

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.

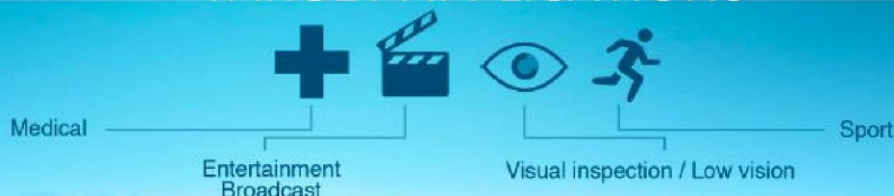
○ External Sync capability

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



| 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 | ✓ | |

PB_TWIGA_HDMI4K Ext Sync_05/04/2023



クロニクス株式会社

〒160-0023 東京都新宿区西新宿3-2-11 新宿三井ビル二号館9階
 TEL:03-5322-7191 / FAX:03-5322-7790
 EMAIL:sales@chronix.co.jp / https://www.chronix.co.jp