FEATURES

• Converts XYZ Stroke Video (HUD, Radar, Sonar, Spectrum analyzer) to raster video
• Supports RS-170 or PAL Formats
• Advanced Scaling algorithm provides excellent output video quality
• Accepts a wide range of stroke (XYZ) input signals
• Selectable Decay Rates
• Internal test signal confirms proper operation or provides for fault isolation
• Flight-worthy Package

BENEFITS

• View Stroke video on standard displays
• Permits use of standard equipment for mission recording
• Conversion to standard video simplifies switching and transmission

MODEL SSC/300

The Model SSC/300 Stroke-to-Video Scan Converter is a rugged, flight-worthy unit designed to convert cockpit stroke video from XYZ vector to a standard raster video format. The converted video can then be recorded, displayed, switched or transmitted using standard video equipment. 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 RS-170 or PAL formats are available.

The SSC/300 accepts a wide range of inputs. Separate gain and offset adjustments for X, Y, and Z are provided in the unit to permit calibration. The calibration potentiometers are easily accessed by removing the SSC/300’s front cover. Jumper selectable controls are also provided to invert each vector input or select balanced or unbalanced signals.

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/300 is designed to meet the requirements for airborne operation (MIL-STD-810E/MIL-STD-461C). The metal housing, conduction cooling and MIL-rated power converters permit the unit to provide reliable performance even in the harshest conditions.
SIGNAL INPUTS/OUTPUTS

X AND Y POSITION INPUTS
• Typical values:
  • Balanced or Unbalanced -5.0 to +5.0V (10Vp-p)
  • Offset +/- 10%
  • 75 ohm termination
  • Signal inversion via front panel
  • Balanced/Unbalanced via front panel

Z INTENSITY INPUTS
(Stroke and Raster)
• Typical values:
  • Balanced or Unbalanced 0.0 to 2.5V
  • Offset +/- 10%
  • 75 ohm termination
  • Signal inversion via front panel
  • Balanced/Unbalanced via front panel
• X/Y/Z Connector Type: PT07A-14-12P

VIDEO OUTPUT
• RS-170/PAL
• Composite video 1V p-p when terminated with 75 Ohms
• Connector Type: BNC

ADDITIONAL SPECS

XYZ INPUT BANDWIDTH
• Greater than 20MHz

SAMPLING RATE
• 20 or 40 Megasamples per second

DECAY
• Every Frame or Every Other Frame
• Choice of 3 Modes
• DIP Switch Selectable

ENVIRONMENT (MIL-STD-810E/461C)
• Operating Temperature: -40°C to +60°C
• Storage Temperature: -55°C to +85°C
• Humidity: 95% Relative
• Altitude- Operating: To 15,000 Feet
• Altitude- Storage: To 50,000 Feet
• Shock-Operational: 15g, 11ms Sawtooth
• Shock-Crash Safety: 40g, 11ms Sawtooth
• Explosion
• Salt Fog: 48 Hours, 5% Solution

SIZE
• 3.7"W x 4.6"H x 9.82"D

WEIGHT
• 6 Lbs.

POWER REQUIREMENTS
• 28VDC @ 1A (In Accordance with MIL-STD-704A)
• Connector Type: PT07A-8-3P