

**PR**  
electronics



**5 9 0 9**

**Loop Link  
USB Communications  
Interface**

No. 5909V103-UK

From ser. no. 059999999



- DK** ▶ PR electronics A/S tilbyder et bredt program af analoge og digitale signalbehandlingsmoduler til industriel automation. Programmet består af Isolatorer, Displays, Ex-barrierer, Temperaturtransmittere, Universaltransmittere mfl. Vi har modulerne, du kan stole på i selv barske miljøer med elektrisk støj, vibrationer og temperaturudsving, og alle produkter opfylder de strengeste internationale standarder. Vores motto »Signals the Best« er indbegrebet af denne filosofi - og din garanti for kvalitet.
- UK** ▶ PR electronics A/S offers a wide range of analog and digital signal conditioning devices for industrial automation. The product range includes Isolators, Displays, Ex Interfaces, Temperature Transmitters, and Multifunctional Devices. You can trust our products in the most extreme environments with electrical noise, vibrations and temperature fluctuations, and all products comply with the most exacting international standards. »Signals the Best« is the epitome of our philosophy - and your guarantee for quality.
- FR** ▶ PR electronics A/S offre une large gamme de produits pour le traitement des signaux analogiques et numériques dans tous les domaines industriels. La gamme de produits s'étend des transmetteurs de température aux afficheurs, des isolateurs aux interfaces SI, jusqu'aux modules universels. Vous pouvez compter sur nos produits même dans les conditions d'utilisation sévères, p.ex. bruit électrique, vibrations et fluctuations de température. Tous nos produits sont conformes aux normes internationales les plus strictes. Notre devise »SIGNALS the BEST« c'est notre ligne de conduite - et pour vous l'assurance de la meilleure qualité.
- DE** ▶ PR electronics A/S verfügt über ein breites Produktprogramm an analogen und digitalen Signalverarbeitungsgeräte für die industrielle Automatisierung. Dieses Programm umfasst Displays, Temperaturtransmitter, Ex- und galvanische Signaltrenner, und Universalgeräte. Sie können unsere Geräte auch unter extremen Einsatzbedingungen wie elektrisches Rauschen, Erschütterungen und Temperaturschwingungen vertrauen, und alle Produkte von PR electronics werden in Übereinstimmung mit den strengsten internationalen Normen produziert. »Signals the Best« ist Ihre Garantie für Qualität!

# USB COMMUNICATIONS INTERFACE

## LOOP LINK 5909

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**GENERAL**

## **WARNING**

When connected to SYSTEM 5000 by the communication cable, this device can get connected to hazardous electric voltages. Ignoring this warning can result in severe personal injury or mechanical damage.

To avoid the risk of electric shock and fire, the safety instructions of this manual must be observed and the guidelines followed. The device must only be applied as described in the following. Prior to the commissioning of the device, this manual must be examined carefully.

Only qualified personnel (technicians) should use this device. If the device is used in a manner not specified by the manufacturer, the protection provided by the device may be impaired.



**HAZARD-  
OUS  
VOLTAGE**

## **WARNING**

The following operations must only be carried out on a device that is not connected to SYSTEM 5000 and a PC:  
Troubleshooting the device.

**Repair of the device must be done by PR electronics A/S only.**



**INSTAL-  
TION**

## **WARNING**

The female communication connector of SYSTEM 5000 is connected to the input terminals on which dangerous voltages can occur. It must only be connected to the programming unit 5909 by way of the attached communication cable.

5909 is provided with intrinsically safe galvanic isolation and protective components according to EN60079-11 § 6.2.5 to assure that the safety components within the connected intrinsically safe devices are protected against overload.

## SYMBOL IDENTIFICATION



**Triangle with an exclamation mark:** Warning/demand. Potentially lethal situations.



**The CE mark** proves the compliance of the device with the requirements of the EU directives.



**The double insulation symbol** shows that the device is protected by double or reinforced insulation.

## SAFETY INSTRUCTIONS

### DEFINITIONS

**Hazardous voltages** have been defined as the ranges: 75...1500 Volt DC, and 50...1000 Volt AC.

**Technicians** are qualified persons educated or trained to mount, operate, and also trouble-shoot technically correct and in accordance with safety regulations.

**Operators**, being familiar with the contents of this manual, adjust and operate the knobs or potentiometers during normal operation.

### RECEIPT AND UNPACKING

Unpack the device without damaging it. The packing should always follow the limits for ambient temperatures should be avoided by way of ventilation.

Check at the receipt of the device whether the type corresponds to the one ordered.

### ENVIRONMENT

Avoid direct sunlight, dust, high temperatures, mechanical vibrations and shock, as well as rain and heavy moisture. If necessary, heating in excess of the stated limits for ambient temperatures should be avoided by way of ventilation.

All devices fall under Installation Category II, Pollution Degree 1, and Insulation Class II.

### MOUNTING

Only technicians who are familiar with the technical terms, warnings, and instructions in the manual and who are able to follow these should connect the device.

Should there be any doubt as to the correct handling of the device, please contact your local distributor or, alternatively,

**PR electronics A/S**  
**[www.prelectronics.com](http://www.prelectronics.com)**

## **PROGRAMMING**

During programming, the measuring and connection of external voltages must be carried out according to the specifications of this manual and the manual for the unit to be programmed.

The technician must use tools and instruments that are safe to use.

## **NORMAL OPERATION**

Operators are only allowed to adjust and operate devices that are safely fixed in panels, etc., thus avoiding the danger of personal injury and damage. This means there is no electrical shock hazard, and the device is easily accessible.

## **CLEANING**

When disconnected, the device may be cleaned with a cloth moistened with distilled water.

## **LIABILITY**

To the extent that the instructions in this manual are not strictly observed, the customer cannot advance a demand against PR electronics A/S that would otherwise exist according to the concluded sales agreement.

## Application

Loop Link 5909 is a USB communications interface for configuration and monitoring of PR electronics' PC-programmable devices. The USB communication is supported by the Windows versions 7, 8 and 10. PR devices available in the configuration program **PRreset ver. 5.0** or higher, can be programmed by way of Loop Link 5909.

## Technical characteristics

The PC program CD **PRreset ver. 5.0** or higher contains the necessary (unsigned) USB drivers. Loop Link 5909 is supplied from the USB port of the PC. If you want to conserve power on a laptop, the USB connector of the 5909 can be connected to an externally supplied hub. The communications connector on the PR devices is galvanically isolated from the USB connection on the PC.

## Installation

### System requirements

Windows 7, 8 or 10 with the following recommendations:

Processor	> 1 GHz
Memory	1 GB RAM (32-bit) or 2 GB RAM (64-bit)
Hard disk space	16 GB (32-bit) or 20 GB (64-bit)

N.B.: Loop Link 5909 devices with serial no. <059999999 are NOT compatible with Windows 7, 8 and 10.

### Installation of PRreset

The USB communications interface Loop Link **5909 must not be connected** to the USB port of the PC until after installation of the PRreset program. PRreset will be installed on your hard disk and the registry will be updated with all necessary information on the program. A PRreset icon will automatically be placed on the desk top.

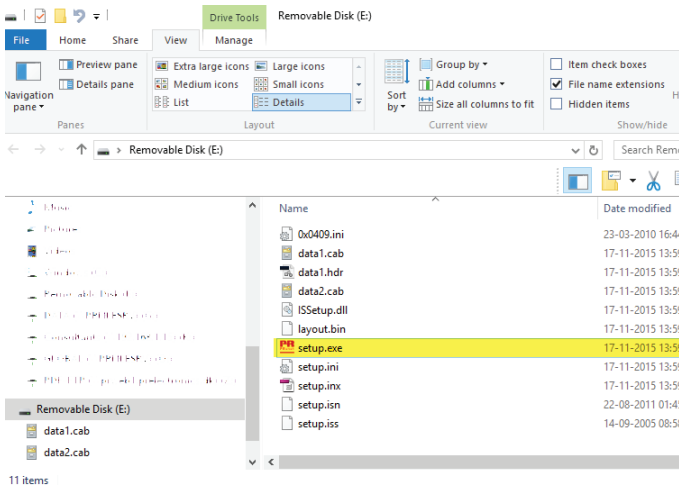
### Installation from CD-ROM

1. Insert the CD-ROM in the CD-ROM drive and the dialog "InstallShield Wizard PRreset - INSTALL" will start automatically.
2. When the installation program has been started, on-screen guidelines will guide you through the rest of the installation.

