



EXO

Training Document

ADVANCED WATER QUALITY MONITORING PLATFORM



April 15, 2012

Connecting Your EXO Sonde to Windows via Bluetooth

Introduction

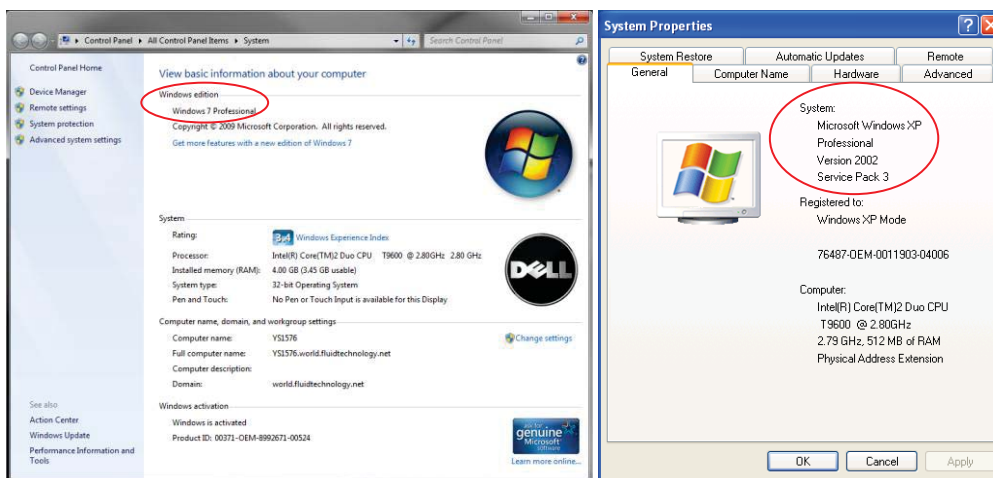
This guide is intended to help EXO users establish wireless Bluetooth communication between an EXO sonde and a Windows PC with the KOR desktop software. With many different versions of Windows being available some of the steps may differ slightly on different PCs. If your PC does not have a built-in Bluetooth radio you can purchase one from most electronics retailers or you can order one from YSI (item #400310). If you have trouble installing any of the hardware or software described below you may need to contact your company's IT department to ensure that you have sufficient privileges to perform the actions described.

If your PC is running Windows 7 or Windows XP Service Pack 3 and has a Bluetooth radio that has been installed via Windows without the use of any 3rd party software you can use the instructions in section 2.1 Connecting your EXO sonde to Windows 7 or Windows XP through KOR search Bluetooth feature.

If you are on Windows 7 and have a Bluetooth radio that was installed with 3rd party software please see section 2.2 Connecting your EXO sonde to Windows 7 through Windows for further instructions.

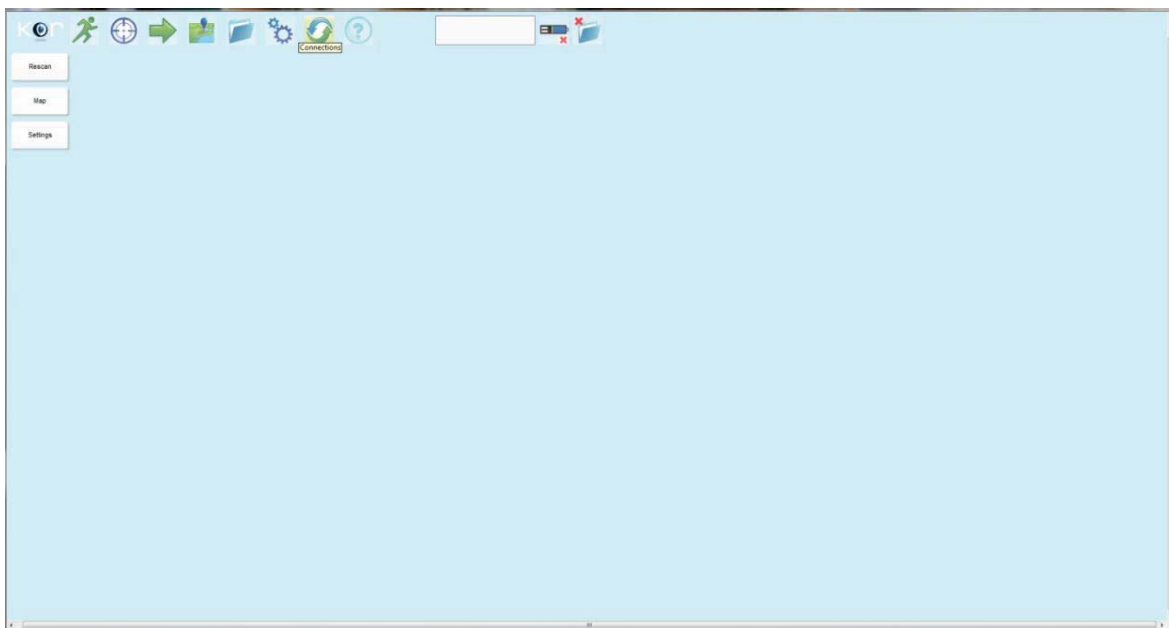
If you have a PC that is running Windows XP Service Pack 3 and have a Bluetooth radio that was installed with 3rd party software please see section 2.3 Connecting your EXO sonde to Windows XP through Windows for further instructions.

If you are unsure which version of Windows is running on your PC you can find this information from the Windows System Properties. You can access this by right clicking on the "Computer" or "My Computer" icon on your desktop and select "Properties".

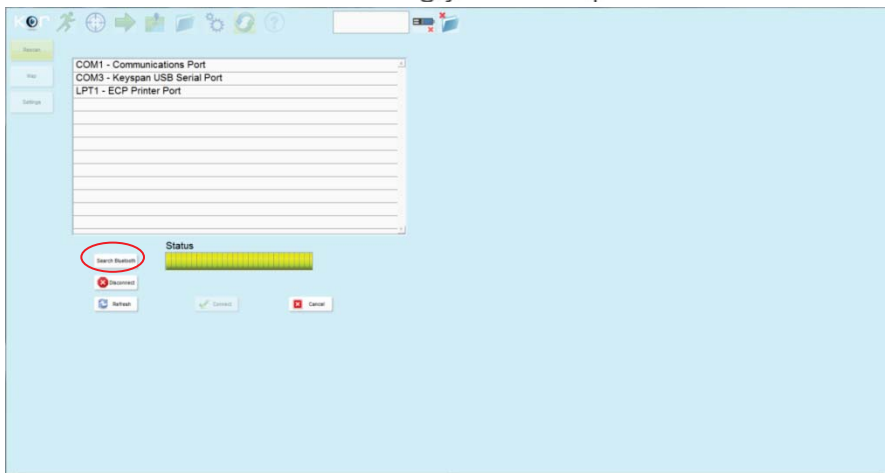


2.1 Connecting your EXO sonde to Windows 7 or Windows XP through KOR search Bluetooth feature.

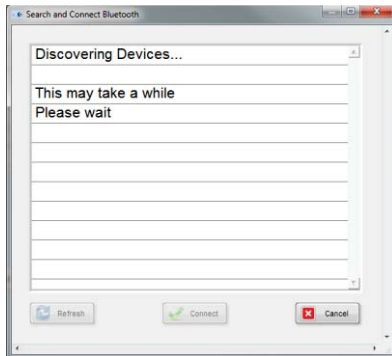
1. Install Bluetooth dongle if your PC is not equipped with an internal Bluetooth radio. If possible allow Windows to install the Bluetooth dongle automatically without the use of third party software that may have been included with the dongle.
2. Activate your sondes Bluetooth radio. This can be done by holding the magnet located in your probe removal tool or EXO handheld at the magnet activation area near the sondes bulkhead (identified by the magnet symbol on the sondes label) or by power cycling the sonde (remove and reinstall batteries). Once the blue LED on the sonde is on steady the sondes Bluetooth radio is active and ready to communicate.
3. Launch the KOR software, click the connections icon and click Rescan. The more COM ports you have on your PC the longer the scan will take.



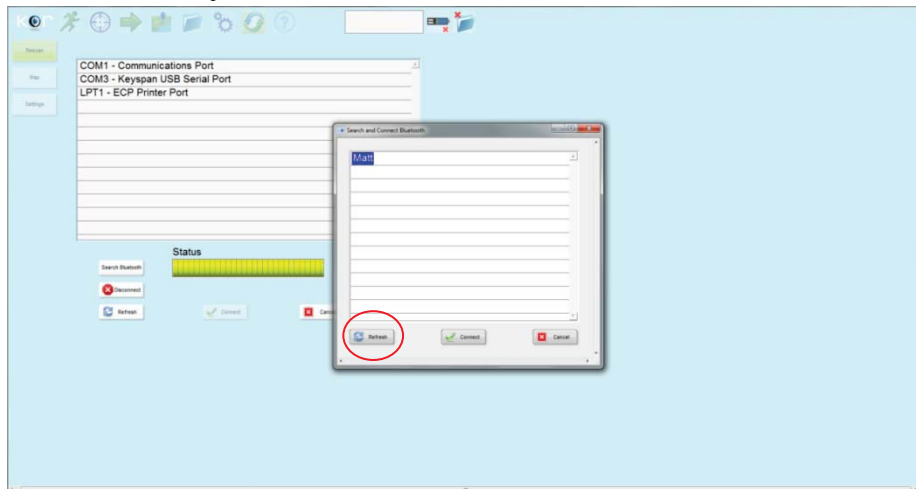
4. Once KOR has finished scanning your COM ports click the Search Bluetooth button.



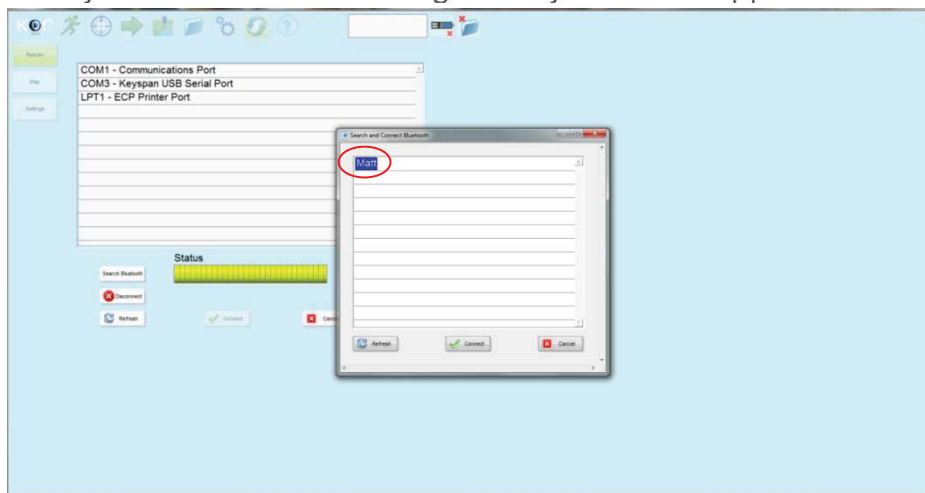
5. When the Search Bluetooth button is pressed the following screen will appear while your PC is scanning for EXO sondes with discoverable Bluetooth radios. Note: Only EXO sondes can be found by the search Bluetooth options. KOR will not recognize EXO handhelds or other Bluetooth devices (ex. Cell phones) via the Bluetooth connection.



