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# Professional USB to Serial Adapter Hub with COM Retention

ICUSB2321X ICUSB2322X ICUSB2324X



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#### FCC Compliance Statement

This equipment has been tested and found to comply with the limits for 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. This equipment generates, uses and can radiate radio frequency energy and, 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.

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## **Table of Contents**

| Introduction                        | 1  |
|-------------------------------------|----|
| Package Contents                    | 1  |
| System Requirements                 | 1  |
| Hardware Guide                      | 2  |
| ICUSB2321X                          | 2  |
| ICUSB2322X                          | 2  |
| ICUSB2324X                          | 3  |
| Installation                        | 4  |
| Manual Installation                 | 4  |
| Automatic Installation              | 9  |
| Verifying Installation              | 9  |
| Configuration                       | 10 |
| Pinout                              | 10 |
| Manual Installation Troubleshooting | 11 |
| Specifications                      | 13 |
| Technical Support                   | 14 |
| Warranty Information                | 14 |



## Introduction

Thank you for purchasing a StarTech.com Professional USB to RS-232 Serial Adapter. This innovative device offers a simple way to utilize serial devices using a USB port, and stores settings that are unique to the connected device in non-volatile memory (COM Port Retention), allowing you to retain the desired settings regardless of the USB Port to which the adapter is connected.

A cost-effective solution, the USB to Serial Adapter is ideal for connecting a serial modem, barcode scanner, PDA or any other device with serial sync to a host computer USB port, saving the expense of having to upgrade the peripheral device to USB compliance.

#### Package Contents

- 1 x USB to RS-232 Serial Adapter
- 1 x USB cable (ICUSB2322X/ ICUSB2324X only)
- 1 x Driver CD
- 1 x Instruction Manual

#### System Requirements

- · USB enabled computer system with available USB port
- Windows<sup>®</sup> 8 (32/64bit), 7 (32/64), Vista (32/64), XP (32/64), Server<sup>®</sup> 2012, 2008 R2, 2003 (32/64)



# Hardware Guide

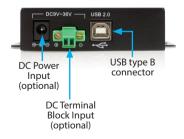


#### ICUSB2322X

#### **Front Panel**



#### **Rear Panel**



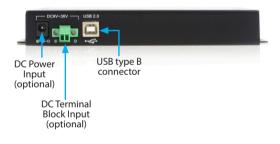


#### ICUSB2324X

#### Front Panel



#### **Rear Panel**





## Installation

It is recommended that you download the latest driver installation package for this product from the www.startech.com website and then follow the Manual Installation procedure below.

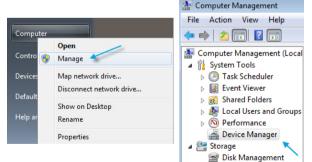
If you are using an older driver (either from an included CD or having downloaded an older version) then please follow the Automatic Installation procedure on the following pages by using the Setup.exe (executable) installation file.

If you are having installation problems using the Automatic Install procedure, please refer to the Manual Driver Installation procedure on the following pages.

#### **Manual Installation**

#### Windows® 8, 7, Vista, Server ® 2012, 2008 R2

- 1. Navigate to http://www.startech.com/Downloads and enter your product ID (ICUSB2321X, ICUSB2322X, or ICUSB2324X).
- 2. Download the latest driver package listed under Driver(s), once your download has finished, extract the driver package to a folder location of your choice.
- 3. Connect the USB to Serial Adapter to your computer system.
- 4. Upon starting Windows, if a Found New Hardware dialog appears on the screen, cancel/close the window.
- 5. From the main desktop or start menu, right-click on Computer then select Manage. Windows 8.1 users can right click on the "Start" button and click Device Manager.
- 6. In the Computer Management Window, select Device Manager from the left window panel.



 Expand the Other Devices section, and right-click on the newly detected "StarTech. com Adapter" device and select Update Driver Software, which will start the Update Driver Software Wizard.



On the How do you want to search for driver software Window, click Browse my computer for driver software, then Let me pick from a list of device drivers on my computer.

| Ho                     | v do you want to search for driver software?   |
|------------------------|--|
| •                      | Search automatically for updated driver software<br>Windows will search your computer and the Internet for the latest driver software<br>for your device, unless you've disabled this feature in your device installation<br>settings. |
| +                      | Browse my computer for driver software<br>Locate and install driver software manually.   |
|                        |  |
| U U                    | odate Driver Software - StarTech.com Adapter   |
|                        | odate Driver Software - StarTech.com Adapter<br>rse for driver software on your computer   |
| Brov                   |  |
| Brov                   | rse for driver software on your computer   |
| Brov<br>Search<br>C:\U | se for driver software on your computer  |
| Brov<br>Search<br>C:\U | rse for driver software on your computer<br>for driver software in this location:<br>ers/Test Lab\Desktop\RTLWIanU_10244.0910.2013_UL_1.00.02_ v Browse  |
| Brov<br>Search<br>C:\U | rse for driver software on your computer<br>for driver software in this location:<br>ers/Test Lab\Desktop\RTLWIanU_10244.0910.2013_UL_1.00.02_ v Browse  |

