Instructions for establishing communications for the G1 Data Logger on Windows 7 or Windows Vista

For G1 models Q200 and MX5 (which are all but the oldest G1 units), the Windows CE 4.2 operating system of these units is not supported by the USB driver in the Mobile Device Center application. You must therefore connect to your computer by other means. Your best option is to connect to a RS-232 port on your computer using the serial cable you received with your G1.

Infra-red is a second, less attractive alternative to a serial port. If your computer is a laptop with an infra-red sensor you might give this a try to see if it works for you (instructions at the end of this document). However, chances are it will not work. And if you are considering the purchase of a infra-red to USB adapter for your computer, be warned that we can find no model of this type of device that will work with the G1. At M. C. Miller we have a small stock of infra-red/USB adapters that are known to work. However, this model has been discontinued and we currently are not aware of any viable replacement.

Know your computer's serial port

So this document is primarily focused on the serial port approach. If your computer does not have a 9-pin male serial port integrated, you will need to purchase serial/USB adapter. These are common and can be found most places where computer parts are sold. Make sure you find one with the Windows 7 logo showing that it is certified.

IMPORTANT: When you insert the adapter into your USB port, a COMn: serial port is created. You need to know the value of 'n' to setup the communications. With some adapters, this is not so easy. Follow this procedure to figure it out no matter what adapter you use:

1. Unplug the adapter from your computer.

2. Press the Start button then right-click "Computer" on the menu, or right-click "Computer" on your desktop.

3. Select "Properties".

4. In the left margin of the resulting window, select "Device Manager".

5. In the Device Manager window, look for a section called "Ports (COM & LPT)"

    1. If you don't have such a section, you have no serial ports so the adapter's port will be the only port available.

    2. Otherwise, make a note of the current COM ports. To discover what port the adapter created, just insert the adapter and press the "Scan for hardware changes" button at the top of the Device Manager window.

Make sure your computer has Mobile Device Center installed

Not all versions of Windows 7 have Windows Mobile Device Center (WMDC) pre-installed. You need to make sure it is installed before you can proceed (NOTE: Mobile Device Center replaces ActiveSync for Windows Vista and Windows 7).

To check if WMDC is installed click the Windows Start button and, in the "Search Programs and Files" box at the bottom type "Mobile Device". If WMDC is installed you will see "Windows Mobile Device Center" appear in the list.

