

BrightEye 55

Genlockable Sync Generator and Test Signal Generator

BrightEye 55 is a genlockable sync generator and test signal generator that can be used as either a slave or master reference generator. It can lock to house reference or it can lock to its own internal precision standard. BrightEye 55 is well suited for remote trucks, desktop and fly packs.

Color Black, Bars, Crosshatch, Multi-burst, 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.



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

Reference Input

Number One
 Signal Type 1V P-P PAL, NTSC, or 10 MHz
 Return Loss >40 dB DC to 5.5 MHz

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 Fsc 4.43361875 MHz +/- 1 Hz
 NTSC Fsc 3.579545 MHz +/- 1 Hz
 601 Fs 27.000000 MHz +/- 5 Hz
 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
 Weight 15 oz
 Power 12 volts, 4 watts
 (100-230 VAC modular power
 supply not included)
 Temperature Range 0 to 40° C ambient
 Relative Humidity 0 to 95%, non-condensing

