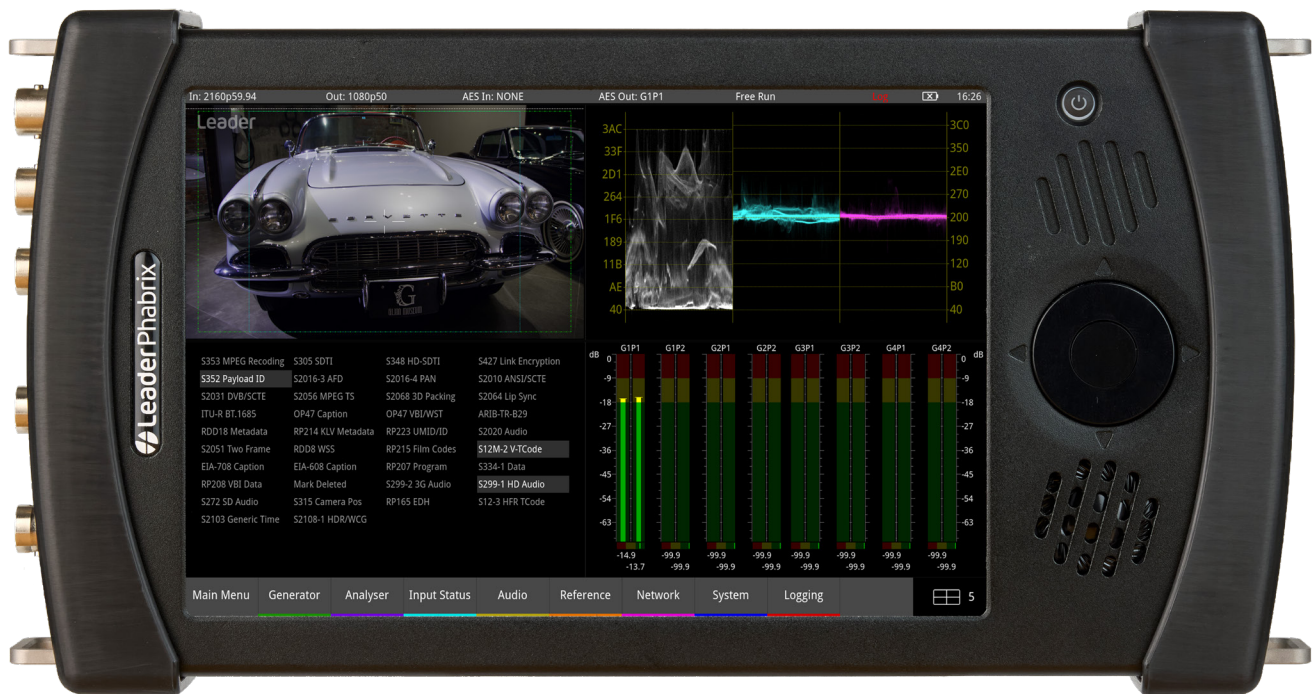


Sx2 Series

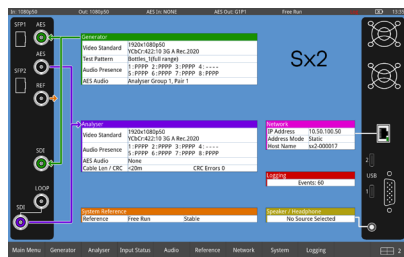
Handheld Test & Measurement Instruments for 12G-SDI
Signal Generation, Analysis & Monitoring



Sx2 Series Overview

12G-SDI Handheld Signal Generation, Analysis and Monitoring

The new LeaderPhabrix Sx2 represents the next generation of advanced video and audio test and measurement technology, purpose-built to support today's 12G-SDI and 4K UHD workflows. Combining powerful signal generation, analysis, and monitoring capabilities in a compact and versatile platform, the Sx2 Series, comprised of the Sx2 and Sx2E models deliver the performance and reliability required across manufacturing, production, post-production, and broadcast facilities. With enhanced processing power, expanded functionality, and a redesigned intuitive, touchscreen user interface, the Sx2 Series enables engineers and operators to work more efficiently while maintaining the highest standards of signal quality and operational confidence.



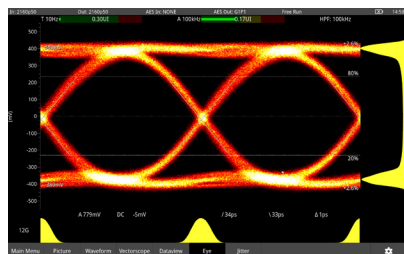
Built on proven PHABRIX and Leader Technology

The Sx2 Series is built on the trusted engineering heritage of both Leader and PHABRIX, bringing together decades of expertise in video and audio test and measurement. Combining the innovative handheld design elements that made PHABRIX products a benchmark within the industry, with Leader's long-standing reputation for precision, accuracy, and reliability, the Sx2 Series delivers a powerful and proven platform for today's modern test workflows.

In: 2160p50		Out: 2160p50	AES In
Resolution	Frame Packing	Frame Rate	Gamut
4096x2160	Progressive	60	601
3840x2160	Interlaced	59.94	709
2048x1080	Segmented	50	2020
1920x1080		48	

High-Performance 12G-SDI Power

The Sx2 Series' 12G-SDI support delivers the bandwidth and performance required for high-resolution, high-bandwidth media workflows. By enabling full 4K UHD signal analysis over a single coaxial interface, the Sx2 simplifies setup while ensuring uncompromised signal integrity and accuracy. This capability has made it sought after across manufacturing, production and broadcast facilities, where the need for reliable, high-performance 12G-SDI monitoring continues to grow rapidly alongside the adoption of UHD content.



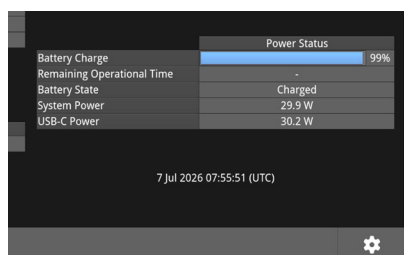
Physical Layer Validation with 12G-SDI Real-Time Eye (RTE™)

Ideal for SDI physical layer line checking, commissioning, and testing, the Sx2E is unique in offering rapid display and analysis of 12G-SDI, 3G, HD, and SD-SDI physical interfaces, combined with a sophisticated real-time Eye and Jitter measurement toolset.



Handheld HDR Measurement and Analysis

The Sx2 brings comprehensive HDR measurement and analysis to a truly handheld form factor, enabling accurate monitoring in the field, on location, or in the machine room without compromising on capability. Supporting today's leading HDR formats and color spaces, the Sx2 provides the precision required to evaluate luminance, color gamut and transfer characteristics, helping ensure SDR and HDR content is captured, processed and delivered exactly as intended.



Enhanced Power & Battery Performance

The Sx2 is designed for extended operation in the field with an enhanced battery system and a USB-C charging port that keeps engineers working for longer. A high-capacity rechargeable battery provides increased operating time, while the swappable battery design allows depleted batteries to be replaced in seconds, minimizing downtime during critical testing. Whether working on location, in an OB truck or around a broadcast facility, the Sx2 delivers the flexibility and endurance needed for uninterrupted test and measurement.

Applications



Outside Broadcast, Live Production

Built for demanding live environments, the Sx2 gives outside broadcast and production teams a powerful handheld solution for commissioning, maintaining, and troubleshooting 12G-SDI and UHD systems. With advanced signal generation, analysis, and monitoring, engineers can quickly identify issues, verify signal integrity, and ensure reliable performance across cameras, routers, converters, and production infrastructure.



Studio & Media Production

From studios to post-production facilities, the Sx2 helps engineers maintain confidence in their video workflows. Supporting 12G-SDI and UHD, it provides fast and accurate analysis of cameras, monitors, routing systems, and production equipment, enabling efficient fault finding, system verification, and day-to-day operational support.



Flyaway Kits

Ideal for flyaway kits, the Sx2's compact, handheld and lightweight form factor eliminates the need to transport multiple test devices, reducing both weight and setup complexity. Its battery-powered design with swappable rechargeable batteries enables engineers to commission, verify and troubleshoot signal paths anywhere. Supporting SD to 12G-SDI, the Sx2 provides the portability and versatility needed to commission and maintain broadcast flyaway systems wherever production takes place.



Professional AV & Live Events

For professional AV and event production environments, the Sx2 provides a compact and versatile tool for system setup, verification, and troubleshooting. Supporting a wide range of video formats, it helps engineers ensure compatibility and performance across cameras, switchers, processors, displays, and complex video distribution systems.



Video Equipment Manufacturers

The Sx2 supports video equipment manufacturers throughout the product development and production lifecycle. Combining signal generation, analysis, and 12G-SDI physical layer testing, it enables engineers to validate signal integrity, eye pattern performance, interoperability, and compliance across professional video products.



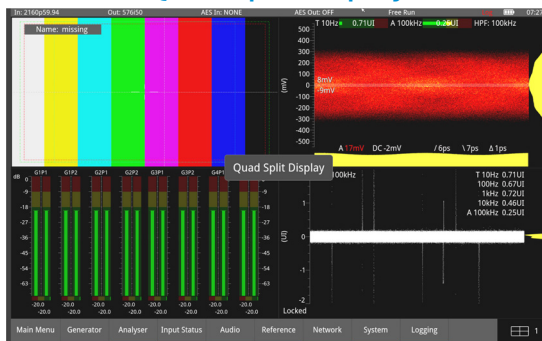
Aerospace, Industrial & Medical Equipment Manufacturers

The Sx2 helps aerospace, industrial and medical equipment manufacturers validate high-performance video systems with confidence. 12G-SDI analysis, physical layer testing, and signal verification capabilities support the development, production, and servicing of imaging, display, and video processing systems.

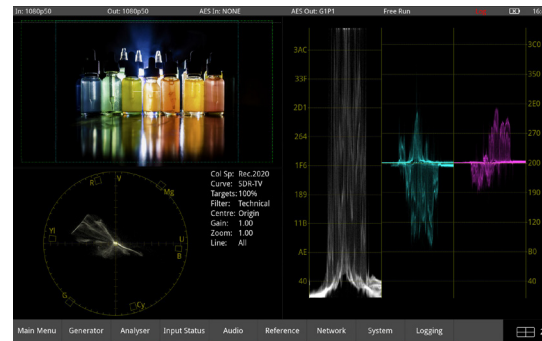
An interface that puts you in control

The Sx2 combines the familiar operation of the PHABRIX Sx Series with a modern, intuitive touchscreen interface for faster, more efficient workflow navigation. Users can control the instrument using the responsive touchscreen or the precision rotary control, providing the flexibility to work comfortably in any environment. An integrated speaker enables convenient embedded audio monitoring, while configurable screen layouts allow you to create up to eight custom templates, each displaying three or four instruments. Complete operating configurations can also be saved as presets, enabling instant recall of preferred setups for different applications and test scenarios.

Quad Split Display



Instant recall of presets



BNC Connections

- **SDI In** - Sx2 accepts an SDI signal from a device via the SDI In connector.
- **SDI Out** - The Sx2's generator outputs an SDI signal via the SDI Out connector.
- **SDI Loop Out** - Sx2 can loop the SDI Input source to the SDI Loop Out connector, upto 12G (Sx2E only)
- **REF I/O** - Sx2 can connect to an external reference signal via the REF-IO connector.
- **AES I/O** - Digital audio is connected to the Sx2 via the AES In and Out connectors.

Connecting Additional Devices

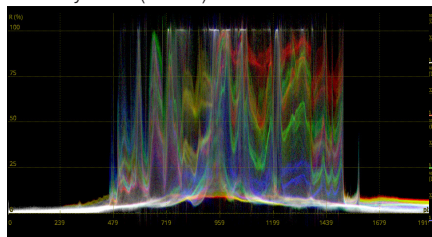
- **USB-C Ports** for Power/charging or external memory sticks (transferring screenshots, presets, user test patterns or for upgrading the unit).
- **USB-C DisplayPort** - A DisplayPort signal is available through the USB-C ports. Fixed output resolution: 1920x1200*.
- **Analog Audio I/O** - Analog audio is connected via the 15-Way-D type high density connector (breakout cable required).
- **Speaker/Headphones Jack**

**Displays with different aspect ratios may distort the image. Designed for display monitoring only. Plug-and-play / hot-plugging is not supported. Please connect the monitor prior to powering on.*

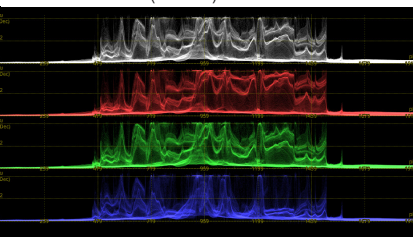
Enhanced waveforms

The Sx2's high-resolution waveform technology uses patented image processing technology to deliver exceptional precision for camera shading, image grading, and SDR/HDR† quality control with support for deep color sources up to 12-bits*. Multiple display modes, including Overlay, Stacked and Parade, are available with configurable trace colors and support for YCbCr, RGB, YRGB, YGRB and individual component displays. Advanced analysis features include cursor-linked Picture and Data views, user markers linked to the Vectorscope, Single Line Mode, and horizontal and vertical magnification for detailed signal inspection. Integrated luminance scales and user-defined Nits markers support SDR, HLG, PQ, S-Log3 and SR Live HDR workflows, with SMPTE narrow and full-range operation, Rec. 709, Rec. 2020 and DCI-P3 color spaces, and compatibility across SD, HD, 2K, UHD and 4K formats.

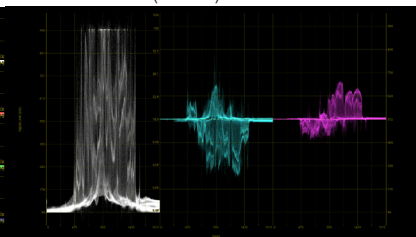
Overlay RGB (Color)



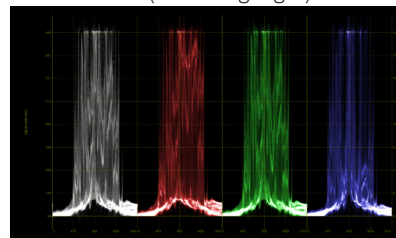
Stacked YRGB (Color)



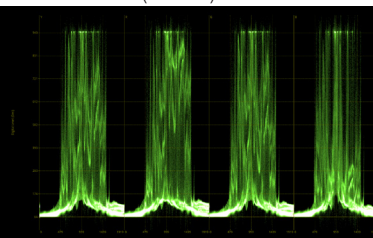
Parade YCbCr (Color)



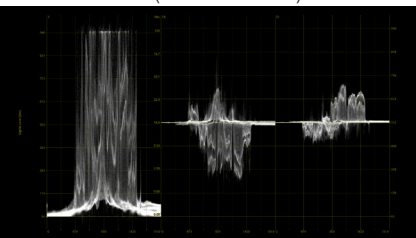
YRGB Parade (Color Highlight)



YRGB Parade (Green)

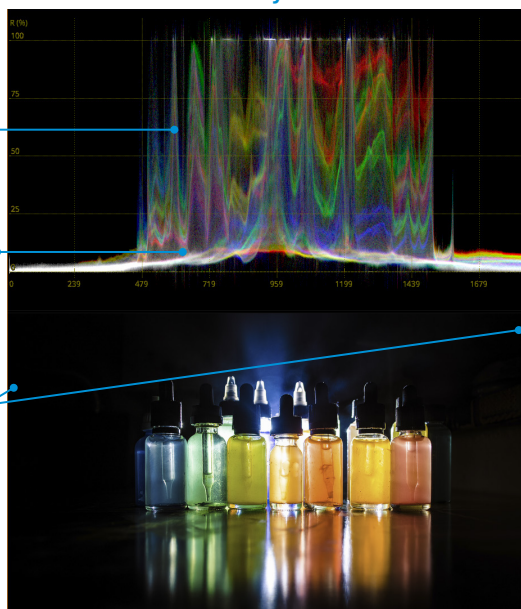


YCbCr Parade (Monochrome)



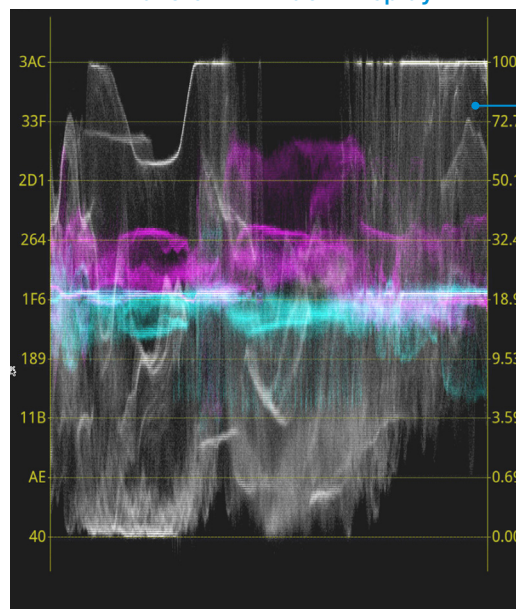
Overlay Mode

Accurate reproduction of image fine detail while simultaneously retaining bright instrument highlights



Full-width waveform display picture mode to match picture width

Waveform Window Display



The double height display allows more detailed inspection of the waveforms in quad-split view

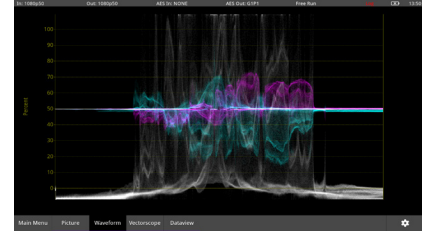
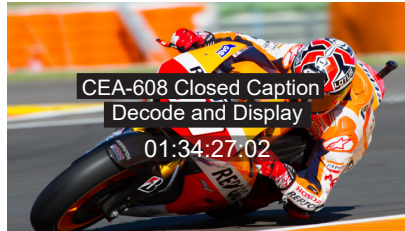
† Optional HDR formats require SX2-HDR software license

* Upcoming software release

Standard Toolset - Analyzer

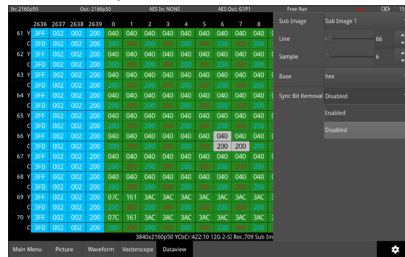
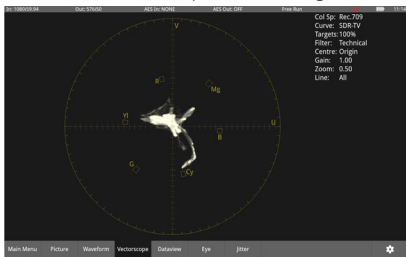


The Sx2 comes equipped with a comprehensive suite of analysis tools, providing everything needed for detailed monitoring and troubleshooting of SDI signals. Picture View, Waveform Monitor, Vectorscope, and 16 channel audio metering, alongside decoded audio channel status information for in-depth audio analysis are included as standard. Ancillary data monitoring is also provided, with ANC status and payload inspection, on-screen decoding of OP47, CTA-608 embedded within CTA-708, and native CTA-708 closed captions, plus Ancillary Time Code (ATC) display.



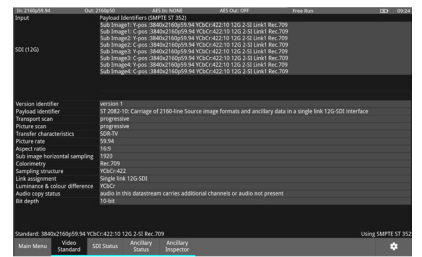
Picture with Auxiliary Data Decode

- Cursors linked to Vectorscope, Waveform and Dataview for more precise, realtime analysis of the picture
- Overlay Ancillary Time Code (ATC), Picture Safe Areas, Picture Center Crosshairs
- Message Center displaying V-chip, AFD, Input Name, ST309 Date, SCTE 104 data and Closed Caption/Subtitle indication
- Closed Captions decoding of OP-47 / CTA-608 / CTA-708 / CTA-608 in 708 services
- Caption support for Danish, English, Finnish, French, German, Italian, Portuguese, Spanish & Swedish languages
- CTA-708 Closed Caption decoding with EUC_KR Korean text option



