



4CH HD LIVE AV MIXER A-PRO-4

For Webcasting & Recording



The Best Quality for Everyone.



for Broadcast
WEB Streaming



The world is now in the age of live video streaming.

Presently, people are becoming more and more interested in “experiences” that can be shared with others rather than “materials,” i.e. finished products.

Within this major trend, live video streaming via the Internet is gaining increased importance. In today’s world, we can promptly share what is happening in front of us on occasions such as meetings, presentations, seminars, events and symposiums, etc. with people having common interests. As such, information sharing in real time is continuously accelerating the evolution of our society.

Live video streaming technologies are supported by devices called AV mixers, which play a core role in audio-visual production. Particularly, the A-PRO-4 has professional-grade SDI, consumer-grade HDMI and analog video inputs, and one of the inputs has a built-in scaler that allows users to connect devices without worrying about resolutions or frame rates. For an external sound source, the unit has one stereo input available for adding a commentary or background music.

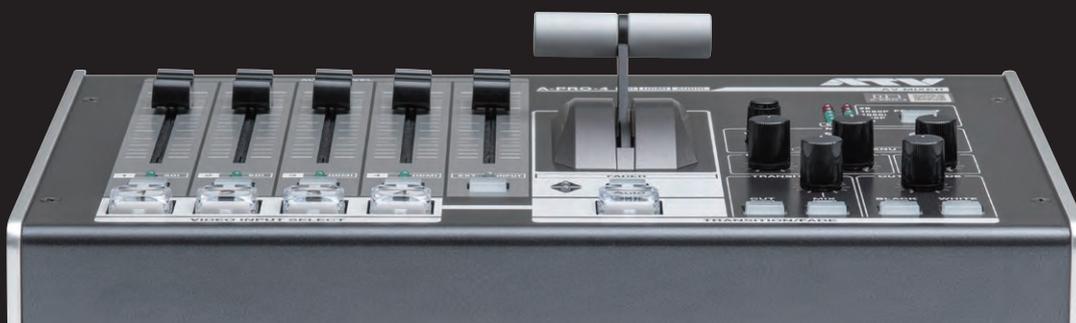
With its easy-operation design, each function is allocated to one button/knob so users can intuitively understand how to operate the unit. The USB terminals on the rear panel can be used directly for web streaming. With your PC/Mac and Internet connection, you can run high-quality live video streaming. (Note: Web streaming software is required separately.) The easy-to-use, professional-quality AV mixer “A-PRO-4” is now available to deliver maximum results to you.



Feel the sensation of having full control of diverse video sources.

Two SDI inputs are available for long-distance transmission and are particularly effective in streaming at large venues. Two HDMI inputs are also available for compatibility with most consumer cameras. Among them, IN 4 has a scaler feature for use with non-AV devices such as a PC. Further, IN 4 can be used as an analog video input, so outdated devices from the old analog age are also compatible.

For video output connectivity, one SDI output and one HDMI output are available to accommodate various needs in the field, e.g. live streaming via USB and field recording. By setting either of the outputs for previewing, you can check the next screen and operate the on-screen menu simultaneously.



A-PRO-4 FEATURES & PERFORMANCE



Easy Operations

For switching between the four video sources, easy-to-understand select buttons are employed to assure simple usability for beginners. Switching is allowed not only for a program's main line but also for preview output.

In addition, the unit has a VIDEO fader feature convenient for transitions and a 100 mm-stroke AUDIO LEVEL fader is available for mixing the five audio inputs. You can fine-tune the levels with ease.



10-bit/4:4:4 Processing for up to 2K/60P

Video input resolutions from 720x480/59.94i to 720P and 1080i/P are fully supported and resolutions up to 2048x1080-60P may also be used.

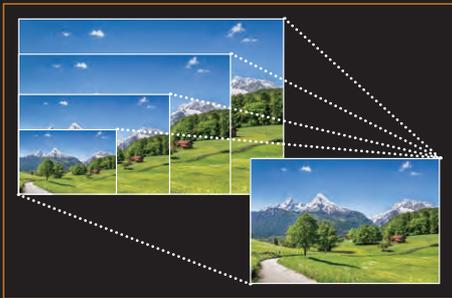
The 10-bit/4:4:4 internal processing provides clear video output with no color bleeding even for output to a projector or LED display.



Streaming Output via USB 3.0

USB terminals on the rear panel provide video and audio streams suited for live video streaming via the Internet. Your PC/Mac will recognize the unit as a USB camera, so you can use it with the web distribution software of your choice.

Output of resolutions of up to 720x480/59.94i with USB 2.0 connection and up to 2048x1080/59.94P with USB 3.0 connection is possible.



Multi-Format Support

The fourth video input has a built-in scaler that converts video resolutions.

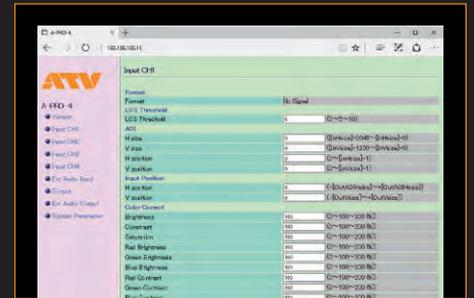
Video signals in system formats non-compatible with this unit are automatically converted by the scaler to a compatible output when connected to the fourth input terminal.



External Synchronization Support

Black burst, binary synchronization, and HD ternary synchronization signals can be used as reference inputs.

This allows you to build a synchronous system using this unit as a core system component, or integrate this unit into an existing system as a high-definition sub-switcher.



Supporting a Wide Range of External Controls

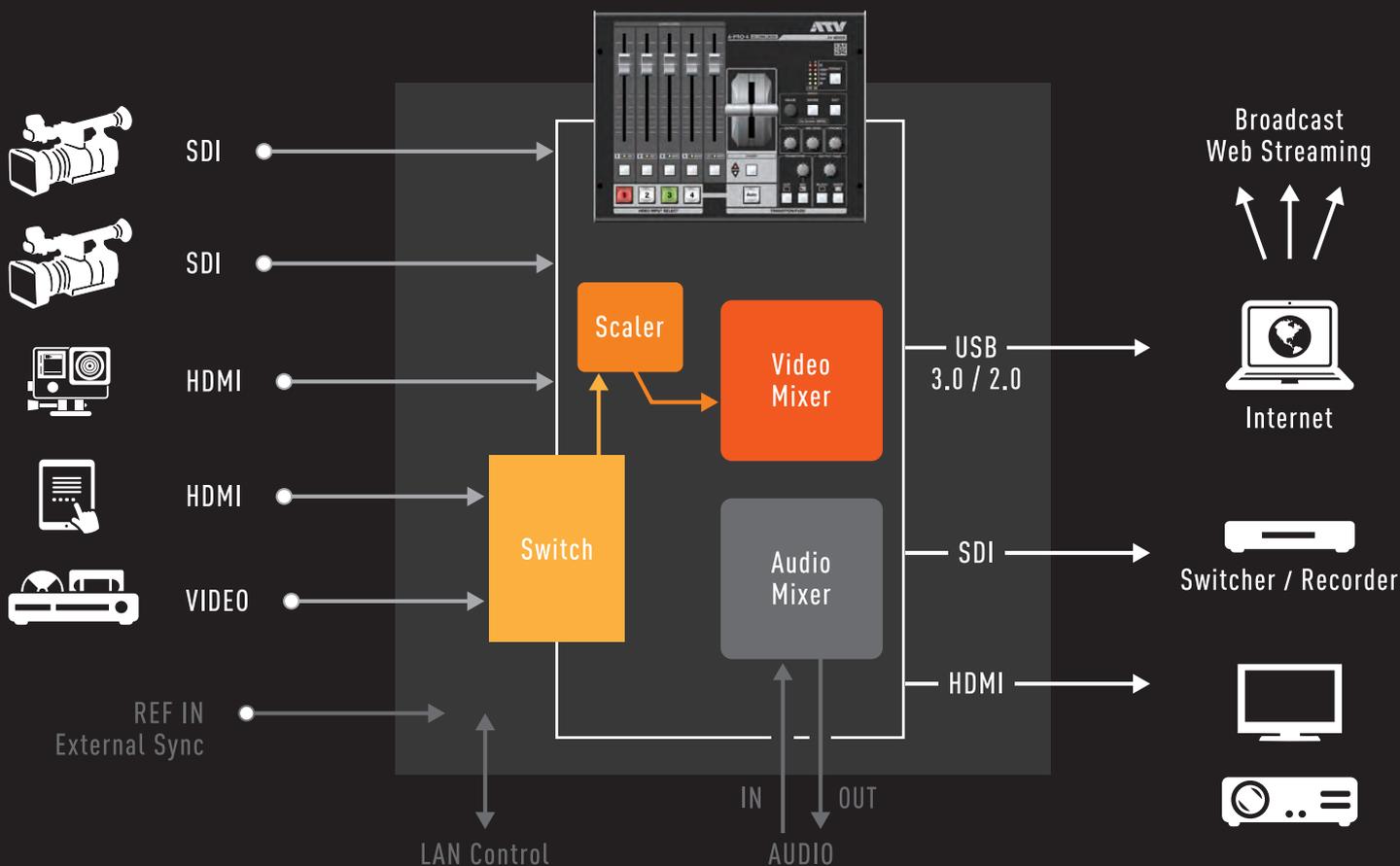
By connecting your PC/Mac with the LAN terminal on the rear panel you can modify the menu parameters as desired via a web browser.

