

BrightEye 54

Sync Generator and Test Signal Generator

BrightEye 54 is a master sync generator and test signal generator that is perfect as a master reference generator for remote trucks, desktop and fly packs. It is a stable timing source, operating from an internal precision standard that meets full broadcast specifications.

Color Black, Bars, Crosshatch, Multiburst, and SDI Checkfield (Pathological) are just some of the signals simultaneously available on the SDI and analog composite outputs.

An ID slate with user programmable text can overlay the test pattern. The cyclops feature adds a motion element to the video test signal, handy for live applications.

The HD Tri-Level Sync output provides reference to high definition equipment, such as VTRs, disc recorders and workstations. There are a wide variety of user selectable formats including: 720p, 1080i, 1080sF, and 1080p. Format selections and other controls are accessed through BrightEye Mac or PC software.

AES3id digital audio, analog audio and embedded audio reference outputs are provided.

► Specifications

Composite Output

Number	One
Signal Type	NTSC / PAL
Impedance	75 Ω
Return Loss	>40 dB DC to 5.5 MHz
Frequency Response	-0.1 dB 10 KHz to 5.0 MHz
Output DC	± 50 mV
K Factor	<1.0%
Differential Phase	<1.0 degree
SCH Phase	± 5 degrees

Accuracy and Timing Stability

Internal TCXO	
PAL F_{sc}	4.43361875 MHz +/- 1 Hz
NTSC F_{sc}	3.579545 MHz +/- 1 Hz
601 F_s	27.000000 MHz +/- 5 Hz



- Reference Generator for All Video and Audio Gear
- Sync Pulse Generator
- Test Signal Generator
- Composite, SDI, HD Tri-Level Outputs
- Audio Outputs

Long Term Drift	< 1 ppm/year
Analog Jitter	< 1 ns
Digital Jitter	< 0.2 UI (0.13 UI typical)

Serial Digital Output

Number	One
Signal Type	Serial Digital (SMPTE 259M)
Return Loss	> 15 dB, DC to 270 MHz

Tri-Level Sync Output

Number	One, 75 Ω
Type	1080i (SMPTE 274M -5, 6) 50, 59.94 720p (SMPTE 296M -2, 3) 50, 59.94 1080p (SMPTE 274M -9, 11) 23.98, 24, 25 Hz 1080sF (RP211 -14, 16) 23.98, 24, 25 Hz
Output DC	± 50 mV
Return Loss	> 30 dB to 30 MHz

AES Audio Output

Number	One
Type	AES3id, 1 KHz tone or silence
Resolution	24 bit

Analog Audio Output

Number	One stereo pair or two mono
Type	1 KHz tone or silence
Impedance	30 Ω, balanced
Reference Level	-10 to + 4 dBu, Adjustable

General Specifications

Size	5.625" W x 0.8" H x 5.5" D (143 mm x 20 mm x 140 mm) including connectors
Power	12 volts, 7 watts (100-230 VAC modular power supply)
Temperature Range	0 to 40° C ambient
Relative Humidity	0 to 95° non-condensing