

# HDMI 4K External Sync



SONY FCB-ER series, FCB-ES8230 and latest FCB-EW9500H



Introducing the latest edition to our 4k interface board range:

The HDMI 4K Ext Sync has been specifically designed for Sony FCB-ER8530, FCB-ER8550, FCB-ES8230 and New FCB-EW9500H 4k cameras.

Twiga high performance new HDMI 4k module will bring 4k possibility to a variety of application where performance, color image quality, and space is a premium.

**4K**  
ULTRA HD

## FEATURES

- Designed for Sony FCB-ER range, FCB-ES8230, FCB-EW9500H
- Supports External Synchronization input (for FCB-ER-8550)
- Drive HDMI cable **up to 20m** (65.61ft)
- Supports 4k video resolution – up to 2160p25/29.97Hz
- Supports Full HD resolution
- Serial communication **TTL or RS232**
- USB micro-B for communication & update
- Camera control through VISCA and GPIO
- Video format selection by DIP switches
- 5V 1A switchable power output for external devices
- Low power sleep mode for mobile applications

### ○ Video output from HD to 4K

The HDMI 4k Ext Sync interface board supports 4K video format in Ultra HD resolution (3840 x 2160) with output flexibility. Depending on your application and configuration, you can select the format you need from HD to 4K.

### ○ External Sync capability

Twiga HDMI 4K Ext Sync supports the external synchronization input from Sony FCB-ER-8550 camera. It provides benefits to users in a multi-camera environment: broadcast application, image stitching, pulsed lighting sync or thermal/visible image overlapping.

### ○ Compact size

Highly compact, and very easy to connect, Twiga HDMI 4K Ext-sync can be rear-mounted on Sony 4K range of cameras without hampering the mechanical integration.

## TARGET APPLICATIONS

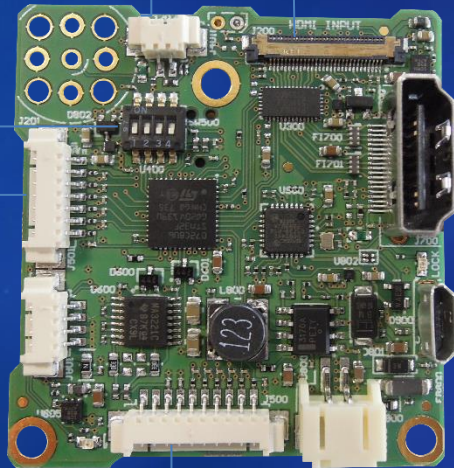


# Onboard Connectors

J202	EXT Sync Signal
2	GND
1	Sync

**J200** Sony FCB-ER /ES/ EW HDMI Input

**J700** HDMI output



J501	Keyboard	Function
7	Command 5	Color bar
6	Command 4	Auto-Focus
5	Command 3	Memory Preset
4	Command 2	Freeze
3	Command 1	Zoom Wide
2	Command 0	Zoom Tele
1	GND	

J900	USB Signal
5	GND
4	N/C
3	D+
2	D-
1	VBUS

SW500 DIP switch format selection				
1	2	3	4	Camera format*
OFF	OFF	OFF	OFF	External
ON	OFF	OFF	OFF	3840x2160 29.97p
ON	ON	OFF	OFF	3480x2160 25p
OFF	ON	OFF	OFF	3840x2160 23.98p
ON	ON	ON	OFF	1920x1080 59.94p
OFF	ON	ON	OFF	1920x1080 50p
ON	OFF	ON	OFF	1920x1080 59.94i
OFF	OFF	ON	OFF	1920x1080 50i
OFF	OFF	ON	ON	1920x1080 29.97p
ON	ON	OFF	ON	1920x1080 25p
OFF	ON	OFF	ON	1920x720 23.98p
ON	OFF	OFF	ON	1280x720 59.94p
OFF	OFF	OFF	ON	1280x720 50p
ON	OFF	ON	ON	720x480 59.94p
OFF	ON	ON	ON	720x576 50p

J500	RS232 & system command	
10	Command 6	Video Output enable
9	Command 7	Low power mode
8	Command 8	Activate Eco mode
7	Command 9	Activate HDMI gain
6	Command 10	Activate 5V output
5	Command 11	Reserved
4	TxD	
3	RxD	
2	GND	
1	N/C	

J800	Power IN
2	GND
1	V+

\* Depending on camera model. Refer to camera technical manual

Functions	Specifications
Digital video output	HDMI 1.4b
External sync input	Molex 2 pts (J202) or coax connector (option not natively mounted)
Video format	Full HD – 4K resolution up to 3840x2160 29.97p
Video format configuration	DIP switches
Camera communication & settings	VISCA – RS232 / TTL level
Power supply	6 to 12 VDC 0,2W (sleep mode), 4.1W (running mode)** with camera set in 4k30p
Operating temperature range	-10°C to 50°C
Storage temperature range	-20°C to 60°C
Regulation	EMC FCC part 15, PCB : UL 94 V0
Dimensions (mm)	48 (H) x 45 (W) x 11 (D)

\*\* Refer to camera model technical manual

P/N Electronic Board:	TV10 0077 HDMI 4K	
P/N Accessory kit:	TV50 0024 Mounting kit	TV50 0017 Cable kit
30 way USL20-30SS-012-C Cable assembly	✓	✓
2 way cable - power supply (J800)	✓	✓
10 way cable - COM (J500)	✓	✓
7 way cable – GPIO'S – (J501)	✓	
Right angle black anodized aluminum bracket	✓	
Screws + spacers	✓	

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