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Deliver the programme.
Anytime. Anywhere.

AWS-G500
ANYCAST STATION

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■ ANYCAST STATION



AWS-G500

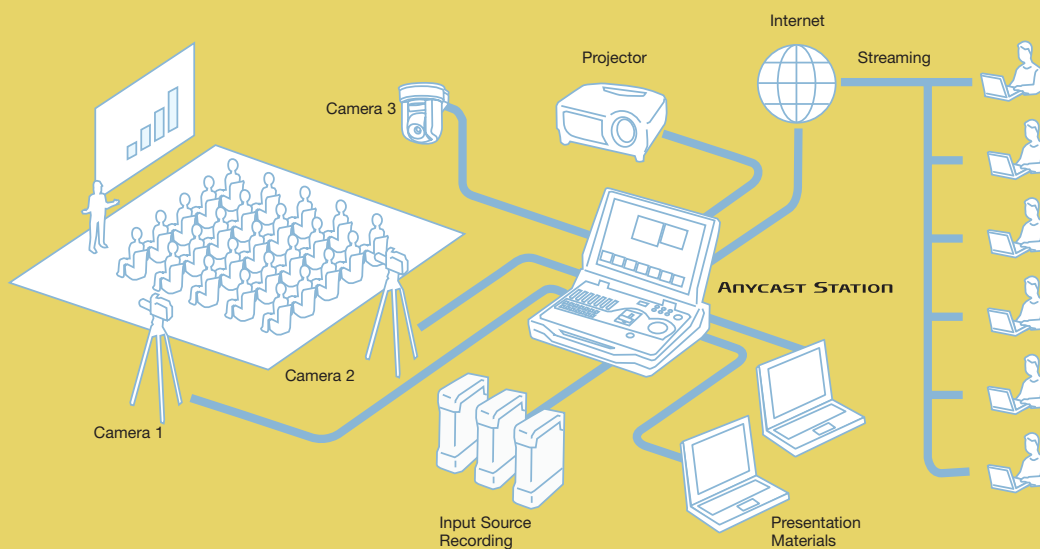
Live Content Producer

The Anycast Station™ Live Content Producer is a development that combines decades of Sony AV expertise together with industry-leading IT technology. Designed as a powerful content creation tool for live event programming, it comprises a high-quality video switcher, an audio mixer, a large LCD display, and a streaming encoder and server – all packed into a briefcase-size chassis weighing only about 17 lb. 10 oz (8 kg).

To accommodate today's growing needs to integrate video, audio, and a variety of PC input sources in live events, the Anycast Station system provides a comprehensive set of AV and IT inputs. These include analogue composite, S-Video, DV Input, and balanced analogue audio as well as computer RGB input. The unique processing of the Anycast Station system allows live switching between these video and computer sources without the use of external line converters or degradation in picture quality.

When it comes to programme delivery, the Anycast Station system is very flexible too. Straight from the Anycast Station system the user can feed programmes to tape or a large venue display, store input sources to hard disk drives for nonlinear editing, or even stream the programme on the web.

With all these unique features, plus a logical design for ultimate ease of use, the Anycast Station system is a tool that can be used by anyone, anytime, and anywhere – including business conferences, press conferences, promotions, seminars, events, live staging and distance learning. Just plug in the power cord, turn on the power, and deliver the programme.



Main Features

All-in-one design

The Anycast Station system comes equipped with a video switcher, an audio mixer, an LCD monitor, and camera control functions, all packed into a compact space-saving design.

This approach eliminates any external wiring and cumbersome signal adjustments, making setup extremely easy and quick. On the large LCD screen, there are two windows for monitoring the programme and preview outputs, together with seven windows to view each individual input source plus one internal still picture source, eliminating the need for multiple picture monitors. These factors make the Anycast Station system a powerful device for producing live events, virtually anywhere and with a minimum production crew. Despite its compact design, each function of the Anycast Station system provides uncompromising power and quality.



1 Video Switcher

Provides:

- 1280 x 1024 100-MHz/4:2:2 8-bit processing
- 6 primary inputs plus one still picture source
- 1 ME with 1 keyer (selectable between Linear Key/Luminance Key/Chrominance Key)
- 1 DSK + 1 fixed station logo

2 Audio Mixer

Provides:

- 48 kHz/24-bit processing
- 6 stereo channel input mixing
- 6 channel faders and 1 master fader

3 Access Buttons

Provides:

Pressing an access button calls up the control menus of the associated input to the LCD screen. A variety of video and audio parameters settings can be made.

