

DOCUMENT D : Caractéristiques du mélangeur Grass Valley KAYAK HD.

Model	Frame Size	M/Es ¹	Inputs	Outputs ²	GPI Inputs	GPI/Tally Outputs	MatchDef Inputs
100C	4 RU	1	24-48	12-24	8-16	32-64	Up to 8 ³
150C	4 RU	1.5	24-48	12-24	8-16	32-64	Up to 8 ³
200C	4 RU	2	48	24	16	64	Up to 8 ³
250C	4 RU	2.5	48	24	16	64	Up to 8 ³
200	8 RU	2	48-96	24-48	16-32	64-128	Up to 16 ³
250	8 RU	2.5	48-96	24-48	16-32	64-128	Up to 16 ³
300	8 RU	3	72-96	36-48	24-32	96-128	Up to 16 ³
350	8 RU	3.5	72-96	36-48	24-32	96-128	Up to 16 ³
400	8 RU	4	96	48	32	128	Up to 16 ³
450	8 RU	4.5	96	48	32	128	Up to 16 ³

¹Half M/Es include cuts and mixes, no wipes or iDPM, with simple linear luminance keyers without chroma keys or freeze-frame buffers.

²Video outputs programmable as ME, program, or AUX bus outputs.

³Up to 4 per M/E and up to 4 per optional I/O expander module.

Kayak HD/Kayak SD Video Standards

HD Mode ⁴	SD Mode
1080i 29.97/30	SMPTE 274M Table 1-4, 5
1080i 25	SMPTE 274M Table 1-6
1080pSF 23.976/24/25/29.97/30	SMPTE 211 Table 1-15, 16
720p 50/59.94/60	SMPTE 296 Table 1-1, 2

⁴Available on Kayak HD models only. Kayak SD models have SD production modes only, but can accept HD sources with MatchDef option.

Serial Digital Video Inputs

- Formats:
 - ITU-T R656
 - SMPTE 259M, 270 Mb/s
 - SMPTE 292M, 1.5 Gb/s
- Return loss: > 15 dB, 5 MHz to 1.5 GHz
- Type of connector: 75Ω BNC (SMPTE 259M)
- Interface:
 - HD video formats SMPTE 292M-1998
 - SD video formats SMPTE 259M-1997
- Nominal amplitude: 800 mV p-p terminated
- Autophasing range: TBD
- Channel coding: conforms to SMPTE 259M, SMPTE 292M
- Ancillary data: blanked or passed (user selectable)⁵
- Embedded audio: blanked or passed (user selectable)⁵
- EDH: blanked
- Input Impedance 75Ω

- Max. cable length:
 - HD video 100m using Belden 1694A type cable
 - SD video 300m using Belden 1694A type cable

Serial Digital Video Outputs

- Format:
 - ITU-R601/656
 - SMPTE 259M, 270 Mb/s
 - SMPTE 292M, 1.5 Gb/s
- Return loss: >15 dB, 5 MHz to 1.5 GHz
- Type of connector: 75Ω BNC (SMPTE 259M)
- Interface:
 - HD video formats SMPTE 292M-1998
 - SD video formats SMPTE 259M-1997
- Nominal amplitude: 800 mV p-p across 75Ω

- Rise and fall times: 400 to 1400 ps
- 75Ω termination between 20% and 80% amplitude
- Timing jitter: ≤ 1 UI (HD, SD)
- Alignment jitter: < .2 UI (HD, SD)
- Output impedance: 75Ω
- DC offset: <50 mV with 75Ω termination

Analog Reference Input

- Video standard:
 - For HD video: Tri-level sync, analog equivalent to the standard being used
 - For SD video: color black, analog equivalent to the standard being used
- Return loss: >40 dB, up to 5 MHz
- Connectors: 2 each BNC loop-through for both HD and SD inputs
- Impedance: 75Ω external termination

