

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 Inputs

1

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

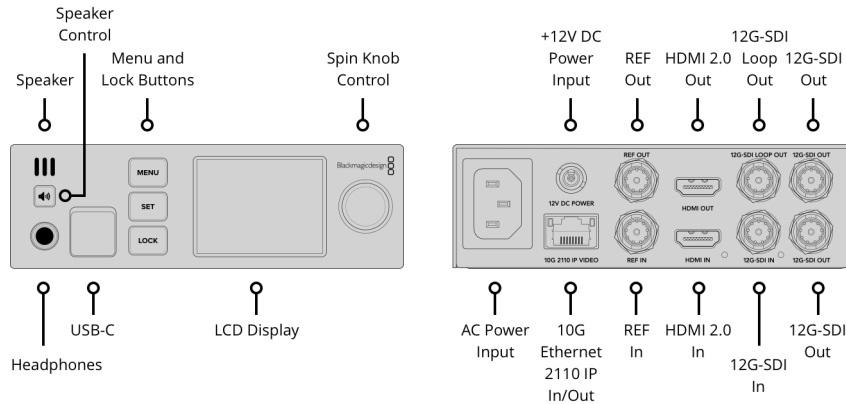
1

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 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.

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

Control

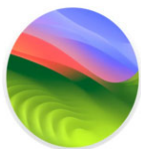
Built in Control Panel
Built in control panel including
3 buttons, spin knob control and 2.2
inch color display.

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.

Displays

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

Operating Systems



Mac 13.0 Ventura,
Mac 14.0 Sonoma or later.



Windows 10 and 11.

Power Requirements

Power Supply

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

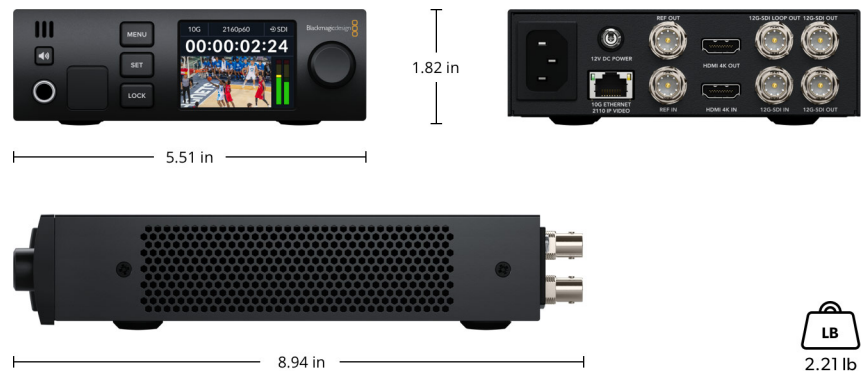
Power Inputs

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

Power Usage

30 W max.

Physical Specifications



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

What's Included

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

Warranty

1 Year Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller