

Release Notes

Software Version 5.15.1.35213

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

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1 Scope

1.1 Purpose

This document describes the characteristics of the RAMON software. Problems of other components, which were observed during the system test, are also reported in this document. A new document will be created for each software release.

2 General Information

2.1 Base Version Identifier

Product Name	RAMON
Release	5.15.1.35213
Build date	2017-04-04

2.2 General Remarks

The software was tested under the conditions stated in section 2.4. Windows 7 (64) Service Pack 1 and Windows Server 2008R2 are supported.

All Ramon work stations have to be time synchronized with a maximum deviation of 3 seconds compared to the time source.

If the receiver box versions are installed with an AMREC box version, the AMREC Manager software should be started before the receiver software.

Even though different versions of RAMON might be installed, there is no guarantee that the data which might be exchanged between the applications are compatible.

2.3 List of Software Components

Type	Contents	Part number	Version
E55-CTL	EM550 Control	3020.8306.02	5.15.1.35213
E51-CTL	EM510 Control	3020.8106.02	5.15.1.35213
PR1-CTL	PR100 Control	3020.8164.02	5.15.1.35213
EM1-CTL	EM100 Control	3020.8064.02	5.15.1.35213
EB5-CTL	EB500 Control	3025.2612.02	5.15.1.35213
EB51-CTL	EB510 Control	3025.2629.02	5.15.1.35213
EMD-CTL	ESMD Control	3020.8070.02	5.15.1.35213
EMDDF-CTL	DF Support for ESMD control	3020.8087.02	5.15.1.35213
DDF007-CTL	DDF007 Control	3025.2806.02	5.15.1.35213
DDF20-CTL	DDF205 Control	3025.2635.02	5.15.1.35213
DDF25-CTL	DDF255 Control	3020.8787.02	5.15.1.35213
DDF20M-CTL	DDF200M Control	5670.0120.02	5.15.1.35213
DDF-CTL	DDF550/5GTS device control	3025.2729.02	5.15.1.35213
DDF155-CTL	DDF1555 Control	5670.0013.02	5.15.1.35213

2.4 Requirements

The RAMON Software is designed for Microsoft Windows operating systems.

It was tested under the following conditions.

Component	Version
Operating System	Windows 7 64 Bit Professional with Servicepack 1
	Windows Server 2008 R2 64 Bit
Graphics Card	NVIDIA Quadro or Intel HD Graphics with support of OpenGL 2.1 or higher

2.5 Contact Information

For additional support please contact customersupport@rohde-schwarz.com

Please reference Order Number, Product Name, Release and Build Number.

3 Functionality

3.1 New Features and Major Changes

This chapter covers new features since RAMON version 5.14.1.

3.1.1 RAMON in General

Supports Windows 10 and Windows Server 2016

3.1.2 DDF200M

Channel1 frequency is now independent of center frequency which was previously not available for older firmware.

3.1.3 PR100 Family

Independent DF settings wherein DF bandwidth is decoupled from step.

Inverted DF antenna setting is supported.

HE400 and HE600 antennas are supported.

IF overload status is supported.

3.1.4 DDF-CTL and DDF-CL

Frequency Based Blanking

Support new Blanking Parameter

Trigger Cold Reset

DDF-CTL shows DF method

DDF-CTL Antenna Test shows relative levels

DDF-CTL supports BIT short

Change "Emission Separation Time" from absolut ms to a number of spectrum updates

Change "Minimum Area for Single Burst" from absolut Hz*s to a number of Freq*Time tiles

3.2 Closed Problems

Closed Problems since RAMON version 5.14.1.

