Professional USB to RS-232 Serial Adapter

ICUSB2321X
ICUSB2322X
ICUSB2324X

Instruction Manual

StarTech.com

Making hard-to-find easy!

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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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, ICUSB232xX 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.

Features

- Enables and disables enumerations
- COM port retention
- Offers customizable device names, for easier identification
- USB Powered - no power outlet required
- Provides dual buffers for upstream and downstream data transfer
- Supports automatic handshake mode
- Supports remote wake up and power management control

Package Contents

- 1 X Driver CD
- 1 X Instruction Manual
- 1 X USB to RS-232 Serial Adapter

Hardware Guide

ICUSB2321X
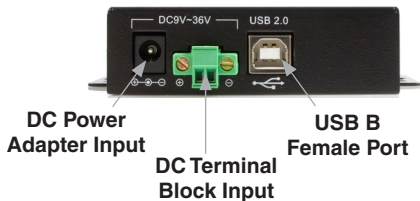

**USB A
Female Port**

**DB9 Male
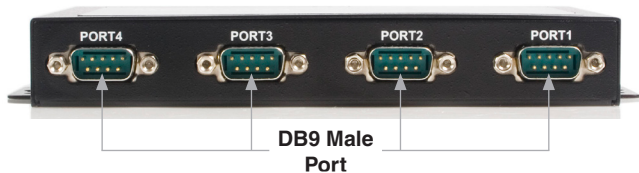Port**

ICUSB2322X

Front Panel

**DB9 Male
Port**

Rear Panel

**DC Power
Adapter Input**

**DC Terminal
Block Input**

**USB B
Female Port**

ICUSB2324X

Front Panel

DB9 Male Port

Rear Panel

DC Power Adapter Input

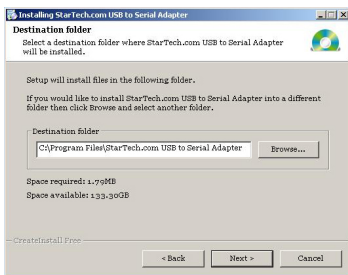**DC Terminal Block Input**

USB B Female Port

Installation

Please note: In order to ensure successful installation, please install the necessary software (included) on the intended host computer prior to connecting ICUSB232xX to the host.

1. Insert the Driver CD into the CD or DVD-ROM drive on the host computer.

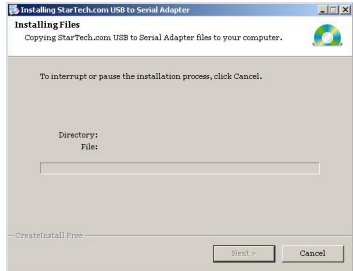2. Browse to, and execute the **Setup.exe** file.

3. When the installation process launches, a welcome screen will appear. Click **Next** to proceed.

4. You will be asked to select a destination where the Startech.com USB to 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.

Once the necessary software has been installed, connect ICUSB232xX to an available USB port on the host computer. Once connected, the operating system will notify you that it has **Found New Hardware - StarTech. com Adapter**:
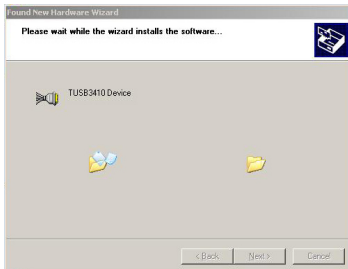
7. When the **Add New Hardware Wizard** launches, select **Install the software automatically** and click **Next**.

8. The Wizard will begin installing the software.

9. A window will appear indicating that "the software you are installing...has not passed Windows Logo testing...". Click **Continue Anyway** to proceed. Please note that this software has been tested for performance and reliability.

10. Once the software has been installed, click **Finish**.

11. Repeat steps 7 - 10 as necessary (dependent on number of serial ports being installed).
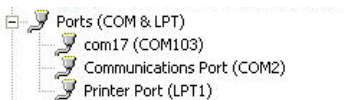
Once the installation has concluded, you will be able to configure the ICUSB232xX as required.
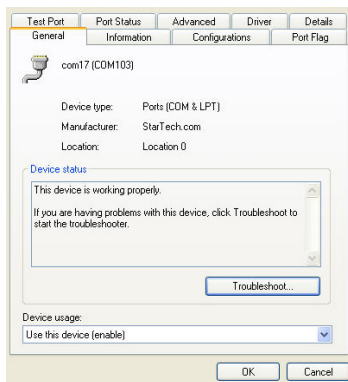
Configuration

To configure ICUSB232xX:

1. Right-click on **My Computer** (Windows XP) or **Computer** (Vista™) and select **Manage** to open the **Computer Management** window.

