

## Moxa CN2500 Async Server

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The purpose of this Quick Installation Guide is to help you get your Moxa CN2500 Async Server up and running as quickly as possible. If you are a first time user, or would like a more detailed description of the installation and configuration procedure, please check the user's manual (pdf format) included on the CN2500 CD.

本簡易安裝指南為提供 CN2500 遠端存取伺服器的簡易硬體安裝及設定的指示。它提供您在最快的速度下使您所購買的伺服器在最短的時間下可以運作。如您需要詳細說明資料，或者您是第一次使用者，請確實參閱 CN2500 光碟片內的詳細手冊。

**First Edition, Jun 2000**



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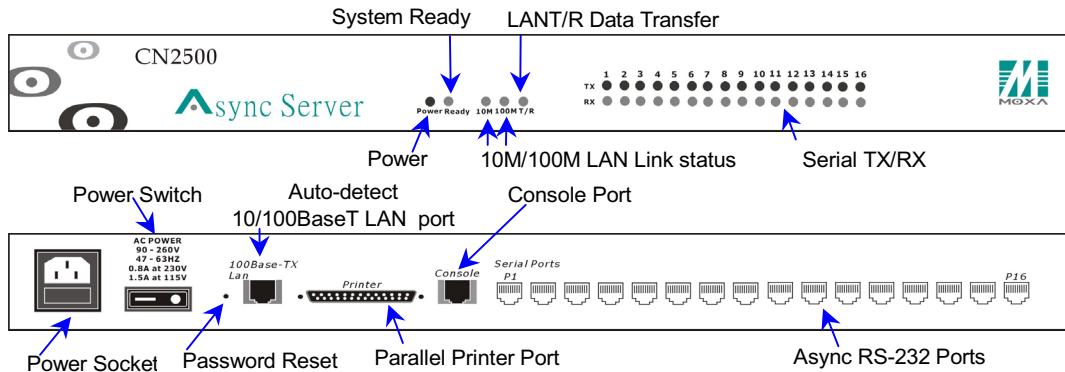
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# Package Checklist

- ◇ CN2500 Async server
- ◇ AC power cord
- ◇ CD with manual and driver
- ◇ Quick Installation Guide
- ◇ CN20030 RJ45 to female DB25 RS-232 crossed cable for connecting DTE
- ◇ CN20040 RJ45 to male DB25 RS-232 straight cable for connecting DCE
- ◇ Rackmount kit (2 brackets, 8 screws)
- ◇ Desktop kit (4 pads)

# Front and Rear Panel



# PIN Assignment

Console Port Interface

Pin	Signals
1	-
2	DSR
3	RTS
4	GND
5	TxD
6	RxD
7	GND
8	CTS
9	DTR
10	-

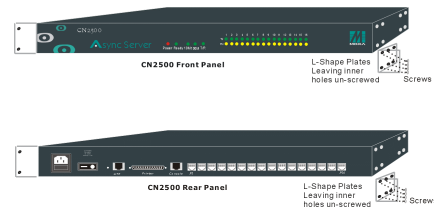
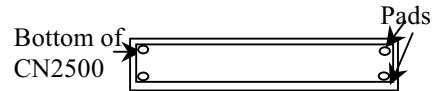
RS-232 Port Interface

Pin	Signals
1	DCD
2	DSR
3	RTS
4	GND
5	TxD
6	RxD
7	GND
8	CTS
9	DTR
10	-

# Quick Hardware Installation

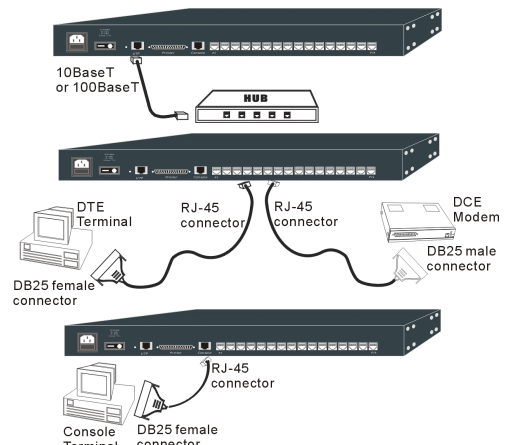
## 1. Installing the Server

- Remove the server from the package.
- Check the label on the bottom of the server for the MAC address. Write the address here for later use.  
MAC address: \_\_\_\_\_
- Attach the pads to the bottom of the server if you plan to put it on a desktop.
- You may also mount the hub on a rack.
- If you plan to mount it from the front, attach the enclosed brackets to the sides of the front panel and then screw the brackets to the rack.
- If you plan to mount it from the rear, attach the enclosed brackets to the sides of the rear panel and then screw the brackets to the rack.
- Plug in the power cord.