## Installation from USB

1. Plug in the USB.

3. Open File Explorer and locate the USB drive. Double-click on the file "setup.exe" to start the installation.



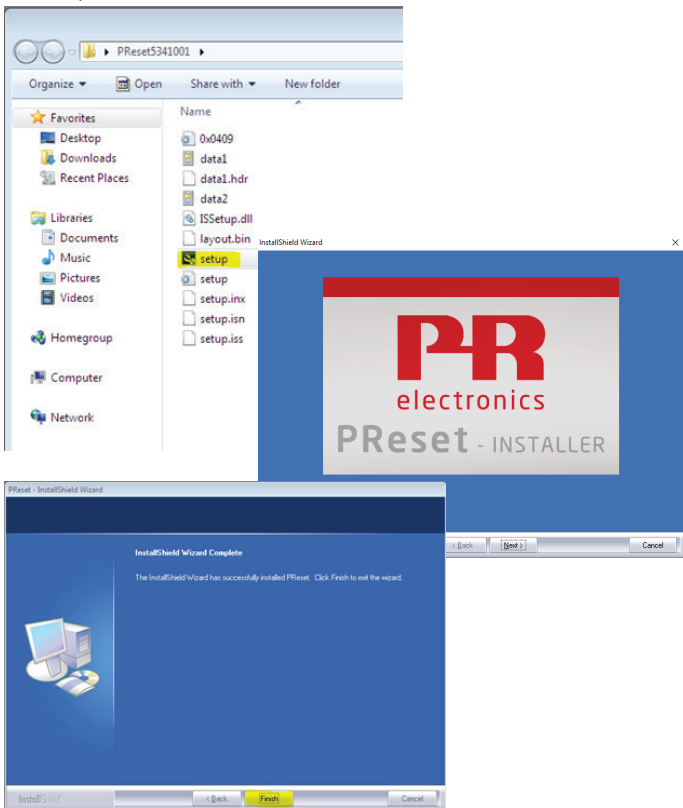


## PRreset installation on Windows 7 / 8 / 10

To install PRreset on Windows 7 / Windows 8 / Windows 10 it is necessary to be a local administrator on the PC.

Install from the CD or the USB or download the software from [www.prelectronics.com](http://www.prelectronics.com)

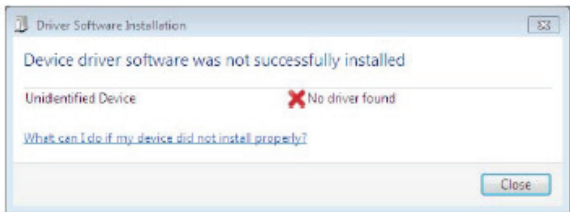
Run setup and follow the instructions on the screen.



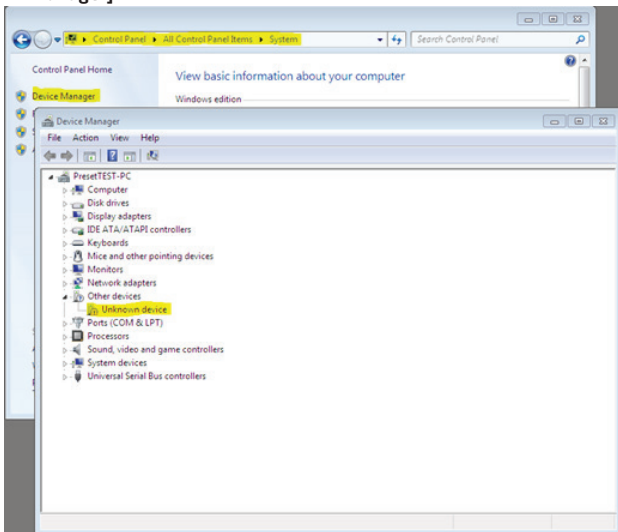
## 5909 installation on Windows 7

To install 5909 on Windows 7 it is necessary to be a local administrator on the pc.

