## I.   Installing / Setting Up the PC-501 / USB Sneezer  Excel Software

IMPORTANT:
To provide an optional  user interface for the Inncom PC-501 device, a Microsoft Excel  "VBA" (Visual Basic for Applications)  program was written.   To use this program , the following requirements must be met:
1.  You must have Microsoft Windows XP , 32 Bit Vista * or 32 Bit Windows 7 * installed as the O/S on the computer where you want to use.
    * 64 Bit Windows Vista or Windows 7 have been made to work, but the setup procedure in this document may not work for all 64 Bit installations.
2.  Office Excel 2003 or Office Excel  2007 must be installed on your computer.   Newer Excel versions have not been tested.
3.  Excel "Macro" security level must be set to Medium or lower.

Installation / Setup Instructions
1.  Verify you have all the necessary components and software:
    USB Sneezer Kit (includes the following items)                    Inncom P/N A01-5001.PC.R1.S1
      A.  PC-501 USB Sneezer device                                 Inncom P/N 01-5001.PC.R1.S1
      B.  USB device cable                                          Inncom P/N 04-8048.G
      C.  USB Sneezer software CD or a copy of the software         Inncom P/N NS-501CD
      D.  User Manual/Setup Instructions                            Inncom P/N NS-501DOC

2.  Insert the  USB Sneezer software CD into the computers CD-Rom drive,  or go to the location of the files if on a thumb-drive or other media.

3.  Install the FTDI USB driver for the PC-501.  This driver will create 2 COM ports on the computer that the PC-501 uses.
    a.  Open the "FTDI USB Driver" folder and double-click on the "CDM 2.04.16.exe" file to begin installation of the USB driver required by the PC-501.
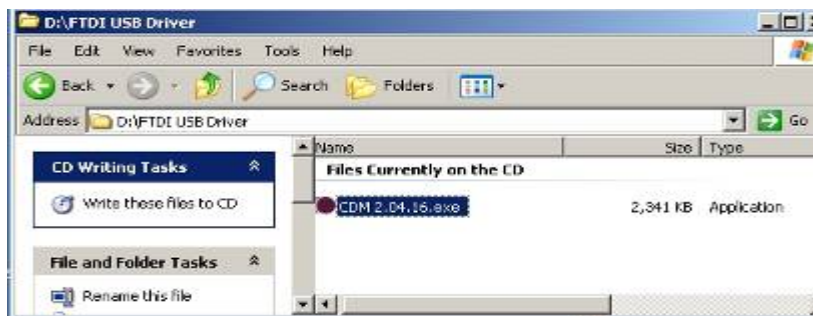


    b.  A DOS window will open as the driver is installed. When the driver is installed the DOS window will close.
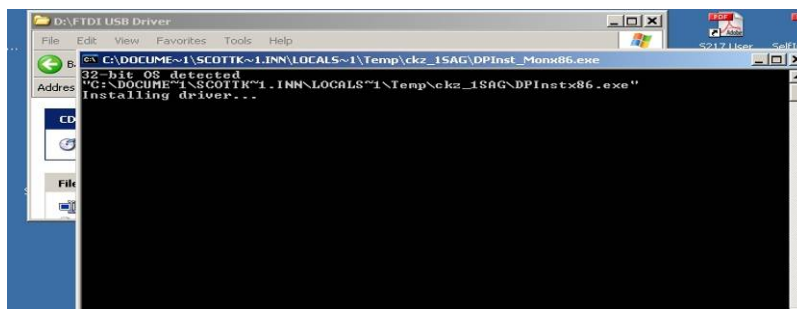
4. Install the OCXNetcom Serial Port Driver . This driver allows Excel to connect to a serial COM port on the computer.  Depending on the version of  Microsoft Windows you are using do one of the following:

**If setting up on a computer with Windows XP do steps 4.a  to 4.c below.**
**If setting up on a computer with Windows Vista or Windows 7  do steps 4.d to 4.h below.**

**Steps 4.a , 4.b and 4.c Only for XP**
a. Open the "OCXNetcom" folder and double-click on the "Setup.exe" file to start the installation of the Excel serial port driver.



b. The NetCommOCX install screen should appear.  Just click Next on each of the 5 screens that appear and use the default settings that appear.



c. Go to step 5.

