user can

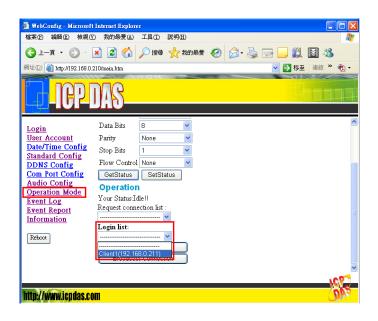
download the utility at http://nmap.org/download.html

The user can test the communication ports by nmap.exe <Server IP> (ex: C:\nmap.exe 61.221.131.37). If the communication port 21, 22, 23, 80, 443(default), 10000, 10001's state are open. It means the server is OK.

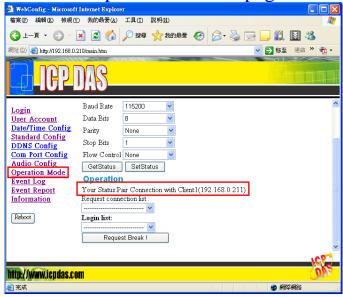
NMAP test

C:\WINDOWS\system32\cmd.exe
C:\Documents and Settings\Raiden\My Documents\nmap\nmap-5.21>nmap.exe 192.168.1. 218
Starting Nmap 5.21 < http://nmap.org > at 2010-09-29 16:56 台北標準時間 Nmap scan report for 192.168.1.218 Host is up (0.00s latency). Not shown: 993 closed ports PORT STATE SERVICE 21/tcp open ftp 22/tcp open ssh 23/tcp open telnet 80/tcp open http
443/tcp open https 10000/tcp open snet-sensor-mgmt 10001/tcp open unknown MAC Address: 00:18:33:29:2A:05 (Texas Instruments) Nmap done: 1 IP address (1 host up) scanned in 0.75 seconds C:\Documents and Settings\Raiden\My Documents\nmap\nmap-5.21>
新注半:

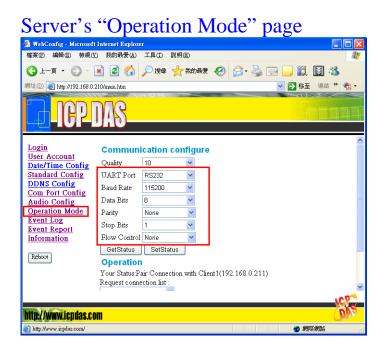
- Q9: Server and Client can't establish Com Port connection.
- A9: Please follow the steps to check below.
 - Step 1: Confirm Client has already login the Server and the user can find the host name of Client in the "Login list" at Server's "Operation Mode" page..



Step 2: Confirm Server and Client are at "Pair Connection" mode and it shows "Your Status: Pair Connection with Client (IP)" at Server's "Operation Mode" page.

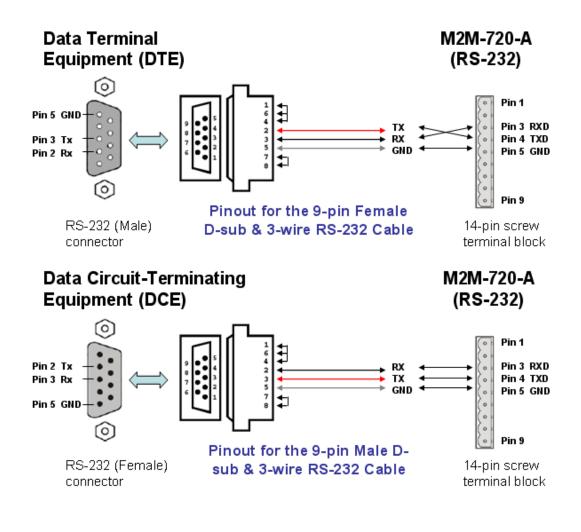


Step 3: Confirm that the Com Port device is connected with Server and Client has the same communication settings with Server's "Operation Mode" page. If it is different, please break the connection and change the settings then reconnect the client.



