

AtlonA
HD/SD-SDI TO
HDMI/DVI/YPbPr/RBGHV CONVERTER
AT-HDSDI-AV

User Manual



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INTRODUCTION

The AT-HDSDI-AV provides high quality 12 bit conversion between SDI digital video input and HDMI / DVI digital video output or YPbPr / Composite (CVBS) / RGBHV analog video output. Plus, with an extra DVI output through HDMI type A connector, users can have a pure digital video transmission path without analog conversion distortion. The AT-HDSDI-AV supports both SD-SDI and HD-SDI formats (SMPTE 259M and SMPTE 292M), and also features 2 equalized SDI loop output.

FEATURES

- Excellent quality 12-bit D/A conversion
- Supported high-definition (HD) formats :
1080i @50/59.94/60Hz, 1035i @50/59.94/60Hz, 720p @50/59.94/60Hz
- Supported standard-definition (SD) formats :
NTSC @59.94Hz, PAL @50Hz
- Default SDI / YPbPr / DVI Patterns
- Auto HD/SD-SDI detection
- 2 Equalized loop output
- Easy installation
- SD output : HDMI (video only) / DVI / YPbPr
- HD output : HDMI (video only) / DVI / YPbPr / RGB
- External DIP Switch Configuration

PACKAGE CONTENTS

- 1x AT-HDSDI-AV
- 1x 5V 4A power adapter
- 1x User Manual
- 1x VGA to YPbPr adapter
- 1xHDMI to DVI adapter

TECHNICAL SPECIFICATIONS

- Video Bandwidth : 270Mbps
1.485/1.001Gbps
- Input signal : HD/SD-SDI (SMPTE 259M / SMPTE 292M / SMPTE 296M)
- Output signal : HDMI (video only) / DVI 1.1 / YPbPr / RGBHV
- Input transmission range : up to 150m / 500ft at HD-SDI
- Loop output : 2 equalized SDI output
- Power Supply : 5V 4A DC
- Dimensions : 120mm x 110mm x 25mm / 4.7"x4.3"x1" (L x W x H)
- Weight : 420g / 15oz

FORMAT SPECIFICATIONS

| HD INPUT | | YPbPr OUT |
|----------------------|-------------------------|-----------|
| 525p @ 59.94Hz | SMPTE 293M, ITU-BT.1358 | |
| 625p @ 50Hz | ITU-BT.1358 | |
| 720p @ 50Hz | SMPTE 296M -3 | O |
| 720p @ 60 / 59.94Hz | SMPTE 296M -1, -2 | O |
| 1080i @ 25Hz | SMPTE 274M -6 | O |
| 1080i @ 30 / 29.97Hz | SMPTE 274M -4, -5 | O |
| 1080p @ 24 / 23.98Hz | SMPTE 274M -10, -11 | O |
| 1080p @ 25Hz | SMPTE 274M -9 | O |
| 1080p @ 30 / 29.97Hz | SMPTE 274M -7, -8 | O |
| SD INPUT | | |
| NTSC | | O |
| PAL B,D,G,H,I | | O |

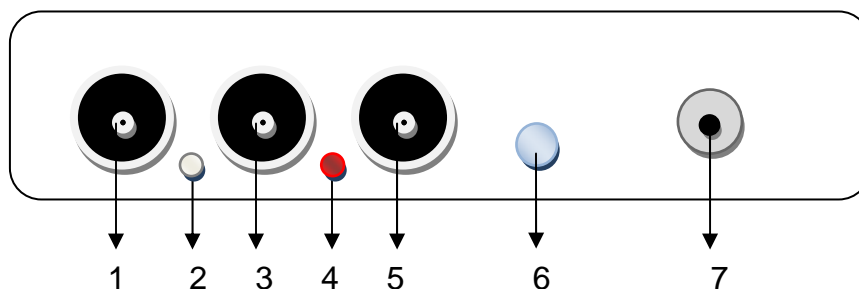
| HD INPUT | | DVI /HDMI OUT |
|----------------------|-------------------------|---------------|
| 525P @ 59.94Hz | SMPTE 293M, ITU-BT.1358 | |
| 625P @ 50Hz | ITU-BT.1358 | |
| 720P @ 50Hz | SMPTE 296M -3 | O |
| 720P @ 60 / 59.94Hz | SMPTE 296M -1, -2 | O |
| 1080i @ 25Hz | SMPTE 274M -6 | O |
| 1080i @ 30 / 29.97Hz | SMPTE 274M -4, -5 | O |
| 1080p @ 24 / 23.98Hz | SMPTE 274M -10, -11 | O |
| 1080p @ 25Hz | SMPTE 274M -9 | O |
| 1080p @ 30 / 29.97Hz | SMPTE 274M -7, -8 | O |
| SD INPUT | | |
| NTSC | | O |
| PAL B,D,G,H,I | | O |

| HD INPUT | | VGA OUT |
|----------------------|-------------------------|---------|
| 525p @ 59.94Hz | SMPTE 293M, ITU-BT.1358 | |
| 625p @ 50Hz | ITU-BT.1358 | |
| 720p @ 50Hz | SMPTE 296M -3 | O |
| 720p @ 60 / 59.94Hz | SMPTE 296M -1, -2 | O |
| 1080i @ 25Hz | SMPTE 274M -6 | |
| 1080i @ 30 / 29.97Hz | 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 INPUT | | |
| NTSC | | |
| PAL B,D,G,H,I | | |

| HD INPUT | | Composite OUT |
|----------------------|-------------------------|---------------|
| 525p @ 59.94Hz | SMPTE 293M, ITU-BT.1358 | |
| 625p @ 50Hz | ITU-BT.1358 | |
| 720p @ 50Hz | SMPTE 296M -3 | |
| 720p @ 60 / 59.94Hz | SMPTE 296M -1, -2 | |
| 1080i @ 25Hz | SMPTE 274M -6 | |
| 1080i @ 30 / 29.97Hz | 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 INPUT | | |
| NTSC | | O |
| PAL B,D,G,H,I | | O |

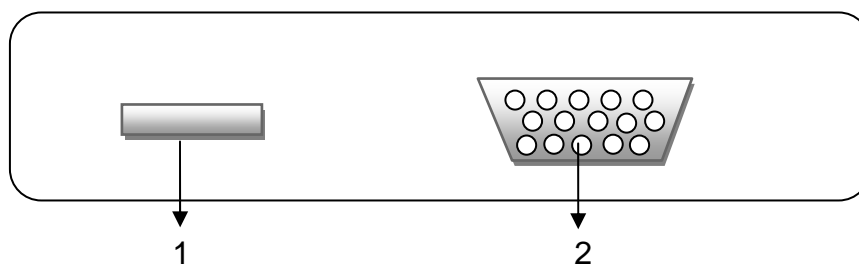
PANEL DESCRIPTIONS

FRONT PANEL



- | | |
|--|---------------------------|
| 1. HD/SD-SDI Input | 4. Power Indicator |
| 2. HD/SD Bi-Color LED Green : HD Orange : SD | 5. HD/SD-SDI Output 2 |
| 3. HD/SD-SDI Output 1 | 6. IR Receiver (reserved) |
| | 7. 5V Power |

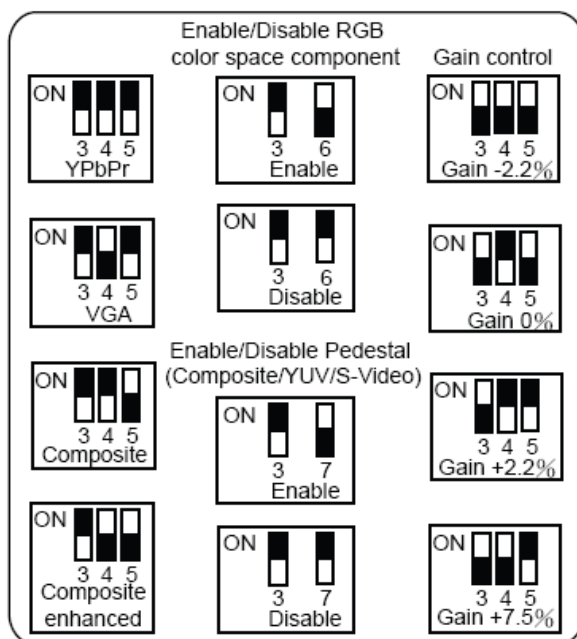
REAR PANEL



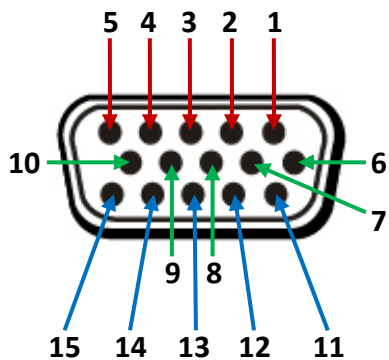
1. HDMI Output
2. YPbPr / RGB Output

BOTTOM

An 8-pin DIP switch is used for user interface, and users can access this switch from the bottom of the unit. Output formats, video patterns, SD Pedestal, SD Wide, PAL mode, YPbPr / RGB, SD component or SD composite, YC on/off etc.



PIN DEFINITION



| | | | |
|-------|--------------------------|--------|--------------------|
| Pin 1 | Pr / Red | Pin 9 | +5 V |
| Pin 2 | Y / Green / Composite | Pin 10 | Ground |
| Pin 3 | Pb / Blue | Pin 11 | Ground |
| Pin 4 | Ground | Pin 12 | Reserved |
| Pin 5 | Ground | Pin 13 | Horizontal Sync |
| Pin 6 | Ground | Pin 14 | Vertical Sync |
| Pin 7 | Ground | Pin 15 | Reserved |
| Pin 8 | Ground | | |

NOTICE

The AT-HDSDI-AV HD/SD-SDI to HDMI / DVI / YPbPr / Composite / RGBHV Converter has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, AT-HDSDI-AV 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.

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

SAFETY INFORMATION

Safeguards

To reduce the risk of electric shock, do not expose this product to rain or moisture.

If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.

Do not modify the wall plug. Doing so will void the warranty and safety features.

This equipment should be installed near the socket outlet and the device should be easily accessible in case it requires disconnection.

Precautions

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product or cause fires.

In the event of an electrostatic discharge, this device may automatically turn off. If this occurs, unplug the device, and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins, or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements and swimming pools.

Use only accessories recommended by ATLONA to avoid fire, shock or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning. Do not use cleaning fluid or aerosols, which could enter the unit and cause damage, fire or electrical shock. Some substances may also mar the finish of the product.

Never open or remove unit panels or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-HDSDI-AV. Opening the product will void the warranty.

Do not attempt to service the unit. Instead disconnect it and contact your Authorized ATLONA reseller or contact ATLONA directly.

WARRANTY

LIMITED ONE-YEAR WARRANTY

ATLONA by Lenexpo Electronics warrants only to the initial purchaser of this product for a period of one year from the date of purchase from an Authorized ATLONA Reseller, the product will be free of electrical and mechanical defects that materially affect the products operation as described in this users manual. Within this period, ATLONA will, at its sole option, repair or replace any components, which fail of normal use or refund the net original price.

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