

# Blackmagic 2110 IP UpDownCross 12G



Blackmagic 2110 IP UpDownCross 12G is a professional standards converter that lets you convert between any equipment with SMPTE-2110 IP video, 12G-SDI and HDMI video connections. You get the highest quality conversion between all SD, HD or Ultra HD video standards plus reference input for built in re-sync and redundant power supplies. The USB port on the front panel even works as an HD webcam.

\$605

## Connections

### SDI Inputs

1

### SDI Loop Outputs

1

### SDI Outputs

2

### SDI Rates

SD, 1.5G, 3G, 6G and 12G

### HDMI 2.0 Video Outputs

1

### SMPTE 2110 Input / Output

1 x 10G Ethernet

### SMPTE ST 2110 IP Audio Inputs /

### Outputs

16 channels embedded input and output audio on ST-2110 IP video via 10G Ethernet.

### SDI Audio Inputs

16 channels embedded audio.

### SDI Audio Outputs

16 channels embedded audio.

### HDMI Audio Inputs

8 channels embedded audio.

### HDMI Audio Outputs

8 channels embedded audio.

### Analog Audio Outputs

1 x 6.35 mm headphone jack.

### Webcam Outputs

1 x USB-C up to 1080p60

### Reference In

1

### Reference Output

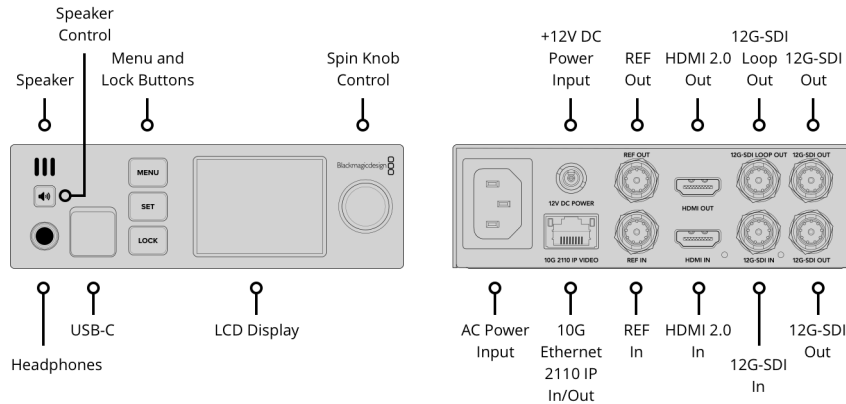
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### Ethernet

Ethernet supports 10/100/1000/10G BASE-T for SMPTE 2110 IP video in and out, configuration and software updates.

### Computer Interface

USB-C for webcam out, updates and configuration



## Video Standards

### SD Video Standards

525i59.94 NTSC, 625i50 PAL

### 2K Video Standards

720p50, 720p59.94, 720p60  
1080i50, 1080i59.94, 1080i60  
1080p23.98, 1080p24, 1080p25,  
1080p29.97, 1080p30, 1080p47.95,  
1080p48, 1080p50, 1080p59.94,  
1080p60,  
1080PsF23.98, 1080PsF24,  
1080PsF25, 1080PsF29.97, 1080PsF30

### Ultra HD Video Standards

2160p23.98, 2160p24, 2160p25,  
2160p29.97, 2160p30, 2160p47.95,  
2160p48, 2160p50, 2160p59.94,  
2160p60  
1080PsF23.98, 1080PsF24,  
1080PsF25, 1080PsF29.97, 1080PsF30

### 4K Video Standards

4Kp23.98 DCI, 4Kp24 DCI, 4Kp25 DCI,  
4Kp29.97 DCI, 4Kp30 DCI,  
4Kp47.95 DCI, 4Kp48 DCI, 4Kp50 DCI,  
4Kp59.94 DCI, 4Kp60 DCI

### SMPTE Compliance

SMPTE 259M, SMPTE 274M,  
SMPTE 292M, SMPTE 296M  
SMPTE 372M, SMPTE 424M,  
SMPTE 425M level A and B,  
SMPTE 2036-1, SMPTE 2048-1,  
SMPTE 2081-10, SMPTE 2081-11,  
SMPTE 2081-12, SMPTE 2082-10,  
SMPTE 2082-11, SMPTE 2082-12 and  
SMPTE ST2108-1

### SDI Metadata Support

RP 188/SMPTE 12M-2 and  
closed captioning.

### Audio Sampling

Television standard sample rate of 48  
kHz and 24 bit.

### Color Precision

8, 10 RGB 4:4:4 in all modes up to  
1080p30 and 8, 10-bit YUV 4:2:2 in  
all modes.

### Color Space

Rec. 601, Rec. 709, Rec. 2020

### HDMI HD Video Standards

720p50, 720p59.94, 720p60  
1080i50, 1080i59.94, 1080i60  
1080p23.98, 1080p24, 1080p25,  
1080p29.97, 1080p30, 1080p47.95,  
1080p48, 1080p50, 1080p59.94,  
1080p60

### HDMI Ultra HD Video Standards

2160p23.98, 2160p24, 2160p25,  
2160p29.97, 2160p30, 2160p47.95,  
2160p48, 2160p50, 2160p59.94,  
2160p62

### HDMI 4K Video Standards

4Kp23.98 DCI, 4Kp24 DCI, 4Kp25 DCI,  
4Kp29.97 DCI, 4Kp30 DCI, 4Kp47.95  
DCI, 4Kp48 DCI, 4Kp50 DCI, 4Kp59.94  
DCI and 4Kp60 DCI.

### HDMI Color Precision

4:2:2

### HDMI Color Space

YUV

## Audio

### Local Audio Monitoring

Front panel audio monitor speaker  
with speaker control button, plus  
6.35 mm headphone socket.

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# IP Video Compliance

**SMPTE 2110-20**  
**(Uncompressed Video)**  
IGMP v2

**SMPTE 2110-21 (Traffic Shaping)**  
Sender: Narrow  
Receiver: Narrow, Wide Synchronous,  
Asynchronous

**SMPTE 2110-30 (PCM)**  
Audio Conformance level: Level C

**SMPTE 2110-40 (Ancillary Data)**  
Full access to entire SMPTE ancillary  
data stream. Includes RP 188/SMPTE  
12M-2, closed captioning and HDR  
static metadata.

**Codec**  
Blackmagic IP10 codec used when  
converting 2160p59.94 and 2160p60  
to 10G 2110 IP video.

**Precision Time Protocol**  
IEEE 1588-2008 (PTP v2)  
ST 2059-1  
ST 2059-2

**NMOS IS-04 Discovery and  
Registration**  
v1.3.2  
Peer-to-peer via mDNS/DNS-SD

**NMOS IS-05 Connection  
Management**  
v1.1.2

**NMOS BCP-002-01**  
Natural Grouping

**NMOS BCP-004-01**  
Receiver capabilities

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# Control

**Built in Control Panel**  
Built in control panel including  
3 buttons, spin knob control and 2.2  
inch color display.

**External Control**  
RJ-45 10Gb/s Ethernet and USB-C.  
REST API over Ethernet for external  
control via HTTP when used with  
REST client applications.

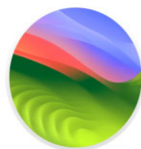
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# Displays

Built in 2.2 inch LCD for monitoring  
video, audio and status plus  
menu settings.

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# Operating Systems



Mac 13.0 Ventura,  
Mac 14.0 Sonoma or later.



Windows 10 and 11.

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## Power Requirements

### Power Supply

1 x Internal 100 - 240V AC 50/60Hz.

### Power Inputs

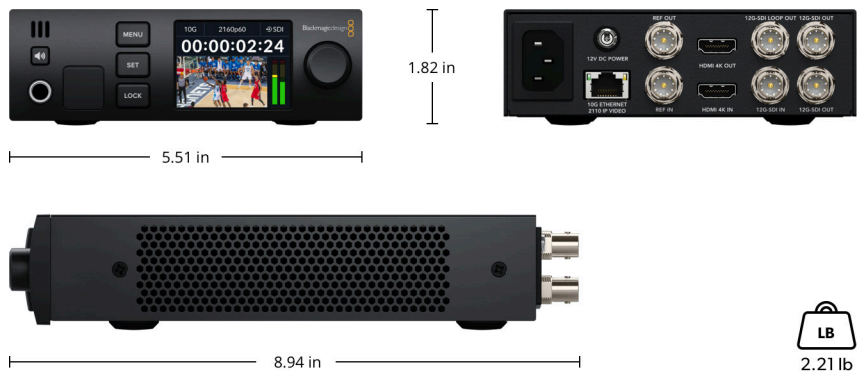
1 x IEC C14 socket for AC power.  
1 x 12V DC Input

### Power Usage

TBC

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## Physical Specifications



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## Environmental Specifications

### Operating Temperature

0° C to 40° C (32° - 104°F)

### Storage Temperature

-20° to 45° C (-4° to 113° F)

### Relative Humidity

0% to 90% non-condensing

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## What's Included

Blackmagic 2110 IP UpDownCross 12G  
Welcome wallet with QR code for software download

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## Warranty

1 Year Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller