

Firmware Release 2.51.15

(32-Bit-WINDOWS version)

for the Signal Generators

R&S SML01, R&S SML02, R&S SML03 and R&S SMV03

**This firmware version is ONLY for the models explicitly mentioned above!
Do not try to update other Rohde & Schwarz generators using this firmware**

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1) Important Notes

This package contains the firmware as well as the context sensitive help systems for the generators: R&S SML and R&S SMV. As these generators are equipped with flash EPROMs, the software can be loaded and updated without opening the equipment.

This firmware installation is only for R&S SMLs and R&S SMVs equipped with **EPROM version 1.03** or higher. If the SML/SMV has an older version, please contact the nearest R&S Service department or your local R&S Vendor.

2) Installation Software

The installation package consists of many parts including the loader, the firmware config file and the firmware itself. You can choose whether you want to update the firmware via the COM1 or COM2 interface.

The installation software is an automatic installation file like a PC installation.

3) Prerequisites concerning the PC

A 32-bit-WINDOWS operating system (WINDOWS 95/98/2000 or NT) is running on your PC and about 5 MByte free space on your hard disk is required.

The RS232 interface must be configured with the following parameters:

- Baud rate: 9600
- Data Bits: 8
- Parity: No
- Stopbits: 1
- Protocol: none

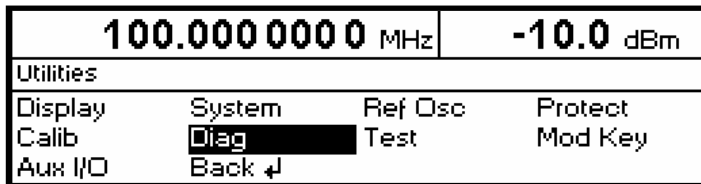
4) Connection between PC and R&S SML/R&S SMV

The generator provide a connection plug with 9 poles (named "RS232"). Pinning as well as electrical and mechanical specifications correspond to the 9-pole-plug of a PC-AT. For the connection to the PC a crossed cable (a so-called null modem) with a female 9-pole-plug at each end is needed.

A cable according to these specifications is available by Rohde & Schwarz. The order number is 1050.0346.00. This well shielded cable can be used for remote controlling too.

5) Procedure of a Firmware Update

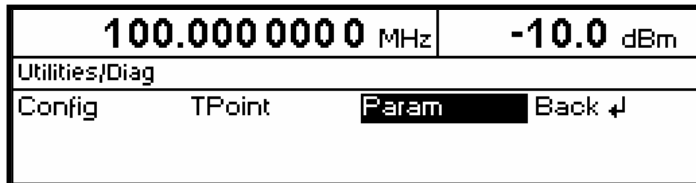
- Checking the version of the Boot Code and the Flash Size
This information is needed for the update process and have to be selected in the software (see below).
You can check the both by the following procedure:



➤ Press the blue *PRESET* button and confirm with the *SELECT* hardkey

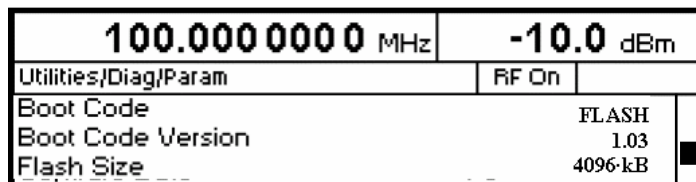
➤ Choose UTILITIES in the main generator menu with the rotary knob

➤ Press the knob or the *SELECT* hardkey



➤ Choose DIAG in the utilities menu with the rotary knob

➤ Choose PARAM in the diag menu with the rotary knob and press the knob or the *SELECT* hardkey

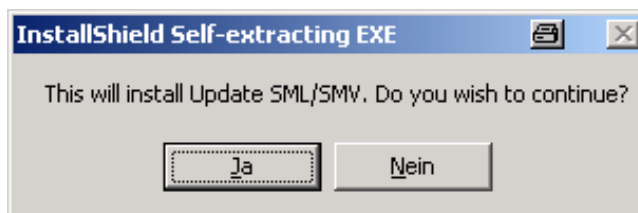


➤ Here the instruments Boot Code, Boot Code Version and Flash Size can be found.

• Starting the Update

Execute the file "SML_SMV_2.51.15.exe". This starts the installation program. Follow the instructions given by the installation process (normally you can answer all questions with the default suggestion). The firmware loader is now running on your PC.

(After the update process all temporary files will be deleted automatically.)



• Necessary settings

Before the update can start, some settings are needed:

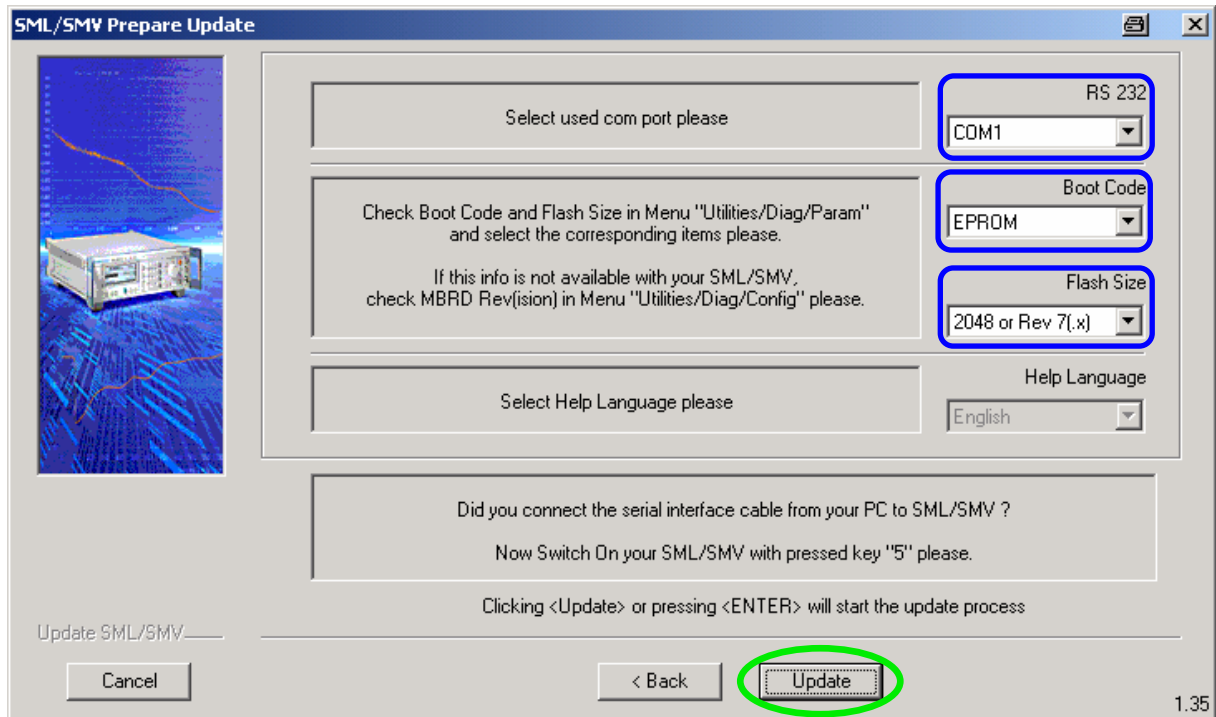
- The right COM port of the PC has to be chosen. COM1 and COM2 are supported by the software.
- Select the right Boot Code and Flash Size, according to the R&S SML or R&S SMV. If you have to change the Boot Code to "FLASH", a message comes up, that the actual setting is not supported by the R&S SML or R&S SMV, so the Flash Size has to be modified to "4096 or Rev. 8(x)".

• Preparation of the instrument

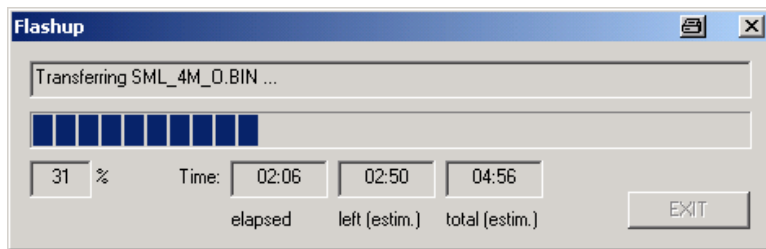
Connect the generator with the PC as described in chapter 4, switch on the generator while pressing the '5' key on the keypad.

• Running the Update

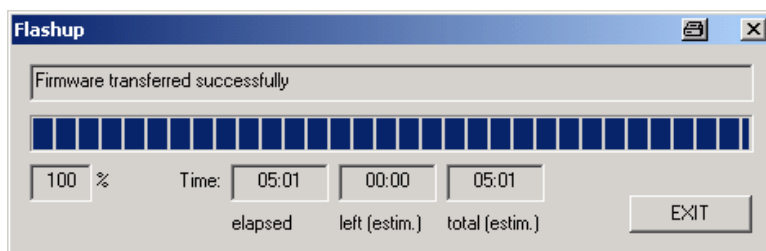
Clicking on the "Update" button starts the update process.



While the update a status bar indicates the progress of the procedure.



After the update process is finished, a message "Firmware transferred successfully" comes up.



Pressing the EXIT button ends the program.

- Internal calibration

After the installation process finished, please continue as follows:

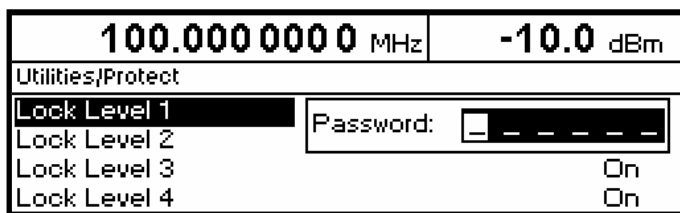
- Switch the device off and on.

With a new firmware release loaded, the generator comes up with the message:

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Firmware update or low battery detected!
ROHDE & SCHWARZ SML
Press "SELECT" to initialize RAM
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Pressing the "SELECT" button clears the battery-buffered RAM, which will help to avoid conflicts between the new firmware and the old content of the memory.

- Alarm and error messages appearing on the display are the consequence of missing calibration data. The necessary calibrations can be carried out without external measuring instruments:



- Unlock protection level 1 in the menu UTILITIES-PROTECT using the password "123456".



- Execute the calibrations from the menu UTILITIES-CALIB-ALL. For the calibration, the generator should be in a warmed-up condition (recommended are 30 minutes).

6. New and modified Functions

- Lower Fixrange Level can be read out
Remote :
:OUTPut:AFIXed:RANGe:LOWer?
Level settings are made electronically only in a 20-dB range (30-dB overrange approx.) with fixed attenuator (From given value)
Please note limit and/or other limiting factors
- MAV/SRQ Bit evaluation improved

7. Problems eliminated

None

Appendix: Contact to our hotline

Any questions and ideas concerning the instrument are welcome to our hotline:

Phone: ++49-1805-124242

FAX: ++49-89-4129-13777

e-mail: CustomerSupport@rsd.rohde-schwarz.com