Moreover, the audio IN/OUT terminals may be used as GPI IN/OUT terminals. One audio terminal can accommodate two GPI channels, so you may utilize eight GPI channels in total.

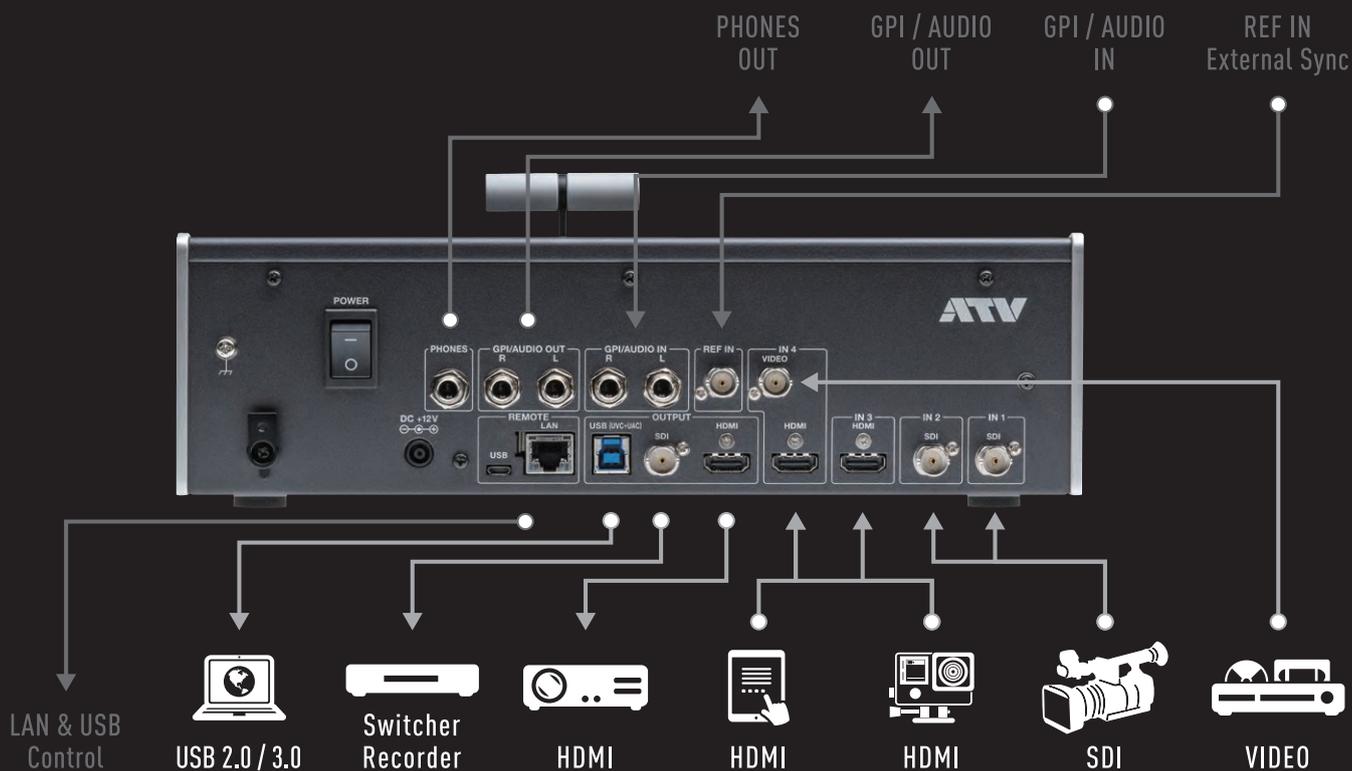
A-PRO-4 EXTERNAL DIMENSIONS



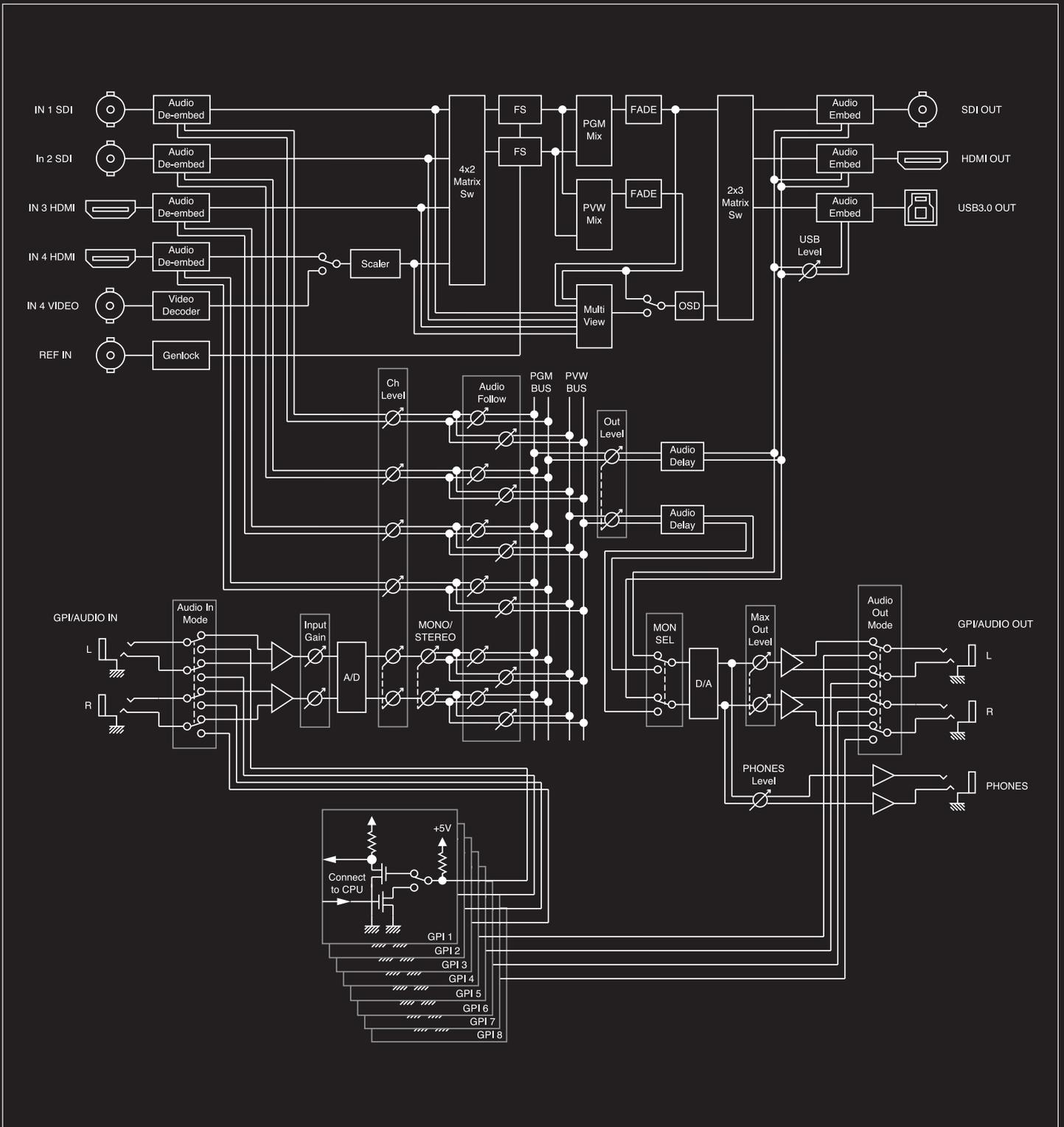
A-PRO-4 SYSTEM CONCEPT



A-PRO-4 INTERFACE



A-PRO-4 BLOCK DIAGRAM



* The multi-view feature will be supported in subsequent versions.

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

A-PRO-4 SPECIFICATION

Input Connectors : SDI IN

Connector	BNC type x 2
Signal Standards	SMPTE ST2081 SMPTE ST424 (SMPTE ST425-AB) SMPTE ST292 SMPTE ST259-C
Video Format	2048x1080/60p/59.94p/50p/48p/47.95p/30p/29.97p/25p/24p/23.98p/ 30PsF/29.97PsF/25PsF/24PsF/23.98PsF (Conforms to SMPTE ST2048) 1920x1080/60p/59.94p/50p/30p/29.97p/25p/24p/23.98p/ 