1. In the left pane of the **Computer Management** window, select **Device Manager**, then in the right pane, click on **Ports (COM & LPT)**.

2. Right-click on the newly added serial port and select **Properties**.

From within the Properties window, the following tabs offer configuration for ICUSB232XX functions:
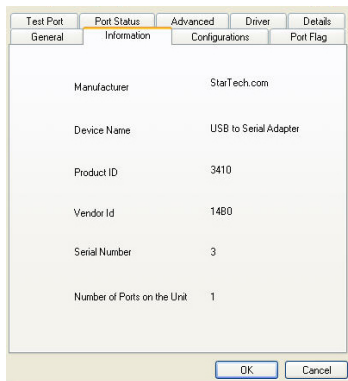
General
This tab provides basic information about the ICUSB232XX, as well as its operating status. ICUSB232XX operation can be disabled from here using the drop-down box provided under Device Usage.
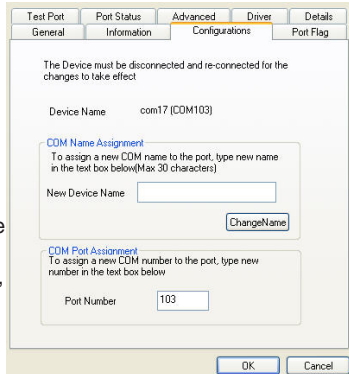
Information
This tab provides further information about ICUSB232XX including its manufacturer, device name, product ID, vendor ID, and Serial Number.

Configurations
This tab allows users to change the name given to the ICUSB232xX for easier reference, and also the assigned port number. The new name will take effect once a new name is entered into the New Device Name field, and the Apply button is pressed. To change the port number, enter the desired value in the space provided and click **OK.**
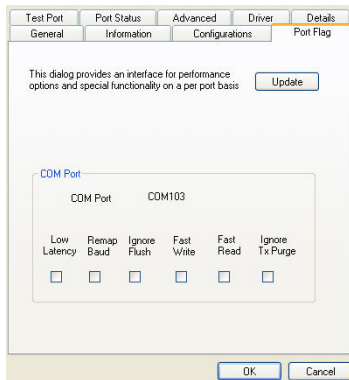
Port Flag
This tab provides the following checkboxes:

• **Low Latency:** Changes how serial data is handled in order to reduce latency (or delay)

Re-map Baud: this feature allows some standard baud rates to be remapped to customized baud rates. When the application uses one of the standard baud rates that has been remapped, the driver will generate the corresponding custom baud rate instead

• **Ignore Flush:** Receipt of a flush request indicates that the driver should flush the device cache or discard that data in its internal buffer. The driver transfers any data currently cached in the device or held in the driver's internal buffers

before completing the flush request. This flush will be ignored when it is checked
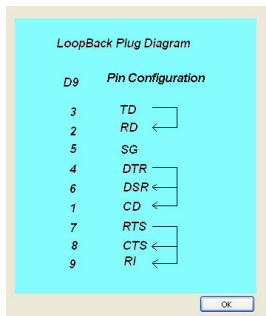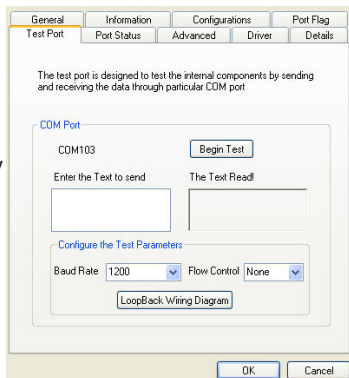
• **Fast Write:** When this checkbox is checked, the driver completes the data write, even if data is stil buffered in the driver and the USB Serial Device

• **Ignore Tx Purge:** The purge request can be used to cancel all read and write requests and to delte all data from the read and write buffers. When this box is checked, the driver will not purge the write buffer.

