

875730 F 70 User Manual



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.

SAFTY AND NOTICE

- 1) The transmission distances of HDMI over UTP cables are measured using TE CONNECTIVITY 1427071-6
- 2) EIA/TIA-568-B termination for CAT cables is recommended for better performance.
- 3) DO NOT use 568A/568B standard mixed CAT cable (cross-over cable) because there are 2 pairs swapped, this will make POH OVER-CURRENT and damage POH components. Please use straight-through CAT cable (both RJ45 headers are 568A or 568B standard).
- 4) It is recommended that power up the device after connections of source, sink and CAT cable.
- 5) To reduce the interference among the unshielded twisted pairs of wires in CAT cable, do not run HDBaseT / Zone Cat5e/6/6a cabling with or in close parallel proximity to mains power cables. Shielded CAT cables can be used to improve EMI problems, which is worsen in long transmission.



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- 6) Because the quality of the CAT cables has the major effect on how long the transmission limit can achieve and how good is the received picture quality, the actual transmission range is subject to one's choice of CAT cables.
 - 7) Do not substitute or use any other Power Supply other than the enclosed unit, or a TLSAV approved Replacement Part. Doing so will void the warranty and potentially expose the user to dangerous voltages resulting in an electrical shock.
 - 8) Do not disassemble the device for any reason. Doing so will void the manufacturer's warranty. Also, our unique case is an integral part of the design of this unit and is responsible for cooling and circuitry shielding. Any modifications to this case will potentially cause malfunction and product failure.
 - 9) Do not expose the device to water, moisture, or liquids. Possible electric shock may result as well as failure of the unit to operate.

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Introduction

The TLSAV F70 Set is a 4K-HDMI1.4 - HDCP 2.2 HDBaseT extender set which can extend HDMI1.4, Bi-directional IR & RS-232 and Bi-directional PoH (Power over HDBaseT) up to lengths of 70m/230ft. The Transmitter includes a HDMI loop-out for integrating local display or cascading to multiple devices. Besides, the Transmitter also features simultaneous analogue audio and digital audio breakout.

Features

- Advanced HDBaseT technology offering distribution of video and audio over a single CAT cable.
- Supports 1080p up to 70m/230ft, 4K up to 40m/130ft.
- Supports 1x HDMI loop out on Transmitter for integrating local display or cascading to multiple devices.
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K.
- Supports all known HDMI audio formats including Dolby TrueHD, Atmos and DTS-HD Master Audio transmission.
- Analogue L/R audio and digital audio breakout on Transmitter unit
- Supports Bi-directional RS-232 pass through
- Supports Bi-directional IR pass through
- Advanced EDID management
- HDCP-2.2 compliant
- With ESD protection

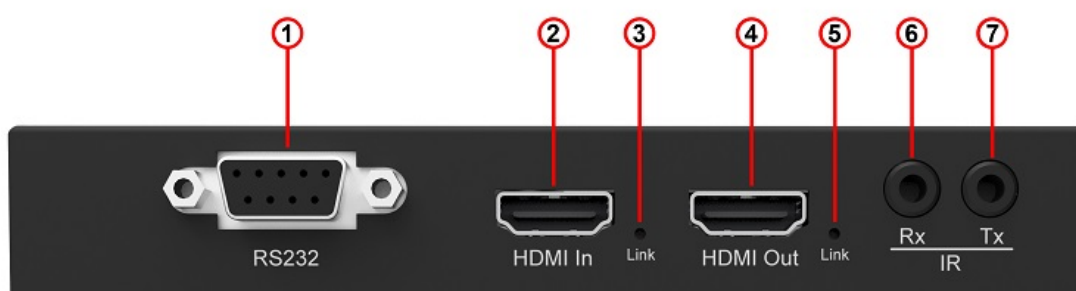
Note:

The POH function is designed for powering compatible transmitter or receiver units of TLSAV only.