60i/59.94i/50i/30PsF/29.97PsF/25PsF/24PsF/23.98PsF (Conforms to SMPTE ST274) 1280x720/60p/59.94p/50p/30p/29.97p/25p/24p/23.98p (Conforms to SMPTE ST296) 720x480/59.94i, 720x576/50i (Conforms to ITU-R BT.656-3/5)
Color Format	10bit YCC4:2:2, 12bit YCC/RGB4:4:4, 10bit YCCA/RGBAA4:4:4, 12bit YCCA4:2:2:4
Audio Format	Linear PCM, 24/20 bits, 48 kHz, 16 ch (Conforms to SMPTE ST299, ST272-C)

Input Connectors : HDMI IN (IN3)

Connector	Type A (19 pins) x 1
Signal Standards	HDMI1.4
Video Format	2048x1080/60p/59.94p/50p/48p/47.95p/30p/29.97p/25p/24p/23.98p (SMPTE ST2048 Timings) 1920x1080/60p/59.94p/50p/60i/59.94i/50i/30p/29.97p/25p/24p/23.98p, 1280x720/60p/59.94p/50p, 720x480/59.94p, 720x576/50p, 720(1440)x480/59.94i, 720(1440)x576/50i (Conforms to CEA-861-F)
Color Format	10/12 bits YCC4:2:2, 8/10/12bit YCC/RGB4:4:4
