R&S®NGL20x / R&S®NGM20x Release Notes

Firmware Version 03.073

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Contents

1 Information on the current version and history

1.1 Version 01.107

Version	Improvements
01.107	First Release NGL Series

1.2 Version 01.118

Version	Improvements
01.118	First Release for end costumer - general improvements and additional features
01.118A	WLAN disclaimer for K0 option

1.3 Version 01.135

Version	Improvements
01.135	First Release NGM Series NGL Change Log: - ARB editor improvements - changed label for digital input - changed slope behavior for digital input - corrected displayed resolution for CR - corrected message after default settings - corrected persistence behavior of network configuration - corrected time stamps for logging >10h - improved current limit during RAMP - fixed potential touch lock misbehavior - improved internal resistance control - improved statistics handling - optimized PowerOn sequence for display - SCPI command improvements - trigger sense protection on voltage jump - show reboot message after option key installation - GUI stability improvements - updated color scheme for warning messages - updated default settings for wireless LAN

- updated display for Ri and Cr
- updated handling of default settings
- improvement of USB handling
- update of web site

1.4   Version 02.005

Version	Improvements
02.005	NGL/NGM Change Log:

NGL/NGM Change Log:
- Enable OS version on SCPI device footprint
- Enable specific channel context per SCPI connection
- Fix: adapted backlight control for improved lifetime
- Fix: corrected start time for logging span
- Fix: digital output behavior
- Fix: enable multiple concurrent SCPI connections
- Fix: encoder usage for target values
- Fix: energy measurement accuracy
- Fix: file handling for FastLog related to USB
- Fix: file handling for logging
- Fix: file handling for screenshots
- Fix: file handling in ARB editor
- Fix: GUI label for time settings
- Fix: GUI menu order for trigger settings
- Fix: GUI settings for csv delimiter
- Fix: GUI usability on touch input
- Fix: inhibit for one-channel devices
- Fix: interpolation on last ARB point
- Fix: inverted logic for gated on trigger in 1+2
- Fix: restore default files after factory reset
- Fix: sense protection warning with RAMP active
- Fix: show impedance during CC mode
- Fix: trigger behavior
- Fix: visualization of data via SCPI
- Improved handling of slow USB flash drives for FastLog
- Show file information on long press in file manager
- Update webpage

1.5   Version 02.016

Version	Improvements
02.016	NGL/NGM Change Log:

NGL/NGM Change Log:
- Added Access to Manual in Website
- Added Service Data Dump

- Corrected Duration for Logging Mode

- Disable Auto-Range on Range-Set

- Fixed USB voltages

- Improved Calibration Date Update

- Improved Responsiveness for Auto Range via SCPI

- Improved Stability for ARB Editor

- Improved Stability for Feature Arbitrary

- Improved Stability for Feature Ramp

- Improved Stability for Gated Output

- Improved Stability for Output Delay

- Improved Stability for Trigger System

- Improvements for Digital IO

- Improvements for Recall Settings

- Reduce latency for OVP

- "*RST" to not reset IP address

- Updated Bootloader to Improve Configuration for Display

- Updated Device Information Screen

- Updated UI According to Corporate Design

1.6 Version 03.034

Note: The update to version 03.034 a factory reset including a purge of the user data on internal memory is recommended. Please make sure to backup user data stored on internal memory as well as the device settings. For details please see section 3 below.

Version	Improvements
03.034	NGL/NGM Change Log: - New Feature: Graphical View - New Feature: Channel List Commands - New Feature: Blocking read of readback values via SCPI "read" command. - Updated of Fast Log sample rates. - Reduced ARB dwell time to 10h - Improved startup performance. - Improved auto range behavior. - Improved stability of log feature. - Improved stability of network configuration. - Improved stability of startup after very short mains blackout. - Improved stability of trigger system. - Improved UI presentation. - Improved behavior of ARB execution. - Improved behavior on output off during execution of ARB. - Improved usability or ARB editor. - Improved behavior on output off during execution of Ramp. - Improved energy visualization. - Improved stability of battery simulator.

- Support NGL HW CI 06.07
- Update menu entries with R&S standard terms.

1.7 Version 03.034.10

Note: The update to version 03.034.10 a factory reset including a purge of the user data on internal memory is recommended. Please make sure to backup user data stored on internal memory as well as the device settings. For details please see section 3 below.

Version	Improvements
03.034.10	NGL/NGM Change Log: - New Option B301 - Improved GUI lock feature

1.8 Version 03.068

Note: The update to version 03.068 a factory reset including a purge of the user data on internal memory is recommended. Please make sure to backup user data stored on internal memory as well as the device settings. For details please see section 3 below.

