

# UC232A / UC232A1 USB-to-Serial Adapter User Manual

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## **Compliance Statements**

# FEDERAL COMMUNICATIONS 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.

The 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.

**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.



#### **KCC Statement**

유선 제품용 / B 급 기기 (가정용 방송 통신 기기) 이 기기는 가정용 (B 급 ) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

#### **Industry Canada Statement**

This Class B digital apparatus complies with Canadian ICES-003.

ICES-003 (B) / NMB-003 (B)

#### **RoHS**

This product is RoHS compliant.

#### UC232A / UC232A1 User Manual

#### Online Registration

International	http://eservice.aten.com
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#### Telephone Support

For telephone support, call this number:

International	886-2-8692-6959
China	86-400-810-0-810
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988 1-949-428-1111

## **Technical Support**

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

Email Support		support@aten-usa.com
Online Technical Support	Troubleshooting Documentation Software Updates	http://www.aten-usa.com/support
Telephone Support		1-888-999-ATEN ext 4998

#### **Package Contents**

Check to make sure that all the components are in working order. If you encounter any problem, please contact your dealer.

- 1 UC232A / UC232A1 USB-to-Serial Adapter
- ◆ 1 User Instructions\*

#### Note:

- Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit or any connected devices.
- The product may be updated, with features and functions added, improved or removed since the release of this manual. For an up-to-date user manual, visit

http://www.aten.com/global/en/

#### 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 UC232A / UC232A1 USB-to-Serial Adapter 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 USB cable (35 CM for UC232A and 100 CM for UC232A1) with a type A plug for connecting to the computer's USB port, or to a USB hub.

The UC232A / UC232A1 provides mobile phones, PDAs, digital cameras, modems and ISDN terminal adapters with high quality serial connections at a data transfer rate of up to 921.6 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 UC232A / UC232A1 also supports energy-saving suspend and resume operations.

Note: The UC232A / UC232A1 does not support devices, such as serial mice, that require an IRQ number or IO Address.

#### **Features**

- Full compliance with USB specification
- Supports RS-232 serial interface
- Supports automatic handshake mode
- Up to 921.6 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, Vista, 7, 8, 8.1, 10, or above
Mac	OS 10 or later
Linux Kernel	2.6.15 or later

If your Linux kernel is between v2.6.15 ~ v5.4 and your device has a new chipset version, please update the Linux driver from our product web page. This driver works with 2021 or later chipset version device only.

Use the link below to identify which chipset version your device is.

http://eservice.aten.com/eServiceCx/Common/FAQ/view.do?id=18695

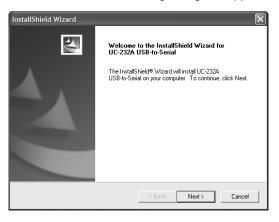
#### Windows 2000 Installation

#### Installing the Driver(s)

To install the UC232A / UC232A1 drivers, do the following:

Note: The setup is for UC232A is the picture below. The UC232A1 is the same as the UC232A, except that it has a 100 cm cable attached instead of 35 cm.

- Please download the latest software installation package from the UC232A / UC232A1 product page at www.aten.com/ download (search for UC232A / UC232A1 and go to the download tab).
- Execute the file and follow the on-screen instructions to configure detailed software settings.
- 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:



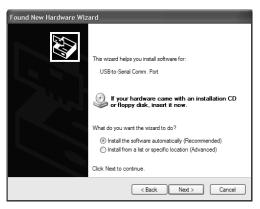
Click Finish to close the wizard. You have successfully installed the driver(s).

#### Connecting the UC232A / UC232A1

 Connect the UC232A / UC232A1 USB-to-Serial Adapter to a USB port on your computer. The New Hardware Wizard appears:



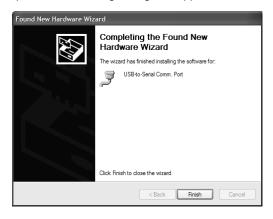
Select No, not this time, and then click Next to continue. The following dialog box appears:



- Leave the default choice (Install the software automatically). Click Next to continue.
- 4. Windows displays the following warning:



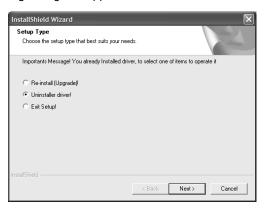
5. You can safely ignore this warning. Click Continue Anyway to continue installing the new hardware. When the installation is complete, the following dialog box appears:



Click Finish to close the wizard. You have successfully installed the UC232A / UC232A1.

