M2M-720-A Quick Start User Guide

1. Introduction

This manual introduces the M2M-720-A's basic setting and operation. The user can refer to the user manual in the ICP DAS companion CD-ROM (Path: "CD:\napdos\multimedia\m2m-720-a\manual\m2m-720-a user manual-en.pdf") for detail.

The manual is intended to help users quickly understanding and easily using of M2M-720-A. We use two M2M-720-As (one as Server, the other as Client), one Ethernet switch and one PC to make a simple application here, as shown in figure 1. The PC is prepared for setting and operating the M2M-720-A.

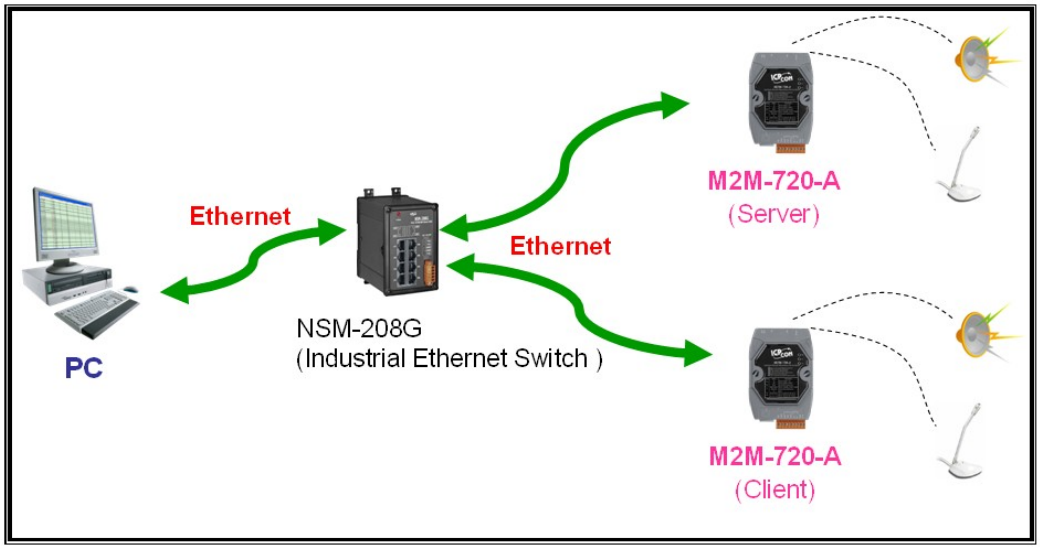


Figure 1: Pair connection

2. Hardware configuration

Pin Assignment



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9-pin screw terminal block

Pin	Name	Description
1	Trig	Trigger input
2	T.Gnd	GND of trigger input
3	RXD	Rx of RS-232
4	TXD	Tx of RS-232
5	GND	GND of RS-232
6	D+	Data+ of RS-485
7	D-	Data- of RS-485
8	PWR	V+ of Power Supply (+10 to +30VDC)
9	GND	GND of Power Supply

DIP switch and Trigger button



DIP switch and trigger button for initial function

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	After power on, it will set IP to default setting (192.168.1.217) and save to

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Option	State	Description
	To press the TB about 40 second after power on	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.

LED Indicator



LED status indicator

Name	Status	Description
PWR	on	Power supply is ok.
	off	Power supply has failed.
SA1	flash	It is receiving com port data via Ethernet.
SA2	flash slowly	Server: The Ethernet is initial ok and wait client to login. Client: The Ethernet is initial ok and login completely. It has readied to enable voice and com port data connection.
	flash fast	It is sending or receiving voice data via Ethernet.
SA1 & SA2	on	AP has some errors. (Client: Please check settings about IP & DNS)
	flash slowly (SA1 & SA2 flash at the same time)	It is trying to establish the connection with server/client. If it can't connect to server/client for a long time, please check it has available network settings and is working well on Ethernet.
	flash (SA1 & SA2 alternate flash)	Server: Receive the request to connect from the client. Client: Request the server to connect.