## 2. Connecting Devices

- To connect to a network through a LAN Interface, use a straight-through LAN cable.
- To connect serial devices, you may, e.g., use a CN20030 RJ45-DB25 female cable to connect to a terminal or use a CN20040 RJ45-DB25 male cable to connect to a modem.
- If you are not on a network, or would like to configure through a console port, use a CN20030 RJ45-DB25 female cable to connect a PC COM port to CN2500's Console port.



## 3. Checking the Connections

- Turn on the power switch.
- Make sure that the power LED is on, indicating that the device is receiving power.
- Make sure that the LAN LED is on, indicating that the server is connected to the network.

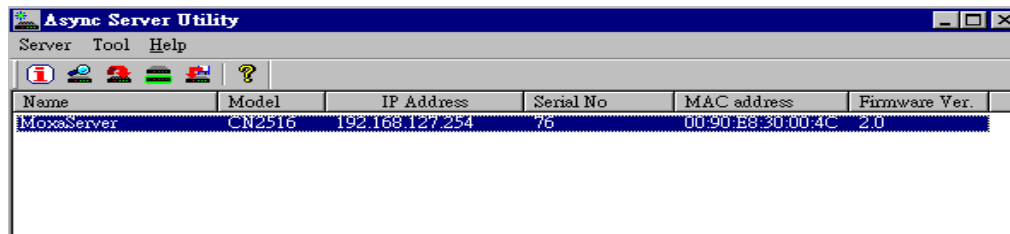
## Quick Configuration

There are three ways to configure the server. Note that the default CN2500 IP address is 192.168.127.254.

1. Use the enclosed 'ASUTIL.exe' utility to change the server IP address, then telnet to the new server IP address.
2. Telnet to the default IP address. If the address is not reachable, add the IP address to your routing table. (If you are not familiar with adding routes, use method 1. or 3. instead.)
3. Use the Console connection to enter the console utility.

### 1. Fast Server IP address Configuration From Network Windows Host

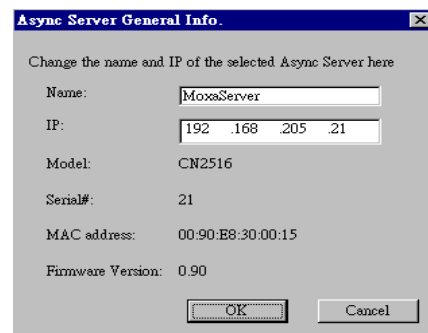
- The procedure below simplifies the network connection from your Windows station to the Async Server.
- Run the "ASUTIL.exe" program included on the CN2500 CD.
- After the program finishes searching for all network servers, move the cursor to the server with the same MAC address you wrote down on page 2.
- Double click the server to see the settings.



Name	Model	IP Address	Serial No	MAC address	Firmware Ver.
MoxaServer	CN2516	192.168.127.254	76	00:90:E8:30:00:4C	2.0

- Change the server name.
- Change the IP address (e.g., 192.168.205.21) to fit your own network.
- Click 'OK' to accept the new settings.
- Now you are ready to run 'telnet server\_ip\_address' for a detailed configuration. This procedure is described on the following page.

☞ Note: If you can't find the server, check the power, and the network connection of the server. Then go to [search] to find the server again.



