USB to RS-232 Adapter Driver Installation Manual

For Win OS 98SE/ME/2000/XP/Vista/7/8/8.1/10; Win server OS 2008/2008R2/2012, Mac OS

Contents

Introduction Features & Specifications System Requirements Installing the Device Uninstalling the Device Disclaimer

Introduction

The USB to RS-232 adapter is your smart and convenient accessory for connecting RS-232 devices to your USB equipped Windows host computer. It provides a bridge connection with a standard DB-9 pin male RS-232 port connector in one end and a standard Type A USB plug connector on the other end. You simply attach the RS-232 device onto the RS-232 port of the cable and plug the USB connector into your PC USB port. It allows a simple and easy way of adding RS-232 connections to your PC without having to go thru inserting a RS-232 card and traditional port configuration.

This USB to RS-232 adapter is ideal for connecting modems, cellular phones, PDAs, digital cameras, card readers and other RS-232 devices to your computer. It provides RS-232 connections up to 250Kbps of data transfer rate. And since USB does not require any IRQ resource, more devices can be attached to the system without the previous hassles of device and resource conflicts.

Finally, the USB to RS-232 adapter is a fully USB Specification compliant device and therefore supports advanced power management such as suspend and resume operations as well as remote wakeup. The USB to RS-232 cable adapter is designed to work on Windows operating systems.

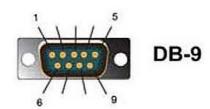
Features & Specifications

- ✓ Smart USB to RS-232 (DB 9pin male RS-232 port) interface
- Supports various serial devices like modems, PDAs, cellular phone, digital cameras, card readers, ISDN terminal adapter etc.
- ✓ Easy Plug and Play Installation
- ✓ Fully Compliant with USB Specification 1.1 and 2.0
- ✓ Supports the standard RS-232 Interface
- ✓ Supports automatic handshake mode
- ✓ Supports Data Transfer Rate up to 1Mbps
- ✓ Supports Remote wake-up and Intelligent power-on-reset
- ✓ 1024-byte bi-directional data FIFO buffers (768-byte receive/256-byte transmit) for faster data throughput.
- ✓ Provides Dual Buffers for upstream and downstream data transfer
- ✓ No IRQ resource required
- ✓ Bus Powered no external power adapter required

System Requirements

- ✓ Windows OS 98SE/ME/2000/XP/Vista/7/8/8.1/10/11
- ✓ Windows server 2008/2008R2/2012/2012R2/2016/2019
- ✓ Mac OS 8.6/9.x/10.x/11.x or higher
- ✓ AMD or Intel Pentium 133MHz or higher graded CPU
- ✓ USB 1.1 or higher port

RS 232 Pin Assignment



Pin No.	Definition	Description
1	DCD	Data Carrier Detected
2	RxD	Receive Data
3	TxD	Transmit Data
4	DTR	Data Terminal Ready
5	GND	Signal Ground
6	DSR	Data Set Ready
7	RTS	Request To Sent
8	CTS	Clear To Sent
9	RI	Ring Indicator

Windows OS Installation Guide

Driver can be installed through Windows Update automatically (Internet connection needed)

The Prolific drivers that have passed the WHQL tests are available for download using Windows Update.

OS requirements: Windows 7/8/8.1/10/11; Windows server 2008/2008R2/2012 or later.

Please go below ways for easy installation.

- 1. You may plug the device into host computer. And then it will pop up 'Installing device driver software' from the taskbar of the screen. (Fig. 1) Click and connect to the Windows Update.
- 2. It will check your computer OS and download the applicable driver at the Windows Update automatically.



3. The program goes 'Searching Windows Update' from 'Driver Software Installation'. (Fig. 2)

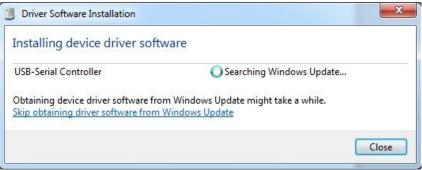


Fig. 2

4. When the applicable driver is detected, it will run 'Installing driver software'. (Fig. 3)

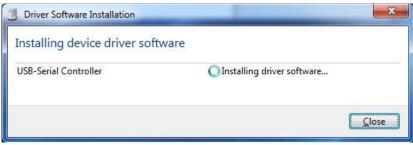


Fig. 3

5. Then it shows 'Prolific USB-to-Serial Comm Port (COM3) installed'. Click 'Close' and go next step. (Fig. 4)



Fig. 4

6. Check 'Device Manager' of Control Panel from the computer OS and there shows Prolific USB-to-Serial Comm Port (COM3) under 'Ports (COM & LPT)'. (Fig. 5) Congratulation! You have finished installing the USB to Serial device successfully.

