

# MD1 High-Speed Digitizer Instrument Drivers

## 1.14.11 Version Information

Released Date:	10 March 2017
Operating systems:	32-bit or 64-bit OS: Windows 7 SP1 Windows 10 (with U1084A)
Required Software:	Keysight IO Libraries Suite (version 16.3 update 2 or later)
Supported Instruments	M9202A, M9210A, M9211A, M9703A, U1084A, U5203A and Acqiris Line
File Name:	MD1_Software_CD_1.14.11.exe MD1_Software_Linux_1.14.9.tar.gz (linux)

### Important note

For U1084A users switching from Windows 7 to Windows 10 operating system, an upgrade procedure of your module is required. It is required to run the *U1084A\_UpdateForWindows10.exe* upgrade software. In order to get this software and the upgrade procedure, please contact support [acqiris\\_support@keysight.com](mailto:acqiris_support@keysight.com).

### Bug Fixes

This Corrective Release addresses only U1084A digitizers. Two firmware files have been updated:

- U1084 AVG:
  - Corrected self-calibration error due to ADC receiver calibration failure (#473578).
  - Corrected Averager mode blocking, requiring reboot to restart (#473577).
- U1084 TDC: Corrected erroneous Peak Histogram Count at low peak rate (#467586).

For more details about this release, please see the following file: <Program Files or installation directory>\Agilent\MD1 Digitizer\ReleaseNotes.txt

## 1.14.9 Version Information

Released Date:	11 May 2016
Operating systems:	32-bit or 64-bit OS: Windows 7 SP1 Windows 10 (with U1084A)
Required Software:	Keysight IO Libraries Suite (version 16.3 update 2 or later)
Supported Instruments	M9202A, M9210A, M9211A, M9703A, U1084A, U5203A and Acqiris Line
File Name:	MD1_Software_CD_1.14.9.exe (Last Linux version is 1.14)

### Important note

For U1084A users switching from Windows 7 to Windows 10 operating system, an upgrade procedure of your module is required. It is required to run the *U1084A\_UpdateForWindows10.exe* upgrade software. In order to get this software and the upgrade procedure, please contact support [acqiris\\_support@keysight.com](mailto:acqiris_support@keysight.com).

### Bug Fixes

- Corrected installation issues on some operating systems.

For more details about this release, please see the following file:

<Program Files or installation directory>\Agilent\MD1 Digitizer\ReleaseNotes.txt

## 1.14 Version Information

Released Date:	15 October 2015
Operating systems:	32-bit or 64-bit OS: Windows 7 Linux with kernel 2.6 & 3
Required Software:	Keysight IO Libraries Suite (version 16.3 update 1 or later)
Supported Instruments	M9202A, M9210A, M9211A, M9703A, U1084A, U5203A and Acqiris Line
File Name:	MD1_Software_CD_1.14.8.exe (Windows) MD1_Software_Linux_1.14.8.tar.gz (linux)

### Important Note for existing users:

When updating from a previous MD1 software release, the computer may need to be restarted **twice** for some types of instruments

After installing MD1 1.14, the instrument may not be available and Windows could report an error message –*This device cannot start. (Code 10)*. In this case, user should restart the computer to be able to start the instrument.

### New Features

- M9703A: Extend supported clocking modes for M9703A synchronization.
- M9703A: Extend M9703A multi module synchronization to 8 modules.
- M9703A: Allow multi-record DDC acquisitions using magnitude trigger.
- M9210A and M9211A: ASBus support.
- Improve the max number of segment from 65'536 to 131'072.

### Bug Fixes

- Corrected InitialXTime values returned by Fetch and Read functions.
- Corrected loading of FDK user bitfiles from current directory.
- Allow presence of MD2 supported instruments in same system.
- M9703A:
  - Support NUM\_ACQUIRED\_RECORDS attribute.
  - Corrected MAX\_SAMPLES\_PER\_CHANNEL attribute value.

- Added copy of attributes from master to slave in synchronization.
- Corrected erroneous loading of DpuC with DpuD bitfile.
- Extend maximum value for trigger delay.
- Enabled FDK CountersMode usage.
- Corrected PIO input to DPU after clock change.
- Increased maximum LO frequency for F05 DDC to 650 MHz.
- Corrected FDK CoreVersion values.
- Windows: Corrected use of StartAddress in WriteIndirectInt32.
- Linux:
  - Added support for MultiInstrAuto init option (Default to false).
  - Allow wait durations above 10 seconds.

#### Limitation when using MD1 in MATLAB

- MATLAB Instrument Control Toolbox is required.
- Please note that MATLAB 2015a or later are not supported.
- Please note that MATLAB R2016 doesn't plan the support of IVI-COM 32-bit.

For more details about this release, please see the following file:

<Program Files or installation directory>\Agilent\MD1 Digitizer\ReleaseNotes.txt

## 1.13.7 Version Information

Released Date:	09 January 2014
Operating systems:	32-bit or 64-bit OS: Windows 7, Windows Vista, Windows XP Linux with kernel 2.6 & 3
Required Software:	Keysight IO Libraries Suite (version 16.3 update 1 or later)
Supported Instruments	M9202A, M9210A, M9211A, M9703A, U1084A, U5203A and Acqiris Line
File Name:	MD1_Software_CD_1.13.7.exe

### Important Note for existing M9703A Users:

This MD1 1.13 release requires an update of the M9703A Control FPGA (version 3.0.59 or newer) for units delivered prior to December 2013.

Please refer to the User Manual for more information on how to update the control FPGA.

### New Features

- Added support of U5203A high-speed digitizer.
- M9703A: Added support of following options:
  - M9703A-M16 (16GB memory)
  - M9703A-LDC (Limited BW RT DDC)
  - M9703A-FRF (Optimized analog performance) options support.
- M9703A: support of 2<sup>n</sup> downsampling.
- M9703A: support of multi-board synchronization.
- M9703A: support of aperture delay controls.
- Added compatibility with U5340A FDK product.
- Extended LogicDevice interface.

## Bug Fixes

- Corrected InitialXOffset returned from Fetch and Read functions to include trigger delay.
- Improved Re-arm time in multi-segments mode.
- Optimized acquisition duration.
- Corrected Slow Boot on HP-Z420.
- Corrected SSR No Gate bad descriptor and timeout error.
- Corrected SAR de-synchronization of the Ping-Pong state machine.

For more details about this release, please see the following file:

<Program Files or installation directory>\Agilent\MD1 Digitizer\ReleaseNotes.txt

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