Audio Format	Linear PCM, 16--24 bits, 32--48 kHz, 2--8 ch

Input Connectors : HDMI IN (IN4)

Connector	Type A (19 pins) x 1
Signal Standards	HDMI1.4
Video Format	2048x1080/60p/59.94p/50p/48p/47.95p/30p/29.97p/25p/24p/23.98p (SMPTE ST2048 Timings) 1920x1080/60p/59.94p/50p/60i/59.94i/50i/30p/29.97p/25p/24p/23.98p, 1280x720/60p/59.94p/50p, 720x480/59.94p, 720x576/50p, 720(1440)x480/59.94i, 720(1440)x576/50i (Conforms to CEA-861-F) 640x480/60/72/75/85, 800x600/56/60/72/75/85, 1024x768/60/70/75/85, 1152x864/75, 1280x768/60/75/85, 1280x800/60/75/85, 1280x960/60/85, 1280x1024/60/75/85, 1360x768/60, 1400x1050/60/75, 1440x900/60/75/85, 1600x1200/60, 1680x1050/60, 1920x1200/60 Reduced Blanking (Conforms to VESA DMT)
Color Format	10/12 bits YCC4:2:2, 8/10/12bit YCC/RGB4:4:4
Audio Format	Linear PCM, 16--24 bits, 32--48 kHz, 2--8 ch