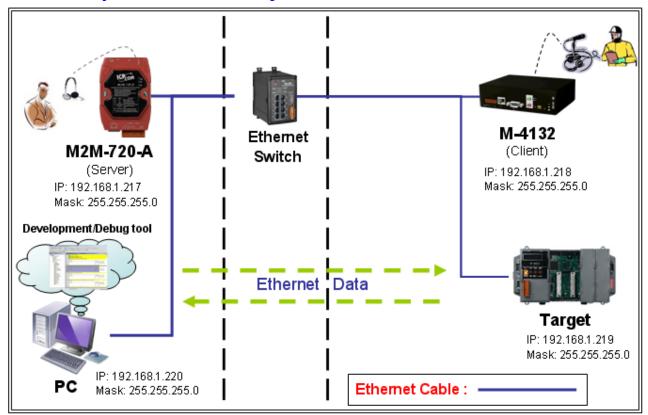
Step 4: Confirm the Cable connected Server/Client to Com Port device is wired correctly. If the connection is RS485, the user can refer to user manual section 2.2.2. If the connection is RS-232 and the Com Port device is a data circuit-terminating equipment (DCE), the user just needs to match the signal names to connect Server/Client to Com Port device, else the user needs to use a crossover cable to connect. Some Com Port devices will wait for one of the handshaking lines to go to the correct level forever. Depending on the signal state it might sometimes work, other time it might not. Here, we connect the M2M-720-A and the Com Port device

via handshake looped to avoid the Com Port device waits handshake line signals, as shown in below.



Q10: How to establish an ETM connection?

A10: Here, we provide an example to show how to establish an ETM connection.



About the system architecture, please refer to below:

In this example, we have below Ethernet settings. M2M-720-A(Server): IP=>192.168.1.217 Mask=>255.255.255.0

M-4132(Client) : IP=>192.168.1.218 Mask=>255.255.255.0

Target (ex: PLC or our ISaGRAF PAC or Modbus TCP device or other Ethernet device): Here we use ip-8847 (ISaGRAF SoftLogic PAC) for this example. IP=>192.168.1.219 Mask=>255.255.255.0

PC: IP=>192.168.1.220 Mask=>255.255.255.0

Please follow the steps to establish an ETM connection.

Step1: Open web browser (ex: IE or Chrome, etc.) on PC and key in http://IP (ex: http://192.168.1.217/) in the address line and then press "Enter" key to connect to client(M-4132). (About IP: default is 192.168.1.217)

🕒 WebConfig	× P WebConfig	
_		
← → C fi 🗅	192,168,1.217	☆ =
🚺 建議的網站 🗋 網頁	快訊圖庫 🗋 自訂連結 🗋 轉換結果 🧰 從 IE 匯入 📑 新分	·頁
ICP.	DAS	
Login	You are not logged yet !	
User Account		
Date/Time Config	User Name : root	
Standard Config	Password : •••••	
DDNS Config	Enter	
Com Port Config		
<u>Audio Config</u>		
Etm Config		
Comm Operation		
<u>Etm Operation</u> Webcam		
Event Log		
Event Report		
Network Tools		
Information		
Reboot		
		We
http://www.icpdas.co	m	QUE

Step2: Key in user name (default: root) and password (default: icpdas) and then click "Enter" button to login.

You are not l	ogged yet !
User Name :	root
Password :	•••••
Enter	

Step3: Click "Standard Config" link and "Manual Configure" button.



Step4: Set the device at the "Manual Configure" page by below settings. And then click "Save Setting" button.

System

Operation Mode=> VSoIP Client

Encryption

Mode=>None(default) Key=>_userkey(default)

NetWork

Host Name=>4132Client1 Connect to Server by=>IP(default) Server IP=>192.168.1.217 Server DNS=>www.serverdns.com(default) Communication Port=>443(default) VPN=>Disable(default) Boot Protocol=>Static IP(default)

Static IP Config

```
IP Address=>192.168.1.218
Net Mask=>255.255.255.0
GateWay=>192.168.1.254
DNS Server=>168.95.1.1
```

ADSL Config

User Name=>user(default) Password=>password(default)

Step5: Click "Reboot" button to reset device in the left page.

