

Connecting a Proteus via an RS-232 Adapter

Connecting your Proteus to your PC via an RS232 can occasionally be hindered by USB driver issues. There are two versions of the RS232 USB adapter in circulation; a serial version, and an RS232GT chipset version. Both are functionally identical for the purposes of connecting to your Proteus.

To check the version you have connect your adapter to the USB port (either directly or using your USB cable) and checking Device Manager on your PC (type "dev" in to the search on your taskbar). Under "Ports (COM & LPT)" check whether your adapter is named "Prolific USB-to-Serial Comm Port (COMX)" or "Prolific PL2303GT USB Serial PORT (COMX)"

Common faults when frequently disconnecting and reconnecting the Proteus can be resolved by following the "Connection Sequence for RS232 Adapters" section at the end of this document.



Prolific USB-to-Serial Comm Port

This type of adapter identifies by the USB (COM) port and should never require any additional action in order to connect.

Prolific PL2303GT USB Serial PORT

This adapter is assigned its own COM identity by the PC. Adapters with a PL2303GT type mean that some users may need to adjust settings and process to successfully connect. Please follow this guide carefully if you experience issues with your "USB>RS-232>Data/Marine cable" connection.

Windows 11

This first process resolves the majority of Windows 11 issues.

- 1. From Device Manager and drop the menu for "Ports (COM & LPT)"
- 2. Right click on the "Prolific PL2303GT USB Serial COM Port" option and select "Properties"



- 3. Open the Power Management tab
- 4. <u>Un</u>check "Allow the computer to turn off this device to save power" and "Allow this device to wake the computer" and select "OK".

| | L2303GT USB | | | | | × |
|---------|------------------|----------|------------|-----------|------------------|---|
| General | Port Settings | Driver | Details | Events | Power Management | |
| | Prolific PL230 | 3GT US | B Serial C | OM Port (| (COM17) | |
| | the computer t | | | | power | |
| | this device to v | vake the | computer | | | |
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| | | | | | OK Can | - |

5. Disconnect and then reconnect the RS232 adapter.

The adapter should now function. If it fails to do so please also complete the following process;

- 1. Follow the steps above to navigate to the Ports section of Device Manager.
- 2. Right click on the device, and select "Update Drivers".

If you still experience issues please contact Proteus Support.

Windows 10

1. On your Proteus USB stick select and extract the folder "PL23XX_Prolific_DriverInstaller_v208"

| | Extract | USB Drive | (E:) | | | | |
|--------------|------------------------|-------------------|---------------------|-------------------|---|-----|-------------------------|
| Con | npressed Folder Too | ls | | | | | |
| th ortcut | Move Copy to • to • | Delete Rename | New folder | Properties | Select all Select none Invert selection | | |
| | Organ | nise | New | Open | Select | | |
| > | | | | | | v Č | ✓ Search USB Drive (E:) |
| Name | ^ | | Date modified | Туре | Size | | |
| 🚾 8 W | ays to Power a Pro | teus | 22/12/2020 09:44 | Microsoft Edge P | 1,434 KB | | |
| 🚾 Cal | ibrating the CDOM | Fluorometer For | C 20/11/2020 14:08 | Microsoft Edge P | 247 KB | | |
| 👼 Cal | ibrating the Tryptop | han Fluorometer | 02/03/2021 09:29 | Microsoft Edge P | 1,034 KB | | |
| Clie | ent Temperature Co | mpensation Calcu | ul 11/11/2020 10:39 | Microsoft Excel W | 15 KB | | |
| PL2 | 23XX_Prolific_Driver | nstaller_v208 | 15/11/2022 16:38 | Compressed (zipp | 11,044 KB | | |
| 👘 Pro | teus Manager Softv | vare | 15/02/2021 09:51 | Windows Installer | 2,153 KB | | |
| Pro | teus Manager Softv | vare | 30/03/2021 15:41 | Compressed (zipp | 1,848 KB | | |
| 👼 Pro | teus SDI12 MODBU | S output operatin | g 22/12/2020 09:45 | Microsoft Edge P | 614 KB | | |
| 应 Pro | teus-Communicati | on-Protocol | 12/04/2021 11:46 | Microsoft Edge P | 187 KB | | |
| 🚾 Pro | teus-user-manual- | v2.2 | 01/03/2021 16:20 | Microsoft Edge P | 83,845 KB | | |
| 👼 RS2 | 232 Proteus Commu | inications_Protoc | o 20/03/2020 14:00 | Microsoft Edge P | 209 KB | | |
| SOF | P for Sampling for F | roteus Derived Pa | ar 11/11/2020 11:05 | Microsoft Edge P | 127 KB | | |