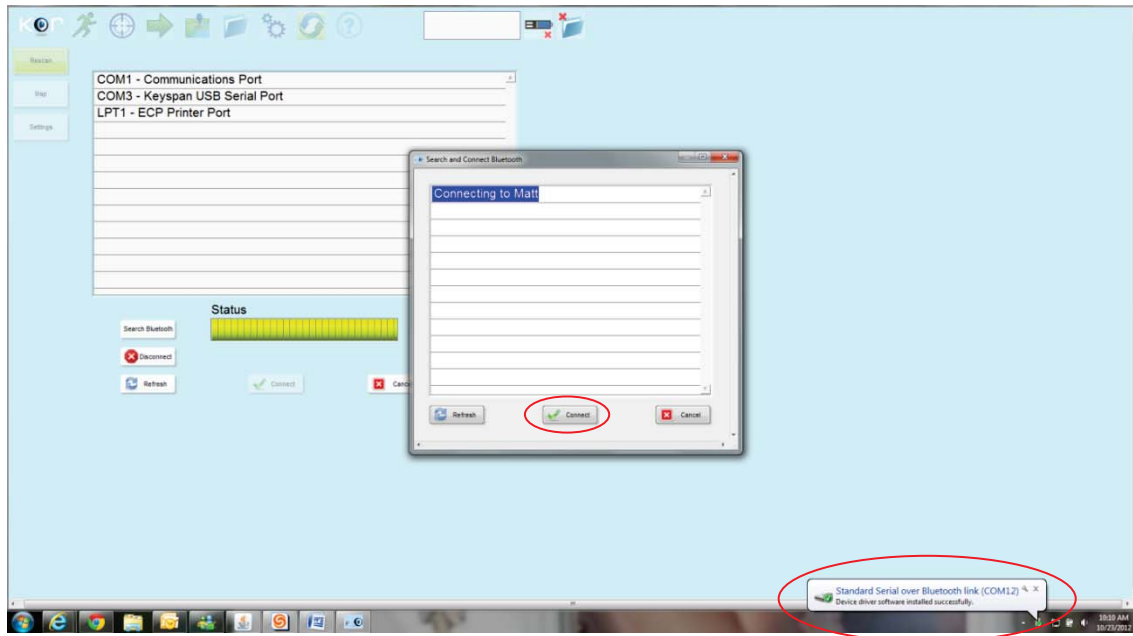
6. If no devices are found click the Refresh button. You may have to repeat this step a few times until KOR finds your EXO sonde.



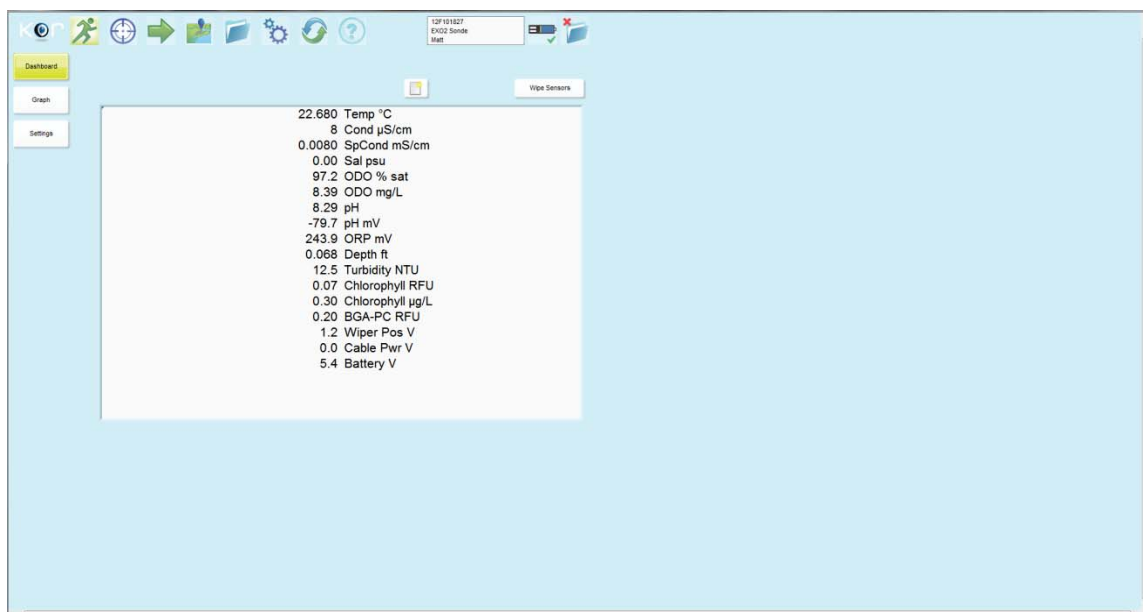
7. Once your sonde has been recognized by KOR it will appear in the list.



8. Highlight the name of the sonde that you wish to connect to by clicking on it and then click the Connect button.
9. If this is the first time you are connecting the sonde to KOR, Windows will automatically install the device drivers and assign the sonde a COM port number. During this time KOR will indicate that it is connecting to your sonde.



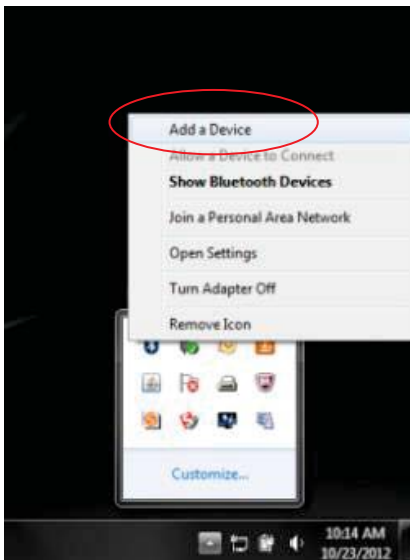
10. Once the connection is complete KOR will automatically take you to the Dashboard screen and begin showing you live data.



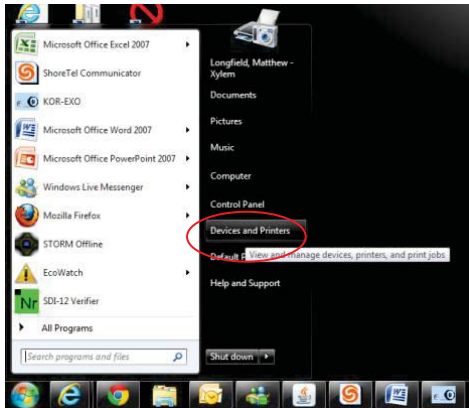
2.2 Connecting your EXO sonde to Windows 7 through Windows.

There may be times where your PC is using a third party Bluetooth stack. In these cases you will not be able to use the Search Bluetooth option through KOR. Instead you will have to pair your sonde to your PC through Windows first, find your COM port number and then you will be able to connect to your sonde through KOR by selecting the appropriate COM port from the list. The steps and screen shots below will explain this process.

