# LabWindows/CVI, VXIpnp driver history for the R&S® SFD DOCSIS® Signal Generator

#### **Products:**

| R&S®SFD



Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for C/C++, VEE, MATLAB® etc.

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# 1 Supported Instruments

In the following table the supported Rohde & Schwarz instruments and firmware versions are listed:

Which instruments are supported?					
Current revision of instrument driver supports these instruments and firmware versions:					
Instrument	Supported Firmware	Remarks			
SFD	78065				

### 2 Getting Started

#### 2.1 LabWindows/CVI driver

The Rohde & Schwarz **rssfd** Instrument driver can be used in LabWindows/CVI 6 and later. In order to be able to compile an application it is required to add following files to your LabWindows/CVI project:

- rssfd.c + rssfd.h
- rssfd\_attributes.c + rssfd\_attributes.h
- rssfd\_utility.c + rssfd\_utility.h
- rsidr core.c + rsidr core.h
- rssfd callbacks.c
- rssfd.fp + rssfd.sub

#### 2.2 VXIplug&play driver in C/C++, LabWindows/CVI

In this case the compiled source code from LabWindows/CVI driver is used. The compiled ANSI-C libraries exist only for Windows XP and newer, 32-bit and 64-bit.

Add the following files to your 32-bit target project:

- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\include\rssfd.h
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\lib\msc\rssfd.lib (static)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\Bin\rssfd 32.dll (dynamic)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rssfd\rssfd.fp (in CVI only)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rssfd\rssfd.sub (in CVI only)

Add the following files to your 64-bit target project:

- C:\Program Files\IVI Foundation\VISA\Win64\Include\rssfd.h
- C:\Program Files\IVI Foundation\VISA\Win64\Lib x64\msc\rssfd64.lib (static)
- C:\Program Files\IVI Foundation\VISA\Win64\Bin\rssfd\_64.dll (dynamic)
- C:\Program Files\IVI Foundation\VISA\Win64\rssfd\rssfd.fp (in CVI only)
- C:\Program Files\IVI Foundation\VISA\Win64\rssfd.sub (in CVI only)

#### 2.3 VXIplug&play driver in C# and Visual Basic.NET

A C# or VB wrappers are necessary to access the driver DLL functions. The **rssfd** wrappers are automatically installed in the following folders:

32-bit driver

C:\Program Files (x86)\IVI Foundation\VISA\WinNT\include\rssfd.cs C:\Program Files (x86)\IVI Foundation\VISA\WinNT\include\rssfd.vb

64-bit driver

C:\Program Files\IVI Foundation\VISA\Win64\Include\rssfd64.cs C:\Program Files\IVI Foundation\VISA\Win64\Include\rssfd64.vb

#### 2.4 VXIplug&play driver in MATLAB

MATLAB instrument driver rssfd.mdd can be found in:

32-bit driver

C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rssfd\rssfd.mdd

64-bit driver

C:\Program Files\IVI Foundation\VISA\Win64\rssfd\rssfd.mdd

For detailed description on how to use the driver in MATLAB please refer to the Application Note 1MA171 - How to use R&S instrument in MATLAB

#### 2.5 Linux and Mac OS X

To be able to use Rohde & Schwarz **rssfd** Instrument driver in Linux or Mac OSX, the functioning VISA is required. Then, the process is the same as using LabWindows/CVI driver.

#### 2.6 Additional Help

The LabWindows/CVI and VXIplug&play instrument driver contains in addition the instrument driver documentation in compressed HTML format (Windows CHM help file **rssfd vxi.chm**) and stored together with the driver sources or in the following folder:

32-bit driver

C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rssfd\rssfd\_vxi.chm

64-bit driver

C:\Program Files\IVI Foundation\VISA\Win64\rssfd\rssfd\_vxi.chm

# 3 LabWindows/CVI and VXIplug&play driver history

rssfd Instrument Driver					
Driver history for LabWindows/CVI and VXIplug&play Instrument Driver for, C/C++, VEE, MATLAB®, etc.					
Revision	Date	Note			
1.0.0	08/2016	Initial release			

#### Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, secure communications, cybersecurity, radiomonitoring and radiolocation. Founded more than 80 years ago, this independent company has an extensive sales and service network and is present in more than 70 countries.

The electronics group is among the world market leaders in its established business fields. The company is headquartered in Munich, Germany. It also has regional headquarters in Singapore and Columbia, Maryland, USA, to manage its operations in these regions.

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