

VENICE 2



Presentation V2.0 with Rialto 2

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SONY

Trusted Creative Partner



Remarkable Image

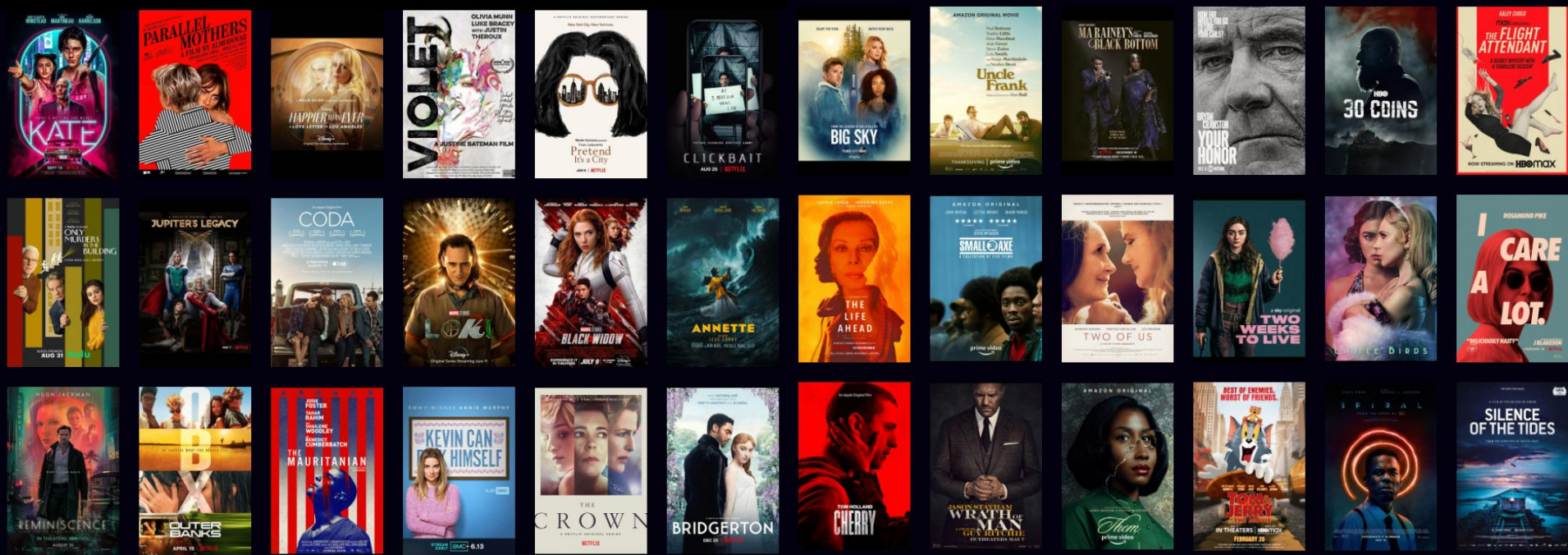


Simple and Intuitive



Shot on VENICE

SONY



[Shot On Sony | Sony Cine](#)

SONY



Digital Motion Picture Camera

VENICE 2

Since February 2022

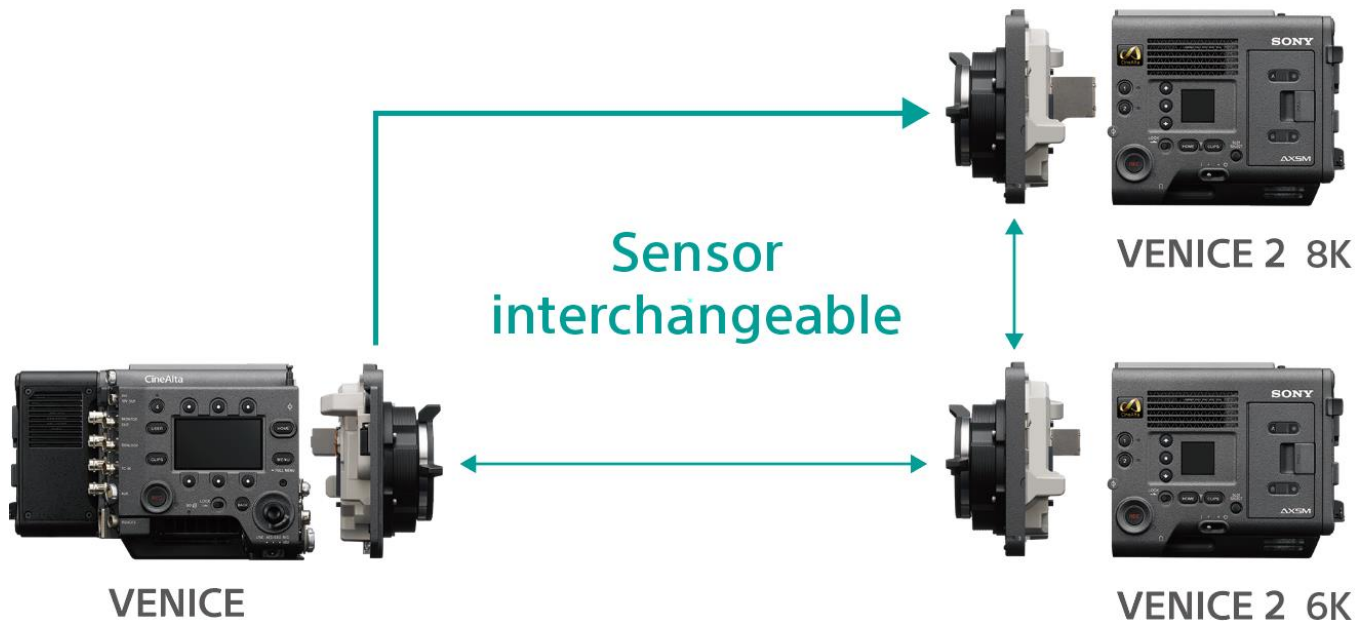
Outline of New Digital Motion Picture Cameras