1. Connect your 5909 to a USB port on your machine.
2. Click [Close] in the following dialog:

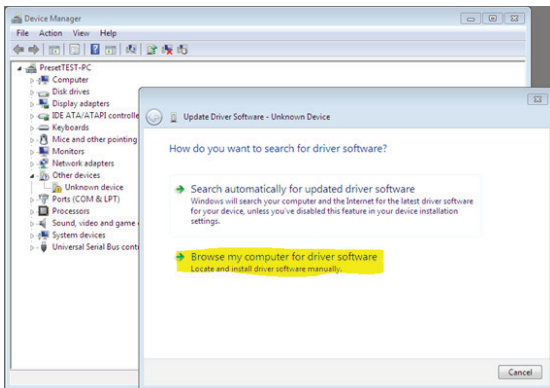


3. Go to Windows control panel and click [System] and then [Device manager].

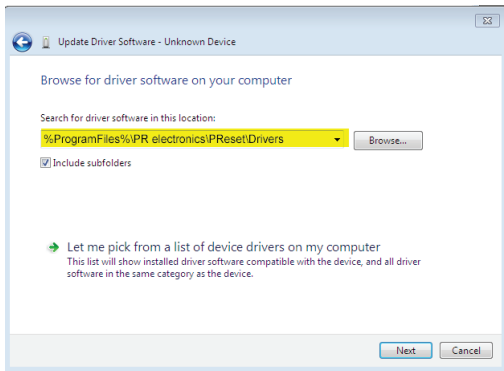


4. Right click the [Unknown device] and click [Update driver software].

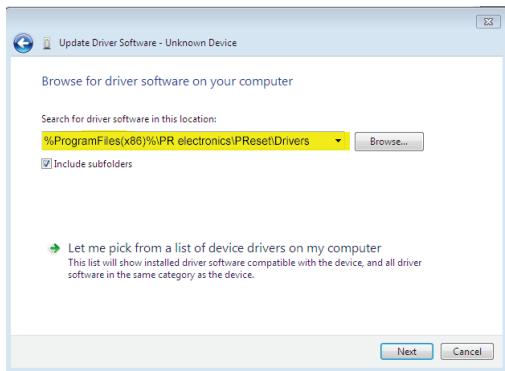
5. Click [Browse my Computer for driver software].



6. If your computer is running the 32 bit version of Windows 7, browse to “%ProgramFiles%\PR electronics\PRreset\Drivers”

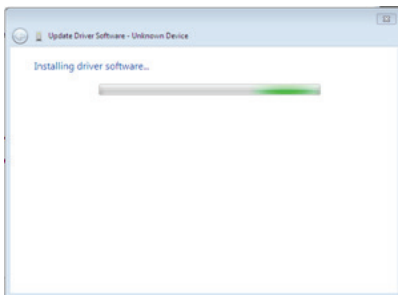


If your computer is running the 64 bit version of Windows 7, browse to  
“%ProgramFiles(x86)%\PR electronics\PRReset\Drivers”

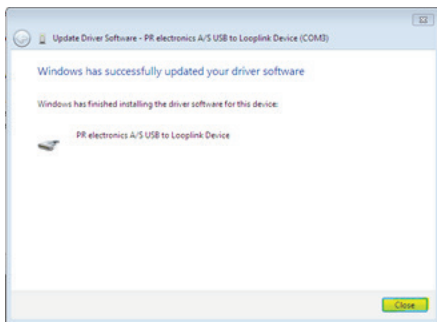


7. Click [Next].

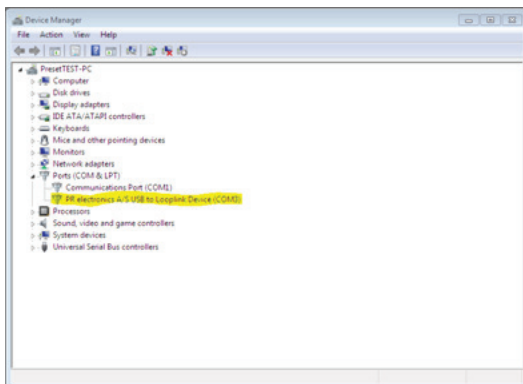
8. Now the driver for your 5909 will be installed.