Panel Descriptions

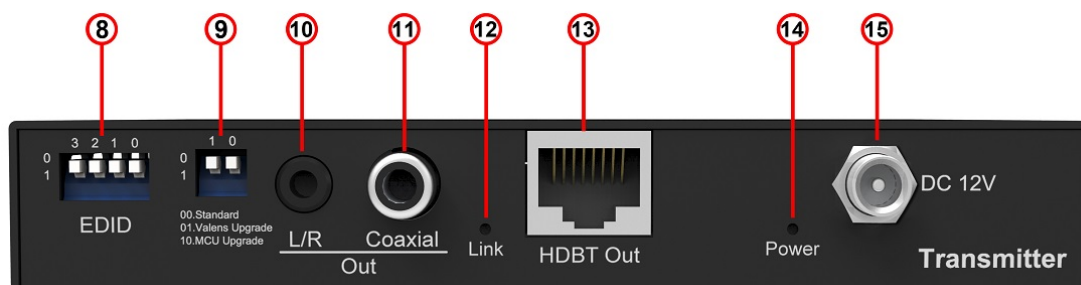
Transmitter

Front side



- ① RS232 port – DB9 female connector, connect to a DTE or DCE
- ② HDMI input – Connect to HDMI source
- ③ HDMI input LED indicator -- Lit when HDMI sink device connected
- ④ HDMI output – Connect to HDMI display device
- ⑤ HDMI output LED indicator – Lit when HDMI display device connected.
- ⑥ IR Rx port -- 3.5mm stereo phone-jack, connect to IR receiver cable
- ⑦ IR Tx port –3.5mm mono phone-jack, connect to IR emitter cable

Back Side



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⑧ EDID DIP Switch (Up=0, Down=1)

3	2	1	0	EDID type
Combination of DIP positions				
0	0	0	0	COPY_EDID_FROM_OUTPUT1
0	0	0	1	HDMI 1080p@60Hz, Audio 2CH PCM
0	0	1	0	HDMI 1080p@60Hz, Audio 5.1CH PCM/DTS/DOLBY
0	0	1	1	HDMI 1080p@60Hz, Audio 7.1CH PCM/DTS/DOLBY/HD
0	1	0	0	HDMI 1080i@60Hz, Audio 2CH PCM
0	1	0	1	HDMI 1080i@60Hz, Audio 5.1CH PCM/DTS/DOLBY
0	1	1	0	HDMI 1080i@60Hz, Audio 7.1CH PCM/DTS/DOLBY/HD
0	1	1	1	HDMI 4K@60Hz 4:2:0, Audio 2CH PCM
1	0	0	0	HDMI 4K@60Hz 4:2:0, Audio 5.1CH PCM/DTS/DOLBY
1	0	0	1	HDMI 4K@60Hz 4:2:0, Audio 7.1CH PCM/DTS/DOLBY/HD
1	0	1	0	HDMI 4K@30Hz 4:4:4, Audio 2CH PCM
1	0	1	1	HDMI 4K@30Hz 4:4:4, Audio 5.1CH PCM/DTS/DOLBY
1	1	0	0	HDMI 4K@30Hz 4:4:4, Audio 7.1CH PCM/DTS/DOLBY/HD
1	1	0	1	DVI 1280x1024@60Hz, Audio None
1	1	1	0	DVI 1920x1080@60Hz, Audio None
1	1	1	1	DVI 1920x1200@60Hz, Audio None

