Guide to the Speedlink software and drivers.

Status Instruments has a range of process control equipment that can be configured using the Speedlink software.
Some equipment will connect directly to a Windows PC or laptop via a simple USB lead, other equipment may require the use of our USB configuration module: refer to the individual user guide for the product you have. In either case the software and drivers will be the same as the USB configuration module will install and use the same driver as if it was a direct connection type product.

Step by step guide to installation

Visit the Status Instruments website http://www.status.co.uk/ go to the downloads page to find the Speedlink software. It is worth checking frequently the version number of the software for updates and using the latest version. Always uninstall older software first as newer versions will not install “over the top” of older versions.

Speedlink software will run on Windows NT, Windows 7, and Windows 8; it will run on both 32 byte and 64 byte versions of Windows.

Download the Speedlink_install.zip file. It is recommended you unzip the contents into a temporary folder and then run the Speedlinksetup.exe file. It is best to install the software before connecting any hardware to the computer.

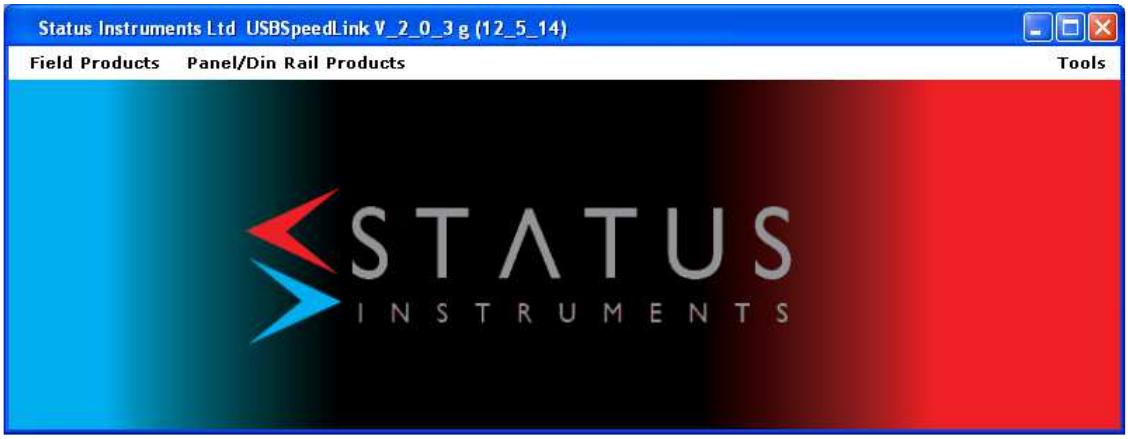
The installation wizard will run. At this point the software will check for the required pre requisites on the target computer. Speedlink software will only run if the host computer has a Windows component called .NET installed on it. This Windows component is an option in the Windows operating system and Status Instruments has no control over this.
If the .NET component is missing from the host computer it will try and launch a web browser and connect to the Microsoft website to download and install the .NET component. It is the user’s responsibility whether to install or not to install this component onto the host computer.

A start menu folder and a desktop icon will be added to the computer

Run the software

The first time the software runs, the correct drivers either 32 byte or 64 byte will be loaded to the computer.
The software can be run and used without any hardware connected. This will allow a configuration to be created and saved for later use without the need to have the hardware present.
This is also useful in assessing the capability of a product and its suitability for possible applications: if a product screen can be configured to requirement the product can reasonably be expected to give a functional solution to the application.

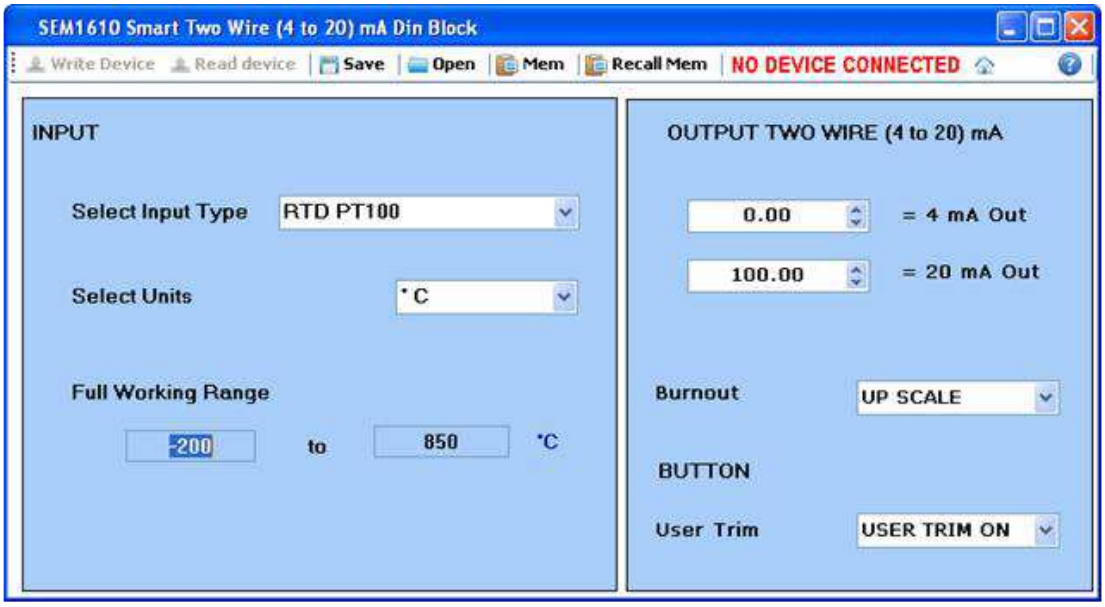
When the software is opened a screen as shown below or similar will run.



Unplug any other configuration type devices you may have connected to the computer as this may cause problems in recognition.

Use the menu to find the product you wish to configure

Select the particular product required and the configuration screen will open, see the screen below for a SEM1610 as an example.



Make the connection

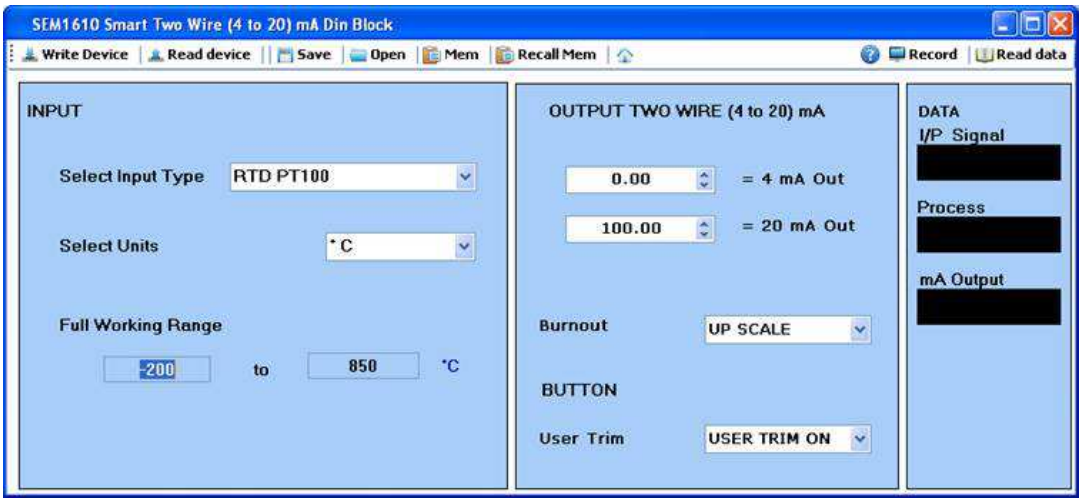
For configuration purposes only, any unit connected to a computer's USB port will be powered from the USB connection. Some units may also only operate correctly while connected to the USB, but it is not intended that any units are used in this way permanently in the field. After configuration units should be powered correctly as shown in the relevant user guides.
USB Connection to products with a direct USB port can be made while the unit is running and powered; the unit can be read and configurations changed.
Note: The USB port on the unit may in some cases be connected to the 0 V supply this can cause errors in reading when using a grounded computer. If it is intended to use the system in this manner, a laptop computer running on battery is recommended.

When using the USB configuration module with a loop powered instrument type, the unit to be configured **must** be disconnected from any other power before connection to the module.

Connect the instrument to be configured to the computer using a USB lead (A to mini B). If you are using an instrument that requires the USB configuration module, connect the module to the computer.
Note: If using the USB module the correct connections to the instrument to be configured will also need to be made for the system to work: refer to the relevant user guide for the instrument.

If it is the first time a connection is being made to a particular type of instrument the software should automatically select the required driver to use. If the found new hardware wizard launches **see below Found new hardware.**

When the product has connected successfully the "Data" panel will open, this is how to tell if it has connected correctly. The data panel is normally to be found to the right hand side of the configuration screen but some screens may differ, also the "Write Device" and "Read Device" menu button will become active.



The software can now be used to configure the connected instrument.

Using the Speedlink software

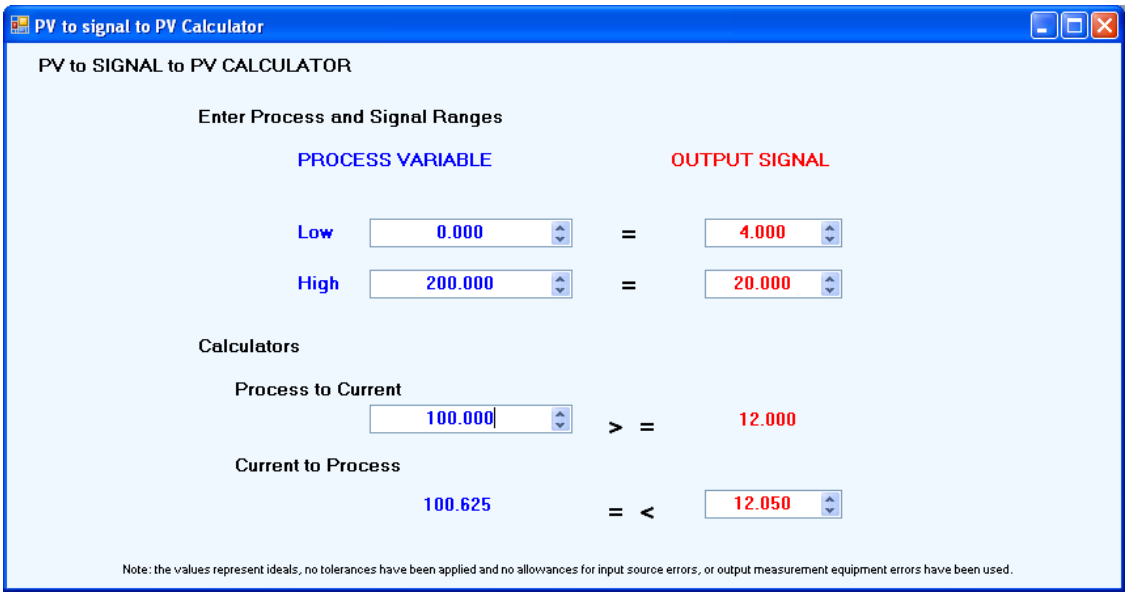
The PV (process variable) to signal to PV calculator

The Speedlink software has a useful calculator that can be found in the Tools menu. This calculator can aid in confirming the operation and configuration of an instrument. The top part of the calculator is used to set up the range information, the process variable (°C, Bar, litres, volts or similar) against the output signal (mA, mV, or volts)

In the example below a temperature transmitter (SEM206P, TTC200X or similar) has been ranged (0 to 200) °C equals (4 to 20) mA.

In the Process to Current (this can also be a Voltage) conversion 100.00°C has been entered to find the output current for this input and the calculator will show that this would relate to a current of 12.000 mA.

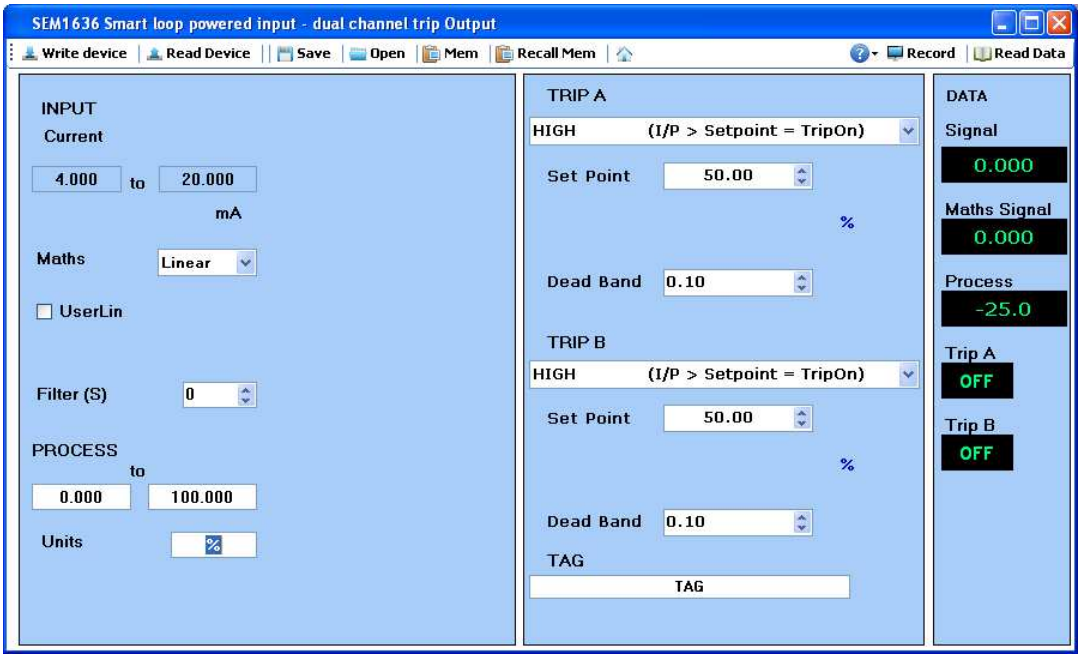
In the Current to Process conversion 12.050 mA has been entered to find the °C input for this output and the calculator will show that this would relate to a input of 100.625 °C.



Configuration using the Speedlink software

Each instrument type will have a unique screen within the Speedlink software allowing for the configuration of the variable parameters applicable to the product. Some of the screens will have only a few variables, others for more complex instruments may have many.

See the example below for a SEM1636



The Basics

When a configuration screen opens it will fill the variable fields with software defaults and will not necessarily reflect the configuration of any connected unit. When the screen and unit are out of synchronization a red warning should appear on the menu bar: this is a warning only and care should be taken to ensure the required configuration is synced between screen and unit.

"?"
Each screen will have a help file denoted by the question mark button in the menu; this is for information on the selected instrument and will deal with functions and settings particular to this instrument. It is recommended this file is read and understood before configuration of the unit.

"Write Device"
As a configuration screen is modified the changes are not automatically applied to the connected unit. This button will write the configuration displayed on the screen (and any tabs open or closed) to the connected unit.

“Read Device”
This button will read the configuration of the connected unit and fill in the screen to match (it will update any tabs open or closed).

“Save”
This button will save the current screen configuration to hard drive. With this function a library of configurations can be created, also configurations can be sent to other Speedlink users.

“Open”
This button will allow a saved configuration to be opened into the configuration screen so it can be loaded onto an instrument.

“Mem”
This is short term storage for a screen configuration much like the memory button on a calculator. It will be lost once the configuration screen is closed.

“Recall Mem”
This will bring the “Mem” configuration back onto the screen. It can be used for recalling a master configuration when setting up multiple units.

Read Data and Record

The software has useful options on viewing data on any equipment in the Status Instruments ranges that are configured by Speedlink. The software can collect live readings that can be used to confirm the correct operation of the unit and its configuration. Also it can be useful in system diagnostics.

“Read Data”
This button will interrogate the connected instrument and report the input and output conditions, and in some cases more, of the connected instrument.

“Record”
This button will create a file onto the computer. The file will be in .txt format and will include information from the unit in time stamped order.
Information recorded will vary from instrument to instrument but in general will include input signal, process value, and output signal.
The data recorded will be saved in a “;” separated format that can be opened into a spread sheet programme for graphing and analysis.
The recording will continue to run until stopped by the software.
This is not true data logging but the ability to do this can be very useful as a diagnostic tool and can be used in many proof of process scenarios.

Troubleshooting

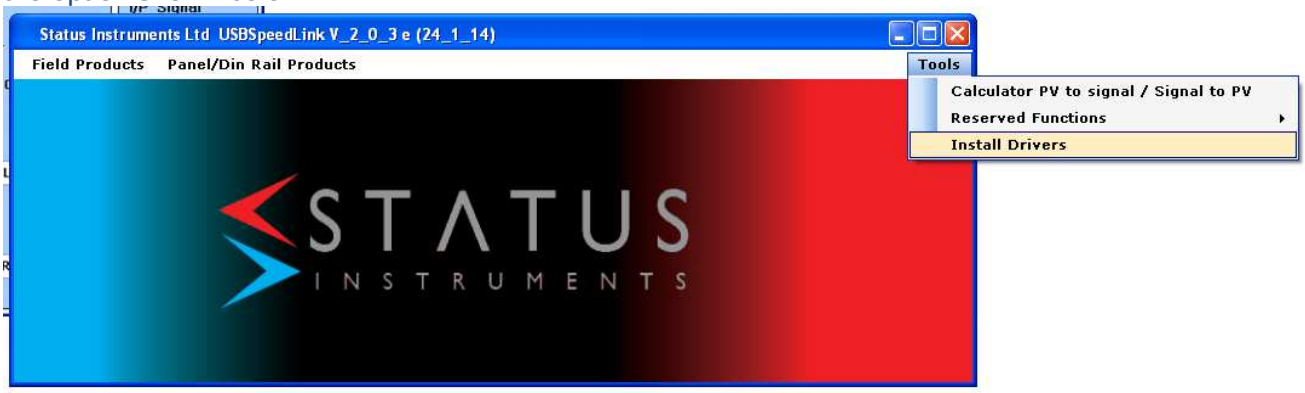
Intermittent problems can occur with a Speedlink installation that has previously worked on a computer with the same or different units for configuration. The most likely causes will be as follows:-

If a unit will not connect, check the USB cable first before anything else.
If the unit will still not connect check the USB cable again.....
Check the USB port on the computer is also working
Restart the computer.

If you are having trouble connecting to an instrument for configuration for the first time after installing the Speedlink software:

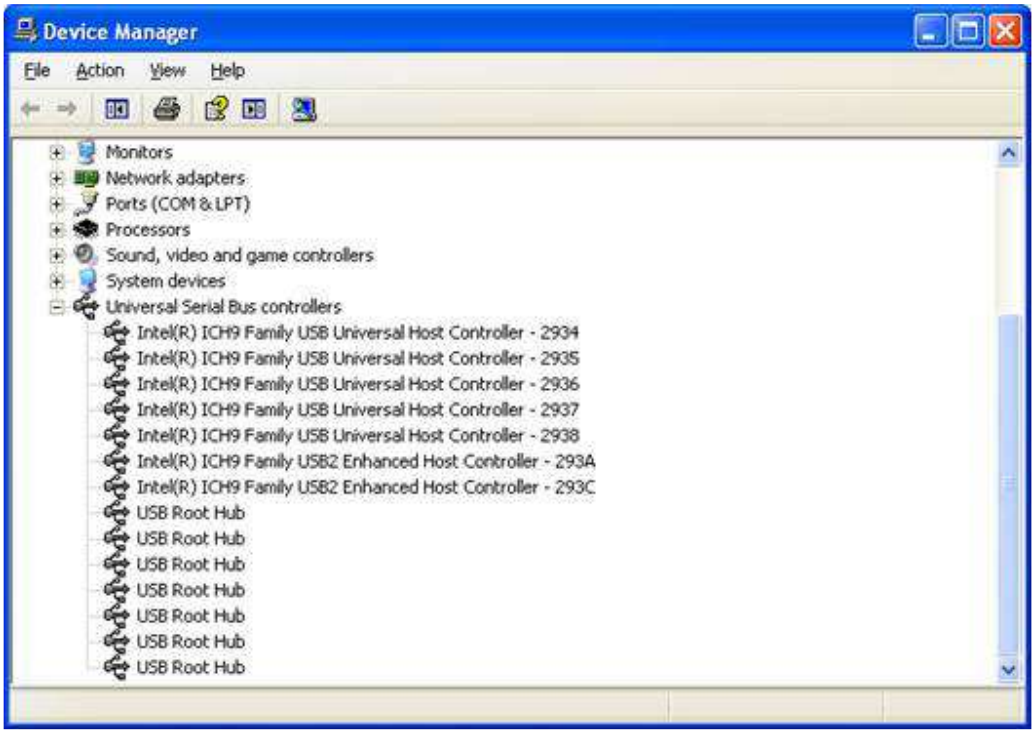
Uninstall and reinstall the software.

If you are still having problems, the drivers can be loaded from the software by selecting the option shown below.

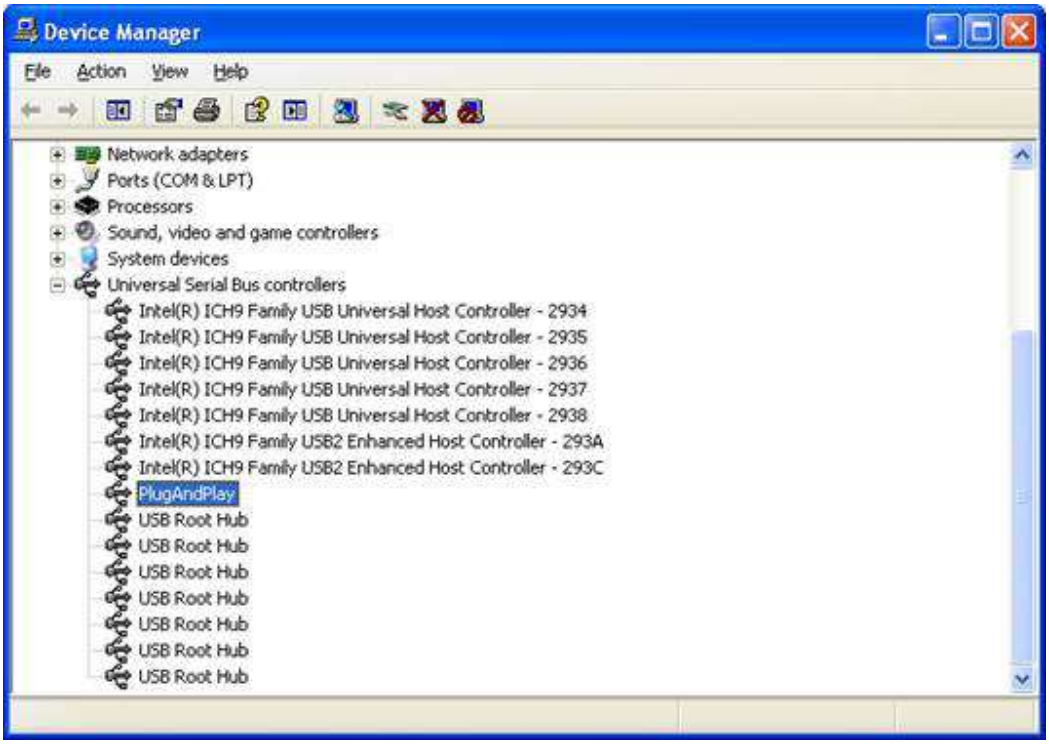


If you still cannot connect, select the Windows "control panel" and "system", then select "hardware" and "device manager".

Plug the unit to be configured in and out and watch for an icon to appear and disappear. This will be the unit.



