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# SC-DS1 Owner's Manual

DVI or HDMI 3G/HD-SDI Format Converter



**PureLink™**

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## Package Contents

Please make sure all of the following items are included in the package:

- 1 x SC-DS1 Unit
- 1 x 5V Power adapter
- 1 x User Manual

## Description

Purelink's SC-DS1 Signal Converter transforms any DVI or HDMI signal to a 3G/HD-SDI output. The interface consists of a single 3 Gb/s serial link, and is standardized in SMPTE 424M for Dual-Link 3G/HD-SDI. The pure digital conversion from DVI/HDMI to SDI guarantees lossless transformation for both audio and video.

## Main Features

### **High Quality Picture - No Signal Loss and Digital Noise Free**

- Our SC-DS1 is designed to deliver the highest quality picture preserving the native resolutions of the video sources without any signal loss. At the same time, the digital noises that may affect the picture quality will be eliminated. Due to the nature of the digital signals and passing through multiple stack of connection, it is important to eliminate the digital noises and boost the signal strength to preserve/enhance the video signal quality, which SC-DS1 does.

### **Signal Amplification for signal reliability and long length signal transmission.**

- SC-DS1 uses external DC 5V power to run an internal chipset, which was designed to transmit high quality visual signal to long distance.

### **Compact and Practical Design**

- The SC-DS1 is designed compactly and practically allowing customers more ease and convenience

### **Full HD without changing display**

- With previously used HDMI/DVI display user can enjoy full HD from new source device without quality degradation

### **HDCP (High-bandwidth Digital Content Protection)**

- SC-DS1 fully supports HDCP
- Currently every digital visual product sends high resolution signal with HDCP signal. You cannot see the picture if the product is not compliant to HDCP.

### **Compliance to HDMI Ver 1.4**

- SC-DS1 fully supports the latest HDMI Ver 1.4

## Product Specification

ITEM	DESCRIPTION
Model Name	SC-DS1
Input Signal	HDMI/DVI
Output Signal	HD-SDI/SDI
Resolution	480p~1080i/p
Receptacle	DC Power Jack BNC Female HDMI 19 Pin Female
Interface	SMPTE HDMI Ver 1.4 DDWG DVI 1.0
Power Consumption	DC 5V Power Adapter(Included) Max 5 W
Dimension	4.0 x 3.07 x 1.18 in.   102x78x30 mm
Weight	0.66 Lbs   0.3 Kg

## Environmental and Reliability Specifications

Recommended environmental conditions for the operation are temperature range of 10°C~40°C, non-condensing humidity levels of 10%-80%, and altitude ceiling of 3,000 meters (9,840 feet).

Environmental limits for transportation are temperature range of -25°C~60°C, non-condensing humidity levels of 5%~95%, and altitude ceiling of 15,000 meters (49,200feet)

Environmental limits for storage are established at temperature range of -20°C~45°C, non-condensing humidity levels of 5%~95%, and altitude ceiling of 3,000 meters (9,840 feet)

The SC-DS1 Converters expected to function for more than 50,000 hours of use at a 90% confidence level. The device is tested according to the identical standards for testing LCD monitors.

## Video Connection

Step 1: Ensure the digital video source and display is turned off

Step 2: Connect the HD-SDI , HDMI cable

Step 3: Connect power adapter jack

Step 5: Turn on the display

Step 6: Turn on the source

## Mechanical Specification

Dimension: 4.0 x 3.07 x 1.18 in. | 102 x 78 x 30 mm



Front part

DC 5V: DC 5V power input port  
HD-SDI Out: HD-SDI Output port(Loop Back)  
EDID S/W : Switch for loading EDID  
S/P : Service port for firmware upgrade.



Rear part

POWER LED: display the status of power  
STATUS LED: display the status of signal input  
HDMI In: HDMI(DVI) input port  
SD/HD/3G LED: display the status of Input Signal operation

## Technical Specification

Input - Data Format	HDMI( YCbCr(4:2:2))
Input Resolution	SC-DS1
Input Signal	Up to Full HD(1920*1080p) 1080p @ (60/59.94) 1080i @ (60/59.94/50) 1080p @ (25/24/23.976) 720p @ (60/59.94/50) 480i @ (59.94)
Input signal standard	HDMI
Input connector type	HDMI Female 19P
Output - Data Format	SDI format YCbCr(4:2:2)
Output Resolution	Up to Full HD(1920*1080p) 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)
Output connector type	BNC Female
Power consumption	5 Watts Max.
Power supply	DC 5V, 2A

## Manufacturer's Warranty (2-Year)

PureLink warrants this SC-DS1 DVI or HDMI to 3G/HD-SDI Format Converter to be free from defects in workmanship and materials, under normal use and service, for a period of two (2) year from the date of purchase from PureLink or its authorized resellers.

If the product does not operate as warranted during the applicable warranty period, PureLink shall, at its option and expense, execute one of the following as necessary:

1. Repair the defective product or part
2. Deliver to customer and equivalent product or part to replace the defective item
3. Refund to customer the purchase price paid for the defective product

All products that are replaced become the property of PureLink. Replacement products may be new or reconditioned. Repaired or replacement products or parts come with a 90-day warranty or the remainder of the warranty period. PureLink shall not be responsible for any software, firmware, information, or memory data loss of contained in, stored on, or integrated with any products returned to PureLink for repair under warranty.

## Customer Service

Any customer service inquiries can be submitted electronically through the Q&A form on our website ( [www.purelinkav.com](http://www.purelinkav.com) ).

For immediate assistance please contact us at (201) 488-3232 to reach our customer care or tech support team.



## Troubleshooting

The SC-DS1 Converter is designed for years of trouble free, please refer to the troubleshooting chart below if experiencing trouble with the device.

Problem	Solution
No picture(or signal)	<ol style="list-style-type: none"> <li>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.</li> <li>2. Use high quality HDMI cables.</li> <li>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.</li> <li>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.</li> <li>5. Turn off all equipments (video source, switch and HDTV) and restart all equipments.</li> </ol>
Converter not Operate	<p>Make sure the 5V power is plugged on the back of the unit.</p> <p>Check to see if the power LED light is on.</p>
Incorrectly sized picture / resolution or No picture	Reset the product by power off.