4 Mixer Output Controls

Provides:

Provides controls for the audio monitor output level, talkback On/Off, and dimmer On/Off of audio monitor, built-in speakers, and headphone output.

5 On-line Button

Triggers or stops the following functions.

- Streaming distribution
- Recording of input sources or PGM output to compatible hard disk drives
- Recording of video-on-demand files of the streaming content

6 Menu Operation / Camera Control

General menu selection/settings are made using the menu button and jog roller.

This area also provides control functions for compatible Sony Pan / Tilt / Zoom cameras.

The position controller allows Pan / Tilt control of compatible Sony Pan / Tilt / Zoom cameras while the ten keys are for camera position memory store / recall. VISCA control is used to provide Zoom, Iris, Tilt and Focus control functions. Six or more position memories are available to store Pan/tilt/Zoom settings.

7 Device Control

Provides basic control functions of external hard disk drives used for playing back video material.

The jog and shuttle dials are also used for focus and zoom control of compatible Sony Pan / Tilt / Zoom cameras.

8 Talkback Microphone

Used for talkback purposes. An intercom connector is also provided on the rear panel should the use of an intercom system be preferred.

9 Wireless Keyboard (Turned Over)

Used for typing system setup parameters and text when using the Text Typing Tool software.

A Source Viewer

Displays the thumbnail video of each input source. The windows of the sources selected for PGM out and PVW out are highlighted in red and amber, respectively.

B Streaming Display

Displays the parameters, current server status of the streaming video, and URL of the Anycast Station system you are operating.

C PGW Viewer

Displays the source currently distributed or presented.

D PVW Viewer

Displays the next source selected for output after the transition.

E Effect Display

The currently selected effect pattern is indicated with an effect icon. Effect and DSK transition durations are also displayed.

F Camera operation Guides

Displays guides for controlling compatible Sony Pan/Tilt/Zoom cameras such as zoom, pan, tilt, focus, and iris. The camera position memory numbers/names of the camera selected on the 'NEXT' button row are also displayed.

G Audio Level Display and Key On Indicator

Displays either the audio output levels of PGM, Mix, Aux1, and Aux2, or the status of the key; on or off. H: Built-in Stereo Speakers

H Built-in Stereo Speakers



ANYCAST STATION

Main Features



Easy and integrated operation

The Anycast Station system makes live event programming as simple as possible. This is because the Anycast Station system requires very little or no technical knowledge of switcher and mixer setup and operations due to its extremely intuitive control surface and large LCD display.

With the Anycast Station system, switching between the desired input signals is extremely easy. This is because all input sources, as well as the preview and programme outputs, are shown on one large LCD screen – simply select the next desired signal from the 'NEXT' button row and slide the transition fader or hit the 'Cut' button.

The window frames of the input sources chosen for the programme and preview outputs are highlighted in the same colour as the programme and preview window markers. This means that operators have complete peace of mind knowing that the correct inputs have been selected. A variety of preset effect patterns are available for source switching transitions as well as for inserting keys.

The large LCD panel display also provides a comfortable visual environment which makes parameter adjustments and other control adjustments as easy as possible. For example, entering characters for source names, network settings and other numerical data is easily achieved by referring to the indications on the LCD display. Audio EQ adjustments and input video-level adjustments are also performed on the display using easy-to-understand graphical menus.

What's more, remote control of one or more compatible Sony Pan / Tilt / Zoom cameras is also simple, since the Anycast Station system allows Pan and Tilt adjustments from its position controller, in addition to Iris, Focus, and Zoom control using the jog and shuttle dials.

The Anycast Station system comes with "Text Typing Tool" software, which is controlled via an easy-to-use GUI displayed in full size on the LCD screen. This GUI can be easily toggled between the main GUI of the Anycast Station system.

The Text Typing Tool software allows operators to easily generate still text for superimposition on the programme output using the DSK or Keyer. In addition, Wipe*1 and Dissolve effects can be used for the overlaying of text. A number of text files can be created and stored in advance for instant recall during the live event, and it is possible to install true type fonts from third parties*2.

Simply put, the Anycast Station Live Content Producer combines creative power and ease of operation in one integrated production system.