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- From the next screen labeled Select your device's type from the list below, select Show All Devices (should be highlighted by default), and then click Next.
  Note: This screen does not appear on all systems, move on to the next step if this does not apply.
- 10.On the Select the Device Driver you want to install for this hardware screen, click the Have Disk button.

| Select the manufactur   | you want to install for this hardware.<br>er and model of your hardware device and then click Next. If you have a<br>driver you want to install, click Have Disk. |
|---|---|
| Manufacturer  | ^   Model   |
| (Generic USB Audio)<br>Altec Lansing<br>Boston Acoustics<br>Canopus | USB Audio Device  |
| This driver is digitally signed<br>Tell me why driver signing       |   |

- 11.Click Browse from the Install from Disk dialog box that pops up.
- 12.From the Locate File dialog window that opens, navigate to the folder location where you extracted the downloaded driver package.
- 13.Double-click the Drivers folder and then the appropriate 32 or 64-bit folder for the system you are using.
- 14.Select the usbuart3410.inf file, and then click the Open button.



| 4             |                                   | Locate File                                  |   |   | ×                                |
|---------------|-----------------------------------|--|---|---|----------------------------------|
| Look in:      | 鷆 64-bit                          |  | ~ | o 🌶 📂 🛄 -   |                                  |
| Recent places | Name<br>usbuart34                 |  |   | Date modified<br>3/28/2014 4:00 PM<br>3/28/2014 4:00 PM | Type<br>Setup Infc<br>Setup Infc |
| Network       | <<br>File name:<br>Files of type: | usbuart3410 inf<br>Setup Information (*.inf) |   | ~ [   | Open<br>Cancel                   |

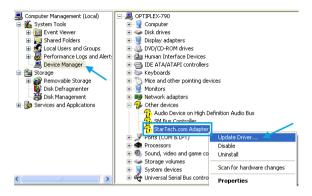
- 15.Click the OK button on the Install From Disk dialog box which will close the window.
- 16.Once back at the Select the Device Driver you want to install for this hardware screen, click Next and then Close once the driver has installed.
- 17.At this point of the install, you may receive a message pop-up stating Windows can't verify the publisher of this driver software, click Install this driver software anyway. **Note:** If Windows encounters a problem during driver installation, please see the section below titled Manual Installation Troubleshooting.

#### Windows® XP

- 1. Navigate to http://www.startech.com/Downloads and enter your product ID (ICUSB2321X, ICUSB2322X, or ICUSB2324X).
- 2. Download the latest driver package listed under Driver(s), once your download has finished, please extract the driver package to a folder location of your choice.
- 3. Connect the USB to Serial Adapter to the computer system.
- 4. Upon starting Windows, if the Found New Hardware dialog appears on the screen, cancel/close the window.
- 5. Open the Device Manager by right-clicking on My Computer, and then select Manage. In the Computer Management window, select Device Manager from the left window panel.



Expand the Other Devices section, right-click on the newly detected "StarTech.com Adapter" device and select Update Driver, which will start the Hardware Update Wizard.



- 7. On the main Hardware Update Wizard window, select Install from a list or specific location (Advanced), then click Next.
- 8. On the next screen, select Don't search, I will choose the driver to install and click Next.
- From the next screen labeled Hardware Type, select Show All Devices (should be highlighted by default), and then click Next.
  Note: This screen does not appear on all systems, move on to the next step if this does not apply.
- 10.On the Select the Device Driver you want to install for this hardware screen, click the Have Disk button.
- 11.Click Browse from the Install from Disk dialog box that pops up.
- 12. From the Locate File dialog window that opens, navigate to the folder location where you extracted the downloaded driver package.
- 13.Select the file "usbuart3410.inf" file and click the Open button.
- 14.On the next dialog window that opens, ensure the Startech.com Serial Adapter device is selected, and click Next.
- 15.At this point of the install, you may receive a message pop-up stating Windows can't verify the publisher of this driver software, click Install this driver software anyway.



#### **Automatic Installation**

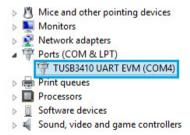
**Note:** In order to ensure successful installation, please install the necessary software (included) on the intended host computer prior to connecting the USB Serial Adapter to the host.

