## Technical Specifications

**HDTV Sync**  
3 x Tri-level HD Analog Sync outputs. Accuracy 2 ppm  

Standards:  
- **1080i**: 50Hz / 59.94Hz / 60Hz.  
- **1080p**: 23.98Hz / 24Hz / 25Hz / 29.97Hz / 30Hz.  
- **720p**: 23.98Hz / 24Hz / 25Hz / 29.97Hz / 50Hz / 59.94Hz.  
- **1080psf**: 23.98Hz/24Hz  

*Note: 1080p 50Hz/60Hz is not supported and 720p 30Hz/60Hz is not supported, but the .001 derivatives are supported.*  

- SMPTE 274M, SMPTE 296M  
- Selectable via integrated 16 position rotary switch  
- Return Loss > 40dB up to 5MHz  
- SNR > 75dB  

**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 7.5IRE pedestal ON/OFF. Adjustable burst phase.  
- Return Loss > 40dB up to 5MHz. SNR > 75dB  

**Ref Sync Input**  
Bi-level or tri-level analog sync, SMPTE 274M, SMPTE 296M  

- Cross lock compatible to 525 and 625 SD sync and all HD sync standards (excluding 1080p 50/60/59.94Hz)  

**Audio Ref.**  
Selectable 48KHz Word Clock or DARS  

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

**Power**  
+12VDC  

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We are constantly adding additional yellobrik modules. Please visit our website for the latest product updates.  

[www.lynx-technik.com](http://www.lynx-technik.com)
Connections and Adjustments
All connections and adjustments are clearly indicated on the module and self explanatory. Settings can be changed with the module powered on or off.

Operation
The SPG 1707 provides 3 x Tri-Level HDTV sync outputs and 3 x Bi-level SDTV sync outputs. HDTV and SDTV Sync outputs are available simultaneously and can be set to any standard. Regardless of the settings made the SDTV and HDTV sync outputs and the audio sync output are always frequency locked.

Stand Alone Use
With no genlock input connected the SPG 1707 will function as a standalone precision sync pulse generator which can be used as a reference source (2 ppm accuracy).

Genlock
When an analog sync input is connected (any standard or format) the SPG 1707 will genlock to this signal and all outputs are then frequency locked to the reference input. The connected reference is auto-detected and the green “genlock” LED will illuminate when locked. Full cross lock compatibility to any reference input standard or format.

Audio Reference
The audio reference output can be set to a 48KHz Word Clock or a DARS reference signal. Selection is made using the dip switch. The audio output is always frequency locked to the output sync signals.

Power
The module requires a 12V DC power input and a LED is provided to confirm power is connected. A power supply is provided, but if applying your own power, please provide a clean 12V DC power source. Module power consumption is approx 250mA (2.8VA)

Power Lead Strain Relief
The module has a small hole in the case located above the power connection. To prevent the power lead being accidentally pulled out, use the supplied tie-wrap and secure the lead as shown below.

Optional Mounting Bracket
The optional RFR 1001 mounting bracket can be used to permanently mount the module on any flat surface or on 19” rack rails.

Note:
Another module type is shown for illustration purposes only. The principle is the same for the SPG 1707