Text Typing Tool

Simulated images

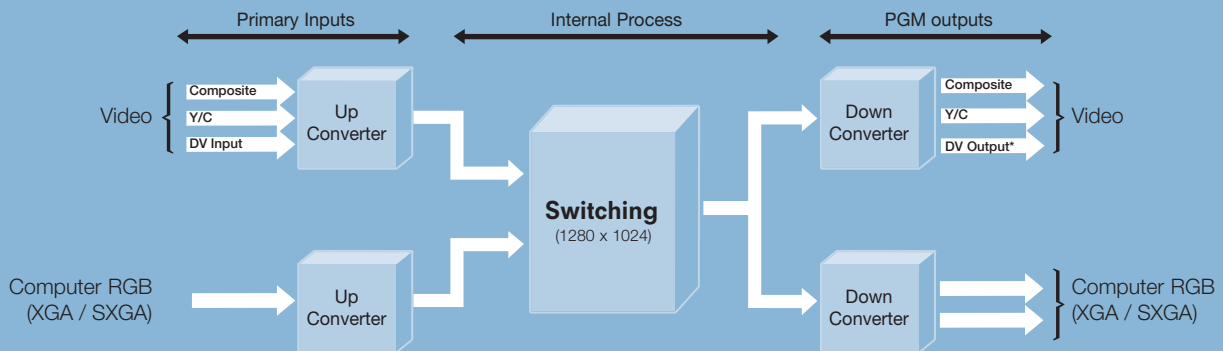
*1 Please contact your nearest Sony office or authorized dealer for the availability of the "Text Typing Tool".

*2 Please contact your nearest Sony office or authorized dealer for supported fonts.

Seamless switching between video and PC sources

In live events, there's no telling what types of signal sources need to be presented or distributed. With the Anycast Station system this dilemma is a thing of the past. The Anycast Station system allows live switching between a variety of signal sources – from standard definition video (Analogue composite, S-Video, DV) to PC images with various resolutions. Two important features make this possible – the sophisticated built-in line converters and the high-resolution internal processing.

Each input source supplied to the Anycast Station system is up-converted and processed within a 1280 x 1024 progressive domain to allow switching between sources of different resolutions while keeping picture degradation to a minimum. The programme can be output from a variety of interfaces including Analogue composite and S-Video for video, and D-Sub 15-pin outputs for projectors and Plasma displays.



*For DV PGM output, the DV connector on the BKAW-570 SD Video Interface Module must be used.

Flexible video input configurations

As standard, the Anycast Station system offers the following video and PC inputs. These are provided as interface modules installed in the slots of its rear panel.

- **Primary inputs 1 to 4:** Analogue composite, S-Video, DV
- **Primary inputs 5 to 6:** RGB (XGA, SXGA)

Should a different input configuration be required, the interface modules are also provided as optional accessories, allowing users to configure the system exactly as required. What's more, the Anycast Station system allows each input on these modules to be assigned to any one of the primary inputs via simple menu settings.

Left Side Panel Connectors



Rear Panel Connectors

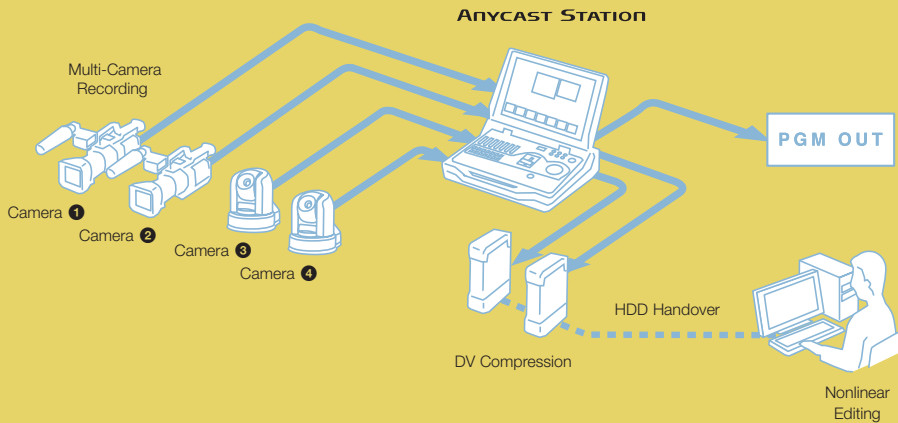


Main Features



Multi-camera recording for convenient nonlinear editing

During a live event, each signal source supplied to the Anycast Station system's primary inputs can be recorded to external hard drive storage^{*1}. The Anycast Station system allows synchronised recording of two primary input sources to a third-party IEEE1394-interface-equipped hard disk drive^{*2} connected to its rear panel. After the event, connecting these hard disk drives to an IEEE1394-equipped compatible nonlinear editor^{*1} allows editing to start very quickly, with the benefits of using hard drive storage to feed the source material.