VENICE 2



- Since February 2022
- Supporting 8.6K and 6K image sensor
- Compact and X-OCN internal Recording
- 4K ProRes internal Rec
- An evolved product design based on VENICE
- Almost same I/O and screw holes for accessories
- Lots of updates based on VENICE users' voices
- High speed 6.6Gbps AXS card for 8K 60p recording
- Image sensor interchangeable
- Version 2 January 2023

Sensor interchangeable between other models



Powerful image sensor

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- Two 36x24mm Full-Frame image sensors
- Newly developed 8,640x5,760 pixels in 8K model
- VENICE's 6K sensor is kept in 6K model
- Color Reproductions are synced between two models for intuitive post workflow

Full-Frame width 36mm 8K

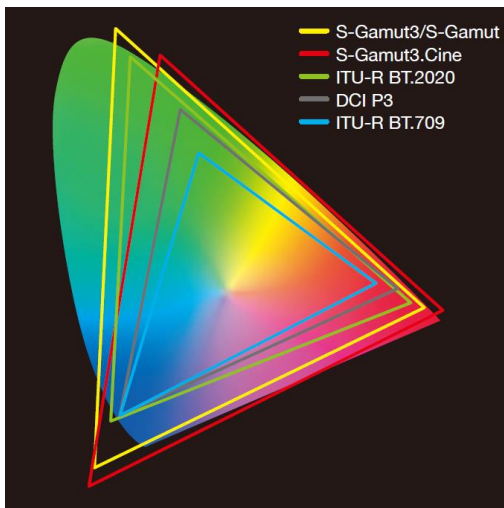
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- **8K high resolution**
 - Recording directly in X-OCN
 - Enough size of one pixel for getting light from lenses
- **Extra shallow depth of field**
 - images have the equivalent of 1-2 stops shallower depth of field compared to Super 35
- **Super wide shooting**
 - Larger sensor captures wider images
- **8K to 4K over sampling recording to 4K ProRes**
 - 4K ProRes can be captured onto AXS card while still sampling from the 8K sensor

More Colors for More Expression

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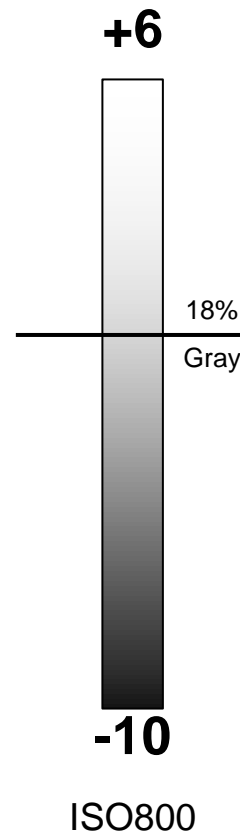


- **Wider color gamut**
 - Exceeding BT.2020 color space.
- **Same specification between both, and VENICE**
 - Two image sensors has same specification about color reproduction.
 - In one project, combined image sensors operation is possible
 - Uses S-Gamut3 color space as same as F65 and F55.
 - Easy color control by established workflow of Sony S-Log3 gamma encoding, and S-Gamut3 Ultra-wide color space.

Phenomenal latitude in 8K image sensor

SONY

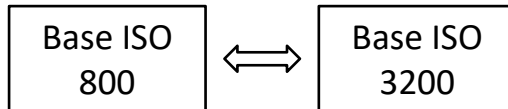
- **Creative freedom in Grading by 16 stop Latitude**
 - Exceptional 16 stops of latitude, with low noise for extraordinary performance in delivering phenomenal images
 - Capture 6 stops in higher from 18% gray and 10 stops in darker from 18% gray in ISO800 as native sensitivity
 - Also Supporting HDR production



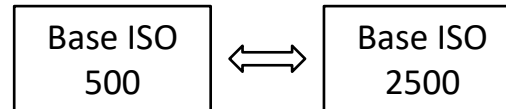
Dual Base ISO

- Switchable Dual Base ISO Sensitivity
 - In night and inside dark scene, they need to push Exposure Index (EI) but it is noisier. High Base ISO is effective
 - By using high ISO, lighting equipment is less
 - Additionally Anamorphic lens is basically “slow” lens (Open Iris is F2.8 or darker) so higher ISO sensitivity is required compared to spherical lens shooting

8K image sensor

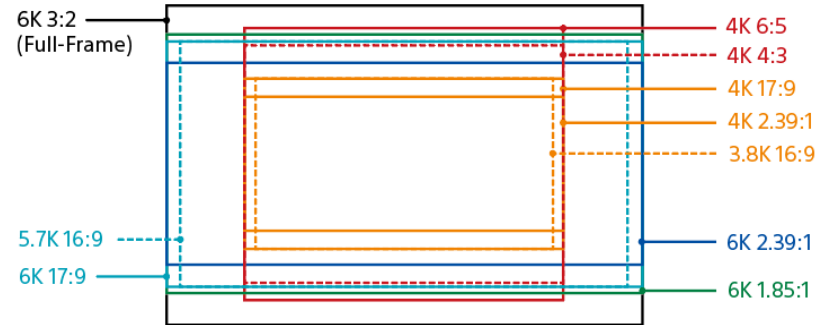
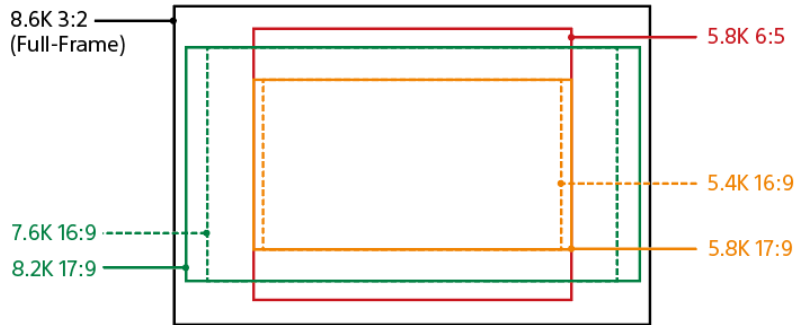