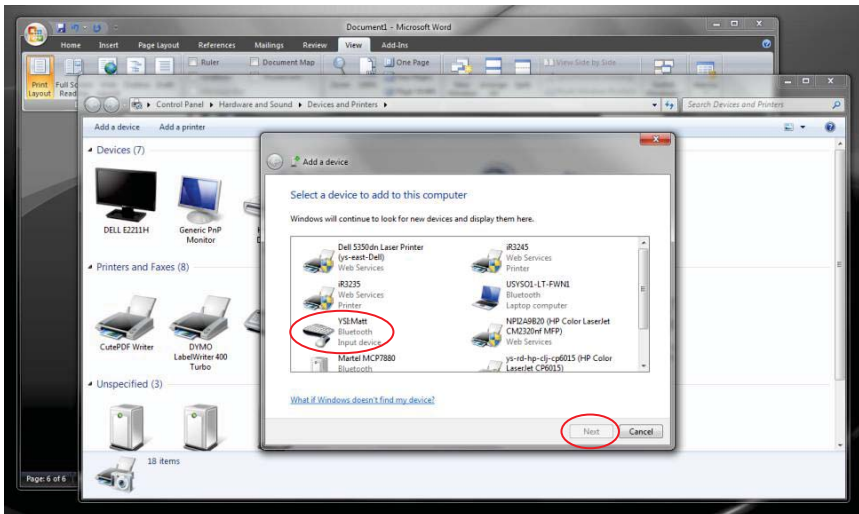
1. Install Bluetooth dongle if your PC is not equipped with internal Bluetooth radio. If possible allow Windows to install the Bluetooth dongle automatically without the use of third party software that may have been included with the dongle.
2. Activate your sondes Bluetooth radio. This can be done by holding the magnet located in your probe removal tool or EXO handheld at the magnet activation area near the sondes bulkhead (identified by the magnet symbol on the sondes label) or by power cycling the sonde (remove and reinstall batteries). Once the blue LED on the sonde is on steady the sondes Bluetooth radio is active and ready to communicate.
3. Pair EXO sonde to PC. There are two places this can be done. The first would be to click on the Bluetooth icon in your system tray and select Add a Device.



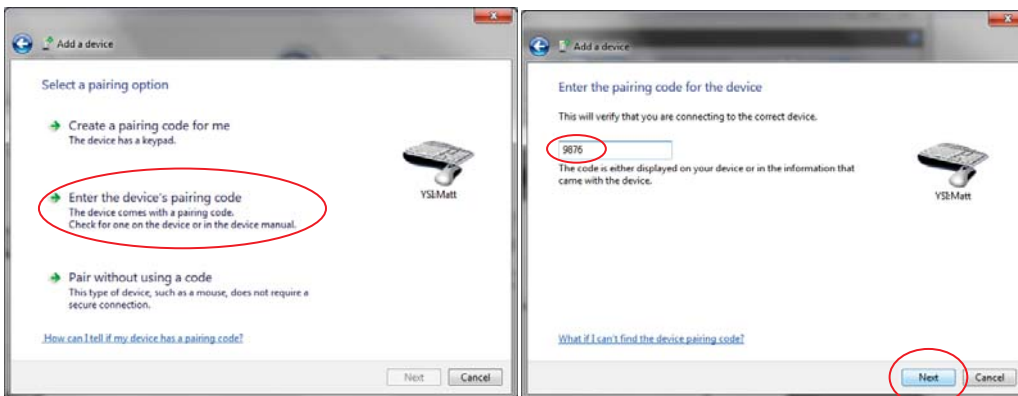
Alternatively, you can click on the Start Menu, then click Devices and Printers and then Add a Device.



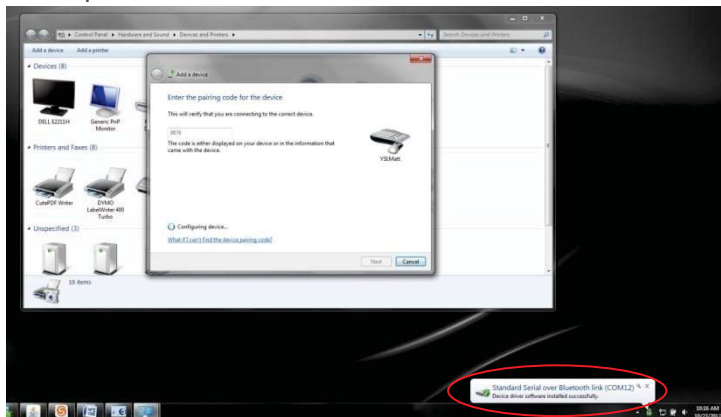
4. This will bring up a list of devices seen by your PC. Select your EXO sonde from the list and click Next. All EXO sondes will start with "YSI:" in the device list regardless of what you have the sonde name set to.



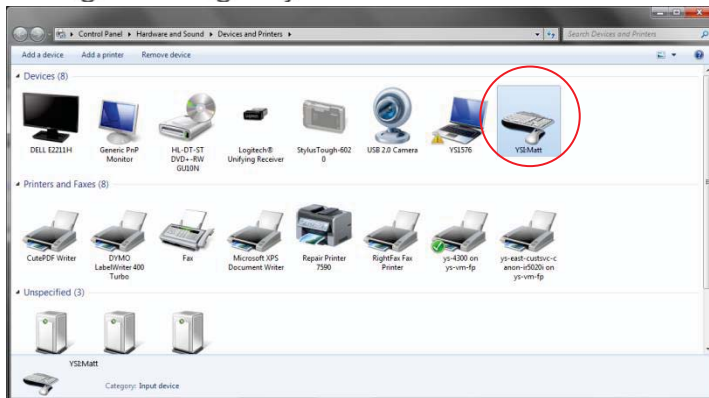
5. Windows will then ask you to select a pairing option. Click on "Enter the device's pairing code" and click Next. Enter your EXO sondes pairing code. The default pairing code for all new sondes is 9876 and click Next.



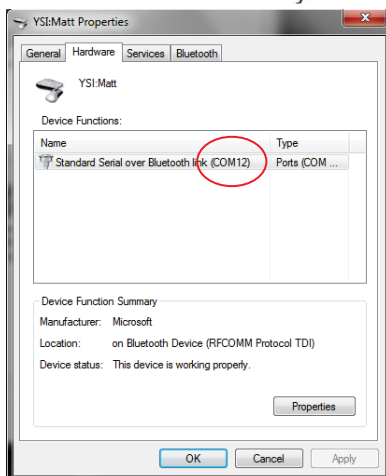
6. Windows will begin to configure the device by installing any needed drivers and assigning a COM port.



