



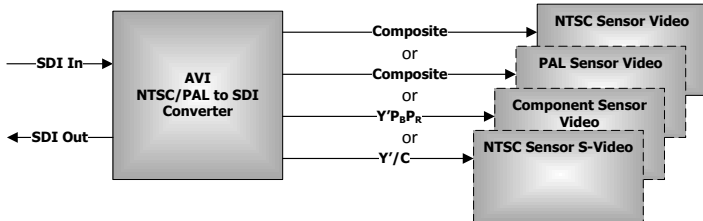
# SDI to NTSC/PAL Video Converter

## Overview

The AVI SDI to NTSC/PAL Video Converter is a rugged stand-alone unit that can convert a SD, HD, or 3G SDI video input to analog video output.

The unit accepts one SDI input and converts it to either component SD/HD, NTSC/PAL composite, or NTSC/PAL S-Video outputs. Low latency, high performance processing provides SDI decoding and scaling to the selected output. The SDI input is automatically detected and also re-clocked as a looped-through output. Available in 1, 2, or 4 channel versions.

Stand-alone or in combination with various AVI system components, AVI's rugged SDI to NTSC/PAL Video Converter offers a high performance solution for converting SDI video to component SD/HD, NTSC, PAL, or S-Video signals. Now all sensors and mission video sources can be used, maximizing the capability of the mission system.



## Standard Features

- One SD, HD, or 3-G SDI Input
- One SD, HD, or 3-G SDI input loop through
- Component SD/HD (Y'P<sub>B</sub>P<sub>R</sub>), or NTSC/PAL (Composite), or S-Video (Y'/C) outputs
- Inputs auto detected
- SMPTE 259M, 292M, 296M, 425M, ITU-R BT.656 and ITU-R BT.601 compliant
- Simple plug-and-play functionality
- 9 – 36 V DC Power
- MIL-STD 38999 circular power connector
- Standard 2 year warranty



## Benefits

- Converts video from SDI format for interface to legacy systems
- Open - works with any Component SD/HD, NTSC, PAL, or S-Video signal output device
- Open – works with any SDI source device
- Continue using legacy video device even with upgraded SDI video sources
- Available in 4, 2, or 1 channel versions

## Typical Applications

- Surveillance systems
- Airborne Law Enforcement sensor systems
- Customs and Boarder Protection sensor systems
- Naval & Coastguard ship's sensor and mission systems
- Naval, Air Force, and Coastguard rotary and fixed wing mission systems
- Ground Vehicle sensor mission systems
- Aerial News Broadcast systems



# SDI to NTSC/PAL Video Converter - Specifications

<b>Video Inputs</b> <ul style="list-style-type: none"> <li>• HD/SD SDI (1) <ul style="list-style-type: none"> <li>○ Connector type – BNC 75 Ω</li> </ul> </li> </ul>	<b>Model Numbers</b> <ul style="list-style-type: none"> <li>• C150104-00 4 channel Converter</li> <li>• C150102-00 2 channel Converter</li> <li>• C150101-00 single channel Converter</li> </ul>
<b>Video Outputs</b> <ul style="list-style-type: none"> <li>• Component SD/HD (Y'P<sub>B</sub>P<sub>R</sub>), or NTSC/PAL (Composite), or NTSC/PAL S-Video (Y'/C) <ul style="list-style-type: none"> <li>○ Connector type – BNC 75 Ω</li> </ul> </li> <li>• HD/SD SDI (1 Loop Through) <ul style="list-style-type: none"> <li>○ Re-clocked</li> <li>○ 10 bit, 4:2:2 color encoding</li> <li>○ Connector type – BNC 75 Ω</li> </ul> </li> </ul>	<b>Functionality</b> <ul style="list-style-type: none"> <li>• Output aspect ratio selection for SD video as Letter Box, or stretched fill</li> <li>• Input video format auto detection</li> <li>• Component, Composite, and S-Video output type</li> <li>• HD down conversion</li> <li>• Analog color sampling 4:2:2</li> </ul>
<b>Video Input and Output Formats</b> <ul style="list-style-type: none"> <li>• SDI Inputs <ul style="list-style-type: none"> <li>○ SMPTE 425M Level B - 2.97 and 2.967Gb/s <ul style="list-style-type: none"> <li>▪ 1080p@60/59.94/50Hz</li> </ul> </li> <li>○ SMPTE 292M/296M - 1.485 and 1.435Gb/s <ul style="list-style-type: none"> <li>▪ 1080i@60/59.94/50Hz</li> <li>▪ 1080p@30/29.97/24/23.98Hz</li> <li>▪ 720p @60/59.94/50Hz</li> <li>▪ SMPTE 259M - 270Mb/s</li> <li>▪ 625i/625p@50Hz</li> </ul> </li> <li>○ 525i/525p@59.94Hz</li> </ul> </li> <li>• Analog Outputs <ul style="list-style-type: none"> <li>○ 625/25 PAL, 525/29.97 NTSC</li> <li>○ 1080i@60/59.94/50Hz</li> <li>○ 1080p@24/23.98Hz</li> <li>○ 720p @60/59.94/50Hz</li> </ul> </li> </ul>	<b>Environmental</b> <ul style="list-style-type: none"> <li>• Operating Temp Low -30°C / -22°F DO-160G Cat B4</li> <li>• Operating Temp High +65°C / +149°F DO-160G Cat B4</li> <li>• Short Term Op Temp Low -35°C / -31°F DO-160G Cat B4</li> <li>• Short Term Op Temp High +70°C / +158°F DO-160G Cat B4</li> <li>• Ground Survival Low Temp -55°C / -67°F DO-160G Cat B4</li> <li>• Ground Survival High Temp +85°C / +185°F DO-160G Cat B4</li> <li>• Temp Variation 5C° per minute DO-160G Cat B</li> <li>• Humidity 0 to 95±4% @ 50C° DO-160G Cat A</li> <li>• Operational Shock &amp; Crash 6g @ 20ms, 20g Sus DO-160G Cat A, R</li> <li>• Vibration Random, 10-2000Hz DO-160G Cat U2</li> <li>• EMI/EMC Sec 18, 19, 20, 21 DO-160G Cat B, CC, R, B</li> <li>• Voltage Spike 2x Line Voltage DO-160G Cat B</li> <li>• Waterproofness Drip Test DO-160G Cat W</li> <li>• Ingress Rating IP67</li> <li>• Altitude Operating 25,000ft DO160G Cat B</li> </ul> <p>DO-160 Tested</p>
<b>Power</b> <ul style="list-style-type: none"> <li>• +9 to +36 DC</li> <li>• 0.20 amps @28V DC</li> <li>• Connector Type MIL-STD D38999/20MB98PN</li> </ul>	<b>Dimensions and Weight</b> <ul style="list-style-type: none"> <li>• 158 mm [6.2 in] W, 108 mm [4.3 in] D, 42 mm [1.7 in] H</li> <li>• 0.65 kg [1.43 lb]</li> </ul>

