

Version  
02.00January  
2005

## TV Trigger/RF Power Trigger R&S®FSP-B6

for Spectrum Analyzer R&S®FSP

The R&S®FSP-B6 option makes the Spectrum Analyzers R&S®FSP suitable for analog TV measurement applications and provides a settable RF level trigger for measurements on pulsed RF signals that are used in TDMA transmission systems.

### Analog TV applications

- ◆ Standards B/K, D/K, I, L and M
- ◆ Trigger to even, odd field or any line
- ◆ Measurement of modulation quality
- ◆ CCVS signal output
- ◆ Trigger to external CCVS signal

### RF power trigger

- ◆ Large trigger bandwidth
- ◆ Settable trigger level
- ◆ Measurement on TDMA systems without trigger output



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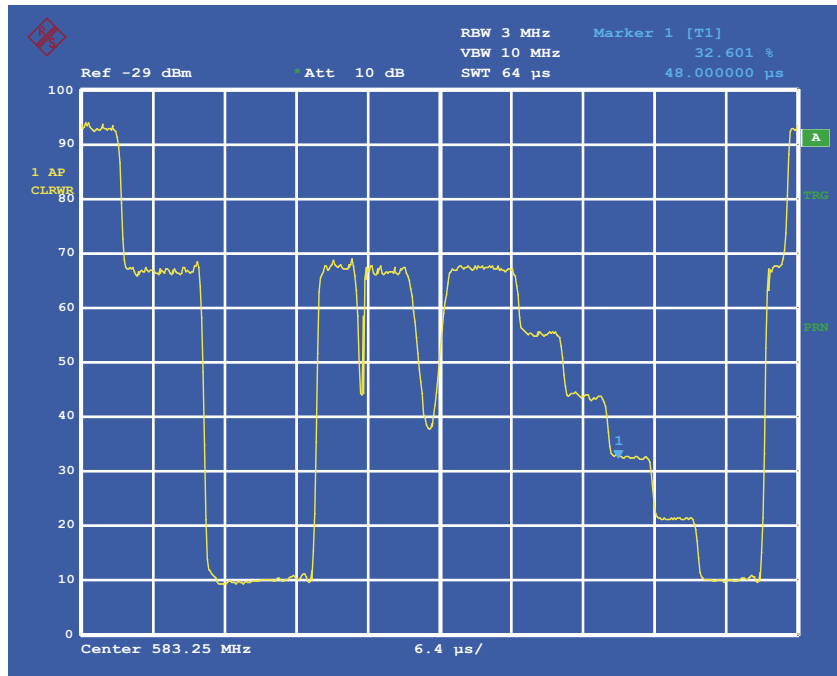
## TV trigger

Measurements on analog TV signals require triggering to specific lines in the video signal. To this end, the R&S®FSP-B6 option provides a trigger signal from a TV demodulator. Triggered to the desired line (horizontal sync) or a field (vertical sync), the R&S®FSP displays the TV video signal in the time domain. This makes it easy to measure the vision carrier amplitude in line 17 or 18 for instance. The high level accuracy and the excellent display linearity of the R&S®FSP ensure high-precision measurements.

The R&S®FSP is equipped with a CCVS connector at the rear panel, thus allowing a visual assessment of the picture quality on a connected monitor. The connector is also used as an input to trigger the R&S®FSP to an external CCVS signal.

## RF power trigger

The RF power trigger makes it possible to trigger the R&S®FSP by means of an RF level. The bandwidth available for triggering is  $\pm 40$  MHz about the R&S®FSP's center frequency. The trigger level can be set in a range of 40 dB. This makes it very easy for the user to measure for instance the spectrum due to modulation of TDMA signals such as GSM or EDGE. A trigger from the DUT is not required and also quite often not available. Therefore, elaborate additional circuits are not required to generate a trigger signal. In conjunction with the comprehensive R&S®FSP trigger functions such as pre-trigger and trigger delay, the wide range of resolution bandwidths (10 Hz to 10 MHz) and the high display resolution (min. 31.25 ns), pulsed signals can be investigated in detail with minimum effort.



Amplitude of RF carrier in line 17

## Specifications

The specifications below describe the data valid as of firmware version 1.20 or later and are a supplement to the R&S®FSP specifications, PD 0758.1206.22. Data designated "nominal" apply to design parameters and are not tested.

### RF trigger

Trigger source	RF level
Trigger level	
Setting range	40 dB, settable in 1 dB steps
Max. deviation of trigger level ( $f_{in} \leq 3$ GHz)	4 dB, nominal
RF bandwidth	80 MHz

### TV trigger

Trigger source	internal TV demodulator, video polarity selectable or external CCVS signal
Standards	B/G, D/K, I, L, M
Level range	
RF input	-10 dBm to -40 dBm (mixer level)
CCVS input	500 mV to 2 V ( $V_{pp}$ )
Triggering	vertical and horizontal TV sync signals, any line within a 625- or 525-line system
CCVS input and output	BNC female
Output voltage	1 V ( $V_{pp}$ ) into 75 $\Omega$

### Ordering information

TV Trigger/RF Power Trigger	R&S®FSP-B6	1129.8594.02
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