Release Note

Revision: 1.25.0

R&S®BBA100

Release 1.25.0

Status: Official Release

Date: 07.07.2015

ROHDE&SCHWARZ

Table of Contents

1 Scope

This release note contains important information about the R&S®BBA100 software product and complements the installation notes and manuals.

The release note describes the new features, known bugs and limitations of this release.

2 Revision History

Date	Release Note Revision	Changes
25.02.2010	1.0.0	Official Release
05.03.2010	1.0.1	Official Release for BBA100 software release 1.0.1
17.03.2010	1.0.2	Official Release for BBA100 software release 1.0.2
29.03.2010	1.0.3	Official Release for BBA100 software release 1.0.3
07.04.2010	1.0.4	Official Release for BBA100 software release 1.0.4
15.04.2010	1.0.5	Official Release for BBA100 software release 1.0.5
30.04.2010	1.0.6	Official Release for BBA100 software release 1.0.6
10.06.2010	1.0.7	Official Release for BBA100 software release 1.0.7
17.06.2010	1.0.8	Official Release for BBA100 software release 1.0.8
04.11.2010	1.1.0	Official Release for BBA100 software release 1.1.0
09.11.2010	1.10.1	Official Release for BBA100 software release 1.10.1
08.02.2011	1.11.0	Official Release for BBA100 software release 1.11.0
08.03.2011	1.11.1	Official Release for BBA100 software release 1.11.1
31.03.2011	1.11.2	Official Release for BBA100 software release 1.11.2
20.05.2011	1.12.0	Official Release for BBA100 software release 1.12.0
24.05.2011	1.12.1	Official Release for BBA100 software release 1.12.1
20.07.2011	1.12.2	Official Release for BBA100 software release 1.12.2
27.07.2011	1.12.3	Official Release for BBA100 software release 1.12.3
15.08.2011	1.12.4	Official Release for BBA100 software release 1.12.4
27.09.2011	1.12.5	Official Release for BBA100 software release 1.12.5
20.02.2012	1.13.0	Official Release for BBA100 software release 1.13.0
05.03.2012	1.13.1	Official Release for BBA100 software release 1.13.1
22.03.2012	1.13.2	Official Release for BBA100 software release 1.13.2
30.04.2012	1.13.3	Official Release for BBA100 software release 1.13.3
24.05.2012	1.13.4	Official Release for BBA100 software release 1.13.4
19.07.2012	1.20.1	Official Release for BBA100 software release 1.20.1
28.02.2013	1.21.0	Official Release for BBA100 software release 1.21.0
03.07.2013	1.22.0	Official Release for BBA100 software release 1.22.0
16.09.2013	1.23.0	Official Release for BBA100 software release 1.23.0
12.11.2014	1.24.0	Official Release for BBA100 software release 1.24.0
07.07.2015	1.25.0	Official Release for BBA100 software release 1.25.0

3 New Features

The following table lists the new features in the stated version:

Version	Function
1.1.0	You now have the possibility to watch all the components of the RF paths and a comprehensive version of their device parameters in the MMI. These menus can be reached by opening an unselected RF path in the “RF-Paths Overview” or by pressing the “Details” button in the “Operating Panel” of a selected RF path.
1.1.0	You now have the possibility to configure the screensaver of the front panel display via the new menu "System" > "Setup" > "Display".
1.1.0	You now have the possibility to configure the units used for displaying temperature (°C/°F) and RF-power values (W/dBm) via the new menu "System" > "Setup" > "Units".
1.1.0	Communication problems of internal components of the system are now signalized via a red blinking System-LED and a matching message displayed in the MMI.
1.1.0	The fans of the system are now being checked at system startup.
1.1.0	The fan control was optimized to prevent unnecessary use of the fans.
1.1.0	Automatically disappearing message boxes are now being displayed for 10 seconds instead of 5 seconds before.
1.1.0	The contents of quite a number of message boxes and logbook entries were improved. Additionally to this a lot of new message boxes and logbook entries are now being created, so that it is easier to understand what happens in the system.
1.1.0	The title of message boxes displaying errors and warnings now start with the matching GPIB-Error-Code in brackets to allow easier finding of the mentioned event in the user manual.
1.1.0	The system startup was optimized regarding speed and detecting and signalizing any possibly existing hardware detection problems as early as possible.
1.1.0	It is now possible to interrupt the system startup by pressing the "System ON - Standby" button for about 3 seconds.
1.1.0	The Bundle Update process was optimized so that you now can watch its progress in the menu "System" > "System Software". Additionally to this there is displayed an explaining message box while a firmware update of any of the hardware components is being executed.
1.1.0	You now have the possibility to configure the behavior of the SCPI Error Queue via the new menu item "GPIB Error Queue" in the menu "Remote Control" > "GPIB". There you can choose whether you want both errors and warnings to be written into the SCPI Error Queue or errors only.
1.1.0	In case of an internal measurement coupler delivering invalid measured values the currently used RF path is automatically switched from “Operate” to “Standby” mode.
1.1.0	Scrolling/moving the cursor in the Logbook was accelerated.
1.1.0	You now have the possibility to export the logbook to your local hard disc of your connected PC. This can be done via the new menu item "Save Logbook" in the Web-MMI. This new feature is available for user role "Administrator" only.
1.11.0	It is now possible to use up to two RF paths with external amplifiers. If you have bought this option, you have the possibility to configure these RF paths via the matching menu "RF-Paths" > "RF-Path X" when being logged in as user "Administrator".
1.11.0	The system now supports use of RF output switches. If you have installed such RF output switches in your system, you have the possibility to watch their data by selecting the "RF-Output" box in the "RF-Path Configuration" menu of the RF path including such a switch.

