

# DIREKTRONIK

Dataprodukter utöver det vanliga

Best.nr: 20102370

## 1X2 Splitter/2x1 Switch

4K@60Hz YUV4:4:4 18Gbps

Support HDCP2.2, HDR10

### OPERATION MANUAL



# DIREKTRONIK

Direktronik AB tel. 08-52 400 700 [www.direktronik.se](http://www.direktronik.se)

## **Dear customer**

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.

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## **Features**

- HDMI 2.0 version (Support 4K@60Hz YUV4:4:4)
- Bandwidth upto 18Gbps
- HDCP2.2/ HDCP1.4
- Support 3D, HDR10, Dolby vision and DTS
- Support 2xHDMI in, 2xHDMI out
- EDID management and Down Scaler functions
- Support Analog 3.5mm stereo out /SPDIF out audio extraction
- Support Analog 3.5mm stereo/SPDIF in audio embedded
- Support power off memory function

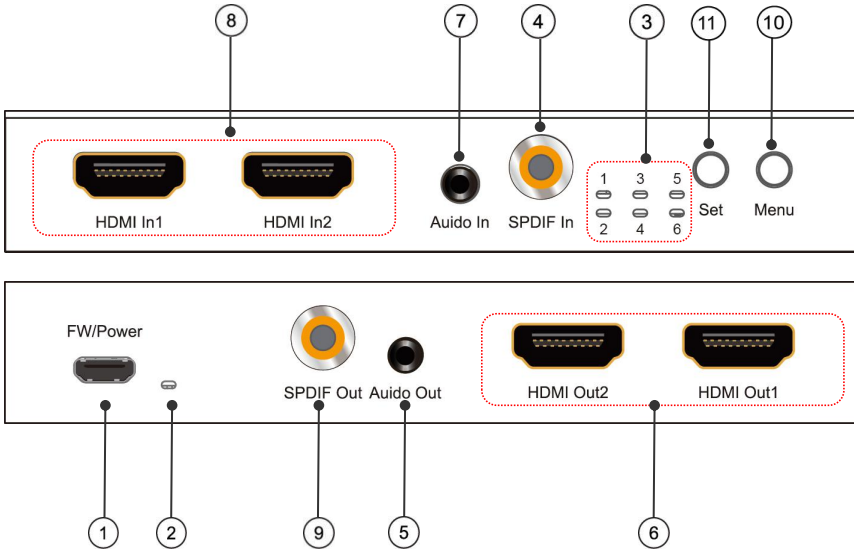
### Specifications

Operating Temperature Range	0°C to +40°C(+32°F to +104°F)
Operating Humidity Range	5 to 90%RH (No Condensation)
Power supply	5V
Maximum power (work under 4K2K/60Hz)	2W
Max resolution	4k@60Hz YUV4:4:4
Function	HDR10 and Dolby vision
HDMI version	HDMI 2.0
HDCP version	HDCP2.2 / HDCP1.4
Control ways	Switch button and EDID
Distance	1080P: input 8m max; output 8m max 4k@30Hz: input 8m max;output 8m max 4k@60Hz-8bit: input 5m max;output 5m
Dimensions(LxWxH)	max 121x68.2x20mm

### Package Contents

- 1) 1x HDMI Switch
- 2) 1x 5V/1A DC power adapter
- 3) 1x User manual

## Panel Description



- 1. Power and Firmware upgrade USB port
- 2. Power Indicator
- 3. Indicator light
- 4. SPDIF In
- 5. Audio out
- 6. HDMI output
- 7. Audio in
- 8. HDMI input
- 9. SPDIF out
- 10. **Menu button**: Long press the key for 1.5 seconds or more to open the menu (Note: LED1~LED6 slow flash twice can release the key) or exit the menu (Note: LED1~LED6 fast flash twice can release the key); Under the premise of opening the menu, you press the button to select functions (input source, EDID, Audio embed and audio unembed, channel), and you can always switch in a loop; When you select a function, the indicator light of the function will flash (Different functions correspond to different indicator lights. Please refer to the silkscreen on the back of the product for details). If there is no next operation after 4S, the LED indicator will go out and remain in the original state. Plis press set button again can still complete the function switch.
- 11. **SET button**: Long press SET button 5S to restore factory Settings;

## Operating Instruction

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On the premise that the menu has been opened and the menu button is switched to the corresponding functional Settings, you press the button can complete the video input source switch, EDID mode Settings, Audio embed and audio unembed setting and Audio channel selection.

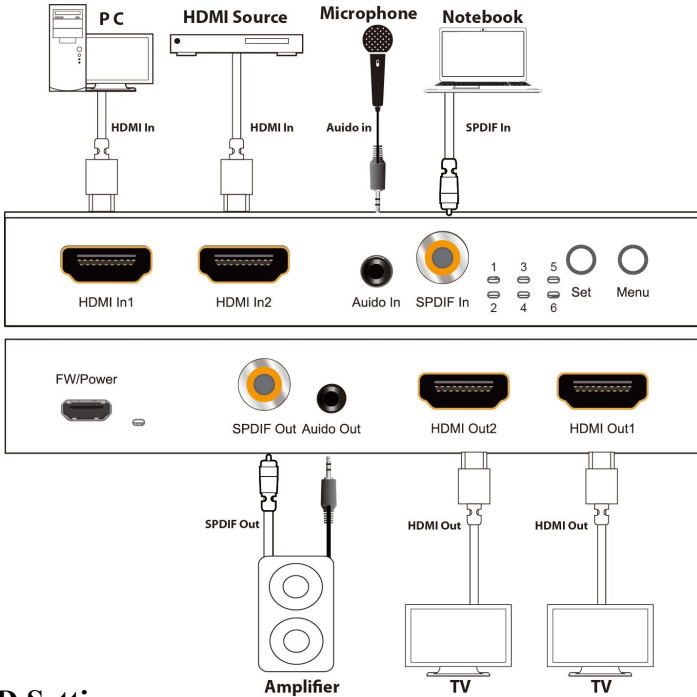
### List of functional indicator lights:

LED	1	2	3	4	5	6
FUNC	\	\	Switch	EDID	ENC/DEC	ENC/ DEC-Config
OFF	\	\	HDMI In 1	Default	DEC	Bypass
BLINK	\	\	\	AUTO	ENC-SPDIF	5.1
ON	\	\	HDMI In 2	Copy	ENC-Analog	2.0

### Application

1. Connect source devices with input ports of the switch by HDMI Cable.
2. Connect HDMI output port with TV or other HDMI sink devices by HDMI Cable.
3. Connect 5V POWER adaptor with DC power socket.
4. Power on

## Application Diagram



## EDID Setting

1. **Copy EDID** : When pressing the button to switch EDID to Copy mode, LED4 indicator light is always on, giving priority to copy the output1 EDID, it will copy the output2 EDID when output 1 is empty;

When the output resolution of the signal source is set to be automatic, if the output1 is 4K60Hz TV and the output2 ports is 4K30Hz/1080p TV, the output1 channels is 4K60Hz, and the output2 channel is reduced to 1080P60Hz.

2. **Mixed EDID**: When you press the button to switch EDID to Mixed mode, LED4 indicator lights will flash, and a group of optimal EDID will be generated at this time to ensure that images can be output from both output TVs, and the EDID of the two output TVs has memory function, that is, pulling out one TV will not affect the other TV; Input to 2.0 BLU-RAY player and set to automatic mode, one output to 4K60Hz TV, one output to 4K30Hz/1080p TV, both output to 4K30Hz video or 1080P video

## Operating Instruction

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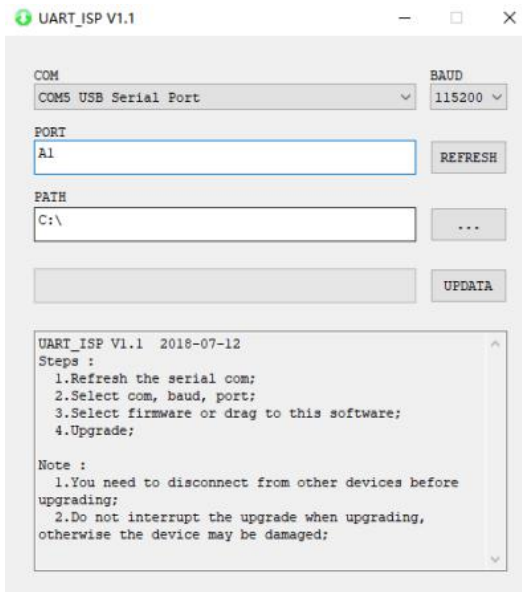
3. **Built-in EDID:** When the button is switched to the built-in EDID mode, LED4 indicator lights will go out.

### Note:

1. Product has the function of Down Scaler
2. Built-in EDID and copy EDID have the function of Down Scaler, which can reduce the input 4K60Hz to 1080P60Hz output. It should be noted that the function of Down Scaler only reduces the resolution and does not reduce the refresh rate, as well as the function of Down Scaler that does not support 4K60Hz YUV422 input signal
3. In the built-in EDID/ copy EDID mode, the input source is set as automatic. When the output of two TV channels is 4K60Hz and 4K30Hz/1080P60Hz, the output of videos in one channel is 4K60Hz and videos in the other channel is 1080P60Hz

## The firmware update

Pls open the software [UART\\_ISP.exe](#) on the PC, you need select the correct port and baud rate 115200, enter A1 in [port](#), then you need select the program in path, and click UPDATE to complete the upgrade.



### **MAINTENANCE**

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

### **PRODUCT SERVICE**

**1) Damage requiring service:** The unit should be serviced by qualified service personnel if:

- (a) The DC power supply cord or AC adaptor has been damaged;
- (b) Objects or liquids have gotten into the unit;
- (c) The unit has been exposed to rain;
- (d) The unit does not operate normally or exhibits a marked change in performance;
- (e) The unit has been dropped or the cabinet damaged.

**2) Servicing Personnel:** Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.

**3) Replacement parts:** When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.

**4) Safety check:** After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.



**LIMITED WARRANTY LIMITS AND EXCLUSIONS**

1) This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, maladjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributable to acts of God.

2) THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)

2) PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

### **WARRANTY**

If your product does not work properly because of a defect in materials or workmanship, our Company (referred to as "the warrantor" ) will , for the length of the period indicated as below, **(Parts(2)Year, Labor(90) Days)** which starts with the date of original purchase ("Limited Warranty period"), at its option either(a) repair your product with new or refurbished parts, or (b) replace it with a new of a refurbished product. The decision to repair or replace will be made by the warrantor. During the "Labor" Limited Warranty period there will be no charge for labor.

During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

### **Mail-In Service**

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.