

Enable Matrix 500 Serial Console

Step 1: Matrix 500 serial console port (ttyS0) shares three data pins with P3 (RS-232 port ttyS3).

ttyS0.TxD <=> ttyS3.RTS
ttyS0.RxD <=> ttyS3.CTS
ttyS0.GND <=> ttyS3.GND

Port 3	
Pin	RS-232
1	
2	TXD
3	GND
4	
5	
6	
7	RXD
8	

Therefore, to access the serial console port, user needs to prepare a special cable adaptor to convert the P3 signal to serial console signal as above.

Step 2: Once the serial console (ttyS0) are connected correctly to your PC, you need to use a terminal software such as hyper terminal of Microsoft and the serial port setting as 115200,N,8,1 and no flow control. Terminal type is VT100.

Step 3: Power on Matrix 500 then you will see the message from your terminal software as follow:

Once “Starting Matrix 500” appears, please keep typing “@{@{@@}” to trigger the serial load program. Then you will see the Artila loader menu appear. If you miss the trigger procedure, please reset the Matrix 500 and repeat step 3 again.

```
Starting Matrix500 ....
*****
Artila Loader Version 1.0.2
(C)opyright 2005-2007, Artila Electronics.
All rights reserved.
*****
H: Help          L: Loader Upgrade
S: Kernel Serial   T: Filesys Serial
K: Kernel TFTP      F: Filesys TFTP.
G: Manager Mode    J: Jump to Firmware
E: Env. Upgrade     M: Ethernet Setting
A: Toggle Console   R: Reset
*****
```

Step 4: Now you can type “A” to enable the serial console function. Once you see the console is enable as follow, Press “q” to return to main menu of console. Then please type ”R” to reboot the system.

```
*****
Artila Loader Version 1.0.2
(C)opyright 2005-2007, Artila Electronics.
All rights reserved.
*****
H: Help          L: Loader Upgrade
S: Kernel Serial   T: Filesys Serial
K: Kernel TFTP      F: Filesys TFTP.
G: Manager Mode    J: Jump to Firmware
E: Env. Upgrade     M: Ethernet Setting
A: Toggle Console   R: Reset
*****
Saving Environment to EEPROM...
Console (ttyS0)
Press 'q' to return...
```

Step 5: Once you complete system debug, please remember to disable the serial console using the Toggle Console item as above.

```
Starting Matrix500 ....
*****
Artila Loader Version 1.0.2
(C)opyright 2005-2007, Artila Electronics.
All rights reserved.
*****
H: Help          L: Loader Upgrade
S: Kernel Serial   T: Filesys Serial
K: Kernel TFTP      F: Filesys TFTP.
G: Manager Mode    J: Jump to Firmware
E: Env. Upgrade     M: Ethernet Setting
A: Toggle Console   R: Reset
*****
Saving Environment to EEPROM...
Console (NULL)
Press 'q' to return...
```