Supported Control Protocols

- VTRs (BWV-75)
- AMP (advanced media protocol) for Profile[®] PVS, Profile XP Media Platform, K2[™], M-Series[™], and Turbo[™] DDR systems RS-422 serial
- Video servers (Louth VDCP, Odetics)
- Routers/routing control systems (Trinix[™], Venus[™], Triton[™], and third-party routers; Jupiter[™] and Encore[™] router control systems)
- Control systems (Andromeda[™] and third-party systems)
- Grass Valley Under Monitor Displays (serial tally for UMD). Requires Andromeda system or third-party tally box such as Tally Display or Image Video
- Grass Valley external remote AUX Panels (CP-300 Series)
- ESAM II for audio-follow-video applications
- Edit controllers (native and Grass Valley Model 100 and 200)

- DOCUMENT E : Caractéristiques du magnétoscope HDCAM SR SRW-5000.

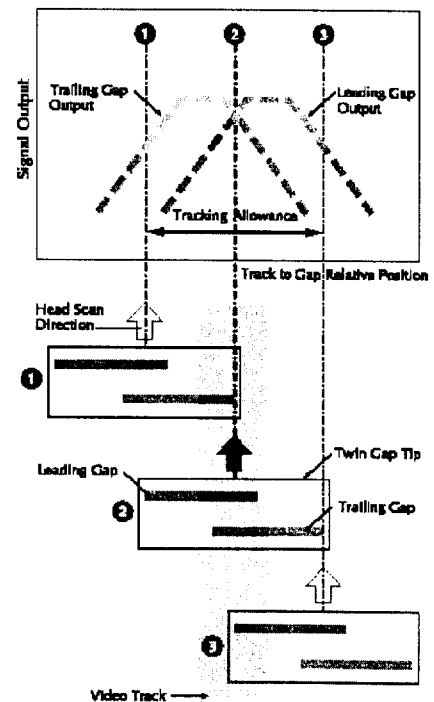
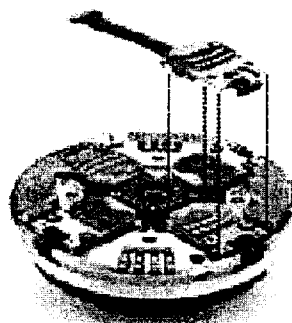
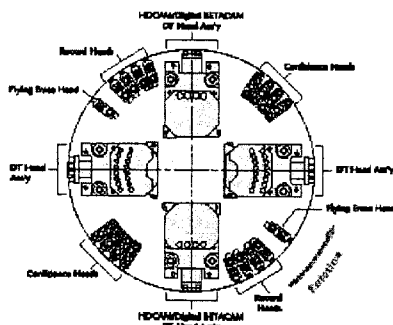
Internal Format-Conversion Capability

REC/PLAY Tape Format			HD-SDI OUT		SD-SDI OUT	HD-SDI (format conv. out) (requires optional HKSR-5001)
HDCAM-SR	1080/4:4:4**	23.98PsF	1080/4:4:4	23.98PsF	-	1080/4:2:2/23.98PsF
		24PsF		24PsF	525/59.94i*	1080/4:2:2/59.94i
		25PsF		25PsF	-	720/4:2:2/59.94P
		29.97PsF		29.97PsF	-	1080/4:2:2/24PsF
		30PsF		30PsF	625/50i*	1080/4:2:2/60i
		50i		50i	525/59.94i*	720/4:2:2/25PsF
	720/4:2:2	59.94i	720/4:2:2	59.94i	525/59.94i*	1080/4:2:2/59.94i
		60i		60i	720/4:4:4/59.94P	
		50P		50P	-	1080/4:2:2/60i
		59.94P		59.94P	625/50i	1080/4:2:2/50i
					525/59.94i	1080/4:2:2/59.94i
					525/59.94i*	720/4:2:2/59.94P
HDCAM or HDCAM-SR	1080/4:2:2	23.98PsF	1080/4:2:2	23.98PsF	-	720/4:2:2/59.94P
		24PsF		24PsF	-	1080/4:2:2/60i
		25PsF		25PsF	625/50i	720/4:2:2/50i
		29.97PsF		29.97PsF	525/59.94i	720/4:2:2/59.94P
		30PsF		30PsF	-	720/4:2:2/59.94P
		50i		50i	625/50i	720/4:2:2/50P
	1035/4:2:2	59.94i	1035/4:2:2	59.94i	525/59.94i	720/4:2:2/59.94P
		60i		60i	-	-
		59.94i		59.94i	525/59.94i	-
		60i		60i	-	-
		59.94i		59.94i	525/59.94i	-
		60i		60i	-	-
Digital BETACAM***	625	50i	1080/4:2:2	50i	625/50i	720/4:2:2/50P
			720/4:2:2	50P	-	1080/4:2:2/50i
	525	59.94i	1080/4:2:2	59.94i	-	720/4:2:2/59.94P
			720/4:2:2	59.94P	525/59.94i	1080/4:2:2/59.94i

