

Agilent M918X Signametrics-Compatible DLL Installation Instructions

This software driver provides a mechanism for customers to use Agilent M918X DMMs in their existing test systems that were designed around the Signametrics SMX206X DMMs.

With this driver:

- Agilent M918Xs can be loaded into existing test systems designed for the Signametrics SMX206X series.
- Agilent M918Xs can be controlled through the Signametrics API.
- You can use Agilent M918Xs with software written for SMX206Xs, including the Signametrics Soft Front Panel.
- You can use Agilent M918Xs and Signametrics SMX206X in the same system, controlled by the same software.

However, the following is **not** supported:

- You cannot store calibration data onto the EEPROMs of M918Xs.
- You cannot run SMX206X DMMs through the Agilent front panel.
- You cannot use the Agilent API (AgM918x IVI driver) to access SMX206X DMMs.
- No accuracy specifications are guaranteed for functions not available on the M918X (VAC Source, inductance).
- Six-wire guarded resistance measurements are not supported on the M918X DMMs.

Installation Process

M918x driver installation (required if the system contains any M918Xs)

Run the Agilent M918x Installation (M918X_Setup.exe). A restart will be required.

For M918x DMMs connected to the system afterwards, the new hardware wizard found may appear, in which case, select "search automatically for updated driver software?".

Opening the M918x DMM with the Agilent soft front panel verifies that the drivers have been successfully installed.

SMX206X driver installation (required if the system contains any SMX206Xs)

Connect the DMM to your system.

goto Control Panel -> System -> Device Manager, find the DMM. If no drivers have previously been installed, it may show up as "Other devices", "PCI Data Acquisition and Signal Processing Controller", with a yellow exclamation mark.

Right click, "Update Driver Software..."

select "Browse my computer for driver software"

select "Let me pick from a list of device drivers on my computer"

select "Show All Devices", click next

click "Have Disk..."

click "Browse..."

direct the wizard to the "M918x_Signametrics-Compatible" folder that contains SMX206X.inf

click Next

In the device manager, the DMM should now show up under an entry "Agilent-VISA Modular Devices".

Signametrics-Compatible DLL Installation

For systems that have not had the Signametrics software installed, copy the SM2060.dll in the M918x_Signametrics-Compatible directory to your windows system32 directory, generally "C:\windows\system32".

For systems that have had the Signametrics software installed...

- 1.) Find the existing SM2060.dll. By default it is installed in "C:\windows\system32", but it may be in the same directory as your test program, or elsewhere on your system. Save a copy of this file. Then delete this file.
- 2.) Attempt to run your test software. It should not run, giving an error regarding the missing SM2060.dll and exiting. This test is important to ensure that the DLL being replaced is the one that Windows is actually loading. If your test software runs, you will need to find where the SM2060.dll is that is being used on your system. A full windows file search of your hard drive may be necessary at this point.
- 3.) Copy the M918x Signametrics-compatible SM2060.dll to the location where your Signametrics SM2060.dll was located.
- 4.) You are now ready to run your test software.

Checking that the installation was successful:

The following are ways to verify that your SMX206X DMM is using the M918x Signametrics-Compatible software driver:

- Open device manager, find the dmm, right click and select "properties". Select the Driver tab. Driver version should be 80.0.14318.1 or higher.
- Find the SM2060.dll (see instructions in Signametrics- Compatible DLL Installation), Right click, select "Properties", select the "Details" tab. File version should be 0.2.0.0 or higher.
- When running your test code, the API function call DMMGetVer should return a DLL Version which is greater than 2.00.