

# R&S®NRX Power Meter

## Release Notes

### Firmware Version 02.40.20100501

© 2020 Rohde & Schwarz GmbH & Co. KG  
Muehldorfstr. 15, 81671 Munich, Germany  
Phone: +49 89 41 29 - 0  
Fax: +49 89 41 29 12 - 164  
E-mail: <mailto:info@rohde-schwarz.com>  
Internet: <http://www.rohde-schwarz.com>

Subject to change

R&S® is a registered trademark of Rohde & Schwarz GmbH & Co. KG. Trade names are trademarks of the owners.

1424.7034.00 | Version 08.00 | R&S®NRX Power Meter

The software makes use of several valuable open source software packages. For information, see the "Open Source Acknowledgment" provided with the product.

The following abbreviations are used throughout this document: R&S®

[R&S NRX Power Meter Information on the Current Version and History](#)

PAD-TM: 3574-3288-02/03.00/C/1/EN

# Contents

<b>1</b>	<b>Information on the Current Version and History.....</b>	<b>3</b>
1.1	Version 02.40.20100501.....	3
1.2	Version 02.32.20062902.....	3
1.3	Version 02.31.20040101.....	4
1.4	Version 02.30.19101601.....	5
1.5	Version 02.20.19042601.....	6
1.6	Version 02.10.18121802.....	7
1.7	Version 02.00.18101801.....	8
<b>2</b>	<b>Modifications to the Documentation.....</b>	<b>10</b>
<b>3</b>	<b>Firmware Update.....</b>	<b>11</b>
3.1	Update Information.....	11
<b>4</b>	<b>Customer Support.....</b>	<b>12</b>

# 1 Information on the Current Version and History

## 1.1 Version 02.40.20100501

### New Functionality

Functions
Remote control: Option NRX-K301 Keysight Remote Emulation: <ul style="list-style-type: none"> <li>• N432A</li> <li>• E4418B/E4419B</li> <li>• N1911A/N1912A</li> </ul>
Security: Change instrument password
Security: Set User Interface operation restrictions

### Modified Functionality

Functions
n.a.

### Improvements

Improvements
Remote control: Fixed blocked SCPI communication when changing network configuration via GPIB

### Known Issues

Known-Issues
Favorite button is without function
Emulation: other emulations not implemented yet (NRVD, HP43x)
Support for network sensors: requires sensor firmware version 02.00 or better
Statistics: wrong results when scaling power axis below 0.1 dB/div
Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX

## 1.2 Version 02.32.20062902

### New Functionality

Functions
n.a.

**Modified Functionality****Functions**

n.a.

**Improvements****Improvements**

Remote control: INIT:CONT? query returns "1" only if a continuous measurement is active

Security: Disabling "SCPI over LAN" disables all supported protocols (VXI-11, HiSLIP, Socket)

NRT measurement: improved trigger event handling when TRIGger:SOURce is set to EXTERNAL

**Known Issues****Known-Issues**

Favorite button is without function

Emulation: other emulations not implemented yet (NRVD, HP, Agilent)

Support for network sensors: requires sensor firmware version 02.00 or better

Statistics: wrong results when scaling power axis below 0.1 dB/div

Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX

Remote control: changing network configuration via GPIB may block SCPI communication – please configure network settings in GUI

**1.3 Version 02.31.20040101****New Functionality****Functions**

n.a.

**Modified Functionality****Functions**

n.a.

**Improvements****Improvements**

Support for R&amp;S Recal+

Pulse Analysis: Bugfix display of reference levels related to voltage/power

Trigger: Bugfix behavior of \*TRG and TRIG:IMM

NRP2 remote emulation: TRIG:MODE is set to NORMAL after L/R transition or reset

## Known Issues

Known-Issues
Favorite button is without function
Emulation: other emulations not implemented yet (NRVD, HP, Agilent)
Support for network sensors: requires sensor firmware version 02.00 or better
Statistics: wrong results when scaling power axis below 0.1 dB/div
Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX

## 1.4 Version 02.30.19101601

### New Functionality

Functions
Support for R&S Recal+
Buffered Mode for Continuous Average Measurement
Predefined settings for common standards
Sanitization/Declassification
Download of user manual to USB stick
Added SENSE commands: SENSE[:POWER]:BURSt:LENGth? SENSE[:POWER]:AVG]:FAST

### Modified Functionality

Functions
Sensor power parameter: default unit depends on SENSE:UNIT:POWER parameter setting SENSE:POWER:REFerence SENSE:POWER:CCDF:REFerence SENSE:TRACe:MEASurement:POWER:*
Source power parameter: default unit depends on SOURCe:POWER:UNIT parameter setting SOURCe:POWER
SYSTem:PRESet is different from *RST: INIT:CONT ON CALCulate:AVERage:TCONtrol MOVing CALCulate:TRACe:AVERage:TCONtrol MOVing SENSE:AVERage:TCONtrol MOVing SENSE:TRACe:AVERage:TCONtrol MOVing

### Improvements

Improvements
Network sensor assignment is persistent.
Timeslot/Timegate: analog output can be assigned to any slot/gate.
Analog output can handle calculated measurement results from two sensors.
Remote control: SENSE:POWER:RANGe commands (NRT bargraph) work as expected.
NRP2-Emulation: Bugfixes

### Improvements

Fixed "TCP SACK Panic" (CVE-2019-11477, CVE-2019-11478, CVE-2019-11479)

### Known Issues

#### Known-Issues

Favorite button is without function

Emulation: other emulations not implemented yet (NRVD, HP, Agilent)

Support for network sensors: requires sensor firmware version 02.00 or better

Statistics: wrong results when scaling power axis below 0.1 dB/div

Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX

## 1.5 Version 02.20.19042601

### New Functionality

#### Functions

n.a.

### Modified Functionality

#### Functions

Power parameter: default unit depends on UNIT:POWer parameter setting

CALCulate:LIMit:LOWer:POWer

CALCulate:LIMit:UPPer:POWer

CALCulate:METer:LOWer:POWer

CALCulate:METer:UPPer:POWer

CALCulate:NRT:CCDF:THReshold

CALCulate:RELative:POWer

CALCulate:TRACe:MEASurement:POWer:\*

OUTPut:RECOder:LIMit:LOWer:POWer

OUTPut:RECOder:LIMit:UPPer:POWer

SENSe:POWer:REFerence

SENSe:POWer:CCDF:REFerence

SENSe:TRACe:MEASurement:POWer:\*

SOURce:POWer

TRIGger:LEVel

TRIGger:ALL:LEVel

Ratio parameter: default unit depends on UNIT:POWer:RATio parameter setting

CALCulate:LIMit:LOWer:RATio

CALCulate:LIMit:UPPer:RATio

CALCulate:METer:LOWer:RATio

CALCulate:METer:UPPer:RATio

CALCulate:RELative:RATio

OUTPut:RECOder:LIMit:LOWer:RATio

OUTPut:RECOder:LIMit:UPPer:RATio

## Functions

### Improvements

#### Improvements

Emulation: complete NRP2 emulation

Support for network sensors: if sensor is not compatible to NRX then an error message is shown - when sensor is removed the error message is still displayed, but can be deleted manually

Trace: horizontal auto scale (only when using NRQ)

Trace: marker results are now displayed in result panel

Timeslot/Timegate: results are now displayed in result panel in graphical view

Remote control: calculated results from two sensors (i.e. DIFF, SUM, ...) can be fetched

Remote control: STAT:QUES completely implemented

Show EULA for used fonts

### Known Issues

#### Known-Issues

Favorite button is without function

Emulation: other emulations not implemented yet (NRP, NRVD, HP, Agilent)

Network sensor assignment is not saved - assignment must be repeated after reboot.

Support for network sensors: requires sensor firmware version 02.00 or better

No predefined settings for common standards

Timeslot/Timegate: analog output does only handle the first slot/gate

Statistics: wrong results when scaling power axis below 0.1 dB/div

Analog output does handle only single measurement results from a single sensor

Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX

Remote control: SENSE:POWer:RANGe commands (NRT bargraph) without function

## 1.6 Version 02.10.18121802

### New Functionality

#### Functions

NRP2 emulation

Support for network sensors (NRPxxYN and NRQ)

### Modified Functionality

#### Functions

n.a.

## Improvements

Improvements
Offset: GUI offset value is always the effective offset (offset value + frequency dependent offset)
Trigger level: limits are updated when offset is to be configured
Trace: fixed wrong behavior in trigger mode "Normal" after reconnecting sensor
Filter: video bandwidth can be configured for NRP sensors
Security settings: webservice / VNC can be disabled
Security settings: request for reboot is shown when switching volatile mode
Remote control: fixed sporadic deadlocks after remote-local transition / reset
Remote control: SCPI errors shown in notification center can be removed

## Known Issues

Known-Issues
Favorite button is without function
Emulation: NRP2 emulation only (most SENSE and CALCulate parameters are implemented, some DISPLAY, MEMORY and OUTPUT parameters not implemented yet)
Emulation: other emulations not implemented yet (NRP, NRVD, HP, Agilent)
Network sensor assignment is not saved - assignment must be repeated after reboot.
Support for network sensors: requires sensor firmware version 02.00 or better
Support for network sensors: if sensor is not compatible to NRX then an error message is shown - when sensor is removed the error message is still displayed until reboot of NRX
No predefined settings for common standards
Trace: horizontal auto scale not implemented yet
Trace: marker results are not shown in result panel
Timeslot/Timegate: results are not shown in result panel in graphical view
Timeslot/Timegate: analog output does only handle the first slot/gate
Statistics: wrong results when scaling power axis below 0.1 dB/div
Analog output does handle only single measurement results from a single sensor
Remote control: USBTMC connection can freeze - please reconnect USB-cable or reboot NRX
Remote control: calculated results from two sensors (i.e. DIFF, SUM, ...) cannot be fetched
Remote control: STAT:QUES not implemented yet
Remote control: SENSE:POWER:RANGE commands (NRT bargraph) without function
EULA for used fonts is missing

## 1.7 Version 02.00.18101801

### New Functionality

Functions
First release



**Modified Functionality****Functions**

n.a.

**Improvements****Improvements**

n.a.

**Known Issues****Known-Issues**

Favorite button is without function

No remote emulations

No predefined settings for common standards

LAN sensors cannot be configured

Security settings: Webserver / VNC cannot be disabled

Trace: horizontal auto scale not implemented yet

Trace: marker results are not shown in result panel

Timeslot/Timegate: results are not shown in result panel in graphical view

Timeslot/Timegate: analog output does only handle the first slot/gate

Analog output does handle only single measurement results from a single sensor

Remote control: calculated results from two sensors (i.e. DIFF, SUM, ...) cannot be fetched

Remote control: STAT:QUES not implemented yet

Remote control: SENSE:POWer:RANGe commands (NRT bargraph) without function

Trigger level: Limits are not updated when offset is to be configured

EULA for used fonts is missing

## 2 Modifications to the Documentation

The current documentation is up-to-date.

## 3 Firmware Update

### 3.1 Update Information

Please refer to the document "R&S®NRX Power Meter User Manual" (<https://www.rohde-schwarz.com/manual/nrx/>).

## 4 Customer Support

### Technical support – where and when you need it

For quick, expert help with any Rohde & Schwarz equipment, contact one of our Customer Support Centers. A team of highly qualified engineers provides telephone support and will work with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz equipment.

### Up-to-date information and upgrades

To keep your instrument up-to-date and to be informed about new application notes related to your instrument, please send an e-mail to the Customer Support Center stating your instrument and your wish. We will take care that you will get the right information.

#### Europe, Africa, Middle East

Phone +49 89 4129 12345

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

#### North America

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

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

#### Latin America

Phone +1-410-910-7988

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

#### Asia/Pacific

Phone +65 65 13 04 88

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

#### China

Phone +86-800-810-8828 / +86-400-650-5896

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