6K image sensor



Full-Frame supports several imager size

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Wide 36mm Large format with Spherical lens

Hight 24mm Large format with Anamorphic lens

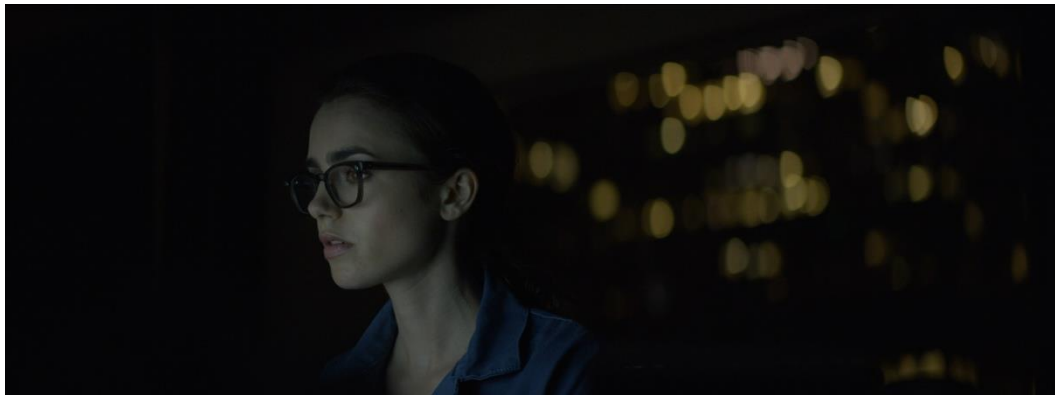
Super35 4 perforation Anamorphic lens

Super 35 3 perforation Spherical lens



5.8K and 4K in Super 35 Anamorphic

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- **High resolution anamorphic**
 - Support for anamorphic lenses combined with horizontal resolution of 4K
- **Anamorphic lens effect**
 - Breathtakingly beautiful images with stunning lens flare, bokeh, Wide-shot and emotional impact
- **Additional 6:5 imager mode**
 - Supports Super 35 6:5 larger scope for wider and higher resolution cinema scope production

Lens Agnostic

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Supporting all major of motion picture lenses in the market



Full-Frame Anamorphic
lens



Full-Frame Spherical
lens



35mm Spherical
lens



E-mount lens

Most popular lens mount and an additional



Screws for attaching lens adaptor

PL mount

- Compatible with all Super35 and Full Frame PL lenses, spherical and anamorphic
- Supports Cooke/i Technology and lens information is recorded as metadata frame by frame
- compatible with Cooke's /i third generation metadata technology (/i3) and ZEISS eXtended Data Technology for Lens distortion and shading metadata
- Sim for adjusting Flange back is available in E-PL lens adaptor



Lever lock for E-mount lenses

E-mount (lever lock type)

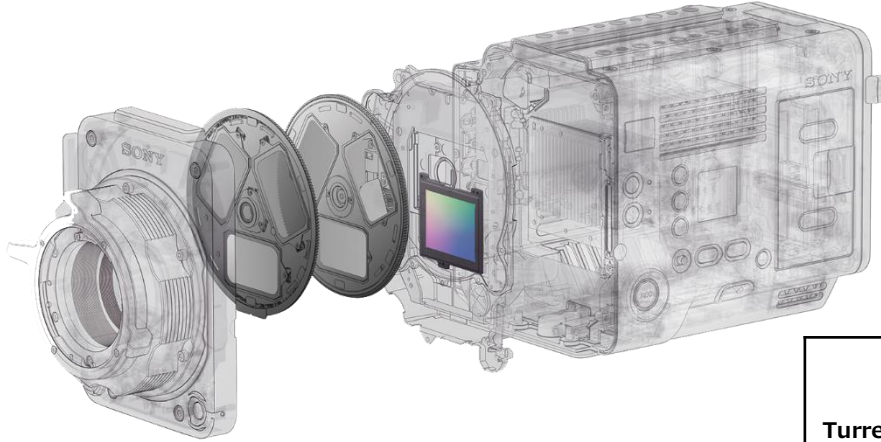
- first camera of its class to offer the choice of swapping out the default PL Mount adaptor by six screws for E-mount
- Allows unprecedented lens choice and creative freedom



Lens mount screws are updated for avoiding drop

8-step glass ND Filter system

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Turret 1				
Turret 2				
Turret 2	Clear	Clear	0.3 (1/2)	0.6 (1/4)
	0.9 (1/8)	0.9 (1/8)	1.2 (1/16)	1.5 (1/32)
	1.8 (1/64)	1.8 (1/64)	2.1 (1/128)	2.4 (1/256)

- Two turrets with Servo has three glass filter in each
- Quick change - Zero time changing glass ND Filters in Matt box -
- Avoiding dust issue and color shifting for changing ND filters
- Remotely control by Controllers or Wi-Fi in the crane, gimbal, underwater

