

# 9363 • Multi-Format Reference Generator



The highly flexible **9363 Multi-Format Reference Generator** generates four reference signal pairs that are independently configurable as composite black burst or tri-level reference sources. Each output can be any industry standard rate related to a received input reference source, or can be generated using the card's internal clocking source. Timing for each output pair can be independently offset (in vertical lines or horizontal pixels) from the received reference or internal clock.

## FEATURES

Flexible, single-card source for any NTSC or PAL SD/HD broadcast or film reference rate

Develops output reference using external analog reference or stand-alone internal clock source

AES/Word Clock output synchronized to any of the four card reference outputs

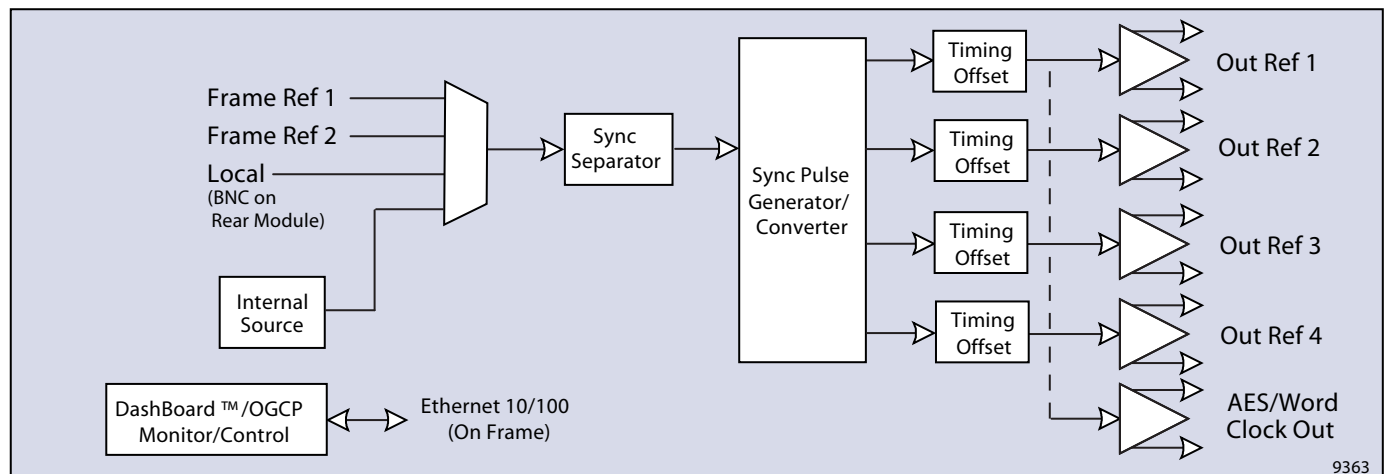
Outputs can be independently set for frame rate and delay relative from input/internal reference, or from each other

Genlock to output rates of 1:1, 1:2, or 2:1 relationship with clock source. Field Lock for interlaced format outputs from progressive clock sources.

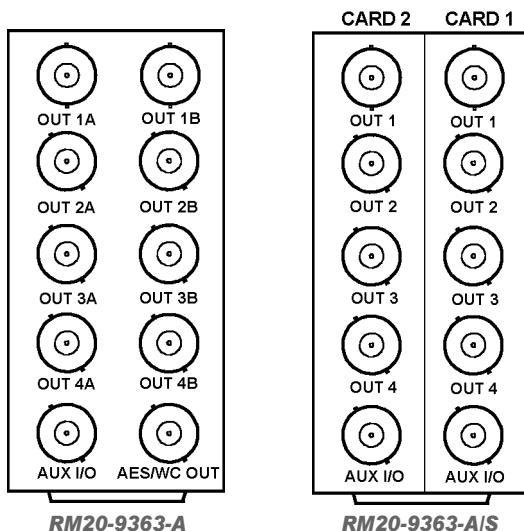
Remote control/monitoring via DashBoard™ software

Hot-swappable

Five year warranty



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### SPECIFICATIONS

**Note:** Inputs/outputs are a function in some cases of rear I/O module used.

#### Power

6 Watts

#### Reference Input

Impedance: 75  $\Omega$

Standard: SMPTE 274M, 296M, 170M; ITU-R BT.470-6 (PAL-B)

Return Loss: >40 dB to 10 MHz

#### Reference Outputs

Reference Outputs: 4 pairs max. (each pair independently configurable)

Rates (Hz; internal clock): 60, 59.94, 50, 30, 29.97, 25, 24, 23.98

Signal Level: 1 Vp-p

Impedance: 75  $\Omega$

Return Loss: >40 dB to 30 MHz

Internal Clock Count Stability: 1 ppm initial (4.6 ppm 10 years; all conditions within specifications)

Thermal Stability:  $\pm 0.25$  ppm (0° to 70° C)

#### AES/Word Clock Output

Signal Level: 1 Vp-p

Impedance: 75  $\Omega$

Return Loss: >25 dB to 10 MHz

AES Sample Rate: 48 kHz

### ORDERING INFORMATION

**9363** Multi-Format Reference Generator

**RM20-9363-A** 20-Slot Frame Rear I/O Module (Standard Width) BNC Analog Reference Input or AES/Word Clock Output (configurable), 4x2 BNC Analog Reference Outputs, dedicated AES/Word Clock BNC Output

**RM20-9363-A/S** 20-Slot Frame Rear I/O Module (Split; supports 2 cards) BNC Analog Reference Input or AES/Word Clock Output (configurable), 4 BNC Analog Reference Outputs (connections are per card)