

## How to Configure a Computer to Not Assign a COM Port for Each PowerLinc™ USB Interface Connected

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Revised: 9-Nov-10

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**Explanation** When testing or using multiple PowerLinc Modem interfaces with a FTDI USB chip, the Windows operating system will attempt to assign a dedicated COM port for each PowerLinc USB Interface connected. This can cause the COM port assigned to be beyond a software program's addressable range (i.e. COM:9, COM: 73, etc.).

This procedure will inhibit Windows from assigning more than one COM ports for each USB channel on the computer.

This procedure has only been tested on Windows XP-operating systems although it is expected that Windows 2000, Vista, and other operating systems will be similar.

At the conclusion of this procedure, all PowerLinc USB Interfaces with the FTDI chip and are using the original unmodified USB VID and PID will use the same COM port. Please note that if the cable is plugged into a different USB port on the computer, a new COM port may be assigned.

### Affected models:

2412U – 2412UH INSTEON PowerLinc Modem, USB  
2413U – 2413UH PowerLinc Modem USB (Dual-Band)  
2448A7 INSTEON Portable USB Adapter

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**References:** FTDI Knowledgebase:  
<http://www.ftdichip.com/Support/Knowledgebase/index.html>

FTDI Virtual COM Port Drivers  
<http://www.ftdichip.com/Drivers/VCP.htm>

*AN232B-07 Configuring FTDI's VCP Drivers to use Location Ids*  
[http://www.ftdichip.com/Documents/AppNotes/AN232B-07\\_LocIDs.pdf](http://www.ftdichip.com/Documents/AppNotes/AN232B-07_LocIDs.pdf)



## Updates on 11-Nov-10:

- Removed sections on “Removing old Drivers” and “Installing new drivers”
- Added command prompt data to view hidden COM ports in case batch file is not available.
- Updated “Remove Reserved COM Ports” to include more steps to help in removing hidden COM ports.
- Updated “Remove Reserved COM Ports” to delete the instructions to re-install the USB drivers.
- Updated index and resources required.

## Step 1: Remove any old and reserved COM ports by Windows.

Start “ComPort.bat” to run a MS-DOS batch program that will expose reserved and hidden COM ports.

```

C:\WINDOWS\system32\cmd.exe
G:\ActivProjects\InsteOn\PLModem\PLM USB\USB chip info and drivers>set devmgr_show_nonpresent_devices=1
G:\ActivProjects\InsteOn\PLModem\PLM USB\USB chip info and drivers>start devmgmt.msc
G:\ActivProjects\InsteOn\PLModem\PLM USB\USB chip info and drivers>echo After COM ports are deleted
After COM ports are deleted
G:\ActivProjects\InsteOn\PLModem\PLM USB\USB chip info and drivers>pause
Press any key to continue . . .
  
```

If the “ComPort.bat” file is not available, enter the following at the command prompt:

```

set devmgr_show_nonpresent_devices=1
start devmgmt.msc
echo After COM ports are deleted
pause
exit
  
```

When Device Manager appears, select “View” from the pull-down menu and select “Show Hidden Devices”

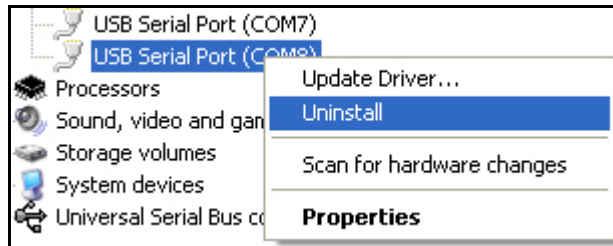


Double-click on “Ports (COM & LPT).”

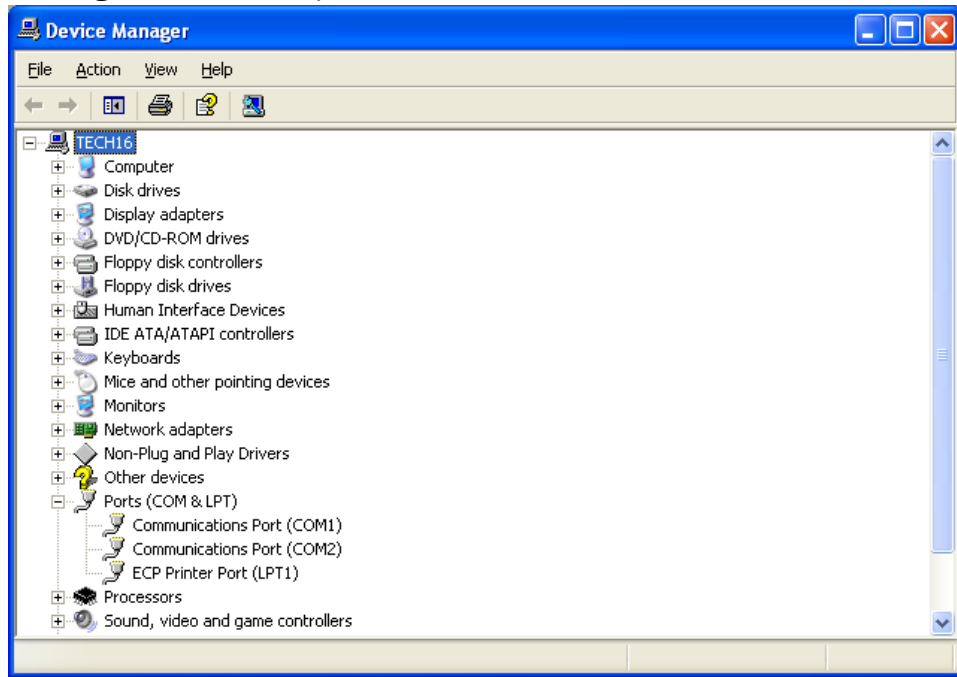
In the example below, there are over a dozen reserved and hidden COM ports on this machine before removal.



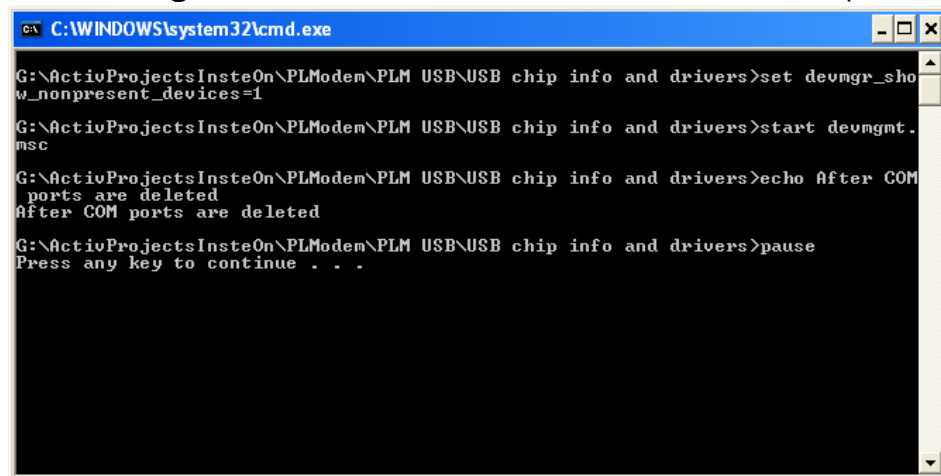
Right-Click on the hidden COM Port to remove and select “Un-install”



After removing reserved COM ports



Close Device Manager and the MS-DOS batch file window if it is still open:

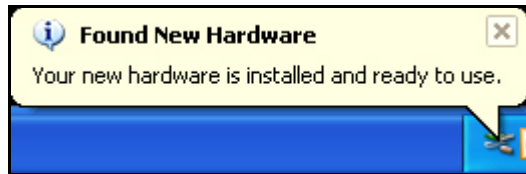


Plug-in the PowerLinc USB Interface.

The computer will now detect a new COM port:

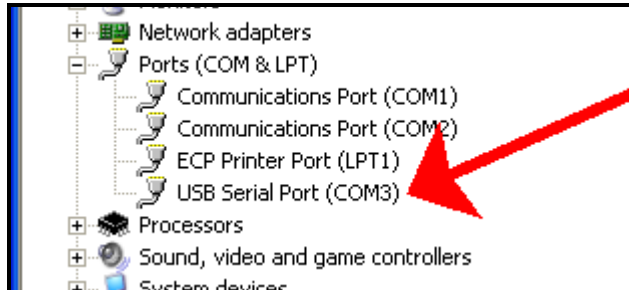


A few moments later, it will show:



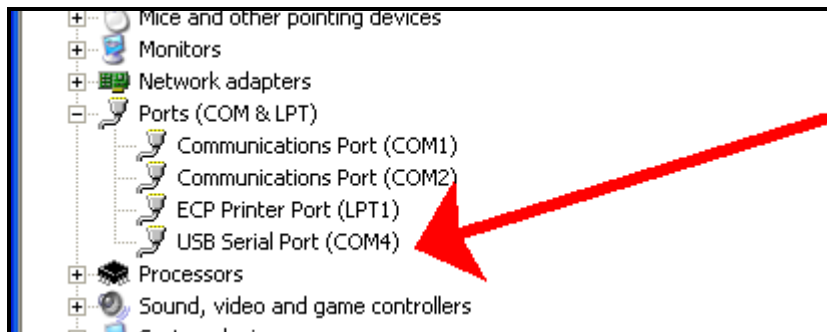
## Step 2: Check PLM-U COM port is present.

Check Device Manager to make sure the computer has assigned a COM port for the PowerLinc USB Interface that was plugged in originally. Here is an example:



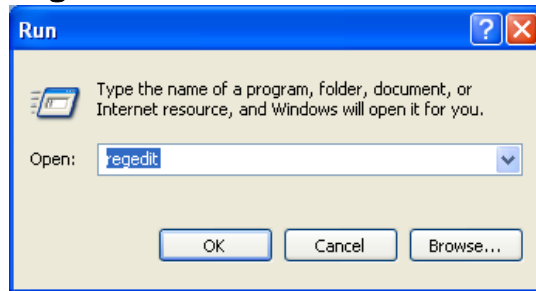
COM 3 is the PowerLinc USB Interface.

At this point, the new driver is installed and plugging in different interfaces will still cause Windows to assign new COM ports:



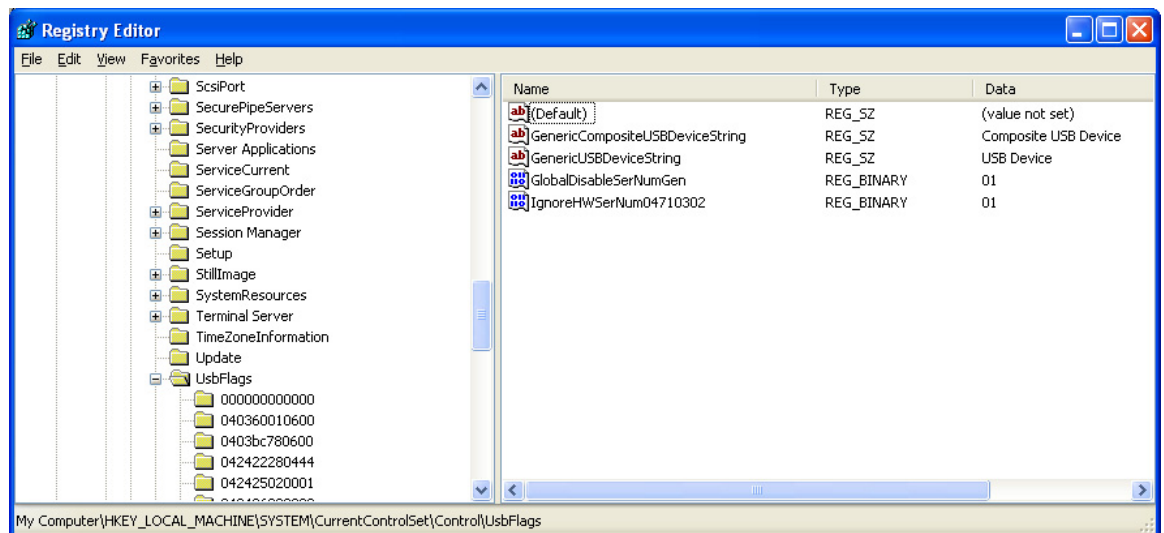
## Step 3: Modifying the Registry file to ignore hardware serial numbers

Run “RegEdit” from the Start, Run menu



Go to this key location:

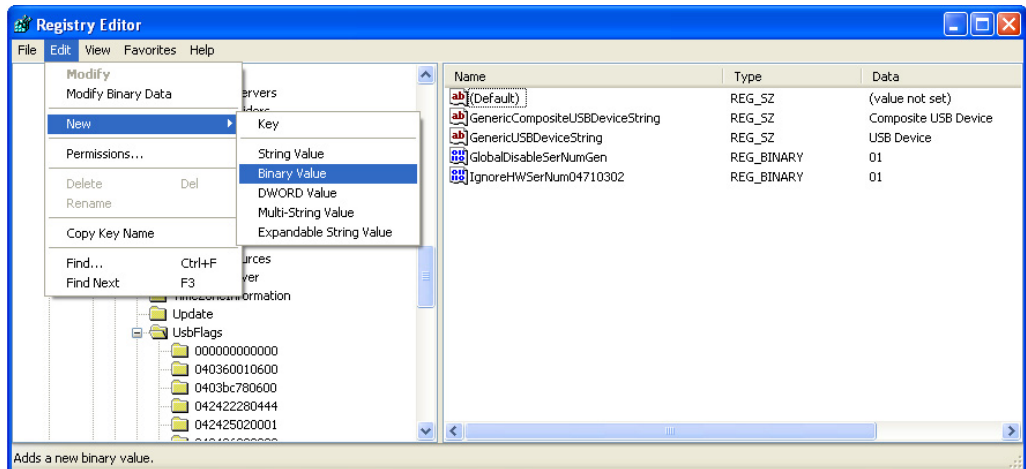
```
HKEY_LOCAL_MACHINE
\SYSTEM
\CurrentControlSet
\Control
\UsbFlags
```



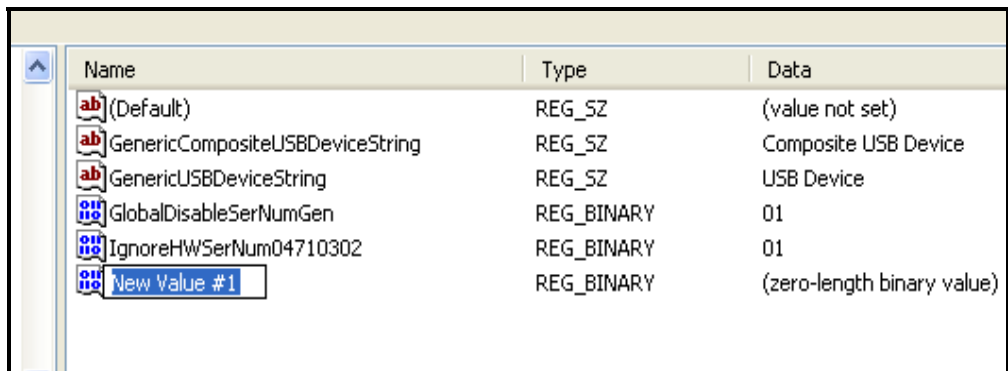
In this example, there is already an entry to ignore hardware serial numbers of some other USB device.

You will need to create a new enter for the computer to ignore the PLM-U interfaces.

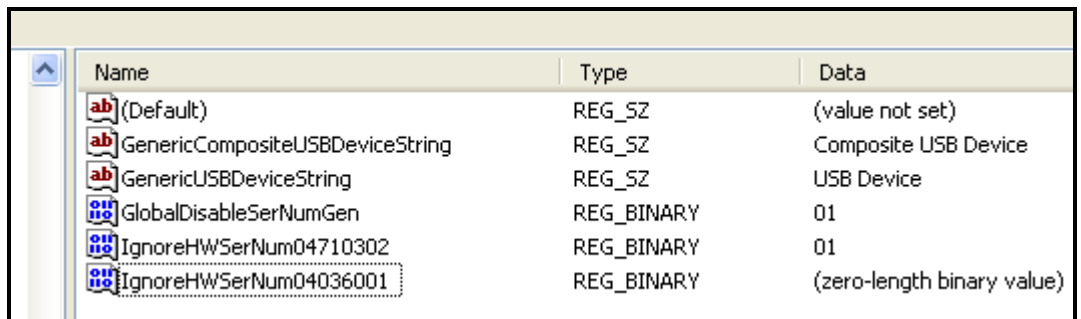




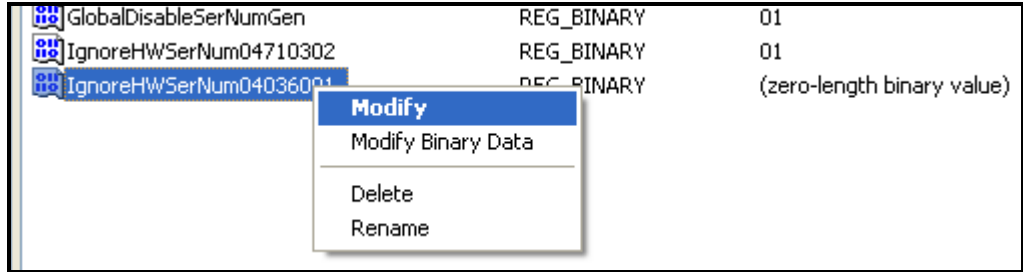
Create a new Binary Value:  
 Click **Edit**  
 Select **New**  
 Choose **Binary Value**



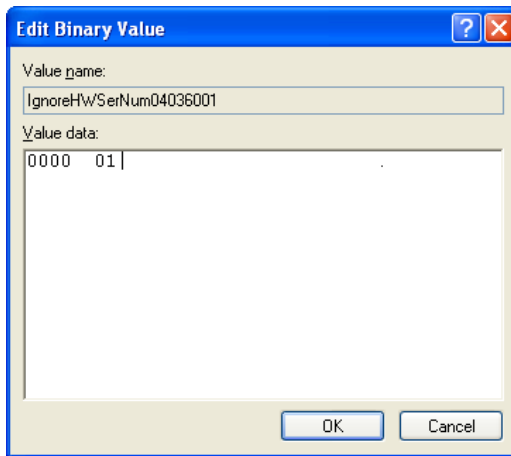
Change the highlighted "New Value #1" to "IgnoreHWSerNum04036001"



Right click on “IgnoreHWSerNum04036001” and select “**Modify**”

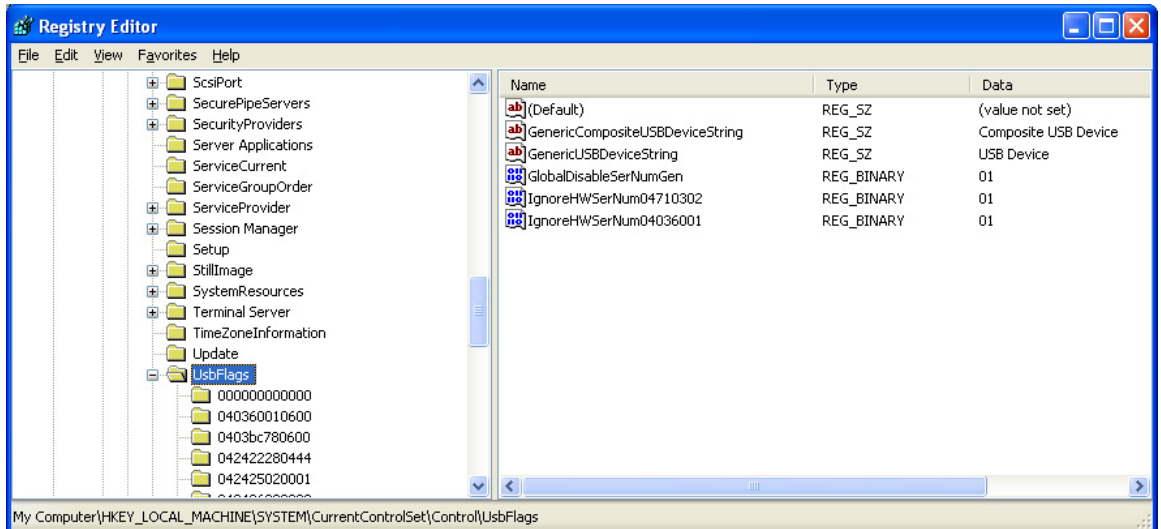


Type in “01”



Click **OK**

It should now look like this:



Exit the Registry Editor.

Restart the computer and from now on, the computer will ignore the hardware serial number burned into the USB chip in the PowerLinc Interfaces.