Internal X-OCN and 4K ProRes Recording

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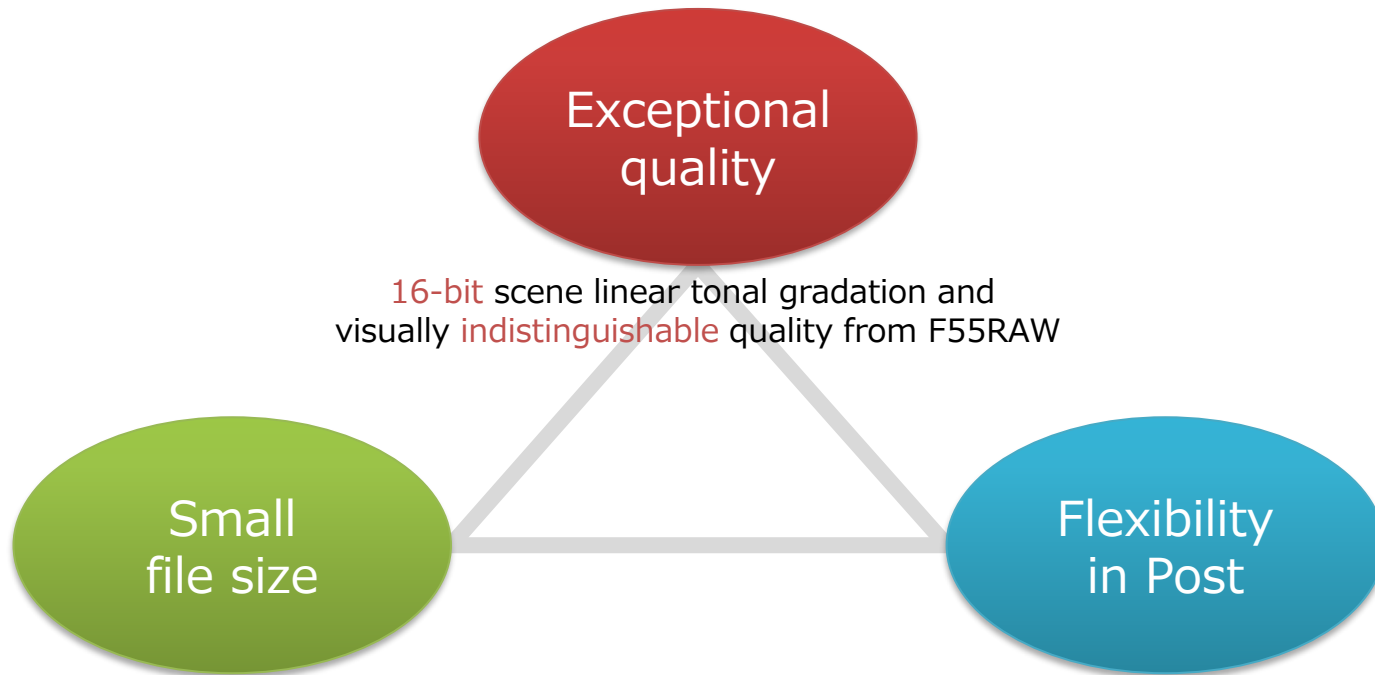
X-OCN ProRes 4K



- Without RAW Recorder
- Two AXS slots inside
- Relay rec is supported
- Cache rec is supported
 - Cache rec memory is double compared to VENICE
- 4K ProRes is available in 17:9/16:9 and 6:5 de-squeezed mode

Most Suitable format for HDR production: X-OCN

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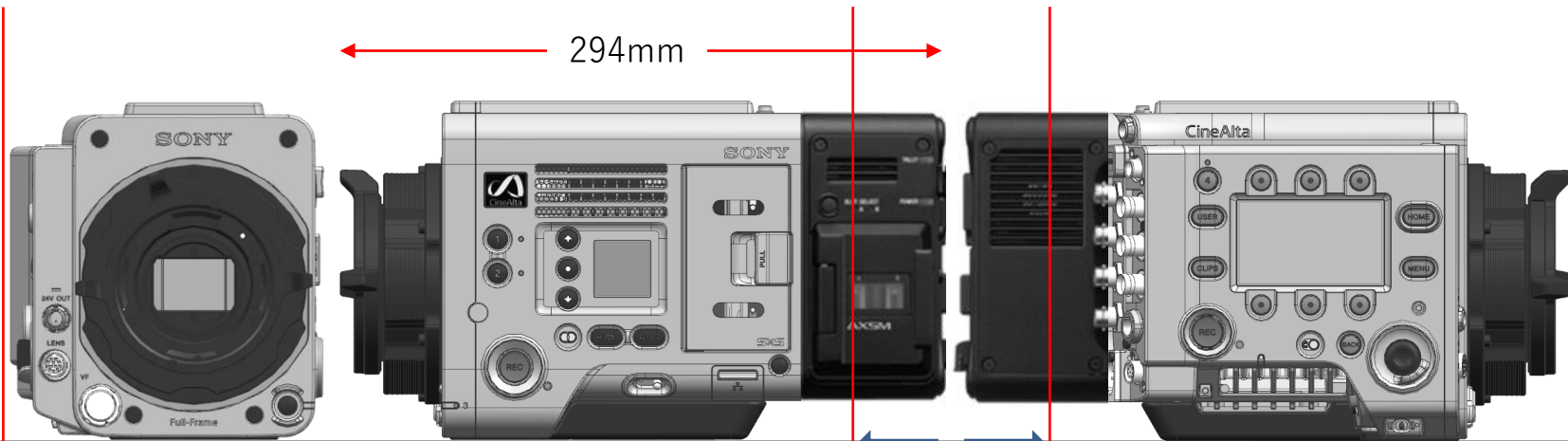


