

VAC-12SH

3G/HD/SD-SDI to HDMI Converter

User Manual

Marshall Electronics

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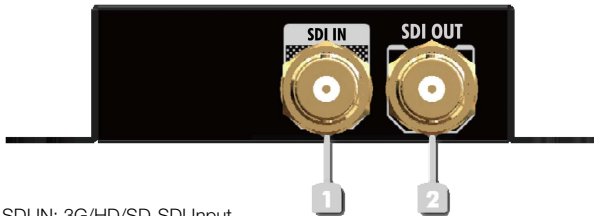
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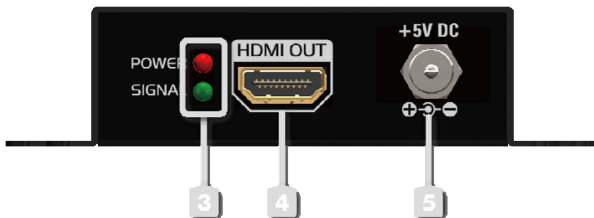
PANEL DESCRIPTION

FRONT PANEL



1. SDI IN: 3G/HD/SD-SDI Input
2. SDI OUT: 3G/HD/SD-SDI output

REAR PANEL



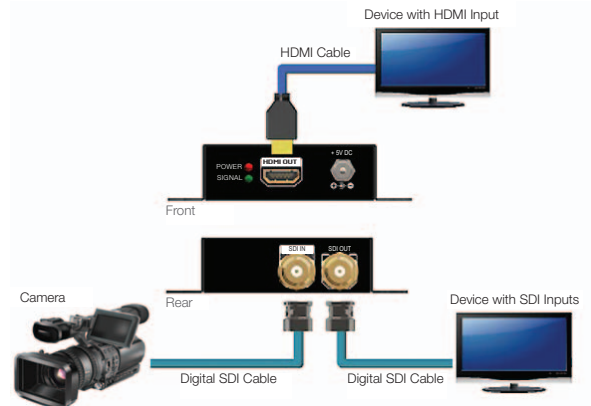
3. Signal LED:
<Green> Both power and signal are active.
<Red> Only power is active.
4. HDMI OUT: Connect to a HDMI display with a HDMI male-male cable here.
5. +5V DC: Connect to a 5V DC power supply included.

INTRODUCTION

The VAC-12SH 3G/HD/SD-SDI to HDMI Converter with Loop-out provides a cost-effective way to convert 3G/HD/SD-SDI signal to an HDMI compliant format. The conversion between SDI and HDMI is purely digital and guarantees no loss of audio and video signal. Audio is supported.

* The VAC-12SH also provides two (SDI and HDMI) low jitter, re-clocked outputs for daisy chains or multiple monitors.

*SDI supports 48KHz. Dolby True HD and DTS HD are not supported in SDI.



FEATURES

- Supported high-definition (HD) formats:
NTSC 525@59.94, PAL 625@50, 720p@50, 720p@59.94, 720p@60, 1080i@50, 1080i@59.94, 1080i@60, 1080p@23.97, 1080p@24, 1080p@25, 1080p@29.97, 1080p@30, 1080p@50, 1080p@59.94, 1080p@60
- Bit Rate: 2.97Gbps, 2.967Gbps, 1.485Gbps, 1.4835Gbps, 270 Mbps
- Auto 3G/HD/SD-SDI detection
- Support HDMI Deep Color
- One SDI compliant output and one HDMI compliant output



The VAC-12SH 3G/HD/SD-SDI to HDMI Converter has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, the VAC-12SH should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation. Do not use near water.
- Keep away from objects that might damage the device. Assure that the placement of this unit is on a stable surface.
- Use only the power adapter, power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

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PACKAGE CONTENTS

- VAC-12SH Converter
- 5V/2A power adapter
- User Manual

SUPPORTED RESOLUTIONS

3G-SDI Output

1080p @ 50/ 59.94 / 60Hz	SMPTE 424M, SMPTE 425M
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HD-SDI Output

720p @ 50Hz	SMPTE 296M -3
720p @ 60 / 59.94Hz	SMPTE 296M -1, -2
1080i @ 50Hz	SMPTE 274M -6
1080i @ 60 / 59.94Hz	SMPTE 274M -4, -5
1080p @ 24 / 23.98Hz	SMPTE 274M -10, -11
1080p @ 25Hz	SMPTE 274M -9
1080p @ 30 / 29.97Hz	SMPTE 274M -7, -8

SD-SDI OUTPUT

NTSC
PAL B,D,G,H,I

For Warranty information please refer to Marshall website page:

<https://marshall-usa.com/company/warranty.php>

SPECIFICATIONS

TECHNICAL

SDI standards	3G-SDI & HD-SDI & SD-SDI
Auto HD/SD-SDI detection	Yes
SDI Data Rate	[2.97Gpbs & 2.975/1.001Gpbs]
Video support	[3G] - 1080p50/59.94/60 (4:2:2) [HD] - 720p @50/59.94/60Hz, 1080i @50/59.94/60Hz, 1080p @23.98/24/25/29.97/30Hz [SD] - NTSC @59.94Hz, PAL @50Hz
Input signal	[SD-SDI] SMPTE 259M [HD-SDI] SMPTE 292M, 296M [3G-SDI] SMPTE-424M
Output signal	1x SDI + 1x HDMI
Output impedance	75 ohms
Eye pattern characteristics	Extra low alignment jitter 0.05UI at HD
Cable equalization	[3G-SDI] up to 90m (300ft) [HD-SDI] up to 150m (500ft) [SD-SDI] up to 300m (1000ft)
Audio support	Yes
Input	1x BNC [SDI]
Output	1x HDMI + 1x BNC [SDI]
BNC connector	75 ohm inter-locked socket
HDMI connector	Type A [19-pin female]

MECHANICAL

Housing	Metal enclosure	
Dimensions [L x W x H]	79 x 84 x 27mm [3.1" x 3.3" x 1.2"]	
Weight	Model	[TX] – 250g [8.8oz]
	Package	780g [1.7 lbs]
Power supply	5V 2A DC with locking power connector	
Power consumption	3 Watts [max]	
Operation temperature	0~40°C [32~104°F]	
Storage temperature	-20~60°C [-4~140°F]	
Relative humidity	20~90% RH [no condensation]	