Change the name and IP of the selected Async Server here

Name:

IP:

Model: CN2516

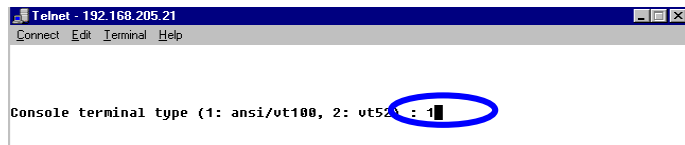
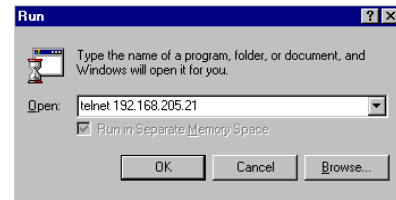
Serial#: 21

MAC address: 00:90:E8:30:00:15

Firmware Version: 0.90

## 2. Entering Console Utility through Telnet

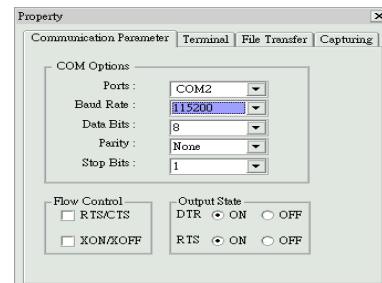
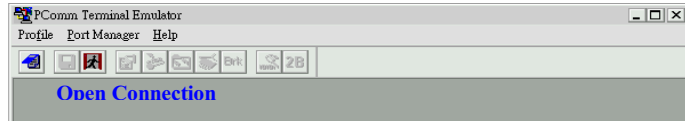
- First run 'ping server\_ip\_address' to see if the server is reachable. If not, use another configuration method.
- Run 'telnet server\_ip\_address' from the Windows run command line (under Start), or from the command prompt under Unix.
- After connecting, type 1, and then enter to use a VT100 terminal emulation.
- After entering the console utility, use the keys listed in the following table to move and select.



Action	Key
Move	[Up/Down/Left/Right] Arrow Key or [Tab] Key
Enter to next menu	[Enter] Key
Back to previous menu	[Esc] Key

## 3. Entering Console Utility through Console Port

- Make sure you have connected the COM port to the server Console port.
- Run the 'pcterm.exe' program on the CN2500 CD.
- Start PComm Terminal program and open a new connection. Use 115200 Baud Rate, 8 data bits, 1 stop bit and none for parity, for the COM port parameters.
- After connecting, type 1, and then enter to use a VT100 terminal emulation.
- After entering the console utility, use the keys listed in the following table to move and select.



Action	Key
Move	[Up/Down/Left/Right] Arrow Key or [Tab] Key
Enter to next menu	[Enter] Key
Back to previous menu	[Esc] Key

# Server Configuration

- Go to [Server] and press enter.
- Select [Info.] and press enter.
- Change the server name under the same menu.
- Change the server IP address to a desired one (e.g., 192.168.205.21).
- Set the default gateway or domain name server if needed.
- Press ESC to leave the [Info] menu.
- Follow the pop up menu instructions to save the configuration settings.
- Choose [Restart] under the main menu to restart the server.

```

MoxaServer U0.90
-----
[Server] Port setting save Utility Restart Exit
         Examine/modify async server node/table configuration
Enter: select ESC: previous menu
  
```

```

MoxaServer U0.90
-----
[Info.] Adv. Host_table Route_table User_table Quit
        Examine/modify async server basic configuration
ESC: back to menu Enter: select

Async Server name      [MoxaServer      ]
Async Server location  [                  ]
Async Server IP address [192.168.205.21 ]
Async Server IP netmask [255.255.255.0  ]

Default gateway IP address [                  ]
Domain server 1 IP address [                  ]
Domain server 2 IP address [                  ]
WINS server IP address  [                  ]

Async server serial number [21]
Ethernet speed          [10Mbps]
Ethernet address        [00:90:E8:03:00:15]
Console password        [                  ]
  
```

```

MoxaServer U0.90
-----
[Info.] Adv. Host_table Route_table User_table Quit
        Examine/modify async server basic configuration
Enter: select ESC: previous menu

Warning !!!
You had modified the configuration without saving.
Would you save it now ?
'Y': yes 'N': no
  
```

```

MoxaServer U0.90
-----
Server Port setting save Utility [Restart] Exit
Restart the whole system or selected ports
Enter: select ESC: previous menu
  