TM *2 *1 Please contact your nearest Sony office or authorized dealer for further information.
ⁱ *2 i.LINK is a Sony trademark used only to designate that a product is equipped with an IEEE 1394 connector. All products with an i.LINK connector may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connector for information on compatibility, operating conditions, and proper connection.

Streaming Encoder and Streaming Server

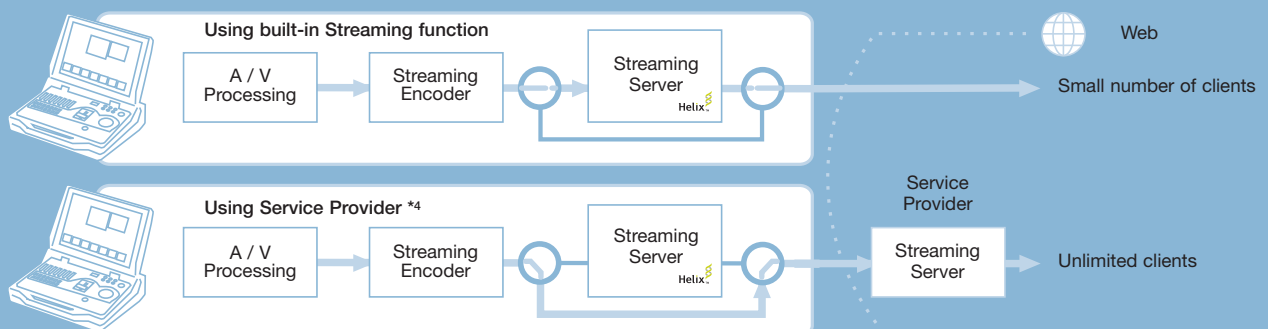
The Anycast Station system provides a built-in Streaming Encoder and Streaming Server as an optional feature. The Streaming Encoder function allows the high-quality programme output of the Anycast Station system to be streamed in real-time – with minimum degradation and through very simple procedures – for distribution over the Internet, LANs, or leased lines. When the number of clients is relatively small, the built-in Streaming Server function allows the streamed video to be distributed right

from the Anycast Station system without needing an external streaming server connection. The following streaming functions are provided:

- **Codec:** Real Video and audio encoders
- **Streaming server:** Helix DNA Server
- **Bit rate:** 50 to 700 kbps
- **Resolution:** 160 x 120, 240 x 180, 320 x 240

Since the built-in Streaming Encoder also allows connection to external streaming servers^{*3}, by signing up with a streaming service provider, the live event can further be distributed to hundreds or even thousands of viewers.

^{*3} For inquiries on the streaming encoder/server option, please contact your nearest Sony office or authorised dealer.



*4 Please contact your nearest Sony office or authorized dealer for availability.

Applications



A range of features make the AnyCast Station system suitable for virtually limitless applications.

The following are typical examples.

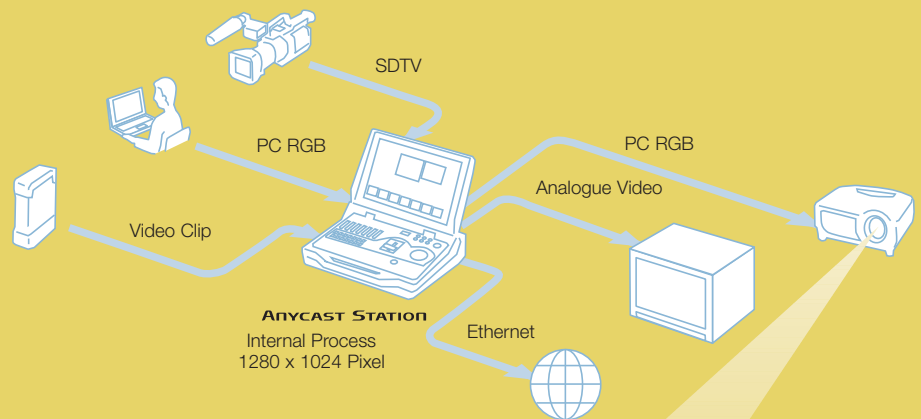
- Business and press conferences
- Product promotion
- Corporate videos
- Event staging
- Live stages
- Seminars
- Distance learning

