# **S**xE



# 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



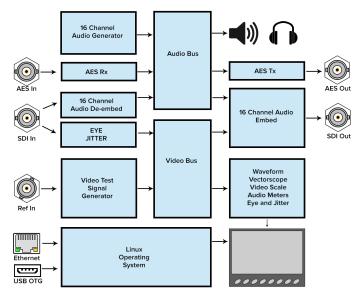




### **Specifications**

Monitor	
	480 x 272 pixels auto scaling
Display resolution	16:9 24 bit color TFT
Display type	95 x 54mm
Display size	
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	
SMPTE formats supported	See www.phabrix.com
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-SD
16 channel embedded audio	Yes
AES Input/Output	1 x 75 ohm BNC
Audio Test Signal	1 x 7 3 offin Bive
	47
Fixed tones Variable tones	17
	1 Hz-24 kHz in 1Hz steps
Intermittent tone	Yes
White noise generation	1.11
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)
	Vancington look fitting
Security	Kensington lock fitting
Security Size	H: 92mm, W: 225mm, D: 42mm

#### Schematic of the SxE





PHABRIX soft carry case and AC power supply included as standard



# **Ordering Information**

#### **Handheld Device**

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

#### **SxE Software Options**

PHSXOS - Command Scripts and Reports (Repeat testing and create print report)

PHSXOSD - SDI Data Display + VANC/ANC Inspector PHSXOR - Enhanced Remote Control integration

PHSXOZ - Advanced zone plate generator (Programmable Y zone plate)

PHSXOF - Advanced video formats + 2K (422/444, YUV/RGB, 10/12bit, SMPTE 428-9

D-Cinema/SMPTE ST 2048-2:2011)

PHSXO-DAG - Dolby E/D/D+ analysis + generation (streaming, metering, timing)

PHSXO-AVD - AV Delay Analysis

PHSXO-ENG - Engineering bundle with six options, namely PHSXOS, PHSXOSD,

PHSXOR, PHSXOZ, PHSXOF, PHSXO-DAG

#### Accessories

**PHSXWM** - Sx Wall mounting bracket

#### **Extended Warranty**

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

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