9. When you see this screen click [Close].



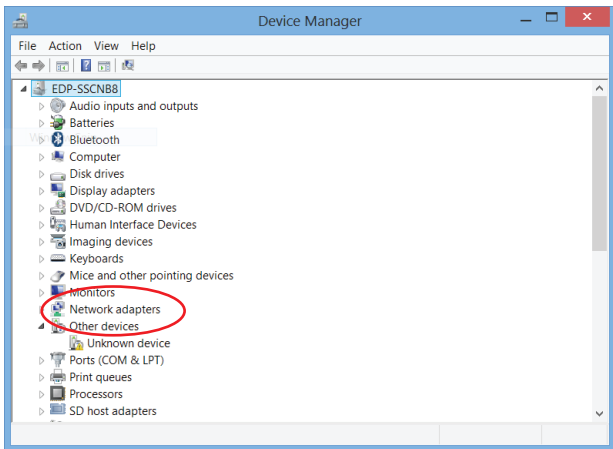
10. The installation of 5909 driver is complete!



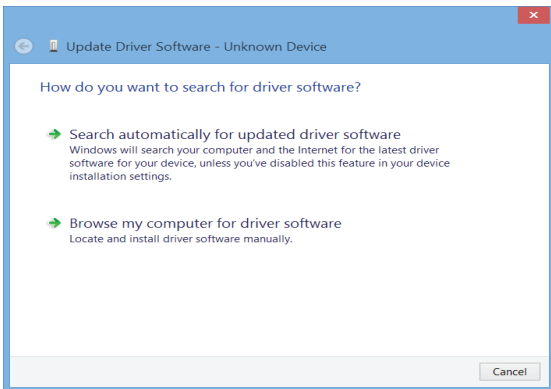
## 5909 installation on Windows 8

To install 5909 on Windows 8 it is necessary to be a local administrator on the pc.

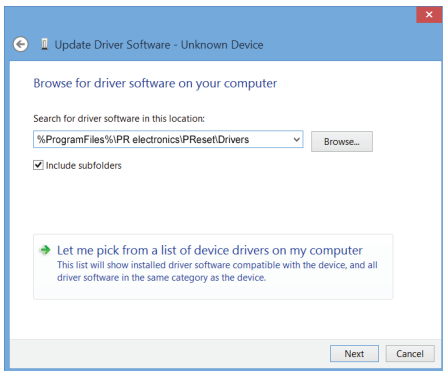
1. Connect your 5909 to a USB port on your machine.  
Go to Windows control panel and click [System] and then [Device manager].
2. Right click the [Unknown device] and click [Update driver software].



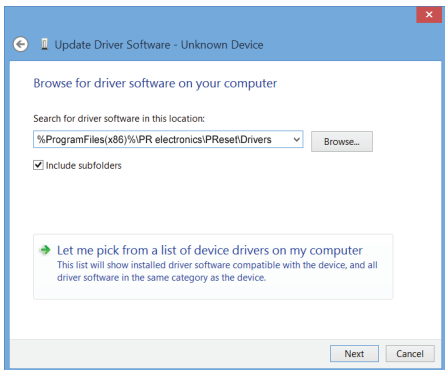
### 3. Click [Browse my Computer for driver software].



### 4. If your computer is running the 32 bit version of Windows 8, browse to "%ProgramFiles%\PR electronics\PRreset\Drivers"



If your computer is running the 64 bit version of Windows 8, browse to “%ProgramFiles(x86)%\PR electronics\PRreset\Drivers”



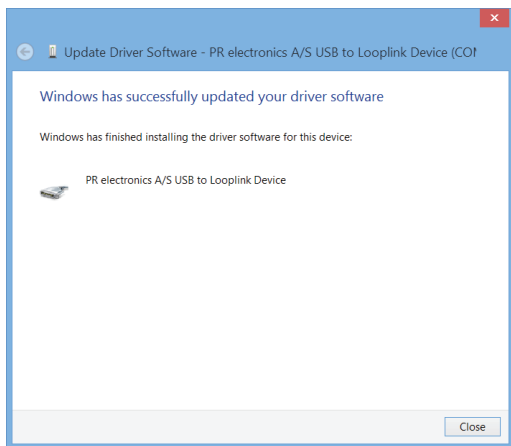
5. Click [Next].

