



User manual 850925

Signalmanager





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Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

SURGE PROTECTION DEVICE RECOMMENDED

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Safety information



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



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



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



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

Introduction

The 850925 Signalmanager is a HDMI 2.0a Amplifier, Reclocker and Audio Extractor and Embedder, which can work in two modes, one mode for extracting the audio via L/R output from HDMI input source, and the other mode for removing the original audio of HDMI source and embedding auxiliary audio via L/R input to the HDMI output. It also features embedded pre-set EDID's as testing device in the video signal chain.

Features

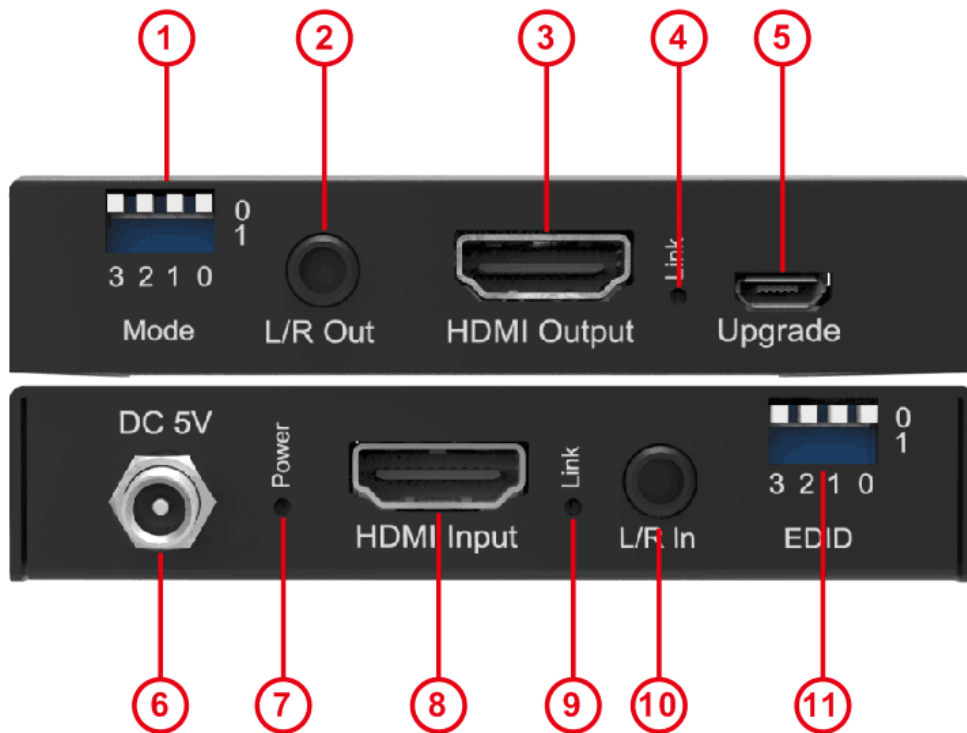
- ◆ HDMI 2.0a
- ◆ Supports 4K@50Hz/60Hz 4:4:4 , HDR and full 3D format
- ◆ HDCP 2.2/HDCP 1.x and DVI compliant
- ◆ Smart CSC technology supports outputting 6G or 3G (4K@60Hz 4:2:0) video depends on sink device capacity
- ◆ Audio embed to HDMI output
- ◆ Audio de-embedded from HDMI input
- ◆ Supports EDID management
- ◆ Supports HDCP management
- ◆ CEC and ARC pass through
- ◆ Supports RS-232 API control commands
- ◆ Relock and enhance output signal quality
- ◆ All PCM, Dolby and DTS audio formats pass through
- ◆ With ESD protection

Note:

What is smart CSC?

Smart CSC is a technology that can convert 6G video to 3G at TX unit and recover 3G to 6G at RX unit, and the RX unit can smartly output 6G or 3G video depends on the sink device capacity.

Panel Description



- ① Mode DIP Switch -- 4 pin (UP=0, DOWN=1). The Signalmanager can be configured to perform various tasks using the mode DIP switches. Detailed settings please see below:
- A. Under control by DIP switch, the position of **DIP Switch-0** should be UP (0).
 - ◆ **DIP Switch-3** -- Selectable to convert HDMI signal to output.
 Position=0 (UP) -- Auto convert 6G (4:4:4) Format to 3G (4:2:0) when detect sink not support 6G (4:4:4).
 Position=1 (DOWN) -- Always convert 6G (4:4:4) format to 3G (4:2:0).
 - ◆ **DIP Switch-2** -- HDCP management.
 Position=0 (UP) -- HDCP follow sink.
 Position=1 (DOWN) -- HDCP follow source.
 - ◆ **DIP Switch-1** -- Audio embedding and bypass.
 Position=0 (UP) -- Audio bypass.
 Position=1 (DOWN) -- Audio embedding (L/R input added to the HDMI Output).
 - B. Under control by serial USB mode, the position of DIP Switch-0 should be DOWN (1). DIP Switch-1/2/3 -- reserved or not in use.

- ② L/R Out -- Extract the audio from the HDMI input
- ③ HDMI Output -- Connect to HDMI sink device
- ④ LED Link for HDMI output -- Lit when detecting HDMI signal
- ⑤ Upgrade -- Micro USB port for F/M upgrade and terminal API control
- ⑥ DC Power Input -- Screw locking connector, use the included 5V/1A DC adapter to power the unit
- ⑦ LED Indicator for Power -- Lit blue light when getting power
- ⑧ HDMI Input -- Connect to HDMI source device
- ⑨ LED Indicator for HDMI Input -- Lit when detecting HDMI signal
- ⑩ L/R In -- Embed the audio to HDMI output
- ⑪ DIP Switcher -- EDID management

EDID type

3	2	1	0	EDID type
Combination of DIP positions				
0	0	0	0	1080P 2.0CH
0	0	0	1	1080P 5.1CH
0	0	1	0	1080P 7.1CH
0	0	1	1	1080i 2.0CH
0	1	0	0	1080i 5.1CH
0	1	0	1	1080i 7.1CH
0	1	1	0	4K60Hz 4:2:0 2.0CH
0	1	1	1	4K60Hz 4:4:4 2.0CH
1	0	0	0	4K60Hz 4:4:4 7.1CH
1	0	0	1	4K30Hz 4:4:4 2.0CH
1	0	1	0	4K30Hz 4:4:4 5.1CH
1	0	1	1	4K30Hz 4:4:4 7.1CH
1	1	0	0	DVI 1280x1024
1	1	0	1	DVI 1920x1080
1	1	1	0	DVI 1920x1200
1	1	1	1	Copy EDID from output

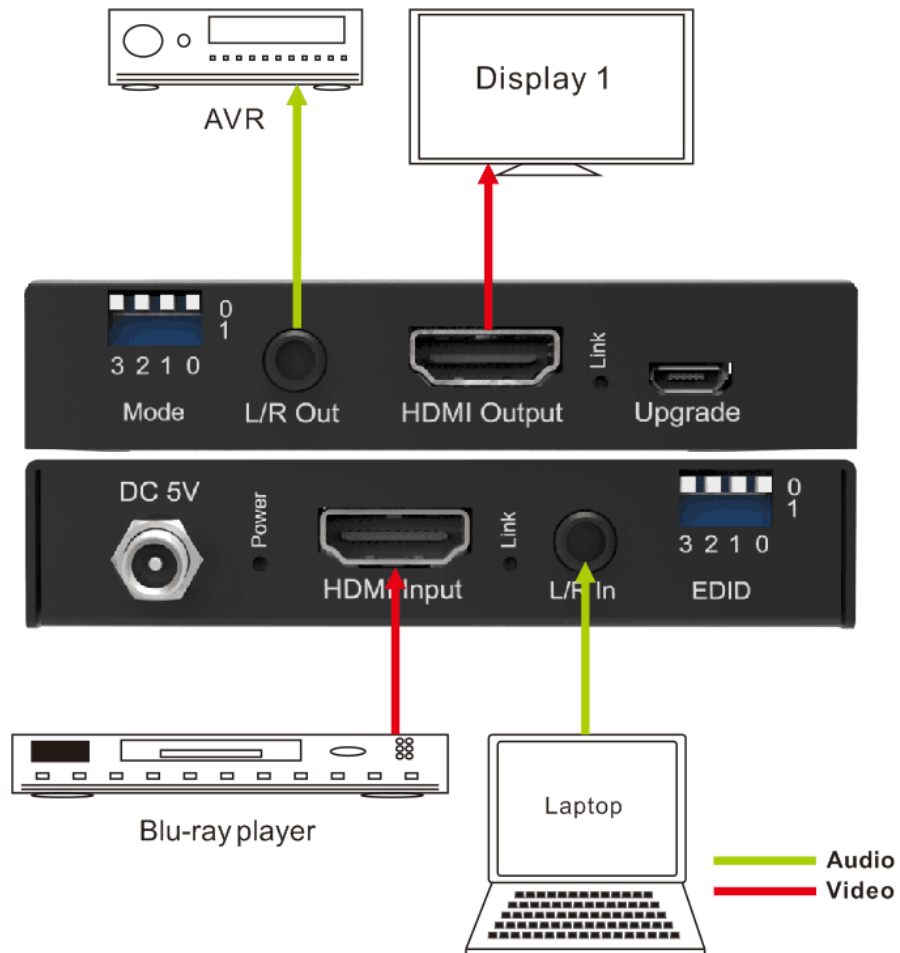
RS232 API Commands

Command	Action
?	Print Help Information
HELP	Print Help Information
STATUS	Print System Status And Port Status
PON	Power On, System Run On Normal State
POFF	Power Off, System Run On Power Save State
OUT ON/OFF	Set OUTPUT On Or Off
OUT CSC xx	Set OUTPUT Color Space Convert Mode xx=OFF: Disable Convert Function xx=420: Always Convert 6G 444 Format To 3G 420 xx=AUTO: Auto Convert 6G 444 Format To 3G 420 When Detect Sink Not Support 6G 444
AUD RX ORG	Input Port Use Orginal Receive HDMI/DVI Signal
AUD RX ANA	Input Port Embeded Analog L/R To HDMI/DVI Signal
AUD RX AUTO	Input Port Embeded Analog L/R When DVI Signal
RESET	Reset System To Default Setting (Should Type "Yes" To Confirm, "No" To Discard)

Note:

You need the additional RS232 cable if you want to work with RS232 API commands (Id.No. 8707574)..

Application Diagram



Specifications

Bandwidth	18Gbps
Video Input Connectors	1x HDMI Type A, 19-pin, female
Audio Input Connectors	1x 3.5mm stereo earphone jack (L/R)
Video Output Connectors	1x HDMI Type A, 19-pin, female
Audio Output Connectors	1x 3.5mm stereo earphone jack (L/R)
EDID	4-pin DIP Switcher
Mode	4-pin DIP Switcher
Dimensions(W x D x H)	83mm x 83mm x 17mm, without feet
Shipping Weight	0.3KG
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	- 4°F to 140°F (- 20°C to 60°C)
Power Supply	5V/1A DC

Package Contents

1. 1x 850925 Signalmanager
2. 1x 5V/1A Power Supply
3. 1x Pair of Rack-mount Ears

Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

Warranty Policy

TLSAV products are warranted against defects in material and workmanship for two years from the date of shipment. During the warranty period, TLSAV will, at its option, repair or replace products that prove to be defective. Repairs are warranted for the remainder of the original warranty or a 90 day extended warranty, whichever is longer.

For equipment under warranty, the owner is responsible for freight to TLSAV and all related customs, taxes, tariffs, insurance, etc. TLSAV is responsible for the freight charges only for return of the equipment from the factory to the owner. TLSAV will return the equipment by the same method (i.e., Air, Express, Surface) as the equipment was sent to TLSAV.

All equipment returned for warranty repair must have a valid RMA number issued prior to return and be marked clearly on the return packaging. TLSAV strongly recommends all equipment be returned in its original packaging.

TLSAV obligations under this warranty are limited to repair or replacement of failed parts, and the return shipment to the buyer of the repaired or replaced parts.

