

# MODEL SSC/623

## STROKE-TO-VIDEO SCAN CONVERTER W/MIXER

TECHNICAL SPECIFICATIONS

### FEATURES

- Converts XYZ Stroke Video (HUD, Radar, Sonar, Spectrum analyzer) to raster video
- Video Mixing/Keying
- Selection of RS-170, NTSC, PAL, or RS-343 (875 Line) or optional SVGA Output
- Advanced Scaling algorithm provides excellent output video quality
- Accepts a wide range of stroke (XYZ) input signals
- Internal test signal confirms proper operation or provides for fault isolation
- NEW front panel control and calibration

### BENEFITS

- View Stroke video on standard displays
- Use standard recorders for mission recording
- Conversion to standard video simplifies switching and transmission



### MODEL SSC/623

The Model SSC/623 Stroke-to-Video Scan Converter with Mixer converts stroke video from XYZ vector to a standard raster video format. The converted video can then be mixed or keyed with an external video signal. Stroke video is generated by a variety of random-deflection devices, including certain radar and sonar devices, spectrum analyzers, and Heads Up Display (HUD) generators. A choice of four video standard outputs are provided: RS-170, NTSC, PAL, or 875-line RS-343. After conversion, the video can be recorded using standard TV cassette recorders and viewed using low cost, off-the-shelf monitors.

This model has two separate analog input processing channels. Each channel has separate gain and offset adjustments for X, Y, and Z. Either channel can be routed to the scan converter. Control and individual channel calibration is provided through the unit's front panel display, keypad and control knob or remote control RS-232 serial port.

High quality video is generated by a combination of high frequency sampling and an advanced scaling algorithm. Scaling is an important consideration when converting computer-generated graphics or alpha numerics to a raster format.

The SSC/623 also includes an internal test signal generator that can be used to either confirm proper operation or to provide fault isolation.

The SSC/623 can be synchronized (or genlocked) to an external video input. Once genlocked, the external video signal can be mixed with the scan converted video to provide a composite video output. The mixer mode can be selected for linear mix, non-additive mix, self key, or matte key. Additionally, in the NTSC or PAL output mode, a matte-key color can be selected.

## SIGNAL INPUTS

### X AND Y POSITION INPUTS

- Typical values:
  - Balanced or Unbalanced 1V to 40Vp-p
  - Offset +/- 50%
  - 75 ohm termination
  - Signal inversion via front panel
  - Balanced/Unbalanced via front panel

### Z INTENSITY INPUTS

(Stroke and Raster)

- Typical values:
  - Balanced or Unbalanced 0.5 to 40Vp-p
  - Offset +/- 50%
  - 75 ohm termination
  - Signal inversion via front panel
  - Balanced/Unbalanced via front panel

### STROKE/RASTER INPUTS (A&B)

- Selects Stroke or Raster Mode (2V-24V)

### GEN-LOCK INPUTS

- RS-170/PAL/RS-343 Composite (1Vp-p into 75 Ohms)
- Comp Sync/H Sync (4Vp-p into 75 Ohms)
- Vertical Sync (4Vp-p into 75 Ohms)

### VIDEO OUTPUTS (2)

- Choice of RS-170, NTSC, PAL, 875-line RS-343
- Composite video 1V p-p when terminated with 75 Ohms
- 2x CVBS or Y/C (NTSC/PAL Only)
- Optional SDI Output

### COMPOSITE SYNC OUTPUT

- 4V p-p when terminated with 75 ohms

### GEN-LOCK INPUTS

- RS-170/PAL/RS-343 Composite (1Vp-p into 75 Ohms)
- Comp Sync/H Sync (4Vp-p into 75 Ohms)

## ADDITIONAL SPECS

### XYZ INPUT BANDWIDTH

- Greater than 20MHz

### DIFFERENTIAL DELAY (X,Y,Z)

- 0-255 Sample Rate Clocks

### SAMPLING RATE

- 20 or 40 Megasamples per second

### FRONT PANEL CONTROLS

- Control via Keypad/VF Display/Optical Encoder
- Test/Operate
- XYZ amplitude and offset
- XY delay adjustment
- Video Output Format
- Decay rates
  - Choice of 6 switch-selectable rates with 3 decay kernels
  - Choice of  $1/30^{\text{th}}$  or  $1/15^{\text{th}}$  second per step

### REMOTE CONTROL

- RS-232 @ 19.2Kb (N,1,8)
- Optional Ethernet

### CONNECTORS

- BJT4-47 triax connectors for X, Y, Z
- BNC for gen-lock inputs, video and sync outputs
- Corcom 6EGSI-1 for power input

### SIZE

- 19"W\* x 12"D x 1.75"H

### ENVIRONMENT

- Operating temperature: 0°C to 50°C

### POWER REQUIREMENTS

- 100 to 250 Vac
- 50 or 60 Hz

