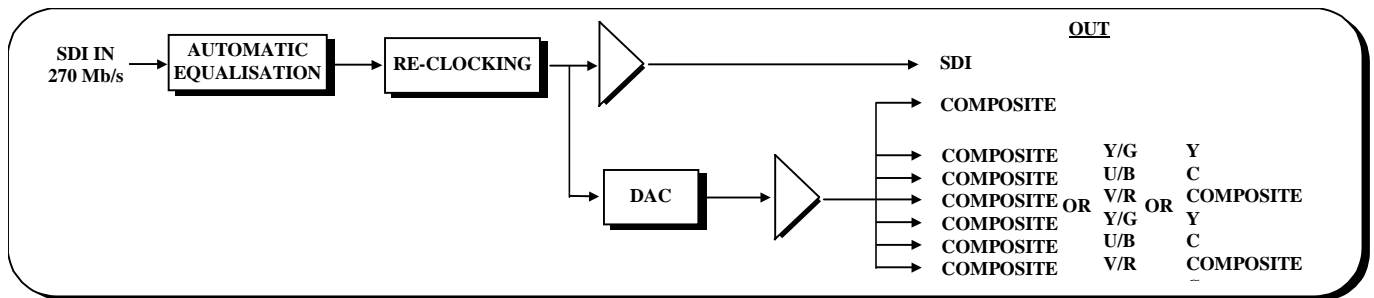


D&A 3412 SDI DAC universal

Introduction

The 3412 serial digital video digital to analogue universal converter is one of the modules in the expanding D&A distribution system. Designed to the highest specification, and meeting all relevant international standards including CE approval, digital and analogue audio and video modules can be mixed within a frame to satisfy a wide variety of interfacing requirements.

Up to 14 modules can be housed in the 3301 3U frame with a single power supply or 12 in the 3302 3U frame with dual power supplies.



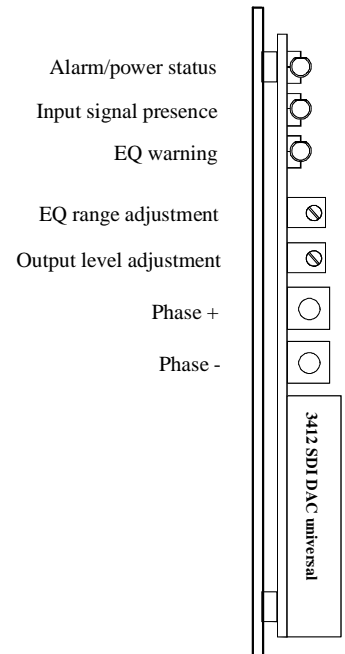
Description

The 3412 is a flexible and cost effective DAC which accepts a SMPTE 259M 270Mb/s 525/625 component input and, with its associated 3490 rear connector unit, provides various user configurable analogue outputs together with an equalised and re-clocked SDI output. One output is analogue composite and the remaining six can be user configured as all analogue composite (default set on delivery), two YUV or GBR or as three YC PAL or NTSC. Further details are explained in 'operation' overleaf.

Alarms can be triggered (frame LED and external alarm) for loss of power, absence of input signal and EQ warning. Card edge LED's show alarm/power status, presence of input signal and EQ range warning. Card edge adjustment is provided to set the range for the EQ warning.

Features

- Cost effective and extremely flexible DAC
- Eight user selectable outputs. Either one SDI and 7 composite (default on delivery) or one SDI, one composite and 2 component YUV or GBR or one SDI, 3 composite and 2 YC
- User selectable colour bars
- User defined maximum equalisation warning
- Numerous user selectable options
- Input signal absence warning
- SMPTE 259M compatible
- User configurable frame LED/external alarm error warning



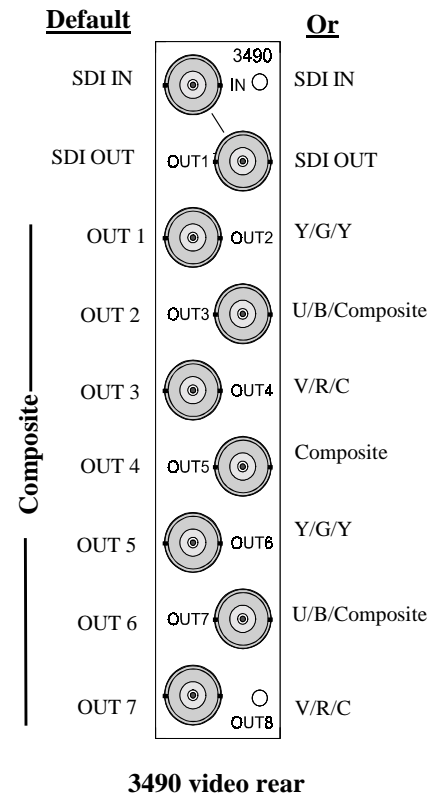
D&A 3412 SDI DAC universal

Operation

Numerous options can be set using two banks of switches on the module. Composite outputs can be PAL (default), PAL M or NTSC. Component outputs can be YUV or RGB(S). Other settings include; selection of the luma filter as low pass, notch or extended; internally generated full screen colour bars (75% amp and 75% sat for NTSC, 75% amp and 100% sat for PAL); colour on or off; sub-carrier phase adjustment in 1.41° steps; sync for component outputs on or off. With these options the unit provides an extremely versatile unit for monitoring SDI sources with existing analogue equipment.

Specification

Input	
Standard	SMPTE 259M 270Mb/s 525 or 625
Impedance	75Ω
Signal level	800mV ±10%
Connector	BNC
Common mode rejection	30Vp-p at 50Hz
Return loss	>22 dB
Equalisation	up to 300m automatic
Output - general	
Number	8
Signal types	1x SDI & 1x analogue composite PAL/NTSC + either 6 analogue composite PAL/NTSC (default on delivery) or 2 sets of analogue component GBR/YUV or 2 sets of YC with 2 further analogue composite
Impedance	75Ω
Connector	BNC
Output - SDI	
Standard	SMPTE 259M 270Mb/s 525 or 625
Signal level	800mV ±10%
Return loss	>18dB to clock frequency
DC offset	0V ±0.5V
Rise & fall time	400-700pS (20-80% amplitude)
Overshoot	<10%
Output - Analogue	
Standards	Composite (PAL or NTSC), YC, YUV, RGB & RGBS
Return loss	>36dB to 5MHz
Signal level	1Vp-p ±10%
DC offset	±100mV
Differential gain	<0.3%
Differential phase	<0.4°
Delay	<10nS
Phase adjustment	360°
Quantization	8 bit component, 10 bit composite & YC
Output level adjustment	±1dB
Other	
User selectable alarm options	Loss of power/loss of input signal/EQ warning
Power supply required	Frames with 3310 6.5V power supplies only
Power Consumption	+3.9W -0.3W
Temperature range	0°C to 45°C
<i>Above measurements relate to the 3412 DAC with 3490 connector in the 3301 frame using the 3310 power supply.</i>	



Ordering information

Part no.	Description	Weight	Height	Width	Depth
3412	SDI DAC universal	750g	100mm	25mm	220mm
3490	BNC rear	100g	100mm	25mm	70mm

We reserve the right to change technical specifications without prior notice. E&OE.

LOCAL
DISTRIBUTOR

DTL Broadcast Ltd
Johnson's Estate, Silverdale Road,
Hayes, Middx, UB3 3BA, UK.
Phone: +44 (0) 20 8813 5200 Fax: +44 (0) 20 8813 5022
Internet: www.dtl-broadcast.com Email: info@dtl-broadcast.com

