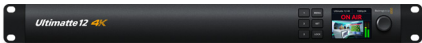


Ultimatte 12 4K



Ultimatte 12 4K is an advanced real time compositing processor designed for keying live action video with next generation broadcast graphics, virtual sets and more. Ultimatte 12 4K features new algorithms and color science, incredible edge handling and color separation, amazing color fidelity, and better spill suppression than ever before. The high performance 12G-SDI design gives you the power to work in Ultra HD and HD with sub pixel processing for an amazing image.

\$2,495

Connections

SDI Video Inputs

8

SDI Video Outputs

9

SDI Video Loop Outputs

7

Reclocked SD, HD, Ultra HD for corresponding inputs.

SDI Rates

270Mb, 1.5G, 3G, 6G, 12G.

ST 2110 Video Inputs

1

ST 2110 Video Outputs

1

Video Input Re-Sync

On all inputs.

Reference Connections

1 x BNC In, 1 x BNC Out, 1 x RJ45 Ethernet
Tri-Sync, Black Burst and PTP.

GPIO

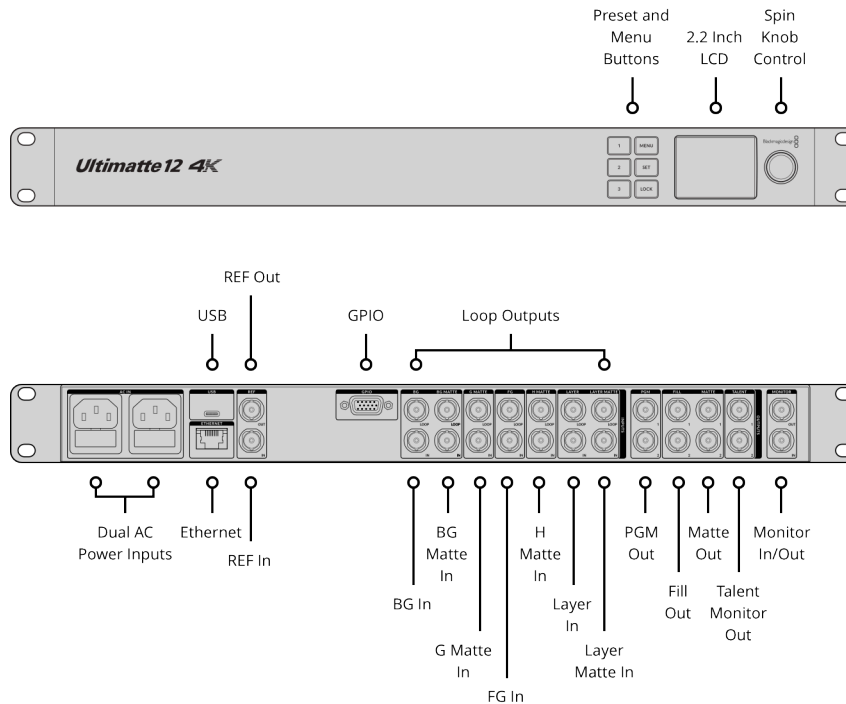
DE15

Ethernet

Up to 10Gb/s for SMPTE 2110 IP video in and out, device control and loading stills into Media Pool.

Computer Interface

1 x USB-C 3.0 for device configuration and software updates.



Standards

SD Video Standards

525i59.94 NTSC, 625i50 PAL

HD Video Standards

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

Ultra HD Video Standards

2160p23.98, 2160p24, 2160p25,
2160p29.97, 2160p30, 2160p50,
2160p59.94, 2160p60

SDI Compliance

SMPTE 259M, SMPTE 292M,
SMPTE 296M, SMPTE 424M,
SMPTE 425M level A and B,
SMPTE 2081-1, SMPTE 2081-10,
SMPTE 2082-1, SMPTE 2110-20,
SMPTE 2110-21, SMPTE 2110-30,
SMPTE 2110-40

Video Sampling

4:2:2

Color Precision

10-bit

Color Space

REC 601, REC 709, REC 2020.

