

TSG 601 Serial Component Generator SDA 601 Serial Digital Analyzer



and indicating the presence and status of SMPTE RP165 and other ancillary (ANC) data signals. The results may be displayed on the built-in LCD screen, on a picture monitor, or transferred directly to a printer or PC for further analysis. The SDA 601 may be operated in a watch mode, reporting errors as they occur.

The SDA 601 also provides a suite of individual checks, including strength of the incoming data signal, data and video format type, and position and validity of data timing signals.

Both the TSG 601 and SDA 601 comply with industry standards for serial component television data transmission. They may be used as a set for data path testing or individually to check performance and compliance of digital source and receiving equipment.

A comprehensive serial component test set:

The TSG 601 Serial Component Generator and the SDA 601 Serial Digital Analyzer form a comprehensive test set for serial component television system installation and maintenance. Each convenient, handheld instrument complements the other for stress testing the television system data path.

The TSG 601 Serial Component Generator provides Serial Digital Interface (SDI) check field test signals that stress receiver clock recovery and phase lock loop circuitry. Data signal launch amplitude may be varied over the SMPTE specification range to check equalizer performance, and a built in 50 meter cable

simulator may be used to quickly check available signal strength margin.

In addition to a full complement of system test signals, the TSG 601 includes signals to test DAC performance and the accuracy of subsequent encoding into the PAL or NTSC domain.

Embedded AES/EBU audio may be added to the TSG 601 output. Any of four audio groups may be embedded into the 270 Mb/s data stream, and two or four channels of the group enabled. Separate frequency and amplitude may be assigned to each channel.

The SDA 601 Serial Digital Analyzer provides analysis of the incoming digital television signal with the push of a button, quickly identifying data errors

TSG 601 specific features:

The TSG 601 generator provides 16 user-selected test signals:

- 75% and 100% color bars
- Pluge, BBC versions 1 and 2
- 5 step and valid modulated staircase
- Limit and shallow ramps
- Convergence and active picture markers
- PLL SDI checkfield
- Equalizer SDI checkfield
- SDI checkfield matrix
- Valid modulated pulse and bar
- 60% line sweep with markers at .5, 1, 3, 4, and 5 MHz
- 500 kHz reduced amplitude bowtie
- CE Marking