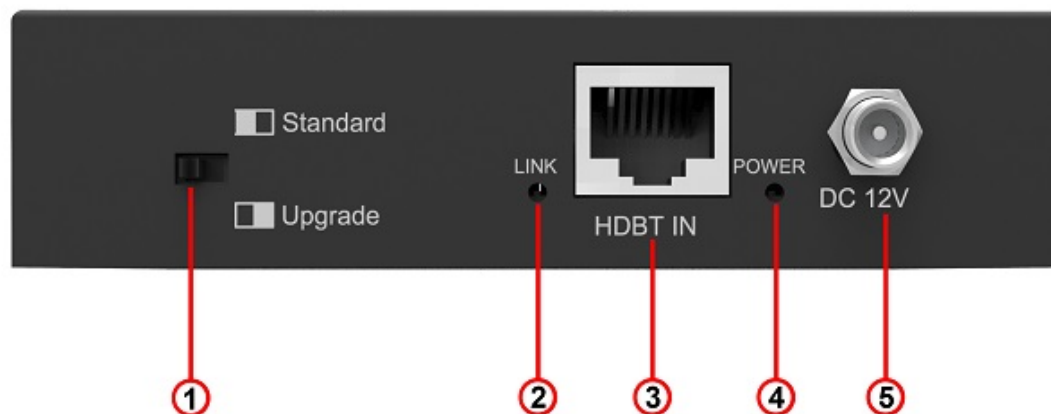
⑨ Mode DIP Switch – To switch RS-232 serial port between pass-through and firmware upgrade mode. As below:

- ✓ 00: RS232 pass through
- ✓ 01: Valens firmware upgrade
- ✓ 10: MCU firmware upgrade

- ⑩ L/R audio output –RCA connector, connect to AV Receiver
- ⑪ Coaxial Audio Output -- S/PDIF audio out, connect to AV Receiver.
- ⑫ HDBT link indicator – Lit when an active connection is achieved between the Transmitter and Receiver
- ⑬ HDBT output -- RJ45 connector, connect to HDBT Out port of the transmitter side via cat5e/6
- ⑭ Power status indicator -- Lit when getting power
- ⑮ Power port -- Use included 12V/2A DC adaptor to power the unit.

