

How to use R&S® FSL Spectrum Analyzer drivers

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LabWindows/CVI

CVI Version

Use National Instruments LabWindows/CVI 6 or later.

Additional Help

The LabWindows/CVI instrument driver consists of a ZIP archive containing the driver sources. In addition, the instrument driver documentation is also included in compressed HTML format (Windows CHM help file) and stored together with the driver sources.

LabVIEW

Additional Help for LabVIEW drivers

The LabVIEW instrument driver consists of a ZIP archive containing the driver sources (LLB and MNU files). In addition, the instrument driver documentation is included in compressed HTML format (Windows CHM help file) stored together with the LV driver sources. Each VI's help is linked to the section in the "CHM" file that describes all the features of the VI.

LabVIEW 6.1 and higher an additional help topic can be accessed directly by pressing "[Click here for more help](#)" in the Context Help

LabVIEW 6.0 driver

Please contact the Rohde & Schwarz Customer Support Center.

LabVIEW 7.1 driver

Please use the LabVIEW 7 driver.

LabVIEW 8.2 and 8.5 drivers

Please use the LabVIEW 8 driver.

VXIplug&play Instrument Driver for VEE, C++, C#, Visual Basic, Visual Basic .NET etc.

C#

A wrapper is necessary to enable a direct access to the driver DLL. The rsfsp.cs wrapper for C# is automatically installed in the ~\VXIIPnP\WinNt\include directory.

Visual Basic .NET

A wrapper is necessary to enable a direct access to the driver DLL.
The rsfsp.vb wrapper for .NET is automatically installed in the ~\VXI\pnp\WinNt\include directory.
See the Visual Basic .NET examples.

VEE Version

Use VEE 6 or later.

Additional Help

In addition, the instrument driver documentation is also included in compressed HTML format (Windows CHM help file) and stored together with the driver sources in the ~\VXI\pnp\WinNT\rsfsp directory.

Additional Information

For more information regarding the VXIPnP instrument drivers, please read the readme.txt file that comes with each driver.

Linux

Drivers for Linux are available - Please contact Rohde & Schwarz Customer Support Center

Remote control via LAN

Instrument Name and IP Address

In order to connect the instrument using VXI-11 or RSIB use the instrument name or the IP address.

Default Name of the Instrument

The R&S FSL is preconfigured for networks using DHCP (dynamic host configuration protocol). In these networks, an available IP address is automatically assigned to the R&S FSL. In this case the generator is identified via an unambiguous computer name in the network.

As **default** the name is composed of:

FSLx- (FSL3, FSL6)

Serial number (on the rear panel of the instrument)

Example: FSL6-100102

To find the instrument name and IP address with a keyboard connected to the instrument

Instrument name: Start => Settings =>Control Panel => System => Computer Name

IP Address: Start => Settings =>Network Connections =>

Local Area Connection => Support

To find the IP Address without a Keyboard connected to the instrument

If you need the IP-Address of the instrument send a "ping" command in the command prompt window.

Example

```
Ping FSL6-10102
```

If you do not know the name, connect a keyboard and use the procedure above.

VXI-11

This driver supports remote control via VXI-11

Use the instrument name or the IP address as **resourceName** in the rsfsp_init function.

```
Example      TCPIP::FSL6-100102::INSTR
             TCPIP::192.168.1.33::INSTR
```

For FSL Firmware Revision 1.0 only

The Windows XP Firewall suppresses all network communication which is not initialized by the controller itself or which is defined as unwanted. It protects the controller from an attack of hostile users and programs. On the R&S FSL, the Internet Connection Firewall (ICF) is activated for all network connections per default to enhance protection of the instrument.

In order to enable VXI-11 communication with FSL, execute the tool portmap.exe.

1. Open the start menu and select Settings -> Control Panel -> Security Center.
2. Select the Windows Firewall.
3. Select tab Exceptions and click "Add Program ...".
4. Click "Browse..." and select the program "C:\winnt\system32\portmap.exe".
5. Confirm changes with "OK" in each open dialog and connect to FSL other VXI-11.

RSIB Interface

This driver supports remote control via RSIB. For more information see application note [1EF47](#)

Use the instrument name or the IP address as **resourceName** in the rsfsp_init function.

```
Example      RSIB::FSL6-100102::INSTR or
             RSIB::192.168.1.33::INSTR
```