#### Uninstalling the Driver(s)

 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:



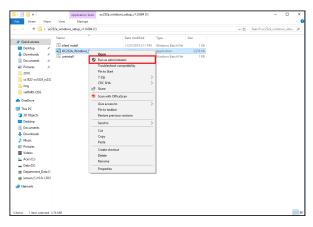
3. Click Finish. You have successfully uninstalled the driver(s).

#### Windows Vista/7/8/8.1/10 Installation

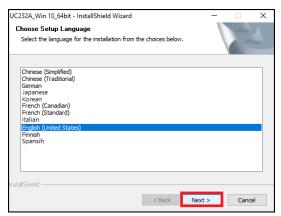
#### Installing the Driver

Note: The setup is for UC232A is the picture below. The UC232A1 is the same as the UC232A, except that it has a 100 cm cable attached instead of 35 cm.

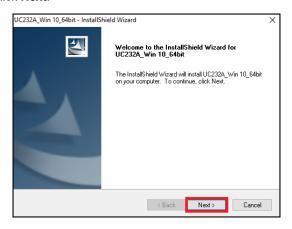
- Make sure that the Windows language for non-Unicode programs is set to English by checking Regional and Language Options, then Administrative.
- Please download the latest software installation package from the UC232A / UC232A1 product page at www.aten.com/ download (search for UC232A / UC232A1 and go to the download tab).
- Execute the file and follow the on-screen instructions to configure detailed software settings.
- Open the downloaded file and right click on the UC232A\_Windows\_Setup. Select Run as administrator as shown in the picture below.



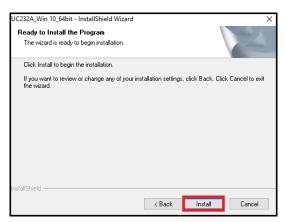
After a few moments, the following dialog box appears. Choose your desired Language and click **Next**.



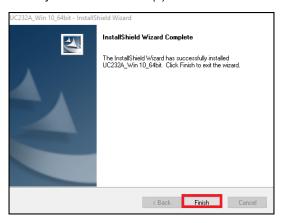
#### 6. Click Next.



7. Click **Install** to install the drivers.



8. When the installation is complete, the following dialog box appears. Click **Finish** to close the wizard. You have successfully installed the driver(s).



## Connecting the UC232A / UC232A1

 Connect the UC232A / UC232A1 USB-to-Serial Adapter to a USB port in your computer. The following dialog box appears on the bottom right of your PC screen to confirm that the driver has been installed and that your UC232A / UC232A1 is ready to use:

☼ Device is ready 'ATEN USB to Serial Bridge' is set up and ready to go.

#### Mac Installation

#### Installing the Software

Note: The setup is for UC232A is the picture below. The UC232A1 is the same as the UC232A, except that it has a 100 cm cable attached instead of 35 cm.

- Please download the latest software installation package from the UC232A / UC232A1 product page at www.aten.com/ download (search for UC232A / UC232A1 and go to the download tab).
- Execute the file and follow the on-screen instructions to configure detailed software settings.
- Open the downloaded folder and copy the Mac OS file to your hard disk.
- 4. Double-click on the file icon to extract the compressed file(s).
- Copy the extracted file(s) to the Hard Disk > System Folder > Extensions folder.

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

Connecting the UC232A / UC232A1
Connect the UC232A / UC232A1 to a USB port on your Mac.

**Note:** The UC232A / UC232A1 will not function properly unless the software was previously installed.

#### Linux Installation

Note: The setup is for UC232A is the picture below. The UC232A1 is the same as the UC232A, except that it has a 100 cm cable attached instead of 35 cm.

#### Installing the Driver(s)

- Please download the latest software installation package from the UC232A / UC232A1 product page at www.aten.com/ download (search for UC232A / UC232A1 and go to the download tab).
- Execute the file and follow the on-screen instructions to configure detailed software settings.
- 3. Open a command line.
- 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.