smaller file sizes than F55RAW
longer recording times and faster transfer times

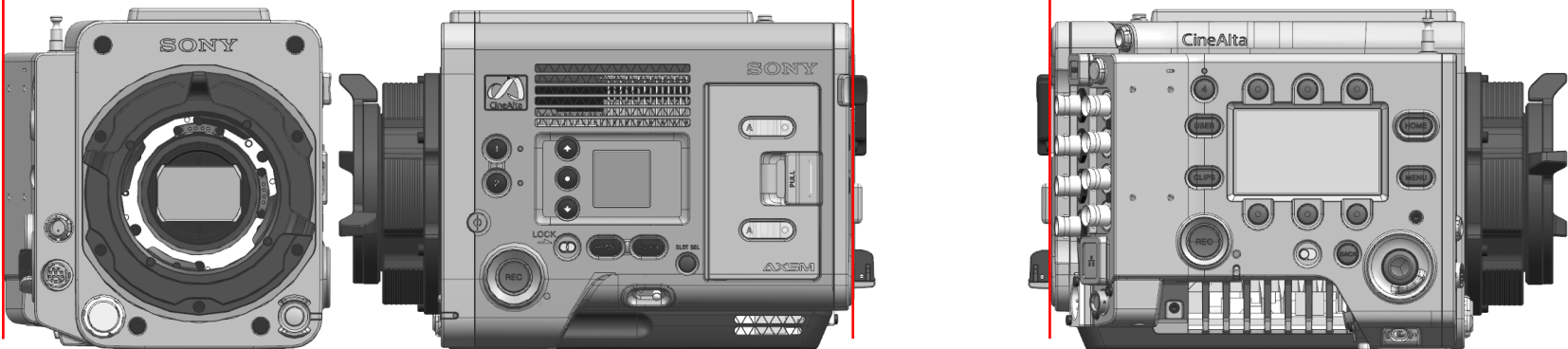
non-destructive and full potential of the original sensor data
far greater decision-making flexibility in Post Production

Comparison (vs VENICE with R7)

Venice/R7

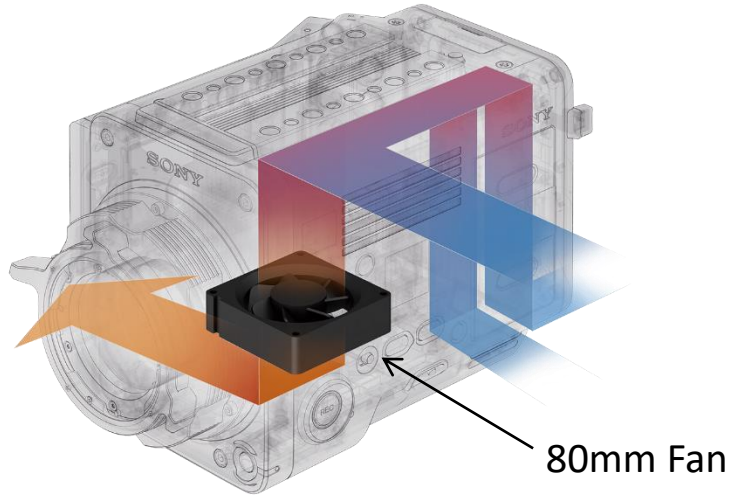


VENICE 2

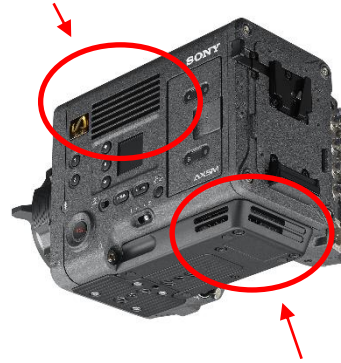


Engineered to Survive: Ventilation

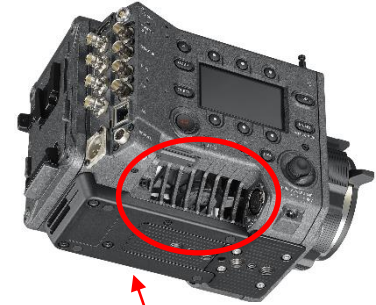
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Main intake



Additional intake for AXS memory



Exhaust

Ventilation system is completely separated from electric boards and parts

Improved useful Outputs and Inputs

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Updated points from VENICE

- 12G-SDI from SDI1/2 and simultaneously 3G HD-out from SDI3/4
- 3D LUT apply in 4K output
- All output can apply LUT simultaneously
- EI Applied in SDI1/2 and ProRes Recording
- Lemo 12V output connector
- Ethernet connector to Camera Assistant side
- Internal noise mic

Other functions

- [Updated] Zoom to Fit
- [Updated] LUT/ART/CDL import via Ethernet/Wi-Fi
- [Updated] CDL control via Ethernet/Wi-Fi
- [Updated] improved LUT quality
- [Updated] 4K Output usability
- [Updated] SDI1/2 EI Applied
- [Updated] improved Grids of 3D LUT
- [Updated] Improved OSD
- [Updated] Rec Tally overlay
- [Updated] ACES RRT update
- [Updated] added Input color space ACEScct
- [Updated] False color chart

New function: Zoom to Fit in V1.0

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Full-Frame 3:2 recording with 17:9 monitoring

Customer's request/pain

For post processing, Full Frame recording is required such as VFX and Re-Framing but Director and on-set people want to see larger area without black-pillars

