AudioRef™ Clips
Advanced Audio Reference

Variations in loudness of broadcast content has become a pressing issue. Sarnoff’s AudioRef™ is a package of scientifically-calibrated audio reference clips that enable professionals to accurately set up and evaluate audio monitoring equipment in virtually any system. The reference clips make mixing remarkably easy by providing calibrated dialog samples, in both male and female voices, to compare and adjust existing material appropriately.

The clips are compliant with the ATSC Recommended Practice A/85 and the proposed Commercial Advertisement Loudness Mitigation Act (CALM), allowing media professionals to assure their content complies with the law and industry best practices.

Capabilities
- Dialog loudness reference
  - Compliant with ATSC A/85 and ITU BS.1770
  - Constant level -24 dB LKFS
  - Level controlled to +/- 1 dB in any 10 second interval
- Male dialog
- Female dialog
- Center channel and left/right channel versions
- Pink noise (all channels)
- Audio channel ID
  - Voice identification by channel number (“one, two, three,...”)
  - Voice identification by channel function (“left, right, center,...”)
- Synchronization “Tick”
  - Simultaneous tick in all channels
  - Compatible with Sarnoff’s Visualizer™ Digital Test Pattern
- Tone
  - -20 dB FS
  - 500 Hz

Scientifically-Calibrated Audio Reference for Industry Compliance and Viewer Satisfaction

Applications
- Broadcast operators
- Post production
- Encoder and decoder testing
- Video over cellular networks
- Satellite and cable television
- Video distribution networks
- IPTV
- D-Cinema

Available As:
- Digital media
- Pre-installed on TSG-1

Specifications
- 16 channels
- Bit depth
  - 16 standard
  - 20, 24 optional
- Sample rate
  - 48,000 Hz
Silicon Valley-based SRI International, a nonprofit research and development organization, performs sponsored R&D for governments, businesses, and foundations. SRI brings its innovations to the marketplace through technology licensing, new products, and spin-off ventures. Commemorating its 65th anniversary in 2011, SRI is known for world-changing innovations in computing, health and pharmaceuticals, chemistry and materials, sensing, energy, education, national defense, and more. SRI Sarnoff is well known for its broadcasting, vision, and semiconductor innovations.

**Headquarters**

**SRI International**
333 Ravenswood Avenue
Menlo Park, CA 94025-3493
650.859.2000

**Washington, D.C.**

**SRI International**
1100 Wilson Blvd., Suite 2800
Arlington, VA 22209-3915
703.524.2053

**Princeton, New Jersey**

**SRI International Sarnoff**
201 Washington Road
Princeton, NJ 08540-6449
609.734.2553

**Additional U.S. and international locations**

**www.sri.com**

SRI International and Sarnoff are registered trademarks of SRI International. All other trademarks are the property of their respective owners.

SRI International reserves the right to change these specifications without notice.

Copyright 2011 SRI International.
All rights reserved. 06/11.