

OSHC-01

HD-SDI/SDI to HDMI/DVI Video Converter



User's Manual

SPIDER ™

Unpacking

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

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

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|---|------------|
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Description, General Specification

:OPTICIS OSHC-01

| ITEM | DESCRIPTION |
|------------------------|--|
| Model Name | OSHC-01 |
| Input Signal | HD-SDI |
| Output Signal | DVI/HDMI |
| VIDEO Input format | YCbCr(422) |
| VIDEO Output format | HDMI:YCbCr(422) DVI:RGB(444) |
| Input format AUDIO | AES/EBU / 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

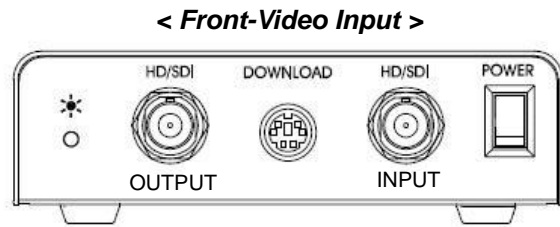
[Recommended Operating Conditions]

| 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% |

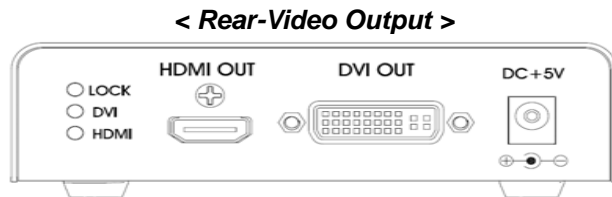
Supported I/O Resolutions

| VIDEO INPUT | | |
|-------------------------|--|----------------------|
| Input - Data Format | SDI format YCbCr(4:2:2) | |
| Input - Connector | SDI BNC | |
| Input Signal Resolution | SMPTE-425M | 1080p (60/59.94) |
| | SMPTE-274M | 1080i (60/59.94/50) |
| | SMPTE-260M | 1080p (25/24/23.976) |
| | SMPTE-296M | 720p(60/59.94/50) |
| | SMPTE-125M | 480i (59.94) |
| VIDEO OUTPUT | | |
| Output – Data Format | HDMI:YCbCr(422), DVI:RGB(444) | |
| Output – Connector | DVI-I / HDMI female connector | |
| Output - Resolution | 1080p (60/59.94), 1080i (60/59.94/50), 1080p (25/24/23.976), 720p(60/59.94/50), 480i (59.94) | |
| AUDIO INPUT DATA FORMAT | | |
| Input Data Format | AES/EBU | |
| Sampling Rate | 48 kHz | |

Panel Descriptions



- Power On/Off indicate LED
- Power switch
- Firmware update PS2 port (Programmer use only)
- SDI input (Right side)
- SDI Loop through output (Left side)



- Status indicator LED
 - 1) Lock: SDI signal detection LED
 - 2) DVI: DVI input connection status LED
 - 3) HDMI: HDMI input connection status LED
- HDMI Output port
- DVI Output port
- 5V power jack

1-5 Panel Descriptions

Mechanical Specification



[Dimensions]

- ◆ OSHC-01: 117 x 105 x 33 (mm)

[Connector]

- ◆ DVI Connector: DVI-I 29-pin female (Digital only)
- ◆ HDMI Connector: HDMI female
- ◆ HDSDI/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
- ◆ Lock: SDI signal detection LED

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 front panel then Red LED (on the front panel) will be lit on.

STEP3

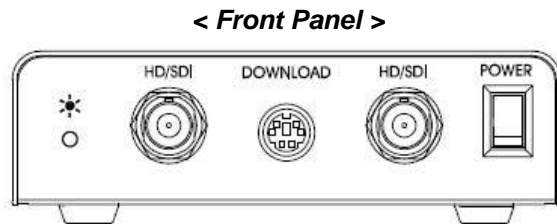
The system is now ready to operate.

Note.1

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

Note.2

The connected SDI source can link to SDI output that accepts SMPTE-424M Serial Digital Video on a female BNC connector and amplifies the buffered and re-clocked output.



Warranty Information

1 (One) Year Warranty

OPTICIS warrants OPTICIS OSHC-01 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. |

Opticis Locations

Headquarter

Opticis Co., Ltd.
304, ByusanTechnopia, 434-6
Sangdaewon-Dong, Chungwon-Ku,
Sungnam City, Kyungki-Do, 463-120
South Korea
Tel: +82 (31) 737-8033~9
Fax: +82 (31) 707-8079
www.opticis.com

North American Office

Opticis USA LLC
649 Route 206
Unit 9 Suite 307
Hillsborough, NJ 08844
Tel: 908-837-9652
Fax: 908-837-9078

cdkim@opticis.com

For order support, please contact your Distributor or Reseller.

For technical support, visit Opticis web site, www.opticis.com or contact techsupport@opticis.com