

Guide to Installing BBL™ Crystal™ MIND on Windows 7

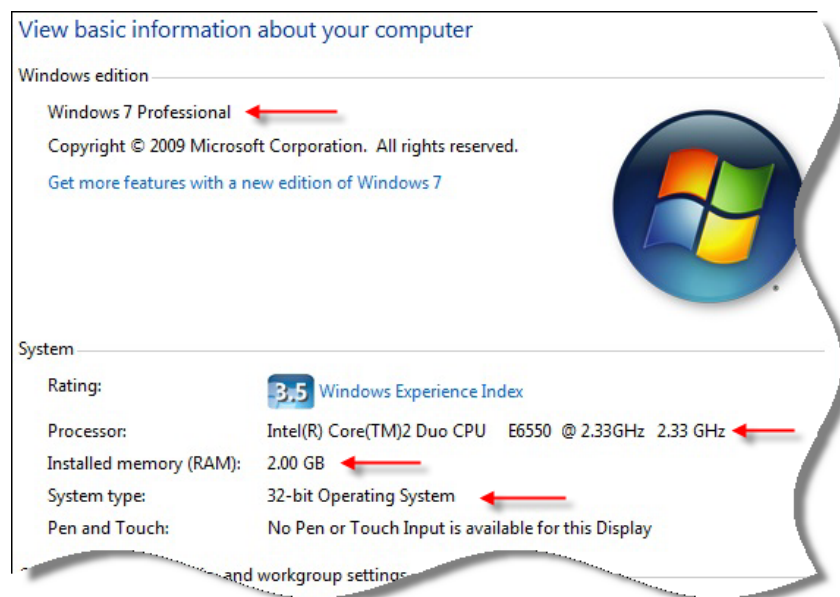
Introduction

The BBL™ Crystal™ MIND software can not be directly installed on the Microsoft® Windows® 7 platform, however it can be installed and run via XP Mode using Windows Virtual PC. Windows Virtual PC is an optional component from Microsoft that creates and runs a “virtual machine” for application compatibility. Windows Virtual PC, available on Windows 7 Professional, Windows 7 Enterprise, and Windows 7 Ultimate, allows you to run multiple Windows environments, such as Windows XP Mode, from your Windows 7 desktop. Windows XP Mode allows older programs to run that will not run in Windows 7.

Requirements

- Windows XP Mode and Windows Virtual PC are only available on Windows 7 Professional, Enterprise, and Ultimate. If you are running another version of Windows 7, you can visit the following website to learn more about upgrading to Professional, Enterprise, or Ultimate: <http://windows.microsoft.com/en-us/windows7/products/windows-anytime-upgrade>
- Internet access on the PC where the Crystal MIND software will be installed.
- At least a 1 GHz processor.
- 32-bit or 64-bit Operating System.
- It is recommended to have at least 2 GB of memory (RAM).
- It is recommended to have 15 GB of hard disk space to install and run Windows XP Mode/Windows Virtual PC.

To view your current system configuration, click on the Start button , select *Control Panel*, *System and Security*, and then *System*. The information about your computer will be displayed as follows.

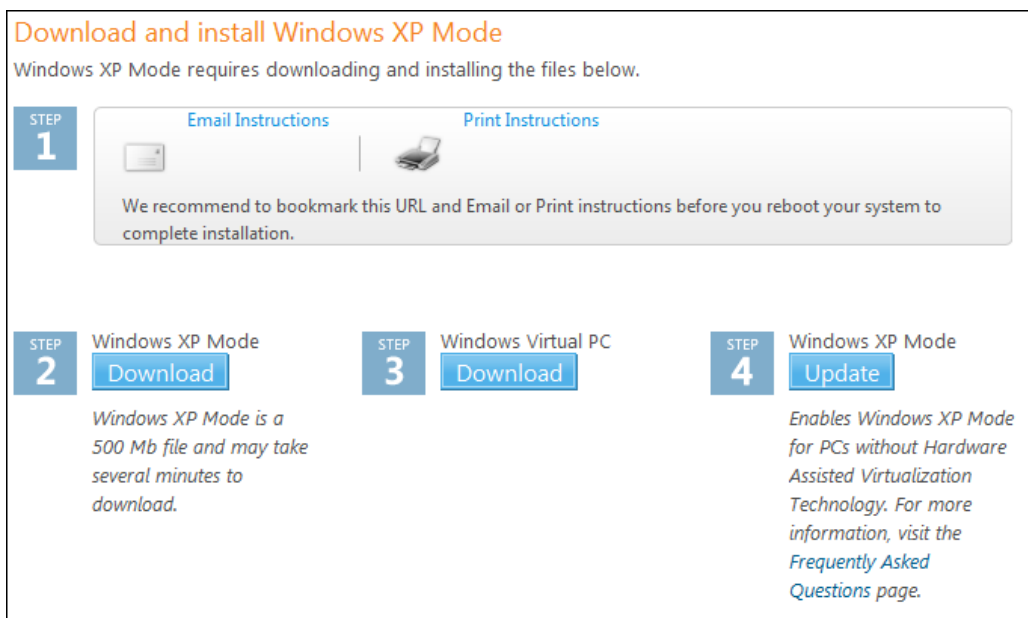


Installation of Windows XP Mode / Windows Virtual PC

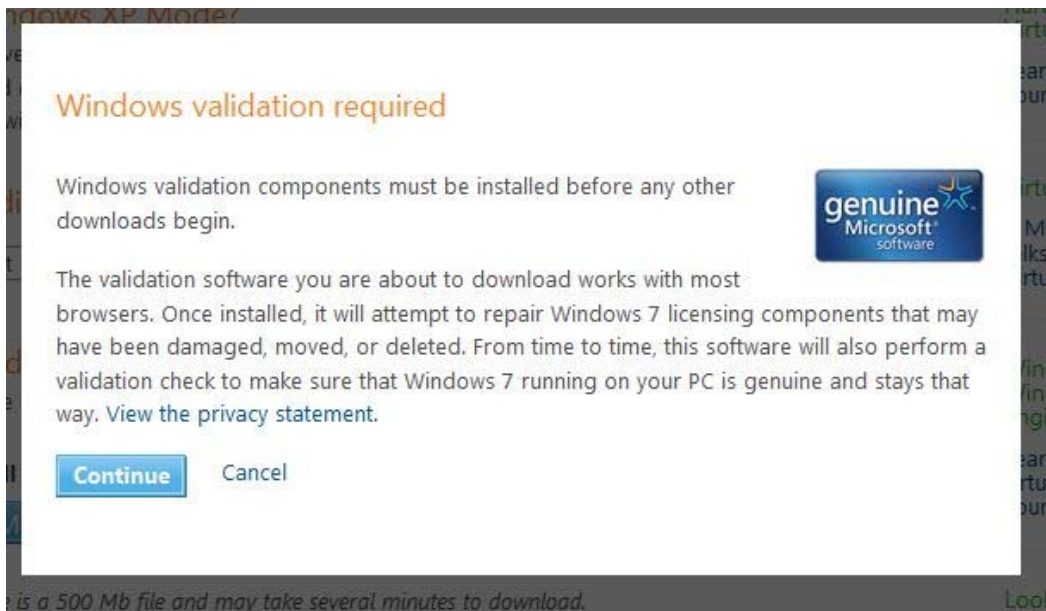
- Close all open applications and print this instruction sheet.
- Windows Virtual PC is available for free download from Microsoft. Visit the following website to get started: <http://www.microsoft.com/windows/virtual-pc/download.aspx>
- The following information will be displayed on the website. *Please note that Microsoft may have updated the look of this website so the step-by-step directions that follow may look different.*



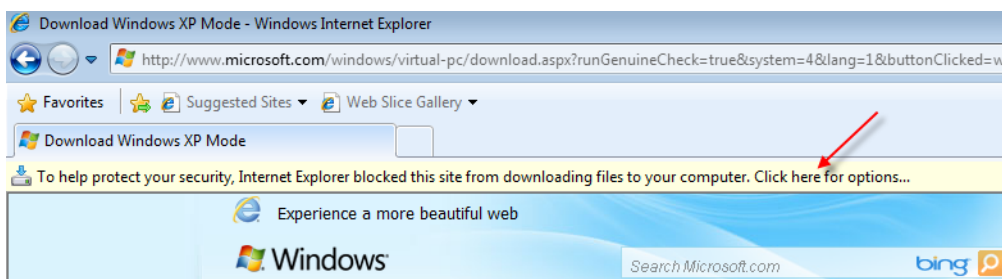
- Select the system and language that is currently running on your PC. If you selected a version of Windows for which Windows Virtual PC / Windows XP Mode will not run, an error message will be displayed with a link on how to purchase an upgrade. Otherwise, you will see the following steps added to the bottom of the webpage.



- Skip Step 1 and proceed to Step 2. Click on the *Download* button of Step 2 (Windows XP Mode). The following **Windows validation required** window will be displayed.

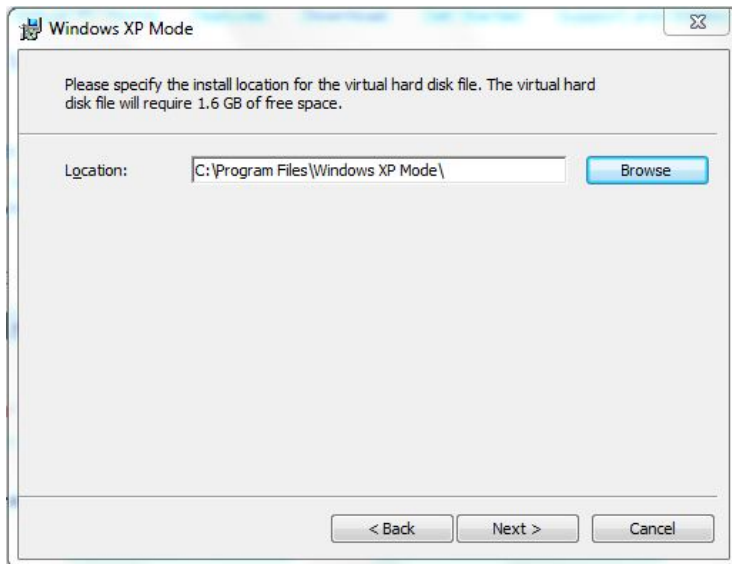


- Click *Continue*. The Windows validation software will be downloaded and installed on your computer.
- The **File Download – Security Warning** window will now be displayed. Click *Run*. The file will be downloaded.
- The **User Account Control** window will be displayed asking if you want to allow a program to make changes to your computer. Click *Yes*. Updates are installed. Click *Close* when complete.
- Another **Windows validation required** window is displayed. The validation can now begin. Click *Continue*.
- When the validation process is complete, a message will be displayed indicating that the validation was successful. Click *Continue*.
- Internet Explorer may block the next step from occurring. If this happens, you will see the following at the top of the webpage.




- Click on the bar and select *Download File*. You might get the “validation successful” message again. Click *Continue*.
- The **File Download – Security Warning** window will now be displayed. Click *Run*. The file will be downloaded.

- When complete, the **Internet Explorer – Security Warning** window will be displayed. Click *Run* to install Windows XP Mode.
- The **Welcome to Setup for Windows XP Mode** window will be displayed. Click *Next* to continue. (Note: If an error occurred during install, the Welcome window is not displayed. In this case, you will need to repeat Step 2 from the Microsoft website and then proceed below.)
- The following window will be displayed prompting for a location to setup the virtual hard disk.

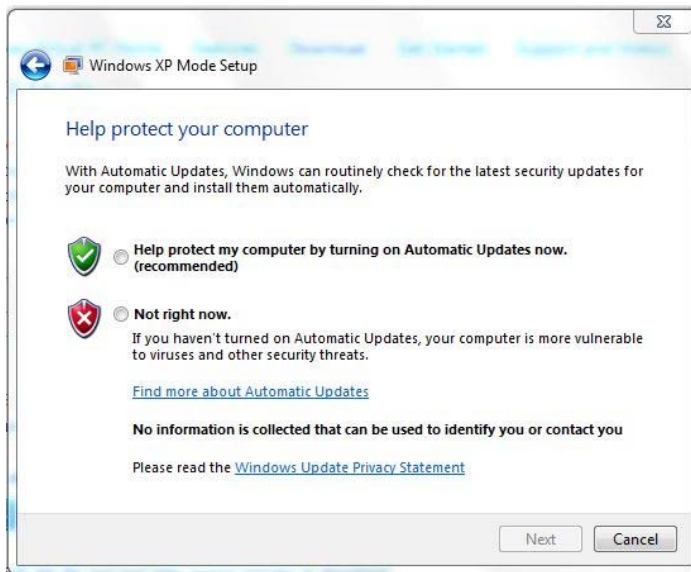


- It is recommended that you keep the default location (c:\Program Files\Windows XP Mode\), that is already specified, however, you have the option of selecting a different location by clicking on the *Browse* button. Click *Next* after a location has been selected to start the installation of the virtual hard disk.
- A **User Account Control** window will be displayed asking permission to allow Windows XP Mode to install software. Click *Yes* to continue.
- Once the installation is complete a window will be displayed indicating setup completion. Click *Finish*.
- You are now ready to begin the next step of installation via the Microsoft website. Return to Internet Explorer and click the *Download* button in Step 3 (Windows Virtual PC).
- The **File Download** window will be displayed. Click *Open*.
- The **Internet Explorer Security** window will be displayed. Click *Allow*.
- The system will now search to see if this update is already installed. This could take several minutes.
- If the update already exists, you will receive a message indicating that it is already installed. Click *OK* to the message, otherwise continue with the installation by clicking *Yes*.
- The license terms for installing updates is displayed. Read the terms and if you agree, click *I Accept*. The update will now be installed. When the installation is complete, a message will be displayed asking you to restart your computer. Do not restart now, you will restart after completing Step 4 from the website. Click *Close*.

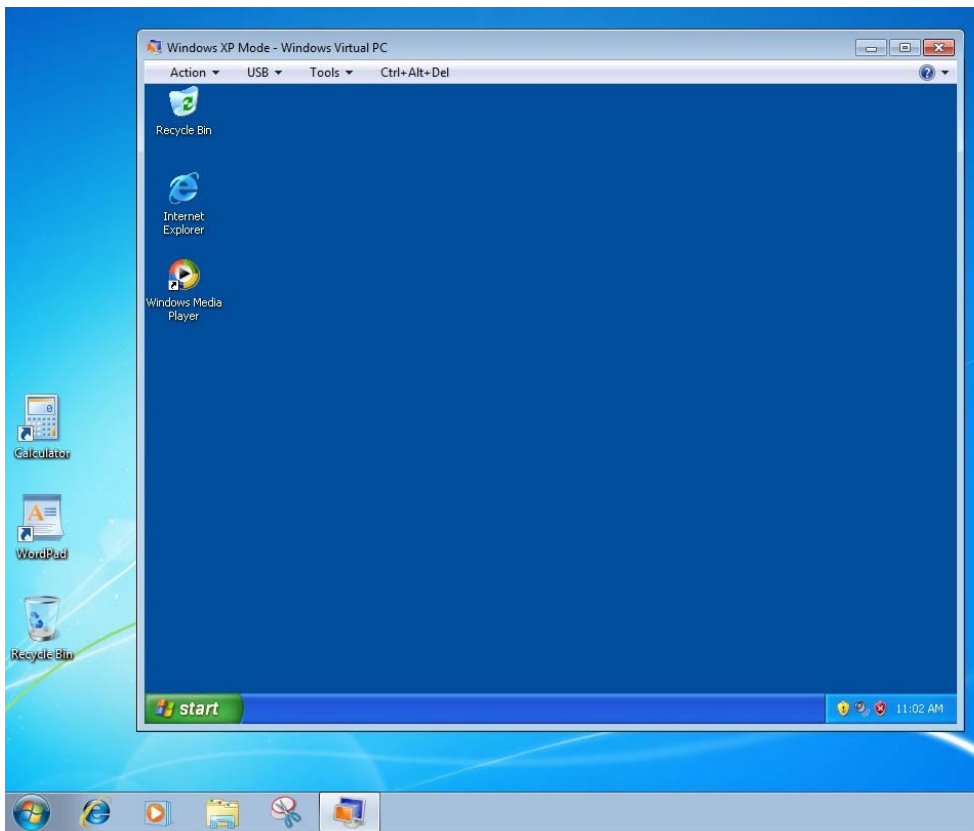
- You are now ready to begin the final step of installation via the Microsoft website. Return to Internet Explorer and click the *Update* button in Step 4 (Windows XP Mode).
- The **File Download** window will be displayed. Click *Open*.
- The **Internet Explorer Security** window will be displayed. Click *Allow*.
- The system will now search to see if this update is already installed. This could take several minutes.
- If the update already, exists, click *OK* to the message, otherwise continue with the installation by clicking *Yes*.
- You will receive an “Installation Complete” message. Click *Restart* to restart your computer or manually restart your computer. Once the computer has restarted, continue to the next step below.
- Click the Start button  on the **Windows 7** task bar. Click on *All Programs, Windows Virtual PC* and then on *Windows XP Mode*.
- The following **Windows XP Mode License Agreement** window will be displayed.



- Read the agreement and if you agree, click the *I accept the license terms* checkbox at the bottom of the window and then click *Next*.
- The **Installation folder and credentials** window is displayed. Keep the “Installation folder” as the default location. Create a password for logging into XP Mode. **Save this password for future reference.** Click *Next*.
- The following **Help protect your computer** window will be displayed.




