

## 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

## STROKE-TO-VIDEO SCAN CONVERTER



## 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