*Requires optional HKSR-5001 Format Converter Board
 **Requires optional HKSR-5001 RGB Processor Board
 ***Requires optional HKSR-5002 Digital Betacam Processor Board

Retaining The Virtues Of Sony 1/2" Formats: The New Drum Assembly

The new drum assembly has 8 channels each of recording and confidence-playback heads, plus a pair of flying-erase heads. As with all recent Sony high-end VTRs, the SRW-5000/5500 uses DT heads for normal playback as well as variable speed and jog playback. Precise tracking of the HDCAM-SR format tape is reliably secured by utilizing the newly designed 4-tip, 8-gap DT head assembly. Each tip has two gaps, which are slightly offset from each other. During playback, both gaps simultaneously trace the same video track. The off-tape data from the gap that produces a higher output signal is used for the actual image playback. In comparison to conventional systems, this unique mechanism allows a wider tolerance in head-to-track tracing. A dedicated pair of DT head assemblies performs legacy playback of HDCAM and Digital BETACAM tapes. Remarkably, despite the complexity of this new recording drum, durability and lifetime are expected to be equal to that of existing Sony 1/2" tape formats.



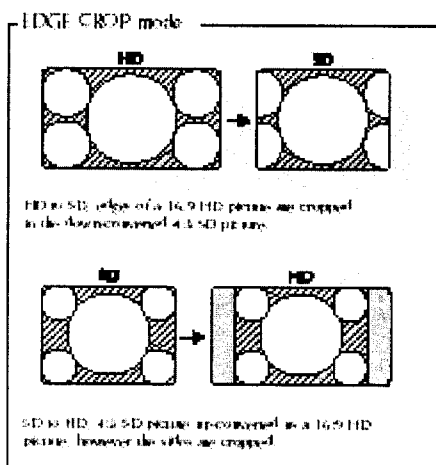
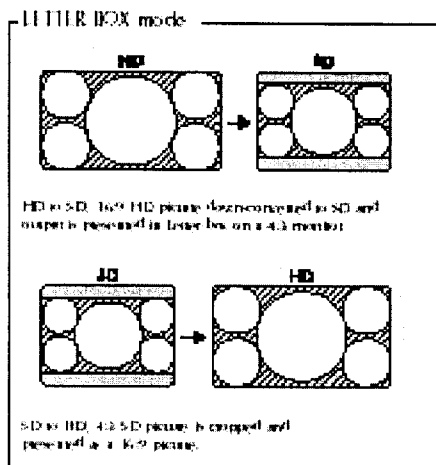
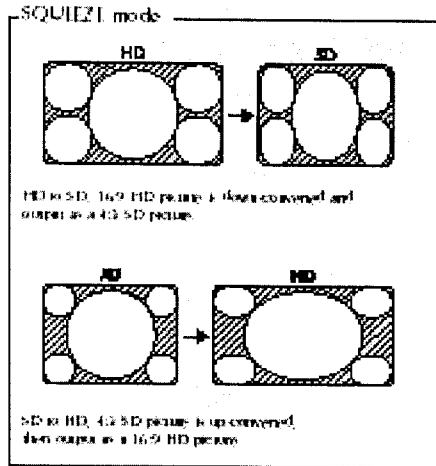
Dynamic Tracking™ Playback

A Dynamic Tracking playback capability provides high-quality pictures over the range of -1 to +2 times normal playback speed during the playback of HDCAM-SR and HDCAM tapes, and -1 to +3 for Digital BETACAM tapes.