🕒 WebConfig	🗙 🗋 WebConfig	×	
← ⇒ C fi 🗅	192, 168, 1, 218		☆ =
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	DAS		
Login	11036 13600C		~
User Account	Connect to Server by (*)	IP 💌	
Date/Time Config	Server IP (*)	192.168.1.217	
Standard Config	Server DNS (*)	www.serverdns.com	
Com Port Config Audio Config	Communication Port	443	
Comm Operation	VPN	Disable 😵	
<u>Etm Operation</u> Webcam	Boot Protocol	Static IP	
Network Tools	Static IP Config		=
Information	IP Address	192.168.1.218	
Reboot	Net Mask	255.255.255.0	
	GateWay	192.168.1.254	
	DNS Server	168.95.1.1	
	ADSL Config		~
			ICP.
http://www.icpdas.co	m		0AS

Step6: Connect to server (M2M-720-A), the same with Step1.

Step7, 8: the same with Step 2, 3.

Step 9: Set the device at the "Manual Configure" page by below settings. And then click "Save Setting" button.

System

Operation Mode=> VSoIP Server

Encryption

Mode=>None(default)

Key=>_userkey(default)

NetWork

Host Name=>720AServer Connect to Server by=>IP(default) Server IP=>192.168.1.217(default) Server DNS=>www.serverdns.com(default) Communication Port=>443(default) VPN=>Disable(default) Boot Protocol=>Static IP(default)

Static IP Config

IP Address=>192.168.1.217 Net Mask=>255.255.255.0 GateWay=>192.168.1.254 DNS Server=>168.95.1.1

ADSL Config

User Name=>user(default) Password=>password(default)

Step10: the same with Step 5.

Step11: Check the led status of client (M-4132). If the SA1 led is flash slowly, it means it is trying to establish the connection with the server. If the SA1 led is off, it means the connection is OK. If the SA1 led is flash slowly and continued over three minutes, please recheck the settings are all correct.

Step12: Open the web page of Server (M2M-720-A) and Click "Etm Config" link. a.Set Target IP=>192.168.1.219, Configure file=>Configure1 b.Click "Save Setting" button c.Click "Port Scan" button

🗋 WebConfig	× 🕒 WebConfig 🛛 ×	
← → C fi 🗋	192.168.1.217	☆ =
[] 建議的網站 📋 網頁的	快訊圖庫 🕒 自訂連結 🗋 轉換結果 🧰 從 IE 匯入 🕒 新分頁	
ICP-I	DAS	
<u>Login</u> User Account	Etm Config 2.	
Date/Time Config	Target IP 192.168.1.219	
Standard Config DDNS Config	Configure file	
Com Port Config	Start value of port scan 1	
Audio Config Etm Config	Stop value of port scan 10000	
<u>Comm Operation</u> <u>Etm Operation</u>	Save Setting Default Setting Port Setting Port Scan	
Webcam	r A	
Event Log	· · · · · · · · · · · · · · · · · · ·	
Event Report 1.	3. 4.	
Network Tools		
Information		
Reboot		
http://www.iondoc.com		NCP S

Step13: Select 4132Client1 in the login list and then click "Start Scan" button and then the "Start Scan" button will become to "Stop Scan" button.

🗋 WebConfig	× 🕒 WebConfig		
← → C fi	192.168.1.217		☆ 〓
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	DAS		
Login	L Target Port4:	Communication Port4:	<u>^</u>
<u>User Account</u>	0		TCP 💌 Disable 💌
Date/Time Config Standard Config DDNS Config	g Target Port5: 0	Communication Port5:	TCP 💌 Disable 💌
Com Port Config Audio Config	Target Port6: 0	Communication Port6:	TCP 💌 Disable 💌
Etm Config Comm Operation Etm Operation	Target Port7:	Communication Port7:	TCP 💌 Disable 💌
<u>Webcam</u> <u>Event Log</u> <u>Event Report</u> <u>Network Tools</u>	Note : None	K ^{1.} K	
Information Reboot	Login list 4132Clier	nt1(192.168.1.218) 💌 Start Scan	Return
			<u>1997</u>

Step14: Wait "Stop Scan" button become to "Start Scan" button again and then select "Configure1" and click "Save" button.