6. Click [Install]. Now the driver for your 5909 will be installed.





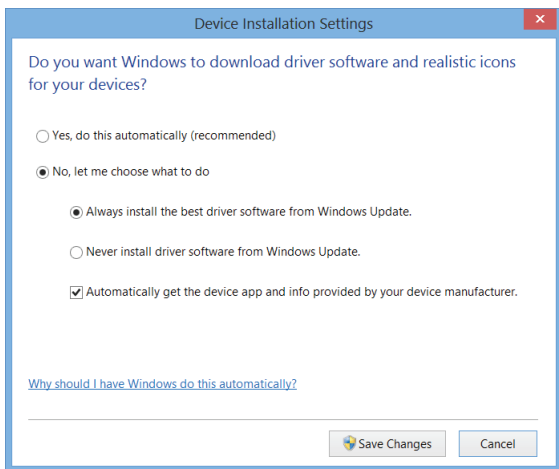
**7. When you see this screen click [Close]. The installation of 5909 driver is complete!**



## Troubleshooting for Windows 7 & 8

If you are unable to install the USB Loop Link follow these steps:

1. Disconnect the 5909.
2. Go to the Control Panel.
3. Go to Devices and Printers.
4. Locate your PC (under devices).
5. Right click on your PC and choose "Device installation settings".
6. Allow Windows to "Always install the best driver software from Windows update".
7. Make sure you are connected to the internet.
8. Reconnect the 5909.



## 5909 installation on Windows 10

To install 5909 on Windows 10 it is necessary to be a local administrator on the pc.

1. Connect your 5909 to a USB port on your machine.
2. Windows 10 will automatically start the installation process.

Device Setup

Installing device...



Please wait while Setup installs necessary files on your system. This may take several minutes.



Close

3. Go to Windows control panel and click [System] and then [Device manager].

System

← → ▾ ▴ > Control Panel > All Control Panel Items > System

File Edit View Tools Help

Control Panel Home

- Device Manager
- Remote settings
- System protection
- Advanced system settings

View basic information about your computer

Windows edition

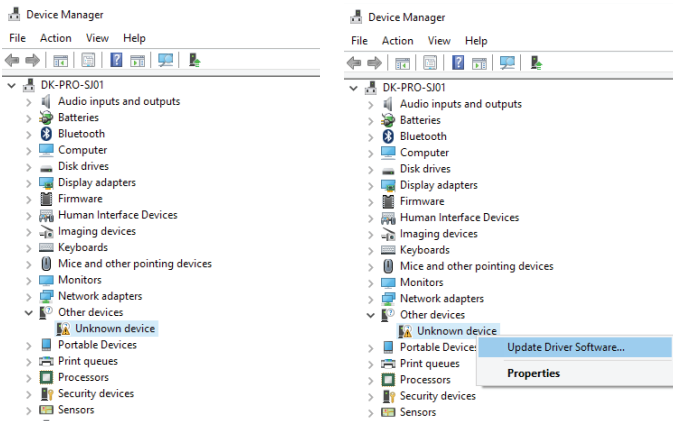
Windows 10 Pro

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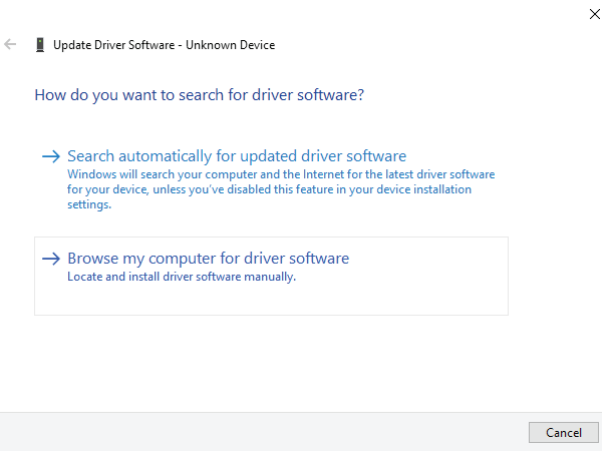
System

Processor:	Intel(R) Core(TM) i5-6300U CPU @ 2.40GHz 2.50 GHz
Installed memory (RAM):	8,00 GB
System type:	64-bit Operating System, x64-based processor
Pen and Touch:	Pen and Touch Support with 10 Touch Points

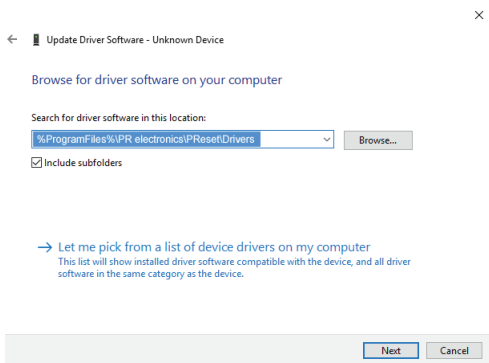
#### 4. Right click the [Unknown device] and click [Update driver software].



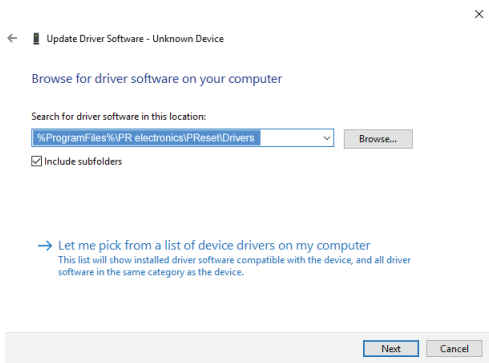
#### 5. Click [Browse my Computer for driver software].



## 6. If your computer is running the 32 bit version of Windows 10, browse to “%ProgramFiles%\PR electronics\PRreset\Drivers”

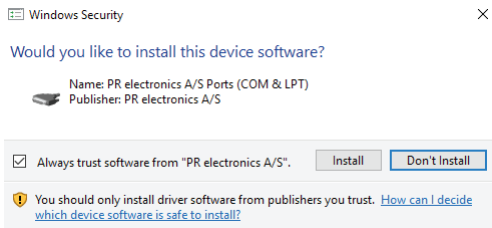


## If your computer is running the 64 bit version of Windows 10, browse to “%ProgramFiles(x86)%\PR electronics\PRreset\Drivers”

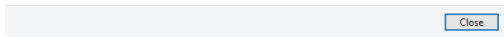


## 7. Click [Next].

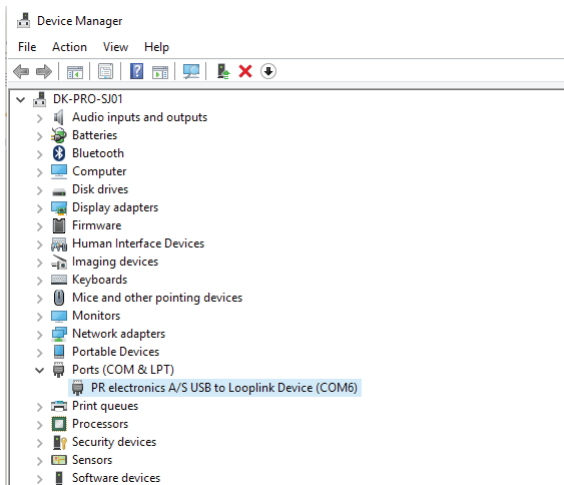
**8. Click [Install]. Now the driver for your 5909 will be installed.**