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3. System Setting

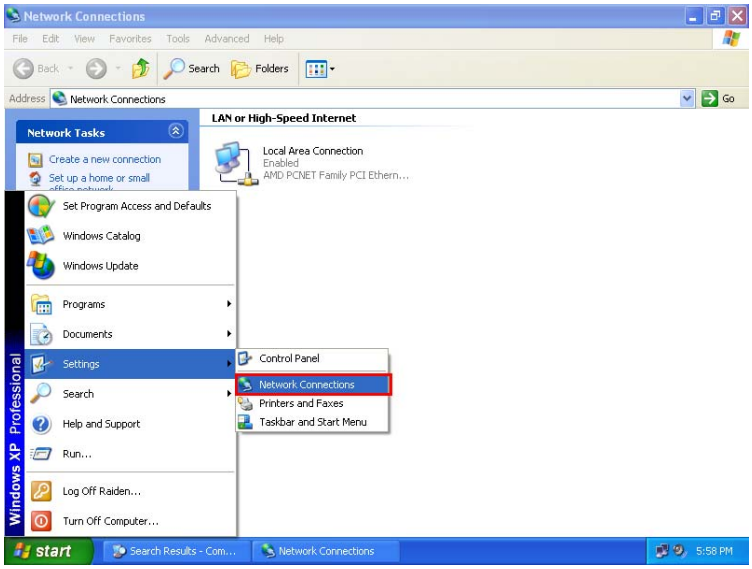
The M2M-720-A module is built-in web server, the user can configure and operate the M2M-720-A by web browser (ex: IE).

Connection Setting

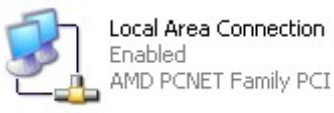
The user needs to prepare a system as figure 1. The user can connect PC and a M2M-720-A by Ethernet switch. M2M-720-As' default IPs (Default IP address is "192.168.1.217") are the same. It can not connect with two M2M-720-A at the same time before the setting is finished, else M2M-720-As' IPs will conflict. The connection setting will be described below and Microsoft Windows XP Professional SP2 is used.

a. Setting the Network of PC：Set the IP and Subnet mask of the PC. These settings must have the same domain and different IP with the M2M-720-A. (ex: M2M-720-A's default IP = 192.168.1.217, PC's IP = 192.168.1.210).

Step 1: Click "start->Settings->Network Connections".
Step 2: Double click "Local Area Connection" icon.
Step 3: Click "Properties" button.
Step 4: Select "Internet Protocol(TCP/IP)" and click "Properties" button.
Step 5: Set "Internet Protocol Properties" and then click "OK" button.

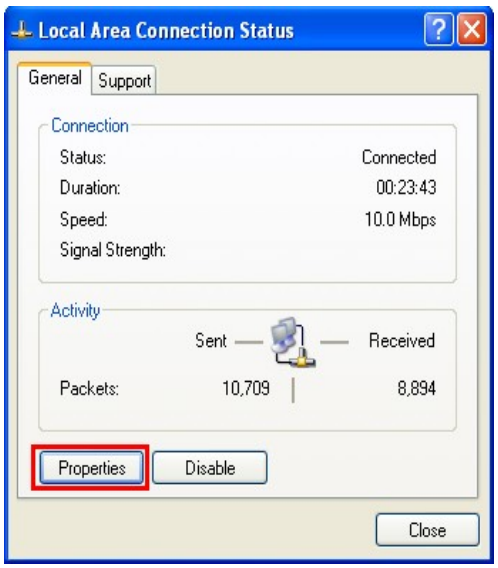


Step 1: Click "Network Connections"

