

# **DAC3001**

## **Digital to Analog Converter**

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## Introduction

The DAC3001 Encoder produces high quality NTSC or PAL encoded video from SMPTE 259M Serial Digital Component Video.

## Features

- High quality 10 encoding
- SMPTE 259M Serial Digital input
- Two serial outputs (SMPTE 259M)
- Four analog composite outputs
- Automatic NTSC/PAL selection
- Configurable pedestal and narrow/wide H/V blanking

## Configuration:

### Dip Switch Functions:

#### **SW 1 Pedestal:** (Disabled in PAL)

ON: For inputs with 7.5 IRE Pedestal (will remove pedestal)

OFF: For inputs without Pedestal

Default: ON

#### **SW 2 Vertical Blanking:** (line numbers indicate where video starts)

NAR: line 13, field 1; line 12 field 2 (525 line)

WIDE: line 22, field 1; line 21, field 2 (525 line)

Default: NARROW

#### **SW 3 Standard:**

AUTO: Automatically sets to 525 or 625 depending on input.

MAN: Video Standard determined by SW4.

Default: Auto

#### **SW 4 Standard:**

525: Configures board for 525 line input

625: Configures board for 625 line input

Default: 525

**Alignment:**

There are four adjustments of the analog outputs.

Adjust R18 for an video level of one volt on "Comp Out 1"

Adjust R29 for an video level of one volt on "Comp Out 2"

Adjust R27 for an video level of one volt on "Comp Out 3"

Adjust R48 for an video level of one volt on "Comp Out 4"

**Specifications:**

**Frequency Response:** +/- .2db to 5 MHz, 2x oversampling

**Input:**

Format: SMPTE 259 Serial Digital Component

Return Loss: 15 db

**Output:**

Format: Analog Composite PAL or NTSC

Outputs: 4

Return Loss 35 db

Delay: 6 usec.

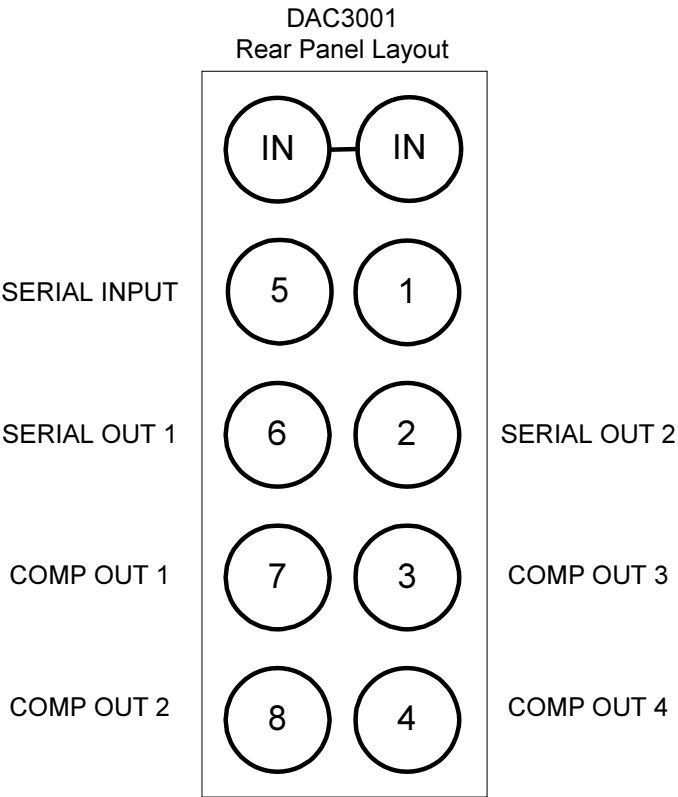
Two serial outputs (SMPTE 259M)

**Power Consumption**

+8.9V 3.5 Watts

-8.9V 0.25 Watts

**Input / Output Connections:**





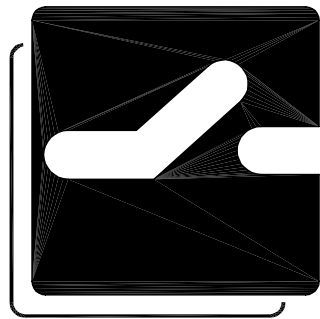
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### Revision History

| Rev. | Date     | Description                                     | By         |
|------|----------|---|------------|
| A    | 03-23-00 | Initial release per ECO-3612.                   | J. Jones   |
| B    | 03-06-01 | Deleted Printing Specification per ECO CE00113. | G. Tarlton |



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