DOCUMENT F : Conversion de format sur magnétoscope HDCAM SR SRW-5000.

Selectable Picture Modes

Three modes of operation – SQUEEZE, LETTER BOX, and EDGE CROP – are available to provide the correct presentation for the application type.



Audio-Output Channel Selection

The SRW-5000/5500 is equipped with a unique internal audio-output router, which enables flexible audio-output channel routing without the use of an external audio-routing device. Any channel from the 12* available on HDCAM-SR tape can be assigned to the HD-SDI (Ch 1-12) and SDI (Ch 1-8) embedded audio-output channels. This feature provides the flexibility needed when recording audio to different tape formats.

*12 channels on HDCAM tape

Dual-Sync Operation

A unique feature of the SRW-5000/5500 allows you to seamlessly integrate the VTR into a 59.94 editing environment. In doing so, you can directly perform insert editing from a 23.98PSF master tape, either to a 1000/59.94i or to a 525/59.94i recording, without having to first dub the master to the 59.94 format. This is achieved by supplying dual reference signals, one to lock the servo of the SRW-5000/5500 to a 23.98Hz signal and one to lock the playout circuitry to a 59.94Hz reference signal.

Off-Speed Playback Capability

In order to play back material at different speeds for applications such as slow-motion or fast-motion, the SRW-5000/5500 is equipped with a built-in off-speed playback capability.

- Normal playback
- 1/2 off-speed playback
- ▲ Video and audio off-speed playback with converted timecode (requires audio pitch correction)
- ◆ HDCAM-SR: Video and audio off-speed playback requires audio pitch correction
- ◆ HDCAM: Video off-speed playback without audio.

	HD-SDI output				
	1000				
	23.98PsF	24PsF	25PsF (50i)	29.97PsF (59.94i)	30PsF (60i)
23.98PsF	☐	●	▲	◆	◆
24PsF	☐	●	▲	◆	◆
25PsF (50i)**	▲	▲	☐	◆	◆
29.97PsF (59.94i)**	◆	◆	◆	☐	▲
30PsF (60i)**	◆	◆	◆	◆	☐
720 29.97PsF**					☐

* When recording mode (one file or 12) of the VTR output and playback tape are different, the output signal is provided in the playback tape's scanning mode.
** HDCAM-SR only.

Easy Setup Using "Memory Stick™" Media

Equipped with a Memory Stick™ slot inside its front panel, the SRW-5000/5500 allows VTR setup files to be saved onto and recalled from a "Memory Stick" media. These files can later be copied onto other SRW-5000/5500 machines, enabling quick and consistent setup of multiple VTRs. A group of parameters can be named by the operator as desired to provide further enhanced setup operation.

*Memory Stick™ is optional.

DOCUMENT G : Spécification du montage virtuel AVID Adrenaline HD. System specifications

Recording

- Edit directly on P2 Card or Editcam FieldPak; native P2 and Editcam media support
- XDCAM and XDCAM-HD 18/25/35-Mbit native support including MPEG4 proxies
- DV25, DV50, 30/40/50-Mbit IMX, JFIF, HDV capture; 1:1 SD, DNxHD, and DVCPROHD capture with DNxcel board
- Component/Composite/S-video I/O
- Serial digital SD I/O, serial digital HD I/O with Avid DNxcel board
- LTC input
- Continuous timecode display
- Serial deck control

Video

- Native MXF support
- Edit and render Avid DNxHD encoded media
- DVCPRO HD editing
- HDV editing
- DV25/DV50 editing
- MPEG2 I-frame (IMX) 30/40/50-Mbit editing
- MPEG2 Long-GOP editing
- 525-line (NTSC) and 625-line (PAL) formats
- 24 video tracks
- Mixed resolutions in timeline
- 4:3 and 16:9 (widescreen) aspect ratio support
- MetaSync[®] capability
- Dual-monitor support

