

ODSG-01-HS

HDMI/DVI to 3G-SDI/SDI Video Converter



User's Manual

SPIDER ™

Unpacking

Each **OPTICIS HD/SDI converter** package includes the following items;

OPTICIS HD/SDI converter(ODSG-01-HS) Unit
One (1) 5V, 3A Power Supply Adapter
User manual

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Description, General Specification

:OPTICIS ODSG-01-HS

ITEM	DESCRIPTION
Model Name	ODSG-01-HS
Input Signal	DVI/HDMI
Output Signal	HD-SDI
VIDEO Input format	RGB(444), YCbCr(444), YCbCr(422)
VIDEO Output format	YCbCr(422)
Audio format	I2S / 48Khz
Receptacle	DC Power Jack for +5V/3A power in the rear panel
Power Consumption	5W (Maximum 15W)
Dimension	117 x 105 x 33 mm

Maximum resolution

Resolution	
Maximum Input Resolution	1920x1080p/60Hz
Maximum Output Resolution	1920x1080p/60Hz

Environmental and Reliability Specifications

[Recommended Operating Conditions]

Parameter	Symbol	Min.	Typ.	Max.	Units
Operating Temp.	T _A	10	25	+ 40	°C
Storage Temp.	T _s	-25		+ 60	°C
Storage Humidity	H _s	10		80	RH%

Supported I/O Resolutions

VIDEO INPUT	
Input – Data Format	DVI/HDMI format RGB(444), YCbCr(444), YCbCr(422)
Input – Connector	DVI-I / HDMI female connector
Input - Resolution	1080p(60/59.94), 1080i(60/59.94/50), 1080p(25/24/23.976) 720p(60/59.94/50), 480i(59.94), 576i(50)

VIDEO OUTPUT		
Output - Data Format	SMPTE format YCbCr(4:2:2)	
Output - Connector	SDI BNC (75ohm)	
Output Signal Resolution	SMPTE-424M	1080p (60/59.94)
	SMPTE-274M	1080i (60/59.94/50)
	SMPTE-296M	1080p (25/24/23.976)
	SMPTE-260M	720p(60/59.94/50)
	SMPTE-259M	480i (59.94), 576i(50)

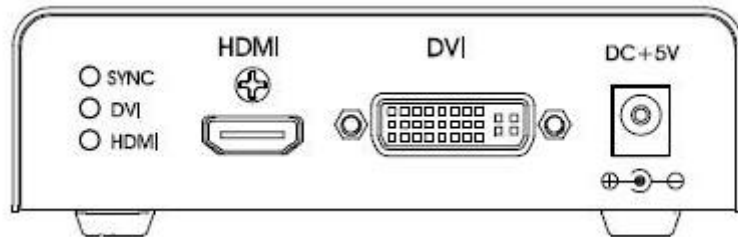
AUDIO DATA FORMAT	
Data Format	I2S
Sampling Rate	48 kHz

Note.1

The ODSG-01-HS does not have scaler function. To convert DVI or HDMI to HD-SDI without fail, input resolutions should be with SMPTE compatible resolution described above.

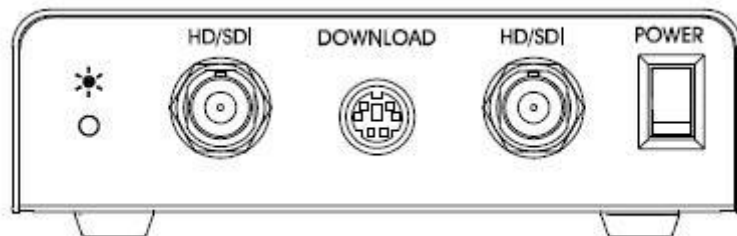
Panel Descriptions

< Front-Video Input >



- Status indicator LED
 - 1) Video sync detection LED
 - 2) DVI input connection status LED
 - 3) HDMI input connection status LED
- HDMI Input port
- DVI Input port
- 5V power jack
- Power LED

< Rear-Video Output >



- Power switch
- Power indicator light
- Firmware update PS2 port (Programmer use only)
- 2 x HD-SDI outputs

1-5 Panel Descriptions

Mechanical Specification



[Dimensions]

- ◆ ODSG-01-HS: 117 x 105 x 33 (mm)

[Connector]

- ◆ DVI Connector: DVI-I 29-pin female (Digital only)
- ◆ HDMI Connector: HDMI female
- ◆ HDSI/SDI Connector: BNC female
- ◆ Firmware Download Port: PS2 female

[Power].

- ◆ Power: +5V DC Toggle switch ON/OFF

[LED Indicators]

- ◆ Power: Power On
- ◆ HDMI: HDMI input
- ◆ DVI: DVI input
- ◆ SYNC: SYNC detection

1-6 Mechanical Specification

Installation and Use Guide

STEP1

Plug the provided AC power cord to the AC/DC power adaptor then plug the DC cord to the +5VDC receptacle on the front panel.

STEP2

Press POWER button on the rear panel then Red LED (on the rear panel) will be lit on

STEP3

The system is now ready to operate.

Note.2

The HDMI input is prior to DVI input when HDMI and DVI port is connected to video sources at the same time.

Note.3

The connected HDMI or DVI sources is converted into HD-SDI and copied to two HD-SDI outputs.

Warranty Information

1 (One) Year Warranty

OPTICIS warrants OPTICIS **ODSG-01-HS** HD/SDI converter to be free from defects in workmanship and materials, under normal use and service, for a period of one (1) year from the date of purchase from OPTICIS or its authorized resellers.

If a product does not work as warranted during the applicable warranty period, OPTICIS shall, at its option and expense, repair the defective product or part, deliver to customer an equivalent product or part to replace the defective item, or refund to customer the purchase price paid for the defective product.

All products that are replaced will become the property of OPTICIS.

Replacement products may be new or reconditioned.

Any replaced or repaired product or part has a ninety (90) day warranty or the remainder of the initial warranty period, whichever is longer.

OPTICIS shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to OPTICIS for repair under warranty or not.

Warranty Limitation and Exclusion

OPTICIS shall have no further obligation under the foregoing limited warranty if the product has been damaged due to abuse, misuse, neglect, accident, unusual physical or electrical stress, unauthorized modifications, tampering, alterations, or service other than by OPTICIS or its authorized agents, causes other than from ordinary use or failure to properly use the Product in the application for which said Product is intended.

Troubleshooting

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Problem	Remedy Actions
Converter not Operate	Make sure the 5V power is plugged on the back of the unit. Check to see if the power LED light is on.
No picture (or signal) Or Poor picture	<ol style="list-style-type: none"> 1. If you are using copper based HDMI cable, overall length of the cables (length of the cable from video source to switch and length of the cable from switch to display) should not exceed 20ft. Exceeding 20ft. with copper based cables will result in no or poor picture quality. To extend beyond 20ft, please use fiber optical HDMI/DVI extension cables 2. Use high quality HDMI cables. 3. If you are using computers, try other refresh rate settings. Most HDTV's have refresh rate of 48Hz and computer's video cards are usually set at higher refresh rate. Try lower refresh rates. 4. Make sure all HDMI connectors are tightly secured to all HDMI ports. Loose plugging on the HDMI connectors will result in no or poor picture. 5. Turn off all equipments (video source, switch and HDTV) and restart all equipments.
Incorrectly sized picture / resolution or No picture	Reset the product by power off.

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