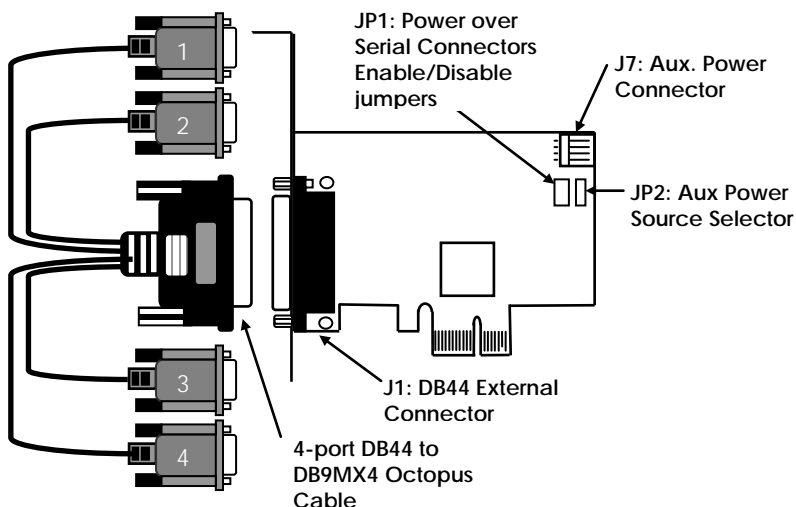# MSC-204A1
Installation Guide

1. Introduction

Congratulation on your purchasing this 4-port RS232 high performance PCI Express multi-serial host adapter. The adapter is high speed PCI Express bus based and plug-and-play compliant. Its 16C950 UART based serial ports (128-byte deep FIFO) are fully 16C550 UART compatible with most of the RS232C devices available from the market.
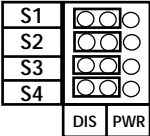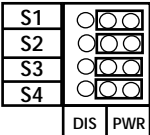
Features:

- ✓ Full x1 PCI Express Throughput, 250Mbytes/sec
- ✓ Fully Compliant with PCI Express Base Specifications, Revision 1.1
- ✓ Extended 16C950 UARTs, Fully Compatible with 16C550, Baud Rate up to 921.6Kbps
- ✓ Supports Power Option over pin 9 of the all DB9-Male Connectors
- ✓ Supports 4-port DB9M connectors by a DB44 Octopus Cable
- ✓ Supports Win 2000, 2003, XP-32, XP-64, Vista-32, Vista-64, and Linux

2. Board Layout

JP1: Power over Serial Connectors Enable/Disable jumpers

J7: Aux. Power Connector

JP2: Aux Power Source Selector

J1: DB44 External Connector
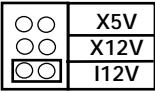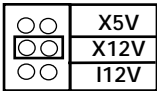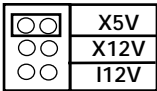
4-port DB44 to DB9MX4 Octopus Cable

3. Jumper Settings

1. **JP1- External Power Enabler:** This jumper is used to Enable or Disable the option of supplying power over pin 9 of the four DB9 connectors (S1, S2, S3 and S4). The S1 jumper controls the port 1 and S2 controls the port 2 and so on. If the jumper is set at "DIS", then the pin 9 was supplied with the RS232 RI standard signal. If the jumper is set at "PWR", then the DC power (5V or 12V) will be supplied to the pin 9 of the corresponding DB9 connector.

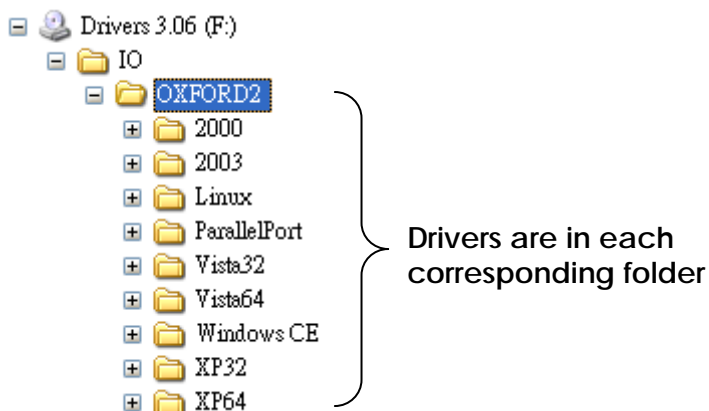| JP1: External Power Enabler	Settings
Disable Power on DB9Ms' pin 9 **(Default)**	
Enable Power on DB9Ms' pin 9	

2. **JP2- External Power Selector:** The pin-9 of the serial port connector(s) will be supplied with DC5V or DC12V. There are 3 sources depend on the jumper's position of the JP2:

3.

JP2: External Power Selector	Settings	
Internal 12V: Power source is +12VDC, from PCI Express golden finger (motherboard's PCI Express slot)	**(default)**	

External 12V: Power source is +12VDC, from J7 AUX power connector.	X5V X12V I12V
External 5V: Power source is +5VDC, from J7 AUX power connector.	X5V X12V I12V

4. Software Installation

The drivers of the PCIe card for each Operating System were shipped in the following different folders on the driver CD:

Drivers 3.06 (F:)
  IO
    OXFORD2
      2000
      2003
      Linux
      ParallelPort
      Vista32
      Vista64
      Windows CE
      XP32
      XP64

Drivers are in each corresponding folder

When the Windows detect the PCIe card, it will invoke its Installation Wizard:

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Found New Hardware Wizard

Welcome to the Found New Hardware Wizard

Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).

Read our privacy policy

Can Windows connect to Windows Update to search for software?

○ Yes, this time only
○ Yes, now and every time I connect a device
⦿ No, not this time

Click Next to continue.

< Back | Next > | Cancel

Note: For Windows 2000 installation, we recommend you to choose **"Install from a list or specific location (Advanced)"** from the following menu, then browse to the correct driver location (\IO\OXFORD2\2000\...) for Windows 2000. It will prevent from the Windows 2000 searching wrong drivers.

Check Windows Version Showed in the folder here: **XP32** in this example

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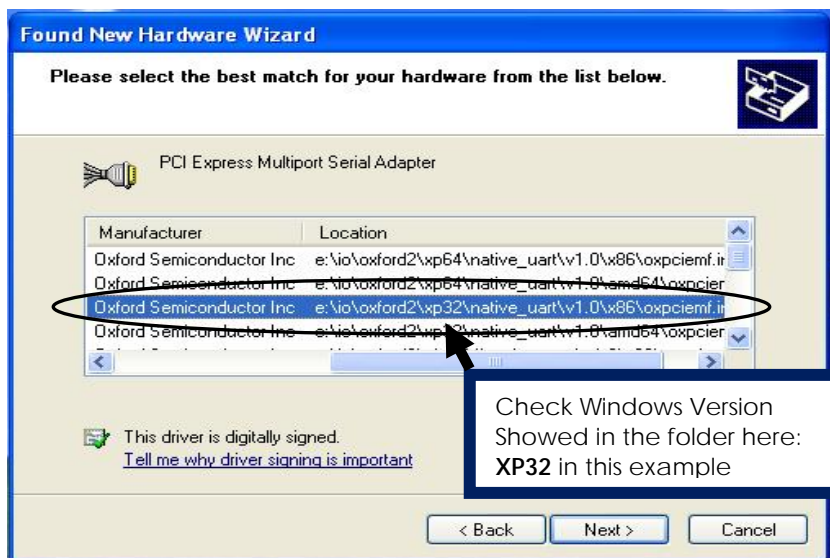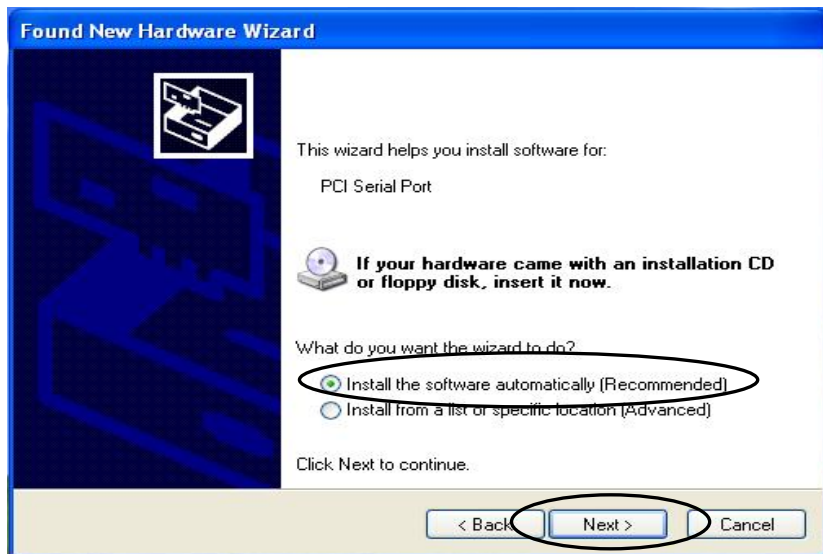
5. Male DB9 Pin Assignments and Cable Wiring
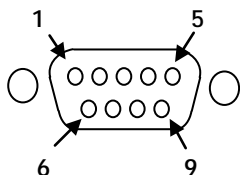
9 Pins	Signal
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	(Power)*

● *Note: The pin 9 of the DB9 male connector supports DC5V or DC12V depends on the settings of the JP1 and JP2, please refer to the above sections for more detail information

DB9(Male) to DB9(Male) Wiring

DB9(USB Adapter)	DB9(Serial Device)
1 DCD ←	1 DCD
2 RXD	2 RXD
3 TXD	3 TXD
4 DTR	4 DTR
5 GND	5 GND
6 DSR	6 DSR
7 RTS	7 RTS
8 CTS	8 CTS

6. Specifications

Type	Specifications
Connector	DB44 female
Cable	DB44F-to-DB9MX4 Octopus type
Bus Interface	1-lane PCI Express
Number of Ports	4
RS-232 Signals	TXD, RXD, RTS, CTS, DTR, DSR, DCD, GND
Baud Rate	110 bps to 921.6Kbps
Data Bits	5,6,7,8,9
Stop Bits	1, 1.5, 2
I/O address/IRQ	Plug-and-Play (various)
Parity	None, Even, Odd, 1, 0
Flow Control	RTS/CTS, XON/XOFF
Power Requirement	3.3V/400mA
Operating Temperature	0 to 55°C(32 to 132°F)
Operating Humidity	5 to 95% RH
Storage Temperature	-20 to 85°C (-4 to 185°F)

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