2. Select the file "PL23XX-M_LogoDriver_Setup_v208_20211221" and "Run" it. Give permissions to make changes and run all stages of the install.

| Extract | L23XX_Prolific_DriverInstaller_v208 | | | | | |
|-----------------------------------|---|----------------------|--------------------|-------------------|-----------------|------------------|
| Compressed Folder Tools | | | | | | |
| Nictures | | Proteus 10225859 | × | | | |
| 1022586 | 52 | 📜 pics for usb guide | Ψ. | | | |
| 📒 Calcerts | | Easyprobe 09225817 | + | Extract | | |
| | Extract To | | | | | |
| PL23XX_Prolific_DriverInstaller_v | /208 > PL23XX_Prolific_DriverInstaller_v208 | | V O Search PL2 | 3XX_Prolific_Driv | /erInstaller_v2 | 208 |
| Name ^ | Туре | Compressed size | Password prot Size | | Ratio | Date modified |
| PL23XX_CheckChipVersion_Rea | dMe Text Document | 1 KB | No | 3 KB | 65% | 03/02/2021 10:27 |
| PL23XX_checkChipVersion_v10 | 20 Application | 95 KB | No | 208 KB | 55% | 06/11/2019 10:19 |
| PL23XX_DriverInstallerv2.0.8_Re | leaseNote Text Document | 2 KB | No | 6 KB | 70% | 21/12/2021 09:59 |
| PL23XX-M_LogoDriver_Setup_v | 208_20211221 Application | 9,386 KB | No | 10,060 KB | 7% | 21/12/2021 10:13 |
| PL2303 Windows Driver Manua | I v1.23.0 Microsoft Edge PDF Doc | cument 1,560 KB | No | 1,815 KB | 15% | 17/06/2019 15:04 |

- 3. Restart your computer.
- 4. Connect the RS-232 Adapter to a USB port using the USB cable.
- 5. Open "Device Manager" on your computer and drop the Ports (COM & LPT).

6. Right click on the "Prolific PL2303GT USB Serial COM Port" option and select "Properties".



7. Check that the Driver installation has been successful by selecting the "Driver" tab. The "Driver Version" field should read "5.1.3.0" (to 5.1.6.0). If this is correct go to Step 8. If this is incorrect follow Steps from 7a as required. If you have previously followed 7a and 7b and your issue has not been resolved then skip to 7c.

| General | Port Settings | Driver | Details | Events | Power Management | |
|---------|-----------------|--------------|-----------------------|-------------|--|----|
| | Prolific PL230 | 3GT US | B Serial C | OM Port | (COM5) | |
| | Driver Provide | er: Pr | olific | | | |
| | Driver Date: | 10 | /11/202 | 1 | | |
| | Driver Version | : 5 . | 1.3.0 | | | |
| | Digital Signer: | | crosoft W ublisher | /indows H | lardware Compatibility | |
| Dri | ver Details | View | details at | oout the ir | nstalled driver files. | |
| Up | date Driver | Upda | ate the dri | ver for thi | s device. | |
| Roll | Back Driver | | | | pdating the driver, roll nstalled driver. | |
| Disa | able Device | Disat | ole the de | vice. | | |
| Unin | istall Device | Unin | stall the d | evice from | n the system (Advanced) |). |

a. If your Drivers have not updated run the Setup again from Step 1. This time it will offer you 3 options; "Modify", "Repair", "Remove" (Remove all installed features). Select "Remove".

| PL23XX USB-to- | -Serial Driver Installer Program | \times |
|-------------------------------------|---|----------|
| Welcome Modify, repai | r, or remove the program. | |
| modify the cu | the PL23XX USB-to-Serial Setup Maintenance program. This program lets you urrent installation. Click one of the options below. | |
| O Modify | Select new program features to add or select currently installed features to remove. | |
| O Repair | Reinstall all program features installed by the previous setup. | |
| Remove Remove InstallShield | Remove all installed features. | |
| n ressanse i distitut | Next > Cancel | |

- b. Next run the Setup from Step 1 again and continue through to Step 7.
- c. If the Drivers are still not showing version "5.3.1.0" return to the "Driver" tab (see steps 5 to 7). Select "Update Drivers".

