How to use R&S® FSP Spectrum Analyzer drivers

Contents

Contents	1
LabWindows/CVI	
CVI Version	
Additional Help	2
LabVIEW	
Additional Help for LabVIEW drivers	
LabVIEW 6.0 driver	
LabVIEW 7.1 driver	
LabVIEW 8.2 and 8.5 drivers	2
VXIplug&play Instrument Driver for VEE, C++, C#, Visual Basic, Visual Basic .NET etc	2
C#	
Visual Basic .NET	3
VEE Version	3
Additional Help	3
Additional Information	
Linux	
Remote control via LAN	
Instrument Name and IP Address	4
VXI-11 Support	
RSIB Interface	

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 \sim VXIPnP\WinNt\include directory.

9. October 2007 How to use FSP drivers Rohde & Schwarz 2

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 ~VXIpnp\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 ~VXIpnp\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

9. October 2007 How to use FSP drivers Rohde & Schwarz 3

Remote control via LAN

FSP-B16 Option is required.

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

As default the name is composed of:

FSPx- (FSP3, FSP7, FSP13, FSP30 or FSP40) Serial number (on the rear panel of the instrument)

Example: FSP7-834265

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

For XP (Firmware 3.xx):

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

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

Local Area Connection => Support

For NT (Firmware2.xx):

Instrument name: Start => Settings => Control Panel => System => Network

IP Address: Start => Settings => Control Panel => System => Network => Protocols =>

TCP/IP Protocol => Properties

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 FSP7-834265

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

VXI-11 Support

VXI-11 support since Firmware 3.6x (XP).

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

Example TCPIP::FSP7-834265::INSTR

TCPIP::192.168.1.33::INSTR

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::FSP7-834265::INSTR or

RSIB::192.168.1.33::INSTR

9. October 2007 How to use FSP drivers Rohde & Schwarz 4