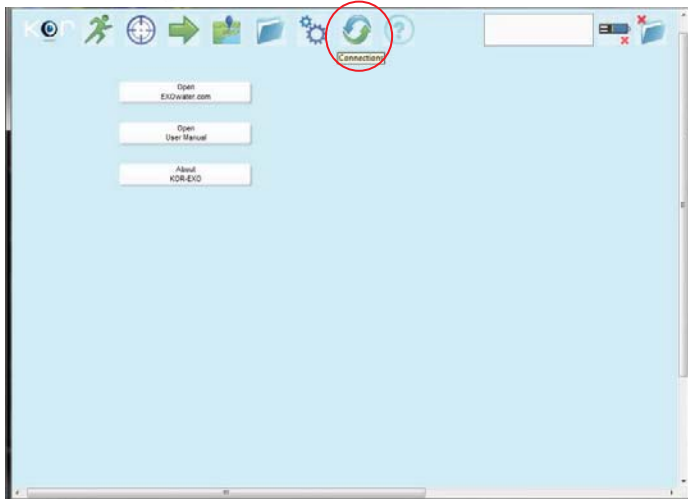
7. You may see the COM port assigned to your sonde in a popup bubble when the configuration is complete. If you do not, you can find the COM port by going back into Devices and Printers and right clicking on your EXO sonde from the list of devices and clicking on Properties.



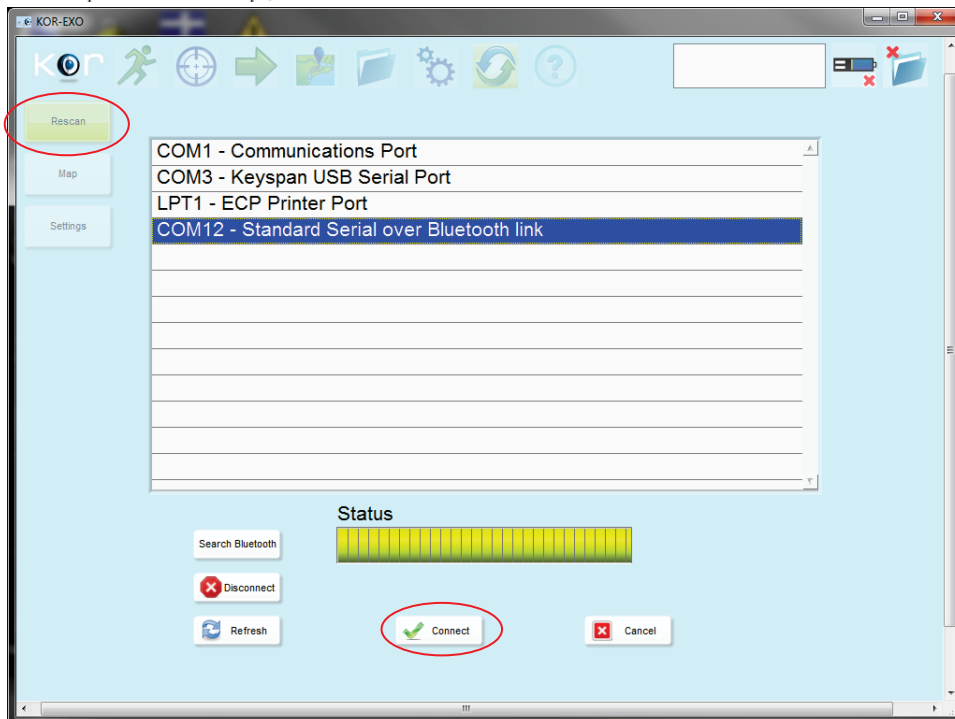
8. Click on the Hardware tab. You will find your Exo sondes COM port number in the Device Functions box. Once you find the COM port number click OK.



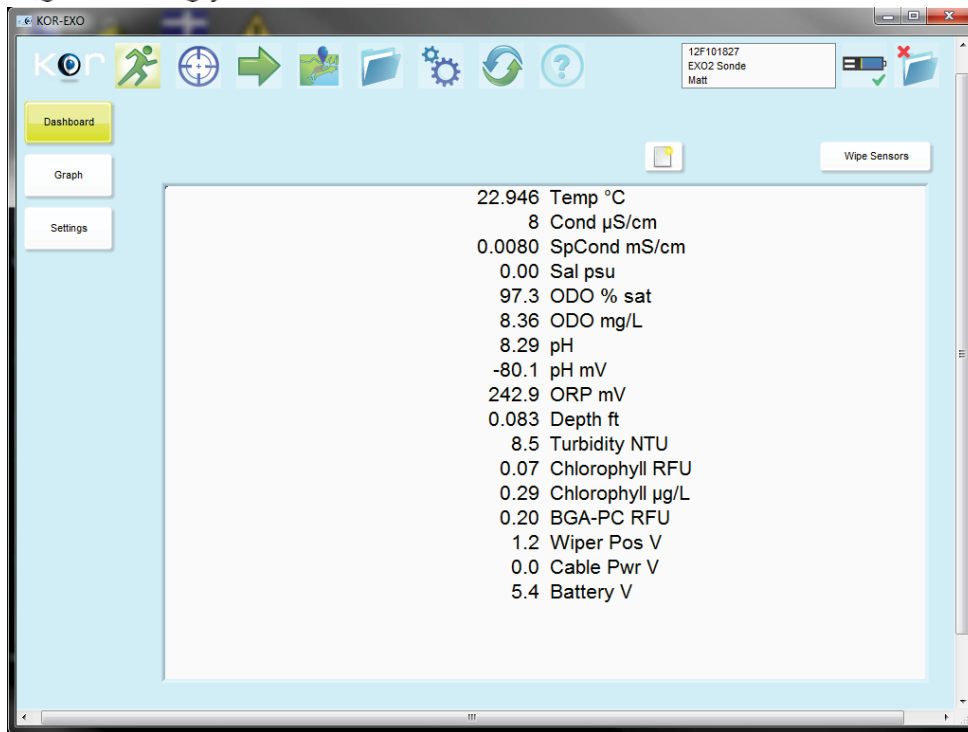
9. Launch KOR, click on the Connections icon and then click Rescan.



10. Select the appropriate COM port from the list (the COM port that was assigned to your sonde in the previous step) and click Connect.

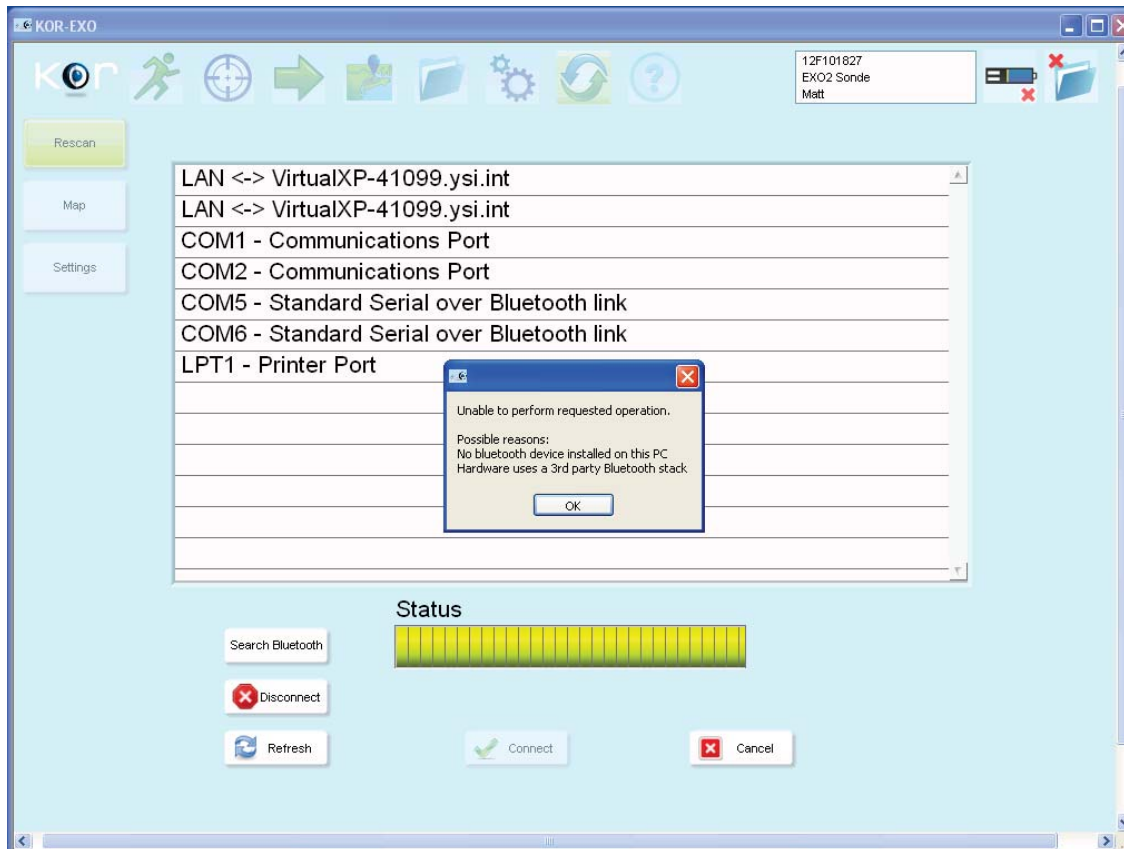


11. Once the connection is complete KOR will automatically take you to the Dashboard screen and begin showing you live data.

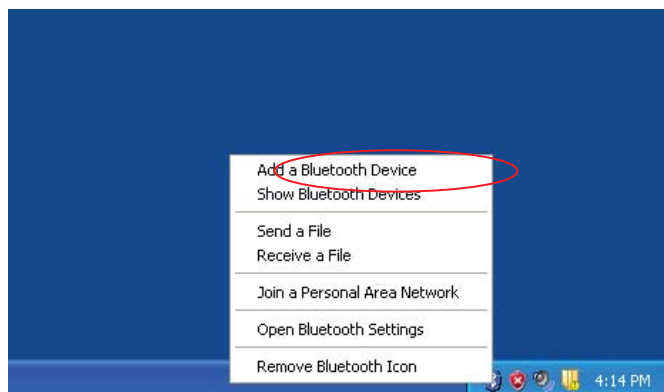


2.3 Connecting your EXO sonde to Windows XP through Windows.

There may be times where your PC is using a third party Bluetooth stack. In these cases you will not be able to use the Search Bluetooth option through KOR. If you have a Bluetooth dongle that was installed using a 3rd party Bluetooth stack you will see the error message below when you click the Search Bluetooth button. Instead you will have to pair your sonde to your PC through Windows first, find your COM port number and then you will be able to connect to your sonde through KOR by selecting the appropriate COM port from the list. The steps and screen shots below will explain this process.



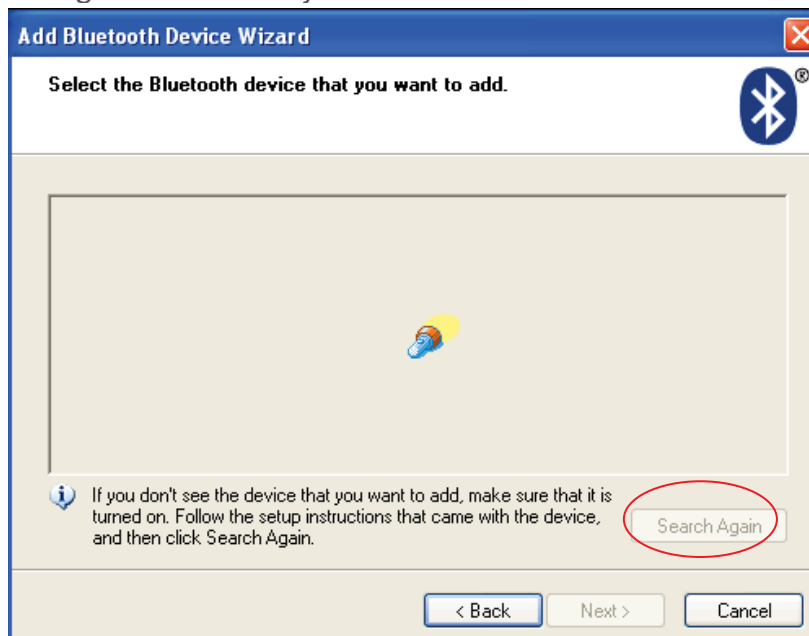
1. Install Bluetooth dongle if your PC is not equipped with a built in Bluetooth radio.
2. Click on the Bluetooth icon in the system tray and select "Add a Bluetooth Device".