🗋 WebConfig	× C WebConfig	×		
← → C fi []	192.168.1.217			☆ =
🊺 建議的網站 🗋 網頁	〔快訊圖庫 🗋 自訂連結 📋 轉換	結果 🧰 從 IE 匯入 📋 新分頁		
	P-DAS			
Login User Account	Port Scan	1.		^
Date/Time Config	Target IP : 192.168.1.2	19		
Standard Config	Port Range : 1~10000	K/		
DDNS Config	Save result to Configure1	V Save K		
Com Port Config				
Audio Config Etm Config	Scan result :			
Comm Operation	Target Port0: 502	Communication Port0:	20000	TCP 👻 Enable 💌
Etm Operation				
Webcam	Target Port1: 0	Communication Port1:	0	TCP 👻 Disable 💌
Event Log	Target Port2: 0	Communication Port2:	0	TCP 💌 Disable 💌
Event Report Network Tools	Target Port3: 0	Communication Port3:	0	TCP 💌 Disable 🛩
Information	Target Port4: 0	Communication Port4:	0	TCP 👻 Disable 🛩
Reboot	Target Port5: 0	Communication Port5:	0	TCP 💌 Disable 💌 🗸
				1923

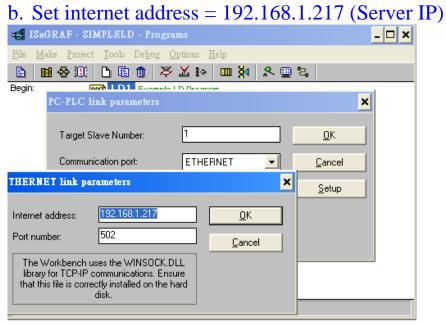
Step15: Click "Etm Operation" link, and then select 4132Client1 in the login list and then click "Pair Connection" button.

🗋 WebConfig	× 🕑 WebConfig 🛛 🗙 🗖	
← → C fi 🗋	192.168.1.217	☆ =
🚺 建議的網站 🕒 網頁的	央訊圖庫 🕒 自訂連結 🗋 轉換結果 🦳 從 IE 匯入 🗋 新分頁	
ICP.I	AS	
<u>Login</u> User Account	Communication configure	
Date/Time Config	Quality 10	
Standard Config	Target IP 192.168.1.219	
DDNS Config	Configure file Configure1	
<u>Com Port Config</u> <u>Audio Config</u>	GetStatus SetStatus	
Etm Config		
Comm Operation	Operation	
<u>Etm Operation</u> <u>Webcam</u>	Your Status:Idle!!	
Event Log	Request connection list :	
Event Report		
Network Tools	Login list:	
Information	4132Client1(192.168.1.218)	
Reboot	Pair Connection 2.	

Step16: At this time, the SA2 led of server and client should flash fast. It means the Pair connection is OK. Now, the user can connect to the

target via server (M2M-720-A) on the PC.

- Step17: In this example, the target is ip-8847 (ISaGRAF SoftLogic PAC). So, we use ISaGRAF Workbench to connect target for diagnostic and reprogramming.
 - a. Open the ISaGRAF project and click "link setup"



c. Click Debug to connect target and click stop button to stop current program.

🔍 ISaGRAF - SIMPLELD - Debugger	- 🗆 🗙
<u>File Control T</u> ools <u>Options H</u> elp	
💬)) (>>)) >>) () () () () () () () ()	
No application	
17:43:49 [0]: application stopped	

d. Click Download to reprogramming target. Now, the user can connect to target for diagnostic.