Version	Function
1.11.0	The system now supports use of an RF Sample Port Switch. If you have installed such an RF Sample Port Switch in your system, you have the possibility to watch its data via the new menu "RF-Paths" > "RF Sample Port Switch".
1.11.0	In the Web-MMI you now have the possibility to reach the menus for watching the data of the RF Input Switch and the Measurement Couplers by choosing the matching items in the menu "RF-Paths" > "RF-Path X".
1.11.0	The upper bound value of the "Forward Power" measurement control is now an additional 10% of the maximum RF output power of the selected RF path when using W as unit for RF power values and an additional 3 dBm of the maximum RF output power of the selected RF path when using dB, as unit for RF power values.
1.11.0	In the Web-MMI you now have the possibility to watch the PDF version of the user's manual and the release notes document via the new menu item "Documents" in the navigator menu tree.
1.11.1	There is a new remote control command “SENS:MAX?” allowing you to get the maximum input power of the system.
1.12.0	It is now possible to store the menu “RF-Path Configuration” as a bookmark.
1.12.0	The text of the footer in the menu “RF-Paths Overview” is now different depending on whether the RF path is selected or not.
1.12.0	When pressing one of the buttons in the upper right frame of the Web-MMI there is now shown an hourglass while system is reacting to this.
1.12.0	The system now also supports the use of high power RF output switches. If you have installed such RF output switches in your system, you have the possibility to watch their data in the menu item “RF-Paths” > “RF-Path X” > “RF-Output Switches” and configure their use in the RF paths via the new menu item “System” > “Setup” > “RF-Output Switches”.
1.12.0	Startup of the system is now stored in the logbook with a matching entry of type “Info”.
1.12.0	Opening and closing an interlock loop is now stored in the logbook with a matching entry of type “info”.
1.12.0	There is a new read-only parameter “Max Forward Power” in the menu “RF-Paths” > “RF-Path X” > “General Settings”. Its value indicates the maximum allowed measured forward power, therefore the currently selected/activated RF path is automatically deselected to protect the system if the measured forward power exceeds this value.
1.12.2	The fans of the system are now being controlled more precise allowing 4 different speeds of the fans depending on the measured temperature values of the internal components.
1.12.2	The defect of a defective driver stage in an amplifier module is now being detected and reported automatically by the system.
1.12.2	When having installed internal components with different frequency ranges but put them together into one RF path, then the displayed frequency range of this RF path matches the smallest match of the frequency ranges of its components instead of the frequency range of the used amplifier modules before.
1.12.2	In the menu “System” > “System Software” you now have the choice between “Quick Mode” and “Live Mode” for the parameter “Bundle Update” to start a bundle update of the system. The “Live Mode” is the same as the previous “Enabled” value meaning that the system can be operated live during the update process but causing the update to take a quite long time. “Quick mode” also puts the system into the update mode but stops all other work, so the system can not be operated during the update process. But for this case the update is executed in a couple of minutes only causing your system to be ready again for operation very soon.
1.12.2	In the menu “System” > “Control Hardware” > “SCM” there is a new parameter “Current Frequency” displaying the current measured frequency via the internal frequency counter. This new feature is available for user role "Administrator" only.

Version	Function
1.12.2	When having a too high VSWR the displayed value of the reached maximum VSWR in the Operating panel now has a precision of 0.1 instead of 1 before.
1.12.4	The defect of an amplifier module's drain current being out of range can now get detected and reported by the system. This replaces but includes the detection of a defective driver stage in this module.
1.12.5	You now have the possibility to disable one unit of each RF path, but only if the RF path consists of more than just one unit, of course. For this there is a new menu item "RF-Paths" > "RF-Path X" > "Use Of Units". There you can see all units of the RF path, and you can set one of them to „Disabled". By this you can achieve using the RF path with lower power in case of defects in the disabled unit.
1.13.0	The start-up of the system was accelerated by about 30 %.
1.13.0	The system now automatically limits and protects itself from too high output power. For this the former item "Max. Forward Power" in the menu "RF-Paths" > "RF-Path X" > "General Settings" was replaced by an item "Max. Forw.+Refl. Power". When the sum of measured forward and reflected power gets above this value, then the system automatically starts controlling the output power. This is then indicated by the RF-LED being switched to yellow and a matching message box and entry in the logbook.
1.13.0	The fan control has been improved.
1.13.0	The needed time for selecting an RF-Path and switching it to Operate was reduced.
1.13.0	Many of the actions which were previously done when switching from RF-Standby to RF-Operate (e.g. switching the RF switches) are now already being executed when selecting an RF-Path.
1.13.0	You now have the possibility to request the typical noise level of an RF-Path via the new SCPI command "SENS:LEV?"
1.13.0	Navigation with the PageUp-, PageDown-, Pos1-, End- and Escape-key in the Web-MMI was optimized.
1.13.0	Cursor navigation in the menu "Interlock" was optimized.
1.13.0	The layout of the virtual keyboard in the front panel display was optimized.
1.13.2	Manual enabling of the software update is not necessary anymore. It is automatically enabled at system start-up.
1.20.1	The start-up of the system was accelerated essentially.
1.20.1	The needed time for selecting an RF-Path and switching it to Operate was reduced significantly.
1.20.1	The system now supports frequency ranges up to 4 GHz.
1.20.1	After opening and closing an interlock loop you now can directly switch to Operate again. Confirmation of the closed interlock loop by pressing the Standby-/Operate-button at the front panel is not necessary anymore. Additionally to this the Interlock-LED is updated immediately now.
1.20.1	You now have the possibility to set the selected port of an RF sample port switch via the new SCPI command "RF:PROBe:PORT" and also request its currently selected port via the new SCPI command "RF:PROBe:PORT?". These features are only available if having bought the matching option.
1.20.1	You now have the possibility to save the logbook to a connected PC via new menu item "Save Logbook" in the navigator tree of the Web-MMI.
1.20.1	In the "Path Overview" and "Operating Panel" of the MMI the nominal power of the RF-Path is now displayed with one floating point when using the power unit dBm to ensure a more precise value.

Version	Function
1.20.1	The settings in the menus “Remote Control” > “Ethernet” and “System” > “Setup” > “GUI Behaviour” can now be changed by every user. Being logged in as Administrator is not necessary anymore.
1.20.1	The settings in the menu “System” > “Setup” > “Date/Time” and “System” > “System Software” > “Device Name” can not be changed by every user anymore. Being logged in as Administrator is necessary now.
1.20.1	The sum status of all Interlock loops is now being put on the pin EX2 of the Interlock output X505. That means that if at least one of the 4 Interlock loops is being opened, the pin EX2 is set too high while it is low in all other cases.
1.21.0	The system now supports the new option “Fast Amplifier Mute”(R&S®BBA-130). When having bought this option, you have the possibility to turn this feature on/off either via the “HF-IF” interface plug or via the new menu item “Mute Mode” in the menu "RF-Paths" > "RF-Path X" > "General Settings" or via the new SCPI command “RF:MUTE:STATe”.
1.21.0	The system now supports use of RF Sample Port Switches of type “single port” (R&S®BBA-143). If you have installed such an RF Sample Port Switch in your system, you have the possibility to choose between “Forward” and “Reflected” Power either via the new menu item “RF Sample” in the menu "RF-Paths" > "RF Sample Port Switch" or via the new SCPI command “RF:PROBe:STATe”.
1.21.0	The system now supports the new broadband amplifier series R&S®BBA150 providing the frequency range 800 MHz to 3 GHz in terms of RF switching and remote control (option “R&S®BBA150 Integration”, R&S®BBA-150).
1.21.0	In freshly installed systems you now have the following default bookmarks in the MMI: "Remote Control" > "Ethernet" and "Remote Control" > "GPIB" and "Interlock"
1.21.0	The system now features a maintenance mode for high power RF output switches. It can be configured via the new menu item "System" > "Control Hardware" > "RF-Output Switches", which is only available if you have high power RF output switches installed in your system. In this menu you can inspect the details of the maintenance mode (date of last run, info whether it is currently running or not), configure it (interval in days) or start it right away ("Start Maintenance Now"). "Maintenance" means that all installed high power RF output switches are being switched back and forth once. This can be started manually by the mentioned menu item or automatically at system startup after when having reached the configured interval (number of days) since the last maintenance run.
1.21.0	The SCPI command “CONT<1..10>:AMOD:FGA” now supports setting the gain in steps of 0.1 instead of 0.5 before.
1.22.0	The system now also supports the new frequency range 2.5 GHz to 6 GHz for the broadband amplifier series R&S®BBA150 in terms of RF switching and remote control.
1.23.0	The system now supports up to 10 RF-Paths.
1.23.0	The system now also supports the broadband amplifier series R&S®BBA150 with 2 different frequency ranges (800 MHz to 3 GHz + 2.5 GHz to 6 GHz) in one R&S®BBA150.
1.23.0	You now have the possibility to change the IP address of included R&S®BBA150 and Milmega amplifiers. After having logged in an “Administrator” you can edit the new menu item “Amplifier IP-Address” in the section "Settings RF-Path X" of the menu "RF-Paths" > "RF-Path X" > "General Settings". For changes to take effect you have to restart the system.
1.24.0	You now have the possibility to specify the gateway address also for the rear Ethernet interface via the new menu item “Gateway” in the section "Rear Ethernet" of the menu "Remote Control" > "Ethernet".
1.24.0	The system now also supports the new frequency ranges 9 kHz to 250 MHz and 80 MHz to 1 GHz for the broadband amplifier series R&S®BBA150 in terms of RF switching and remote control.

Version	Function
1.25.0	The system now also supports even more power classes for the frequency ranges 9 kHz to 250 MHz and 80 MHz to 1 GHz for the broadband amplifier series R&S®BBA150 in terms of RF switching and remote control.
1.25.0	You now have the possibility to see the measured currents of the installed amplifier modules in the section "Technical Parameters" of the “Amplifier Board” in the menu “RF-Paths" > "RF-Path X" > "Preamp X Output X". These values are only available when the specified RF path is currently selected.
1.25.0	In the Web-MMI you now have the possibility to watch the PDF version of the Open Source Acknowledgement document via the menu item "Documents" in the navigator menu tree.

4 Restrictions

The following table lists the restrictions. That means not yet supported features even though they are mentioned in the user's manual:

Version	Function
1.1	There are currently no additional information and help texts displayed in the menu structures of the MMI.
1.20.1	When having installed 3 preamplifiers in an RF Path, then there are only 2 of them visible in the menu "RF-Paths" > "RF-Path X".

5 Corrections

The following table lists the corrections of former problems in the stated version:

Version	Function
1.0.1	When pressing buttons on the Frontpanel you now get immediate response in the MMI by the display showing an hourglass. While this hourglass is shown you are requested to not press any other buttons to let the system finish its current action.
1.0.1	The rare effect of LEDs and buttons in the upper right corner of the Web-MMI not displaying correct information when switching from local to remote and vice versa was eliminated.
1.0.2	When pressing the ok-button while the cursor is on a logbook-entry you now get immediate response in the MMI by the display showing an hourglass. While this hourglass is shown you are requested to not press any other buttons to let the system finish its current action.
1.0.3	Some bugs concerning switching of Peak/av were fixed in the firmware.
1.0.4	When VSWR is signaled as being “> 1 : 10”, then the currently operated RF-path is automatically switched to Standby and deselected by the software.
1.0.5	The with v1.0.4 introduced automatic switch to Standby and deselection of the currently operated RF-path in case of VSWR being signaled as “> 1 : 10” was speed up by the factor of 4.
1.0.6	The effect of endlessly turned on and off fans in systems with at least 2 power amplifiers and one of them being placed at position A4 was eliminated.
1.0.7	Modulated RF input signals sometimes caused a shutdown of the selected RF path due to wrong VSWR interpretation. Bug has been fixed.
1.0.8	The effect of the not working SCPI-commands “SENS:FORW?”, “SENS:REFL?” and “SENS:VSWR?” was eliminated. They do work correctly now.
1.1.0	The menu items "SW/FW Bundle Part Number", "SW/FW Bundle Version" and "Device SW-Version" in menu "SCM" and the menu item "SW/FW Bundle Part Number" in menu "Mainboard", which did not display any useful data before, were completely removed.
1.1.0	The former problem “*When the system started with an error (i.e. a HDF-error), and you enable the "Bundle Update" in menu "System Software", as mentioned in the user's manual chapters 6.10.5 and 6.11.1, automatic reset of the menu item to "Disabled" does not work, even though the update is really disabled. You can work around this by setting manually the menu item to "Disabled"*” was solved.
1.1.0	The former problem “*When the system started with an error (i.e. a HDF-error), you get a message "HTTP error" in the menu "RF-Paths" in stead of the expected RF paths*” was solved.
1.1.0	The former problem “*When changing the "Device Name" of the system in menu "System Software", as mentioned in the user's manual chapter 6.10.5, it might happen that the changed information is getting lost when turning the system off*” was solved.
1.1.0	Many problems concerning the Bundle Update were eliminated, so especially the former problems “*Trying to let run two or more software updates simultaneously might cause severe problems, hence it is strongly recommended to not start another software update while another one is still in progress!*” and “*Trying to disable "Bundle Update" in the menu "System Software" while a software update is already running, does not cause the software update to be cancelled.*”.
1.1.0	When watching the details of a logbook entry while a new logbook entry is created the cursor now remains on the formerly marked entry.
1.1.0	The former problem “*External signaling of an open interlock loop does not work correctly for Interlock loop 1. This Interlock loop is always stated to be closed.*” was solved.

