

**Features**

- High performance & cost effective
- Supports standard definition PAL, NTSC, Y-C or YPrPb inputs
- High performance 12-bit oversampled ADCs
- 5-line, super adaptive, 2D comb filter
- Able to adapt to inaccurately timed, poor or noisy video signals
- Optional two channel AES or four channel analogue audio embedder
- LED indicators
- Contact closure alarm
- Compact & rugged design 142mm(L) x 82mm(W) x 47mm(H)

**Description**

The Digital Video Decoder provides high performance composite or component to SDI conversion. The inputs can either be composite (CVBS), S-Video (Luma & Chroma) or Component outputs (YPrPb). Performance is achieved through 12-bit oversampled noise shaped video ADCs, full 10-bit processing and a 5-line, super adaptive, 2D comb filter.

**Specifications**

|                           |                       |
|---------------------------|-----------------------|
| <b>Electrical Inputs</b>  |                       |
| Number of Inputs          | 6                     |
| Signal Level              | 1V p-p +/- 10mV       |
| Impedance                 | 75 ohm                |
| Connectors                | BNC female            |
| <b>Electrical Outputs</b> |                       |
| Number of Outputs         | 2                     |
| Data Rate                 | 270 Mbps (SMPTE-259M) |
| Return Loss               | >15dB (5MHz – 300MHz) |
| Impedance                 | 75 ohm                |
| Connectors                | BNC female            |

|  |   |
|--|---|
| <b>Electrical Inputs – Audio Balanced (DVDC-1000A)</b> |   |
| Number of Inputs                                       | 4   |
| Format   | Analogue Audio (+24dBu = 0dBfs)               |
| Data Rate  | 24-bit samples @ 48KHz (synchronous to video) |

|  |                                   |
|--|-----------------------------------|
| Impedance  | Hi-Z balanced                     |
| Connectors   | 3 pin phoenix                     |
| <b>Electrical Inputs – Audio Unbalanced (DVDC-1000D)</b> |                                   |
| Number of Inputs   | 2                                 |
| Format   | AES-3                             |
| Data Rate  | 15KHz to 50KHz resampled to 48KHz |
| Impedance  | 75 ohm                            |
| Connectors   | BNC female                        |

**Alarm & Control Interface**  
 Composite (CVBS), S-Video (Luma & Chroma) or RGB or YPrPb  
 Loss & Presence LED indicator  
 50Hz or 60Hz LED indicator  
 Solid state alarm relay contacts

**Supported Standards**  
 SMPTE - 259M (270Mbit/s)  
 SMPTE-272M

|                             |   |
|-----------------------------|---|
| <b>Ordering Information</b> |   |
| DVDC-1000                   | SD Video Decoder                            |
| DVDC-1000A                  | SD Video Decoder + 4 channel analogue audio |
| DVDC-1000D                  | SD Video Decoder + 2 channel AES audio      |

**Accessories (extra)**  
 High performance, 110-240V universal input, 12V @1.5A output  
 Power lead, SAA approved, 2M, IEC320-C14 connector

**Compatibility**  
 Compatible with all SBC products supporting digital video interfaces  
 Compatible with third party compliant digital video interfaces

**Compliances**  
 CE; UL; C-Tick  
 RoHS Compliant Directive 2002/95/EC

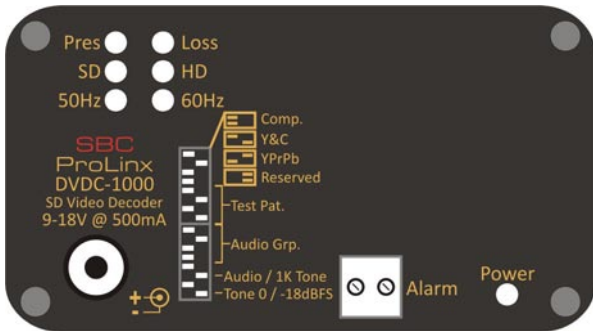
- Ordering Information**
- DVDC 1000 Digital Video Decoder
  - PSLV-1200, 240V AC/12V DC power supply