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

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

make inst

8. Connect the UC232A / UC232A1 to a USB port on your computer.

**Note:** The UC232A / UC232A1 will not function properly unless the drivers have been previously installed.

#### 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

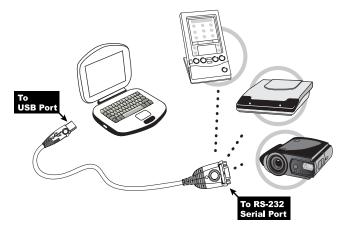
• To uninstall all drivers (including the base driver):

```
make uninst all
```

You have successfully uninstalled the driver(s).

#### Peripheral Installation

 After you have finished the software installation procedures for your operating system and have connected the UC232A/ UC232A1 to your computer, connect the peripheral device to the UC232A / UC232A1, and then turn the peripheral on.



- 2. Follow the Installation Wizard's on-screen instructions to complete the installation.
- 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*.

## Specifications

Function		UC232A	UC232A1
Connectors	USB	Type A Plug	Type A Plug
	Serial	DB-9 Male	DB-9 Male
LEDs		Power (Orange)	Power (Orange)
Data Transfer Rate		Up to 921.6 Kbps	Up to 921.6 Kbps
Cable Length		35 cm	100 cm
Power Consumption		450mW	450mW
Power Mode		Bus Powered	Bus Powered
USB Specification		2.0 Compliant	2.0 Compliant
Environment	Operating Temp.	0–40° C	0–40° C
	Storage Temp.	-20–60° C	-20–60° C
	Humidity	0–80% RH, Non- condensing	0–80% RH, Non- condensing
Physical Properties	Housing	Plastic	Plastic
	Weight	0.04 kg (0.09 lb)	0.06 kg (0.13 lb)
	Dimensions (L x W x H)	6.59 x 3.4 x 1.6 cm (2.59 x 1.34 x 0.63 in.)	6.59 x 3.4 x 1.6 cm (2.59 x 1.34 x 0.63 in.)

## **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.

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Belgium Subsidiary (Importer)	U.K. Subsidiary (Importer)
ATEN Infotech N.V.	ATEN U.K. Limited
Website: http://www.aten.be	Website: http://www.aten.co.uk
Address: Mijnwerkerslaan 34 3550	Address: 229 Berwick Avenue Slough,
Heusden-Zolder, Belgium	SL1 4QT, U.K.

#### Japan Subsidiary (Importer) Korea Subsidiary (Importer) ATEN Japan Co., Ltd. ATEN Korea., Ltd. Website: http://www.atenjapan.jp Website: http://www.aten.co.kr Address: B-303, Gabeul Great Valley, Address: ATEN Bldg. 8-4, 60-5, Gasan-dong, Geumcheon-gu, Seoul, Korea; 153-801 Minami-senjyu 3-chome, Arakawa-ku, Tokvo 116-0003 Japan China Subsidiary (Importer) Taiwan Subsidiary (Importer) Atech Peripherals, Inc. ATEN China Co., Ltd. Website: http://www.aten.com.tw Website: http://www.aten.com.cn Address: 6F., No.133, Sec. 2, Address: 18/F, Tower A, Datong Rd., Sijhih District., New Taipei Horizon International Tower, City 221, Taiwan No.6.Zhichun Road. Haidian District, Beijing,

China 100088

## **Limited Warranty**

ATEN warrants its hardware in the country of purchase against flaws in materials and workmanship for a Warranty Period of two [2] years (warranty period may vary in certain regions/countries) commencing on the date of original purchase. This warranty period includes the LCD panel of ATEN LCD KVM switches. Select products are warranted for an additional year (see *A+Warranty* for further details). Cables and accessories are not covered by the Standard Warranty.

#### What is covered by the Limited Hardware Warranty

ATEN will provide a repair service, without charge, during the Warranty Period. If a product is detective, ATEN will, at its discretion, have the option to (1) repair said product with new or repaired components, or (2) replace the entire product with an identical product or with a similar product which fulfills the same function as the defective product. Replaced products assume the warranty of the original product for the remaining period or a period of 90 days, whichever is longer. When the products or components are replaced, the replacing articles shall become customer property and the replaced articles shall become the property of ATEN.

To learn more about our warranty policies, please visit our website:

http://www.aten.com/global/en/legal/policies/warranty-policy/