

What's New

Sx Series Release 14.02



Advanced, Handheld Test and Measurement

This free upgrade provides the Sx with a set off new features and support for a wide range of 2K-HD, 422/10 low frame-rate formats. New features include:

- Improved, dual ST352 Payload ID View with Error Indication in the Byte and Field.
- Free-run Frequency Control (+/- 100 ppm) Tool for the Generator.
- Support for Single Link of a Quad, Dual UHD SDI Interface for 2 Sample Interleave (2SI) and Square Division (SQ).
- Automatic Link Detection of Single Links of Multi-link 3G- and HD-based UHD formats (for example, 4 x 3G, 4 x 1.5 and 2 x 3G Signals.)
- Support for 2K-HD 422/10 and 3GB-DS 2K Low Frame-rate Formats.
- Support for Additional Cable Types: Draka 0.6/2.8 AF S and Percon VK 5/0.6
- Improved Eye Jitter Logging (SxE Only).

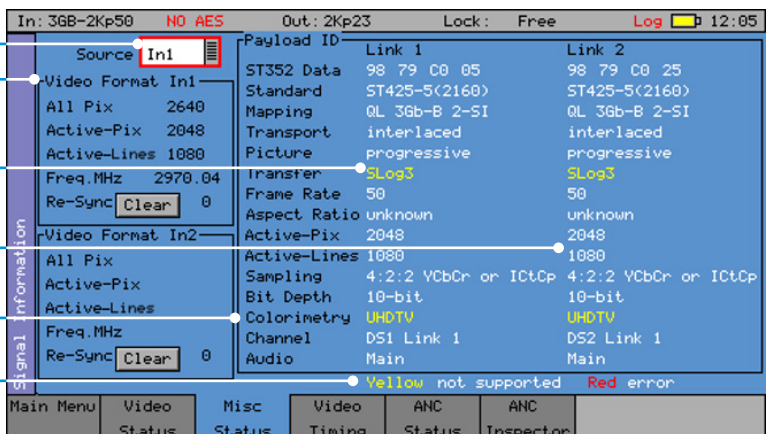
Support for New Video Standards

- SMPTE 292 M (HD/2K, YCbCr 422 10-bit, progressive and progressive segmented frame rates)
 - SMPTE 425-1 3G Level-B DS 2.97 Gb/s (2 x (2048 x1080) YCbCr 422 10-bit, progressive and progressive segmented frame rates)
 - SMPTE 425-5 3G Level-A/B Quad Link 2.97 Gb/s (3840 x 2160 and 4096 x 2160, 422 YCbCr, 4224 YCbCrA, RGB, RGBA, 10/12-bit, progressive frame rates)
- For a comprehensive list of standards supported consult the PHABRIX website or Sx *User Manuals*

Dual ST352 Payload ID View with Error Indication

The Misc Status menu displays auto-detected and SMPTE ST352 (VPID) parameters for both links of the selected SDI source. As source input for payload inspection, you can select the Analyser input or Generator output for comparison.

SxA and SxE



Selected SDI Source for Analysis: In1

Auto-detected Video Format: Input 1

SMPTE 352 Payload details for Link 1


SMPTE 352 Payload Details for Link 2

Colorimetry Parameter Now Displayed: UHDTV

Detected Errors in Red; Sx Unsupported Parameters in Yellow

Signal Information	Link 1	Link 2
Source	In1	
Video Format In1	ST352 Data	ST352 Data
All Pix	98 79 C0 05	98 79 C0 25
Active-Pix	Standard	Standard
Active-Lines	ST425-5(2160)	ST425-5(2160)
Freq.MHz	Mapping	Mapping
Re-Sync	0L 3Gb-B 2-SI	0L 3Gb-B 2-SI
	Transport	Transport
	interlaced	interlaced
	Picture	Picture
	progressive	progressive
	Transfer	Transfer
	SLog3	SLog3
	Frame Rate	Frame Rate
	50	50
	Aspect Ratio	Aspect Ratio
	unknown	unknown
	Active-Pix	Active-Pix
	2048	2048
	Active-Lines	Active-Lines
	1080	1080
	Sampling	Sampling
	4:2:2 YCbCr or IctCp	4:2:2 YCbCr or IctCp
	Bit Depth	Bit Depth
	10-bit	10-bit
	Colorimetry	Colorimetry
	UHDTV	UHDTV
	Channel	Channel
	DS1 Link 1	DS2 Link 1
	Audio	Audio
	Main	Main