**Typical Performance (PAL composite input)**

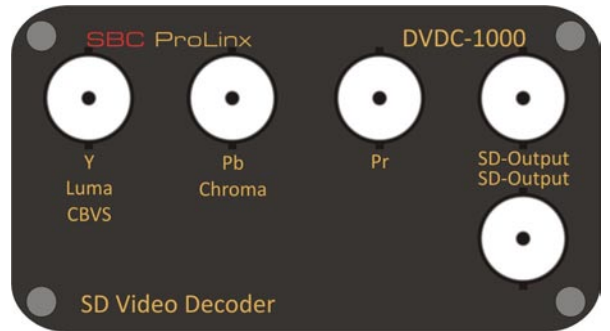
|                         |                |
|-------------------------|----------------|
| Differential Gain       | 1.2% pk-pk     |
| Differential Phase      | 0.5% pk-pk     |
| Luminance Non-Linearity | 0.9% pk-pk     |
| K Factor                | K-2T = 0.1%    |
|                         | K-PB = 0.3%    |
| Chroma Gain             | 98.0%          |
| Chroma Delay            | -1.9nS         |
| Sync Bar Ratio          | 100.7%         |
| Line Time Distortion    | 0.1%           |
| Bar Tilt                | 0.1%           |
| Frequency Response      | 0.5MHz -0.01dB |
| 1.0MHz                  | -0.11dB        |
| 2.0MHz                  | -0.00dB        |
| 3.0MHz                  | -0.42dB        |
| 4.0MHz                  | -0.53dB        |
| 5.8.0MHz                | -1.36dB        |

|       |  |
|-------|--|
| Noise | 79.5dB (black, 5MHz low-pass, unified weighted)                                |
| Noise | 63dB (full ramp, 5MHz low-pass, unified weighted, tilt null)                   |
| Noise | 22dB (full ramp, 5MHz low-pass, unified weighted, tilt null, 200KHz high pass) |

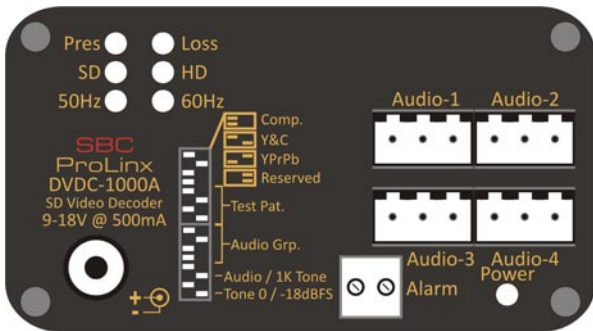
(measurements performed using a DVDC-1000 & DVEC-2000 to convert the composite video into SDI then back to composite. Therefore, the performance degradation contributed by the composite encoder is included in the typical measurement provided)



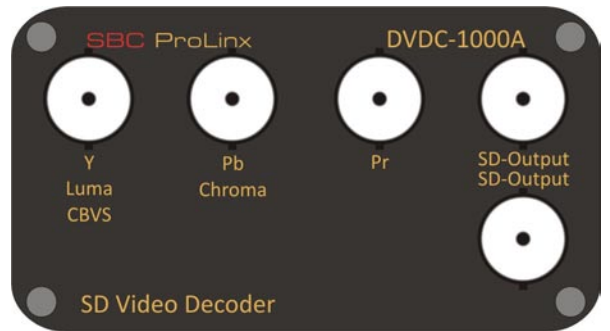
Front panel with power connector



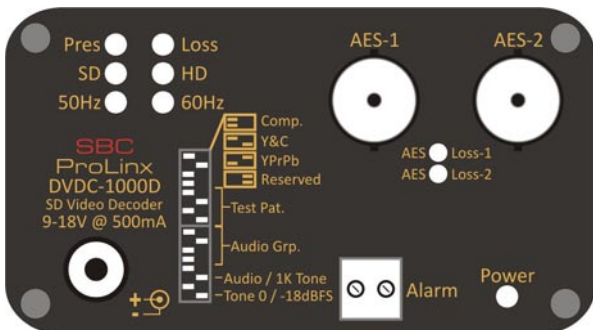
Rear panel



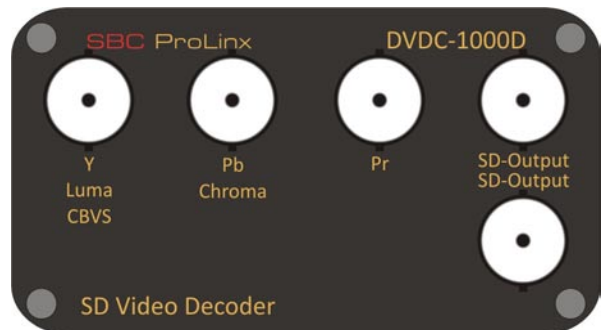
Front panel with power connector



Rear panel



Front panel with power connector



Rear panel

Copyright by SBC 2008. Product Specifications are subject to change without prior notice.