**Steps 4.d to 4.h  Only for Vista and Windows 7**

The OCXNetcom serial driver required is not inherently supported by Windows Vista or Windows 7, but it can be made to work with Vista or Windows 7 by first manually registering the Windows "default" serial COM port driver named "MSCOMM32.OCX"  that normally comes with Windows XP and then registering the "NETComm.OCX" driver.  Both of these files MUST be copied to the "C:\Windows/system32"  folder and registered from that location.

d.  Copy the "MSCOMM32.OCX" and "NETComm.OCX" files from the install CD to the "C:\Windows/system32" folder on the computer.

e.  Open a DOS Window but you MUST open and run the DOS window as an "Administrator". Use the following steps to do this:

1.  Left-click the "Start" button in the lower left corner of the display.

2.  Type "cmd" (without the quotes) into the run field and you will see the Windows "cmd" DOS program appear as an available program to switch to.

3.  Right-click on the displayed "cmd" program to open a drop-down list and left-click on  "Run as Administrator".   A "User Account Control" window will pop-up asking you to confirm that you want to allow the program to make changes to the computer.  Click "Yes" to allow.
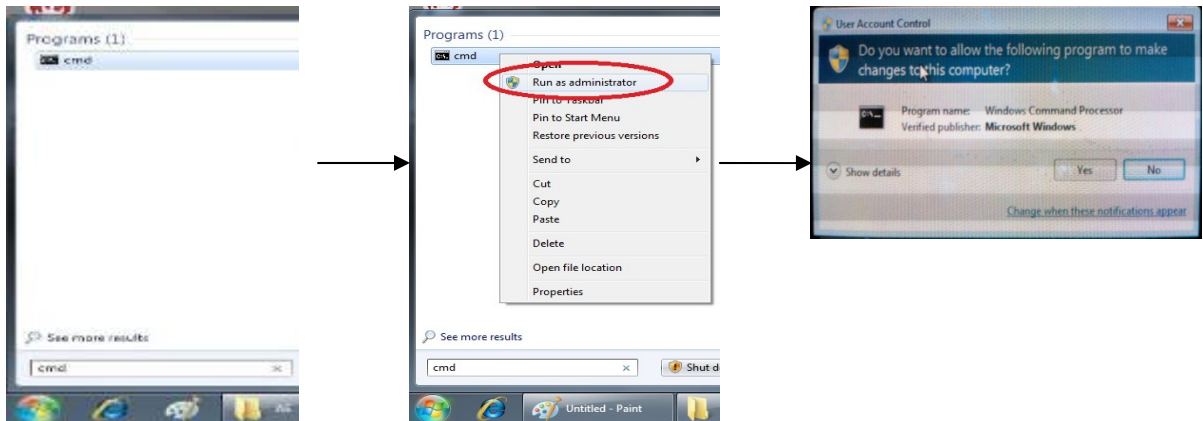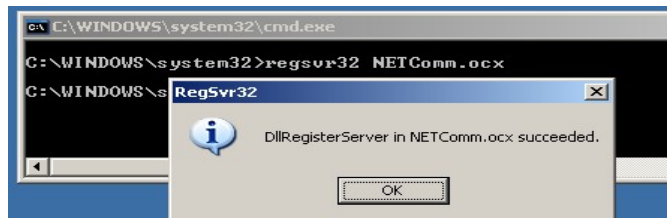


4.  A Windows DOS window will now open with "C:\Windows\system32" selected as the current DOS path.

f.  Type "regsvr32 MSCOMM32.OCX" and press Enter to register the MSCOMM32.OCX driver with Windows.
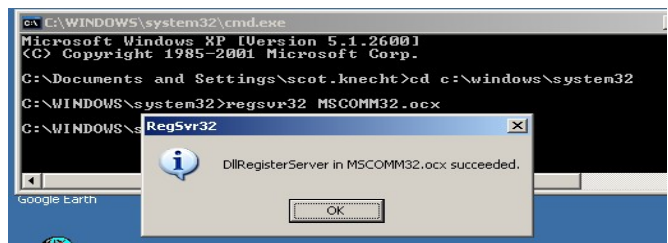


g.  Now that the  "MSCOMM32.OCX" driver is registered, register the "NETComm.OCX" driver by typing  "regsvr32 NETComm.OCX" and press Enter.



h.  Close the DOS window and go to step 5.

