Content creators, broadcasters and distributors succeed or fail based on picture quality. Now SRI International Sarnoff offers a comprehensive solution for testing and verifying the quality of digital video signal chains. The TG-100™ test sequence generator combines acclaimed digital test patterns with playback hardware.

The suite includes a powerful portfolio of test signals, starting with the award-winning Visualizer™, a video sequence that enables operators to judge 24 separate parameters. The Visualizer sequence takes the guesswork out of digital video quality control. Users get hard data simply by looking at a picture on a monitor. AudioRef™ advanced audio reference clips not only confirm technical performance but also help ensure compliance with the Commercial Advertisement Loudness Mitigation Act (CALM). Finally, the ESP™ encoder stress pattern helps evaluate and tune digital video compression encoders.

These test signals are standard on the TG-100 system, a one-rack-unit uncompressed video player that outputs 10-bit digital video and up to 16 channels of embedded 16-bit digital audio. The result is a comprehensive, convenient, cost-effective solution for quality control.

### Features

**TG-100™ Test Generator**
- Award-winning test content
- Plays uncompressed 10-bit video from RAM
- Provides multiple formats and frame rates
- Enables easy selection of test patterns via GUI
- Provides SD/HD-SDI and 3G/Dual Link SDI outputs, HDMI™ output and 2-channel 24-bit AES/EBU audio output

**Includes: Visualizer™ Digital Video Test Pattern**
- Enables comprehensive diagnostics on a simple picture monitor
- Quantifies lip sync errors
- Quantifies compression fidelity
- Identifies HD (709) and SD (601) color matrix mismatch
- Determines bit depth and chroma subsampling
- Identifies highlight clipping and black level offset (PLUGE)
- Provides 18 additional tests

**Includes: AudioRef™ Audio Reference Clips**
- Provides dialog loudness reference
- Supports CALM act compliance
- Audibly confirms channel ID by number and function
- 16 channels embedded in HD-SDI

**Includes: ESP™ Encoder Stress Pattern**
- Evaluates SD and HD encoder quality on a simple picture monitor
- Assists in selecting and tuning encoders
- Provides visual verification of encoder performance
- Reveals limits in spatial resolution, judder, dropped frames, and more
About SRI International

Innovations from SRI International have created new industries, billions of dollars of marketplace value, and lasting benefits to society—touching our lives every day. SRI, a nonprofit research and development institute based in Silicon Valley, brings its innovations to the marketplace through technology licensing, new products, and spin-off ventures. Government and business clients come to SRI for pioneering R&D and solutions in computing and communications, chemistry and materials, education, energy, health and pharmaceuticals, national defense, robotics, sensing, and more. Visit www.sri.com and the SRI Timeline of Innovation (www.sri.com/timeline) to learn more.

Headquarters
SRI International
333 Ravenswood Avenue
Menlo Park, California 94025-3493
650.859.2000

Additional U.S. and international locations
www.sri.com

Stay Connected

Contact Us
For more information about this product:

SRI International Sarnoff
201 Washington Road
Princeton, NJ 08540-6449
609.734.2553
info@sri.com
sri.com/tg-100

Standard Specifications

Formats
1080i 25, 29.97
720p 50, 59.94
1080p 23.98
480i 29.97
480p 23.98
576i 25

Interfaces
SDI, HD-SDI, 3G-SDI-Level B
HDMI
AES/EBU: one stereo pair
Embedded: 16 channels
Analog: component, composite, 2-channel audio
Genlock input

Dimensions
17 in (W) x 1.75 in / 1U (H) x 13 in (D)

Power
120–240 VAC 80W

Supported Standards
SMPTE 125M  SMPTE 259M
SMPTE 259M  SMPTE 296M
SMPTE 274M  ITU-R BT.601

Optional Specifications

Formats
4K (2160p) 23.98, 29.97
2K (2048 x 1556p) 23.98, 24, 25
1080p 50, 59.94, 29.97, 25

Integer Frame Rates
720p 24
1080p 24, 30, 60
1080i 30