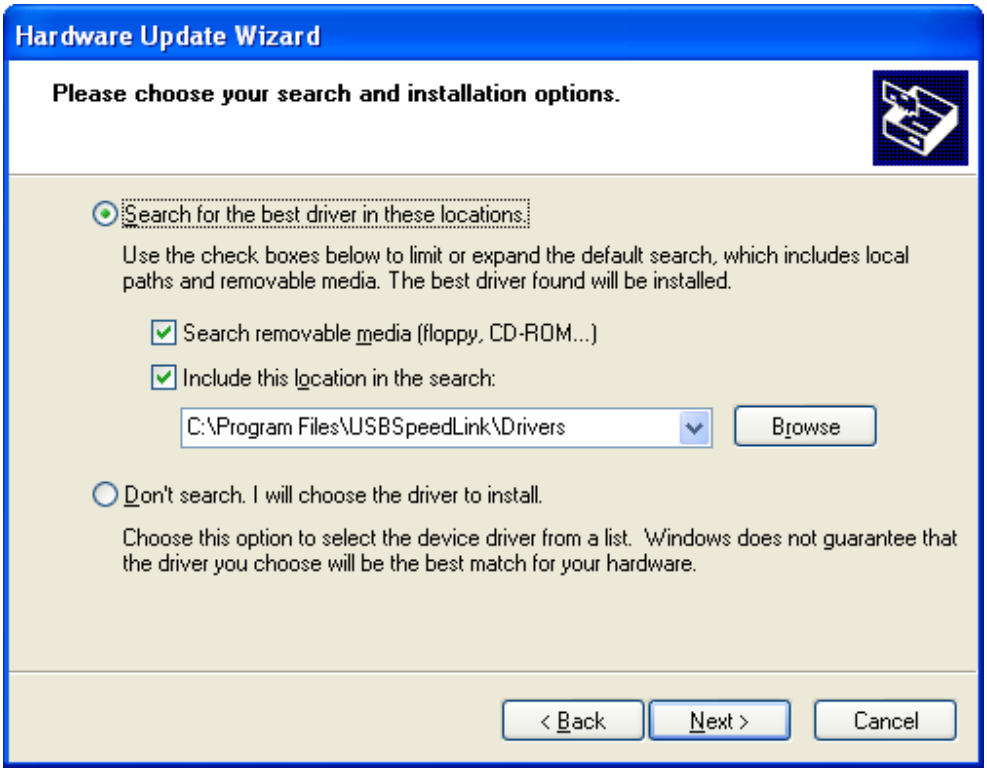
no unit connected



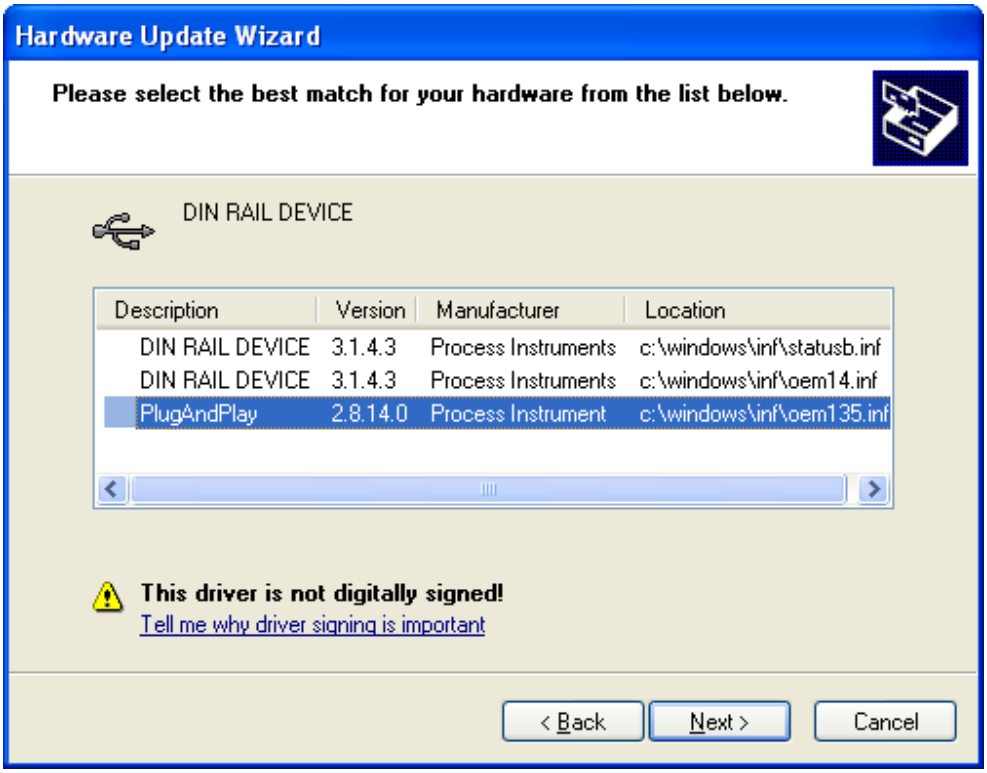
unit connected correctly

If the drivers have not loaded, or have loaded incorrectly, the icon may appear elsewhere in the list and may appear with an error mark by the side. If this is the case then try and reload the drivers by the following method: -
Right click the icon and select the option to update the driver (this may be found in slightly different places depending on the version of Windows you have).

Point at the drivers folder and continue.



If given a choice select "plug and play"



This should load the drivers.
If you are still having problems try the set up with a different unit and a different lead.
Also try the software on a different PC, and if it works on that, run through this instruction on the new PC to see if you can find where the process is going wrong.

Please let us know how you get on.
Status Support team.