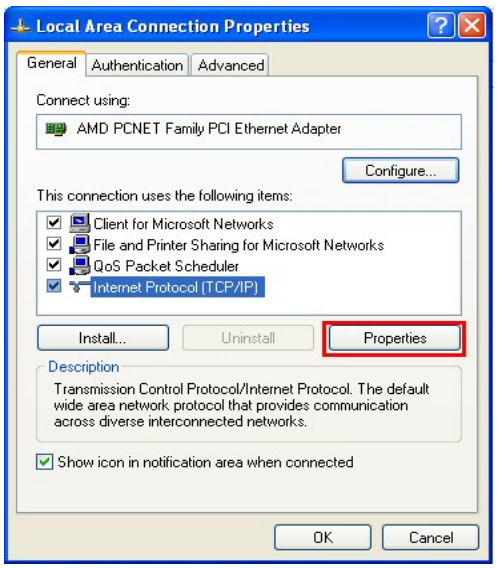


Step 2: Click icon

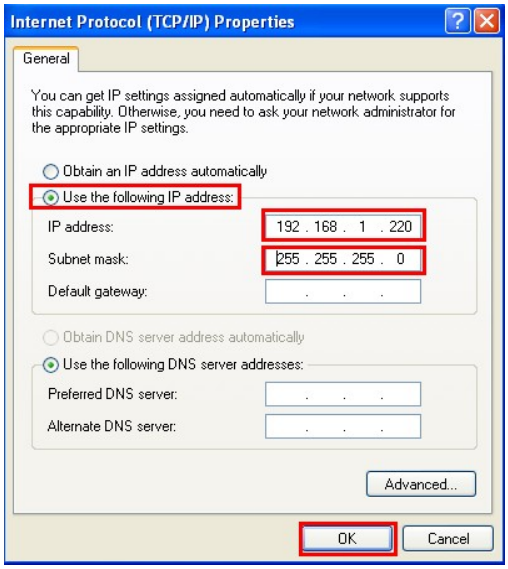
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Step 3: Click “Properties” button



Step 4: Click “Properties” button

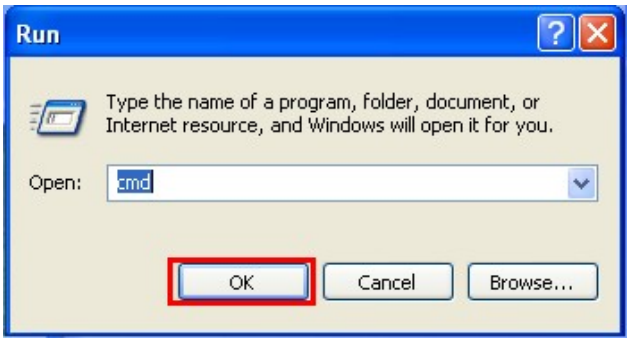


Step 5: Set “Internet Protocol Properties”

b. connection test：



Step 1: Click “start->Run”

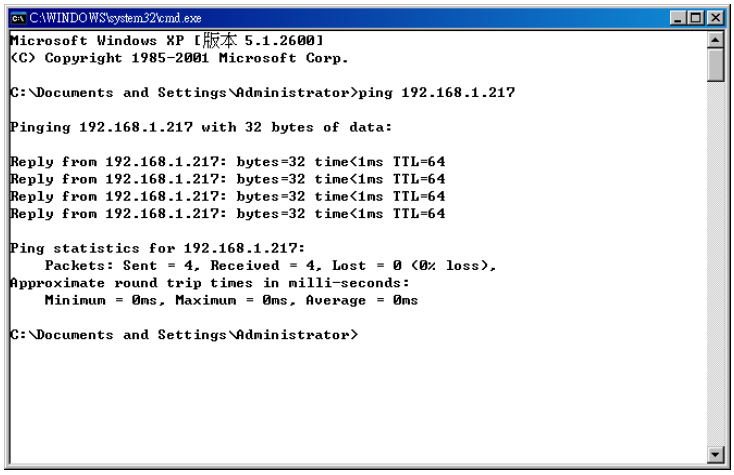


Step 2: key in “cmd” and then click “OK” button

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Step 3: Key in “ping 192.168.1.217” and click “Enter”. If the network settings are all correct in PC and M2M-720-A, these messages are shown below.