X-OCN 3:2 imager mode



All SDI/HDMI/VF output



Cut top and bottom images



Monitoring in VENICE

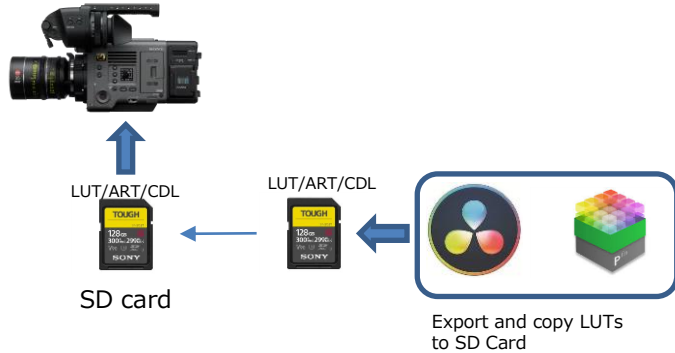


Monitoring in VENICE 2 Zoom to Fit

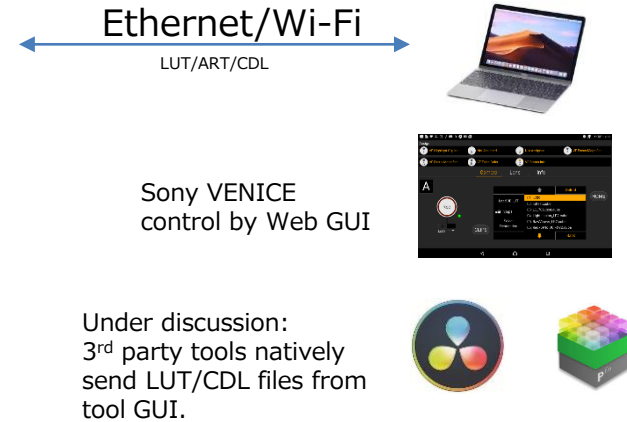
New function: LUT/ART/CDL file import via Ethernet/Wi-Fi



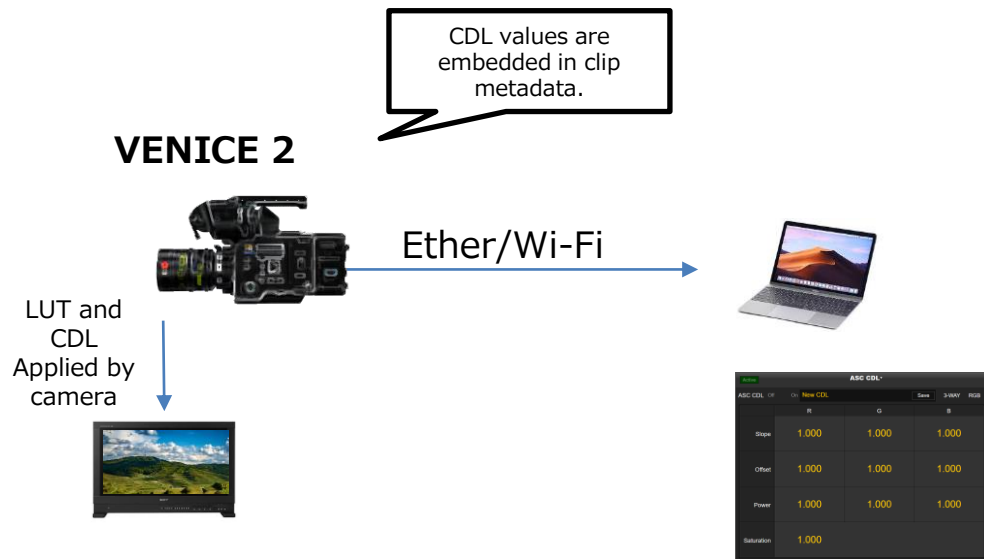
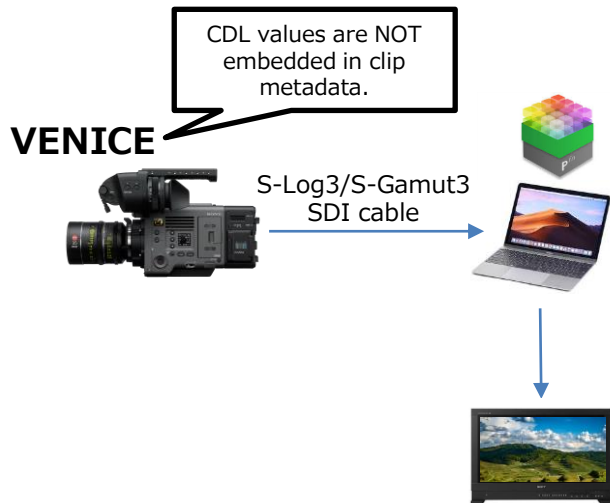
VENICE



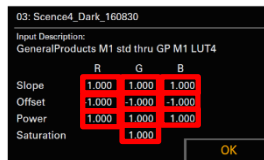
VENICE 2



New function: ASC-CDL values control via Ethernet/Wi-Fi



LUT and
CDL
Applied by
camera



Camera menu for
control CDL by Rotary
Encoder



Web GUI control is
supported but color wheels
are not supported.

Under discussion:
3rd party tools natively
send LUT/CDL files from
tool GUI.