**9. When you see this screen click [Close]. The installation of the 5909 driver is complete!**

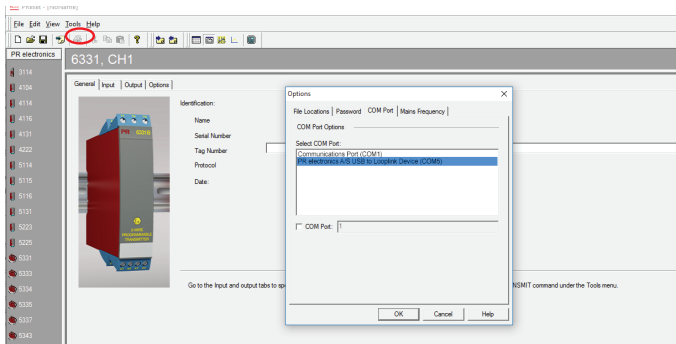


## 10. You can now see the 5909 USB to Loop Link device in the Device Manager.



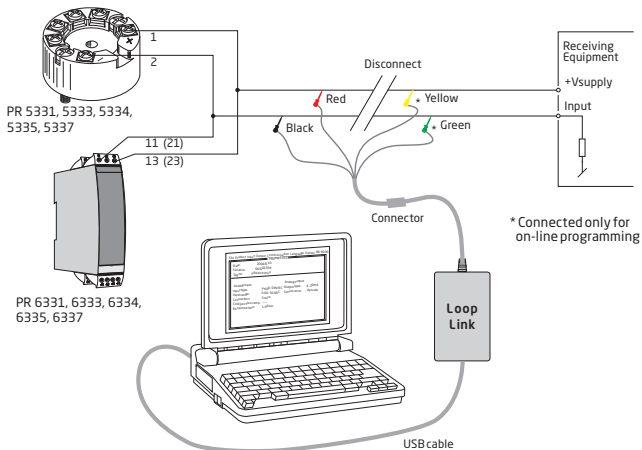
## Configuration of USB communication in PRreset

1. Start the PRreset program and choose [Tools] [Select COM port], and the "Options" window is shown on screen.
2. Select PR electronics Loop Link. Click OK.
3. If you want to configure Loop Link for other USB ports, you must connect Loop Link to these ports and install the USB drivers for each port.

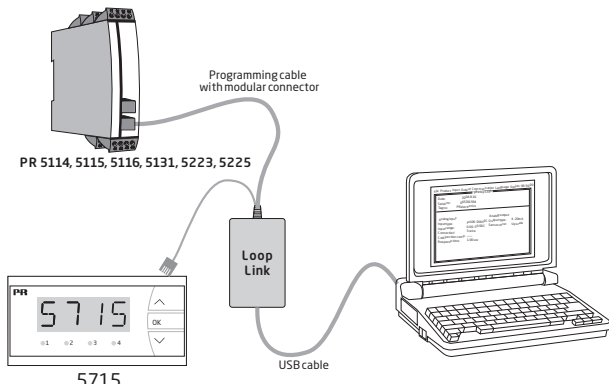




## Connection of PR devices using EZ-Mini-Hooks



## Connection of PR devices using a modular connector





**Displays** Programmable displays with a wide selection of inputs and outputs for display of temperature, volume and weight, etc. Feature linearization, scaling, and difference measurement functions for programming via PReset software.



**Ex interfaces** Interfaces for analog and digital signals as well as HART signals between sensors / I/P converters / frequency signals and control systems in Ex zone 0, 1 & 2 and for some devices in zone 20, 21 & 22.



**Isolation** Galvanic isolators for analog and digital signals as well as HART signals. A wide product range with both loop-powered and multifunctional isolators featuring linearization, inversion, and scaling of output signals.



**Temperature** A wide selection of transmitters for DIN form B mounting and DIN rail devices with analog and digital bus communication ranging from application-specific to multifunctional transmitters.



**Multifunctional** PC or front programmable devices with universal options for input, output and supply. This range offers a number of advanced features such as process calibration, linearization and auto-diagnosis.





[www.preelectronics.fr](http://www.preelectronics.fr)  
[sales@preelectronics.fr](mailto:sales@preelectronics.fr)



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[sales@preelectronics.de](mailto:sales@preelectronics.de)



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[sales@preelectronics.com](mailto:sales@preelectronics.com)



[www.preelectronics.cn](http://www.preelectronics.cn)  
[sales@preelectronics.cn](mailto:sales@preelectronics.cn)

## Head office

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Denmark  
PR electronics A/S  
Lerbakken 10  
DK-8410 Rønne

[www.preelectronics.com](http://www.preelectronics.com)  
[sales-dk@preelectronics.com](mailto:sales-dk@preelectronics.com)  
tel. +45 86 37 26 77  
fax +45 86 37 30 85