Limitations of Warranty

The warranty does not apply to any part of a product that has been installed, altered, repaired, or misused in any way that, in the opinion of TLSAV, would affect the reliability or detracts from the performance of any part of the product, or is damaged as the result of use in a way or with equipment that had not been previously approved by TLSAV.

The warranty does not apply to any product or parts thereof where the serial number or the serial number of any of its parts has been altered, defaced, or

removed. The warranty does not cover damage or loss incurred in transportation of the product.

The warranty does not cover replacement or repair necessitated by loss or damage from any cause beyond the control of TLSAV, such as lightning or other natural and weather related events or wartime environments.

The warranty does not cover any labor involved in the removal and or reinstallation of warranted equipment or parts on site, or any labor required to diagnose the necessity for repair or replacement.

The warranty excludes any responsibility by TLSAV for incidental or consequential damages arising from the use of the equipment or products, or for any inability to use them either separate from or in combination with any other equipment or products.

A fixed charge established for each product will be imposed for all equipment returned for warranty repair where TLSAV cannot identify the cause of the reported failure.

Exclusive Remedies

TLSAV's warranty, as stated is in lieu of all other warranties, expressed, implied, or statutory, including those of merchantability and fitness for a particular purpose. The buyer shall pass on to any purchaser, lessee, or other user of TLSAV's products, the aforementioned warranty, and shall indemnify and hold harmless TLSAV from any claims or liability of such purchaser, lessee, or user based upon allegations that the buyer, its agents, or employees have made additional warranties or representations as to product preference or use.

The remedies provided herein are the buyer's sole and exclusive remedies.

TLSAV shall not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory.

RMA Policy

When returning product to TLSAV for any reason, the customer should fill out the official RMA form to obtain a RMA number. Without the permission or approval, TLSAV will be no responsible for any return. This can be initiated by emailing or calling your related sales.

All requests are processed within 48 hours.

Standard Replacement

For customers that agree to return defective product to TLSAV first, a Standard Replacement option is available.

An RMA number must first be issued by sales. This RMA number will need to be referenced on the outside of the return shipment.

Upon receipt of the defective product, TLSAV will, at its discretion, either repair or replace the product and ship it out in the most expeditious manner possible. Subject to availability, the replacement product will be shipped on the business day following receipt of the defective product.

In the event the product returned to TLSAV has been discontinued (i.e. the product is no longer being manufactured by TLSAV but is still under warranty), TLSAV will, at its discretion, either repair or replace with recertified product.

Once you have obtained an RMA number

After obtaining an RMA number from TLSAV, you must send the product - freight prepaid - to TLSAV. The TLSAV RMA number must be prominently displayed on the outside of your package. If you send your product to TLSAV without the RMA number prominently displayed on the outside of the package, it will be returned to you unopened.

Please use a shipping company that can demonstrate proof of delivery. TLSAV does not accept responsibility for any lost shipments unless proof of delivery to TLSAV is provided.



Please note:

Product shipped to TLSAV must be properly packaged to prevent loss or damage in transit.

Shipping your RMA to TLSAV using regular mailing envelopes is not acceptable, as they do not protect the product from damage during shipping.

TLSAV will not repair or replace a module that is shipped in such a way that the product is not properly protected.

TLSAV will not accept any product that has been damaged as a result of accident, abuse, misuse, natural or personal disaster, or any unauthorized disassemble, repair or modification.

Warranty

Warranty time is two year and from the date of original shipment.

This warranty shall be void if a serial number has been removed from the product.

Upon determination of a legitimate defect covered by this warranty and at TLSAV sole discretion, user should bear the transport cost during the warranty.

If product is out of warranty then repair charge is required. Minimum repair charge: 10% of the retail price plus the cost of failed components. We will repair the failed product after repair cost has been approved by Customers and proper financial arrangements are made. Customer must cover round trip shipment expenses.

Return and RMA Policies

Shipments will not be receiver and processed for warranty repair/replacement without an TLSAV RMA(Return Materials Authorization).

TLSAV
Nehringkamp 47a
41462 Neuss

Tel.: 00 49 (0) 172 244 6725
Fax: 00 49/(0) 2131 939 7204
rudu@tlsav.de

