

M2M-710D Quick Start User Guide

1. Introduction

This manual introduces the M2M-710D'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-710D>manual\M2M-710Duser manual.pdf")

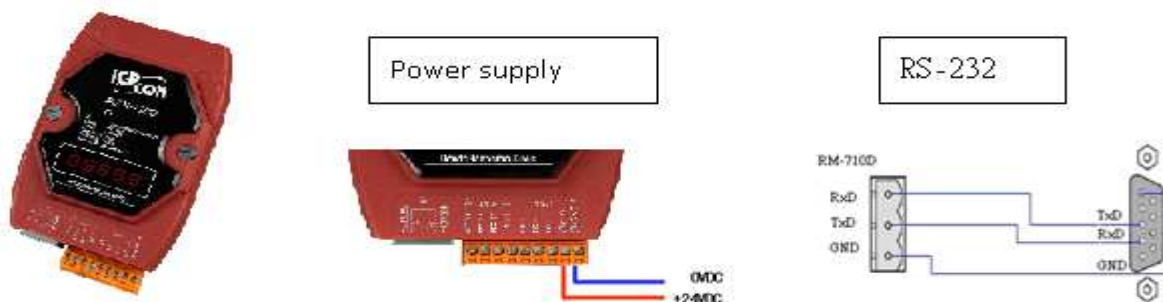
The manual is intended to help users quickly understanding and easily using of M2M-710D. In this demo, one M2M-710D is set as client mode and the other is in server mode. One Ethernet switch and one PC to make a simple application here, as shown in figure 1. The PC is prepared for setting the M2M-710D.



Figure 1: Pair connection

2. Hardware configuration

M2M-710D



M2M-710D Pin definition

Pin	Name	Description
1	CTS1	Clear to Send
2	RTS1	Request to Send
3	RxD1	Receive Data
4	TxD1	Transmit Data
5	INIT	InitPin
6	DATA+	Data+ of RS-485
7	DATA-	Data- of RS-485
8	Vs	Vs of Power Supply
9	GND	GND of Power Supply

Digit Led Display

State	Step	Describe
Power on	11111	Show local IP step by step
	22222	Show Server IP step by step
	33333	Show connected port for server
	44444	Show Comport configuration
connect	connecting	The word "Conn." twinkled
	Logi n	Display the word "Conn."
	serial port	Show information of alternate port and Baudrate

3. System Setting

The M2M-710D module is built-in web server, the user can configure and operate the M2M-710D by web browser (ex: IE).

Connection Setting

The user needs to prepare a system like figure 1. The user can connect PC and a M2M-710D by Ethernet switch. It can not connect with two M2M-710D at the same time before setting. M2M-710Ds' IPs will conflict, because M2M-710D' default IPs (Default IP address is "192.168.1.217") are the same. 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-710D. (ex: M2M-710D's default IP = 192.168.1.217, PC's IP = 192.168.1.210).

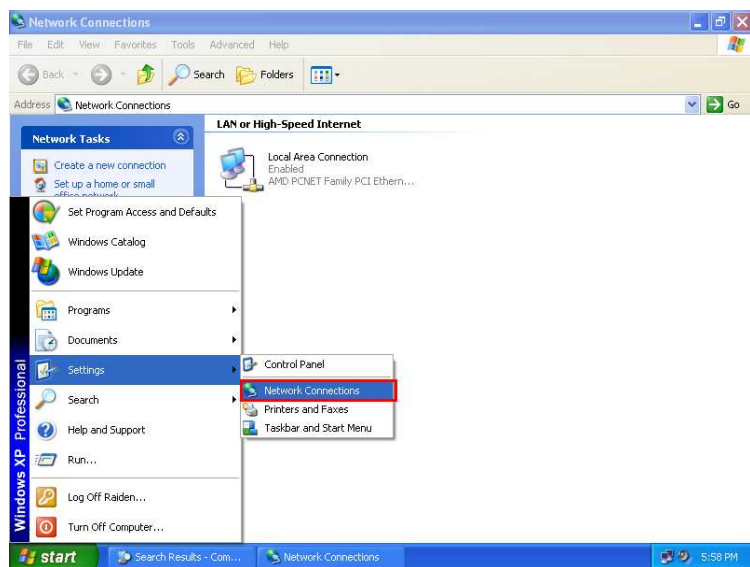
Step 1: Click “start->Settings->Network Connections”.

Step 2: Double click “Local Area Connection” icon.

Step 3: Click “Properties” button.

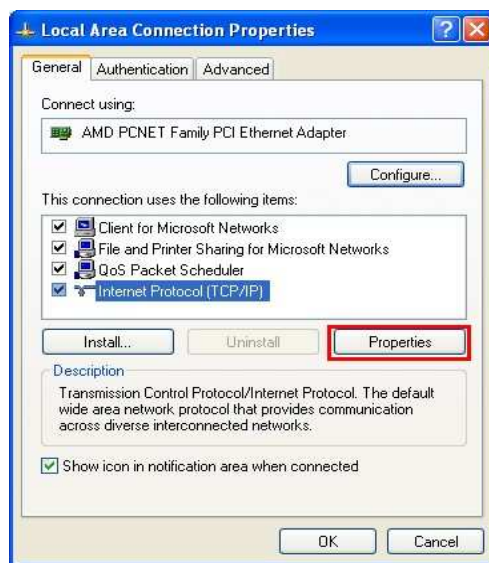
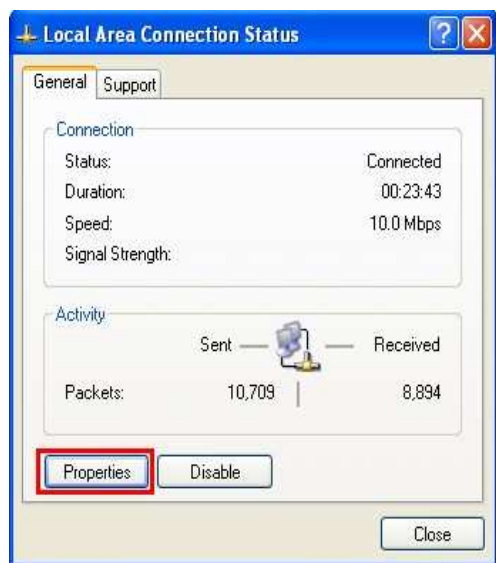
Step 4: Select “Internet Protocol(TCP/IP)” and click “Properties” button.

Step 5: Set “Internet Protocol Properties” and then click “OK” button.



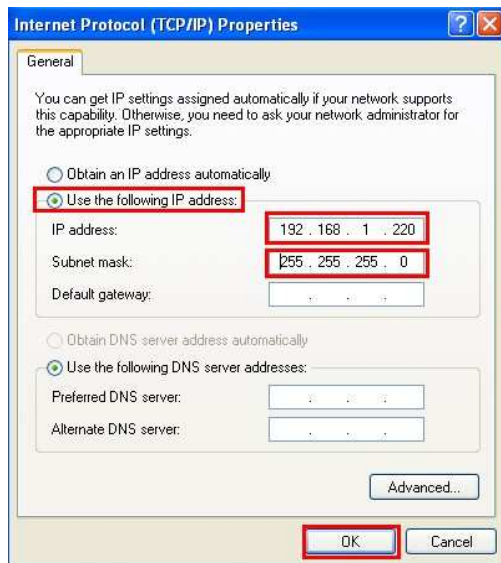
Step 1: Click “Network Connections”

Step 2: Click icon



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

Step 3: Key in “ping 192.168.1.217” and click “Enter”. If the network settings are all correct in PC and M2M-710D, these messages are shown below.

Response Message:

Reply from 192.168.1.217: bytes=32 time<1ms TTL=64

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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:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ping 192.168.1.217

Pinging 192.168.1.217 with 32 bytes of data:

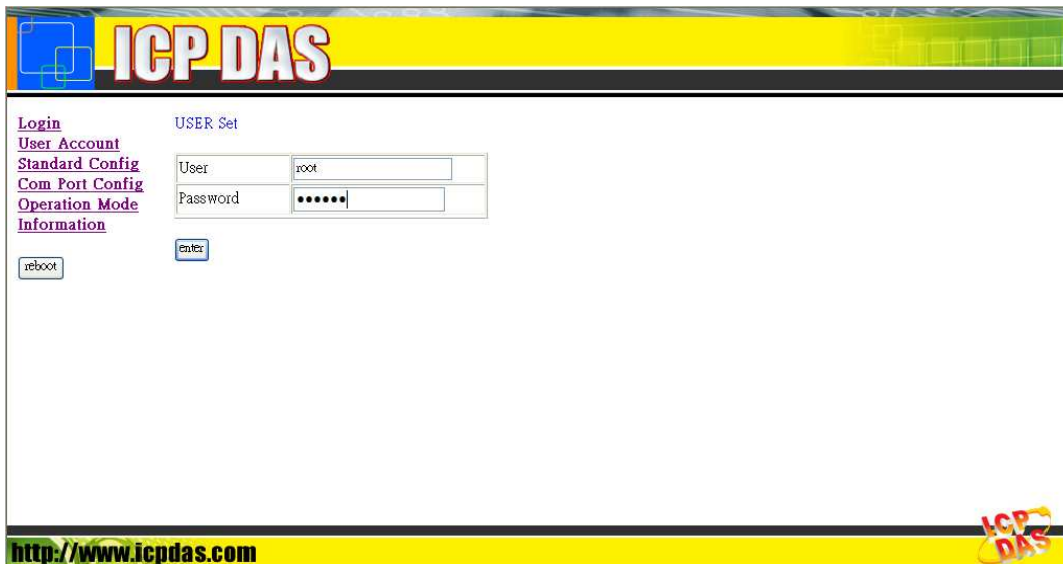
Reply from 192.168.1.217: bytes=32 time<1ms TTL=64
Reply from 192.168.1.217: bytes=32 time<1ms TTL=64
Reply from 192.168.1.217: bytes=32 time<1ms TTL=64
Reply from 192.168.1.217: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.1.217:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Documents and Settings\Administrator>

```

c. **Set 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-710D’s web page.



- Key in user name and password and then click “Enter” button to login.

USER Set

User	root
Password	•••••

Enter

- Set Host Name = “M2M-710D”, Operation Mode = “Client” , 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-710D in the left page.

d. Setting Server

Now the user can connect the other M2M-710D and Ethernet switch and 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 led 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 give 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 give 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-710D 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 click Information page. If System State condition is “Communication” or you can find out client IP in Operation Mode page, both sides already established the communication.



Information

OS Version :	2.2.15[Apr 29 2008]
XS Version :	0.9.3.13
Current IP :	192.168.1.217
Subnet Mask :	255.255.0.0
Mac Address :	00:0D:80:50:01:1D
System State :	Communication

[Login](#)
[User Account](#)
[Standard Config](#)
[DDNS Config](#)
[ComPort Config](#)
[Operation Mode](#)
[Information](#)

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System state sides already established the communication.



Communication configure

Client IP	192.168.0.220
Port	RS232
Baud Rate	115200
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

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Check Client IP on Operation Mode page

After accomplish setting, then tests M2M-710D's function using HyperTerminal Applet. The RS232 material which tests on PC to send out may transmit correctly from any one to another tests PC.