

# LabWindows/CVI, VXIplug driver history for the R&S® RTH Handheld Digital Oscilloscope Driver Documentation

## Products:

| R&S®RTH



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 R&S instruments and firmware versions are listed:

| <b>Which instruments are supported?</b>  |                           |                |
|--|---------------------------|----------------|
| <b>Current revision of instrument driver supports these instruments and firmware versions:</b> |                           |                |
| <b>Instrument</b>  | <b>Supported Firmware</b> | <b>Remarks</b> |
| RTH  | 1.60                      |                |

## 2 Getting Started

### 2.1 LabWindows/CVI driver

The Rohde & Schwarz **rsrth** 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:

- *rsrth.c + rsrth.h*
- *rsrth\_attributes.c + rsrth\_attributes.h*
- *rsrth\_utility.c + rsrth\_utility.h*
- *rsidr\_core.c + rsidr\_core.h*
- *rsrth\_callbacks.c*
- *rsrth.fp + rsrth.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 for Windows XP and newer, 32-bit / 64-bit.

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

- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\include\rsrth.h
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\lib\msc\rsrth.lib (static)
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\Bin\rsrth\_32.dll (dynamic)

In CVI only:

- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsrth\rsrth.fp
- C:\Program Files (x86)\IVI Foundation\VISA\WinNT\rsrth\rsrth.sub

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

- C:\Program Files\IVI Foundation\VISA\Win64\Include\rsrth.h
- C:\Program Files\IVI Foundation\VISA\Win64\Lib\_x64\msc\rsrth64.lib (static)
- C:\Program Files\IVI Foundation\VISA\Win64\Bin\rsrth\_64.dll (dynamic)

In CVI only:

- C:\Program Files\IVI Foundation\VISA\Win64\rsrth\rsrth.fp
- C:\Program Files\IVI Foundation\VISA\Win64\rsrth\rsrth.sub

## 2.3 VXIplug&play driver in MATLAB

MATLAB instrument driver **rsrth.mdd** can be found in:

32-bit driver

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

64-bit driver

**C:\Program Files\IVI Foundation\VISA\Win64\rsrth\rsrth.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](#)

## 2.4 Linux and Mac OS

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

## 2.5 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 **rsrth\_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\rsrth\rsrth\_vxi.chm**

64-bit driver

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

### 3 LabWindows/CVI and VXIplug&play driver history

| rsrth Instrument Driver |         |   |
|-------------------------|---------|---|
| Driver history          |         |   |
| Revision                | Date    | Note  |
| 1.0.0                   | 05/2017 | * Initial Release for the RTH firmware 1.60 |

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### **Regional contact**

Europe, Africa, Middle East

+49 89 4129 12345

[customersupport@rohde-schwarz.com](mailto:customersupport@rohde-schwarz.com)

North America

1-888-TEST-RSA (1-888-837-8772)

[customer.support@rsa.rohde-schwarz.com](mailto:customer.support@rsa.rohde-schwarz.com)

Latin America

+1-410-910-7988

[customersupport.la@rohde-schwarz.com](mailto:customersupport.la@rohde-schwarz.com)

Asia/Pacific

+65 65 13 04 88

[customersupport.asia@rohde-schwarz.com](mailto:customersupport.asia@rohde-schwarz.com)

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**Rohde & Schwarz GmbH & Co. KG**

Mühl Dorfstraße 15 | D - 81671 München

Phone + 49 89 4129 - 0 | Fax + 49 89 4129 - 13777

[www.rohde-schwarz.com](http://www.rohde-schwarz.com)