



**RJM & Associates, LLC**  
Broadcast Solutions

## Data Sheet

### VRG-1

## Video Referenced AES/Word Clock Generator



*The power supply is sold separately*

### Key Features

- Looping video input accepts NTSC or PAL video, color black, or sync
- Outputs for word clock, silent AES3, and silent AES3id
- Internal crystal oscillator provides stable 48kHz reference in the absence of an input signal
- Dipswitch selection of mute outputs or revert to internal reference upon loss of input signal
- Alarm output to warn of loss of input signal
- Compact size: 5.2"W x 1.62"H x 6.625"D (15.2 x 4.1 x 16.8 cm) less connectors

In video applications, digital audio sample clocks must be locked to a video reference. The VRG-1 provides a means to do so, easily and cost effectively. This module produces word clock and silent AES outputs that are locked to an NTSC or PAL reference input.

Use the VRG-1 in conjunction with the SoundPals ADC-24 or DTG-1 modules, or with any other digital audio equipment that requires an AES or word clock reference signal that is locked to video.

Like all of the SoundPals line, the VRG-1 is housed in a compact, rugged aluminum enclosure.

### RJM & Associates, LLC

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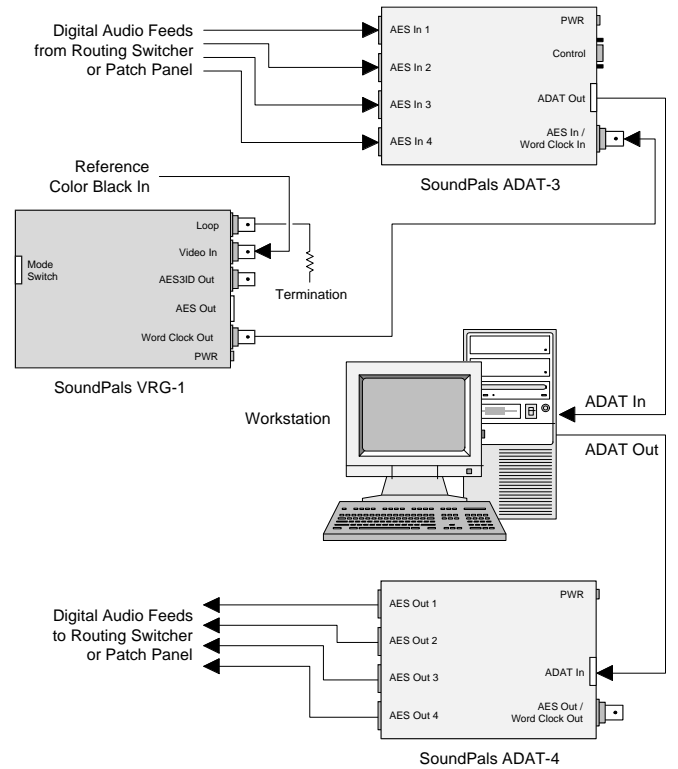
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Technical Data	
Video input	Hi-z looping, minimum 0.25V p-p sync component, maximum 2V p-p sync or video
Frequency lock range	± 200 ppm
Sample rate	48kHz
Word clock output	4.5 to 5V p-p
AES3 output	4V p-p, 110 Ω balanced
AES3id output	1V p-p, 75 Ω unbalanced
Alarm output	+5V @ 25mA
Power	150mA @ 6Vdc
Options	
RT-2	1RU rack tray for mounting up to 3 units, with power supply
PSU-1	90-260V 50/60Hz power supply, with detachable IEC power cord



**Application Diagrams**

There are many uses for SoundPals in music recording, radio or television broadcasting, DVD/CD/CR-ROM mastering, and video production and post-production.



In this configuration, 4 AES channels (from a facility routing switcher or patch panel) are routed to the ADAT-3 for conversion to the ADAT format. A standard analog house reference signal (from a routing switcher or a dedicated feed) provides the video that locks the ADAT-3 via the VRG-1, thus synchronizing the AES signals to video. Once the segment is completed on the workstation, the ADAT-4 converts it back to AES format,

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