

4-Port Industrial USB to Serial Adapter Hub - RS-232/RS-422/RS-485 DIN Rail and Wall Mountable

ICUSB234854I

- FR: Guide de l'utilisateur - fr.startech.com
- DE: Bedienungsanleitung - de.startech.com
- ES: Guía del usuario - es.startech.com
- NL: Gebruiksaanwijzing - nl.startech.com
- PT: Guia do usuário - pt.startech.com
- IT: Guida per l'uso - it.startech.com

Package contents

- 1 x USB serial hub
- 1 x USB-B with screw lock to USB-A cable
- 1 x DIN rail kit
- 1 x instruction manual

Requirements

- USB-enabled computer with an available USB 2.0 port
- Any of the following operating systems:
 - Microsoft Windows® 10, 8/8.1, 7
 - Microsoft Windows Server® 2012, 2008, 2003
 - macOS High Sierra (10.13), Sierra (10.12) El Capitan (10.11), Yosemite (10.10), Mavericks (10.9)
 - Linux® kernel 3.5 to 4.11.x, LTS versions only
 - Phillips type screwdriver

Operating system requirements are subject to change. For the latest requirements, please visit www.StarTech.com/ICUSB234854I.

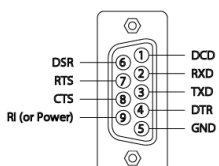
Product diagram



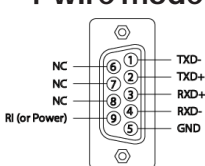
1. RS-232/422/485 ports
2. Power LED
3. Power adapter port
4. USB 2.0 host port
5. Port send/receive LED
6. Port mode LED

Pinouts

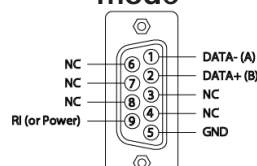
RS-232 mode



RS-422/RS-485 4-wire mode



RS-485 2-wire mode



Installation

Notes:

- You may need to restart your computer during the software installation process. Be sure to save any unsaved material before you install the software.
- Configure your port settings before installing the USB serial hub.

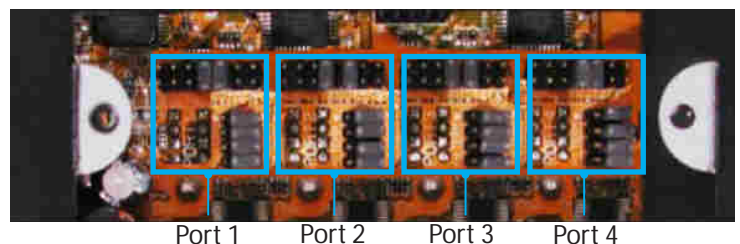
1. Download the latest software from the StarTech.com website: www.StarTech.com/ICUSB234854I.
2. The software that corresponds with your operating system will be compressed in a .zip folder. Download and extract the contents of that folder to a location on your computer that's easy to access, such as your **Desktop** or **Downloads** folder.
3. Open the folder that corresponds with your specific operating system and launch the installer file.
4. Follow the on-screen prompts to complete the installation, and if instructed to do so, restart your computer.
5. Connect each of your serial devices to the port you've configured for their connection.
6. Connect the USB-A to USB-B cable to the USB 2.0 port on the USB serial hub and to a USB port on your computer.
7. (Optional) If you require AUX power (fully loaded) connect your power adapter to an AC outlet, then connect the Power adapter port to the USB serial hub.

Configure port settings

The serial adapter hub supports four different modes (RS-232, RS-422, RS-485 2-wire, and RS-485 4-wire) with different power and termination options. You can set the mode and settings for each individual port by adjusting the jumpers inside the serial adapter hub's housing. To access the jumpers, open the access panel on the back of the housing using a Phillips type screwdriver to remove the two screws.

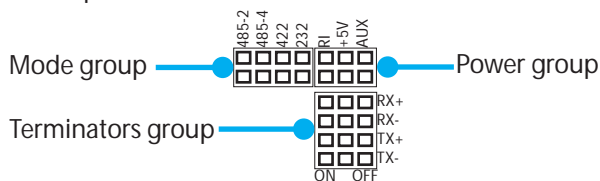
Jumper groups for each port

Each port has its own set of jumpers that enable you to assign the settings for each individual port.



Jumper group settings

There are three settings that you can define for each port: Mode, Power and Termination. Each setting has its own jumper group used to define each port set.



The tables below outline the available settings for each jumper group.

Mode (COM Standard)		Use the Mode jumper group to define the serial communication standard each port uses. Note: If the mode is set to RS-232 it's important to set all terminations to the off position (see Jumper group settings, Terminations for details).
	RS-232 (default)	
	RS-422	
	RS-485 4-wire	
	RS-485 2-wire	

Power (Pin-9)		Use the Power jumper group to define the pin-9 power requirements for each port. Note: AUX outputs power consistent with the power adapter (not included) connected to the Power adapter port on the USB to serial hub.
	AUX power adapter on pin-9	
	+5V DC on Pin-9	
	No power / RI on pin-9 (default)	

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

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. Changes or modifications not expressly approved by StarTech.com could void the user's authority to operate the equipment.

Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.
CAN ICES-3 (B)/NMB-3(B)

Use of Trademarks, Registered Trademarks, and other Protected Names and Symbols

This manual may make reference to trademarks, registered trademarks, and other protected names and/or symbols of third-party companies not related in any way to StarTech.com. Where they occur these references are for illustrative purposes only and do not represent an endorsement of a product or service by StarTech.com, or an endorsement of the product(s) to which this manual applies by the third-party company in question. Regardless of any direct acknowledgement elsewhere in the body of this document, StarTech.com hereby acknowledges that all trademarks, registered trademarks, service marks, and other protected names and/or symbols contained in this manual and related documents are the property of their respective holders. Phillips is a registered trademark of the Phillips Screw Company in the United States and other countries. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries. Windows® is a registered trademark of Microsoft Corporation in the United States and/or other countries. macOS is a trademarks of Apple Inc., registered in the U.S. and other countries.

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.

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.

Limitation of Liability

In no event shall the liability of StarTech.com Ltd. and StarTech.com USA LLP (or their officers, directors, employees or agents) for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, or any pecuniary loss, arising out of or related to the use of the product exceed the actual price paid for the product. Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.

Jumper group settings cont'd

Terminations		Use the Terminations jumper group to define which of your send and receive communication pins are on and off for each port. Notes: • Because RS-232 utilizes different communication pins and additional signals can cause interference, it's recommended that all terminators be set to off in RS-232 mode. • While standard terminations for each mode are recommended, your termination requirements may vary depending on your application and the specific device you're communicating.
	Both RX+/RX- and TX+/TX- terminators are disabled (Terminators for RS-232 mode) (default)	
	TX+/TX- terminators are enabled (Standard terminators for RS-485 2-wire mode)	
	RX+/RX- terminators are enabled	
	Both RX+/RX- and TX+/TX terminators are enabled (Standard terminators for RS-422 and RS-485 4-wire mode)	

About the LED indicators

The adapter features two sets of LED indicators for each port:

- The Port mode LEDs illuminate solid to indicate what mode each port is set to.
- The Port send/receive LEDs blink to indicate that data is being sent or received.