

8 Switch Settings and Indicators

SWITCH 1

PEDESTAL ON (+) ADDS 7.5 IRE SETUP TO VIDEO SIGNAL

SWITCH 2

UV COMPONENT PROCESS OUTPUT LEVEL SELECTION OF 1000MV (+) OR 700MV (-)

SWITCH 3

CLAMP POSITION ON VIDEO SIGNAL. FRONT PORCH (+), BACK PORCH (-)

SWITCH 4

CLAMP DELAY DIRECTION. POSITIVE (+), NEGATIVE (-)



COLOR BAR ON/OFF SWITCH
ILLUMINATES WHEN BARS ARE ACTIVE.
NOTE THAT INPUT SIGNAL WILL NOT
APPEAR WHEN ACTIVATED. BAR SIGNAL
TYPE WILL CHANGE WITH VIDEO FORMAT.

POWER ON/OFF SWITCH
WITH SYSTEM INDICATOR
IF THERE IS NO INPUT SIGNAL, THE
INDICATOR WILL BE AMBER



BC-0301-10 Users Guide

9 Warranty

Marshall Electronics warrants to the first consumer, that this BC-0301-10 Digital to Analog Converter will, under normal use, be free from defects in workmanship and materials, when received in its original container, for a period of one year from the purchase date.

This warranty is extended to the first consumer only and proof of purchase is necessary to honor the warranty. If there is no proof of purchase provided with a warranty claim, Marshall Electronics reserves the right, not to honor the warranty set forth above. Therefore, labor and parts may be charged to you.

This warranty does not apply to product exterior and cosmetics. Misuse, abnormal service or handling, improper alterations or modifications in design or construction, voids this warranty. No sales personnel of the seller, nor any other person is authorized to make any warranties other than those described above, or to extend the duration of any warranties on behalf of Marshall Electronics, beyond the time period described above.

Due to constant effort to improve products and product features, specifications may change without notice.

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1 Product Overview

Marshall's cost effective **BC-0301-10** digital to analog module can be configured for use in a variety of applications. The unit features two simultaneous Composite Video and S-Video D/A (10 bit) conversion from a Serial Digital Interface (SDI) signal conforming to SMPTE-259M-C for transport and ITU-R.BT656/ITU-R601 for video process. 4x over sampling provides superb analog images and up samples 4:2:2 components to 4:4:4 for processing. There is also a built in Color Bar Generator, System indicator (PAL/NTSC), and dipswitch settings for Pedestal (On/Off), UV Level Control (700ma/1000ma), Clamping Position (Front Porch/Back Porch), and Clamping Delay Position (Positive/Negative). All Marshall Electronics Processing and Distribution modules include power supply and owners manual. An optional base holder (V-CB1) is available for use in desktop applications.

2 Features

- Cost effective solution for DTV and Multimedia Applications
- Converts component serial digital signal to analog composite
- Active loop through for SDI signal with re-clocking and signal shaping
- Automatic Compensation of SDI input for cable length up to 1000'
- Simultaneous outputs for 2 video and 1 Y/C (S-video)
- PAL/NTSC auto detection with led indicator
- Pedestal on/off selection for NTSC signals
- 10-bit processing with 4x over sampling
- Supports closed captioning
- Includes color bar generator
- Includes Power Supply Model V-PS6-1.2A

3 Electrical Specifications

Serial Digital Input	75Ω BNC connection of component digital 525/625 signals conforming to SMPTE-259M-C, ITU-R.BT656/ITU-R601
Input Data Rate	270 Mb/s
Serial Digital Output	BNC active loop through 0.8V p-p 75Ω
Input Return Loss	<19db
Input Cable Length	1000' max (8281 or equivalent)
Analog Output	2 ea. BNC composite video plus simultaneous Y/C (Svideo) NTSC: 1.0Vp-p 75Ω; PAL: 1.0Vp-p 75Ω conforms to SMPTE-RS-170A
Sample Frequency	54Mhz
Signal to Noise	>78db
Differential gain/phase	<0.1% / 0.2°
Y/C delay	<1%/1°
Power required	6 V D.C. from external power supply (included) max 1.2 AMP

4 Mechanical Specifications

Dimensions	4.75"W x 3.75"D x 1.0"H (12.1cm x 9.5cm x 2.5cm)
BC-0301-10 Weight	0.80 lbs (0.36kg)
V-PS6-1.2A Power Supply Weight	0.20 lbs (0.10kg)

5 Optional Accessories

V-CB1 Stand



BC-0301-10 on V-CB1 Stand



6 Operational Setup

1. Unpack the BC-0301-10 and accompanying V-PS6-1.2A power supply. Physically inspect for any damage that may have occurred during shipping. Also verify there is a small package with mounting accessories. Should there be any damage, immediately contact Marshall Electronics at 800-800-6608. If you are not located within the continental United States call +1 310-333-0606.

2. Install in your desired location. If wall mounting is required, attach the mounting brackets by removing the Phillips head screws on the sides, closest to the rear of the unit. (See Picture) Only one screw per side should be removed. Use the same screw to attach the bracket with the flange facing away from the side and parallel to the front of the BC-0301-10 metal case. The flange has two holes. For desktop use, apply the supplied rubber pads.

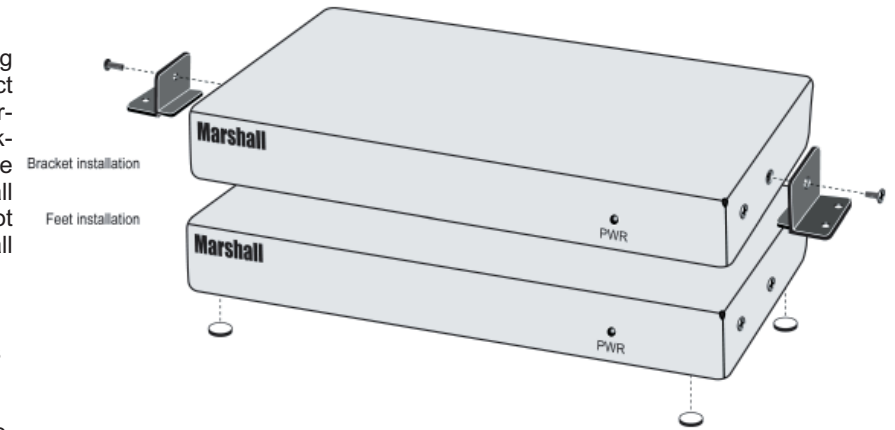
3. Connect required cables for signal input and output.

Please note that power must be applied to the BC-0301-10 for the SDI Output to be activated. All BNC connectors should be rated for 75Ω.

4. Plug the V-PS6-1.2A power supply into the A.C. source

5. Attach twist lock power connection from V-PS6-1.2A power supply to the back of the unit.

6. Turn on the BC-0301-10 by depressing the power switch located on the front of the unit. Refer to Page 4 picture for location of switch settings.



POWER SUPPLY V-PS6-1.2A

7 Connectors

