# How to Make "in use" COM Ports Available

When you connect your LD-200P to a USB Port, Windows assigns a COM Port number to the device. If you use a different USB Port the next time you plug it in, or if you're also using a USB printer, they might get assigned a different COM Port number each time you use them. When a new port number is assigned, Windows doesn't always clear the old port number so that it will still show as "in use".

Since the LD-200P Software will recognize only 5 COM ports, you may eventually run out of available ports (this will change in the next version upgrade). Clearing the "in use" ports that aren't really being used is a bit cumbersome, so here's a step-by-step procedure to follow:

Window's Device Manager will show you a list of ports that are currently being used, but will not show ports that are assigned but *not* currently being used ("in use"). The first step is to make these "in use" ports visible on the list. (The **red numbers** on the picture match the numbers in the list below.)

1. Go to the Start button or Desktop, right-click on My Computer and select **Properties**
2. In the System Properties dialog box, select the **Advanced** tab
3. Click the **Environment Variables** button
4. In the Environment Variables dialog box, locate the System Variables panel and click **New**
   *Picture 3*
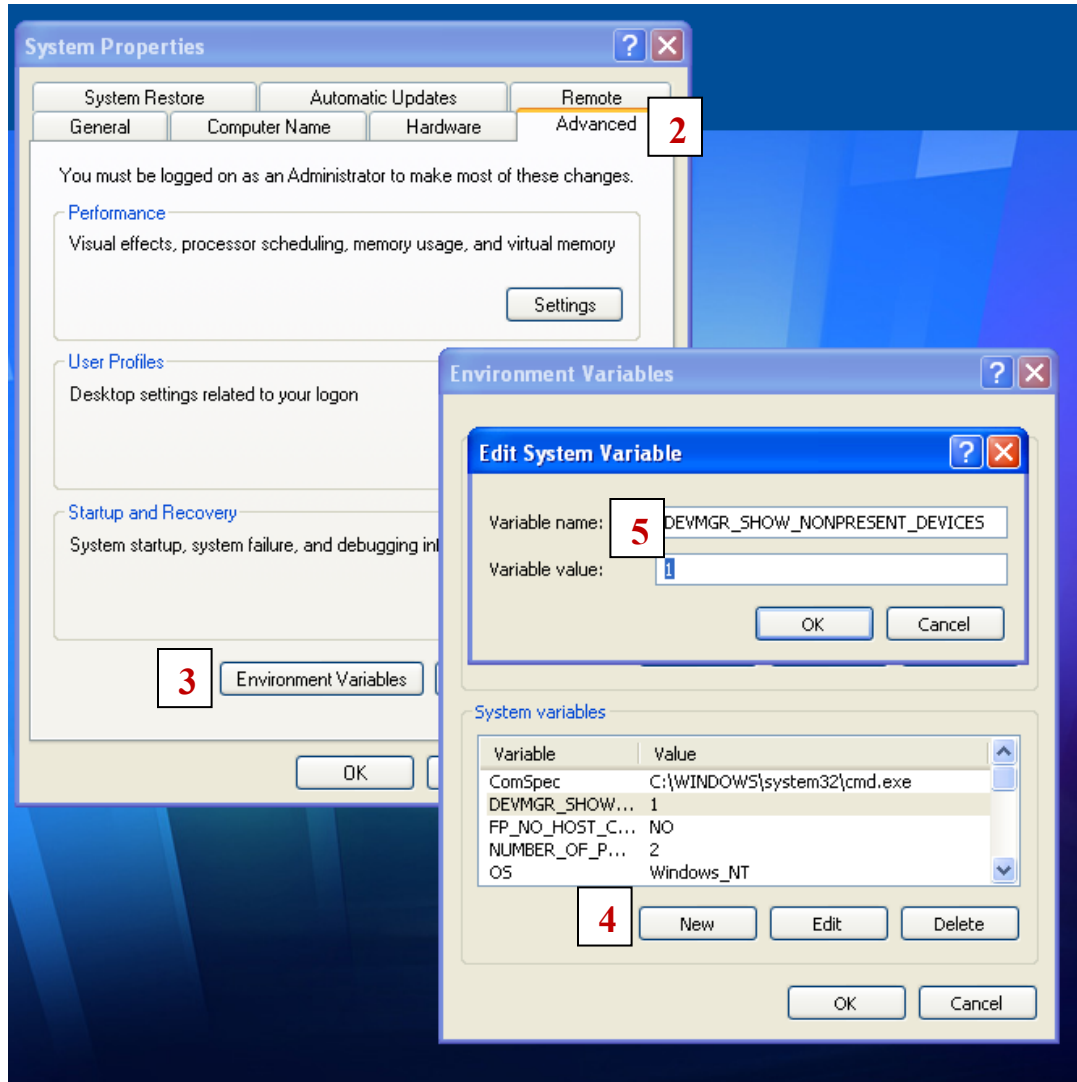
5. In the New System Variable dialog box, type **DEVMGR_SHOW_NONPRESENT_DEVICES** in the Variable Name text box and type **1** in the Variable Value text box.

6. Click OK twice
7. To view the non-present devices, go to the Start button or Desktop, right-click My Computer, and select **Manage**
8. Click **Device Manager**
9. Pull down the View menu, and select **Show Hidden Devices**.
   Picture 2
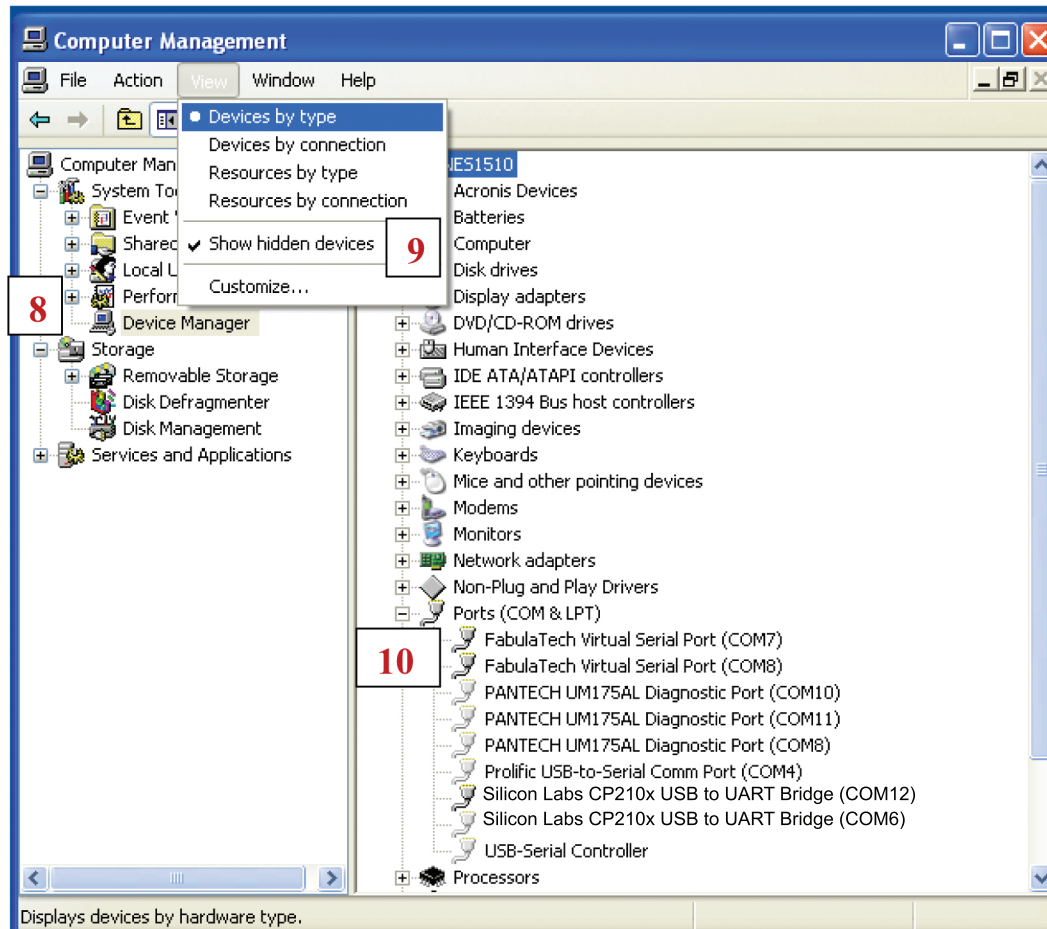
10. Click on the + sign in front of **Ports (COM & LPT)**. The list will now show all the assigned ports, whether they are connected or not.

    Now you can delete ports from the list that are not needed. If you see the same device listed on several different ports, you can remove the extra ones. As you can see in Picture 2 above, "Silicon Labs CP210x USB to UART Bridge" (for LD-200P Software) is assigned to both COM12 and COM6. Since the highest port number is the last one assigned, COM6 should be deleted.

11. From the Device Manager screen shown above, right-click on the COM port you want to remove and select **Uninstall**.
12. Repeat as necessary to remove other unwanted devices from the list. **NOTE:** If you accidentally remove the wrong device, you will need to reinstall the driver before you can use it again.

Once you have removed the duplicate port assignments, you can reassign the port to a number between 1 and 5 so the LD-200P Software can use it.

13. From the Device Manager screen shown above, right-click on the COM port you want to change and select **Properties**.
14. In the System Properties dialog box, select the **Port Settings** tab
15. Click the **Advanced** button

Picture 3
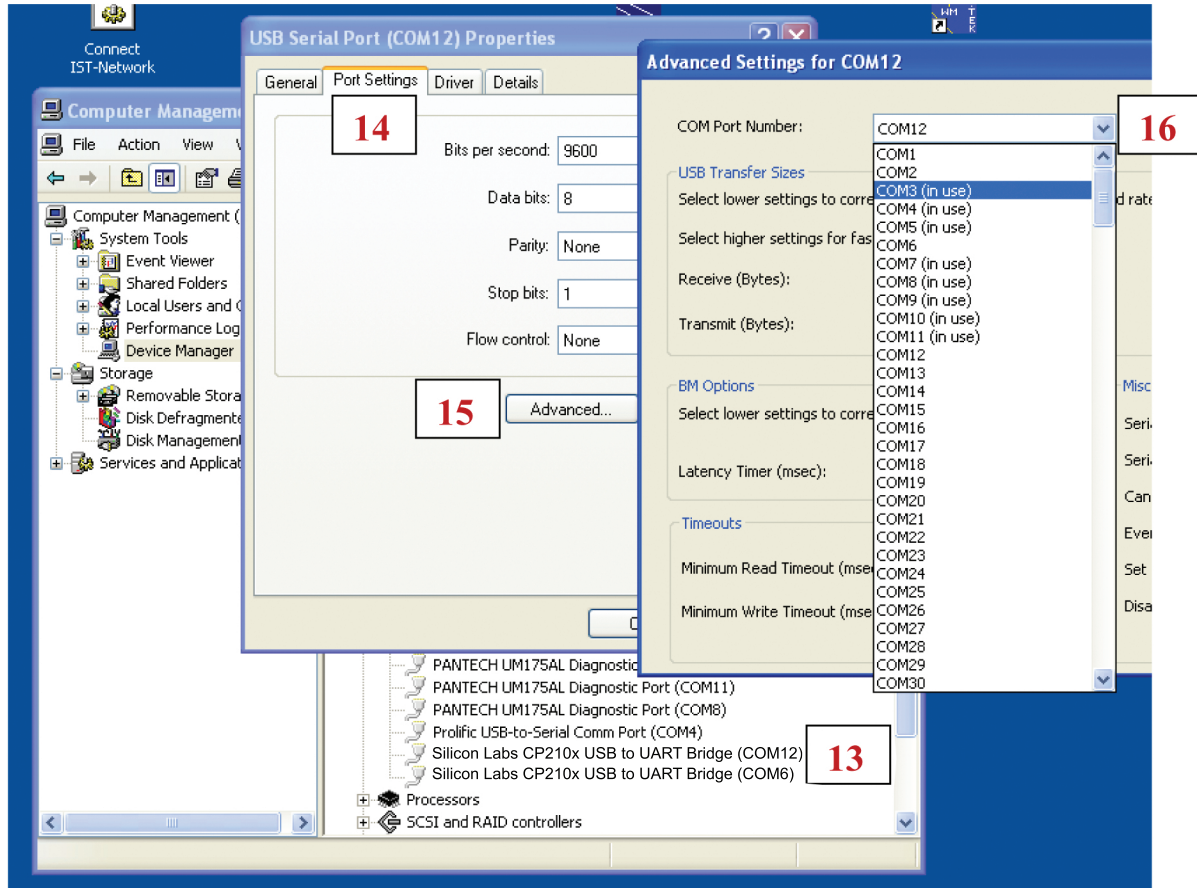
16. Click the down arrow next to the COM Port Number box
17. You can now select an available COM port between 1 and 5 (in this example, COM2 is now available)
18. Open LD-200P Software. Select "No" for other ports and "Yes" for "COM2".
19. The LD-200P Sofware will now confirm you are connected to COM2.