Multiple Rate Support

Auto detection of SD, HD, 6G-SDI and 12G-SDI.

Composite Sources

Foreground

1 x 12G-SDI In with Loop Out
1 x RJ45 Ethernet for SMPTE 2110 IP video

Background

1 x 12G-SDI In with Loop Out
Still from Media Pool

Background Matte

1 x 12G-SDI In with Loop Out
Internal Window
Still from Media Pool

Garbage Matte

1 x 12G-SDI In with Loop Out
Internal Window
Still from Media Pool

Holdout Matte

1 x 12G-SDI In with Loop Out
Internal Window
Still from Media Pool

Layer

1 x 12G-SDI In with Loop Out
Still from Media Pool

Layer Matte

1 x 12G-SDI In with Loop Out
Internal Window
Still from Media Pool

Composite Outputs

Fill

2 x 12G-SDI

Matte

2 x 12G-SDI

Program

2 x 12G-SDI,
1 x RJ45 Ethernet for SMPTE 2110 IP
video

Talent

2 x 12G-SDI

Monitor

Monitor In

1 x 12G-SDI
for monitor cascade

Monitor Out

1 x 12G-SDI

For monitoring Program, Foreground Input, Background Input, Combined Matte, Internal Matte, Fill Out, Layer Input, Background Matte Input, Garbage Matte Input, Holdout Matte Input, Layer Matte Input, Processed Layer Matte, Processed Holdout Matte, Processed Garbage Matte, Processed Background Matte, Screen Correction.

Media Pool

Background Still Image Formats

TGA, TIFF, BMP, PNG, JPG.

Background with Alpha Still Image Formats

TGA, TIFF, BMP.

Layer Image Still Image Formats

TGA, TIFF, BMP, PNG, JPG.

Layer with Alpha Still Image Formats

TGA, TIFF, BMP.

Garbage Matte Still Image Formats

TIFF, BMP, PNG, JPG.

Holdout Matte Still Image Formats

TIFF, BMP, PNG, JPG.

Media Pool Memory

6GB non-volatile internal storage.

Displays

Built in 2.2 inch color display for device name, video preview, video standard audio meters, status and menus.

Control

Front Panel

2.2 inch color display, 3 preset buttons,
3 menu buttons and spin knob.

Control Connection

Network or direct Ethernet connection to a computer running Ultimatte Software Control or Ultimatte Smart Remote 4.

Software Control

Ultimatte Software Control supported on Mac™ or Windows™ computers.

Hardware Control Panel

Ultimatte Smart Remote 4

Custom Control

Ethernet protocol and GPIO pin out included in the [Ultimatte instruction manual](#).

IP 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)

Access to SMPTE ancillary data stream RP 188/SMPTE 12M-2

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

Software

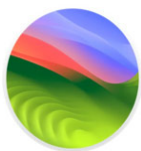
Software Updates

Using USB-C or Ethernet connection to Mac™ or Windows™ computers.

Configuration

Ultimatte IP address is set via the front panel or Ultimatte setup utility connected via USB.

Operating Systems



Mac 13.0 Ventura,
Mac 14.0 Sonoma or later.



Windows 10, 64-bit.
Windows 11.

Power Requirements

Power Supply

2 x Internal 100-240V AC, 50/60Hz

Power Usage

54W

Accessories

Optional Accessories

Ultimatte Smart Remote 4

Physical Installation

1 rack unit height

Physical Specifications



Environmental Specifications

Operating Temperature

0° to 40°C (32° to 104°F)

Storage Temperature

-20° to 60°C (-4° to 140°F)

Relative Humidity

0% to 90% non-condensing.

What's Included

Ultimatte 12 4K

Welcome wallet with QR code for software download

Warranty

1 Year Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller