

SxE

Portable 3G/HD/SD Generation, Analysis
& Video/Audio Monitoring with Advanced Physical Layer Analysis



SxE Overview

PHABRIX's SxE is a 3G-SDI, HD-SDI and SD-SDI portable video test signal generator, monitor and analyzer with advanced Physical Layer Analysis (Eye & Jitter).

With its advanced SDI physical layer analysis, the SxE is ideal for applications such as video technology manufacturing and live production. Its instant, RTE™ (Real-Time Eye) technology speeds physical layer testing, and delivers automated measurements and logging for key parameters such as: rise time, fall time, delta, rise and fall overshoot and cable length. The Jitter analysis instrument enables an engineer to quickly analyze the nature of jitter present using a graph of jitter versus time.

The SxE offers advanced signal generation, analysis and monitoring capabilities. There's support for SMPTE compliance testing with over 350 different formats and is configured with a full range of test patterns, both static and animated. An extensive array of video and audio tools include a multi-format waveform, vectorscope and video display, plus data view and VANC/ANC inspector. Signal generation offers 32 test patterns, including pathological.

The SxE features support for 16-channel audio metering and bitstream generation and analysis of Dolby E, Dolby Digital and Dolby Digital Plus. Embed a single external 48kHz synchronous AES stream into the generated video stream, as well as extract embedded audio and export it via the AES output.

Advanced AV Delay Generation and Analysis tools offer an end-to-end solution for the measurement of Audio to Video differential delay through a broadcast system. The tool provides a realtime update of the differential delay between the video content and the selected audio channel pair to measure the propagation (latency) or pipeline delay.

With a built-in TCP/IP interface for remote control and comprehensive status logging with custom reports, the PHABRIX SxE offers unmatched ease of use for busy engineers who need to diagnose faults and assure compliance quickly.

SxE Key Features

- 3 in 1 Generator, Analyzer, Monitor
- 3G-SDI, HD-SDI, SD-SDI, AES
- Advanced Physical Layer Analysis (Eye & Jitter)
- High quality 16:9 picture monitor
- Superior ease of use
- AV delay generation and analysis
- 32+ video test signals standard
- Moving zone plate standard
- Text and logo ident
- 16 channel embedded audio
- Audio genlock Bi/Tri/SDI cross lock
- 16 channel audio metering
- Bitstream generation and analysis of Dolby E, Dolby Digital and Dolby Digital Plus
- AES Audio metering
- Waveform monitor
- Vectorscope
- Rugged reliability
- Ethernet based remote operation
- Battery and mains power

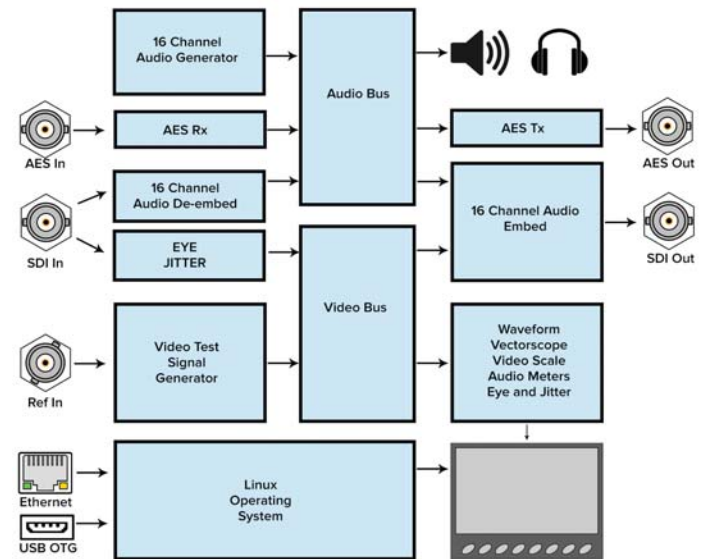
PHABRIX SxE 3-in-1 Generator/Analyzer/Monitor with Eye/Jitter



Specifications

| Monitor | |
|---------------------------|--|
| Display resolution | 480 x 272 pixels auto scaling |
| Display type | 16:9 24 bit color TFT |
| Display size | 95 x 54mm |
| Processing | All digital |
| Video | |
| SDI | 3G-SDI, HD-SDI, SD-SDI |
| Inputs/Outputs | 1 x 75 Ohm BNC |
| Genlock | Bi/Tri/SDI with cross lock |
| Adjustable timing | 0 to 1 frame |
| Text ident | Yes with font, color, point size |
| Logo ident | Yes |
| EDH | Yes (SD-SDI) |
| Video Test Signals | |
| Resolution | 10 bits |
| Static Test Patterns | 32+ including full frame |
| User defined | DPX, YUV, TGA, BMP |
| Zone plate | Yes |
| Video Inputs/Outputs | |
| Eye bit rates | 3Gbps, 1.485Gbps, 270 Mbps |
| Jitter | SMPTE specification filters |
| Jitter thermometers | Alignment, Timing |
| Audio | |
| Internal speaker | 0.5 watts |
| Audio DAC | 24 bit stereo |
| Headphone socket | 3.5mm with auto line out |
| Generator/Monitor | 48 kHz 20-bit (SD-SDI) 24-bit (HD-SDI) |
| 16 channel embedded audio | Yes |
| AES Input/Output | 1 x 75 ohm BNC |
| Audio Test Signal | |
| Fixed tones | 17 |
| Variable tones | 1 Hz-24 kHz in 1Hz steps |
| Intermittent tone | Yes |
| White noise generation | Yes |
| Audio levels variable | 0 to 100dB in 1 dB steps |
| Audio phase invert | Yes |
| General | |
| Navigation panel | 5 menu keys, 8 custom select |
| Integral battery supply | 2 hours lithium polymer |
| Internal storage | 8GB |
| Remote control | Web browser interface |
| Ethernet | Yes |
| Carry case | Included |
| AC power supply | Included (universal) |
| Security | Kensington lock fitting |
| Size | H: 92mm, W: 225mm, D: 42mm |
| Weight | 0.9Kgs |

Schematic of the SxE



Soft carry case and AC power supply included as standard



Ordering Information

Handheld Device

PHXSXE - SxE SD/HD/3G Handheld unit with PHABRIX soft carry case

SxE Software Options

- PHXSXS - Command Scripts and Reports (Repeat testing and create print report)
- PHXSXSD - SDI Data Display + VANC/ANC Inspector
- PHXSXOR - Enhanced Remote Control integration
- PHXSXOZ - Advanced zone plate generator (Programmable Y zone plate)
- PHXSXOF - Advanced video formats + 2K (422/444, YUV/RGB, 10/12bit, SMPTE 428-9 D-Cinema/SMPTE ST 2048-2:2011)
- PHXSXO-DAG - Dolby E/D/D+ analysis + generation (streaming, metering, timing)
- PHXSXO-AVD - AV Delay Analysis
- PHXSXO-ENG - Engineering bundle with six options, namely PHXSXS, PHXSXSD, PHXSXOR, PHXSXOZ, PHXSXOF, PHXSXO-DAG

Accessories

PHSXWM - Sx Wall mounting bracket

Extended Warranty

PHSX-3YEAR - 3 Year Warranty
PHSX-5YEAR - 5 Year Warranty

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