

## VIDEO

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### Video Processing

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4:2:2 (Y/Pb/Pr), 10-bit

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### Number of Video Channels

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4 channels

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### Video Input Formats

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#### HDMI 4K IN:

2160p/60 Hz, 59.94 Hz, 50 Hz, 30 Hz, 29.97 Hz, 25 Hz, 24 Hz, 23.98 Hz

1080p/60 Hz, 59.94 Hz, 50 Hz, 30 Hz, 29.97 Hz

1080i/59.94 Hz, 50 Hz

720p/60 Hz, 59.94 Hz, 50 Hz

\* HDCP 1.4, 2.2 supported.

\* Conforms to CEA-861-F

\* Color Gamut: Rec.709, Rec.2020

\* Dynamic Range: SDR, HDR PQ (HDR10), HDR HLG

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### Video Output Formats

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#### HDMI 4K OUT:

2160p/60 Hz, 59.94 Hz, 50 Hz, 30 Hz, 29.97 Hz, 25 Hz, 24 Hz, 23.98 Hz

1080p/60 Hz, 59.94 Hz, 50 Hz, 30 Hz, 29.97 Hz

\* HDCP 1.4, 2.2 supported.

\* Conforms to CEA-861-F

\* Color Gamut: Rec.709, Rec.2020

\* Dynamic Range: SDR, HDR PQ (HDR10), HDR HLG

#### HDMI HD OUT:

1280 x 720/60 Hz

\* HDCP 1.4 supported.

\* Conforms to CEA-861-F

\* Color Gamut: Rec.709

\* Dynamic Range: SDR

#### 4K STREAMING:

960 x 540, 1280 x 720, 1920 x 1080, 2560 x 1440, 3840 x 2160

\* Frame Rate (--2560 x 1440): 25 Hz, 29.97 Hz, 30 Hz, 50 Hz, 59.94 Hz, 60 Hz.

\* Frame Rate (3840 x 2160): 25 Hz, 29.97 Hz, 30 Hz.

\* Color Gamut: Rec.709

\* Dynamic Range: SDR

\* Conforms to USB Video Class

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### Still Image:

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Bitmap File (.bmp) Maximum 3840 x 2160 pixels, 24-bit color, uncompressed.

JPEG File (.jpg, .jpeg) Maximum 3840 x 2160 pixels, 24-bit color

PNG File (.png) Maximum 3840 x 2160 pixels, 24-bit color

\* It can be stored up to 8 files in the internal memory.

\* PNG alpha channel supported

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## Video Effects

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Transition: Cut, Mix, Wipe (11 patterns)

Composition: Background, Layer 1 (PinP + Key)(\*1), Layer 2 (PinP + Key) (\*1), DSK (\*2), Logo (\*3)

Other: Multi-View, Output Fade, Output Freeze, Output Capture, Still Image playback, Test pattern output

\*1 Chrominance Key, Luminance Key

\*2 Chrominance Key, Luminance Key, Still image alpha channel

\*3 Chrominance Key, Luminance Key, Still image alpha channel, For 4K STREAMING only. Maximum size is 1920 x 1080.

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## AUDIO

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### Audio Processing

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Sample rate: 24 bits, 48 kHz

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### Number of Audio Channels

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14 Channels

\* MIC x6, LINE x2, HDMI, USB

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### Audio Formats

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HDMI 4K IN : Linear PCM, 24 bits, 48 kHz, 2 ch

HDMI 4K OUT : Linear PCM, 24 bits, 48 kHz, 2 ch

4K STREAMING (Input and Output) : Linear PCM, 16 bits, 48 kHz, 2 ch

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### Audio Effects

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Channel Effects: Auto Gain, High pass filter, Anti-feedback, Noise Gate, De-esser, Compressor, 4-Band PEQ, Delay, Auto Mixing

Master Effects: Reverb, Compressor/Limiter, Loudness Auto Gain Control, 15-band GEQ, Delay

Others: Output fade, Test tone output

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## COMMON SECTION

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### External Media

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USB flash drive (commercially available)

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### Other Functions

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Scene Memory (64 types)

Panel Lock Function

EDID Emulator

Menu language (English, Japanese)

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## CONNECTORS

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### Video Input Connectors

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HDMI 4K IN 1--3, 4-1--4-4: HDMI type A (HDMI 2.0) x 7  
\* HDCP 1.4, 2.2 Supported  
\* Multi-format Supported