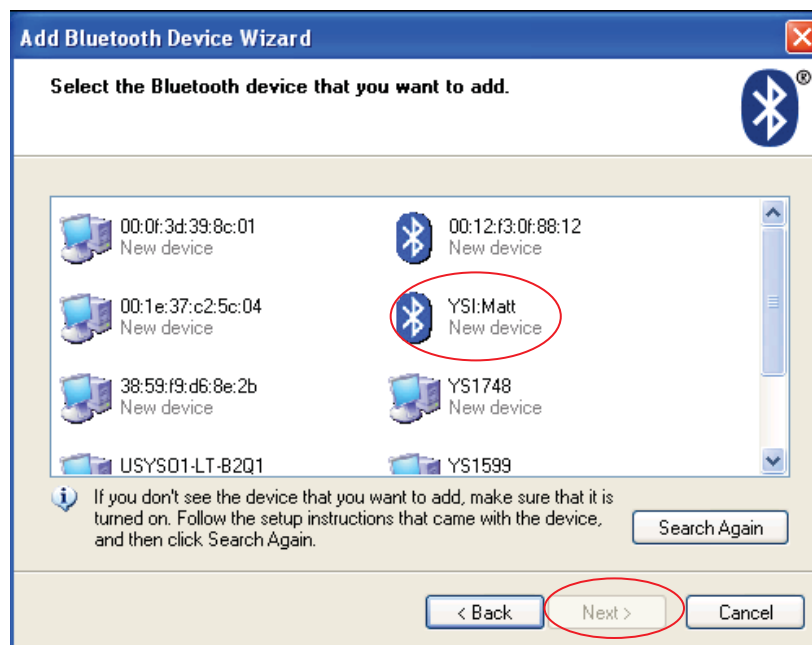
3. This will open the "Add Bluetooth Device Wizard" which will walk you through pairing your sonde with your PC.
4. Activate your sondes Bluetooth radio. This can be done by holding the magnet located in your probe removal tool or EXO handheld at the magnet activation area near the sondes bulkhead (identified by the magnet symbol on the sondes label) or by power cycling the sonde (remove and reinstall batteries). Once the blue LED on the sonde is on steady the sondes Bluetooth radio is active and ready to communicate.
5. Now that your sonde is discoverable put a check in the box next to "My device is setup and ready to be found." And click Next.



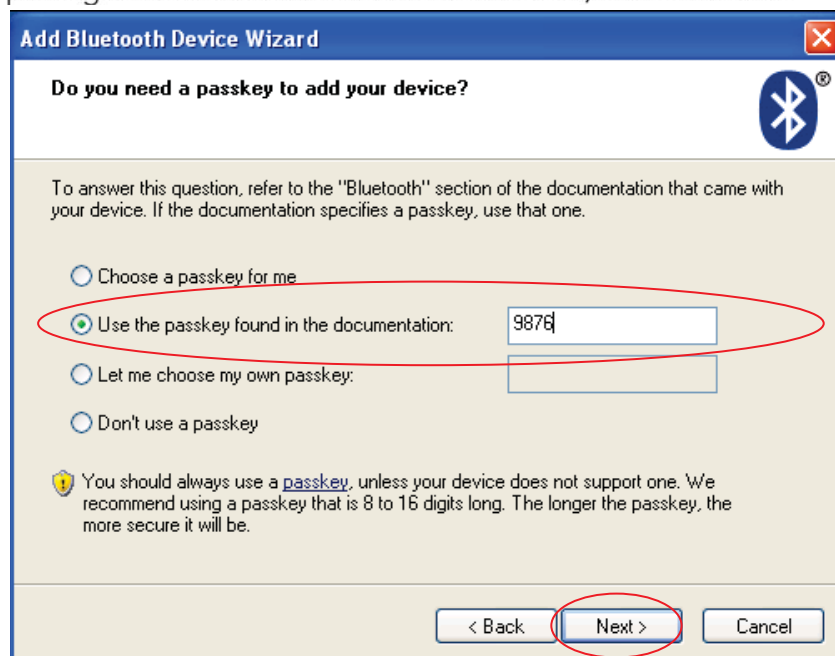
6. Windows will begin searching for discoverable Bluetooth devices in your area. If your sonde is not found on the first scan click "Search Again". All EXO sondes will start with "YSI:" in the device list regardless of what you have the sonde name set to.



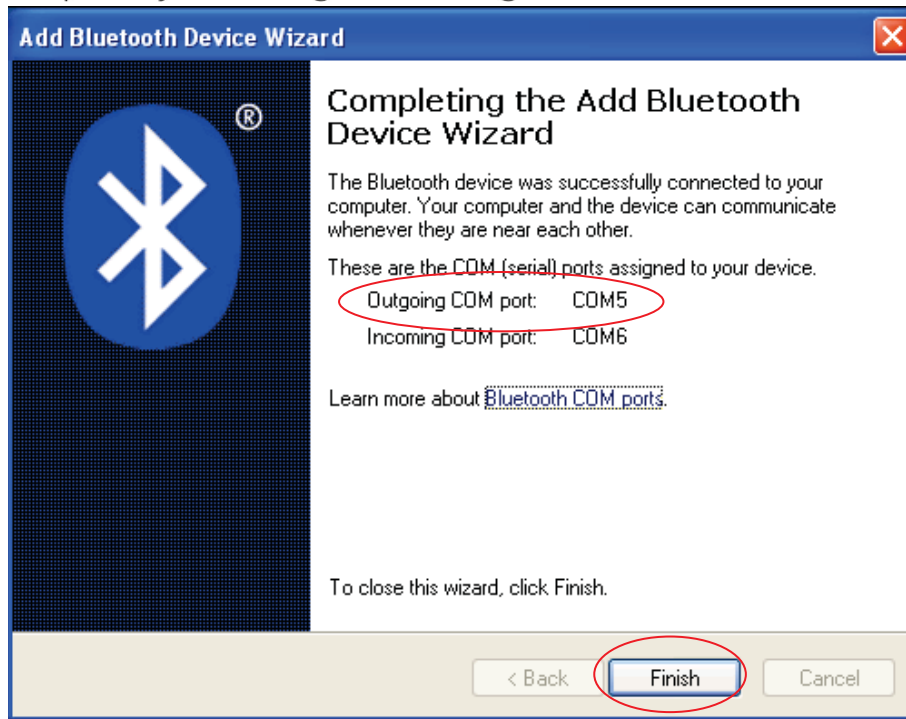
7. Once you see your EXO sonde in the list of devices highlight it by clicking on it and then click Next.