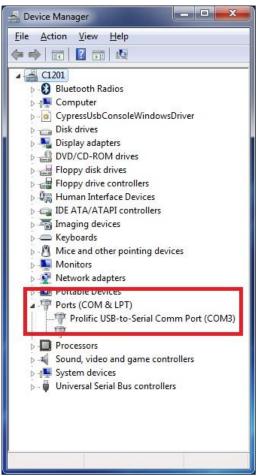


Fig. 5

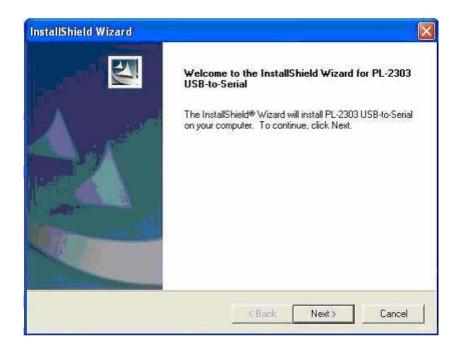
Installing the Device with InstallShield

This section will guide you on how to install the USB to RS-232 adapter under Windows OS 98SE/ME/2000/XP/Vista/7/8/8.1/10/11; Windows server OS 2008/2008R2/2012.

- **Note:** 1. Please take notice of the installation order. First, run the InstallShield wizard, and then plug in the USB to RS-232 adapter.
 - 2. Before updating the product driver, please be sure your OS system (Windows update) is the updated version.

The following steps will show how to install the device under Windows OS XP/Vista/7/8/8.1/10/11; Windows server OS 2008/2008R2/2012. Basically, the procedures for Windows XP are also somewhat the same for other previous Windows OS.

- 1. Power on your computer and boot to Windows.
- 2. Run or double click the InstallShield driver setup program "Driver Installer.exe" (for Windows XP and previous versions) or "Vista Driver Installer.exe" (for Windows Vista/7/8/8.1, Windows server 2008/2008R2/2012). The InstallShield Wizard will be displayed on your screen to inform you that the driver will be installed on your computer. Click **Next** to continue and start the installation.



(Windows XP and below versions screenshot)



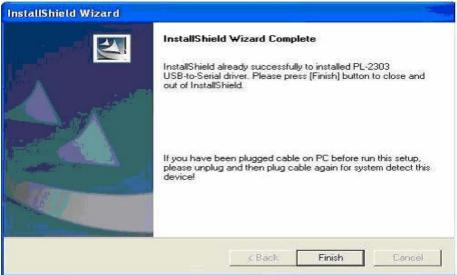
(Windows Vista/7/8/8.1/10/11; 2008/2008R2/2012 screenshot)

3. The End User License Agreement (EULA) window will be shown, click to accept the terms of the agreement and click **Next** to continue.

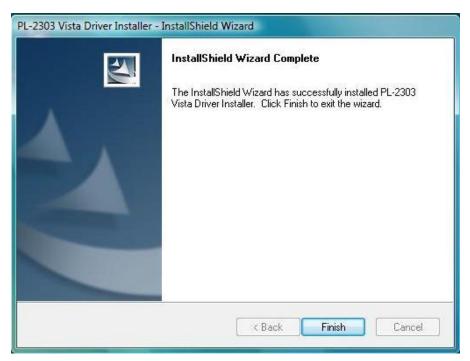
icense Agreement	And a state of the
Please read the following license agreement carefully.	
End User License Agreement ("EULA")	
Do not install or use the software until you have read and accepterms. Permission to use the software is conditional upon your agterms. Installation or use of the software by you will be deemed to license terms. Acceptance will bind you to the license terms in a contract with Prolific Technology Inc.	preeing to the license to be acceptance of the
* SOFTWARE LICENSE AND LIMITED WARRANTY This is an agreement between you, the end user, and Prolific Te By using this software, you agree to become bound by the terms	
SYOU DO NOT ACREE TO THE TERMS OF THE ACREEME	
I accept the terms of the license agreement	Print
I do not accept the terms of the license agreement	<u></u>
allShield	

(Windows Vista/7/8/8.1/10/11; 2008/2008R2/2012 screenshot)

4. Wait until the InstallShield Wizard informs you that driver installation is successfully installed. Click the **Finish** button to close the InstallShield program. If you have plugged the cable into the PC while running the setup installation, please unplug and re-plug the cable for the system to detect the device.