Input Connectors : REF IN

Connector	BNC type x 1
Signal Standards	B.B. (SMPTE ST318), Bi-Level (ITU-R BT.1358-1), HD Tri-Level (SMPTE ST274, ST296)
Signal Format	1920x1080/59.94p/50p/59.94i/50i (Conforms to SMPTE ST274) 1280x720/59.94p/50p (Conforms to SMPTE ST296) 720x480/59.94p, 720x576/50p (Conforms to ITU-R BT.1358-1) 720x480/59.94i, 720x576/50i (Conforms to SMPTE ST318)

Input Connectors : VIDEO IN

Connector	BNC type x 1
Signal Standards	ITU-R BT.470-6
Video Format	NTSC, NTSC-J, PAL

Input Connectors : AUDIO IN

Connector	1/4" TRS phone type (balanced) x 2
Input Level	-30--+4 dBu
Maximum Input Level	+24dBu
Impedance	150 k / 600 ohms selectable

Output Connectors : SDI OUT

Connector	BNC type x 1
Signal Standards	SMPTE ST2081 SMPTE ST424 (SMPTE ST425-AB) SMPTE ST292 SMPTE ST259-C
Video Format	2048x1080/59.94p/50p (Conforms to SMPTE ST2048) 1920x1080/59.94p/50p/59.94i/50i (Conforms to SMPTE ST274) 1280x720/59.94p/50p (Conforms to SMPTE ST296) 720x480/59.94i, 720x576/50i (Conforms to ITU-R BT.656-5)
Color Format	10bit YCC4:2:2, 12bit YCC/RGB4:4:4 (Valid bits are 10 bits)
Audio Format	Linear PCM, 24/20 bits, 48 kHz, 2 ch (Conforms to SMPTE ST299, ST272-C)

Output Connectors : HDMI OUT

Connector	Type A (19 pins) x 1
Signal Standards	HDMI1.4
Video Format	2048x1080/59.94p/50p (SMPTE ST2048 Timings) 1920x1080/59.94p/50p/59.94i/50i, 1280x720/59.94p/50p, 720(1440)x480/59.94i, 720(1440)x576/50i (Conforms to CEA-861-F)
Color Format	10 bits YCC4:2:2, 8/10 bits YCC/RGB4:4:4
Audio Format	Linear PCM, 24 bits, 48 kHz, 2 ch

Output Connectors : USB3.0 OUT

Connector	USB Type B (Super Speed USB) x 1
Standards	USB 3.0 Super Speed (SS) / USB 2.0 High Speed (HS) USB Video Class 1.1, USB Audio Class 1.0
Video Format	(SS) 2048x1080/59.94p/50p, 1920x1080/59.94p/50p/59.94i/50i, 1280x720/59.94p/50p, 720x480/59.94i, 720x576/50i (HS) 720x480/59.94i, 720x576/50i
Color Format	8 bits YCC4:2:2
Audio Format	Linear PCM, 16 bits, 48 kHz, 2 ch

Output Connectors : AUDIO OUT

Connector	1/4" TRS phone type (balanced) x 2
Output Level	-20--+4 dBu
Max Output Level	+24dBu
Min Load Impedance	20k ohms

Output Connectors : PHONES OUT

Connector	1/4" TRS phone type (stereo) x 1
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Processing

Video Processing	10 bits YCC4:4:4
Audio Processing	24 bits 48kHz

Other Connectors

USB2.0 Connector	Micro USB Type B (Hi-Speed USB) x 1 USB 2.0 High Speed (HS)
LAN Connector	RJ45 (10/100Base-T)
DC IN	Power Voltage : 12--20 V, Power Consumption : 35 W

Others

Dimensions	12-1/8 (W) x 9-11/16 (D) x 4-11/16 (H) inches
Weight	2.9kg, 6 lbs 7 oz (without AC adaptor & AC cord)
Operation Temperature	+0--+40 degrees Celsius, +41--+104 degrees Fahrenheit
Accessories	AC adaptor, Startup Manual Electrical power cords x 5 (for Japan, North America, UK, EU and Australia)

* 0dBu=0.775Vrms

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