



# Canadian Nuclear Society – Société Nucléaire Canadienne CNS Geiger Kit Computer User Quick Reference

## GETTING STARTED

- 1) You may run the Aware Software from the CD, or install to a directory on the computer hard disk. The latter is preferable as the program will attempt to save the set-up information and any data files in this location.
  - a. Create a folder (directory) C:\Aware
  - b. Copy the contents of the Aware software directory on the CD to that folder
  - c. Select the Aw-Radw icon / executable program, right click and then click on “Create a shortcut”
  - d. Select the shortcut and drag it to the desktop.

- 2) Before you run the program, it is important to know which type of computer interface you are using for the RM-80 Radiation Monitor (Geiger). Please see the “Interfaces” document.

### 3) Interface Driver Installation:

- a. If you have installed a Type 1 Interface, install the driver if necessary as per the supplier’s instructions (Windows may include a driver);
- b. If you have a Type 2-a USB interface, please find the driver installation program on the CNS CD, Aware Software directory, USB serial port folder:

Windows XP: PL2303 folder, XP folder, PL-2303 Driver Installer (2005)  
Run the PL-2303 Driver Installer program

Windows Vista: please contact the CNS and we will send you a copy of the tested obsolete version of the Prolific driver.

Windows 7: The CNS has received only one serial port adapter type 2-b that works with a 2009 version of the Windows 7 driver. We have yet to distribute any for Geiger Kits. This document will be revised when these become available.

The PL2303\_Prolific\_DriverInstaller\_v110.exe file is compatible with the type 2-b, but has only been tested successfully with Windows 7.

There is a newer driver for the type 2-c adapters available at <http://www.prolific.com.tw/eng/downloads.asp?ID=31>

- c. If you have a Type 3 USB-MSP interface, the driver in the FT\_install directory has been tested with XP, Vista and Windows 7.

Windows 7: it is necessary to perform the install function TWICE to make the interface functional. (This is not the case for the other Windows version.)

All versions:

- i. Aware Electronics recommends that you copy the drivers to a temporary folder on the computer hard disk



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- ii. Plug the USB-MSP into a USB port via the interfacing cable
  - iii. Windows Found New Hardware Wizard pops up asking if may Windows connect to Windows Update  
Check "**No, not this time**" then click "**Next**"
  - iv. Click "**Install from a list or specific location**" then "**Next**"
  - v. Click "**Search for the best driver in these locations**" and
  - vi. "**Include this location in the search**" then click "" and
  - vii. Browse to the temporary FTDI folder created or the CD folder.
  - viii. Windows copies the files needed then click "**Finish**".
  - ix. Windows 7: So far half of the driver has been installed. Run the same installer once again.
  - x. You may have to re-boot the PC. (**We didn't.**)
- 4) Now the PC should have a new COM port.
- a. Plug the RM into the Serial Port, USB serial port, or USB-MSP
  - b. Start Aw-Radw and click "Rad Options" "Find RM or Micro-Controller"  
Aw-Radw should display in its main window:
    - i. "Aware-RM Detected on COM X", or
    - ii. "Aware-MSP430 Detected on COM X"
    - iii. where X is the COM number – you'll need this!
- 5) Type 1 or Type 2 Interfaces:
- a. Click "Rad Options"
  - b. Click "RM COM Port"
  - c. Select the number corresponding to X above
  - d. Go to 7 below.
- 6) Type 3 USB-MSP Interface:
- a. Click "Rad Options" and check "Micro-Controller source switch".
  - b. Next click "Rad Options" - "Micro-Controller Options" then "Micro Controller COM port" then enter the COM port number found above.
  - c. Next click "Rad Options"  
- "Micro-Controller Options" - "COM Port Baud Rate and XON-XOFF"  
then check by clicking "4800 Baud" (I found 9600 Baud worked too?)  
and also make sure XON-XOFF is not checked.
  - d. Next click "Rad Options" - "Micro-Controller Options"  
and click to check "Use CRC Check"
  - e. Click on "Rad Options" – "Geiger Click Options" -- select "**Low Priority Direct X**"
- 7) Now Aw-Radw is ready to start collecting radiation data. See Aw-Radw's help for more info. The Experiment 0 Section of the Workshop Manual includes additional information.
- a. Click on "Rad Collection" – "Express Start of Data Collection"
  - b. Cancel each of the data logging options if you don't intend to use them
  - c. The program should launch with the saved "SET" file parameters.
  - d. The next time you start the program, you should have to start at #7.