(Windows XP and below versions screenshot)



(Windows Vista/7/8/8.1/10/11; 2008/2008R2/2012 screenshot)

Uninstalling the Device Driver

You have three selections to uninstall the driver: For Windows XP and previous versions:

- Run the InstallShield Setup program again
- Run Start→ Programs→USB to RS-232 Driver→ Uninstaller
- Control Panel→ Add or Remove Programs→USB to RS-232
- 1. The InstallShield Wizard will appear and will let you choose if you want to reinstall the driver, uninstall the driver, and then click **Nex**t to continue.

istallShield Wizard Setup Type		1	
Choose the setup type that best suits your ne	eeds.		1
Importants Message! You already Installed d	river, to select one	of items to opera	ste it
C Re-install (Upgrade)			
 Uninstaller driver! 			
C Exit Setupl			
italShield			
NAMES AND DECISION OF THE OWNER		5	

2. When finished, the InstallShield Wizard will prompt you to restart Windows. Click the **Finish** button and wait for the system to restart your computer.



For Windows Vista: (same for Windows 7/8/8.1/10/11; 2008/2008R2/2012)

- Run the InstallShield Setup program again
- Run Start \rightarrow Programs \rightarrow USB to RS-232 Driver \rightarrow Uninstaller
- Control Panel \rightarrow Add or Remove Programs \rightarrow Vista Driver Installer (for Windows Vista)
- 1. The InstallShield Wizard will appear and prompt you if you want to completely remove the driver, click **Yes** to continue.



2. When finished, the InstallShield Wizard will prompt you that uninstall is complete, click **Finish** to continue. You do not need to restart Vista after uninstall procedure.



Mac OS X Universal Binary Driver Installation Guide

Introduction

This installation guide document shows the procedure for installing the Mac OS X driver.

System Requirement

The following requirements are needed:

• Mac OS X 10.1 to 10.7 operating systems (includes 64-bit support)

Also supports Mac OS X Lion 10.7 (see page 19)

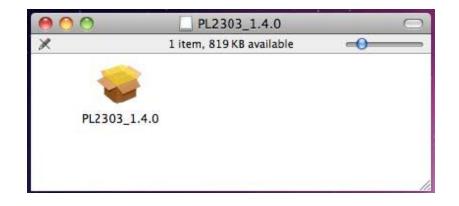
- Apple Mac OS X compatible computers (Intel or PowerPC based machines)
- USB 1.1 or higher port

Mac OS X Driver Installation

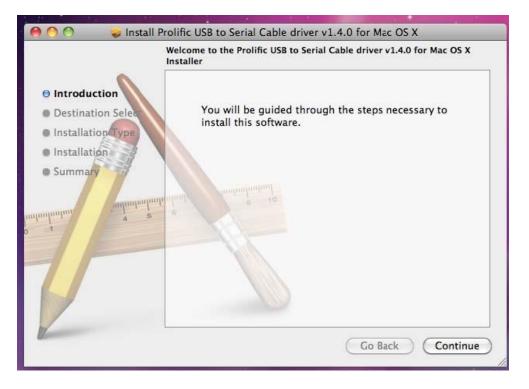
The following steps will show how to install the USB to RS-232 device under Mac OS X operating system:

1. The USB to RS-232 Mac OS X driver package contains the DMG compressed image file click on the DMG file to extract the driver installer package.

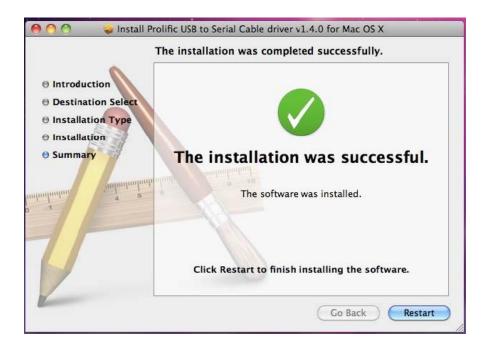
Name	Date Modified	Size
PL2303_1.4.0.dmg	Sep 2, 2010 4:57 PM	8.9 MB



2. Click on the driver installer file to run the driver installation process. Click Continue to proceed and follow the succeeding instructions to complete the installation.



3. At the end of the installation, you will need to restart your computer. Close all programs and click Restart to complete installation and reboot the system.



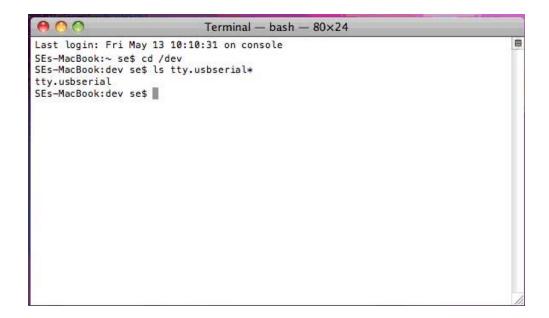
4. After rebooting the system, you can now plug the USB to RS-232 adaptor or cable to the USB port. You can first run the System Profiler program under the Applications-Utilities folder. Click USB hardware inside System Profiler and look for "USB-Serial Controller" or "USB-Serial Controller D". This means that the hardware device is detected by your Mac computer.

00		MacBook	
SE's MacBook			5/13/11 10:20 AM
Contents	USB Device Tree		*
 Hardware ATA Audio (Built In) Bluetooth Diagnostics Disc Burning Ethernet Cards Fibre Channel FireWire Graphics/Displays Hardware RAID Memory PCI Cards 	 ▼ USB Bus Apple Internal Keyb IR Receiver USB Bus ▼ USB Bus ♥ USB Bus Bluetooth USB Host USB Bus ♥ USB Bus ♥ USB High-Speed Bus Built-in ISight USB High-Speed Bus 	er	
Parallel SCSI Power Printers SAS Serial-ATA USB Vetwork AirPort Firewall Locations Modems Volumes WWAN	USB-Serial Controller: Product ID: Verdor ID: Version: Speed: Manufacturer: Location ID: Current Available (mA): Current Required (mA):		

5. You can then proceed to check if the USB to RS-232 port device is setup properly. You can run the Terminal program under Applications-Utilities folder and type the following commands:

cd /dev Is tty.usbRS-232*

You should see the "tty.usbSerial" device which means the USB to RS-232 device is already setup properly. If you try to plug another USB to RS-232 device, you should also see several "tty.usbSerialx" listed where "x" is the assigned device number similar to Windows COM port assignment.



6. **NOTE:** Mac OS may also pop-up a new network interface when it detects a new USB-Serial Controller device. See next section for more explanation.

A new network interface has been detected
The "USB-Serial Controller" network interface has not
been set up. To set up this interface, use Network
 Preferences.

Using the USB to RS-232 Device under Mac OS X

The following steps will show how to use the USB to RS-232 device under Mac OS X operating system:

1. One common test is to connect a 56K RS-232 modem to the USB to RS-232 adapter. Go to System Preferences and click on Network.

	Show All		System I	Preferences		Q	
Personal							
Appearance	Desktop & Screen Saver	Dock	Exposé & Spaces	Language & Text	Security	Spotlight	
Hardware							
6		Q		\bigcirc			۵
CDs & DVDs	Displays	Energy Saver	Keyboard	Mouse	Trackpad	Print & Fax	Sound
Internet &	Wireless						
		8	۲				
MobileMe	Network	Bluetooth	Sharing				
System							
11		**	()	₽	2	۲	
Accounts	Date & Time	Parental Controls	Software Update	Speech	Startup Disk	Time Machine	Universal Access

2. The left side column shows you all the existing ports and status. If you do not see the USB Serial Controller device, click on the "+" add button to look for the device.

	Location:	Automatic	•
FireWire Not Connected FireWire Not Connected AirPort On	** **	Status: Configure IPv4: IP Address: Subnet Mask: Router: DNS Server: Search Domains:	Cable Unplugged Either the cable for Ethernet is not plugged in or the device at the other end is not responding. Using DHCP
+ - Q-			Advanced)

3. Select the Interface "USB-Serial Controller". You can also choose to change the Service Name to distinguish the device if you have several devices attached.

000			Network			
Show Al					٩	
Ethernet Not Connected FireWire Not Connected		Interface:	e and enter a na USB-Serial Co USB-Serial Co	ntroller		
On	0		IP Address: Subnet Mask: Router: DNS Server: earch Domains:	Using DHCP		;
+ - \$.					Advan	iced) (?)
Click the lock	to prevent	further cha	inges.	Assist me	Revert	Apply

4. Now the "USB-Seruial Controller" device is added to the list and you can start to configure the RS-232 modem Internet dial-up settings attached to the USB to RS-232 adaptor.

Network	
	٩
tion: Automatic	•
Status: Not Cor	nfigured
Configuration: Default Telephone Number: 941256 Account Name: prolific Password: Conr	
☑ Show modem status in mer	nu bar (Advanced) ?
	tion: Automatic Status: Not Cor Configuration: Default Telephone Number: 941256 Account Name: prolific Password: Cont

5. You can click on the Advanced button to set the correct modem vendor and model. The default modem settings normally would work on any RS-232 modems.

000	Network	
Show All		٩
USB-Serial Controller Vendor: Model:	Modem DNS WINS Pr Generic Dialup Device	oxies PPP
a second second	Enable error correction an	d compression in modem
Dial Mode:	Wait for dial tone before dia	ling 🗘
Dialing: Sound:		
0	in the second se	Cancel OK

6. Click the Connect button to start the Internet dial-up connection. Make sure the RS-232 modem has a telephone connected and powered on.

00	Network	
Show All		٩
Loca	tion: Automatic	•
USB-Sentroller Connecting Ethernet Not Connected	Status:	Connecting
 FireWire Not Connected AirPort On 	Configuration: Telephone Number: Account Name: Password:	prolific
+ - \$-	☑ Show modem stat	us in menu bar Advanced) (?)
Click the lock to prevent f	urther changes.	Assist me Revert Apply

7. When connection is made, you can start to use Mac OS X Safari web browser and monitor the modem connection status by data sent and received.

8 😑 🔿	Network	
◄ ► Show All		٩
Loca	ation: Automatic	\$
Buss-Sentroller Ethernet Not Connected FireWire Not Connected AirPort On	Status: Connecter Connect Time: 00:00:53 IP Address: 61.226.248. Configuration: Default Telephone Number: 94125678 Account Name: prolific Password: ••••••• Disconne	Sent: BHEISICE 230 Received: BHEISICE \$
+ - \$-	☑ Show modem status in menu	bar Advanced) ?
Click the lock to prevent t	further changes. Assist n	ne Revert Apply

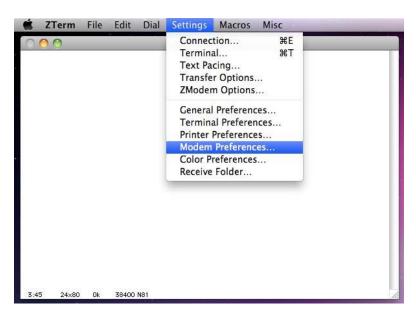
8. You can also click the "Show modem status in menu bar" to see the connection status on top of the menu bar. Then click on the Modem status on the menu bar to show the controls.



Using ZTerm program under Mac OS X

You can also test the USB to RS-232 device by using the ZTerm RS-232 port terminal program and a null modem cable to connect two computers and transmit/receive data files. The following steps will show how to use the program:

1. Run the ZTERM program and select the USB to RS-232 device by clicking on Settings-Modem Preferences.



2. Click on the RS-232 Port box. If you have several USB to RS-232 devices attached, you will find those devices listed similar to the list shown when running the Mac OS Terminal program.

Serial Port:	/ usbserial	
Modem setur Initialize: Delnitialize:	usbserial6 Bluetooth-PDA-Sync Bluetooth-Modem	
Dial Substitutio	n: Dial Timeout: 60	
•1 *70,	Pulse Dial	10
•2 9,	📃 Hardware Hangup	DTR
87	OK Ca	ncel

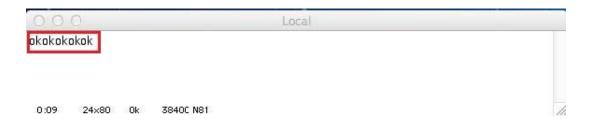
3. Then click on Settings-Connections to set the date transfer rate and flow control settings.

Phone Num	ber:				
Pre-dial init	:				
Account:		_	Password:		
Data Rate:	9600	\$	Data Bits:	8	\$
Parity:	None	\$	Stop Bits:	1	+
🗹 Local Ecl	ho				
Flow Contro	ol: 📃 Xo	n/Xof	f 🗹 Hardwa	re Han	dshake

4. Run all of the above same procedures for the other Mac OS computer. Use a RS-232 null modem cable to connect the USB to RS-232 port from both computers. On one computer, click File-Send Files and choose the file to send. On the other computer, click File-Receive Files. You will then see the file transfer to begin.

000	USBSerialCable1
🔿 🔿 🔿 ZModem Send	
File: 1M.TXT Folder: Mac OS X 10.6.6	
Type: TEXT / ttxt (Text)	
File Size: 1270375 Bytes Sent: 87040 Efficiency: 3227 cps, 84% Time elap/left: 0:26 / 6:06	
Status:	
Retries: 0 Cancel	
3:29 24×80 0k 38400 N81	

5. You can also simply plug a loopback connector (TX-RX short) to the USB to RS-232 port and type the keyboard to show the send characters on the Local window display.



How to Uninstall Driver

To remove and uninstall the USB to RS-232 drivers from Mac OS X operating system, you must be logged on as root. You can use the "sudo" command option to substitute user privileges.

1. Run a Terminal session (Applications-Utilities-Terminal) and enter the following commands at the command prompt:

cd /System/Library/Extensions sudo kextunload ProlificUSBRS-232.kext (enter system password) rm -r ProlificUSBRS-232Driver.kext

You can also go to the System-Library-Extensions file folder to delete the "**ProlificUSBRS-232Driver.kext**" file.

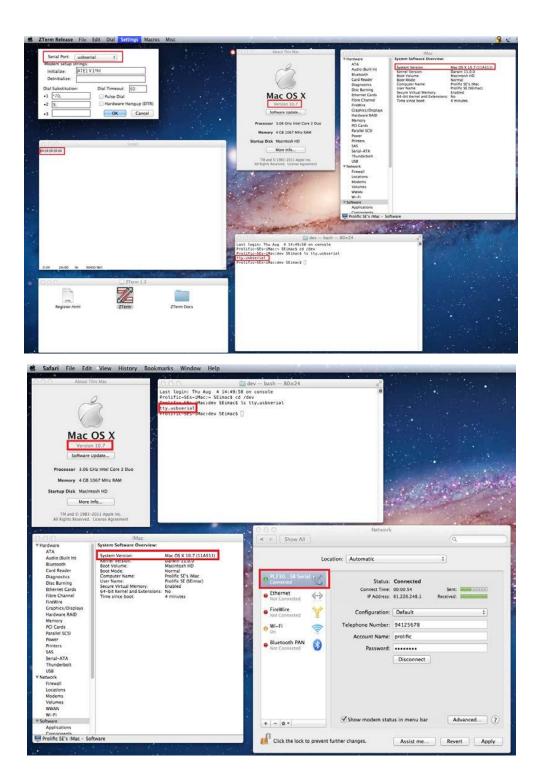
2. To remove the port from the system, go to System Preferences and select Network. Select the "USB-Serial Controller" device shown from the Show menu and click on the "-" remove button to uninstall the port.

	Network	
Show All	cation: Automatic	Q
USB-Sentroller Not Connected Ethernet Not Connected FireWire Not Connected AirPort On	Status: Configuration: Telephone Number: Account Name: Password:	94125678 prolific
+ - *-	Show modem stat	us in menu bar Advanced ? Assist me Revert Apply

3. Restart the computer again before reinstalling the driver.

Mac OS X 10.7 Lion Support

The USB TO RS-232 is also tested to be compatible with Mac OS X 10.7 Lion version using ZTerm terminal program and Network-Dialup RS-232 modem.



Regulatory Compliance

Disclaimer

Information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any other commercial damage, including but not limited to special, incidental, consequential, or other damages.

No part of this document may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopying, recording or information recording and retrieval systems without the express written permission of the manufacturer.

All brand names and product names used in this document are trademarks, or registered trademarks of their respective holders.

CE Certification

This equipment complies with the requirements relating to electromagnetic compatibility. It has been manufactured under the scope of RoHS compliance.

FCC Compliance Statement

This equipment generates and uses radio frequency and may cause interference to radio and television reception if not installed and used properly. This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

You are cautioned that changes or modification not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation



WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process.

Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose or any electrical or electronic products. More details can be obtained from your national WEEE recycling agency.