3.2.1 ESMD Family/EB500 Family/PR100 Family/EMx50 Family

ID	Description
93550	Panorama Scan menu item missing under Control Menu if the device was powered on after launching Control software
26545	Suppress frequencies are still scanned by device.
68989	Span changes to a different value after control software reset.
169600	While in Scan mode, performing a zoom over a selected range will result to incomplete spectrum display.
116722	Local PC time will be set by control software when GPS location changed, although current date time synchronization setting is to synchronize local PC time to device.
73430	Receiver simulation logout upon control SW reset.
232807	Emission Detection Toolbar Disabled in MSEARCH Modes.
231804	IQ recording button is disabled after resetting device from control software.
119518	MSCAN continues to scan inactive memory items when memory items have been set to inactive while in MSCAN.
182903	Replay of scan recording does not change correctly to frequency range when frequency is changed during the recording.
231475	Shutting down PC or logging off windows will show an exception message when Receiver GUI is running.
237246	In Search mode, level historical data in the RF Panorama disappeared after the search reached the end and re-starts again

3.2.2 ESMD Family/EB500 Family/PR100 Family

ID	Description
96917	In simulation, after Control SW connection is changed from device to simulation through CfgService then simulation is launched afterwards, DFIF/WFFM Panorama are blank and greyed out.
70127	In simulation, DFIF Panorama is blank and greyed after control SW reset.

3.2.3 ESMD Family/ EB500 Family

ID	Description
13075	'IF Output Frequency' field is not enabled when IF is selected for the 'Analog Video Output' format in Receiver Configuration, unless Apply button is clicked.
67908	Change in IF Equalizer Coefficients from device does not update GUI.
68970	In simulation, recording of DDC Audio stream not working.
68796	In simulation, Audio Signal is not working in DDCs.
234890	DDC does not set marker for detected activity in Activity Generation.
229876	Setting "Couple All Demodulation to RX" for DDCs has no effect for PULSE demodulation.
229558	In Digital Video toolbar, for demodulation IQ, ISB, CW, USB, LSB, trigger traces shows "Both", "FM" and "AM" instead of "I" and "Q".

117134	Scan and search mode may have broken waterfall at very low measurement time (0.0005s periodic).
192036	"Connect All DDC to Mapview" option checked in launching of Receiver GUI is not effective.

3.2.4 ESMD Family

ID	Description
230282	DDC channels from ESMD does not set the correct status (muted or not) to AllAudio on start-up.
231571	Replay of WideIQ recording in high resolution mode stops at trigger point.

3.2.5 PR100 Family

ID	Description
67276	No gaps allowed in the memory slots of the memory items in the device for a successful import.
69806	Some DF BW combinations cannot be set when importing device setting xml file.
4846	Switching the device reference to External in the Receiver Configuration when the said setting is not supported by hardware, did not display any error in the GUI status line.
228521	Maxhold shows a temporary step line when frequency is changed by clicking on IF panorama.

3.2.6 DDF200M

ID	Description
233696	History is cleared while resizing the window in DF Search and DF MSearch mode.
231609	Emission detection is disabled in scan mode for DDF200M.

3.2.7 DDF1555

ID	Description
231583	Sometimes invalid time-stamp is shown on Alarm popup window when threshold is changed during DF MSearch.

3.2.8 EMx50/DDF205

ID	Description
169644	IF Spectrum is incomplete during MSearch for EMx50 and DDF205 if dwell time is 0.1s
232592	Spectrum/waterfall update appears abnormal in EMx50 PSCAN mode after changing PScan range and threshold is set above signal.

3.3 Known Limitations

The known limitations are selected for relevance and importance. Minor issues are not listed here.

3.3.1 ESMD Family/EB500 Family/PR100 Family /EMx50 Family

ID	Description	Work-around
67768	"Windows" is available in View menu.	Activate Default view, then select again the desired view.
113883	Waterfall data gets truncated when widget or GUI is resized.	
24137	Recording and Replay toolbar always enabled.	
93553	Replay traces of MSR sometimes does not display correctly for the first few seconds of replay.	
12823	The second frequency item in Multiple Scan Range feature does not display the correct bandwidth during Pscan.	
12828	While Multiple Scan Range feature is active, adding suppressed frequency is possible via "Shift+F7" hotkey and context menu.	
51726	Changing the BFO value on the device will not reflect in the GUI.	
12822	Changing start and stop frequency in the device while in PScan is not reflected to the GUI.	
94009	Panorama scan timeout in CA100 does not make control software switch from PScan to FFM.	
92898	No search/Msearch spectrum for frequencies beyond 5GHz with Simulation.	
162377	When the device is in DF MSEARCH mode, changing to other modes may sometimes need a retry.	Retry multiple times with different modes (i.e. set DF Off) until device is not in DF MSEARCH anymore.
288607	Adding suppress during Search mode will sometimes remove or revise previous spectrum data in the first suppressed scan.	
297936	Trace recording files can be replayed only when the mode the recording was done has already been switched to before.	Before replaying the file, go to the mode where the trace recording was done at least once.

3.3.2 ESMD Family/EB500 Family/PR100 Family

ID	Description	Work-around
122849	Opening a new RF-spectrum window will change the squelch to default value.	
24097	Elevation widget is not shown even though "Show Elevation" option is checked in the context menu by default.	Uncheck then check the "Show Elevation" option in the context menu to show the widget.
68062	LogPer Antenna rotator was allowed even in FFM DF On.	
288241	When screen resolution height is 768 pixels or less, the step values may appear in two columns and the second column values are not visible but still can be selected.	Increase the screen resolution until only one column appears. Otherwise, the options in the second column are still accessible even if no caption.

3.3.3 ESMD Family/EB500 Family

ID	Description	Work-around
67723	Azimuths stopped updating on WFFM when DF BW was changed in device.	After changing DF BW in device, click DF Off then DF On again to stabilize sw. But this would change also DF BW in device.
4512	Polychrome controls are not enabled during dwell time.	
129435	Last channel data level on spectrum for 4 specific span-step combinations may be unusually high. The 4 specific span-step combinations are: 5 MHz / 200 KHz, 500 KHz / 20 KHz, 50 KHz / 2 KHz, 5 KHz / 200 Hz.	Use other span-step combinations.
92502	Bandwidth changes in MScan mode when memory items have different bandwidths.	Switch to MSearch then MScan. Bandwidth switching will not occur.
231801	Incomplete spectrum seen in simulation for FFM and WFFM mode with DF On when DF bandwidth is set at minimum of 0.375Hz.	Change DFBW to higher values.
291209	When Elevation is set to Manual mode, updating the Elevation Histogram dock widget will not reflect on the elevation value on WFFM Panorama dock widget and vice versa.	

3.3.4 ESMD Family

ID	Description	Work-around
67316	Multiple scan range is not working when Downconverter is used.	
100178	Down Converter does not work in combined setup.	

3.3.5 EB500 Family

ID	Description	Work-around
123942	IQ recording at 5 MHz bandwidth has no spectrum intermittently for about a second.	

3.3.6 PR100 Family

ID	Description	Work-around
100248	Selecting IQ as recording source while on DF ON generated an error in status bar.	
97050	Heading value from NMEA compass did not update on corresponding compass tab.	
123061	CHM always show "Default" on the "Receiver Connected Antennas" field.	
122080	Sometimes the DF measurement time setting is accepted even though it is not allowed in frequency store.	
98635	Peak detector was enabled during DF ON and setting this item was not effective.	To disable peak detector, shift to DF Off then back again to DF On.
293423	IGT Avg time(s) always shows 0 value that is not the same as Observation Time on device.	

3.3.7 EMx50 Family

ID	Description	Work-around
94806	Search button is always red even squelch is too high.	

3.3.8 DDF1555

ID	Description	Work-around
96898	Control software allows "none" to be set at Ant X1 aux port configuration, although not available in DDF1555.	

3.4 Supported Firmware Versions

Device	Recommended Version	Supported Versions
DDF007	6.00	>=5.20
DDF1555	6.00	>=5.50
DDF200M	2.00	>=1.50
DDF205	4.60	>3.55
DDF255	4.90	>3.91
DDF550	4.00	
DDF5GTS	2.62	
DDF1GTX	2.00	
EB500	4.60	>3.55
EB510	4.56	>2.50
EM050	1.95	
EM510	1.95	
EM550	1.95	
EM100	6.00	>=5.20
ESMD	4.90	>3.91
PR100	6.00	>=5.20

4 Open Source Components

Open Source Components used in these programs are listed in the document “OpenSource_Acknowledgement.pdf”, which is included on the installation media.