HD / SD Sync Pulse Generator with Genlock

- Wide variety of HDTV Sync standards
- Simultaneous HD and SD analog sync outputs
- 3 x HD sync outputs and 3 x SD sync outputs
- Genlock with cross lock to any sync standard
- Sync only, Color bars or Black Burst for SD sync
- NTSC, PAL or PAL M/N sync outputs
- Burst phase adjustment for NTSC and PAL sync
- 48KHz Word Clock or DARS audio reference output
- Simple to use, all controls easily accessible.

The SPG 1707 is a compact, versatile analog sync pulse generator with genlock providing HD / SD video sync and audio reference signals. The module provides three SD sync outputs and three HD sync outputs and a separate audio sync output that can be switched between 48 KHz World Clock or Digital Audio Reference (DARS).

Flexible genlock capability allows the module to genlock to any SD or HD reference input, with full cross lock capability, even across unmatched standards.

The HD tri-level sync outputs can be set to any of the available HD standards, and the bi-level SD outputs set for NTSC, PAL or PAL M/N. The SD and HD sync outputs and audio sync signals are all frequency locked to the reference regardless of the selected sync standard for the outputs.

The SD sync outputs can be Color bars, Black Burst or Sync only with selectable 7.5 IRE pedestal for NTSC standards with adjustable burst phase in 8 increments.

The sync generator is robust and temperature stabilized, suitable as a reference source with 2ppm accuracy.

All user controls are located on the top of the module clearly labelled and easily accessible. This facilitates simple changes to module function and configuration without referring to a manual.

The compact portable design makes it suitable for a wide range of applications in broadcast and mobile production environments.

Note: 1080p 50Hz / 60Hz and 59.94Hz sync standards not supported

**Technical Specifications**

**HDTV Sync**

- 3 x Tri-level HD Analog Sync outputs
- Standards:
  - 1080i / 50Hz / 59.94Hz / 60Hz
  - 1080p / 23.98Hz / 24Hz / 25Hz / 29.97Hz / 30Hz
  - 720p / 23.98Hz / 24Hz / 25Hz / 29.97Hz / 50Hz / 59.94Hz
  - 1080p23.98Hz/24Hz
  - SMPTE 274M, SMPTE 296M

**SDTV Sync**

- 3 x Bi-level SD sync outputs
- Standards: NTSC, PAL, PAL M/N
- SMPTE 170M, ITU-R BT 470.6
- Selectable: 75% color bars / black burst / sync only
- NTSC 7.5 IRE pedestal ON/OFF
- Adjustable burst phase in 8 increments
- Return Loss > 40dB up to 5MHz
- SNR > 75dB

**Ref Sync Input**

- Bi-level or tri-level analog sync
- Cross lock compatible to 525 and 625 SD sync and all HD sync standards (excluding 1080p 50/60/59.94Hz)
- SMPTE 274M, SMPTE 296M

**Audio Ref.**

- Selectable 48KHz Word Clock or DARS
- DARS: SMPTE 276M unbalanced AES (24-bits) - Grade 2
- 48KHz Word Clock: 0 - 5.0V

**Accuracy**

- 2 ppm

**Power**

- +12VDC power supply (including)

**USB**

- USB port for firmware upgrades

**Size**

- 105mm x 95mm x 22mm (4.13" x 3.74" x 0.86")

**Model #**

- SPG 1707

**Includes**

- Module, 12V DC power supply and wall mounting brackets

Specifications subject to change