



**ROHDE & SCHWARZ**

Test and Measurement  
Division

## **Release Notes**

### **TETRA II Analysis**

### **Application Firmware R&S FS-K110**

### **Release 4.40**

for R&S FSQ, FSU, Analyzer Firmware V4.4x

**Release Note Revision: 2**

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## History

| <u>Date</u>    | <u>Rel Note Rev</u> | <u>Changes</u>  |
|----------------|---------------------|---|
| March 11, 2009 | 1                   | First revision of K110 Application Firmware for V4.40 |
| July 09, 2009  | 2                   | System memory requirements issues added.              |

## General Topics

### Compatibility of the R&S FS-K110 TETRA II Analysis Application Firmware with other Firmware Releases

The following table shows the compatible versions of the basic analyzer firmware and the TETRA II Analysis Application Firmware.

Table of compatible versions:

| R&S FS-K110<br>Application<br>Firmware | R&S FSQ<br>Basic<br>Firmware | R&S FSU<br>Basic<br>Firmware |
|--|------------------------------|------------------------------|
| 4.40                                   | 4.45 SP 1                    | 4.41 SP 1                    |

### Firmware Update of the R&S FS-K110 TETRA II Analysis Application Firmware

Since basic firmware version 4.2x a ZIP file with the update sets of the basic system firmware and all available applications is provided. This ZIP file is available in the instruments FIRMWARE section, e.g. R&S FSQ of the Service Board on GLORIS.

Please follow the steps described in the instrument's basic firmware release note to perform a complete firmware update.

### Enabling the Application Firmware via License Key Code Entry

This section can be skipped if the option key was entered once.

After installing the application firmware package a license key for validation must be entered. The license key is printed either on a label on the rear panel of the instrument or delivered as a part of the R&S FS-K110 TETRA II Analysis application firmware package.

The key sequence for entering the license key is:

SETUP - GENERAL SETUP – OPTIONS - INSTALL OPTION

Use the numeric keypad to input the license key number and press ENTER.

- On a successful validation the message 'option key valid' will appear. The instrument will perform an automatic reboot.
- If the validation failed, the application firmware is not installed.

The most probable reason will be that the instrument is not equipped with the correct basic firmware version. Therefore a messagebox will appear asking for installation of the correct basic firmware version.

If the application firmware package was not installed prior to entering the license key code, a message will appear asking for installation of the application firmware package.

**In any case please make sure that the correct basic firmware version is installed prior to entering the license key code..**

## **System Memory Requirements**

For FS-K110 TETRA II Analysis Application Firmware, an installed system memory of 512MByte is essential.

The system memory size can be easily checked by pressing SETUP – SYSTEM INFO – STATISTICS, item "Memory size". This item is available since version 3.25 of the base system firmware.

For instruments, shipped with 256MByte system memory, a memory extension FSQ-B512, order number 1157.1590.02, is available.

Please refer to the Software Release Notes of the basic system firmware for further system memory requirements which may apply.

## **Known problems with option R&S FS-K110 TETRA II Analysis Application Firmware**

The version numbers in brackets indicate the version in which the error was observed for the first time.

### **Manual Operation and IEC/IEEE Bus**

#### **1. (K110 V4.40) Y-Auto scaling is not always optimum**

The automatic scaling of the y-axis of some measurements needs improvement.

**Workaround:** Switch to manual y-axis scaling for measurements located in the EVM-submenu.

#### **2. (K110 V4.40) RBW of FFTs blinks**

In the measurements Spectrum FFT and ACP due to Modulation the application delivers FFT traces and the resolution bandwidth of them. These RBW figures blink and disappear after a RUN SGL is finished.

**Workaround:** In the release 4.40 the RBW is always 300 Hz.

#### **3. (K110 V4.40) Crest Factor too small**

The returned Crest Factor is sometimes too small. Error is up to about 0.2 dB.

## **IEC/IEEE Bus only**

### **1. (K110 V4.40) Setting limits for ACP due to Transients does not update GUI**

Commands that set limits of the measurement ACP due to Transients like

*CALCulate1:LIMit:BURSt:ACPTrans:CHAN2:RELPower:BANDwidth0*

change the limits but the GUI does not reflect these changes.

Commands that query failed / passed limits like

*CALCulate1:LIMit:BURSt:ACPTrans:CHAN2:RELPower:MAXimum:RESult?*

use the correct (i.e. changed) limits.

## Appendix: Contacting our hotline

Any questions or ideas concerning the instrument are welcomed by our hotline:

### USA & Canada

Monday to Friday (except US public holidays)

8:00 AM – 8:00 PM Eastern Standard Time (EST)

Tel. from USA 888-test-rsa (888-837-8772) (opt 2)

From outside USA +1 410 910 7800 (opt 2)

Fax +1 410 910 7801

E-mail [Customer.Support@rsa.rohde-schwarz.com](mailto:Customer.Support@rsa.rohde-schwarz.com)

### East Asia

Monday to Friday (except Singaporean public holidays)

8:30 AM – 6:00 PM Singapore Time (SGT)

Tel. +65 6 513 0488

Fax + 65 6 846 1090

E-mail [Customersupport.asia@rohde-schwarz.com](mailto:Customersupport.asia@rohde-schwarz.com)

### Rest of the World

Monday to Friday (except German public holidays)

08:00 – 17:00 Central European Time (CET)

Tel. from Europe +49 (0) 180 512 42 42

From outside Europe +49 89 4129 13776

Fax +49 (0) 89 41 29 637 78

E-mail [CustomerSupport@rohde-schwarz.com](mailto:CustomerSupport@rohde-schwarz.com)