Version	Function
1.1.0	The former problem "*When pressing the Standby/Operate-button to confirm a closed interlock group while the system is in Remote mode, you get shown a message saying that the requested operation can not be executed. This can be ignored as the confirmation of the closed interlock group is being processed anyway*" was solved.
1.1.0	The former problem "*When trying to switch to Operate by pressing the Standby/Operate-button while there is no RF-path selected, the Standby- and the Operate-LED keep on blinking forever. To get them working correctly again, you should just select an RF-path*" was solved.
1.1.0	The former problem "*In the unlikely event of a power amplifier getting defective while switching from Operate to Standby, the system might get into some inconsistent state. Please restart your system then by powering it off and on again using the Mains switch*" was solved.
1.1.0	The former problem "*When trying to change the RF-Path selection via remote control with the command RF:BAND:PATH while system is in Operate, you receive another error code in stead of 10900, as specified in the user's manual chapter 11.2*" was solved.
1.1.0	The former problem "*When trying to execute setting commands via remote control while the system is in Local mode, you receive another error code in stead of 11300, as specified in the user's manual chapter 11.2*" was solved.
1.1.0	The former restriction "*The menu item "Update Progress" in menu "System Software", as mentioned in the user's manual chapter 6.10.5, does not display any useful data, yet*" was eliminated.
1.1.0	The stability of the system and its MMI when running it for a long period of time were improved.
1.1.0	Fans are now also being turned off when switching the system off by pressing the "System ON – Standby" button and all of the components of the system are cool enough.
1.1.0	The status of the fans is now always visualized correctly.
1.1.0	There were removed some problems which occurred when not all fans in a unit are installed.
1.1.0	The device info data of the main boards displayed in the menu "System" > "Control Hardware" > "Mainboard(s)" is now correct.
1.1.0	The Local-/Remote-Button can now always be pressed in the Local-Web-MMI but never in the Remote-Web-MMI to ensure consistent behaviour for the Remote Control.
1.1.0	Sometimes it happened that there a message box saying that an invalid firmware image was found was displayed after having the system in soft power off mode for a long time. This problem was solved as well.
1.1.0	Quite a number of other problems concerning the firmware update process at system startup were solved.
1.1.0	All SCPI commands that cause changes of the state of the system now cause creation of a new entry in the GPIB-Error-Queue with code -201 while the system is on local mode.
1.1.0	The checks for consistency and possible warning and error messages when editing the DHCP server settings were improved.
1.1.0	Pressing the "Local/Remote" button in the Local-Web-MMI while the system is in local lockout mode now causes displaying of the same message box as when doing the same action on the front panel.
1.1.0	The rare effect of a slow or even blocked system after many (de-) selections and (de-) activations of RF paths was eliminated.
1.1.0	The degree symbol is now always displayed correctly in all parts of the MMI.
1.1.0	The values for the measured forward and reflected power in the Operating Panel of the MMI are now always updated correctly.

Version	Function
1.11.0	The former restriction "*The option "GUI Behaviour" in the menu "System" > "Setup" > "GUI Behaviour" can not be changed.*" was fixed.
1.11.0	The former restriction "*The parameter "Connector" in the details of a measurement coupler is not displayed.*" was fixed.
1.11.0	The former restriction "*The parameter "Nominal RF Input Power" in the menu "RF-Path" is always "0.0" irrespective whether an input switch is installed in the system or not.*" was fixed.
1.11.0	The former problem "*When being in "Local Lockout" mode it might happen that the front panel MMI gets quite slow and therefore does not display message boxes and/or update data immediately.*" was solved.
1.11.0	The former problem "*Under certain rare circumstances it might happen that the system does not react on pressing any of the buttons "System ON - Standby", "RF-Standby/Operate" and "Local/Remote". To solve this problem restart the BBA using the mains switch.*" was solved.
1.11.0	The former problem "*When having no input signal connected to the BBA with the system being in "Operate" it might happen that there is displayed a low measured value of 3 to 7 dBm for the forward power caused by noise.*" was solved.
1.11.0	The former problem "*After an executed firmware update it might happen that one or more of your RF-paths are disabled. To solve this problem restart the BBA using the mains switch and afterwards set the RF-path via the item "Path Activation" in the menu "RF-Path" to "Enabled" again.*" was solved.
1.11.0	The former problem "*When having quite a number of bookmarks stored in your MMI it might happen that the MMI gets quite slow after opening the "Bookmarks" menu. To solve this problem delete some of your bookmarks.*" was solved.
1.11.0	The former problem "*In systems with many amplifier modules being in one RF-path it sometimes might take some time to select this RF-path.*" was solved.
1.11.0	The former problem "*When you get a "Logon Error" in the Web MMI caused by problems of the Java environment on your PC the concerned user session is not automatically closed, which can lead to reaching to maximum number of allowed user sessions when trying this for multiple times. To solve this problem restart the BBA using the mains switch.*" was solved.
1.11.0	The former problem "*When trying to navigate in the "RF-Paths Overview" of the front panel MMI while this is not allowed (e.g. when being in "Operate"), a message "Key currently not active" is displayed in the orange colored footer of the "RF-Paths Overview". This causes the MMI to significantly slow down while staying in the "RF-Paths Overview". To solve this problem go to any other menu (e.g. "Logbook" by pressing the "Status"-button).*" was solved.
1.11.0	The former problem "*Under certain rare circumstances it might happen that the Web-MMI does not work correctly while using other web applications in the same instance of your webbrowser. To avoid this ensure that the Web-MMI is the only used site in your webbrowser.*" was solved.
1.11.0	The problem of the not working FPGA-FW-Update for the installed internal hardware components was solved.
1.11.0	The effect of short time RF output when selecting an RF path was eliminated.
1.11.0	There were solved a number of problems concerning the monitoring and control of the unit fans.
1.11.0	The rare effect of errors in the system check at system startup was eliminated.
1.11.0	When having problems with your HDF causing no RF path to be found, you now get a correct display in the Web-MMI anyway.
1.11.0	The problem of the not persistently stored RF power unit when having it changed from dBm to W was solved.

Version	Function
1.11.0	There were made quite a number of layout improvements in some of the menus, especially the "RF-Path Configuration" menu, the "Preamp X Output X" menu and the "Operating Panel" menu.
1.11.0	The position of the font in the header and the buttons of the message boxes were fixed.
1.11.0	There were added a number of new logbook messages as well as many of the former logbook messages were improved.
1.11.0	RF paths without an RF input switch can now be used without any restrictions.
1.11.0	The default value of the DHCP server stop address for the front ethernet port was changed to 192.168.58.253, which allows to start the DHCP server more easily with the default IP setting now.
1.11.0	The rare effect of strange system behaviour when switching to system standby right after switching to operate was eliminated.
1.11.1	The former problem “If there is a VSWR > 10 : 1 and the measured forward and reflected power are > 30 dBm the operated RF path is automatically switched to standby, no matter of its frequency range and nominal output power.” was solved. The operated RF path is now automatically switched to standby under the following circumstances: Frequency range 9 kHz – 250 MHz: VSWR > 40 :1 Frequency range 80 MHz – 400 MHz: VSWR > 10 :1 Frequency range 250 MHz – 1 GHz: VSWR > 10 :1 Additionally to this the measured forward power has to be higher than or equal to half of the nominal input power of the RF path.” was solved.
1.11.1	The former restriction “*The remote control command SENS:MGA?, as stated in the user's manual chapter 7.3.8, is not supported, yet.*” Was fixed.
1.11.2	The former problem “*Switching off the system while a firmware update is in progress might in very rare cases result in endless firmware updates after switching the system on again. Therefore try to prevent to switch off the system while processing a firmware update! Notice: A firmware update can take quite some time; approximately 30 minutes per unit. So you are requested to be patient, please!*” was solved.
1.12.0	The former known problem “*In some cases of long time "Operate"-use of the system it might happen that one of the amplifier modules stops working, which is told by a matching message box then. To solve this problem restart the BBA using the mains switch.*” is softened by a workaround so that the concerned amplifier module only stops working for a few seconds and automatically recovers after that.
1.12.0	When trying to select an RF path, of which an amplifier module or any other hardware component is lost communication to, you now get a matching message box and logbook entry of type “error” informing you about this fact.
1.12.0	When communication to any hardware component, which is not part of a selected RF path, is lost, you now get a matching message box and logbook entry of type “warning” informing you about this fact.
1.12.0	When the system detects unknown hardware components on startup you now get a matching message boxes and logbook entries informing you about this fact.
1.12.0	The former problem “*In the Web-MMI it might happen in some cases that selecting a bookmark after switching from "Local" to "Remote" or vice versa causes significant slow down of the Web-MMI. To solve this problem you should restart your session by logging off and on again.*” was solved.
1.12.0	The former known problem “*In rare cases it might happen that the Web-MMI is quite slow and/or does not display changed data immediately and/or correctly. To solve this problem restart the BBA using the mains switch.*” was solved so far that now all the displayed data is correct, even though it might still take some time to update it.

