

# Release Notes

## R&S®RTM Digital Oscilloscope

### Firmware Version 06.000

These Release Notes describe the following models and options of the R&S®RTM Digital Oscilloscope:

- R&S®RTM 2102 Digital Oscilloscope, order no. 5710.0999.02
- R&S®RTM 2104 Digital Oscilloscope, order no. 5710.0999.04

#### New Features of V6.000:

- Full support of all current probes: R&S®RT-ZC5B, R&S®RT-ZC10B, R&S®RT-ZC15B, R&S®RT-ZC20B; R&S®RT-ZC10, R&S®RT-ZC20, R&S®RT-ZC30

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The following abbreviations are used throughout this document:  
R&S®RTM is abbreviated as R&S RTM.

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# 1 Revision History

Date	Rel. Note rev.	Changes
28.06.2016	3.0	Version V06.000 of RTM2102 and RTM2104 firmware. Includes LAN/USB interface firmware V1.413 and GPIB interface firmware 3.006.
25.06.2015	2.0	Version V05.551 of RTM2102 and RTM2104 firmware. Includes LAN/USB interface firmware V1.407 and GPIB interface firmware 3.006; these are not changed compared to the previous release V05.700.

## 2 Installation Information

### 2.1 Firmware Update

The firmware update file for the R&S RTM is one file with the name `RTM210x_Firmware_V6.000.zip` from the Rohde & Schwarz web page.

#### 2.1.1 Preparing the Installation

The ZIP archive contains the following files:

RTM2102.FWU	Firmware image R&S®RTM 2102, including online help and user interface languages
RTM2104.FWU	Firmware image R&S®RTM 2104, including online help and user interface languages
GPIB_B10.FWU	Interface firmware for GPIB (for RTM-B10 option)
USB_LAN.FWU	Firmware image for the USB/LAN interface
RTM210x_Release_Notes_V6.000.pdf	This document

Extract these files from the archive to the root directory of a memory stick.

### 2.1.2 Updating the Firmware on the Instrument

Follow these steps to update the instrument firmware:

1. Insert the memory stick into the USB port of the oscilloscope and push the key **Setup**.
2. Press the soft key **More 1|3**.
3. Press the soft key **Update**.
4. Press the soft key **Firmware**.
5. Press the soft key **Execute** once the new firmware has been loaded and checked.
6. Wait until the device reboots automatically.



The oscilloscope will update the firmware and reboot itself.

Interruption of the power during the update process can make the instrument unusable!

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### 2.1.3 Updating the Firmware on the USB/LAN Interface

Follow these steps to update the firmware on the USB/LAN interface (skip steps 1 to 3 if the USB/LAN interface board is already installed):

1. Turn off the instrument.
2. Install the interface board with the USB and LAN interface in the instrument (at the back of the instrument).
3. Turn on the instrument.
4. Insert the memory stick into the USB port of the oscilloscope and push the key **Setup**.
5. Press the soft key **More 1|3**.
6. Press the soft key **Update**.
7. Press the soft key **Interface**.
8. Press the soft key **Execute** once the new firmware has been loaded and checked.
9. Wait until the update process is finished.



Interruption of the power during the update process can make the instrument unusable!

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### 2.1.4 Updating the Firmware on the GPIB Interface (RTM-B10 option)

The following steps are only possible, if an RTM-B10 option is available.

Follow these steps to update the firmware on the GPIB interface (skip steps 1 to 3 if the GBIP interface board is already installed):

1. Turn off the instrument.
2. Install the interface board with the GPIB interface in the instrument (at the back of the instrument).
3. Turn on the instrument.
4. Insert the memory stick into the USB port of the oscilloscope and push the key **Setup**.
5. Press the soft key **More 1|3**.
6. Press the soft key **Update**.
7. Press the soft key **Interface**.
8. Press the soft key **Execute** once the new firmware has been loaded and checked.
9. Wait until the update process is finished.



Interruption of the power during the update process can make the instrument unusable!

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## 3 New Functions

The following table lists the new functions and indicates the version in which the new function was introduced:

Version	Function
V6.000	Full support of all current probes: R&S®RT-ZC5B, R&S®RT-ZC10B, R&S®RT-ZC15B, R&S®RT-ZC20B; R&S®RT-ZC10, R&S®RT-ZC20, R&S®RT-ZC30
V5.851	Option R&S®RTM-K18 Spectrum Analysis & Spectrogram
V5.851	Support of portable licenses for options

## 4 Modified Functions

The following table lists the modified functions and indicates the version in which the modification was carried out:

Version	Function
V06.000	Update German and Russian language for menu texts.
V06.000	When waveform rate is set to max. sample rate MinMax arithmetic for display trace data is not activated.
V05.851	When files are saved, the file name is automatically appended with a number. The maximum for this number was increased from 99 to 9999. This means far more files can be saved in the same directory.
V05.851	Autoset now runs considerably faster.

## 5 Eliminated Issues

The following table lists the eliminated issues and indicates the version in which the issue was eliminated:

Version	Function
V06.000	In some cases the selfalignment did not complete successfully. Only when run a second time it completed successfully.
V06.000	B-trigger: if a B-trigger is configured, it triggers every time the trigger condition is fulfilled, independent of the A-trigger
V06.000	Option K15: when operated via SCPI commands the select current segment command sometimes delivers a different segment than the current one.
V06.000	Current probe R&S® RT-ZC20B: if the instrument is booted while the current probe is already connected the waveform is not visible on this channel. It becomes visible after operating the position or scale knobs.

Version	Function
V06.000	In some cases the selfalignment did not complete successfully. Only when run a second time it completed successfully.
V06.000	Option K18 Spectrum Analysis: no spectrum trace was visible when persistence was activated.
V06.000	FFT Mode: wrong frequencies and amplitudes in spectrum when 'high resolution' was active.
V05.851	None.

## 6 Known Issues

The following table lists the known issues and indicates the version in which the issue was observed for the first time:

Version	Function
V06.000	none

## 7 Modifications to the Documentation

The new and modified functions mentioned in these release notes are already documented. Except the below mentioned last minute changes you can find the description in the online help or in the manual. The manual can be downloaded from the internet under: <http://www.rohde-schwarz.com>. Select "DOWNLOAD" and search for R&S RTM within the category MANUAL.

Currently no last minute changes to the operating manual exist.



## 8 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.

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