Version	Improvements
03.068	- Added current readback Auto Range configuration menu (NGM20x). - Added VNC remote control. - Added FTP remote file access. - Correct visualization of unit prefix for battery capacity in battery model (NGM20x). - Improved Auto Range performance. - Set Auto Range to default "off". - Improved save/recall device settings - Show all options enabled by an installed K0 when issuing "*opt?" via SCPI. - Improved stability for fast log. - Enable output trigger SCPI commands without installed digital IO software option. - Improved internal impedance. - Improved OCP fuse delay on output-on event. - Improved Fastlog behavior.

1.9 Version 03.073

Note: The update to version 03.073 a factory reset including a purge of the user data on internal memory is recommended. Please make sure to backup user data stored on internal memory as well as the device settings. For details please see section 3 below.

Version	Improvements
03.073	- Improved stability for early HW revisions (NGL20x).
	- Fix:on SCPI command "read".
	- Minor style updates on GUI.

2 Modifications to the documentation

The current documentation is up-to-date.

3 Firmware update

3.1 Validity information

If necessary list here the material and model numbers the firmware is referring to

Device	Order Number
R&S® NGL201 1-CH POWER SUPPLY 60 W	3638.3376.02
R&S® NGL202 2-CH POWER SUPPLY 120 W	3638.3376.03
R&S® NGM201 1-CH POWER SUPPLY 60 W	3638.4472.02
R&S® NGM202 2-CH POWER SUPPLY 120 W	3638.4472.03

3.2 Update Information

Firmware updates for the R&S NGUx01 are available as download from the Rohde & Schwarz web page http://www.rohde-schwarz.com.

The installation file R&S NGUx01 is named `NGx20x_03_073.rsu`.

Attention: Microsoft browsers (Internet Explorer and Edge) rename the RSU files automatically to ZIP files. Please rename the downloaded ZIP file back to RSU.

3.3 Backup User Data (Recommended)

For a clean update it is recommended to perform a factory reset including a purge of the user data on internal memory. Please make sure to backup user data stored on internal memory as well as the device settings.

To copy internal files to an external drive, the File Manager can be used:

1. Press Menu button

2. Select File Manager

3. Attach external USB drive to R&S NGx20x and select external file system (left column) in the of the File Manager

4. Select user data files stored on internal memory (right column) and use the button "← Copy" to copy them to the external drive.

5. Repeat step 4 for all files in folders that contains user data you want to keep.

To save the device configuration to an RDS file:

6. Attach external USB drive

7. Press Menu button

8.   Select Save/Recall Device Settings

9.   Select Save Settings to file

10. Select the external drive

11. Enter a name for the settings file and press Save

12. Wait for the USB drive to finish writing

To restore the saved user data and device configuration, see section 3.5.

3.4   Updating the Firmware

To update the firmware

13. Press Menu button

14. Open Device Menu -> Device Update

15. Navigate to update file (RSU file)

16. Press "UPDATE" button

After the update to the new version, the instrument will start with preset instrument settings.

To check the installed firmware version

1.   Press Menu button

2.   Open Device Menu -> Device Information

The firmware version is shown in the Information dialog.

3.5   Restore User Data (Recommended)

To reload device settings from an RDS file:

3.   Attach external USB drive containing the RDS file

4.   Press Menu button

5.   Select Save/Recall Device Settings

6.   Select Recall Settings from file

7.   Select the external drive

8.   Navigate to the RDS file

9.   Press Load button

To restore user data files from an external drive, the File Manager can be used:

10. Press Menu button

11. Select File Manager

12. Attach external USB drive to R&S NGx20x containing user data and select external file system (left column) in the of the File Manager

13. Select user data files stored on external memory (left column), the target folder on the internal drive (right column) and use the button "➜ Copy" to copy user data to the internal drive.

14. Repeat step 4 for all files in folders that contains user data you want to restore.

3.6 Emergency Update of Firmware

If described firmware update (3.4) did not work, please use emergency update procedure:

1. Insert an USB memory stick (FAT32) with the latest firmware update file (RSU file) downloaded from the R&S website.

2. Press Enter (Encoder) and Output button

3. Power up the device

4. Wait for 5 seconds.

5. Release Enter (Encoder) and Output button

6. After 10 seconds the update process starts automatically

If the emergency update did not work, please contact customer support team.

4 Recommendations on Secure Operation

The R&S NGx20x is designed to operate at local workplaces or in secured networks (LAN). It should not be accessible from the internet, because this is a potential security risk. As an example, attackers could misuse or damage your device.

Please always install the latest firmware.

It is highly recommended that you work closely with your IT department or system administrator to ensure compliance with your company policies when connecting devices to your company's network.

5 Customer support

Technical support – where and when you need it

For quick, expert help with any Rohde & Schwarz product, contact our customer support center. A team of highly qualified engineers provides support and works with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz products.

Contact information

Contact our customer support center at www.rohde-schwarz.com/support or follow this QR code:

Figure 5-1: QR code to the Rohde & Schwarz support page