Version	Function
1.12.0	The former problem "*When having installed an RF-path with the frequency range of 250 MHz - 1 GHz with a nominal power of 450 W / 56.6 dBm its nominal power is not displayed correctly, as there is displayed a wrong nominal power of 500 W / 57 dBm. Also there is a problem for the same frequency range with a nominal power of 800 W / 59.1 dBm, as there is displayed a wrong nominal power of 1000 W / 60 dBm.*" was solved.
1.12.0	The structures of the menus in Web- and Frontpanel-MMI are identical now so that all menu items can be found in all of the MMIs.
1.12.0	The former problem "*The "Live"-mode doesn't work for the "Gain"-Edit field in the "Operating Panel" of the Web-MMI.*" was solved.
1.12.0	The former problem "*In some rare system configurations it can happen that the layout of the unit separator of the power amplifiers is misplaced in the "RF-Path Configuration" menu.*" was solved.
1.12.0	The former value "In Range" of the parameter "RF Input" in the menu was renamed to "OK".
1.12.0	The "Production Date" was removed from the device info data of all hardware components.
1.12.0	The format of the "Product Index" in the device info data of all hardware components was optimized for better readability.
1.12.0	The "Part Number" and "Variant" in the device info data of all hardware components were now put together into the "Part Number" field now having a format "xxxx.xxxx.xx".
1.12.0	When selecting an RF path any other way it sometimes happened that the "Operating Panel" in the Web-MMI did not switch over to the new selected RF path. This always works fine now.
1.12.0	If an automatically disappearing message box is displayed while a permanent message box is still shown, then the permanent message box is restored after the automatically disappearing message box disappeared.
1.12.0	The navigation tree at the very left side of the Web-MMI was redesigned and optimized.
1.12.1	A problem with the VSWR monitoring for the frequency range 250 MHz – 1 GHz was solved.
1.12.1	A problem with default values and sometimes lost configuration for the output switches was solved.
1.12.1	The values for the measured forward and reflected power are much more exact now.
1.12.2	The former known problem "*Changes of the power unit between dBm/W do not get saved permanently and therefore this setting is lost after having switched off the system.*" was solved.
1.12.2	The former known problem "*Setting an RF-Path to "Disabled" via the menu item "RF-Paths" > "RF-Path X" > "General Settings" > "Path Activation" does not work in case that RF path misses one of its hardware components. To avoid this set disable the RF path before removing one if its components.*" was solved.
1.12.2	The former known problem "*In systems with many amplifier modules spread over a number of different units it might happen that execution of a firmware update fails. To solve this problem follow these steps: Completely turn off all units using their mains switch. Start the base unit using its mains switch. After completion of its firmware update (message box saying that the system can be started) turn it off again. Then start the base unit and the first of the extension units. Again after completion of the firmware update turn them off again. Then start the base unit and the first two of the extension units. Again after completion of the firmware update turn them off again. Go on like this until all units were updated.*" was solved.
1.12.2	A problem with some mixed-up error of amplifier modules was solved, so that all errors concerning amplifier modules are correct now.
1.12.2	A problem with not permanently saved changes of the parameter "GUI behaviour" in the menu "System" > "Setup" > "GUI behaviour" was solved.

Version	Function
1.12.2	When configuring the use of your high power RF output switches in the RF paths via the menu item “System” > “Setup” > “RF-Output Switches” now senseless configurations are prevented by allowing an RF-path to be assigned to just only one input/output of a switch.
1.12.2	The logbook entry for a closed interlock loop does now have the same text as the logbook entry for an opened interlock loop, but with the difference that it has a falling instead of a rising slope.
1.12.2	Documents are now available for download in the Web-MMI again.
1.12.3	Detection of the 2 defects of amplifier modules of a missing RF-Input and transistor current being out of range was disabled as under certain circumstances these defects might get reported even though they were not there when using CW signals.
1.12.3	The reaction rate of the system, especially concerning pressed keys, was improved.
1.12.3	The former known problem “*In some cases of long time "Operate"-use of the system it might happen that one of the amplifier modules stops working for a few seconds and automatically recovers after that. This event is told by a matching message box and logbook entry then.*” was solved.
1.12.4	The displayed current measured frequency (parameter “Current Frequency” in the menu “System” > “Control Hardware” > “SCM”) was faulty before, but should be quite correct now.
1.12.4	In previous releases it could happen under certain circumstances that the persistently configured “Maximum Forward Power” of an RF path got lost after an SW-update. This is fixed now.
1.13.0	The former known problem “*Deleting and editing of bookmarks does not work in the Web-MMI.*” was solved.
1.13.0	The former known problem “*In some cases it might happen that the Remote-Web-MMI stops working when trying to open a bookmark to the menu "System" > "Setup" > "Date/Time" shortly after having switched between local and remote mode.*” was solved.
1.13.0	The former known problem “*In rare cases it might happen that system startup fails. You can recognize this by the R&S-boot-screen or a grey screen at the front panel standing there for more than 5 minutes without any changes. To solve this problem turn off the system using the mains switch and restart it again.*” was solved.
1.13.0	A problem concerning the cursor navigation when typing in your password for the option “Change User” was solved.
1.13.0	A problem that an unsuccessful login to the Web-MMI was still counted as an active user session was solved.
1.13.0	The effect of the not correctly working SCPI-commands “SYST:INT:MATR?” and “SENS:VSWR?” was eliminated. They do work fine now.
1.13.0	The message saying that invalid measured values were received by a measurement coupler does is now only a warning in low power systems causing the RF path not being deselected automatically (as still for high power systems).
1.13.0	A problem that the system was still complaining about missing components when disabling all power amplifiers of a unit was solved.
1.13.0	The effect of the not correctly working “Gain Offset” in the menu “RF-Paths” > “RF-Path X” > “Preamp X Output X” was eliminated. It works now as expected.
1.13.0	The effect of the not correctly working SCPI-command “SENS:NFR?” for RF-paths with frequency range above 1 GHz was eliminated.
1.13.0	The effect of the not correctly working SCPI-command “SENS:FORW?” for forward power values higher than 1000 W was eliminated.
1.13.0	A problem of a sometimes not correctly displayed power unit in the menu “RF-Paths” > “RF-Path X” > “General Settings” was solved.

Version	Function
1.13.0	The rare effect of the sometimes occurring “Drain current out of range” error, even though there really was not such an error, was eliminated.
1.13.0	A problem that sometimes the system got into inconsistent states when switching quickly between RF-Standby and RF-Operate and when quickly switching between different RF-Paths, especially in bigger systems, was solved.
1.13.0	The incorrect input level values of logbook entries concerning a too high input level of preamplifiers are not being displayed anymore.
1.13.0	The menu item "RF-Paths" > "RF-Path X" > "Use Of Units” is now only available when having at least 4 high power RF output switches installed in your system.
1.13.0	The very rare effect of the system software stopping to work when switching between RF-Standby and RF-Operate was eliminated.
1.13.0	The following problem concerning the SW-update was solved: When being connected with the SW-update-package-executable to the BBA and then cancelling the update by pressing the “Exit” button, then the BBA was automatically restarted. This does not happen anymore.
1.13.0	A problem that in some rare cases the system was hanging for up to 10 seconds when being controlled by SCPI commands was solved.
1.13.0	The rare effect of the system software stopping to work when starting it via the “System ON – Standby” button was eliminated.
1.13.0	Pressing the Standby/Operate button is now being ignored (and not buffered anymore) when the system is still in start progress.
1.13.0	The former known problem “*When enabling the DHCP client for the rear ethernet interface it might happen that the new IP address is not displayed in the "IP address" field until moving the cursor to it or closing and reopening this menu.*” was solved.
1.13.0	The former known problem “*In the case that an amplifier module gets too hot it can happen that the color of the temperature-LED of the amplifier module does not match the warning or errors displayed for it in the MMI.*” was solved.
1.13.0	The former restriction “*Opening an interlock loop and closing it again after a very short period of time (2-4 seconds) might not be detected by the system in rare cases.*” was eliminated.
1.13.0	A problem that the System-LED sometimes was blinking red already on system startup, even though there was no error at all, was solved.
1.13.1	A problem that in certain systems and under certain circumstances it could happen, that the displayed measured values of the forward and reflected power were jumping and/or incorrect, was eliminated.
1.13.2	A problem that sometimes in bigger systems the FW-update failed was solved.
1.13.2	The former restriction “*Right after a FW-update was executed it might happen that the updated component is not found by the system. To solve this problem restart the BBA using the mains switch.*” was eliminated.
1.13.3	A problem that sometimes in some systems it happened that the system did never finish starting (all LEDs of all amplifier modules were blinking green in the meantime) was solved.
1.13.3	Many optimizations concerning the visualization of the FW-update progress were made.
1.13.4	The former known problem “*In certain systems using an RF sample port switch confirmation of the closing of a previously open interlock loop does not work until the system is restarted. To solve this problem restart the BBA using the mains switch.*” was solved.
1.20.1	The former known problem “*Under certain circumstances it might happen that the system does not recognize a too high VSWR and therefore also does not automatically switch to RF-Standby.*” was solved.

Version	Function
1.20.1	The former known problem "*In extremely rare cases it might happen that the switching from RF-Standby <-> RF-Operate might not get finished, which is indicated by endless blinking of the Standby and the Operate both together. To solve this problem restart the BBA using the mains switch.*" was solved.
1.20.1	The former known problem "*Switching between different RF-Paths via the command "RF:BAND:PATH x" too quick might cause the system to get into inconsistent states. To avoid this, it is strongly recommended to ask the system with the command "RF:BAND:PATH?" if the previous RF-Path switching command was finished before switching to the next path.*" was solved.
1.20.1	The former known problem "*In very big systems with more than 16 power amplifiers modules it might rarely happen that some of the components are not correctly recognized on system start-up. To solve this problem restart the BBA using the mains switch.*" was solved.
1.20.1	The former known problem "*Under certain circumstances it might happen that the system shows a message box saying that a measurement coupler delivers invalid results and therefore that activated RF path is deselected, even though the generated forward power is ok. You need to select and activate the RF path again after that.*" was solved.
1.20.1	The former known problem "*In rare cases it might happen that the front panel MMI freezes and does not react to any user action then. Another effect with this can be that the whole display remains white after system start up. To solve this problem restart the BBA using the mains switch.*" was solved. The MMI is automatically restarted in that case now.
1.20.1	The former known problem "*If the device interlock loop is opened while being in Operate, it might happen that the system still creates minor output power.*" was solved.
1.20.1	The former known problem "*If there is a VSWR > 3.5 : 1 at a frequency of about 250 MHz it might happen that the output power gets significantly reduced by the system.*" was solved.
1.20.1	The former known problem "*The "Current frequency" in the menu "System" > "Control Hardware" > "SCM" might not be correct.*" was solved.
1.20.1	The former known problem "*For AM signals the displayed measured forward power is unsteady.*" was solved.
1.20.1	The former known problem "*In rare cases it happens that the warning "The power is being reduced automatically, because the specified maximum forward + reflected power was exceeded!" occurs and therefore the RF-LED is switched to yellow, even though the power is not really reduced. Ignore this message then, please.*" was solved.
1.20.1	The former known problem "*When opening the menu "RF-Paths" > "RF-Path X" > "RF-Path Configuration" in the Web-MMI while switching from RF-Standby to RF-Operate and vice versa in the meantime, you might experience long waiting time until this menu is opened.*" was solved.
1.20.1	The former known problem "*In rare cases in big systems it happens that during a Firmware-Update not all of the components of the system are updated correctly because of a write error, which is displayed then. To solve this problem restart the BBA using the mains switch as these components will be updated correctly with this next system start then.*" was solved.
1.20.1	The former known problem "*Some of the measured values (i.e. temperatures and voltages of the mainboards, preamplifiers etc.) displayed in the logbook might be incorrect.*" was solved.
1.20.1	The former known problem "*When editing numeric values in the Web-MMI via the up-/down-arrows right below the concerned digit the values is in-/decreased by 2 instead of 1. Please use the keyboard or the arrows of the control element at the very right side of the Web-MMI instead.*" was solved.
1.20.1	Some problems concerning unnecessary turn on or speed up of the fans were solved.
1.20.1	The effect of the not correctly working SCPI-command "SENSe:LEVel?" was eliminated. It works fine now.

