USER MANUAL

DV-HAS HDMI Audio Separator

HDMI

LIT1460

Proprietary Information

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Unpacking

Each DV-HAS HDMI Audio Separator includes the following items:

- DV-HAS HDMI Audio Separator Unit
- 5V Power Adapter
- HDMI Cable
- User manual

HƆMI™
HIGH DEFINITION MULTIMEDIA INTERFACE

Cautions:
1. FSR logo is a trademark of FSR Inc.

2. HDMI is a trademark of HDMI licensing, LLC.

3. Specification may be changed without any notice in order to improve the function of the product.

4. The design and specification of the product may be change without any prior notice.

Table of Contents

Basic understanding of the product

Cautions for safety

- All the safety and user manual should be read before the appliance is operated.
- The safety and operating instructions should be retained for future reference.
- Unplug this product from the wall outlet before clean. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- Do not use this equipment near wet place.
- This product should be operated only from the type of power sources indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your local power company. For equipment intended to operate from battery power, or other source, refer to the user manual.
- Do not use any damaged power cords or plugs, or outlets, this may cause electrical shock or fire.
- Do not put heavy articles such as other equipment on this product.
- Keep it away from liquid, flammable substances.

If you experience any malfunctioning of product or have any question with regard to operation of the product, please contact our customer service center.

Description, General Specification

➢ HDMI Audio separator (DV-HAS) is designed to separate Video and 2ch stereo Audio from the HDMI signal.

➢ Compact size and low power design

➢ DV-HAS easily sends HDMI full HD (1920x1080p) to the HDMI display to Audio systems such as Audio Amps, Audio Mixers etc.

➢ HDCP Compliant

ITEM	DESCRIPTION
Model Name	DV-HAS
Input Signal	HDMI (TMDS) Single Link
Output Signal	Digital video (HDMI), Analog Audio (stereo)
Resolution	Supports up to WUXGA (1920x1200 @ 60Hz) 480i/p , 720i/p , 1080i/p
Receptacle	DC 5V Power Jack HDMI 19 Pin Female Stereo RCA Jack
Support	HDMI Ver 1.3 2 ch Audio
Power Consumption	Min1.0 W Max 5 W External Power - 5V Power Adapter (Included)
Dimension	3.54" x 4.05" x 0.98" (90 x 103 x 25 mm)
Weight	0.66 lbs. (0.30Kg)

Environmental and Reliability Specifications

- Recommended environmental conditions for the operation are temperature range of 50°– 104°F (10°C– 40°C), non-condensing humidity levels of 10%– 80%, and altitude ceiling of 9,840 feet (3,000 meters).

- Environmental limits for transportation are established as a temperature range of -13°– 122°F (25°C to 60°C), non-condensing humidity levels from 5-95%, and an altitude ceiling of 49,200 feet (15,000 meter)

- Environmental limits for storage are established as a temperature range of -13°– 122°F (-20°C to 45°C), non-condensing humidity levels from 5-95%, and an altitude ceiling of 9,840 feet (3,000meters)

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

Main Features

High Quality Picture - No Signal Loss and Digital Noise Free

Our DV-HAS 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 noise that may affect the picture quality will be eliminated. Due to the nature of the digital signals and passing through multiple connections, it is important to eliminate the digital noise and boost the signal strength to preserve/enhance the video signal quality, which the DV-HAS does.

Compact and Practical Design

The DV-HAS is designed compactly and practically allowing customers more ease and convenience

Great retrofit for existing systems

Without changing / upgrading / down-grading HDMI sources and displays

HDCP (High-bandwidth Digital Content Protection)

The DV-HAS fully supports HDCP. Currently, every digital video product sends high resolution signal with HDCP. It will not display, if the products are not compliant to HDCP standards.

Compliance to HDMI Version 1.3a

DV-HAS is fully compliant with the HDMI Ver 1.3a with deep color 36 bit

Video/ Audio Connections

Step 1: Confirm that the DV-HAS, digital video source and display are turned off.

Step 2: Connect the HDMI to HDMI cable from the DV-HAS HDMI output port to the HDMI input port of the display.

Step 3: Connect the RCA to RCA stereo audio cable from the DV-HAS audio output to the audio input of the display or external sound system.

Step 4: Connect the HDMI to HDMI cable from the DV-HAS HDMI input port to the source's HDMI output port.

Step 5: Connect power adapter to the DV-HAS.

Step 6: Turn on the display.

Step 7: Turn on the source.

