TECHNICAL SPECIFICATIONS

FEATURES

- Converts XYZ stroke signals (such as radar, sonar, HUD, and spectrum analyzer) to raster video

- Selection of HD, SD, and VESA output formats

- Advanced scaling algorithm provides excellent quality video output

- Accepts a wide range of stroke (XYZ) input signals, including color

- User-selectable decay rates

- Internal test signal confirms proper operation or provides fault isolation

- Gen-lock to external video signal (RS-170 or PAL)

BENEFITS

- Signal can be viewed using low cost, off-the-shelf TV monitors

- Signal can be recorded using standard TV recorders

DESCRIPTION

The Model SSC/924 Stroke-to-Video Scan Converter converts stroke video from XYZ vector to a standard video format. 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. High Definition, Standard Definition, and VESA video output standards are provided. After conversion, the video can be recorded using standard video recording devices and viewed using low cost, off-the-shelf monitors.

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. Scaling in the SSC/924 is done using multitap FIR filtering and advanced horizontal and vertical interpolation to generate an 8-bit (256 level), high resolution video signal. A selection of different decay rates provides for emulation of a wide variety of stroke monitors.

The SSC/924 can accept signals in a stroke format, raster format, or a mixed stroke and raster format. Some stroke-generating devices have the ability to change the output signal between stroke and raster format in order to accommodate special display information. The SSC/924 can be adjusted to ensure that both the stroke and raster data appear in their proper location and intensities in the same output video signal.

The Model SSC/924 has a vacuum fluorescent front panel display, 4-button keypad, and optical rotary encoder that makes navigating and calibrating the unit much easier then our previous generation scan converters. Preferred settings can be saved and recalled.

SIGNAL INPUTS

X AND Y POSITION INPUTS
- Customer specified
- Typical values:
  - Balanced 1 to 10V p-p
  - Offset +/- 5V
  - 75 Ohm termination
  - Signal inversion via strapping
  - Balanced/Unbalanced via strapping
  - Triaxial Connector

Z INTENSITY INPUTS (STROKE AND RASTER)
- Customer specified
- Typical values:
  - Unbalanced 0.5 to 5V
  - Offset +/- 5V
  - 75 Ohm termination
  - Signal inversion via stapping
  - Balanced/Unbalanced via strapping
  - Triaxial Connector

GEN-LOCK INPUT
- RS-170 or PAL composite video
- Composite video: 1V p-p
- RS-170 or PAL composite sync
- Composite sync: 4V p-p or TTL
- BNC Connector

STROKER / RASTER INPUT
- TTL level
- DB-9 Aux-In Connector

SIGNAL OUTPUTS

VIDEO OUTPUT
- Choice of HD, SD, VESA
- Composite video 1V p-p when terminated w 75 Ohms (BNC)
- VESA up to 1280 x 1024 60fps (DVI-D)
- HD/SD-SDI IAW SMPTE-259/292 (BNC)

ADDITIONAL SPECIFICATIONS

XYZ INPUT BANDWIDTH
- 6 MHz

SAMPLING RATE
- Twenty (20) Megasamples per second

CONTROLS
- Test/Operate
- XYZ amplitude and offset
- XY delay adjustment
- Decay rates
- Output Resolutions

SIZE
- 16.75"W* x 12"D x 1.75"H
  - *without the 19-inch rack mounting flanges

ENVIRONMENT
- Operating temperature: 0°C to 50°C

POWER REQUIREMENTS (J1 CONNECTOR)
- 100 to 250 Vac
- 50 or 60 Hz
- ~ 20 Watts

Certifications
- CE Mark