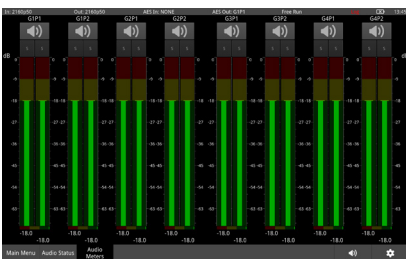
Waveform

- YCbCr, YGBR and GBR display modes
- Cursor linked to Picture and Dataview, Single line mode linked to Picture Cursor
- Configurable H and V Graticules, User markers
- Overlay, Stacked, Parade, Single line, H & V Mag, Brightness, Persistence and Monochrome controls
- Horizontal or Vertical Measurement cursors



Vectorscope

- 75% and 100% Targets for ITU-R Rec. 709, Rec. 2020 and HDR formats
- A target is displayed around the origin when the 100%/75% targets are displayed
- Custom 'user markers' linked to Waveform
- Center on target or custom user markers
- 0.5x to 10x Mag, center on chosen target
- Single line mode linked to Picture Cursor



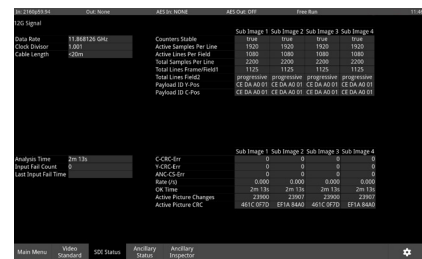
Dataview

- Allows analysis of complex faults
- Navigate function for rapid access to a required line, pixel or TRS word
- Color-coding to help identification
- Cursor linked to Picture and Waveform
- 12G SDI sync bit removal



Video Standard

- Display of detected SMPTE ST 352 Payload ID for each SDI Link and Sub image
- Manual override of ST 352 Payload ID
- Selection of SMPTE video standards
- Indication of ST 352 Payload ID errors



Audio Meters

- Displays 16 channel audio meters from selectable SDI audio groups (Groups 1-4 or 5-8), for up to 128 SDI audio channels depending on the SDI input format.*
- Ballistics: PPM-I, PPM-II, Vu, Vu-Fr, Fast
- Scales: dBFS, dBu, BBC, DIN45406, NordcN9
- Configurable dBFS level: -18, -20 and Custom
- Detect Dolby® E, Dolby Digital, Dolby Digital Plus™, and Dolby ED2 line pos
- Stereo/mono audio preview bus
- Analysis of AES or Analog input

Audio Status

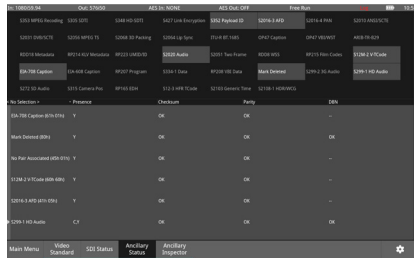
- AES Channel Status Information table configurable in 8 channel audio blocks, for any of the 128 SDI audio channels depending on the SDI input format. 2 AES input channels can also be displayed*
- Indicates audio type and presence, including: PCM, Dolby® E, Dolby Digital, Dolby Digital Plus™, and Dolby ED2, for up to 128 SDI audio channels, and 2 AES input channels
- Clear indication of useful audio parameters including CRC, PCM/data, sample frequency, word length
- Channel Status data view (Hex)
- AES and Analog out configuration

SDI Status

- Provides SDI data to verify the format of the signal being analyzed including Data Rate, Sub Image data, Estimated Cable Length
- CRC analysis tool including Analysis Time, OK Time, Active Picture Changes, CRC Errors

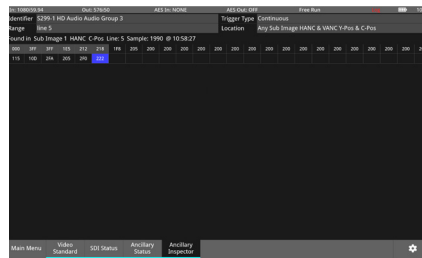
* Audio in Data Stream 2 is not supported for 3G-B-DL. Please refer to the instruction manual for further details.

Standard Toolset - Analyzer



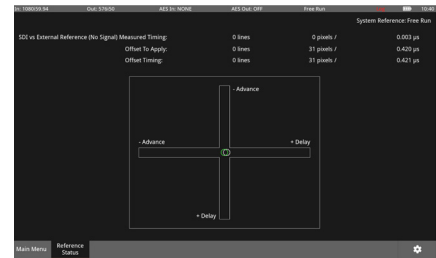
Ancillary Status

- SMPTE ST 291 VANC/HANC ancillary data presence/status window
- Grid/List View – clear visual overview of present/absent/fault indication, ANC present list with location & status information for Checksum, Parity, DBN
- Link to Ancillary Inspector



Ancillary Inspector

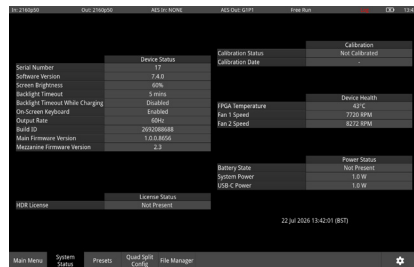
- Ancillary data packet analyzer
- Link from ANC Status window
- User-defined DID/SDID windowed search
- ANC Inspector can be set to trigger on checksum, DBN or Parity error, once or continuously
- ANC packet capture with Hex view
- ANC packet decode view



Reference Status

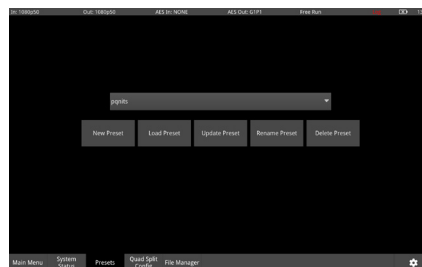
- Measurement of the timing of inputs against reference
- Indication of reference status and stability
- Indication of the relative co-timing of input SDI channels
- Set system genlock to Free Run/External Reference/SDI
- Graphical and numeric display

Standard Toolset - System Setup & Status



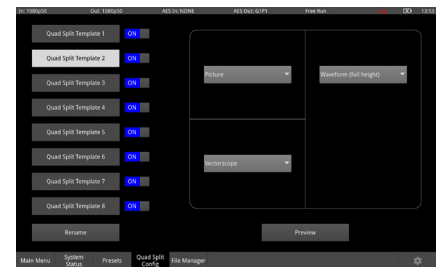
System Status

- Check the current health status of the unit, including FPGA temperature, rotational speed of the cooling fans, battery status
- Check license status, software version and build, unit serial number and calibration details
- Screenshot tool



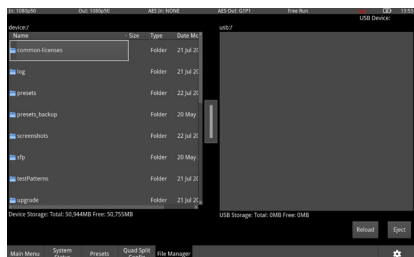
Presets

- Personalize configurations that includes instruments and settings
- Create, load, update, rename or delete presets



Quad Split Config

- Quad split mode enables 3 or 4 instruments to be displayed concurrently
- The following instruments can be displayed in a Quad Split template: Ancillary Status, Audio Meters, Eye, Jitter, Output Status, Picture, Waveform and Vectorscope
- In the upper quadrants, Waveform can be displayed as quarter size or full height



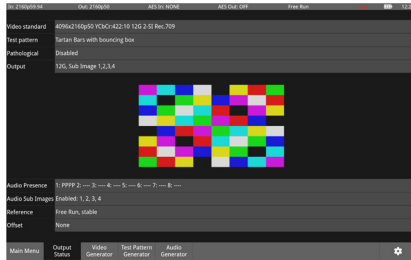
File Manager

- Copy presets, instrument logs, screenshots and user TIFF images to and from USB memory stick
- Delete selected files

Standard Toolset - Generator

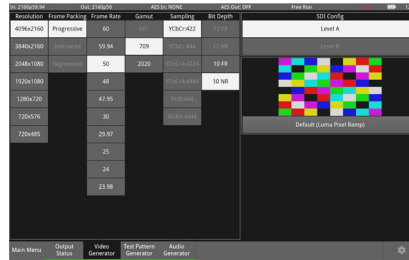


Simultaneously generate and analyze a comprehensive range of SDI formats with the Sx2's powerful audio and video generation toolset. Designed for commissioning, maintenance and fault diagnosis, the generator supports a wide selection of moving test patterns with up to eight audio groups (32 channels) which can also be duplicated into each sub image. Support for importing TIFF images allows HDR/WCG graphics to be verified and custom test images to be displayed and evaluated, providing exceptional flexibility for testing modern broadcast and production workflows.



Output Status

- Details of the video standard being generated, including; Resolution, Frame Packing, Frame Rate, Gamut, OTF[†], Sampling, Bit Depth, Range
- 12G Sync Bit Insertion/ removal
- Description of the selected test pattern
- Status of pathological insertion
- Audio signal presence and sub-images
- System reference status
- Output Offset adjustment



Video Generator

- 12G/6G/3G/1.5G/270M, 4K/UHD and 2K/HD/ SD SDI signal generation
- YCbCr: 422, 10 bit formats
- YCbCr/RGB: 444, 4224 and 4444, 12 bit formats*
- Support for Single Link, 2Si, Level A & B
- HDR OTF support[†]
- Confirms generated Video Standard and Test Pattern details
- Supports the detection and analysis of SMPTE Full Range or Narrow Range video standards



Audio Generator

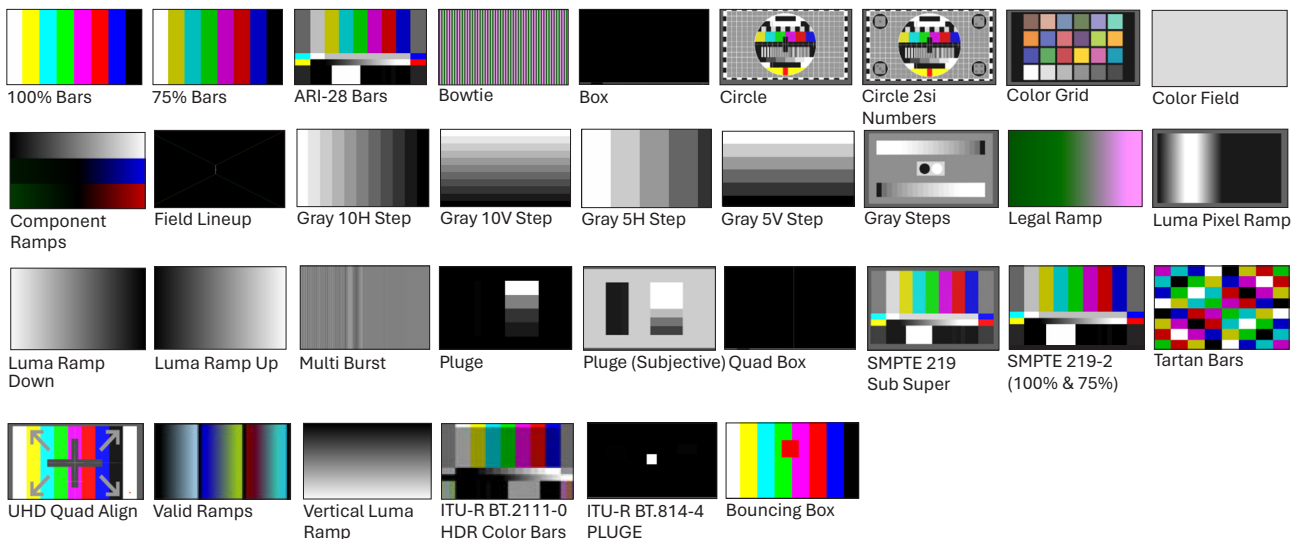
- Generate a fixed audio frequency (in Hertz or musical pitch) for all audio channels
- Choice of fixed tones or chromatic scale
- Choice of fixed or ramp levels
- Custom config of number of active audio groups and channels
- Depending on the generated video standard, up to eight audio groups (32 channels) are available, which can also be duplicated into each sub image
- Mute or unmute any of the individual channels



Test Pattern Generator

- System Patterns: Lists standard test patterns supplied with the unit
- User Patterns: Lists any imported user-defined TIFF images
- Moving test patterns (bouncing box)
- Preset and custom color field pattern insertion and configuration
- Define a text identifier (or ident) to overlay on the active picture of the video standard

Test Patterns

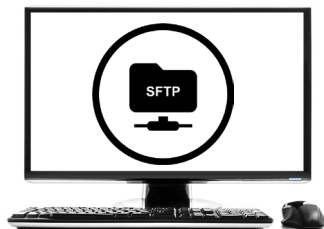


[†] Requires SX2-HDR license
* Upcoming software release



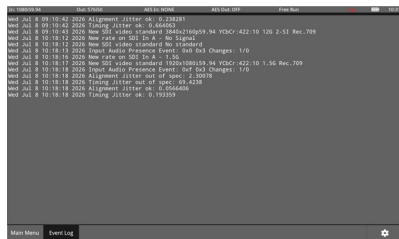
Standard Toolset - Remote Access & Logging

Various methods are provided to enable you to establish a remote connection with your Sx2, depending on your requirements.



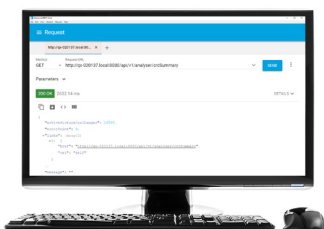
SFTP

- Use a standard SFTP client (e.g. FileZilla) to perform the following tasks on the unit;
- Upgrade the software from a remote location
- Retrieve and delete event logs, presets, screenshots and user-defined test pattern files
- Upload presets from another unit and user-defined test patterns



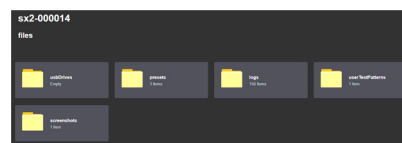
Event Logger

- SDI Input standard/status
- Jitter Timing (model Sx2E only)
- Jitter Alignment (model Sx2E only)
- SDI Input Rate
- SCTE104
- REST API Request
- Reference Locking
- Audio Input Presence



REST API

- For integrated control, monitoring and automated manufacturer testing
- Sx2 can be controlled remotely over a network via its REST API



Web Browser

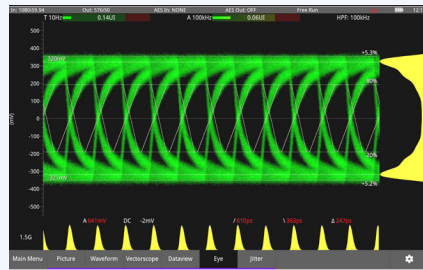
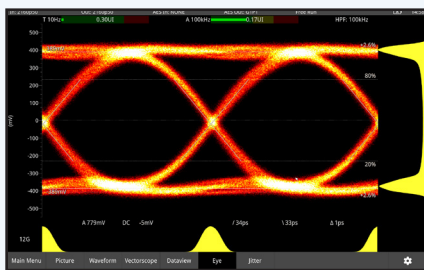
- Use a standard web browser to view and retrieve Event Log, Screenshot, Preset and User Test Pattern files

Standard Toolset - Sx2E

Physical Layer Analysis [SX2E]



The Physical Layer Toolset, available as standard on the Sx2E, offers fast 12G/6G/3G/HD/SD-SDI physical layer commissioning, testing and development. Its RTE™ (Real-Time Eye) Technology instantly highlights any SMPTE compliance issues and its realtime SDI jitter window provides simultaneous monitoring across five specified frequency bands, jitter histogram and video trigger options. Included is a full range of SDI eye measurements including amplitude, DC offset, transition times, overshoot and health indication with both amplitude and time histograms, as well as choice of color, heat-map overlays and infinite persistence display.



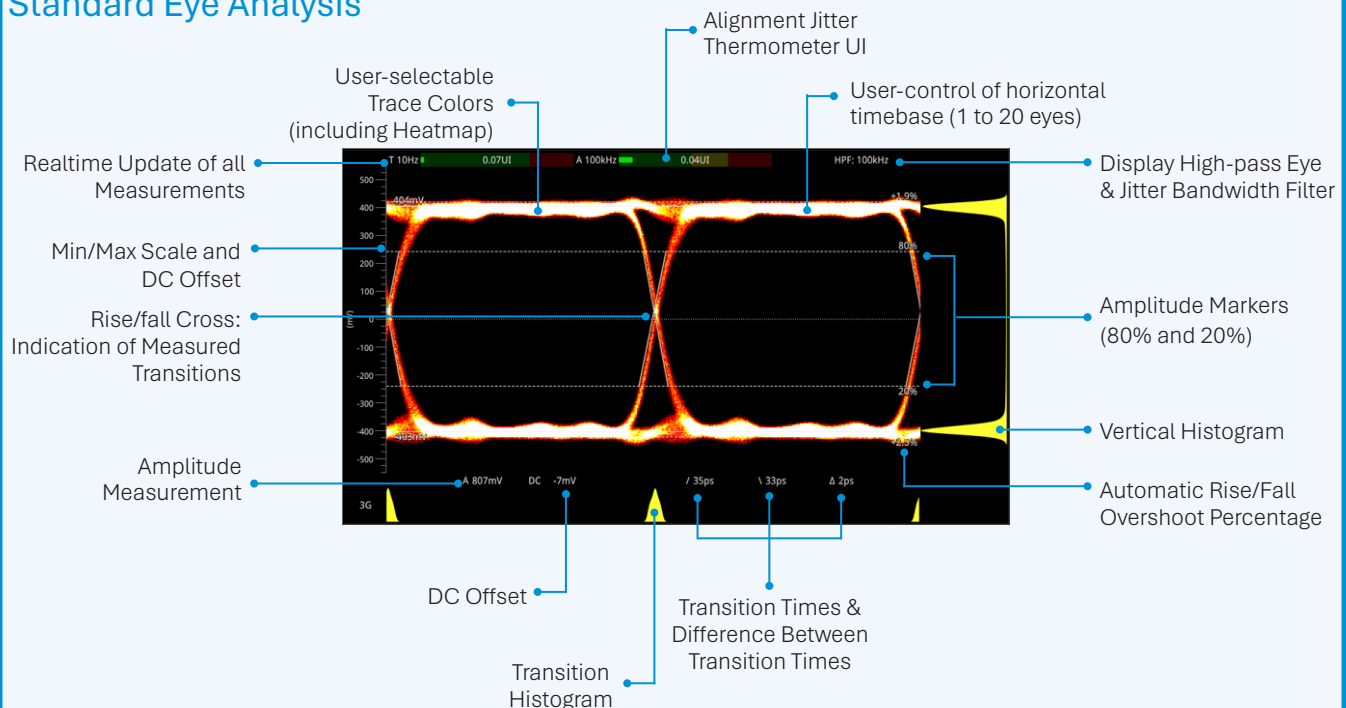
SDI EYE Analysis

- RTE™ (Real-Time Eye) for testing SMPTE compliance with indication of DC offset
- Automatic measurements of: DC level, amplitude, rise and fall time, rise/fall overshoot, visual rise time indication
- Amplitude and time histograms
- Single or multiple eyes with choice of color, heat-map overlay and infinite persistence
- Timing and Alignment jitter thermometers
- User-definable time measurement cursors

SDI Jitter Analysis

- Realtime SMPTE jitter measurements down to 10 Hz
- 10 Hz, 100 Hz, 1 kHz, 10 kHz, 100 kHz filters
- H, 2H, F, V Trigger
- Persistence control none to infinite
- +/- 0.25 to +/- 64 UI vertical scale adjustment
- Jitter amplitude histogram

Standard Eye Analysis



Optional Toolset - HDR Analysis

[SX2-HDR]

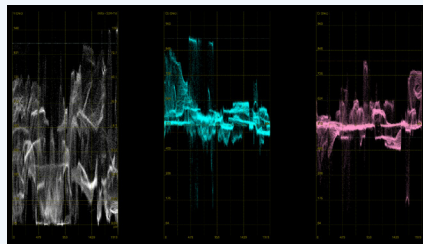
The Sx2's comprehensive HDR toolset includes a signal generator, Luma false color highlighting or heat map, waveform monitor and vectorscope. All the main live production SDR and HDR formats are supported: Standard Dynamic Range (SDR) BT.709, BT.2020 as well as HDR BT.2100 HLG, PQ, Sony S-Log3 and SR Live. The Waveform provides a Cd/m^2 (nits) graticule along with BT.2048 diffuse white markers. The flexible user controlled HDR heatmap offers 7 simultaneous programmable color overlay bands with presets for HDR and SDR ranges, plus a user custom preset.