-
- Ext. Unit Temperature High
- Int Stby
- Int Stby
- High Key
- High Key



Recording media

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VENICE image will be updated



NEW

S66
1TB



S48
1TB
512GB



S24
1TB
512GB
256GB

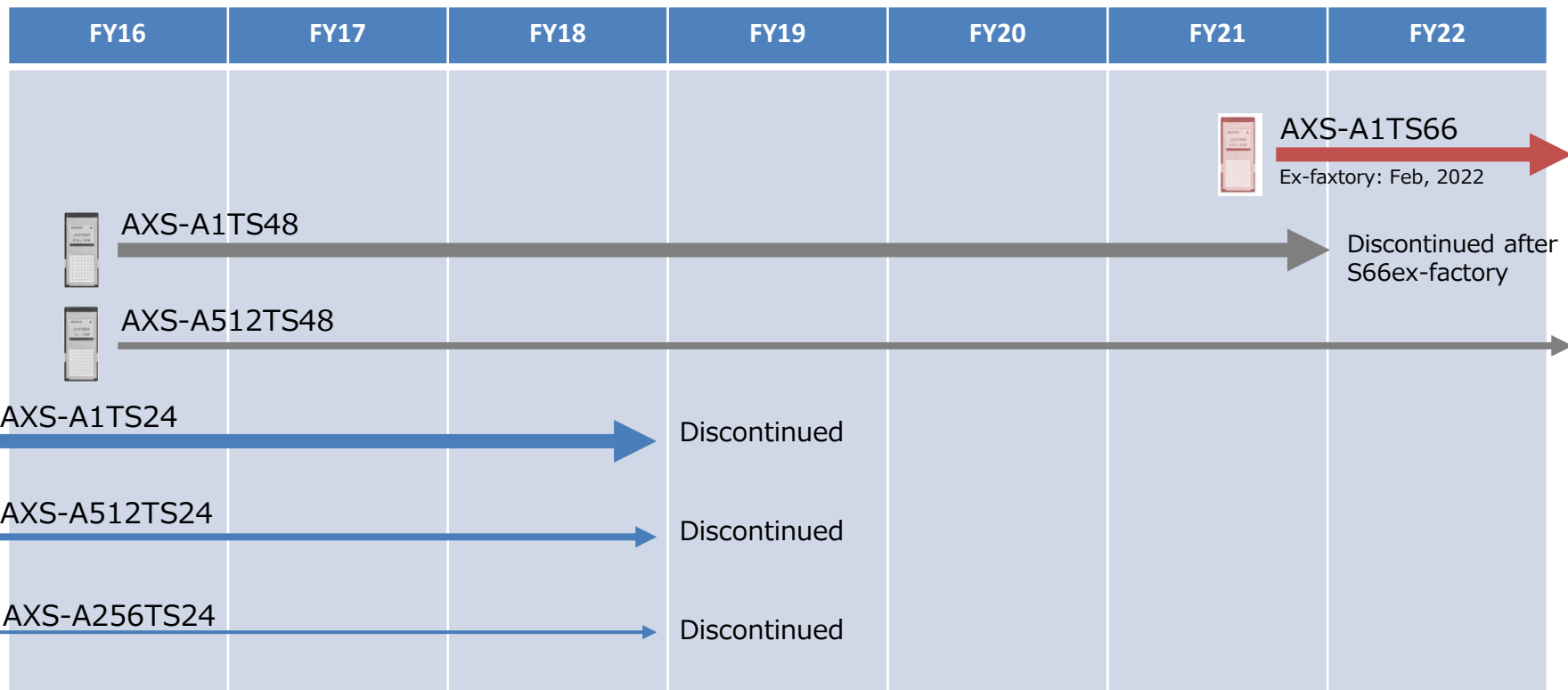
- **High speed AXS Memory**
 - Maximum 6.6Gbps write speed
 - Supporting 8.6K 3:2 X-OCN XT 30p recording
 - Supporting 8.2K 17:9 X-OCN ST 60p recording
 - Supporting 6K 3:2 X-OCN XT 60p recording
- **Backward compatibility**
 - AXS-R7 (even with F55/F5) is supported