5.  Install the OSWinsock TCP/IP network Excel driver . This allows excel to send and receive data over a TCP/IP network.

    a.  Open the "OSWinsock Driver" folder and double-click on the "oswinsck.exe" file to begin installation of the network driver required by the PC-501.
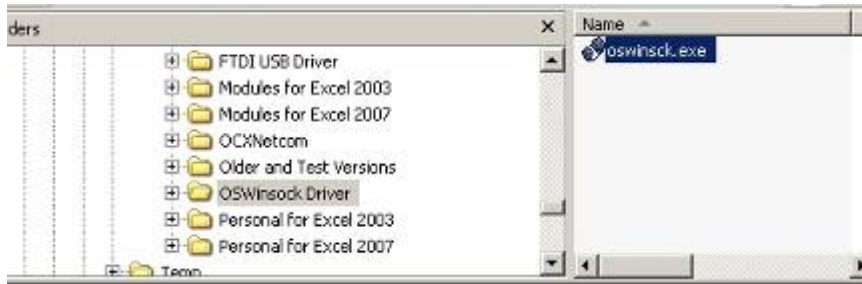


    b.  If a Security Warning appears stating the software publisher could not be verified, click the "Run" button to continue.
    c.  Follow the installation instructions, and just use the default installation location and settings.

6. Setup Excel to run the" USB Sneezer"  program.  The "USB Sneezer" program is not a standard Windows application, but it is an Excel "Visual Basic for Applications (VBA)"   Macro that runs from within  Excel.  Excel MUST be installed on the computer.  Currently , the USB Sneezer application runs and has been tested  on  Excel 2003 and Excel 2007 running under Windows XP and Vista.   Windows 7 has not been tested.

   a. Close Excel if it is currently running.

   b. Copy the appropriate "personal" excel file from the CD or thumb drive to the appropriate "XLSTART" folder on the computer.   Which "personal" file to copy depends on it you are using Excel 2003 or Excel 2007.

   **Important**:  There are 2 "personal" excel files available on the install CD.  One file ends in a ".xls" extension, and one ends in a  ".xlsb" extension.   The "personal.xls" file MUST be used with Excel 2003, and the "personal.xlsb" file MUST be used with Excel 2007.

   **If using Office/Excel 2003:**
   Copy the "**personal.xls**" file from the "Personal for Excel 2003"  folder on the CD or thumbdrive and paste it into the  **C:\Program Files\Microsoft Office\OFFICE11\XLSTART**  folder on the computer.
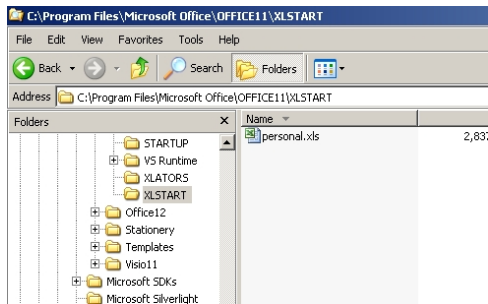
   