EDID data saving

The EDID Default of the DV-HAS is set to 1080p @60Hz. If you want to change the EDID data, please follow these steps:

Step 1: Connect the HDMI to HDMI cable from the DV-HAS output port to the HDMI input of the display.

Step 2: Connect the power adapter to the DV-HAS power input,

Step 3: Turn on the display and push EDID switch for 2 to 3 seconds

Step 4: EDID LED is illuminated for about 2 second if EDID was saved correctly. If EDID was not saved correctly, EDID LED blinks 5~6 times. Please try again after checking the connection of cables and the power of display and DV-HAS.
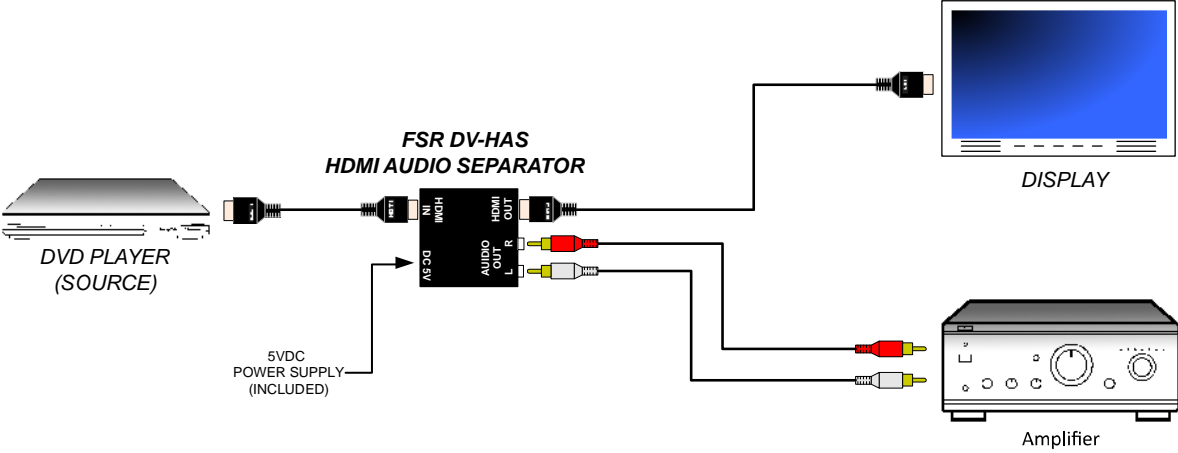(EDID saving is to display the best resolution between the video source and the display)

Caution: If your display supports multi-channel audio, you should set the display to 2 channel stereo audio manually.

If multi-channel audio is sent from the source to the DV-HAS, there will be no output from the RCA jacks, but audio will be present on the unit's HDMI output.

NOTE: Audio output is active whether the Display is connected or not.

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DV-HAS Typical Application

NOTE: Audio output is active whether the Display is connected or not.

Technical Specification

Data transmission speed: 2.25 Gbps (Single Link)
Digital Video Bandwidth: 25~165 MHz
Resolution: Up to 1080p (1920*1080) @60Hz, PC up to 1920x1200 @60hz
Digital Audio 2 channel up to 96 KHz
Input/output signal standard: Digital RGB, TMDS, 2ch Audio
Input connector type: HDMI Female 19P
Output connector type: HDMI Female 19P / Stereo RCA JACK
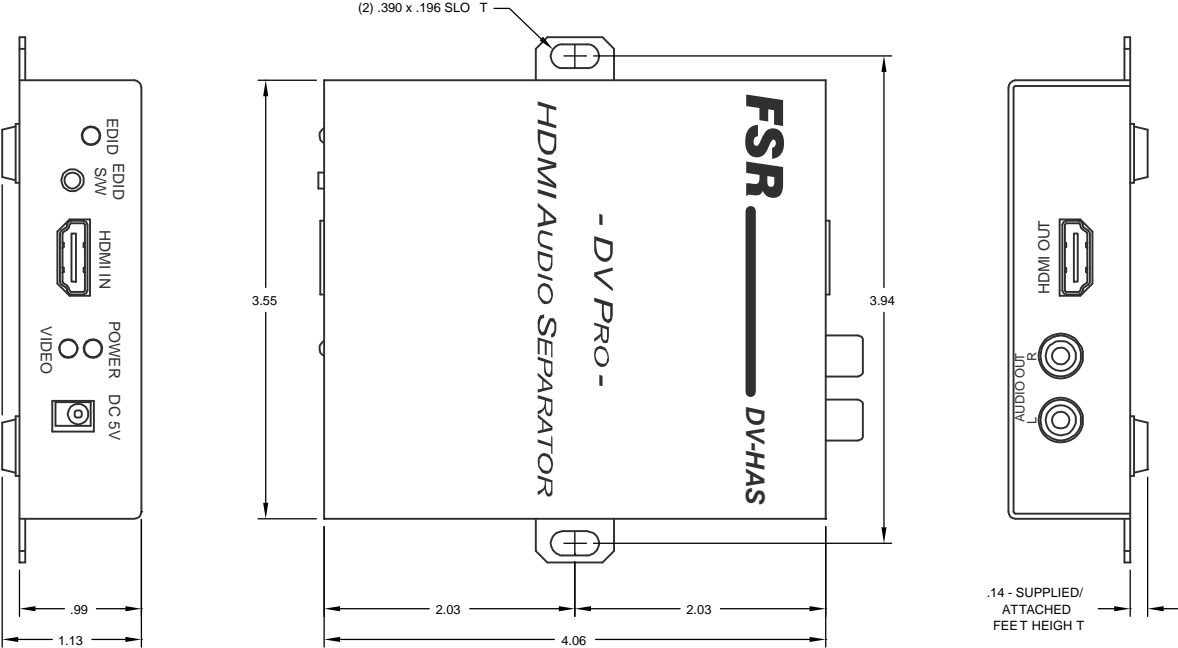Power consumption: 5 Watts Max.
Power supply: DC 5V, 2A