Audio

- SDI embedded audio
- 48 kHz, 44.1 kHz, and 32 kHz
- 16- or 24-bit resolution
- 8 channels ADAT audio I/O (via connector)
- 4 channels AES/EBU digital audio I/O
- 4 channels RCA analog audio inputs/outputs
- 4 channels XLR analog audio inputs/outputs

High-definition workflow

NewsCutter Adrenaline natively supports Avid DNxHD[®], DVCPRO HD, HDV, and MPEG Long-GOP high-definition (HD) formats. The Avid Adrenaline hardware accelerator integrates real-time I/O capability, and the easy-to-install Avid DNxcel™ expansion board adds comprehensive HD-SDI format flexibility. With its field-upgradeable hybrid architecture, NewsCutter Adrenaline systems keep broadcasters ahead of the technology curve and help protect the return on their technology investment.

Avid DNxcel HD I/O board (optional)

Video specifications

- Capture and output HD via industry-standard HD-SDI input/output for connecting to HDCAM, DVCPRO HD, D5, and other popular decks and cameras
- Supported resolutions include: 1080i 59.94, 50 fps; 1080p at 25, 24, 23.976 fps; 720p at 50, 59.94, 23.976 fps
- HD-SDI input: SMPTE 292 compliant:: cable equalization for 100m. Belden 8281
- HD-SDI output: SMPTE 292 compliant, 800 mv. p-p, jitter spec defined by RP-184

Analog video output

- CAV output freq. response: +/- 0.5 dB 10 kHz. to 30 MHz.
- CAV output inter component cross-talk: < -40 dB to 30 MHz.
- CAV output inter component gain error: +/- 2 %
- CAV output S/N: > 50 dB bandlimited to 30 MHz.
- CAV output return loss: < -40 dB to 30 MHz.

Physical connections

on the Avid DNxcel board

- One HD-SDI (SMPTE 292M) IN connection
- Two HD-SDI (SMPTE 292M) OUT connections
- One HD Monitor OUT DVI-I connection
- HD Component OUT Y/Pb/Pr
- HD Tri-Level Sync

System specifications subject to change.

Avid Total Services

Providing faster return on your investment by getting your systems and personnel up and running quickly, maximizing workflow efficiency, and meeting your production schedules. To learn more about Avid Total Services, please visit: www.avid.com/services.

- DOCUMENT H : système de stockage AVID Unity Media Network.

Avid Unity MediaNetwork	Avid Unity ISIS
Number of real-time clients supported Up to 46	Number of real-time clients supported Up to 330
Clients and resolutions All resolutions, from offline to HD, including: <ul style="list-style-type: none"> • Up to 46 single-stream clients at DV25 • Up to 19 dual-stream clients at Avid DNxHD® 145 • Up to 14 dual-stream clients at Avid DNxHD 220 or 1:1 10-bit SD • Up to 2 dual-stream clients at 1:1 8-bit HD • Up to 2 single-stream clients at 1:1 10-bit HD <small>Number of clients may vary in an Avid Interplay environment</small>	Clients and resolutions All resolutions up to 145 Mbps, including: <ul style="list-style-type: none"> • Up to 330 dual-stream clients at DV25 • Up to 150 dual-stream clients at DV50 • Up to 150 dual-stream clients at 2:1 • Up to 72 dual-stream clients at Avid DNxHD 145 <small>Higher-resolution client support planned for future release.</small>
Interconnection Gigabit Ethernet, Fibre Channel (4 Gb)	Interconnection Gigabit Ethernet
Total available bandwidth ~1.5 GB/sec (actual, under load)	Total available bandwidth ~3.6 GB/sec (actual, under load)
Total amount of storage Up to 40 TB (20 TB mirrored)	Total amount of storage Up to 192 TB (96 TB mirrored)
Video subsystem support Avid DNA™, Meridien™	Video subsystem support Avid DNA, Meridien
Real-time client support Avid DS Nitris™, Avid Xpress®, Avid Xpress Pro, Film Composer™, Avid Instinct™, Media Composer®, Media Composer Adrenaline™ family, NewsCutter® Adrenaline, NewsCutter Effects, NewsCutter XP, Symphony™, Symphony Nitris	Real-time client support Avid DS Nitris, Avid Xpress, Avid Xpress Pro, Film Composer, Avid Instinct, Media Composer, Media Composer Adrenaline family, NewsCutter Adrenaline, NewsCutter Effects, NewsCutter XP, Symphony, Symphony Nitris
System options AirSpeed™, Avid Archive™, Avid Interplay family, DMS ProEncode™, Nearchive™	System options AirSpeed, Avid Archive, Avid Interplay family, DMS ProEncode, MediaManager, Nearchive, TransferManager

