

# USB-to-Serial Converter

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USER MANUAL

**UC-232A**

## CE NOTICE

Display of the CE logo indicates that this ATEN International Co., Ltd device complies with the European Union's EMC Directive (2004/108/EC). It demonstrates that this ATEN product meets the following technical standards:

- ◆ EN 55022
- ◆ EN 55024
- ◆ EN 61000-3-2
- ◆ EN 61000-3-3

**NOTE:** EN 55022 provides two emissions classifications depending on the intended use: Class A applies to use in typical commercial environments Class B applies to use in typical residential environments.

A "Declaration of Conformity" in accordance with these directives and standards has been made and is on file at ATEN International Co. Ltd. Taiwan.

## FCC INFORMATION

### Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital service, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◆ Reorient or relocate the receiving antenna.
- ◆ Increase the separation between the equipment and receiver.
- ◆ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ◆ Consult the dealer or an experienced radio/TV technician for help.

**FCC Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## ROHS

This product is RoHS compliant.

## SJ/T 11364-2006

The following contains information that relates to China.

部件名称	有毒有害物质或元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
电器部件	●	○	○	○	○	○
机构部件	○	○	○	○	○	○

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006规定的限量要求之下。

●: 表示符合欧盟的豁免条款, 但该有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。

×: 表示该有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。



# UC-232A USER MANUAL

## ONLINE REGISTRATION

International	<a href="http://eservice.aten.com">http://eservice.aten.com</a>
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## TELEPHONE SUPPORT

International	886-2-8692-6959
China	86-10-5255-0110
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988
United Kingdom	44-8448-158923

## TECHNICAL SUPPORT

- ◆ For international online technical support – including troubleshooting, documentation, and software updates:  
**<http://eservice.aten.com>**
- ◆ For North American technical support:

Email Support		<a href="mailto:support@aten-usa.com">support@aten-usa.com</a>
Online Technical Support	Troubleshooting Documentation Software Updates	<a href="http://www.aten-usa.com/support">http://www.aten-usa.com/support</a>
Telephone Support		1-888-999-ATEN ext 4998

## PACKAGE CONTENTS

The UC-232A USB-to-Serial Converter package contains the following items:

- ◆ 1 UC-232A USB-to-Serial Converter
- ◆ 1 Installation Disk
- ◆ 1 User Instructions\*

Check to make sure that all the components are present and that nothing got damaged in shipping. If you encounter a problem, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit, and/or any of the devices connected to it.

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\* Features may have been added to the UC-232A since this manual was printed. Please visit our website to download the most up to date version of the manual.

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## OVERVIEW

Universal Serial Bus (USB) port technology has emerged in response to the proliferation of external peripheral devices (scanners, digital cameras, removable drives, etc.) that are increasingly being connected to the latest generation of computers. It is faster than traditional bus ports and, since it does not require any IRQs, the problem of IRQ conflict is eliminated, which means more peripheral devices can be attached to the system.

The UC-232A USB-to-Serial Converter provides an external plug-and-play RS-232 serial connection for computers, notebooks, laptops, and handheld computing devices that support the USB specification. It comes with a standard DB-9 male connector for the peripherals to plug into, and an attached 35 cm USB cable with a type A plug for connecting to the computer's USB port, or to a USB hub.

The UC-232A provides mobile phones, PDAs, digital cameras, modems and ISDN terminal adapters with high quality serial connections at a data transfer rate of up to 230 Kbps. It makes the USB interface transparent to the peripherals, allowing them to easily interface with the USB, eliminating the setup hassle found with traditional serial port connections. As a USB specification compliant device, the UC-232A also supports energy-saving suspend and resume operations.

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**Note:** The UC-232A does not support devices, such as serial mice, that require an IRQ number or IO Address.

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## FEATURES

- ◆ Full compliance with USB specification v1.1
- ◆ Supports RS-232 serial interface
- ◆ Supports automatic handshake mode
- ◆ Up to 230 Kbps data transfer rate
- ◆ Supports remote wake up and power management
- ◆ Provides a 96 byte buffer for each upstream and downstream data transfer
- ◆ Works with cellular phones, PDAs, digital cameras, modems and ISDN terminal adapters
- ◆ Easy way to install an additional RS-232 port
- ◆ No IRQ required

## SYSTEM REQUIREMENTS

- ◆ USB Host Controller installed on the system

## OPERATING SYSTEMS

Supported operating systems are shown in the table, below:

OS		Version
Windows		2000, XP, Vista, 7, 8
Mac		OS 10 and higher
Linux	RedHat	7.3 and higher

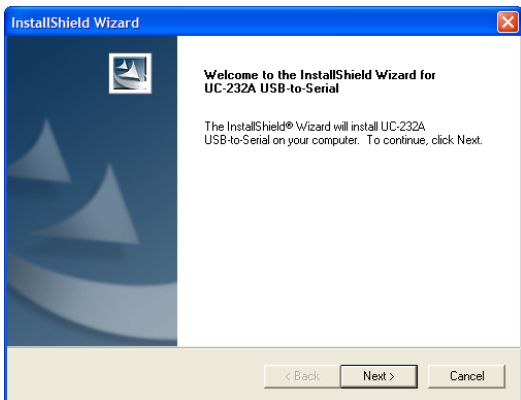
# WINDOWS 2000 INSTALLATION

## INSTALLING THE DRIVER(S)

To install the UC-232A drivers, do the following:

1. Insert the installation disk into your CD-ROM drive.
2. Navigate to the folder on the CD that contains the UC-232A driver installer (UC232A → Windows series).
3. Double click **UC-232ADriverInstaller.exe**.

After a few moments, the following dialog box appears:

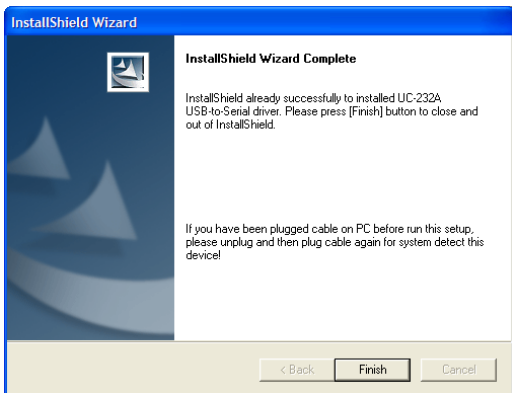


4. Click **Next** to install the drivers.

5. Windows displays the following warning:



6. You can safely ignore this warning. Click **Continue Anyway** to continue installing the new software. When the installation is complete, the following dialog box appears:



7. Click **Finish** to close the wizard. You have successfully installed the driver(s).

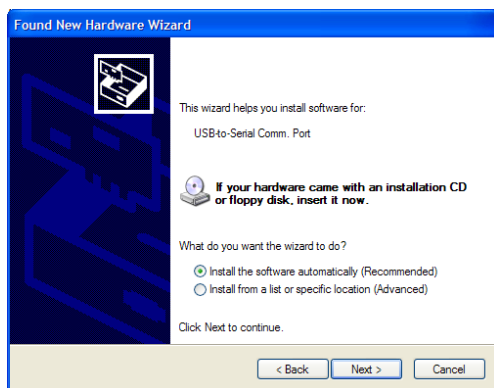


## CONNECTING THE UC-232A

1. Connect the UC-232A USB-to-Serial Converter to a USB port on your computer. The *New Hardware Wizard* appears:



2. Select *No, not this time*, and then click **Next** to continue. The following dialog box appears:

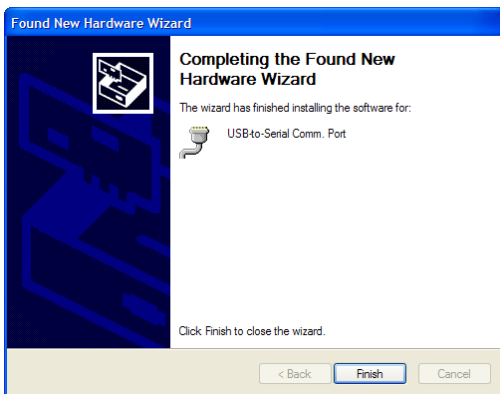


3. Leave the default choice (*Install the software automatically*). Click **Next** to continue.

4. Windows displays the following warning:



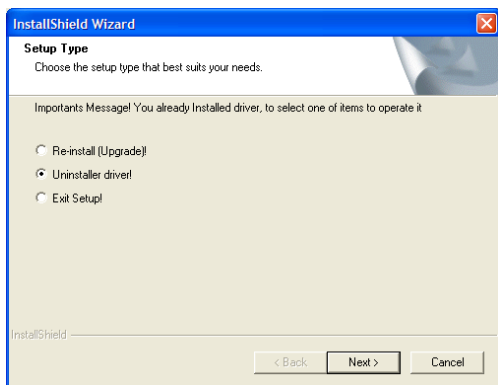
5. You can safely ignore this warning. Click **Continue Anyway** to continue installing the new hardware. When the installation is complete, the following dialog box appears:



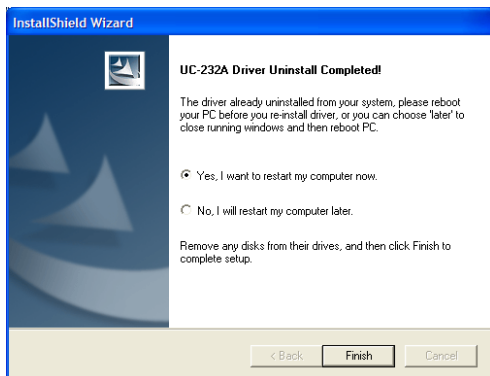
6. Click **Finish** to close the wizard. You have successfully installed the UC-232A.

## UNINSTALLING THE DRIVER(S)

1. Insert the installation disk into the CD-ROM drive. The following dialog box appears:



2. Select *Uninstall the driver*, and then click **Next**. The following dialog box appears:



3. Click **Finish**. You have successfully uninstalled the driver(s).

# WINDOWS XP/VISTA/7/8 INSTALLATION

## INSTALLING THE DRIVER

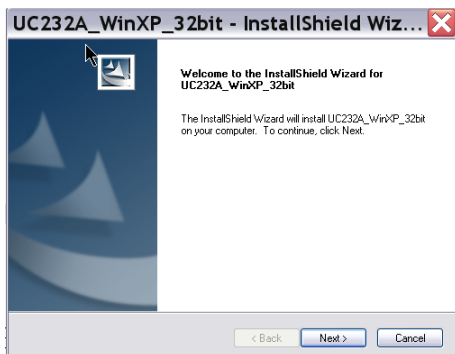
1. Make sure that the Windows language for non-Unicode programs is set to English by checking *Regional and Language Options*, then *Administrative*.
2. Insert the installation disk into your CD-ROM drive.
3. Navigate to the folder on the CD that contains the UC-232A driver installer (UC232A → Windows series → **{Windows OS}**).

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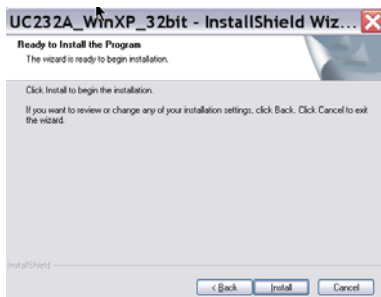
**Note:** **{Windows OS}** is the Windows OS you are using and can be: Windows XP, Vista, 7 or 8.

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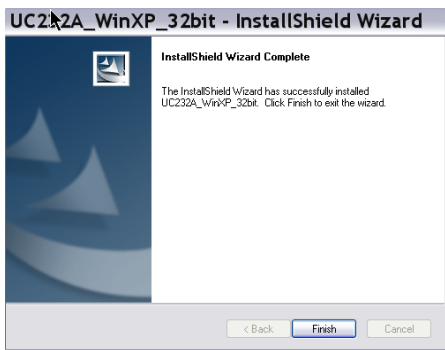
4. Double click **UC232A\_Windows\_Setup.exe**. After a few moments, the following dialog box appears:



5. Click **Next**. The *Ready to Install the Program* box appears:



6. Click **Install** to begin the driver installation. When the installation is complete, the following dialog box appears:

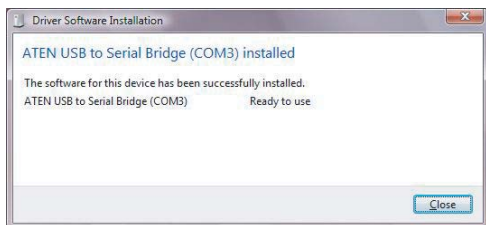


7. Click **Finish** to close the wizard.

Now that you have successfully installed the driver, you can connect the UC-232A.

## CONNECTING THE UC-232A

1. Connect the UC-232A USB-to-Serial Converter to a USB port in your computer. The following dialog box appears to confirm that the driver has been installed and that your UC-232A is ready to use:



## MAC INSTALLATION

### INSTALLING THE SOFTWARE

1. Insert the installation disk into the CD-ROM drive.
2. Open the *CD-ROM Folder*, then open the *Intel MAC* folder.
3. Copy the Mac OS file (UC-232\_1.3.0.dmg) to your hard disk.
4. Double-click on the file icon to extract the compressed file(s).
5. Copy the extracted file(s) to the *Hard Disk > System Folder > Extensions* folder.

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**Note:** If you are using a non-English language version, copy the files to the corresponding folder for your system.

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## CONNECTING THE UC-232A

Connect the UC-232A to a USB port on your Mac.

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**Note:** The UC-232A will not function properly unless the software was previously installed.

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# LINUX INSTALLATION

## INSTALLING THE DRIVER(S)

1. Insert the installation disk into your CD-ROM drive.
2. Open a command line.
3. Move to the CD-ROM directory and then to the *LINUX* subdirectory.
4. Move to the subdirectory that corresponds to the version of your operating system. (For example, if your operating system is Red Hat 7.3, then move to the *Redhat73* subdirectory.)
5. Enter the following commands to copy the files in the subdirectory to a directory on your hard disk:

```
cp pl2303.c /directory_name
```

```
cp Makefile /directory_name/makefile
```

where *directory\_name* is the name of the directory on your hard disk that you are copying the files to.

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**Note:** Be sure to change the capital “M” in “Makefile” to a lowercase “m” when you copy the file to the new directory.

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6. Move to the directory where you copied the files.
7. Enter the following command:

```
make inst
```
8. Connect the UC-232A to a USB port on your computer.

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**Note:** The UC-232A will not function properly unless the drivers have been previously installed.

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## UNINSTALLING THE DRIVER(S)

1. Open a command line.
2. Move to the directory where you installed the driver(s).
3. Enter the following command:

- ◆ To uninstall the driver:

```
make uninst
```

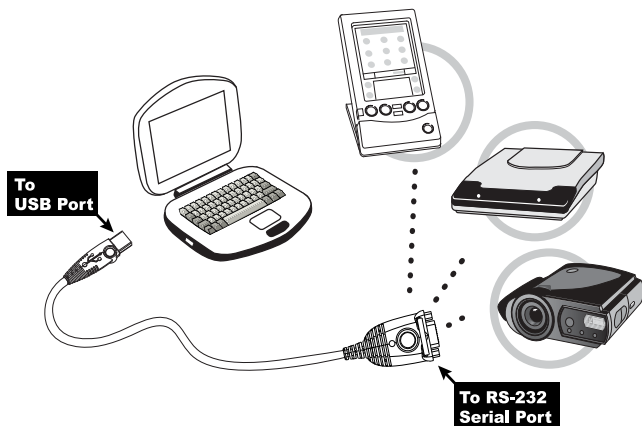
- ◆ To uninstall all drivers (including the base driver):

```
make uninst_all
```

You have successfully uninstalled the driver(s).

## PERIPHERAL INSTALLATION

1. After you have finished the software installation procedures for your operating system and have connected the UC-232A to your computer, connect the peripheral device to the UC-232A, and then turn the peripheral on.





2. Follow the Installation Wizard's on-screen instructions to complete the installation.
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**Note:** 1. This procedure only occurs the first time you connect the peripheral. If your peripheral was previously connected and configured for the RS-232 (COM) port, after you perform the Adapter Installation and click Finish, the driver will detect it and install it automatically. However, some peripheral devices, such as older PDAs, require that you re-install the software for the peripheral device before it will work properly.

2. Under Windows 2000, if you connect a modem, you must specify it as a *Standard Modem*.
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## SPECIFICATIONS

Function		Specification
Connectors	USB	Type A Plug
	Serial	DB-9 Male
LEDs		Data Transfer / Handshaking (Orange)
Data Transfer Rate		Up to 230 Kbps
Cable Length		35 cm
Power Consumption		450mW
Power Mode		Bus Powered
USB Specification		1.1 Compliant
Environment	Operating Temp.	5–40° C
	Storage Temp.	-20–60° C
	Humidity	0–80% RH, Non-condensing
Physical Properties	Housing	Plastic
	Weight	60 g
	Dimensions (L x W x H)	6.59 x 3.4 x 1.6 cm

## DB-9 PIN ASSIGNMENTS

Pin	Assignment
1	CD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

Thank you for purchasing this ATEN product! It is recommended that you register the product right away at our website: <http://eservice.aten.com>. This will give you access to useful add-on features, as follows:

- ◆ View details of all your registered ATEN products in one place
- ◆ Read about application tips and supporting information specific to your product
- ◆ Get fast service and response from our highly skilled engineers
- ◆ Receive the latest news and promotions from ATEN, and participate in customer surveys

ATEN warrants this product against flaws in the materials and workmanship during the warranty period which commence on the date of original purchase. The duration, terms, and conditions of the warranty period may vary from country to country. Please visit ATEN's website for more information or contact the ATEN office responsible for providing support in your country/region. Contact details for all ATEN offices are listed in the following table.

<p><b>Corporate Headquarters (Original Manufacturer)</b>  <b>ATEN International Co., Ltd.</b>            Website: <a href="http://www.aten.com">http://www.aten.com</a>            Address: 3F., No.125, Sec. 2, Datong Rd., Sijhih District., New Taipei City 221, Taiwan</p>	<p><b>U.S.A Subsidiaries (Importer)</b>  <b>ATEN Technology Inc.</b>            Website: <a href="http://www.aten-usa.com">http://www.aten-usa.com</a>            Address: 19641 DaVinci Foothill Ranch, CA 92610, U.S.A            ATEN New Jersey Inc.            Address: 155 Pierce Street, Somerset, NJ 08873, U.S.A</p>
<p><b>Belgium Subsidiary (Importer)</b>  <b>ATEN Infotech N.V.</b>            Website: <a href="http://www.aten.be">http://www.aten.be</a>            Address: Mijnwerkerslaan 34 3550 Heusden-Zolder, Belgium</p>	<p><b>U.K. Subsidiary (Importer)</b>  <b>ATEN U.K. Limited</b>            Website: <a href="http://www.aten.co.uk">http://www.aten.co.uk</a>            Address: 229 Berwick Avenue Slough, SL1 4QT, U.K.</p>
<p><b>Japan Subsidiary (Importer)</b>  <b>ATEN Japan Co., Ltd.</b>            Website: <a href="http://www.atenjapan.jp">http://www.atenjapan.jp</a>            Address: ATEN Bldg. 8-4, Minami-senju 3-chome, Arakawa-ku, Tokyo 116-0003 Japan</p>	<p><b>Korea Subsidiary (Importer)</b>  <b>ATEN Korea., Ltd.</b>            Website: <a href="http://www.aten.co.kr">http://www.aten.co.kr</a>            Address: B-303, Gabeul Great Valley, 60-5, Gasan-dong, Geumcheon-gu, Seoul, Korea; 153-801</p>
<p><b>China Subsidiary (Importer)</b>  <b>ATEN China Co., Ltd.</b>            Website: <a href="http://www.aten.com.cn">http://www.aten.com.cn</a>            Address: 18/F, Tower A, Horizon International Tower, No.6,Zhichun Road, Haidian District, Beijing, China 100088</p>	<p><b>Taiwan Subsidiary (Importer)</b>  <b>Atech Peripherals, Inc.</b>            Website: <a href="http://www.aten.com.tw">http://www.aten.com.tw</a>            Address: 6F., No.133, Sec. 2, Datong Rd., Sijhih District., New Taipei City 221, Taiwan</p>

## **LIMITED WARRANTY**

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM THE DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK OR ITS DOCUMENTATION.

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and specially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

The direct vendor also reserves the right to revise or update the device or documentation without obligation to notify any individual or entity of such revisions, or update. For further inquires please contact your direct vendor.