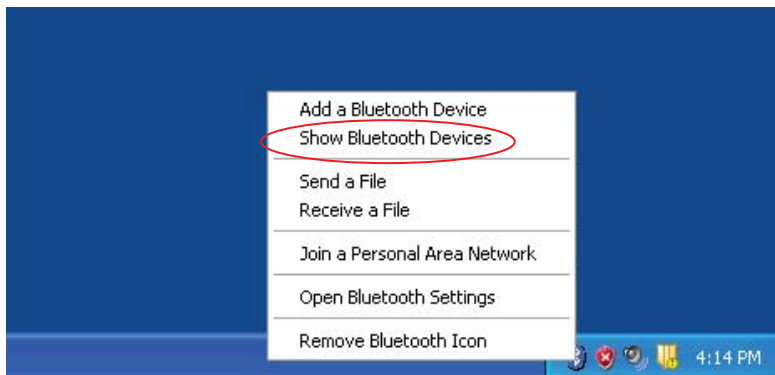
8. Windows will then ask you to select a pairing option. Click on "Use the passkey found in the documentation", enter your Bluetooth pairing code in the white box that opens up (the default pairing code is 9876 on all new Exo sondes) and click Next.



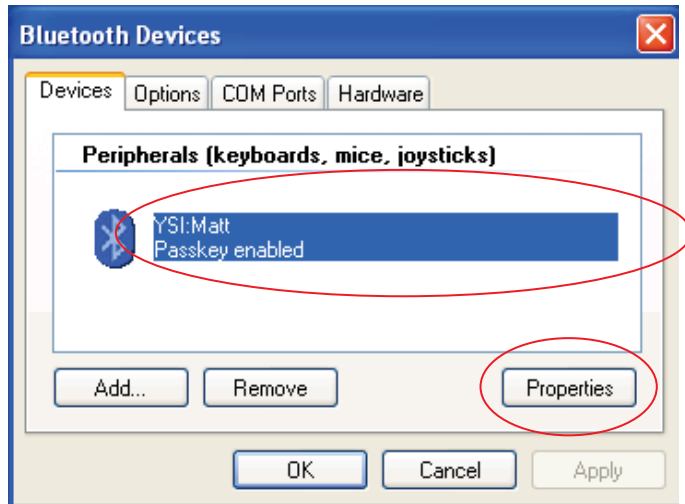
9. Windows will then attempt to connect to your sonde and assign a COM port that you will later use to connect to the sonde via the KOR software. Once a successful pairing has been completed you should get the message seen below. Click Finish.



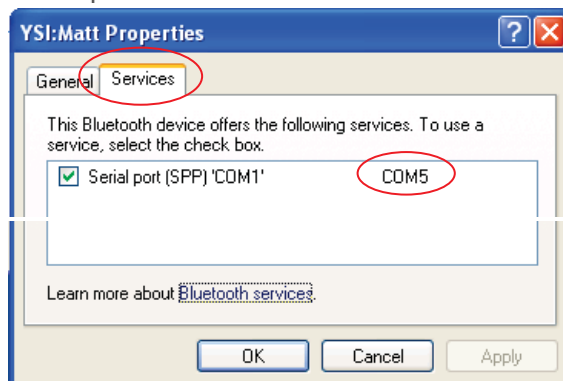
10. The Outgoing COM port is the COM port that you will select in KOR to communicate with your sonde. If you forget this COM port number you can find which one you should select by looking at the Bluetooth devices paired to your PC. To do this click on the Bluetooth icon in the system tray and click "Show Bluetooth Devices".



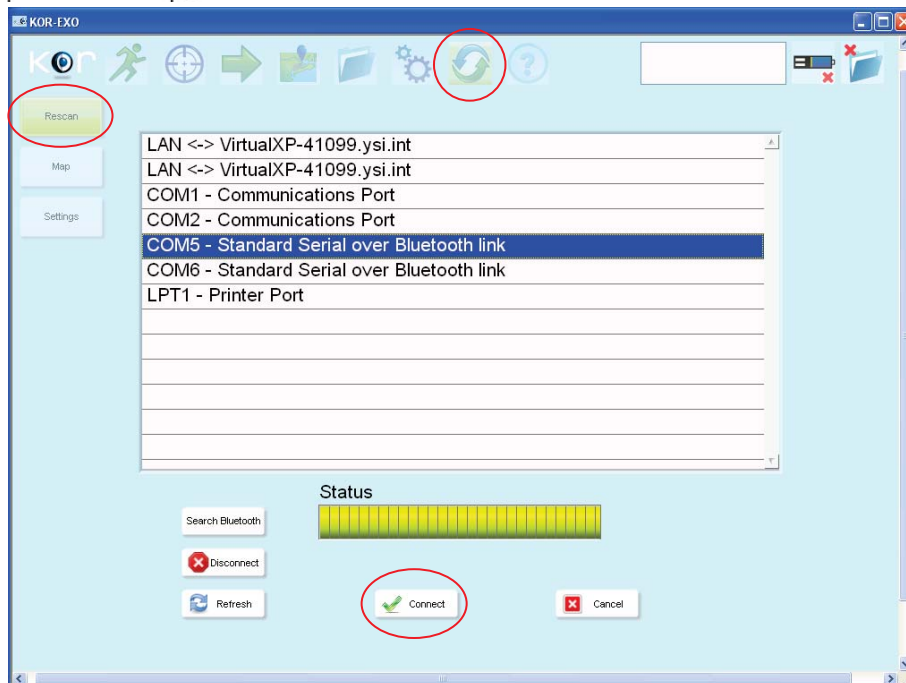
11. Select your sonde from the list of devices and click Properties.



12. Click on the Services tab and you will see the correct COM port number listed. Make a note of this COM port number and click OK or Cancel.



13. Launch KOR, click on the Connections icon and then click Rescan.
14. Select the appropriate COM port from the list (the COM port that was assigned to your sonde in the previous step) and click Connect.



15. Once the connection is complete KOR will automatically take you to the Dashboard screen and begin showing you live data.