- You are asked if you want to enable “Automatic Updates” for XP Mode. This decision will be based upon your company policy, however, it is recommended to select “Automatic Updates.” Select an option and click *Next* to continue.
- A window will be displayed stating the drives will be shared. Click *Start Setup* to begin. This step could take several minutes to complete.
- When complete, the following **Windows XP Mode** window will be displayed.



- Setup of XP Mode is complete!

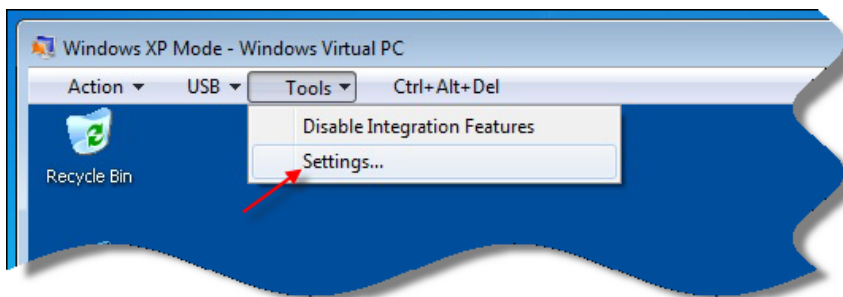
Installation of Crystal MIND V5.05A

Install Crystal MIND and the ODBC Drivers by following the Crystal MIND installation instructions located on the Crystal MIND download website www.bd.com/ds/CrystalMIND or in the User's Guide. Note that you are installing MIND and ODBC in XP Mode via the Virtual PC. Click on the "Start" button  in XP Mode, not in Windows 7 to perform the installs.

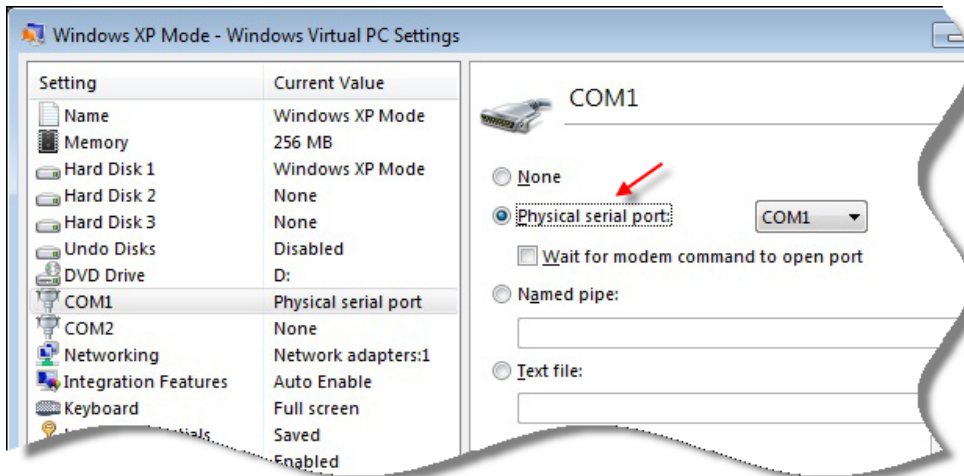
Crystal AutoReader: Serial Port Setup

If the Crystal AutoReader is connected via a serial port on the PC, setup of the com port is necessary. Follow the steps below.

- Click on *Tools* from the menu at the top of the XP Mode Window. Select *Settings*.



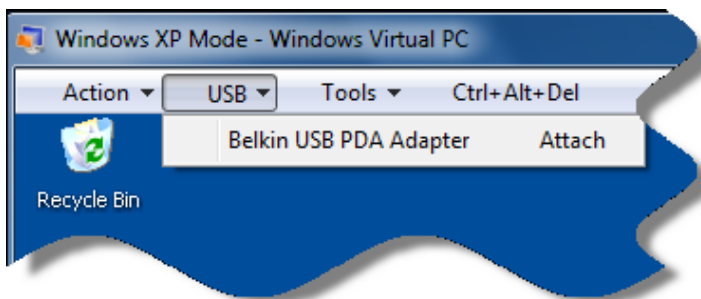
- The **Windows Virtual PC Settings** window is displayed.
- On the left side of the display, click on COM1.
- On the right side of the display, click on *Physical serial port*. Click *OK*.



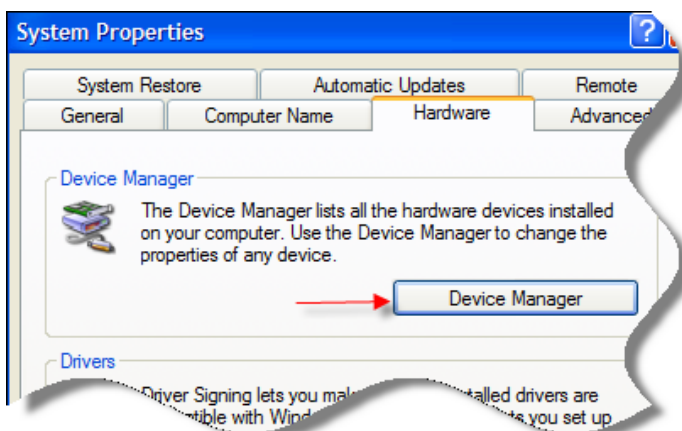
Crystal AutoReader: USB Port Setup

If the Crystal AutoReader is connected via a USB port on the PC (using a USB to serial converter), follow the steps below.

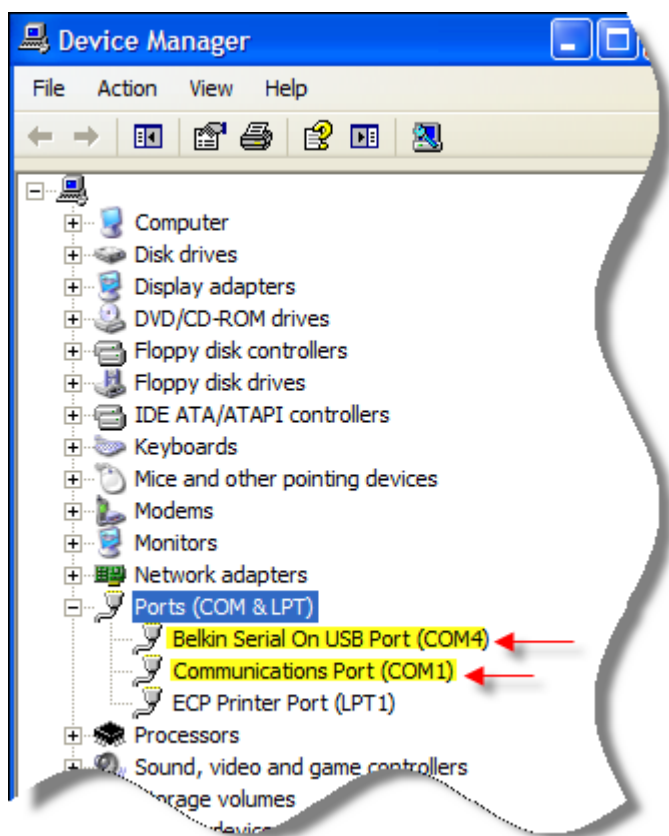
- Install the device driver (that came with the converter) through the XP Mode window. (Note: Attaching the USB converter cable to the computer may allow the system to automatically detect new hardware and prompt you to install the drivers.)
- With the USB converter cable connected to a USB port, click on the USB menu at the top of the XP Mode display. You should see your USB converter listed in the drop down with the text “Attach” as shown below.



- Click on this item to “enable/attach” the converter on your XP mode system. Each time XP Mode is launched from Windows 7, the USB port will need to be re-attached. To ensure that the USB converter cable is enabled/attached, click on the menu item again and the text will now be listed as “Release” instead of “Attach.”
- The port number assigned to the USB converter needs to be determined. This value will be used to update the “CommPort” setting in the Crystal MIND configuration file. Ensure that the USB converter cable is connected to a USB port on the PC prior to continuing. To find the assigned port number double-click the *System* icon in Control Panel (*Control Panel can be found under the Start Menu of XP Mode.*) Depending upon the PC configuration, the *System* icon may be directly located under Control Panel or it may be located under the *Performance and Maintenance* section under Control Panel. The *System Properties* window will be displayed. Select the *Hardware* tab. Click on the *Device Manager* button, located under the *Device Manager* section.



- Open the *Ports* section by clicking on the “+” next to *Ports* to view the list of defined ports. Note the com port listed next to “...Serial On USB Port.” The example below lists COM4 as the assigned port for the USB converter cable.



- The assigned com port number now needs to be updated in the Crystal MIND configuration file. Refer to Section 11.4 in the User’s Guide for instructions on updating the com port setting.

If you have questions regarding the installation process, please contact BD Technical Services at 1-800-638-8663 or email Technical_Services@bd.com.

International customers, contact your representative.