| Prolific U | SB-to-Serial C | omm Po | ort (COM | 18) Properties | × |
|------------|-----------------|------------|------------------------|--------------------------------|------------|
| General | Port Settings | Driver | Details | Events | |
| | Prolific USB-to | o-Serial C | Comm Poi | t (COM18) | |
| | Driver Provide | er: Pr | olific | | |
| | Driver Date: | 11 | /11/2021 | | |
| | Driver Version | n: 3. | 8.41.0 | | |
| | Digital Signer | | icrosoft W ublisher | indows Hardware Comp | oatibility |
| Dri | ver Details | View | details at | oout the installed driver fi | les. |
| Up | date Driver | Upda | ate the dri | ver for this device. | |
| Roll | Back Driver | | | ils after updating the driver. | ver, roll |
| Disa | able Device | Disal | ble the de | vice. | |
| Unin | stall Device | Unin | stall the d | evice from the system (A | dvanced). |
| | | | | ОК | Cancel |

d. Select "Browse from Computer".



e. Select "Let me pick from a list of available drivers on my computer".

| | | × |
|---|---|--------|
| ← | Update Drivers – Prolific USB-to-Serial Comm Port (COM18) | |
| | Browse for drivers on your computer | |
| | Search for drivers in this location: | |
| | C:\Users\Darren.Louch\Desktop\PL23XX_Prolific_DriverInstaller_v208 Browse | |
| | ☑ Include subfolders | |
| | | |
| | | |
| | → Let me pick from a list of available drivers on my computer | |
| | This list will show available drivers compatible with the device, and all drivers in the same category as the device. | |
| | | |
| | | |
| | Next | Cancel |

f. Select "Prolific PL2303GT USB Serial Port Version; 5.3.1.0 [10/11/2021]" from the available options and select "Next".

| 📱 Up | date Drivers – Prolific PL2303GT USB Serial COM Port (COM5) | |
|------------------|---|-----------------------|
| Selec | t the device driver you want to install for this hardware. | |
| 0 | Select the manufacturer and model of your hardware device and then cl disk that contains the driver that you want to install, click Have Disk. | ick Next. If you have |
| | | |
| ✓ Sho Mode | w compatible hardware el | |
| Mode | | |
| Mode Pr | el | |
| Mode Pr Pr | el olific PL2303GT USB Serial COM Port Version: 5.1.3.0 [10/11/2021] | Have Disk |
| Mode Pr Pr | el olific PL2303GT USB Serial COM Port Version: 5.1.3.0 [10/11/2021] olific PL2303GT USB Serial COM Port Version: 5.1.4.0 [26/05/2022] | Have Disk |

g. Allow any requested system permissions and allow Windows to update the Drivers.



8. In "Properties" select the "Port Settings" tab and change "Bits per second" to 9600 and "OK".

| eneral | Port Settings | Driver | Details | Events | Power Management |
|--------|---------------|--------|------------|---------|-------------------|
| | | Bits p | er second | 9600 | • |
| | | | Data bits | 8 | • |
| | | | Parity | None | • |
| | | | Stop bits | 1 | • |
| | | Flo | ow control | None | • |
| | | | Ac | lvanced | . Restore Default |
| | | | | | |
| | | | | | |
| | | | | | |

9. In Properties select the "Power Management" tab and uncheck "Allow the computer to turn off this device to save power" and "Allow this device to wake the computer" and select "OK".

| General | Port Settings | Driver | Details | Events | Power Management | |
|---------|------------------|------------|------------|-----------|------------------|--|
| | Prolific PL230 | 3GT US | B Serial C | OM Port | (COM17) | |
| | the computer t | o turn off | this devic | e to save | power | |
| | this device to v | vake the | computer | | | |
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10. Follow the steps in the section "Connection Sequence for RS-232 Adapters".

Connection Sequence for RS-232 Adapters

The PL2303GT chip may be sensitive to Input and Output sequence with frequent disconnection and reconnection. Please follow the relevant guide for Data Cable or Marine Cable as applicable. As a rule of thumb work outwards from the USB port. The Marine cable sequence should be used when connecting a Data cable using an additional 12v adapter.

Data Cable Connection Sequence

1. Connect the USB cable to the desired COM port.



2. Connect the RS-232 Adapter to the USB cable.



3. Connect the DB9 end of the Data cable to the RS-232 adapter and tighten the screws.



4. Connect the Data cable to the Proteus unit.



5. Your Proteus should now be connected.



Marine Cable Connection Sequence

1. Connect the USB cable to the desired COM port.



2. Connect the RS-232 Adapter to the USB cable.



3. Insert the 12v power cable in to the RS-232 adapter.



4. Connect the DB9 end of the Marine cable to the RS-232 Adapter and tighten the screws.



5. Connect the Marine cable to the Proteus unit and screw the holding cover in to position.



6. Your Proteus should now be connected.

