

- **Broadcast quality, full 10-bit video conversion.**
- **4 Equalised, regenerated and re-clocked repeater outputs.**
- **3 Composite analogue outputs with high quality 10 bit D to A.**
- **Component (RGB, YPbPr) or S-Video (Y/C) output.**
- **PAL or NTSC operation with auto or manual switching.**
- **SDI input loss and decoded video indicators on front panel.**
- **Simple Network Management Protocol (SNMP) capability.**

General:

The DVC-4112 is a high performance SDI 270 Mbit/s serial digital video to analogue composite/component converter and distribution amplifier.

The DVC-4112 is designed to regenerate a link and provide a broadcast quality analogue composite or component signal.

The serial receiver section, shown in the block diagram above, automatically equalises and re-clocks the input serial video signal and the cable driver section retransmits the regenerated serial video.

This configuration allows both an extension of the link and a jitter performance advantage over non re-clocking regenerators.

The DVC-4112 is primarily intended to operate in mixed (digital and analogue) environments allowing existing analogue monitoring equipment to be utilised without the need to purchase more expensive digital equipment.

The DVC-4112 provides component outputs for most requirements: RGB, YPbPr and S-VHS (Luma + Chroma). Three composite outputs are always available plus a choice of one of the remaining component formats.

Full 10 bit video processing and 10-bit digital to analogue converters are used in order to assure a high quality analogue signal suitable for broadcast and production monitoring applications.

Simple Network Management Protocol (SNMP) monitoring is possible if mounted in IRT's 4000 series frame fitted with SNMP capability.

DVC-4112 Technical specifications

Input:

Connector BNC.
 Format 270 Mbit/s SDI (Serial CCIR601, 4:2:2).
 Impedance 75Ω
 Equalisation Automatic, better than 200 metres at 270 Mb/s for Belden 8281 or equivalent cable.

Outputs - Digital:

Number 4.
 Connectors BNC.
 Format Re-clocked 270 Mbit/s SDI (Serial CCIR601, 4:2:2).
 Signal Level 800 mV ±10%.

Outputs - Analogue:

Number 3 x composite plus 1 x RGB / YpbPr / YC component.
 Connectors BNC.

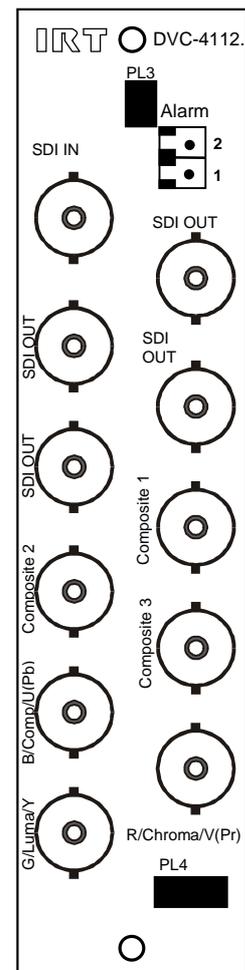
Performance:

Differential gain <0.5 %
 Differential phase <0.5°
 Luminance non linearity <1% p-p.
 2T pulse K factor K-2T <0.5% KF
 Noise level (10 KHz - 5 MHz unified) <-80 dBrms
 Hsync jitter in a frame <3 ns p-p
 Frame period jitter <5 ns p-p

Power requirements 28 Vac CT (14-0-14) or ± 16 Vdc.
 Power consumption <240 mA.

Other:

Temperature range 0 - 50° C ambient
 Mechanical Suitable for mounting in IRT 19" rack chassis with input output and power connections on the rear panel
 Finish: Front panel Grey background, silk-screened black lettering & red IRT logo
 Rear assembly Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals
 Dimensions 32 mm x 3 U x 220 mm IRT Eurocard
 Standard accessories Rear connector assembly.
 Links Component output selection (LK3 & LK4)
 RGB sync insertion (LK5)
 NTSC Pedestal insertion (LK6)
 Digital Noise Reduction (LK7)
 Digital Noise Shaping (LK8)
 Pass Vertical Blanking Information (LK9)



Due to our policy of continuing development, these specifications are subject to change without notice.

Detailed specifications available from:

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