An extensive set of test patterns include BT.2111 HDR color bars for HLG, PQ, S-Log3 and SR Live as well as a full set of SDR 709 patterns mapped via display light to each of the four HDR formats for line checks, comparative monitor set-up and the evaluation of HDR to SDR converters.



False Color Highlighting

- Programmable Heat Map to highlight luminance zones providing quick identification of shadows, skin or mid-tones or specular highlights
- Seven simultaneous programmable color overlay bands
- Presets for HDR and SDR ranges plus user custom



HDR Waveform

- Waveform HDR graticules with Nits (Cd/m^2)
- BT. 2408 diffuse white markers
- Support for BT. 1886, BT. 2100 HLG and PQ, Sony S-Log3, SR Live



HDR Generation

- An extensive set of test patterns, including: BT.2111 HDR color bars for HLG, PQ and SR Live, a full set of SDR 709 patterns mapped to each of the four HDR formats using display light for line checks
- Native HDR test patterns, including: ITU-R BT.2111-0 HDR Color Bars, ITU-R BT.814-4 PLUGE – 4 variants
- Comparative monitor set-up and evaluation of HDR to SDR converters

Sx2

Portable 12G-SDI 4K/UHD Generation, Analysis & Monitoring Instrument



Ordering

SX2 Sx2 12G-SDI Handheld Analyzer, Generator, Monitor. Supports 270M/1.5G/3G/6G/12G-SDI. Analog Audio In/Out, AES In/Out. Includes Lithium-ion Battery and LeaderPhabrix soft carry case. *Power supply unit is not included.*

Software Option

SX2-HDR HDR/WCG, HDR Heatmap (PQ, HLG, S-Log3, SR Live)

Cables

PHSXC-1 Audio cable - D15 break out cable for Analog audio

Accessories

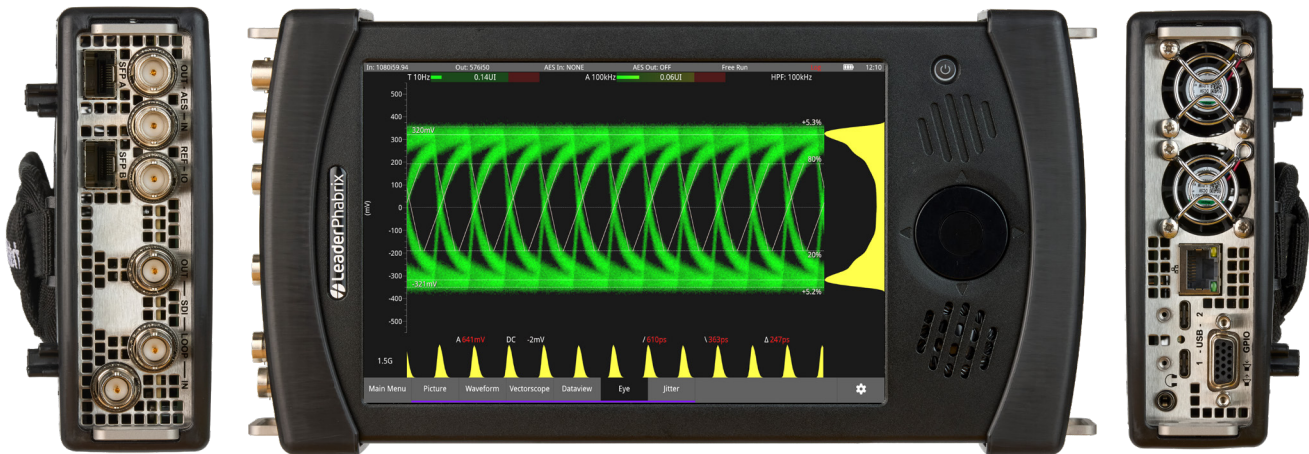
SX2-PSU Power supply unit
SX2-BATT Spare internal battery pack
SX2-CHG External charger for spare battery
SX2-VESA VESA mounting plate

Extended Warranty

SX2-3YEAR Sx2 upgrade from 1 to 3 year warranty
SX2-5YEAR Sx2 upgrade from 1 to 5 year warranty

Sx2E

Portable 12G-SDI 4K/UHD Generation, Analysis & Monitoring Instrument with Advanced Physical Layer Analysis



Ordering

SX2E Sx2E 12G-SDI Handheld Analyzer, Generator, Monitor with EYE Pattern Analysis. Supports 270M/1.5G/3G/6G/12G-SDI with Loop Out. Analog Audio In/Out, AES In/Out. Includes Lithium-ion Battery and LeaderPhabrix soft carry case.

Power supply unit is not included.

Software Option

SX2-HDR HDR/WCG, HDR Heatmap (PQ, HLG, S-Log3, SR Live)

Cables

PHQXC-1 12G-SDI Eye measurement test cable 1m
PHSXC-1 Audio cable - D15 break out cable for Analog audio

Accessories

SX2-PSU Power supply unit
SX2-BATT Spare internal battery pack
SX2-CHG External charger for spare battery
SX2-VESA VESA mounting plate

Extended Warranty

SX2E-3YEAR Sx2E upgrade from 1 to 3 year warranty
SX2E-5YEAR Sx2E upgrade from 1 to 5 year warranty

Please note: SFP A and SFP B cages are not currently utilized

Specifications

	Sx2	Sx2E
Formats Supported		
SDI IO	●	●
12G / 6G / 3G / 1.5G / 270M-SDI, 4K / UHD / HD / SD Analysis	●	●
12G / 6G / 3G / 1.5G / 270M-SDI, 4K / UHD / HD / SD Generation	●	●
Software Options Supported		
HDR/WCG	○	○
SDI Inputs / Outputs		
SDI Input - up to 12G - 1 x 75 ohm BNC	●	●
SDI Output - Input Loop Out up to 12G - 1 x 75 ohm BNC	N/A	●
SDI Output - Generator up to 12G - 1 x 75 ohm BNC	●	●
Physical Layer Measurements		
Automated measurement - Eye amp, Rise/Fall time, Delta, Rise/Fall Overshoot	N/A	●
Jitter thermometers alignment, timing	N/A	●
Eye bit rates 12Gbps, 6Gbps, 3Gbps, 1.485Gbps, 270Mbps	N/A	●
Audio Inputs/Outputs		
AES Input - 1 x 75 ohm BNC	●	●
AES Output 1 x 75 ohm BNC	●	●
Analog Audio Input/Output (via 15-way high-density D-type socket)	●	●
Reference		
Reference In - 1 x 75 ohm BNC	●	●
Networking & Control		
Ethernet - 1000 BASE T Connector	●	●
Monitoring		
Headphones - 3.5mm stereo jack socket	●	●
Speaker	●	●
Dolby® E, Dolby Digital, Dolby Digital Plus™, and Dolby ED2 Detection	●	●
16 channel embedded audio	●	●
Logging		
Eye and Jitter & Export Log	N/A	●
SDI Signal & Export Log	●	●
General		
Internal Battery supply - Lithium ION Smart Battery	●	●
AC/DC USB-C Power Supply	○	○
USB-C Port for Power	●	●
USB-C Port for DisplayPort	●	●
Spare Internal Battery Pack	○	○
External Charger for Spare Battery	○	○
VESA Mounting Plate	○	○
LeaderPhabrix Soft Carry Case, Hand Strap, Shoulder Strap	●	●
Form Factor		
Size (Width x Height x Depth)	261 x 135 x 57 mm	261 x 135 x 57 mm
Weight including battery and hand strap	1.5kg	1.75kg
Warranty		
1 year manufacturer's warranty	●	●
Extended Warranty Package (3-5 years)	○	○

Accessories



Power Supply Unit
[SX2-PSU]



Backup Battery
[SX2-BATT]



External Charger
[SX2-CHG]



VESA Mounting Plate
[SX2-VESA]



LeaderPhabrix Soft Carry Case, Hand Strap & Shoulder Strap
[included as standard]



Formats Supported

Supported 2K/HD/SD SDI Formats

SMPTE Stnds. Link (Content)	Interface	Resolution	Sampling Structure	Pixel Depth	Frame/Field Rate	SDI HDR†	SDI SDR
ST 259 (ST 125)	SD (625i)	720 x 576	4:2:2 (YCbCr)	10	50i	-	●
ST 259 (ST 125)	SD (525i)	720 x 485	4:2:2 (YCbCr)	10	59.94i	-	●
ST 292 (ST 296)	HD	1280 x 720	4:2:2 (YCbCr)	10	60p, 59.94p, 50p, 30p, 29.97p, 25p,	○●	●
ST 292 (ST 274)	HD	1920 x 1080	4:2:2 (YCbCr)	10	60i, 59.94i, 50i 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 292 (RP 211)	HD	1920 x 1080	4:2:2 (YCbCr)	10	30psF, 29.97PsF, 25psF, 24PsF, 23.98PsF	○●	●
ST 292 (ST 2048-2)	HD	2048 x 1080	4:2:2 (YCbCr)	10	30p, 29.97p, 25p, 24p, 23.98p, 30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF	○●	●
ST 425-1 (ST 274)	3G Level A (1)	1920 x 1080	4:2:2 (YCbCr)	10	60p, 59.94p, 50p	○●	●
ST 425-1 (ST 2048-2)	3G Level A (1)	2048 x 1080	4:2:2 (YCbCr)	10	60p, 59.94p, 50p, 48p, 47.95p	○●	●
ST 425-1 (ST 296)*	3G Level A (2)	1280 x 720	4:4:4 (YCbCr/RGB) 4:4:4:4 (YCbCrA/RGBA)	10	60p, 59.94p, 50p, 30p, 29.97p	○●	●
ST 425-1 (ST 274)*	3G Level A (2)	1920 x 1080	4:4:4 (YCbCr/RGB) 4:4:4:4 (YCbCrA/RGBA)	10	60i, 59.94i, 50i, 30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 425-1 (ST 2048-2)*	3G Level A (2)	2048 x 1080	4:4:4 (YCbCr/RGB) 4:4:4:4 (YCbCrA/RGBA)	10	30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 425-1 (ST 274)*	3G Level A (4)	1920 x 1080	4:2:2 (YCbCr)	12	60i, 59.94i, 50i, 30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 425-1 (ST 2048-2)*	3G Level A (4)	2048 x 1080	4:2:2 (YCbCr) 4:2:2:4 (YCbCrA)	12	30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 425-1 (ST 274)	3G Level B-DL (I)	1920 x 1080	4:2:2 (YCbCr)	10	60p, 59.94p, 50p	○●	●
ST 425-1 (ST 2048-2)	3G Level B-DL (I)	2048 x 1080	4:2:2 (YCbCr)	10	60p, 59.94p, 50p, 48p, 47.95p	○●	●
ST 425-1 (ST 274)*	3G Level B-DL (II)	1920 x 1080	4:4:4 (YCbCr/RGB) 4:4:4:4 (YCbCrA/RGBA)	10	60i, 59.94i, 50i, 30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 425-1 (ST 2048-2)*	3G Level B-DL (II)	2048 x 1080	4:4:4 (YCbCr/RGB) 4:4:4:4 (YCbCrA/RGBA)	10	30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 425-1 (ST 274)*	3G Level B-DL (III)	1920 x 1080	4:4:4 (YCbCr/RGB)	12	60i, 59.94i, 50i, 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 425-1 (ST 2048-2)*	3G Level B-DL (III)	2048 x 1080	4:4:4 (YCbCr/RGB)	12	30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 425-1 (ST 274)*	3G Level B-DL (IV)	1920 x 1080	4:2:2 (YCbCr)	12	60i, 59.94i, 50i, 30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF 30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 425-1 (ST 2048-2)*	3G Level B-DL (IV)	2048 x 1080	4:2:2 (YCbCr) 4:2:2:4 (YCbCrA)	12	30PsF, 29.97PsF, 25PsF, 24PsF, 23.98PsF 30p, 29.97p, 25p, 24p, 23.98p	○●	●

Supported 4K/UHD Formats

SMPTE Stnds. Link (Content)	Interface	Resolution	Sampling Structure	Pixel Depth	Frame/Field Rate	SDI HDR†	SDI SDR
ST 2081-10 M1 (ST 2036-1)	6G-2SI	3840 x 2160	4:2:2 (YCbCr)	10	30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 2081-10 M1 (ST 2048-1)	6G-2SI	4096 x 2160	4:2:2 (YCbCr)	10	30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 2082-10 M1, ST 425-5 (ST 2036-1)	12G-2SI (I)	3840 x 2160	4:2:2 (YCbCr)	10	60p, 59.94p, 50p	○●	●
ST 2082-10 M1, ST 425-5 (ST 2048-1)	12G-2SI (I)	4096 x 2160	4:2:2 (YCbCr)	10	60p, 59.94p, 50p, 48p, 47.95p	○●	●
ST 2082-10 M1 ST 425-5 (ST 2036-1)*	12G-2SI (III)	3840 x 2160	4:4:4 (YCbCr/RGB)	10	30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 2082-10 M1 ST 425-5 (ST 2048-1)*	12G-2SI (II)	4096 x 2160	4:4:4 (YCbCr/RGB) 4:4:4:4 (YCbCrA/RGBA)	10	30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 2082-10 M1 ST 425-5 (ST 2036-1)*	12G-2SI (IV)	3840 x 2160	4:2:2 (YCbCr) 4:2:2:4 (YCbCrA)	12	30p, 29.97p, 25p, 24p, 23.98p	○●	●
ST 2082-10 M1 ST 425-5 (ST 2048-1)*	12G-2SI (IV)	4096 x 2160	4:2:2 (YCbCr) 4:2:2:4 (YCbCrA)	12	30p, 29.97p, 25p, 24p, 23.98p	○●	●

KEY

- - Generator and Analyzer
- - Optional
- A - Analyzer Only
- '-' - Not Available

† Optional HDR formats require SX2-HDR

* Upcoming software release

Leader

For more information about the
Sx2 Series contact:

www.leaderphabrix.com

