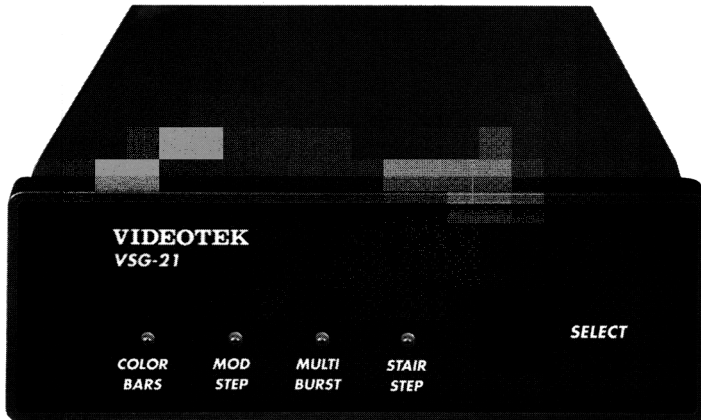


VSG-21

COLOR SYNC REFERENCE AND TEST SIGNAL GENERATOR



The **VSG-21** provides the most useful test and reference signals for a video production environment in a single, compact unit. Select one of four test signals, dedicated blackburst and 1 kHz audio tone outputs which provide signals for operational adjustment of NTSC equipment while providing a stable reference.

FEATURES

- SMPTE color bars
- FCC multiburst
- 10-step modulated stairstep
- 10-step stairstep
- Continuous blackburst output
- +4 dBm 1 kHz tone output
- Rackmountable using optional DAT-1 Rackmount Frame

APPLICATIONS

- Field Production
- Studio Production
- Duplication
- SNG and ENG

VSG-21 SPECIFICATIONS

CONTINUOUS OUTPUTS

BLACKBURST:

{Color Black}
One isolated output, BNC.
Digitally generated RS-170M composite video containing composite sync, burst and 7.5 IRE (nominal) black level.

AMPLITUDE:

47.5 IRE ±1 IRE

DC OFFSET:

0V ±100 mV

RESIDUAL SUBCARRIER:

≤1 IRE

AUDIO

One balanced output via detachable connector.

FREQUENCY:

1 kHz, ±0.5%, sine wave

LEVEL:

+4 dBm, ±0.5 dBm (internally adjustable)

IMPEDANCE: 600Ω

THD: ≤1%

SWITCHABLE OUTPUT

Four times subcarrier digitally generated.

SMPTE COLOR BARS

with pluge and I and Q bars.

BAR ACCURACY: <1°

AMPLITUDE: ≤1%

DC OFFSET: 0V ±50 mV

LUMINANCE:

100% white bar,

100 IRE ±1 IRE

RESIDUAL SUBCARRIER: ≤1 IRE

OVER/UNDERSHOOT & RINGING:

<1% at 1V p-p output

FCC MULTIBURST

REFERENCE BAR AMPLITUDE: 100 IRE

REFERENCE PACKET AMPLITUDE: 60 IRE

BURST FREQUENCIES:

0.5, 1.25, 2.0, 3.0, 3.58 and 4.1 MHz

10-STEP MODULATED STAIRSTEP

CHROMINANCE AMPLITUDE: 40 IRE

10-STEP STAIRSTEP

LUMINANCE AMPLITUDE: 100 IRE

POWER

INPUT:

90-132, 180-264 VAC, 50/60 Hz

CONSUMPTION:

12 VA, nominal

CONNECTION:

3-wire power cord

ENVIRONMENTAL

OPERATING TEMPERATURE:

0° to 50°C

STORAGE TEMPERATURE:

-50° to 75°C

HUMIDITY:

90% maximum (non-condensing)

MECHANICAL

DIMENSIONS:

Height: 1.74" (4.4 cm)

Width: 5.25" (13.3 cm)

Depth: 9.9" (25.2 cm)

WEIGHT:

2.5 lb (1.15 kg)

STANDARD ACCESSORIES

Service Manual

OPTIONS (see page 67)

DAT-1:

Rackmount frame accommodates three VSG-21s and/or stand alone distribution amplifiers.

DAT-2:

Blank Panel for DAT-1