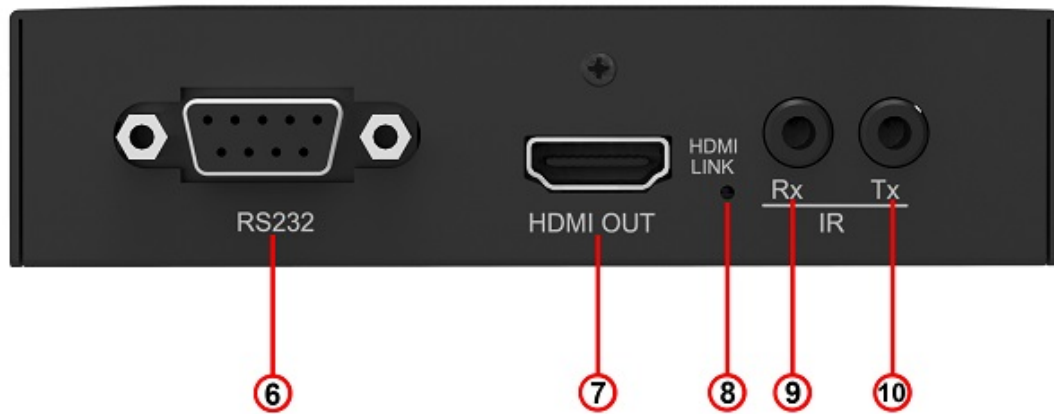
Receiver

Front Side



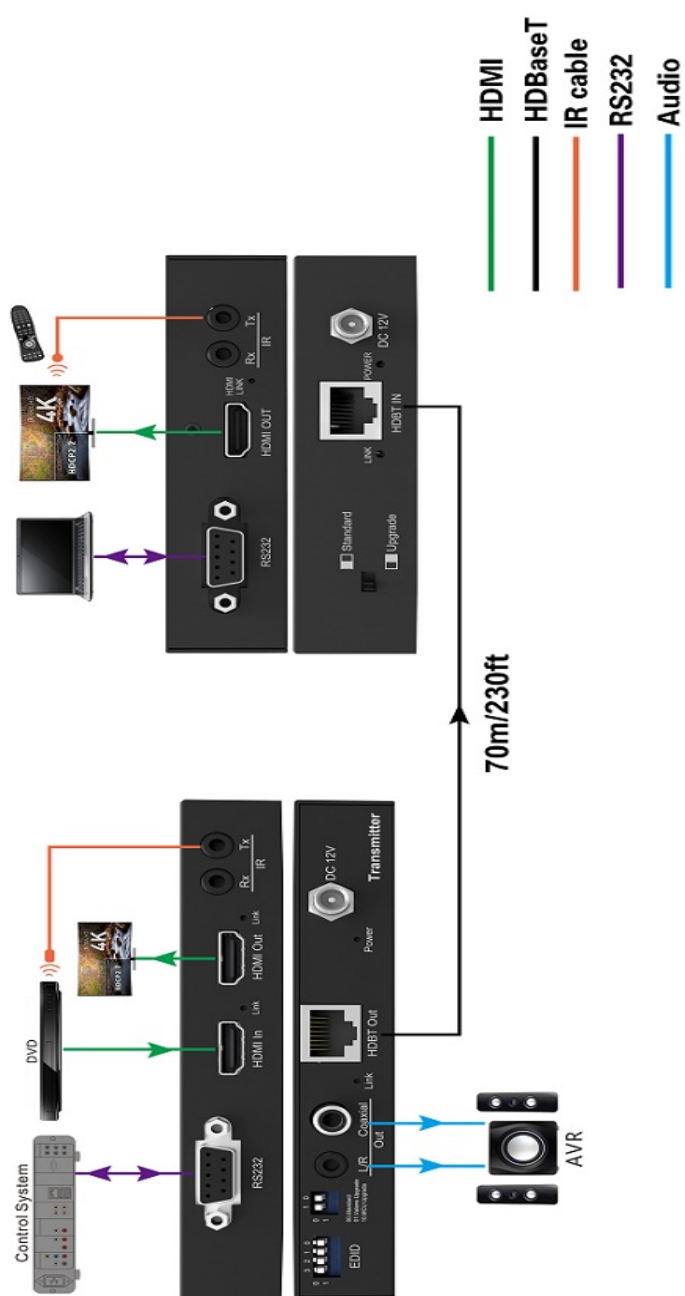
- ① Standard/Upgrade mode switch
- ② HDBT link LED indicator -- Lit when an active connection is achieved between the Transmitter and Receiver
- ③ HDBT input -- RJ45 connector, connect to HDBT Out port of the transmitter side via cat5e/6
- ④ Power port -- Use included 12V/2A DC adaptor to power the unit.
- ⑤ Power status indicator -- Lit when getting power

Back Side



- ⑥ RS232 port -- DB9 female connector, connect to a DTE or DCE
- ⑦ HDMI Output – Connect to HDMI sink device
- ⑧ HDMI signal link indicator -- Lit when HDMI sink device connected
- ⑨ IR Rx port -- 3.5mm stereo phone-jack, connect to IR receiver cable
- ⑩ IR Tx port –3.5mm mono phone-jack, connect to IR emitter cable

Application Diagram





Specifications

	F70 TX	F70 RX
Video input:	1x HDMI Type A, female	1x HDBaseT RJ45 connector
Video output:	1x HDBaseT RJ45 connector 1x HDMI Type A, female	1x HDMI Type A, female
Audio output:	1x 3.5mm L/R analogue audio, 1x digital optical (SPDIF)	N/A
RS-232 serial port:	1x DB9 female connector	1x DB9 female connector
IR input:	1x 3.5mm stereo jack	1x 3.5mm stereo jack
IR output:	1x 3.5mm mono jack	1x 3.5mm mono jack
EDID DIP switch:	4-pin	N/A
Dimensions (W x D x H)	143mm x 134mm x 22mm	113mm x 124mm x 22mm
Shipping weight(kit):	0.5kg	0.4kg
Power Supply:	12V/2A DC, screw type connector	12V/2A DC, screw type connector
Operating temperature:	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Storage temperature	4°F to 140°F (-20°C to 60°C)	4°F to 140°F (-20°C to 60°C)

Package Contents

1. 875730 F70 Set, Transmitter & Receiver
2. 1x 12V DC power supply
3. 1x IR Transmitter, 1x IR Receiver
4. 1x 875730 User Manual

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's 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.

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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.

TLSAV Rudy

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