

R&S®BBA300

Release Notes

Software Version 4.0.0

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

The following abbreviations are used throughout this document: R&S®BBA300 is abbreviated as R&SBBA300.

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1 Information on the current version and history

1.1 Version 4.0.0

Firmware package contents

Contents

BBA300_4.0.0.exe

OSA_BBA300_4.0.0.pdf

OSA_RsDistributor.pdf

New functionality

Contents

Support for new R&SBBA300-F and R&SBBA300-FG amplifiers

Modified functionality

Contents

VSWR calculation starts at 35 dBm output power

Power measurement starts at 35 dBm/3W output power

Ethernet interfaces renamed from local and remote to LAN0 and LAN1

Interlock configuration cannot be modified any more

Improvements

Contents

Front panel: fixed turning off amplifier with button

GUI layout improved

Fixed "calling the SCPI command "RF:BAND:PATH" with an invalid RF Path number while having RF-Operate turned on, turns RF-Operate off."

Faster bias current calibration

GUI menu "About"

Known issues

Contents

During a software update, the device shows no hint for a running update. The software distributor shows the progress of the update.

R&SBBA300 without K1 option cannot change Output Mode and Operating Class from R&SBBA130

Customer cannot use the system in the subnet 192.168.58.x (reserved for internal communication)

Switch RF-Operate while muting can cause undefined behavior.

Please start muting after amplifier is in RF-Operate state.

In rare cases it might happen that one or more of the system's units freeze (do not react to any interactions anymore). In that case you are kindly requested to turn the whole system off and on again.

The Output Mode and Operating Class slider in the web UI sometimes does not apply the selected value.

Front panel: When setting the menu item "Mute" to "Off" and this fails (because of still activated mute via control interface), the menu item shows "Off" even though mute is still activated and should show "On".

Changing the Output Mode or Operating Class live while RF-Operate has no effect for F/FG amplifiers. Turn operate off and on that the change has effect.

1.2 Version 3.3.0

Firmware package contents

Contents

BBA300_3.3.0.exe

OSA_BBA300_3.3.0.pdf

OSA_RsDistributor.pdf

New functionality

Contents

Support for software options K1 and K130 in CDE300

Support for splitting up the combination of R&SBBA150/130 and R&SBBA300

Software Update of the R&SBBA150/130 for combination of R&SBBA150/130 and R&SBBA300

Name of RF Paths and RF Path Groups can be changed by user "expert"

Front panel: New menu item "Mute: On/Off" for (de-)activating mute when having option K130 (Fast Amplifier Mute) installed

Modified functionality

Contents

-

Improvements

Contents

Numerous improvements concerning CDE300

Numerous improvements concerning the combination of R&SBBA150/130 and R&SBBA300 to a system

Numerous improvements concerning the SCPI remote control

Front panel: Fixed wrong IP address for static mode of Remote Ethernet Interface

Known issues

Contents

The SCPI commands "RF:PROBe:STATe" and "RF:PROBe:STATe?" do not have any effect as RF sample port switches are not supported yet.

During a software update, the device shows no hint for a running update. The software distributor shows the progress of the update.

R&SBBA300 without K1 option cannot change Output Mode and Operating Class from R&SBBA130

Customer cannot use the system in the subnet 192.168.58.x (reserved for internal communication)

Switch RF-Operate while muting can cause undefined behavior.

Please start muting after amplifier is in RF-Operate state.

In rare cases it might happen that one or more of the system's units freeze (do not react to any interactions anymore). In that case you are kindly requested to turn the whole system off and on again.

The Output Mode and Operating Class slider in the web UI sometimes does not apply the selected value.

Front panel: When setting the menu item "Mute" to "Off" and this fails (because of still activated mute via control interface), the menu item shows "Off" even though mute is still activated and should show "On".

Calling the SCPI command "RF:BAND:PATH" with an invalid RF Path number while having RF-Operate turned on, turns RF-Operate off.

1.3 Version 3.0.0

Firmware package contents

Contents

BBA300_3.0.0.exe

OSA_BBA300_3.0.0.pdf

OSA_RsDistributor~1.pdf

New functionality

Contents

Support CDE300 (without software option K1 and K130)

Factory Reset

Front Panel: added boot screen and user dialogs for bias current calibration, restart and power off

Support more than one BBA300 RF-Path for combination of R&SBBA150/130 and R&SBBA300

Software Option K9 (Automatic RF-On)

Modified functionality

Contents

Updated base operation system with latest security patches

Improvements

Contents

Numerous improvements concerning the combination of R&SBBA150/130 and R&SBBA300 to a system

Reduced time to turn RF-Operate

Reduced boot time

Rf-Operate LED toggles while bias current calibration is executed

Error LED toggles while unit has own error

Fixed sporadic errors while switching to RF-Operate

Known issues

Contents

The SCPI commands "RF:PROBe:STATE" and "RF:PROBe:STATE?" do not have any effect as RF sample port switches are not supported yet.

During a software update, the device shows no hint for a running update. The software distributor shows the progress of the update.

R&SBBA300 without K1 option cannot change Output Mode and Operating Class from R&SBBA130

Customer can not use the system in the subnet 192.168.58.x (reserved for internal communication)

Switch RF-Operate while muting can cause undefined behavior.
Please start muting after amplifier is in RF-Operate state.

In rare cases it might happen that one or more of the system's units freeze (do not react to any interactions anymore). In that case you are kindly requested to turn the whole system off and on again.

The Output Mode and Operating Class slider in the web UI sometimes does not apply the selected value.

Splitting up the combination of R&SBBA150/130 and R&SBBA300 is not working

1.4 Version 2.3.1

Firmware package contents

Contents

BBx_2.3.1.exe

OSA_BBx_2.3.1.pdf

OSA_RsDistributor~1.pdf

New functionality

Contents

Online help in the Web-MMI (available via ?-button)

SCPI-command "*OPT?"

Modified functionality

Contents

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Improvements

Contents

Numerous improvements concerning the combination of R&SBBA150/130 and R&SBBA300 to a system

The problem was solved that after switching RF-Operate on/off the SCPI command "RF:OUTPut:STATe?" immediately returned the new state even though the new state was not really reached yet.

Numerous improvements concerning the logbook in the Web-MMI.

Known issues

Contents

The SCPI commands "RF:PROBe:STATE" and "RF:PROBe:STATE?" do not have any effect as RF sample port switches are not supported yet.

During a software update, the device shows no hint for a running update. The software distributor shows the progress of the update.

R&SBBA300 without K1 option cannot change Output Mode and Operating Class from R&SBBA130

Customer can not use the system in the subnet 192.168.58.x (reserved for internal communication)

Switch RF-Operate while muting can cause undefined behavior.
Please start muting after amplifier is in RF-Operate state.

In rare cases it might happen that one or more of the system's units freeze (do not react to any interactions anymore). In that case you are kindly requested to turn the whole system off and on again.

1.5 Version 2.0.0

Firmware package contents

Contents

BBx_2.0.0.exe

OSA_BBx_2.0.0.pdf

OSA_RsDistributor~1.pdf

New functionality

Contents

Combine R&SBBA150/130 and R&SBBA300 to a system

New menu "RF-Path Selection"

Software Option K130 (Fast Amplifier Mute)

Modified functionality

Contents

Renamed "Gain" setting to "Gain Control" in GUI

X105 signal OPERATE_STANDBY inverted

Improvements

Contents

Faster RF-Operate and RF-Off switching

Solved issue: Fast interlock changes may cause undefined device behavior

Improved system availability e.g. continuous operation

Known issues

Contents

The SCPI commands "RF:PROBe:STATE" and "RF:PROBe:STATE?" do not have any effect as RF sample port switches are not supported yet.

During a software update, the device shows no hint for a running update. The software distributor shows the progress of the update.

R&SBBA300 without K1 option cannot change Output Mode and Operating Class from R&SBBA130

Customer can not use the system in the subnet 192.168.58.x (reserved for internal communication)

Switch RF-Operate while muting can cause undefined behavior.
Please start muting after amplifier is in RF-Operate state.

In rare cases it might happen that one or more of the system's units freeze (do not react to any interactions anymore). In that case you are kindly requested to turn the whole system off and on again.

Local Device Time Timestamps are not correct (use Local Browser Time)

No error messages from R&SBBA150/130 are logged to R&SBBA300

Only one R&SBBA150/130 system is supported

1.6 Version 1.5.0

Firmware package contents

Contents

BBx_1.5.0.exe

OSA_BBx_1.5.0.pdf

OSA_RsDistributor~1.pdf

New functionality

Contents

Automatic Standby Feature

Support for time zones

System diagnosis for R&S Service

Operating Misc menu in front panel

Added SCPI commands:

SYSTem:DATetime:LOCal

SYSTem:DATetime:ZONe

Modified functionality

Contents

Setting of date and time

Updated base operation system

Gain setting in 0.25 dB steps

Improvements

Contents

Solved issue: Changing the gain to a positive value is possible but does not have any effect.

Solved issue:

In the Web-MMI the user dialogue cannot be closed after opening it via the button with the user name in the menu with the user name.

In that case use the buttons "Logout" or "Reload App" to exit, please.

GUI Layout improvements

Logbook entry "Reduced RF Power" added in case of continued operation with failure

Known issues

Contents

The SCPI commands "RF:PROBe:STATE" and "RF:PROBe:STATE?" do not have any effect as RF sample port switches are not supported yet.

During a software update, the device shows no hint for a running update. The software distributor shows the progress of the update.

Fast interlock changes may cause undefined device behavior

1.7 Version 1.2.0

Firmware package contents

Contents

BBx_1.2.0.exe

OSA_BBx_1.2.0.pdf

OSA_RsDistributor~1.pdf

New functionality

Contents

License / Option Management

Software Option BBA300-K001 - Adjust Operation Point & High Power

Added support for devices of type "DE15", "DE25", "DE50", "DE90", "CDE90" and "DE180".

Two separate configurable interlocks

Rf Operate works with defect transistors

Modified functionality

Contents

-

Improvements

Contents

Solved issue with interlock for device type "CDE180"

Known issues

Contents

The SCPI commands "RF:PROBe:STATE" and "RF:PROBe:STATE?" do not have any effect as RF sample port switches are not supported yet.

During a software update, the device shows no hint for a running update. The software distributor shows the progress of the update.

The feature of "Automatic Standby" is not supported yet.

Changing the gain to a positive value is possible but does not have any effect.

In the Web-MMI the user dialogue cannot be closed after opening it via the button with the user name in the menu with the user name.

In that case use the buttons "Logout" or "Reload App" to exit, please.

1.8 Version 1.0.1

Firmware package contents

Contents

BBx_1.0.1.exe

OSA_BBx_1.0.1.pdf

OSA_RsDistributor~1.pdf

New functionality

Contents

-

Modified functionality

Contents

-

Improvements

Contents

The problem was solved that in rare cases the amplifier froze (did not react to any interactions anymore).

Known issues

Contents

The SCPI commands "RF:PROBe:STATE" and "RF:PROBe:STATE?" do not have any effect as RF sample port switches are not supported yet.

During a software update, the device shows no hint for a running update. The software distributor shows the progress of the update.

The feature of "Automatic Standby" is not supported yet.

Changing the gain to a positive value is possible but does not have any effect.

In the Web-MMI the user dialogue cannot be closed after opening it via the button with the user name in the menu with the user name.

In that case use the buttons "Logout" or "Reload App" to exit, please.

In devices of type "CDE180" opening the interlock with RF-Operate being turned on causes numerous errors while RF-Operate is automatically turned off. After closing the interlock it is not possible to turn RF-Operate on again.

In that case you are kindly requested to turn the amplifier off and on again or restart it via the SCPI command "**RST" or the "Restart"-button in the Web-MMI.

Licence / Option Management is not supported yet.

In some rare cases there might occur a warning W235 "Gate current out of range for amplifier..." in the logbook while having RF-Operate turned on even though the gate current is OK.

1.9 Version 1.0.0

Firmware package contents

Contents

BBx_1.0.0.exe

OSA_BBx_1.0.0.pdf

OSA_RsDistributor~1.pdf

New functionality

Contents

Devices of type "CDE15", "CDE25", "CDE50" and "CDE180" are supported.

Modified functionality

Contents

-

Improvements

Contents

-

Known issues

Contents

The SCPI commands "RF:PROBe:STATE" and "RF:PROBe:STATE?" do not have any effect as RF sample port switches are not supported yet.

During a software update, the device shows no hint for a running update. The software distributor shows the progress of the update.

The feature of "Automatic Standby" is not supported yet.

Changing the gain to a positive value is possible but does not have any effect.

In the Web-MMI the user dialogue cannot be closed after opening it via the button with the user name in the menu with the user name.

In that case use the buttons "Logout" or "Reload App" to exit, please.

In devices of type "CDE180" opening the interlock with RF-Operate being turned on causes numerous errors while RF-Operate is automatically turned off. After closing the interlock it is not possible to turn RF-Operate on again.

In that case you are kindly requested to turn the amplifier off and on again or restart it via the SCPI command "**RST" or the "Restart"-button in the Web-MMI.

Licence / Option Management is not supported yet.

In rare cases it might happen that the amplifier freezes (does not react to any interactions anymore). In that case you are kindly requested to turn it off and on again.

2 Modifications to the documentation

The current documentation is up-to-date.

3 Firmware update

Further information

- For detailed instructions and information about the Firmware Update refer to the chapter named "Software Update" in the User's Manual.

3.1 Validity information

Device	Order Number
BBA300	5357.9053K40

3.2 Update information

Downgrading to lower version numbers than the installed one is not supported.

3.3 Updating the firmware

The ZIP-archive contains the files "BBA300_[Version].exe" and "OSA_BBx.pdf" and must be extracted to any directory.

Then the file "BBA300_[Version].exe" has to be executed.

In the first two screens just press "Next >".

In the third screen called "Device List" select your found and desired BBA300 by clicking the checkbox of the respective line and press "Install" afterwards.

The status in the respective line should change to "Copy..." and others then.

You are kindly requested to be patient and not turn off the system during that process. Completion of the installation is displayed via the status "Ready:..see report for details!" in the respective line.

Finally, the update program can be closed via pressing "Exit".

In case of problems or for detailed instructions and information about the Firmware Update refer to the chapter named "Software Update" in the User's Manual, please.

4 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 4-1: QR code to the Rohde & Schwarz support page