```

## Port Configuration

- To enter Console Utility, either telnet to the server IP address, or connect to the server console port, as described on the previous page.
- Go to [Port] and press enter.
- Go to [Mode] and press enter.
- Move the cursor to the desired ports.
- Press enter to select the included application types:
  - Dia-lin/out
  - Terminal
  - Reverse Terminal
  - Device Control
  - Multiplex
  - Printer
  - Fixed TTY
  - NT Real COM
- Press TAB to move to the Mode and Description fields and then press enter to accept the settings.
- Press ESC to go back to PORT MENU.
- Go to [Line] and press enter, then move the cursor to a specific port.
- Go through each parameter field in the same row and complete all settings.
- Press ESC to go back to PORT MENU.
- If the port is connected to a modem, go to [Modem].
- Set parameters for modem initialization string or dial-out number number if needed.
- Save the new settings and then return to MAIN MENU.
- Choose [Restart] under MAIN MENU and restart the server.

```
-----
[Mode] Line m0dem Welcome_MSG Quit
Examine/modify the operation mode of async ports
ESC: back to menu Enter: select
Port Application Mode Description/more setting
01 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
02 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
03 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
04 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
05 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
06 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
07 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
08 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
09 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
-----
```

```
-----
MoxaServer U2.00
-----
[Mode] Line m0dem Welcome_MSG Quit
Examine/modify the operation mode of async ports
ESC: back to menu Enter: select
Port Application +-----+ption/more setting
01 [Device Control ]] Dialin/out Server Proprietary Protocol]
02 [Device Control ]] Terminal Server Proprietary Protocol]
03 [Device Control ]] Reverse Terminal Server Proprietary Protocol]
04 [Device Control ]] Device Control Server Proprietary Protocol]
05 [Device Control ]] Multiplex Server Proprietary Protocol]
06 [Device Control ]] Printer Server Proprietary Protocol]
07 [Device Control ]] Fixed TTY Server Proprietary Protocol]
08 [Device Control ]] NT Real COM Server Proprietary Protocol]
09 [Device Control ]] Server Proprietary Protocol]
10 [Device Control ]] Server Proprietary Protocol]
-----
```

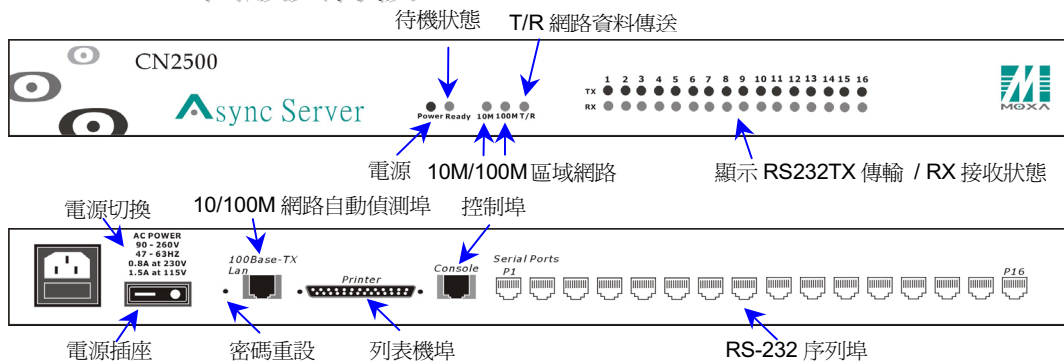
```
-----
MoxaServer U0.90
-----
Mode [Line] m0dem Welcome_MSG Quit
Examine/modify asynchronous port configuration
ESC: back to menu Enter: select
Port Speed Bits Stop Parity Tx/FIFO RTS/CTS XON/XOFF Discon. ctrl
01 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
02 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
03 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
04 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
05 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
06 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
07 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
08 [19200 ] [8] [ 1 ] [none] [yes] [yes] [no ] [DCD-off ]
09 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
10 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
11 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
12 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
13 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
14 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
15 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
16 [115.2K] [8] [ 1 ] [none] [yes] [yes] [no ] [none ]
-----
```



## CN2500 通訊伺服器包裝內附

- ◇ 一台通訊伺服器 CN2500
- ◇ 一條電源線
- ◇ 一片光碟
- ◇ 一份快速安裝指南
- ◇ 一條 RJ45 對 DB25 公頭 cable
- ◇ 一條 RJ45 對 DB25 母頭 cable
- ◇ 上機架所需之機耳 2 個，螺絲 8 個
- ◇ 防滑用腳墊 4 個

## CN2500 面版與背板



## 腳位圖

Console Port 界面

Pin	Signals
1	-
2	DSR
3	RTS
4	GND
5	TxD
6	RxD
7	GND
8	CTS
9	DTR
10	-

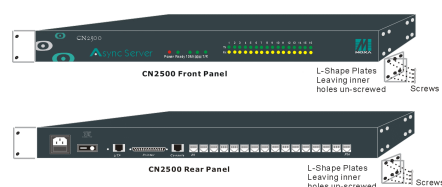
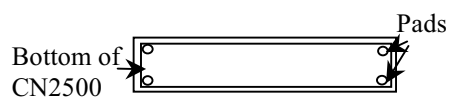
RS-232 Port 界面

Pin	Signals
1	DCD
2	DSR
3	RTS
4	GND
5	TxD
6	RxD
7	GND
8	CTS
9	DTR
10	-

## 快速硬體安裝

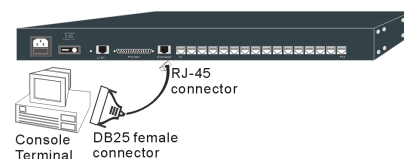
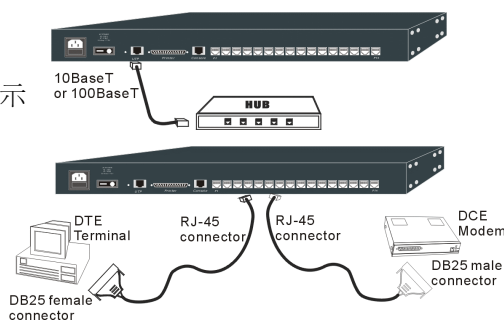
### 1. 安裝通訊伺服器

- 把通訊伺服器從紙箱中取出。
- 檢查位於通訊伺服器，本體底部的標籤，標籤上有註明此通訊伺服器的 MAC address，請寫下此號碼供稍後安裝用 MAC address: \_\_\_\_\_。
- 若您暫不考慮把伺服器鎖上機架，請利用附於小紙盒中的腳墊，以防刮傷伺服器表面。
- 鎖上機架的方式您可選擇把此伺服器面板朝前，兩側機耳分別多鑽 2 個孔便於您排線寬度做適當的調整，確定後鎖上螺絲。
- 您也可選擇背板朝前上機架，其餘如上述。插上電源線。



### 2. 連接設備端

- 連接網路時可使用 10/100Base T 網路線，插上背板所示插孔位置(LAN port)。
- 連接設備端時，使用 CN20030 RJ45-DB25 母頭線接終端機，或使用 CN20040 RJ45-DB25 公頭線接數據機。
- 若您未架設網路，您也可直接經由背板上所示 console 的位置使用 CN20030 RJ45-DB25 母頭線連上電腦 COM port 對伺服器做設定。



### 3. 檢查連接狀態

- 打開電源。
- 檢查顯示燈 power 是否為紅色。
- 區域網路是否有連上，檢查 100M 或 10M 燈號有亮燈。

## 快速設定

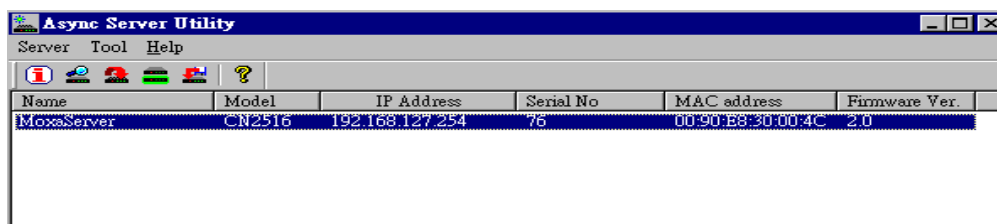
這裡提供 3 種安裝方式 \*\*請牢記 CN2500 出廠值 IP 位址 192.168.127.254。

1. 使用所附 CD 內的‘ASUTIL.exe’執行檔迅速更換 IP 位址，然後再利用 telnet 程式連接到新的 IP 位址。
2. 使用初始 IP 位址去 Telnet. 若是此位址無法連線成功(表網域不同)，請把 IP 位址加到路由表單中 (若您不太熟悉增加使用此方式，建議您使用 1 或 3 的方式設定)。
3. 從 Console 界面進去設定功能模式。