Test Port

This function can be used to diagnose any suspected hardware problems that may occur. To perform a Loopback Test, pins 2 and 3 of the DB9 connector need to be physically connected to one another.
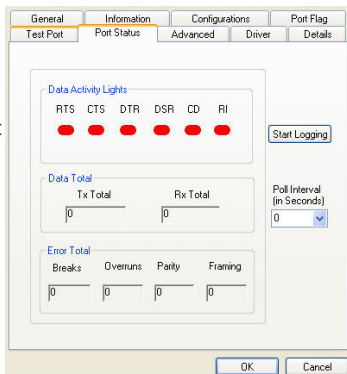
Test parameters can be set based on individual requirements; once the *Baud Rate* and *Flow Control* have been adjusted accordingly using the drop-down boxes provided, and the physical connection between pins 2 and 3 has been made, click **Begin Test**. If the test is successful, characters entered in the *Enter the Text to send* box will appear in the *Text Read!* box.

To view jumper pin configurations used to perform the LoopBack Test, click the **LoopBack Wiring Diagram** button. Please note that a jumper connection between pins 2 and 3 are required in order to perform the LoopBack Test.
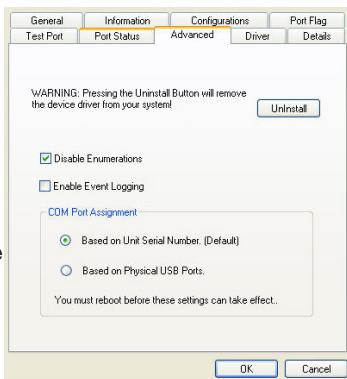
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Port Status
This function allows users to view the amount of data having been sent and received through ICUSB232XX. To log data flow status, select an appropriate *Poll Interval* (the rate at which data is collected), then click on the Start Logging button.

Advanced
This tab allows user to Disable Enumerations (checked by default) and designate COM Port assignment based on either the unique serial number assigned to the ICUSB232XX (default), or on the physical USB port to which the device has been connected. In order for this assignment to take effect, the computer must be rebooted.

COM Port Assignment Based on Unit Serial Number will assign the same COM Port address, regardless of the USB port to which the ICUSB232XX is connected.

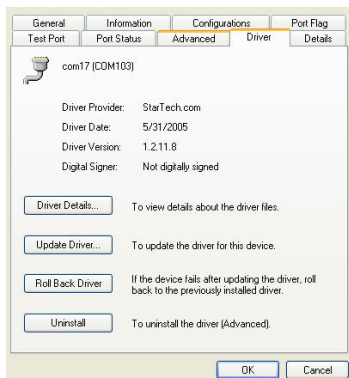COM Port Assignment Based on Physical USB Ports is determined by the USB port to which ICUSB232XX is connected. For example, if ICUSB232XX is removed from one USB port and connected to another, the COM Port assignment will change to the COM Port number given to the latter port. Switching the connection back to the original USB port wil retain the original COM Port address. Please note that the selection for

Based on Physical USB ports is only available for ICUSB2321X. As such, if an ICUSB2322X or an ICUSB2324X is connected, the option of "Based on Physical USB ports" is not visible/accessible.
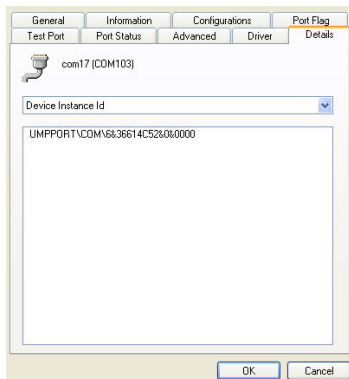
Driver

This tab allows users to view Driver Details (rev. etc.), update the Driver file, Roll Back the installed Driver to a previous state, or uninstall the device software for ICUSB232XX.

Details

Provides further operating information about ICUSB232XX.

Specifications

Connectors	1 x USB type A (Male) 1 x RS-232 (DB9) (Male) (ICUSB2321X) 2 x RS-232 (DB9) (Male) (ICUSB2322X) 4 x RS-232 (DB9) (Male) (ICUSB2324X)
Maximum Data Transfer Rate	230Kbps
OS Support	Windows 2000, XP, Server 2000 and 2003. Limited functionality with Windows NT 4 and Vista™
Regulatory Certifications	CE/FCC/RoHS
Product Weight	33.4 g (1.18 oz)
Product Dimensions	ICUSB2321X: 35 x 13 x 420mm (W x H x L) 　　　　　　　　(1.38 x 0.51 x 16.54") ICUSB2322X: 80 x 23 x 113mm (W x H x L) 　　　　　　　　(3.15 x 0.91 x 4.45") ICUSB2324X: 118 x 25 x 165.2mm (W x H x L) 　　　　　　　　(4.65 x 0.98 x 6.5")

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