Front panel

DC 5V: DC 5V power input port
POWER LED: display the status of power
VIDEO LED: display the status of the signal input
HDMI In: HDMI Input port
EDID S/W: EDID SAVE operation switch
EDID LED: display the status of EDID operation

Rear panel

HDMI OUT: HDMI output port
AUDIO OUT: Analog audio (stereo) output port

Mechanical Dimensions

(2) .390 x .196 SLO T

EDID
EDID SW
HDMI IN
VIDEO
POWER
DC 5V

3.55

- DV PRO -
HDMI AUDIO SEPARATOR

FSR
DV-HAS

3.94

HDMI OUT
AUDIO OUT
R

.99
1.13

2.03
2.03
4.06

.14 - SUPPLIED/
ATTACHED
FEE T HEIGH T

HDMI Connector Pin Assignment

HDMI Input, Output

Part No.	Pin No.	Description	Remarks
HDMI 19pin	1	TMDS DATA 2+	
	2	TMDS DATA 2 Shield	
	3	TMDS DATA 2-	
	4	TMDS DATA 1+	
	5	TMDS DATA 1 Shield	
	6	TMDS DATA 1-	
	7	TMDS DATA 0+	
	8	TMDS DATA 0 Shield	
	9	TMDS DATA 0-	
	10	TMDS Clock +	
	11	TMDS Clock Shield	
	12	TMDS Clock -	
	13	CEC	
	14	RESERVED	
	15	DDC Clock	
	16	DDC DATA	
	17	GND	
	18	+5v	
	19	Hot Plug Detect	

Limited Warranty

The DV-HAS is warranted against failures due to defective parts or faulty workmanship for a period of three years after delivery to the original owner. During this period, FSR will make any necessary repairs or replace the unit without charge for parts or labor. Shipping charges to the factory or repair station must be prepaid by the owner, return-shipping charges (via UPS Ground) will be paid by FSR.

This warranty applies only to the original owner and is not transferable. In addition, it does not apply to repairs done by other than the FSR factory or Authorized Repair Stations.

This warranty shall be cancelable by FSR at its sole discretion if the unit has been subjected to physical abuse or has been modified in any way without written authorization from FSR. FSR's liability under this warranty is limited to repair or replacement of the defective unit.

FSR will not be responsible for incidental or consequential damages resulting from the use or misuse of its products. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Warranty claims should be accompanied by a copy of the original purchase invoice showing the purchase date (if a Warranty Registration Card was mailed in at the time of purchase, this is not necessary). Before returning any equipment for repair, please read the important information on service below.

SERVICE

Before returning any equipment for repair, please be sure that it is adequately packed and cushioned against damage in shipment, and that it is insured. We suggest that you save the original packaging and use it to ship the product for servicing. Also, please enclose a note giving your name, address, phone number and a description of the problem.

NOTE: all equipment being returned for repair must have a Return authorization (RMA) Number. To get a RMA Number, please call the FSR Service Department (1-800-332-FSR1). Please display your RMA Number prominently on the front of all packages.

CONTACT INFORMATION

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