Conçus spécialement pour stocker, consulter et partager des médias en environnement de travail collaboratif, les systèmes Avid Unity™ MediaNetwork offrent des avantages significatifs comparée aux simples SAN (Storages Area Network).

Le nouveau serveur tout-en-un avec châssis de stockage Avid Unity Media Engine simplifie l'installation et la prise en charge, à la fois de la large bande passante Fibre Channel 4 Gb et les interfaces économiques Ethernet Gigabit, avec le logiciel Avid Unity et le matériel d'extension de stockage MEDIAArray XT.

Construit autour d'une architecture de système de fichiers, Avid Unity MediaNetwork délivre simultanément et en temps réel un grand nombre de médias compressées ou non, y compris en HD non compressée ou encodée avec le codec haute efficacité de qualité master Avid DNxHD™.

- Permet une infinité de possibilités pour améliorer l'efficacité des processus de travail via un véritable partage simultané des médias jusqu'au niveau des fichiers,
- Support de workflows collaboratifs en HD avec les médias encodé en Avid DNxHD,
- Grandes capacités de stockage allant jusqu'à 40 To avec les châssis MEDIAArray™ XT,
- Support de clients mixtes en temps réel : Windows XP, Windows 2000 et Macintosh® OS X via Fibre Channel ou Gigabit Ethernet,
- Services pour travail collaboratif Avid Interplay en option pour intégrer la gestion du système, de la production et des ressources ; le transfert des médias en tâche de fond et du stockage d'archives.

- DOCUMENT I : Caractéristiques du microphone Sennheiser MD46.**MD 46 DYNAMIC MICROPHONE**

High-quality hand-held microphone with cardioid pick-up pattern. Designed for rugged routine use in radio and TV reporting. Easy to handle - the special design minimizes wind and handling noise.

CHARACTERISTICS

- Excellent speech clarity due to optimised frequency response.
- Specially designed rugged housing for tough use.
- Good recording results.
- Excellent rejection of handling noise.
- Special protection against wind and pop noise due to double layer sound inlet basket.

RECOMMENDED ACCESSORIES (NOT SUPPLIED)

- Quick release clamp MZQ 800, Cat. No. 04711.
 - Foam windshield MZW 5000 (black), Cat. No. 03824.
 - Foam windshield MZW 65 PRO (black, velour), Cat. No. 03757.
- Other colours and imprints are available on request, please order from your local Sennheiser dealer.

TECHNICAL DATA

Acoustic principle	Pressure-gradient microphone
Frequency response	40 - 18,000 Hz
Pick-up pattern	Cardioid
Rejection at 1 kHz at 180°	20 dB
Sensitivity (free field, no load) at 1 kHz	2.0 mV/Pa \pm 2.5 dB (= -54 dBV with 0 dB = 1 V/Pa) (= -74 dBV with 0 dB = 1V/ μ bar;USA)
Nominal impedance at 1 kHz	350 Ω
Min. terminating impedance	1000 Ω
Magnetic field interference factor	\leq 1 μ V/ μ T
Connector	3-pin XLR connector
Dimensions / weight	\varnothing 49 mm, length 250 mm / approx. 360 g
Delivery includes	MD 46 microphone

POLARDIAGRAMM
PICK-UP PATTERN
DIAGRAMME DE LA DIRECTIVITÉ
DIAGRAMMA POLARE
DIAGRAMA DE LA DIRECTIVIDAD
POLDIAGRAM