Version	Function
1.20.1	A problem that sometimes in some systems it happened that the wrong error and/or warning messages were created when opening the Interlock loop of the currently operating RF Path was solved.
1.20.1	The effect was eliminated that when changing the Autosensing and Mode settings in the menu “Remote Control” > “Ethernet” and restarting the system the previous settings were displayed again, even though the new settings were active.
1.20.1	The problem that the Interlock-LED did not turn yellow after opening an Interlock loop without any RF Path being selected and selecting an RF Path being assigned to that Interlock loop was solved.
1.20.1	The former known problem “*In some rare system configurations it might happen that the displayed measured forward power is unsteady.*” was solved.
1.21.0	The former known problem “*It might happen that logbook entries concerning the currents of the power amplifier modules are not created even though a matching message box is being displayed.*” was solved.
1.21.0	The former known problem “*In extremely rare cases it happens that the system does not react to any of the front panel buttons anymore. To solve this problem restart the BBA using the mains switch.”* was solved.
1.21.0	The former known problem “*In rare cases it happens that the system containing high power RF output switches can not finish its start. This is indicated by an endlessly yellow blinking System-LED. So if this is still the case after waiting more than 5 minutes, restart the system using the mains switch.*” was solved.
1.21.0	The former known problem “*After the automatic system restart after a software update it might happen that the systems starts with an HDF error once. Restart the systems using the mains switch then.*” was solved.
1.21.0	The former known problem “*When requesting the contents of the SCPI error queue with the command "SYST:ERR?" you also get warnings delivered, if configured so in the menu item "Remote Control" > "GPIB" > "GPIB Error queue". Possibly delivered warnings are being declared as [ERROR] in stead of [WARNING].*” was solved.
1.21.0	The former known problem “*In systems without an RF sample port switch the SCPI-command "RF:PROBe:PORT?" returns an incorrect value.*” was solved.
1.21.0	The former known problem “*The SCPI-command "SENSe:VSWR?" does NOT return a value in case of infinite VSWR.*” was solved.
1.21.0	The former restriction “*When trying to switch to Operate with the assigned Interlock loop of the RF path still being open you do not get a matching message box telling you why switching to operate is not possible.*” was eliminated.
1.21.0	The displayed positions of the preamplifiers in the menu "RF-Paths" > "RF-Path X" > "Preamp X" are not "A5" to "A8" instead of "1" to "4" before.
1.21.0	The position of the menu item "RF-Paths" > "RF-Path X" > "Use Of Units" was changed. It is now located right below the menu item “General Settings”.
1.21.0	When being in Local-Lockout-Mode you now also get a matching informational message when pressing one of the frontpanel keys right below the display.
1.21.0	The SCPI command “SENS:INT?” now also delivers useful results when having no RF path selected.
1.21.0	The problem was solved that when there were missing components in your system, you then got more HDF errors about missing components then there really were missing.
1.21.0	The problem was solved that when there were missing previously installed high power RF output switches in your system, the system then was not able to finish its startup.
1.21.0	The menu item "RF-Paths" > "RF-Path X" > "Preamplifier 1" is now only visible if there really is a preamplifier installed in that RF Path.

Version	Function
1.21.0	The system now reports an error if communication to an internal measurement coupler is lost (e.g. by unplugging it) even while the system is already up and running. But this only works if the system is not in OPERATE.
1.21.0	When disabling a unit via the menu item "RF-Paths" > "RF-Path X" > "Use Of Units" in systems with the -3dB option, then the "Max. Forward + Reflected Power" of the affected RF Path is automatically reduced by 3 dBm.
1.21.0	When switching in RF Path to OPERATE for the first time after selecting it, then the RF path adjusts its BIAS currents causing this first switching from STANDBY to OPERATE to take 2 seconds more than the other times.
1.21.0	The problem was solved that the system did not automatically deselect an affected RF path when one of its components reported an error which disappeared within a few milliseconds.
1.22.0	The former known problem "*When switching to OPERATE and quickly selecting another RF Path in the meantime, then it might happen that the MMI shows that there is no RF Path selected anymore even though the previously selected one is still selected."* was solved.
1.22.0	The former known problem "*When having a disabled RF Path with the frequency range of "800 MHz - 3 GHz" and enabling it again even though it is still not there, then the systems pretends to have that RF Path working correctly even though that it is not the case.*" was solved.
1.22.0	The former known problem "*The rack and unit of the air coolers in the menu "System" > "Cooling" > "Air Cooling" are being displayed incorrectly in systems with the rack and/or unit numbers not starting with 1 and increasing sequentially.*" was solved.
1.22.0	The former known problem "*For an RF Path with the frequency range of "800 MHz - 3 GHz" it is necessary to assign it to interlock group 1 as handling of opening and closing interlock groups 2 and 3 is not supported for that frequency range.*" was solved.
1.22.0	The problem was eliminated that in some cases the RF-LED turned yellow when activating an RF Path containing an amplifier from the R&S®BBA150 series.
1.22.0	The system now reports much fewer warnings so that you do not get disturbed by too many warnings.
1.22.0	The menu items "System" > "Setup" > "RF-Output Switches" > "RF-Path X" > ".. without Unit Y" are now only visible in systems with the -3dB option.
1.22.0	The problem was solved that there were displayed senseless values for the measured forward and reflected power in the menu "RF-Path(s)" > "RF-Path X" > "Measurement Coupler" in case that this RF Path was not activated.
1.22.0	The system now creates a special logbook entry about a missing combiner unit in case that it is not switched on.
1.22.0	The problem was solved that the system did not recognize missing high power RF output switches in case that their connection cable was not connected to the BBA.
1.22.0	In the menu "Remote Control" > "Ethernet" the initial value for "Auto Sensing" of the front Ethernet interface is now "On".
1.22.0	The SCPI command "*IDN?" now returns the correct serial number of the system.
1.22.0	The maximum number of logbook entries created at once for a system start error was increased to 10.
1.22.0	A problem was eliminated that in very rare cases in big systems containing an amplifier from the R&S®BBA150 series, the system reported an error at startup telling that it could not find the R&S®BBA150.
1.22.0	A problem was solved that in very rare cases in big systems containing an amplifier from the R&S®BBA150 series and high power RF output switches, the system was not able to operate these high power RF output switches when selecting an RF path that made use of them.