   **If using Office/Excel 2007:**
   Copy the "**personal.xlsb**" file from the  "Personal for Excel 2007"  folder CD or thumb drive and paste it into the  **C:\Program Files\Microsoft Office\OFFICE12\XLSTART**  folder on the computer.
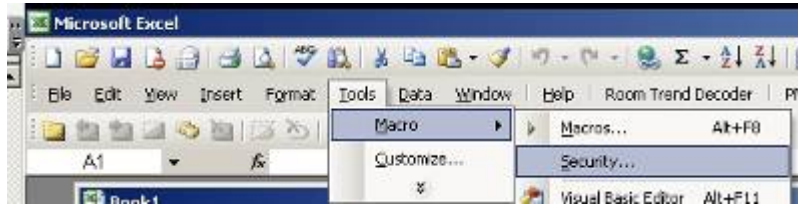
   Note that the Personal file for Excel 2007 as "XLSB" as an extension.
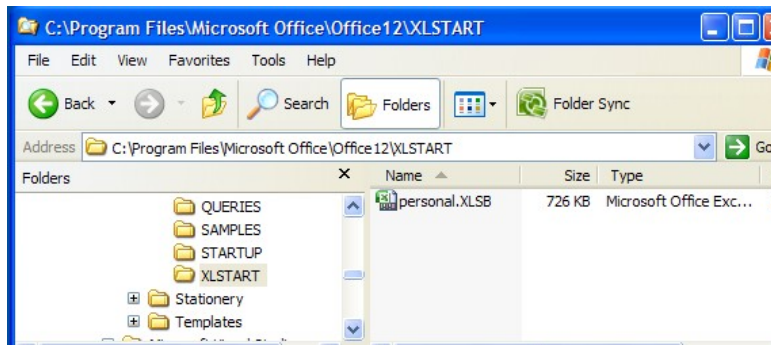
**7.** Start Excel and setup Excel to support running Macros.

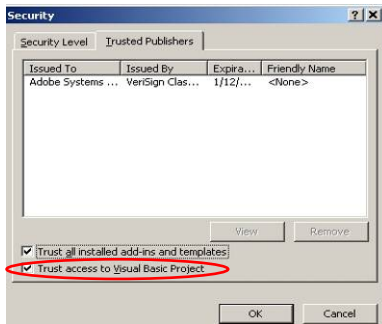**If Setting Up Excel 2003 Do The Following 4 steps to allow Excel to run macros:**

a. From the Excel main menu bar, select "Tools > Macro > Security" to open the "Security" window.



b. Select the "Security Level" Tab and select "Medium" Security Level. This is required to run Excel macros.
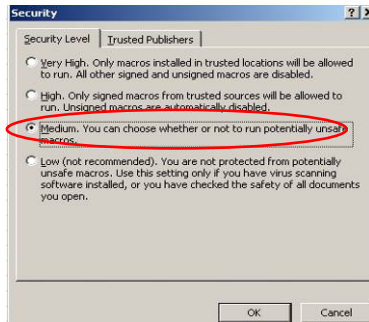


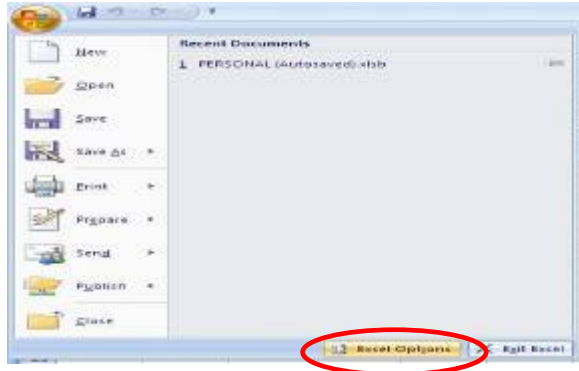c. Select the "Trusted Publishers" tab and check the "Trust access to Visual Basic Project"
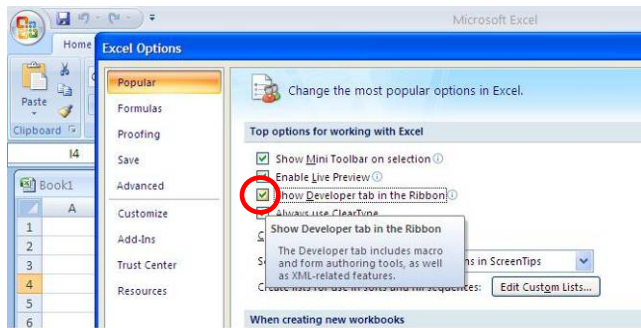


d. Click OK button to close.