SxD



Selected SDI Source for Analysis: In1

Auto-detected Video Format: Input 1

SMPTE 352 Payload details for Link 1

Auto-detected video format: Input 2 (on SxD Only)

SMPTE 352 Payload Details for Link 2

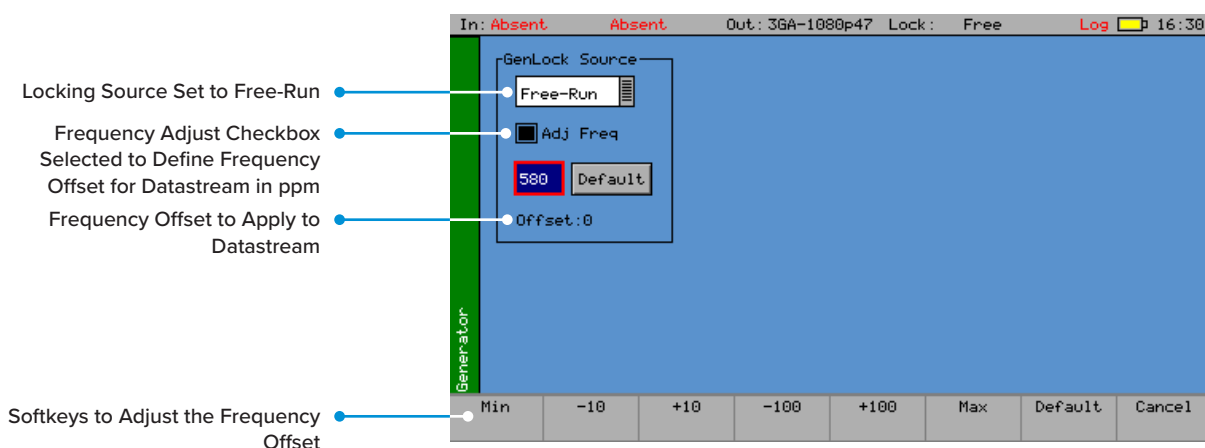
Detected Errors in Red; Sx Unsupported Parameters in Yellow

Signal Information	Link 1	Link 2
Source	In1	
Video Format In1	ST352 Data	ST352 Data
All Pix	97 F9 60 45	85 42 00 01
Active-Pix	Standard	Standard
Active-Lines	ST425-3(2160)	ST292-1(1080)
Freq.MHz	Mapping	Mapping
Re-Sync	0L 3Gb-A 2-SI	1080 1.485Gb/s
	Transport	Transport
	progressive	interlaced
	Picture	Picture
	progressive	progressive
	Transfer	Transfer
	SLog3	SDR-TV
	Frame Rate	Frame Rate
	50	23.98
	Aspect Ratio	Aspect Ratio
	unknown	unknown
	Active-Pix	Active-Pix
	2048	1920
	Active-Lines	Active-Lines
	1080	1080
	Sampling	Sampling
	4:2:2 YCbCr or IctCp	4:2:2 YCbCr or IctCp
	Bit Depth	Bit Depth
	10-bit	10-bit
	Colorimetry	Colorimetry
	UHDTV	Rec.709
	Channel	Channel
	Link 2	Ch 1
	Audio	Audio
	Copy	-

Free-Run Frequency Control

The GenLock menu allows the Sx to be locked to an external studio reference, SDI input or to free-run.

- Setting the Generator GenLock Source of the Sx unit to Free-Run enables you to select an **Adj Freq** checkbox to adjust the frequency of the datastream by more than + / - 100 ppm..
- Use this feature to generate SDI signals that are *off-frequency* to test the susceptibility of a system to absolute clock frequency.
- Adjustable frequency range from 0 to 1024, with the nominal mid-point at approximately 580.
- Increment the value to increase the signal frequency and decrement to decreases the frequency.



New Cable Types Supported

The following additional cable types are now supported for cable length indication:

- Draka 0.6/2.8 AF S
- Percon VK 5/0.6

Improved Logging of Eye Jitter on SxE

Jitter thresholds may be set independently for each jitter meter (Jitter-1 and Jitter-2):

- Set different jitter thresholds for each of the three SDI data rates (SD / HD / 3G).
- Independent thresholds for both jitter meters.
- Jitter threshold defaults are the maximum values specified by the SMPTE standard.