Version	Function
1.22.0	Now it is not possible anymore to set the “Path Activation” of an RF Path containing an amplifier from the R&S®BBA150 series from “Disabled” to “Enabled” even though this component is missing.
1.22.0	The SCPI command “SYSTem:INTerlock:MATRix?” now also works for systems with 7 RF Paths.
1.23.0	A problem was solved that in some cases the displayed nominal output power was incorrect when using the -3dB option and disabling a unit.
1.23.0	A problem was eliminated that the SCPI query command “RF:PROBe:STATe?” did only return the previous set value, which was set via the SCPI set command “RF:PROBe:STATe”, instead of the real current value.
1.24.0	The problem of the not persistently stored gateway address for the front Ethernet interface was solved.
1.25.0	A problem was solved that in systems containing an amplifier from the R&S®BBA150 series, under certain circumstances the system reported an error of a critical VSWR and then automatically deselected the affected RF path.
1.25.0	The menu “System” > “System Software” was extended by some “Legal notices”.

6 Known Problems

The following table lists the known problems in the current version and indicates the version in which the problem was observed for the first time.

Entries marked with dark red color indicate problems you may consider very important.

Version	Function
1.0.0	In rare cases it might happen that the Web-MMI is quite slow. To solve this problem restart the BBA using the mains switch.
1.0.0	When having bought and installed the Optical Ethernet option, the Optical Ethernet only works if having also a valid Ethernet connection on the rear LAN.
1.0.2	The values displayed for the forward and reflected power as well as the resulting VSWR are only approximate values. The measurement uncertainty increases with rising mismatch. Depending on the application, it is recommended to use calibrated power meters.
1.10.1	When the display is turned off in system standby mode, it is still illuminated a little bit.
1.11.0	In some rare system configurations it can happen that the layout of the unit separator of the power amplifiers is misplaced in the "RF-Path Configuration" menu.
1.13.0	In some rare system configurations it might happen that the displayed measured forward power is unsteady.
1.22.0	In the menu "RF-Path(s)" > "RF-Path X" > "Measurement Coupler" there are displayed senseless values for the measured forward and reflected power of the measurement coupler in case that the amplifier modules of this RF Path are located in an extension unit.

7 Backwards Compatibility

Release 1.0.1 is 100% backwards compatible to release 1.0.0. Therefore systems with release 1.0.0 can be updated to release 1.0.1 without any problems.

Release 1.0.2 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.0.2 without any problems.

Release 1.0.3 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.0.3 without any problems.

Release 1.0.4 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.0.4 without any problems.

Release 1.0.5 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.0.5 without any problems.

Release 1.0.6 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.0.6 without any problems.

Release 1.0.7 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.0.7 without any problems.

Release 1.0.8 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.0.8 without any problems.

Release 1.1.0 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.1.0 without any problems.

Release 1.10.1 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.10.1 without any problems.

Release 1.11.0 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.11.0 without any problems.

Release 1.11.1 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.11.1 without any problems.

Release 1.11.2 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.11.2 without any problems.

Release 1.12.0 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.12.0 without any problems.

Release 1.12.1 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.12.1 without any problems.

Release 1.12.2 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.12.2 without any problems.

Release 1.12.3 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.12.3 without any problems.

Release 1.12.4 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.12.4 without any problems.

Release 1.12.5 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.12.5 without any problems.

Release 1.13.0 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.13.0 without any problems.

Release 1.13.1 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.13.1 without any problems.

Release 1.13.2 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.13.2 without any problems.

Release 1.13.3 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.13.3 without any problems.

Release 1.13.4 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.13.4 without any problems.

Release 1.20.1 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.20.1 without any problems.

Release 1.21.0 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.21.0 without any problems.

Release 1.22.0 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.22.0 without any problems.

Release 1.23.0 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.23.0 without any problems.

Release 1.24.0 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.24.0 without any problems.

Release 1.25.0 is 100% backwards compatible to all previous releases. Therefore systems with any previous release can be updated to release 1.25.0 without any problems.

8 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.

Chapter	Changes
3.5.2.5	The RF-LED is green when the system is in "Operate" and has no warning or error concerning the RF output. The RF-LED is yellow if a VSWR of <= 1:6 is measured. The RF-LED is read of a VSWR of >= 1:10 is measured or the measured forward power is >= the nominal power of the selected RF-path.
5.4.2	The “BACK” key only works until having reached the “RF-Paths Overview”, because this is the “HOME” menu of the BBA.
5.4.3	In some menus you can see different states of some components of the BBA. The possible states are "OK", "Warning", "Error" which of "Warning and "Error" have matching graphical icons. The graphical icon for "Warning" displays a black "!" in a yellow triangle and the one for "Error" a white lightning in a red circle.
5.7.3	The "DHCP Server" can only be set to "Enabled" if the settings of the "DHCP Server" do match the other Ethernet settings (e.g. Start IP and Stop IP have to match the subnet setting).
6.1	If the cursor is placed onto the field for selecting an RF-path in the "RF-Paths Overview", but then access to this field is suddenly removed (for example by changing control mode from LOCAL to REMOTE) then the cursor automatically jumps to the most upper left field of the table.
6.2	The gain adjustment only works reliably in the range of -20 to 0 dB.
6.8	Not all of the logbook entries have matching reset logbook entries.
6.10.9	The "Host Name" is the name the system uses to identify itself.
6.10.9	The “Gateway” setting is also available for the “Rear Ethernet”.
6.12	Due to increased security settings in the latest versions of the JAVA runtime you might be prompted several warnings when running the Web-MMI. To suppress some of these warnings you can go to the “Security”-tab of the “Java Control Panel” on your PC and add the URL of the Web-MMI to the “Exceptions Site List” in the form of “http://*BBA100-IP*” (e.g. “http://192.168.59.253”). All other of the warnings you have to accept allowing them to “Run” the applets of the Web-MMI.
6.12	When experiencing problems with the Web-MMI, check the settings of your JAVA runtime environment in the following way: Go to the "Java Control Panel" on your PC and there to its network settings. In there make sure that the option "Use browser settings" is activated, please! Additionally to this you should ensure that in the settings for the Java temporary internet files the item "Keep temporary files on the computer" is NOT checked, please!
6.12.2	After being logged on to the Web-MMI it might take up to about 50 to 60 seconds to load the Java applets. It might also happen that the Java loading progress is not updated all the time then, even though loading really is still in progress.
7.3.8	Not putting the desired RF path number right after group name CONTrol for the remote control commands “CONTrol<1..10>:AMODe:FGAin” and “CONTrol<1..10>:AMODe:FGAin?” causes the command to use the default value for the RF path number, which is 1 (for RF path 1) in this case.
11.2	For the codes 4512(F) and 4513(F) a possible way to solve the problem can be to set the RF-Path, which contains the mentioned components, to "Disabled" in the menu "RF-Path".
12	The BBA uses a number of Open Source softwares, which are published under different licenses. For further information consult the print-out of the Open Source Acknowledgement coming with your BBA or its digital version in the "Documents"-menu of the Web-MMI, please.

9 Contacting Customer Support

For queries regarding technical aspects of our products, contact our customer support at http://www.customersupport.rohde-schwarz.com.