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### Video Output Connectors

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HDMI 4K OUT 1--2: HDMI type A (HDMI 2.0) x 2  
\* HDCP 1.4, 2.2 Supported  
\* Multi-format Supported

HDMI HD OUT: HDMI type A (HDMI 1.4) x 1  
\* HDCP 1.4 Supported

4K STREAMING: USB Type-C (R) (USB 3.2 GEN 2 10 Gbps)

4K STREAMING: USB Type-C (R) (USB 3.1 GEN 2 10 Gbps)

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### Audio Input Connectors

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#### Analog:

AUDIO MIC IN 1--4: Combo type (XLR, 1/4-inch TRS phone) balanced, phantom power (DC 48 V, 10 mA Max)

AUDIO MIC IN 5--6: 1/4-inch TRS phone, balanced

AUDIO LINE IN 1--2: RCA phono type

#### Digital:

4K STREAMING: USB Type-C (R)

HDMI 4K IN 1--3, 4-1--4-4: HDMI type A (HDMI 2.0) x 7

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### Audio Output Connectors

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#### Analog:

AUDIO OUT MAIN (L, R): XLR type

AUDIO OUT AUX (L, R): RCA phono type

PHONES: Stereo 1/4-inch phone type

#### Digital:

4K STREAMING: USB Type-C (R)

HDMI 4K OUT 1--2: HDMI type A (HDMI 2.0) x 2

HDMI HD OUT: HDMI type A (HDMI 1.4) x 1

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### Other Connectors

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USB HOST1--2: USB A type

RS-232: 9 pin D-sub type (Male)

LAN: RJ45 type, 100BASE-TX

TALLY: 9 pin D-sub type (Female)

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## **AUDIO INPUT/OUTPUT CHARACTERISTICS**

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### Nominal Input Level

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AUDIO MIC IN 1--6: -64--+4 dBu (Maximum input level: +24 dBu)  
AUDIO LINE IN 1--2: -10 dBu (Maximum input level: +10 dBu)

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### Input Impedance

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AUDIO MIC IN 1--6: 16 k ohms (phantom power OFF), 8 k ohms  
(phantom power ON)  
AUDIO LINE IN 1--2: 2.7 k ohms

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### Nominal Output Level

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AUDIO OUT MAIN (L, R): +4 dBu (Maximum output level: +24 dBu)  
AUDIO OUT AUX (L, R): -10 dBu (Maximum output level: +10 dBu)  
PHONES: 90 mW + 90 mW (32 ohms load)

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### Output Impedance

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AUDIO OUT MAIN (L, R): 600 ohms  
AUDIO OUT AUX (L, R): 1 k ohms  
PHONES: 10 ohms

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### Residual Noise Level (IHF-A, typ.)

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-87 dBu (All faders: Min)  
-85 dBu ([MAIN] Fader: Unity, Channel faders: Unity only one INPUT1  
channel, Preamp gain: Min)  
-57 dBu ([MAIN] Fader: Unity, Channel faders: Unity only one INPUT1  
channel, Preamp gain: Max)  
\* Input 150 ohms terminate  
\* Output Connector: AUDIO OUT MAIN (L, R) jacks

-100 dBu (All faders: Min)  
-99 dBu ([MAIN] Fader: Unity, Channel faders: Unity only one INPUT1  
channel, Preamp gain: Min)  
-80 dBu ([MAIN] Fader: Unity, Channel faders: Unity only one INPUT1  
channel, Preamp gain: Max)  
\* Input 150 ohms terminate  
\* Output Connector: AUDIO OUT AUX (L, R) jacks

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## **OTHERS**

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### Display

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7 inch Graphic color LCD 800 x 480 dots (touch screen) x2

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### Internal Speaker

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Monaural 1 W

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Power Supply

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AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz)

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Power Consumption

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115 W

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Operation Temperature

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+5 to +40 degrees Celsius  
+41 to +104 degrees Fahrenheit

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Dimensions

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436 (W) x 279 (D) x 137 (H) mm  
17-3/16 (W) x 11 (D) x 5-7/16 (H) inches

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Weight (excluding Accessories)

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6.8 kg  
15 lbs

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Accessories

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Startup Guide  
Power cord