If WMDC is not installed, you will need to install it. With your web browser, go to the microsoft.com web site and search for "Mobile Device Center". Select the download appropriate to your operating system and install it.
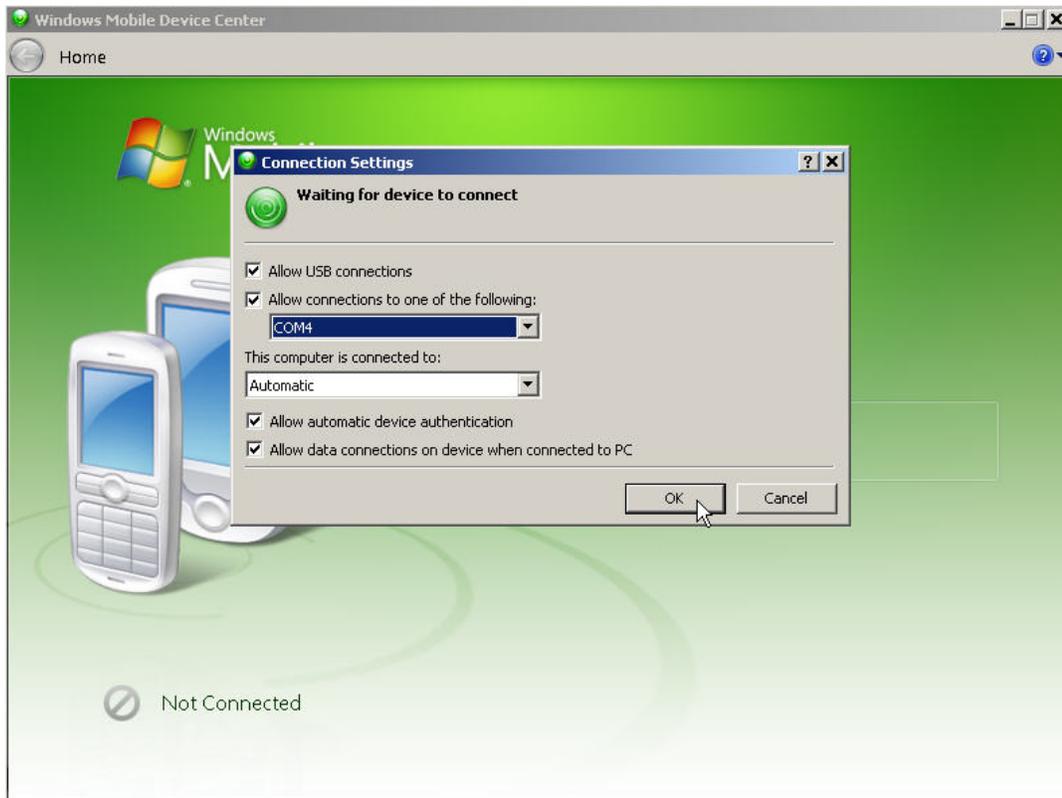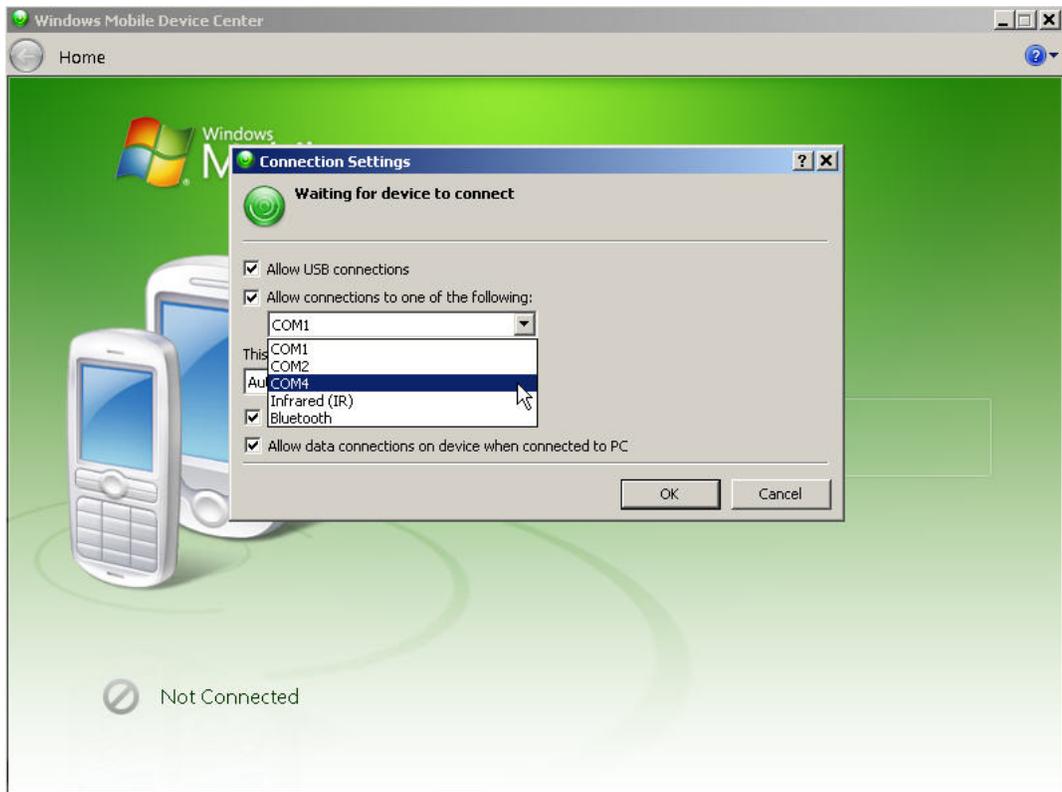
Windows Mobile Device Center Setup

Once WMDC is installed, alternatively, you can use it to determine which COM port is being used by the serial/USB adapter.

1. Make sure the adapter is not plugged into any USB port on your computer.

2. Open the WMDC (can open via the Control Panel).

3. 'Mouse over' *Mobile Device Settings* and you will see *Connection Settings*, click it.

4. If the field *Allow connections to one of the following:* is not checked, *check* it.

   1. click the dropdown arrow, and note if there are any COM port connections present

      1. If you don't have any COM ports showing, you have no serial ports. In this case, when the adapter is plugged in, it will be the only COM port showing.

      2. If you see COM ports, note them, so when the adapter is plugged in, it will be assigned a new COM port.
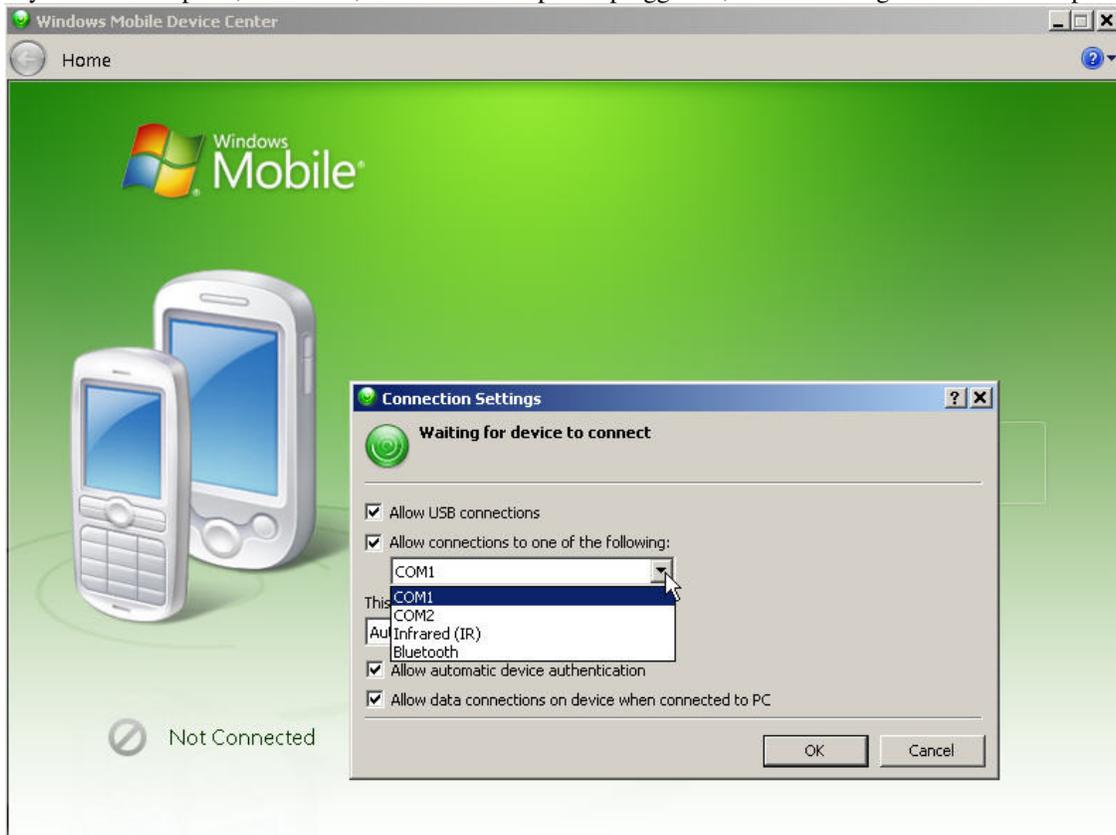
   Here we have existing COM1 & COM2 ports.

   3. Now plug-in the adapter

   4. When the WMDC is re-opened, and Connection Settings is checked again, in this example, a new COM4 port appeared. This *new* COM port is the one that will be selected for connecting your G1.

Windows Mobile Device Center

Home

Windows M...

Connection Settings

Waiting for device to connect

☑ Allow USB connections
☑ Allow connections to one of the following:
COM1
    COM1
    COM2
    COM4
    Infrared (IR)
☑ Bluetooth
☑ Allow data connections on device when connected to PC

OK   Cancel

⊘ Not Connected

Windows Mobile Device Center

Home

Windows M...

Connection Settings

Waiting for device to connect

☑ Allow USB connections
☑ Allow connections to one of the following:
COM4
This computer is connected to:
Automatic
☑ Allow automatic device authentication
☑ Allow data connections on device when connected to PC

OK   Cancel

⊘ Not Connected

Configure your G1 serial port

Your G1 has two connectors and either one can be used for the serial connection. The left-hand port is COM1 (preferred) and the right-hand port is COM4. Setup '*PC Connection*' on the G1 Control Panel, specifying the serial port that will be used for the connection. Choices will be COM1 (if you use the left plug) or COM4 (right-hand plug). MCMiller recommends using the highest baud rate setting associated with the com port.
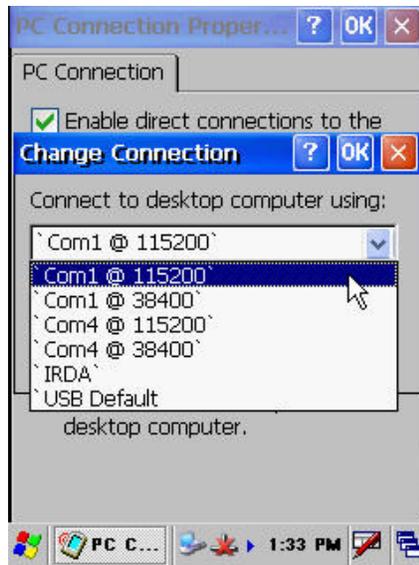

1. Control Panel

2. Control Panel→PC Connection

3. PC Connection Change

4. PC Connection COM Selection

5. PC Connection COM OK

Connect to your G1 - Windows Mobile Device Center connect option

You have now setup the WMDC on your PC and the PC Connection on your G1. Connect the G1's serial cable to the RS-232 COM connector selected to be used via your PC Connection setup above…

WMDC will detect a connection and will open… You will see **Connected**

1. By plugging your G1 serial cable to the G1, the WMDC connects to your G1.

2. Click the **Connect without setting up your device**, your G1is now ready to use with your Vista or Win7 PC.

G1 Connectivity via IR support.

To connect your G1 to a Windows 7 or Vista platform, refer to the '**ProActive & MCM Data Loggers on Win7 & Vista.pdf**' document.