Response Message:
Reply from 192.168.1.217: bytes=32 time<1ms TTL=64
Reply from 192.168.1.217: bytes=32 time<1ms TTL=64
Reply from 192.168.1.217: bytes=32 time<1ms TTL=64
Reply from 192.168.1.217: bytes=32 time<1ms TTL=64
Ping statistics for 192.168.1.217:
Packets: Sent=4, Received=4, Lost=0 (0% loss)

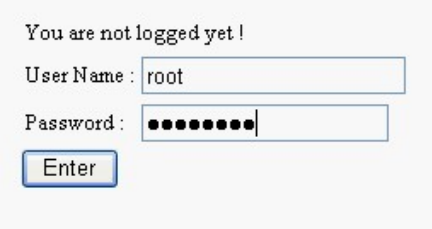


c. Setting Client：Open web browser (ex: IE, Mozilla, etc.) on PC and key in http://192.168.1.217/main.htm in the Address line and then press “Enter” key to link the M2M-720-A’s web page.



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- Key in user name (default: root) and password (default: icpdas) and then click “Enter” button to login.



- Set Operation Mode = “VSoIP Client”, Host Name = Client1, ServerIP(*) = ”192.168.1.217” and IP Address = “192.168.1.218” in “Standard Config” web page. It is not need to change the other settings and, then click “Save Setting” button to save the settings.
- Click “Reboot” button to reset M2M-720-A in the left page.

d. Setting Server

Now the user can connect the other M2M-720-A and Ethernet switch. You don’t need to remove the Client after the Client finished setting. If the Server has default settings, it can work in the demo.

The Client will try to establish the connection with the Server after the Server and Client power on. If PWR is on, SA1 is off and SA2 flash slowly one minute later, it means the Server and Client work normally and ready to use.

e. Error check

If these LEDs statuses are not the same as the above, check the power supply, network connection and system settings again.

Server: The user can open web browser and set the network address: http://192.168.1.217/main.htm . After login, the user can click “Default Setting” button and then click “Save Setting” button to recover the default settings in the “Standard Config” page.

Client: The user can open web browser and set the www address: http://192.168.1.218/main.htm . After login, the user can click “Default Setting” button in the “Standard Config” page and then set the client refer to the above.

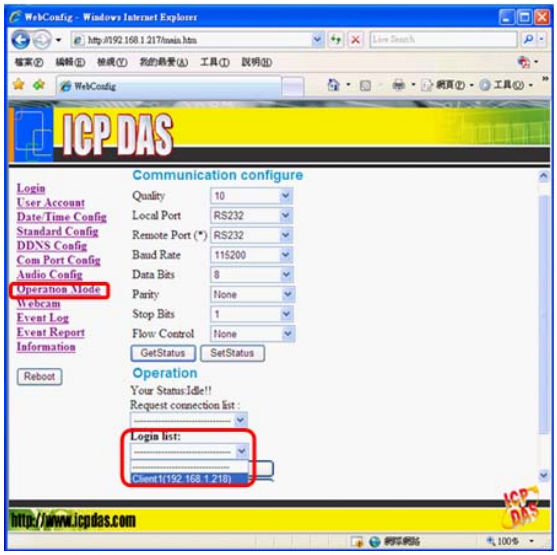
Note: It must reset the M2M-720-A by power reset or click “Reboot” button after the user changes the settings.

4. Communication test

If the above settings are all correct, the Server and Client should work normally. Open web browser and give the network address: http://192.168.1.217/main.htm and then

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login. The user can click “Operation Mode” hyperlink to operate the server. The user can find Client1 in the drop down list of “Login list”, as shown below.



Drop down list of “Login list”

Please select “Client1” in the drop down list of “Login list” and click “Pair Connection” button. The SA2 of the Server and Client will flash quickly; it means the voice connection is established. Voice and serial data transferred from one side is forwarded to the other side at that time. If the user wants to end the connection, the user can click “Request Break” button.



“Pair Connection” button



“Request Break” button

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