- 1. Insert the Driver CD into the CD or DVD-ROM drive on the host computer.
- 2. Browse to, and execute the Setup.exe file.
- 3. When the installation progress launches, a welcome screen will appear. Click Next to proceed.
- 4. You will be asked to select a destination where the StarTech.com Serial Adapter will be installed. Please click on Browse to manually select a location. Otherwise, leave the default destination in place and click Next.
- 5. Please wait while the necessary drivers are copied and installed.
- 6. Once completed, a message indicating that the drivers have been successfully installed will appear. Please click Finish to conclude the software installation.
- 7. Connect the USB to Serial Adapter to the computer system. Windows will automatically detect the device and install the drivers.

#### **Verifying Installation**

#### Windows

- 1. Open the Device Manager by right-clicking on Computer, and then select Manage. In the new Computer Management window, select Device Manager from the left window panel (For Windows 8, open the Control Panel and select Device Manager).
- 2. Expand the Ports section; you should see either a StarTech.com Adapter or a TUSB3410 UART EVM device listed.
- 3. The port is automatically sequentially numbered by Windows, but can be changed through the Properties by right-clicking on the port.





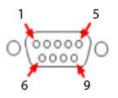
## Configuration

To configure the USB Serial port:

- 1. In the Device Manager, double-click on "Ports (COM & LPT)" to expand.
- 2. Right-click on the newly added serial port and select "Properties".
- 3. From within the Properties window, the "Setting" tabs offer configuration options for the USB Serial Adapter functions:

### Pinout

| Pin | Signal |
|-----|--------|
| 1   | DCD    |
| 2   | RxD    |
| 3   | TxD    |
| 4   | DTR    |
| 5   | GND    |
| 6   | DSR    |
| 7   | RTS    |
| 8   | CTS    |
| 9   | RI     |
|     |        |





## Manual Installation Troubleshooting

If Windows does not successfully install the adapter by following the above steps, please follow the procedure below to successfully install the adapter.

1. On the Windows encountered a problem installing the driver software for your device screen, click the back arrow button.



If you know the manufacturer of your device, you can visit its website and check the support section for driver software.

- 2. Repeat the installation steps 9 through 15 in the Manual Install Procedure above.
- 3. When back at the Select the device driver you want to install for this hardware screen, deselect the Show compatible hardware button.
- Select the TUSB3410 UART EVM device, and click Next and then Close once the driver has installed.



Select the device driver you want to install for this hardware.

|              | Select the manufacturer and model of your hardware of<br>disk that contains the driver you want to install, click H |               |
|--------------|---|---------------|
| Show o       | compatible hardware   |               |
| MSP-<br>MSP- | 3410 UART EVM<br>EXP430F5438 USB - Serial Port<br>FET430UJF - VCP   | ^             |
|              | ech.com Serial Adapter  | *             |
|              | driver is digitally signed.<br>me why driver signing is important   | Have Disk     |
|              |   | > Next Cancel |

At this point of the install, you may receive a message pop-up stating Windows can't verify the publisher of this driver software, click Install this driver software anyway.

Please contact StarTech.com technical support for further troubleshooting or installation support. 1-800-265-1844



## Specifications

|                                 | ICUSB2321X   | ICUSB2322X                      | ICUSB2324X                       |
|---------------------------------|--|---------------------------------|----------------------------------|
| Number of Ports                 | 1  | 2                               | 4                                |
| Host Interface                  |  | USB 2.0                         |                                  |
|                                 | 1 x USB type A<br>(male)<br>1 x DB9 (male)   | 1 x USB type B<br>(female)      | 1 x USB type B<br>(female)       |
| Connectors                      |  | 2 x DB9 (male)                  | 4 x DB9 (male)                   |
| connectors                      |  | 1 x DC Power                    | 1 x DC Power                     |
|                                 |  | 1 x 2-pin Terminal<br>Block     | 1 x 2-pin Terminal<br>Block      |
| Serial Protocol                 |  | RS-232                          |                                  |
| Maximum Data<br>Transfer Rate   |  | 230 Kbps                        | -                                |
| Compatible Operating<br>Systems | Windows® 8 (32/64bit), 7 (32/64), Vista (32/64), XP (32/64),<br>Server® 2012, 2008 R2, 2003 (32/64)<br>CE/ FCC/ ROHS |                                 |                                  |
| Regulatory<br>Certifications    |  |                                 |                                  |
| Product Weight                  | 33.4g  | 300g                            | 593g                             |
| Product Dimensions<br>(LxWxH)   | 207.0mm x<br>35.0mm x<br>135.0mm   | 113.0mm x<br>80.0mm x<br>25.0mm | 165.2mm x<br>118.0mm x<br>25.0mm |



## **Technical Support**

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit **www.startech.com/support** and access our comprehensive selection of online tools, documentation, and downloads.

For the latest drivers/software, please visit www.startech.com/downloads

### Warranty Information

This product is backed by a two year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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