Example: Large projection application

The AnyCast Station system is a convenient live content creation system that allows easy integration of PC images, such as Microsoft PowerPoint slides and Excel sheets, into live video programming. The AnyCast Station system is designed such that PC image quality and/or video quality are not degraded during source switching, keeping the final programme output quality at its best. Since image quality is important when displaying presentations on large projection systems, the AnyCast Station system serves as a powerful tool in such applications. The preview monitor on the LCD screen further assists in selecting the next source to be put on screen, allowing for a very smooth, seamless presentation.

What's more, by preparing video clips to be used in the presentation on third-party hard disk drives, operation of the entire presentation becomes much smoother, especially compared to using conventional tape-based playback devices. And, of course, using the built-in streaming capability or signing up with a streaming service provider allows the impressive screen projection to be distributed across the web, delivering the message wherever desired.

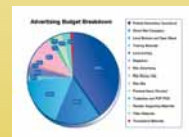
Large projection Application



Camera



Video Clip



Power point

Optional Accessories

BKAW-550

PC Video Interface Module



BKAW-570

SD Video Interface Module

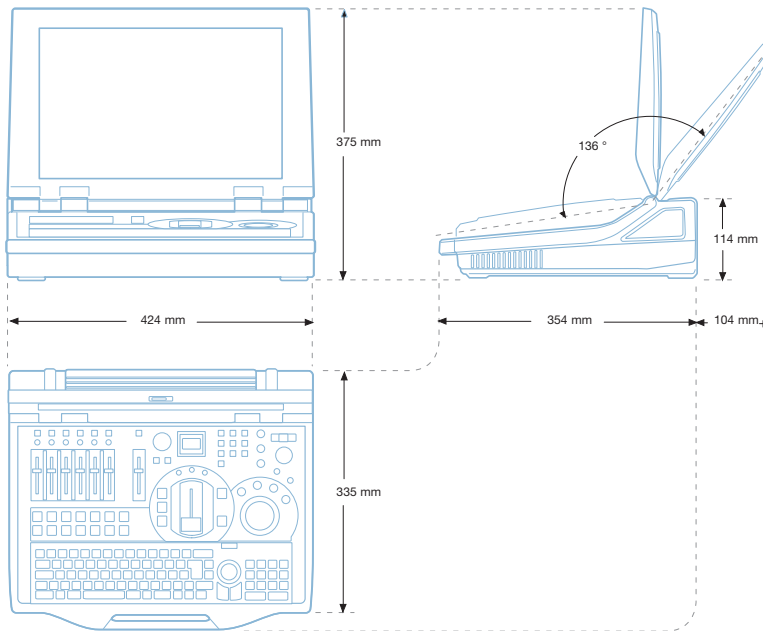


BKAW-580*

Serial Digital Interface Module

* Please contact your nearest Sony office or authorized dealer for availability.

Dimensions



Functions

Video Switcher

Configuration	6 Primary inputs and 1 Internal Still Picture 1 M/E + 1 Keyer + DSK + LOGO
Input Level Control	Lum Level / Lum Offset(Setup) / Chroma Level / Hue (NTSC only)
Video Effect	Transition: Mix, Wipe Patterns 16 Animation: Picture in Picture Patterns* 8 <small>*Please contact your nearest Sony office or authorized dealer for availability.</small> Fade to Black
Key source	Keyer: Input Signals or Internal Still Picture DSK: Internal Still Picture LOGO: Internal Still Picture
Key Type	Keyer: Luminance Key / Chroma Key* / Alpha Channel <small>*Please contact your nearest Sony office or authorized dealer for availability.</small> DSK: Luminance Key / Alpha Channel LOGO: Luminance Key / Alpha Channel
Internal Still Picture	Matte, Colour Bar (SMPTE/EBU) Import Picture Format: BMP, TIFF, TGA, JPG
Picture Aspect	4:3 / 16:9* <small>*Please contact your nearest Sony office or authorized dealer for availability.</small>

