

TV Trigger/RF Power Trigger FSP-B6

for Spectrum Analyzer FSP

Option FSP-B6 makes the Spectrum Analyzers 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

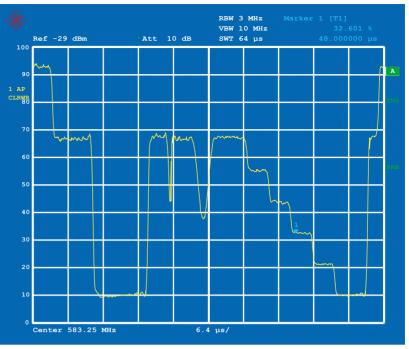
- Large trigger bandwidth
- Settable trigger level
- Measurement on TDMA systems without trigger output



TV trigger

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

FSP is fitted 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 FSP to an external CCVS signal.



Amplitude of RF carrier in line 17

RF power trigger

Using this feature FSP can be triggered by means of an RF level. The bandwidth available for triggering is \pm 40 MHz about the FSP 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 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.

Specifications

The specifications below describe the data valid as of firmware version 1.20 or higher and are a supplement to the FSP data sheet, PD 757.5137. Data designated "nominal" apply to design parameters and are not tested.

RF trigger

Trigger source Trigger level Setting range Max. deviation of trigger level (f_{in} ≤3 GHz) RF bandwidth

TV trigger Trigger source

Standards Level range RF input CCVS input Triggering CCVS input and output Output voltage 40 dB, settable in 1 dB steps 4 dB, nominal 80 MHz

RF level

internal TV demodulator, video polarity selectable or external CCVS signal B/G, D/K, I, L, M

-10 dBm to -40 dBm (mixer level) 500 mV to 2 V (Vpp) vertical and horizontal TV sync signals, any line within a 625- or 525-line system BNC female 1 V (Vpp) into 75 Ω

Ordering information