**If Setting Up Excel 2007 Do The Following 6 steps to allow Excel to run**                    **macros:**

a.  Click the "Office" button in the upper left corner of the Excel window.

b.  Click the "Excel Options" button at the bottom of the window that opens.

c.  Check the "Show Developer Tab in the Ribbon" option if not already checked and click  the OK button to close the Excel Options window.  If not already there, a new tab, "Developer", should appear on the main Excel menu (ribbon) bar after clicking OK.
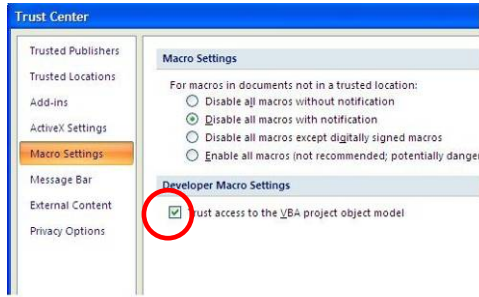
d.  Click the "Developer" tab on the main menu bar.
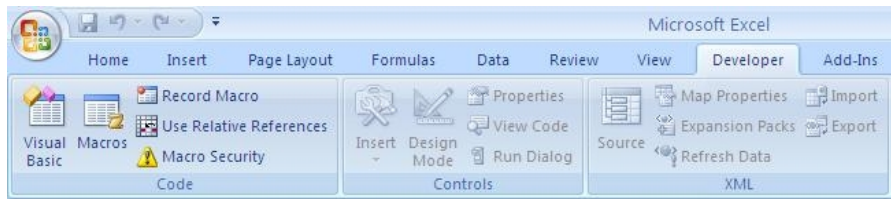
e.  Click the "Macro Security" button to open the "Trust Center" window.

f.  On the "Trust Center" window, check the "Trust access to the VBA project object model, then click OK to close the window.
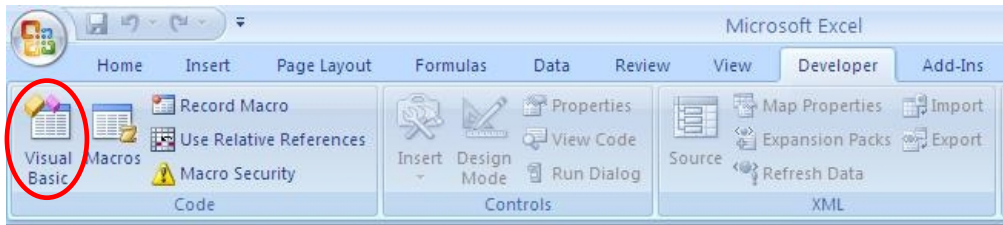


8.  Open  the Excel Visual  Basic Editor (VBE) window.

**If using Office/Excel 2003:**
From the Excel menu bar, select " Toosl > Macro > Visual Basic Editor".
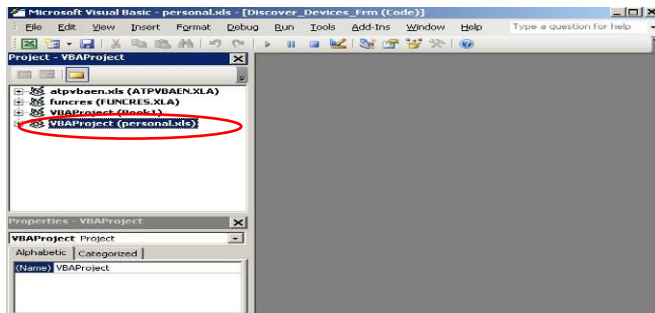


**If using Office/Excel 2003:**
Click the "Developer" tab on the main menu (ribbon), then click the "Visual Basic" icon on the far left.



9.  If you copied the Excel "personal.xls" (Excel 2003) or the "PERONSL.XLSB" (Excel 2007)  file correctly in step 7  above,  you should see the "personal"  as a project shown in the VBA Editor project tree.

a. On the Microsoft Visual Basic window, select "Tools > References" from the main menu to open the "References" window
   Check ( or verify they are checked) the following items:
   o Visual Basic for Applications
   o Microsoft Visual Basic for Applications Extensibility
   o MSComm32.OCX replacement
   Click OK to close the "References" window when done.
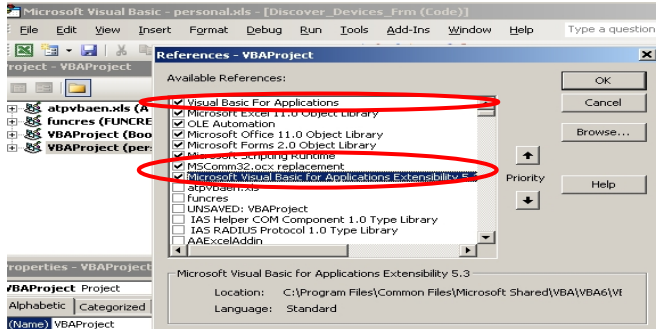


b. Save the "personal.xls" or "personal.xlsb" file by selecting "File >Save personal.xls" or "File >Save personal.xlsb" from the Visual Basic Editor menu bar.
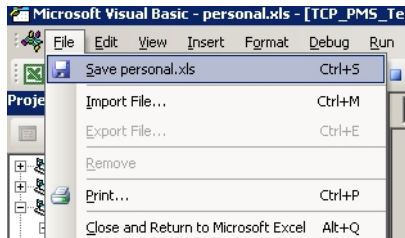


10. Close the Visual Basic Editor.

11. Shut down and restart Excel.

12. When Excel starts, it will automatically create 2 drop-down menus in the main Excel menu bar:
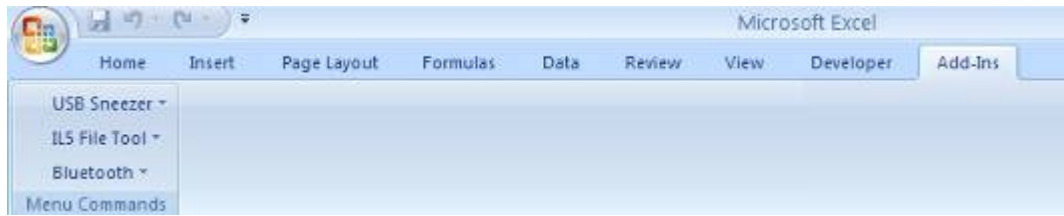    USB Sneezer
    IL5 File Tool

    The "IL5 File Tool" is another Macro that automatically gets added because it is also part of the "personal" macro that was installed during this procedure. This is a macro that allows "crunching" IL5 data files, but is not discussed as part of this document.

**Excel 2003**

**Excel 2007**
In Excel 2007, they appear in the "Add-Ins" tab.



It will also create a new folder "C:\Inncom\Sniffer".   Inside this folder several other folders will also be created:
Commands
Device_Offsets
Reports
RoomLists
Traces



14. Copy the contents of the "Device Offsets" folder on the Install CD and paste into the "C:\Inncom\Sniffer\Device_Offsets" folder.
These files define memory offset names used by the "Read/Modify Device Offset" feature.

If done correctly, you should see several device "cbc" files now located in the  "C:\Inncom\Sniffer\Device_Offsets" folder.
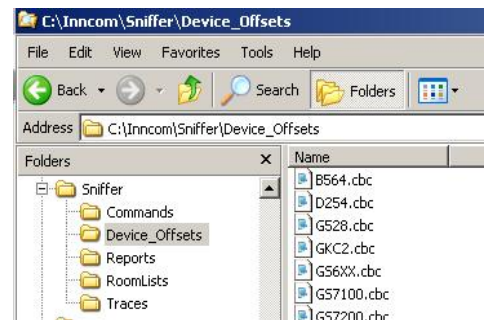


15. To run the USB Sneezer macro, left-click "USB Sneezer" and the click "Run".