Audio Mixer

Configuration	Input: 8 Monaural inputs or DV Stereo Audio Mixing: 6 Stereo Mixing Output: PGM (Stereo) / MIX (Stereo) / AUX1 / AUX2
Input Control	Input Trim: -15dB to +15dB Filter: High Cut 8kHz, Low Cut 100Hz EQ: 3 Band Parametric Equalizer Limiter: 100:1 Compressor: 2:1 Pan
Tone Signal	100Hz, 440Hz, 1kHz, 10kHz

Camera Control

Recommended Camera	BRC-300 / EVI-D100 / EVI-D70 BRC-300P / EVI-D100P / EVI-D70P
Max. Controllable cameras	Up to 6 Cameras
Snap Shot Memory	Memory: 6 Items: Pan / Tilt / Zoom / Focus / Iris
Control Tool	NEXT Button / Pointer / Jog Shuttle Dial

Streaming

Streaming Control	Online Button for starting Streaming
Meta Data Description	Title, Author, Copyright
Movie during preparing broadcast	Sony Original Movie "Sony Network Tunnel"

Text Typing Tool

Resolution	1280x 960 RGB 8 bit
Objects	Text, Line, Background Colour
Modification	Bold, Italic, Underline Edge Border
Font	Three English True Type Font
Import format	True Type Fonts (.ttf) English fonts are acceptable.
Export format	TIFF, TGA
Colour Tool	RGB/HSB Slider type, Colour Picker type
Others	Kerning, Centering, Ordering, Safe Zone <small>* Please contact your nearest Sony office or authorized dealer for more information.</small>

Specifications

General

Model	AWS-G500
Power Requirements	AC 100-240 V, 50/60 Hz
Operating Voltage	AC 90-260 V, 47/63 Hz
Power Consumption	160 W
Operating Temperature	5 to 40 °C (42 to 104 °F)
Dimensions (W x H x D)	424 x 114 x 354 mm (16 3/4 x 4 1/2 x 14 inches)
Mass	Approximately 8.0 kg (17 lb 10 oz)

Video Signals

VIDEO INPUTS (in ex-factory configuration)

Composite	BNC Type x 4 Video: 1.0 Vp-p, 75 Ω, Sync negative
S-Video	DIN Type x 4 Y: 1.0 Vp-p, 75 Ω, Sync negative C: 0.286 Vp-p at burst, 75 Ω (NTSC) C: 0.3 Vp-p at burst, 75 Ω (PAL)
RGB	D-Sub Shrink 15pin Type x2 (Female)

VIDEO OUTPUTS

Composite	BNC Type x1 Video: 1.0 Vp-p, 75 Ω, Sync negative
S-Video	DIN Type x 1 Y: 1.0 Vp-p, 75 Ω, Sync negative C: 0.286 Vp-p at burst, 75 Ω (NTSC) C: 0.3 Vp-p at burst, 75 Ω (PAL)
RGB	D-Sub Shrink 15pin Type x2 (Female)
REF OUT	BNC Type x 2 Sync: 0.286 Vp-p, 75 Ω, Sync negative (NTSC) Sync: 0.3 Vp-p, 75 Ω, Sync negative (PAL) C: 0.286 Vp-p at burst, 75 Ω (NTSC) C: 0.3 Vp-p at burst, 75 Ω (PAL)

VIDEO INPUTS/OUTPUTS

DV IN/OUT	IEEE 1394 6pinx4 IEC 61883-2 equiv.
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VIDEO SIGNALS PERFORMANCE

Quantization and Sampling Frequency (SD Video)	8 bit Y: 13.5MHz R-Y/B-Y: 6.75MHz
Frequency Response	NTSC: 0 to 4.2MHz +1dB - 3dB PAL: 0 to 4.8MHz +1dB - 3dB
S/N Ratio	50 dB or more (Composite Y)
Y/C Delay	Less than 50ns
REF OUT Frequency Accuracy	Within 50 ppm
RGB Preset Signals	XGA 60Hz (VESA DMT1024x768 60Hz) XGA 75Hz (VESA DMT1024x768 75Hz) SXGA 60Hz (VESA DMT1280x1024 60Hz) SXGA 75Hz (VESA DMT1280x1024 75Hz) Input Only

HDD Port

i.LINK (in ex-factory configuration)	IEEE 1394 S400 6pin Type x 2 HDD IF: SBP2
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HDD RECORDING / PLAYBACK *1

Codec	DV
Recording Format	DV (RAW DV)*2
Recording Source	Video: SD Video Inputs / PGM Audio: Inputs(Stereo) / PGM Audio(Stereo)

*1 Please contact your nearest Sony office or authorized dealer for the availability.
*2 Please contact your nearest Sony office or authorized dealer for other supported formats.