### 1. 從網路 Windows 主機連接伺服器

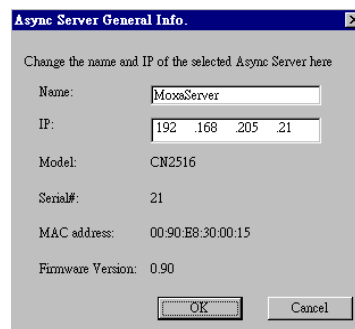
以下的操作是告訴您，如何讓您快速的由網路上的 Windows 主機連接上伺服器。

- 執行“ASUTIL.exe”檔 (此檔案於所附之 CD 內)。
- 程式會自動搜尋已安裝於網路上的 CN2500 伺服器，將游標指到與您前一頁寫下有相同 MAC 位址的伺服器，並按下滑鼠鍵。



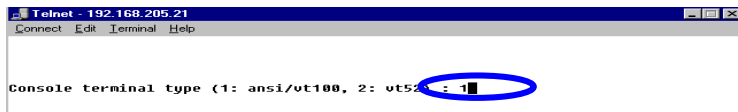
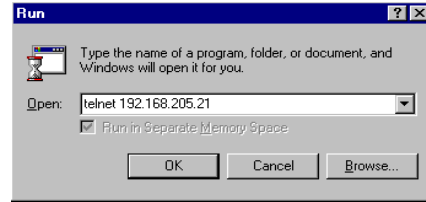
- 雙擊按鍵，進入基本畫面。
- 更改伺服器名字。
- 更改 IP 位址(e.g. 192.168.205.21)以符合您的網路。
- 按‘OK’儲存設定值。
- 現在您已經準備就緒接下來 ‘telnet server\_ip\_address’ 以更改詳細的設定說明。

⇒ **Note:** 若您找不到伺服器，請檢查電源與網路是否正常，之後再按



## 2. 用 Telnet 執行 Console 功能

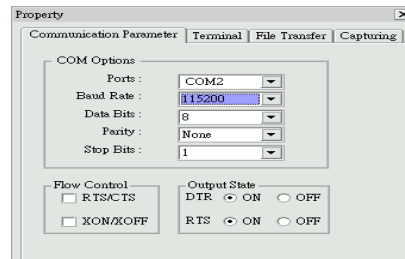
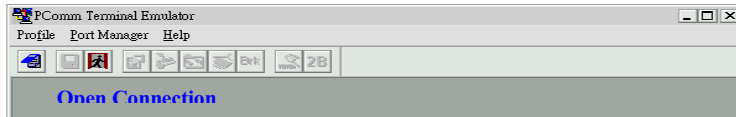
- 首先執行‘ping server\_ip\_address’ 看是否能連接上伺服器，若不行，利用另一種設定方式(3)。
- 執行‘telnet server\_ip\_address’ 此執行方式適用在 Windows 作業系統下或 Unix 作業系統下執行。
- 連上線後按 ‘1’ 然後按 enter 後，選擇使用 VT100 終端模式。
- 使用下列功能按鍵執行選擇執行 console 功能。



Action	Key
Move	[Up/Down/Left/Right] Arrow Key or [Tab] Key
Enter to next menu	[Enter] Key
Back to previous menu	[Esc] Key

## 3. 利用 Console Port 的連結執行 Console 功能

- 先確認您有把 PC 上的 COM port 與伺服器上的 Console port 連接。
- 執行 ‘pct Console erm.exe’ 檔案(此檔案附於 CN2500 CD 中)。
- 執行 pterm 終端程式及建立新的連接。
- 使用 ‘115200， 8 data bit， 1 stop bit and none parity’ 數值鍵入 COM port 參數欄中。
- 連接後按‘1’ 在按 enter 後使用 VT100 終端機。
- 進入 Console 功能後，使用表單中所列功能鍵選擇執行 Console 的功能。



Action	Key
Move	[Up/Down/Left/Right] Arrow Key or [Tab] Key
Enter to next menu	[Enter] Key
Back to previous menu	[Esc] Key

## Server 設定

- 指到 [Server] 並按 enter。
- 選擇 [Info.] 並按 enter。
- 在同一張表單中變更伺服器名稱。
- 加入您所要的 IP 位址，i.e. 192.168.205.21。
- 若有需要，請設定通訊閘 (gateway) 初始值或名稱伺服器 (domain name server)。
- 按 ESC 跳離 [Info.] 選單畫面。
- 當螢幕畫面跳出警示畫面時，請儲存設定值。
- 在畫面下方功能表中 [Restart]，重新開機。

```

MoxaServer V0.90
-----
[Server] Port setting sAve Utility Restart Exit
         Examine/modify async server node/table configuration
Enter: select  ESC: previous menu
  
```

```

MoxaServer V0.90
-----
[Info.] Adv. Host_table Route_table User_table Quit
        Examine/modify async server basic configuration
ESC: back to menu  Enter: select
Async Server name           [MoxaServer]
Async Server location       [ ]
Async Server IP address     [192.168.205.21 ]
Async Server IP netmask    [255.255.255.0 ]
Default gateway IP address [ ]
Domain server 1 IP address [ ]
Domain server 2 IP address [ ]
WINS server IP address    [ ]
Async server serial number [21]
Ethernet speed              [10Mbps]
Ethernet address            [00:90:E8:03:00:15]
Console password            [ ]
  
```

```

MoxaServer V0.90
-----
[Info.] Adv. Host_table Route_table User_table Quit
        Examine/modify async server basic configuration
Enter: select  ESC: previous menu

Warning !!!
You had modified the configuration without saving.
Would you save it now?
'Y': yes      'N': no
  
```

```

MoxaServer V0.90
-----
Server Port setting sAve Utility [Restart] Exit
Restart the whole system or selected async ports
Enter: select  ESC: previous menu
  
```

## Port 設定

- 如前頁所述，經由 Telnet 或伺服器的 Console port 進入 Console 功能。
- 指到 [Port] 按 enter。
- 到 [Mode] 按 enter。
- 移動游標至欲改變模式的 port。
- 按 enter 選擇應用模式
  - Dialin/out
  - Terminal
  - Reverse Terminal
  - Device Control
  - Multiplex
  - Printer
  - Fixed TTY
  - NT Real COM.
- 用 TAB 鍵來移動游標到欲選擇的模式，選擇完成後按 enter 就完成設定。
- 按 ESC 回到 PORT 選單。
- 指到 [Line] 按 enter. 移動游標列至特定的 port 。

```

-----
[Mode] Line m0dem Welcome_MSG Quit
Examine/modify the operation mode of async ports
ESC: back to menu Enter: select
-----
Port Application Mode Description/more setting
01 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
02 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
03 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
04 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
05 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
06 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
07 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
08 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
09 [Device Control] [ASPP ] [Async Server Proprietary Protocol]
-----

```

```

-----
MoxaServer U2.00
-----
[Mode] Line m0dem Welcome_MSG Quit
Examine/modify the operation mode of async ports
ESC: back to menu Enter: select
-----
Port Application Mode Description/more setting
01 [Device Control] [Device Control] [Server Proprietary Protocol]
02 [Device Control] [Dialin/out] [Server Proprietary Protocol]
03 [Device Control] [Terminal] [Server Proprietary Protocol]
04 [Device Control] [Reverse Terminal] [Server Proprietary Protocol]
05 [Device Control] [Device Control] [Server Proprietary Protocol]
06 [Device Control] [Multiplex] [Server Proprietary Protocol]
07 [Device Control] [Printer] [Server Proprietary Protocol]
08 [Device Control] [Fixed TTY] [Server Proprietary Protocol]
09 [Device Control] [NT Real COM] [Server Proprietary Protocol]
10 [Device Control] [ ] [Server Proprietary Protocol]
-----

```

```

-----
MoxaServer U0.90
-----
Mode [Line] m0dem Welcome_MSG Quit
Examine/modify asynchronous port configuration
ESC: back to menu Enter: select
-----
Port Speed Bits Stop Parity TxFIFO RTS/CTS XON/XOFF Discon. ctrl
01 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
02 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
03 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
04 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
05 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
06 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
07 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
08 [19200] [8] [1] [none] [yes] [yes] [no] [DCD-off]
09 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
10 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
11 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
12 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
13 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
14 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
15 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
16 [115.2K] [8] [1] [none] [yes] [yes] [no] [none]
-----

```

- 在每一個欄位選擇您所想設定的參數值。
- 按 ESC 跳回 PORT 選單。
- 若 port 是連接數據機(Modem)，就選擇[Modem]。
- 若有需要，請設定數據機起始參數。
- 回到主畫面之前必須先儲存設定值。
- 在主畫面下選擇 [Restart] 並重開機。