Supplied Accessories

OPERATING INSTRUCTIONS

Keyboard	85 keys + Pointer Infrared communication Powered from AWS-G500: +5 V Battery operation: CR2032 or 2032H*
Cell Battery	CR2032 x 2
Pin to BNC Connector	x4

Audio Signals

AUDIO INPUTS

Analogue Inputs 1-2	XLR/TRS Combo Type x 2 Ref. Level: +4 dBu, -20 dBu, -44 dBu Mic. Power: +48 V
Analogue Inputs 3-6	TRS Type (Balanced) x 4 Ref. Level: +4 dBu, -20 dBu, -44 dBu
Analogue Inputs	7-8 Pin x 2, Ref. Level: -10 dBu

AUDIO OUTPUTS

PGM OUT	TRS Type x 2, Ref.: +4 dBu, Impedance: 150 Ω
MIX OUT	Pin Type x 2, Ref.: -10 dBu, Impedance: 470 Ω
AUX OUT	TRS Type x 2, Ref.: +4 dBu, Impedance: 150 Ω
MONITOR OUT	TRS Type x 2, Ref.: +4 dBu, Impedance: 150 Ω
HEADPHONES	1/4" Stereo Phone Jack Type x 2 70mW x 2, Impedance: 47 Ω
INTERCOM	D-Sub 9-pin Type (Female) Original Parallel I/O

AUDIO SIGNALS PERFORMANCE

Sampling Frequency	48kHz x128 over sampling (A/D)48kHz/32kHz(DV IN)
Quantization	24 bit (A/D, D/A), 32/40bit (DSP)
Frequency Response	(MIC/LINE) 20Hz to 20kHz +0.5dB to - 2dB
THD (LINE -10dBu 1kHz)	0.1% or less
Dynamic Range	90 dB or more

Other Interfaces

NETWORK	RJ-45 Type x 1, 10 base-T/100 base-TX
USB	USB A Type x 2, USB equiv.
RGB(GUI)	D-Sub Shrink 15 pin (Female), 1280 x 800 60 Hz
REMOTE	D-Sub 9 pin (Male), RS-232C
FACTORY USE	D-Sub 15 pin (Male), Original Parallel I/O
MEMORY STICK	Memory Stick™ Slot Memory Stick Pro/Pro Duo/ are not supported.
VISCA OUT	DIN 8pin Type x 1 Sony VISCA camera commands are supported.
LCD	15.4" High Brightness LCD 1280 x 800 60 Hz
Speaker	Built-In Speaker x 2 Size: 20x40 (mm)

STREAMING PERFORMANCE

Codec	Real Video 9, Real Audio 8
Streaming Server	Helix DNA Server
Protocol	rtsp (Streaming), UDP, TCP, HTTP (Transport)
Audio Sampling Frequency	44.1kHz
Resolution	160x120, 240x180, 320x240
Bit Rate (Video+Audio)	Compression Scheme: Variable Bit Rate Preference: Average (Max. Bit Rate) 34kbps(56kbps) / 50kbps(64kbps) / 150kbps(180kbps) / 225kbps(256kbps) / 350kbps(700kbps) / 450kbps(900kbps) / 700kbps(1400kbps)
Frame Rate	15fps (Typical) *

* The Anycast Station automatically selects the frame rate according to bit rate and picture resolution. Therefore the frame rate cannot be manually selected.

Distribution Delay	10 seconds or more (inc. player's minimum buffering delay)
Client Number	34, 50, 150kbps: Up to 20 225, 350kbps: Up to 10 450, 700kbps: Up to 5 (This number is influenced by network condition.)

OPTIONAL ACCESSORIES

BKAW-550 PC VIDEO INTERFACE MODULE

RGB	D-Sub Shrink 15pin Type x 2 (Female)
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BKAW-570 SD VIDEO INTERFACE MODULE

Composite	BNC Type x 2 Video: 1.0 Vp-p, 75 Ω, Sync negative
S-Video	DIN Type x 2 Y: 1.0 Vp-p, 75 Ω, Sync negative C: 0.286 Vp-p at burst, 75 Ω (NTSC) C: 0.3 Vp-p at burst, 75 Ω (PAL)
i.LINK	IEEE 1394 S400 6pin Type x 2 HDD IF: SBP2



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