AXS Memory card reader
AXS-AR3
Thunderbolt 3™ connection
for Win and Mac

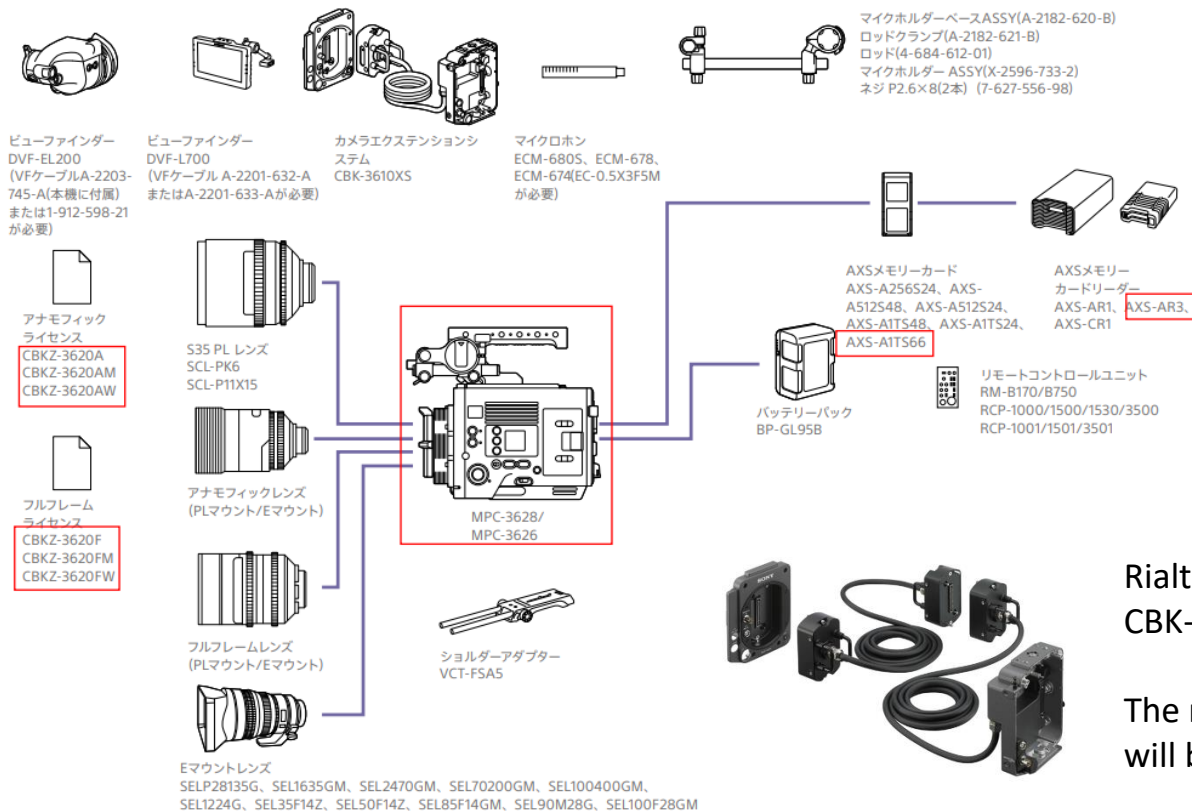
AXS Memory lineup

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Accessories

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Rialto

CBK-3610XS supports 6K imager block.

The new kit supporting 8K imager block will be released in early 2023.

New 8K Digital Motion Picture Camera



VENICE



8.6K Full-Frame in V1.0

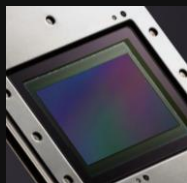
8.6K	3:2	30 FPS
8.2K	17:9/16:9	60 FPS
5.8K	6:5	48 FPS
5.8K	17:9/16:9	90 FPS

X-OCN Internal Rec. (without R7)

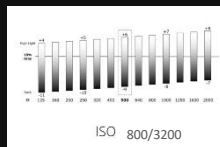
4K ProRes Internal Rec.

4K LUT output and other improvements

VENICE 2 with 8K image sensor



Newly Developed
8.6K Full-Frame
CMOS



Dual Base ISO
800/3200



Internal
ND 8 Position



New AXS S66
For 8.6K 3:2 30p XT rec.
8.2K 17:9 60p ST rec.



Same Operation
With VENCE
UI, Modular, I/O

VENICE 2 with 8K image sensor Product Outline **SONY**

Next Generation 8K Digital Motion Picture Camera

- **8.6K Full-Frame Image Sensor**
 - Full-Frame 8.6Kx5.8K 3:2 up to 30FPS
 - 8.2Kx4.3K 17:9 up to 60FPS
 - Like VENICE, several imager modes will be installed for Super 35mm, Anamorphic and HFR shooting in firmware version up
 - 16 Stop total Latitude and same color reproduction with VENICE
 - 800 and 3200 dual base ISO
- **X-OCN internal recording and ProRes 4K recording by small body**
 - Almost same body size with VENICE (w/o R7) and X-OCN internal Recording
 - Newly support 4K ProRes recording from 8.6K sensor by oversampling
 - Two AXS Memory media slots supporting Relay rec.
 - XAVC 4K/HD is NOT supported, and Simultaneous Rec. is NOT supported
- **Improvements from VENICE based on Voice Of VENICE Users**
 - 4K LUT applied and higher grids cube file's picture quality than VENICE
 - LUT/ACS-CDL control via Ethernet/Wi-Fi
 - Zoom to Fit (Full-Frame recording and 17:9/16:9 monitoring) operation
 - Ethernet connector position changed to Camera Assistant side
 - Lemo 2pin 12V output connector from Hirose 4 pin
 - Internal mic installed
 - And others
- **Sensor Interchangeable with VENICE 2 6K and VENICE OHB block**
 - Users can change to 6K OHB block (VENICE 2 6K and VENICE)
 - Camera body recognizes changing OHB block and start-up automatically (no need firmware exchange or re-install)



Target Users



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	VENICE 2 with 8K Sensor	VENICE 2 with 6K Sensor
High-end DMC (Drama, Movie, Commercial)	<ul style="list-style-type: none">• Over sampling 8K to 4K high picture quality• Trimming from 8K picture	<ul style="list-style-type: none">• Compact and light weight from VENICE• ProRes 4K Internal Rec for ProRes user• Lots of improvement from VENICE
VFX-VR	<ul style="list-style-type: none">• Effective VFX post-production work by 8K• 8K60p VR production	<ul style="list-style-type: none">• Compact and light weight from VENICE
8K 50p/60p production	<ul style="list-style-type: none">• 8K broadcast prod. mainly Asia courtiers	<ul style="list-style-type: none">• -
Live production	<ul style="list-style-type: none">• Over sampling 8K to 4K• 700p and pain menu control like VENICE	<ul style="list-style-type: none">• Compact and light weight from VENICE• 700p and pain menu control like VENICE
Documentary Archiving	<ul style="list-style-type: none">• 8K picture quality• Compact and light weight from VENICE	<ul style="list-style-type: none">• Compact and light weight from VENICE• ProRes 4K Internal Rec for ProRes user• Lots of improvement from VENICE

VENICE series line up in 2022

SONY

In 2021



VENICE

New 8K only

Full-Frame 8.6K3:2 30FPS & 8.2K17:9 60FPS

+

X-OCN Internal Rec. (without R7)

Updates and new features

- ProRes 4K internal Rec.
- 4K LUT monitor
- And others

March 2022



VENICE 2
6K & 8K



VENICE

Continuously keep line-up for XAVC Cinema Camera



Rialto 2

Extension Sensor System

3m and 12m

One KIT, 2 cable lengths : 3m and 12m

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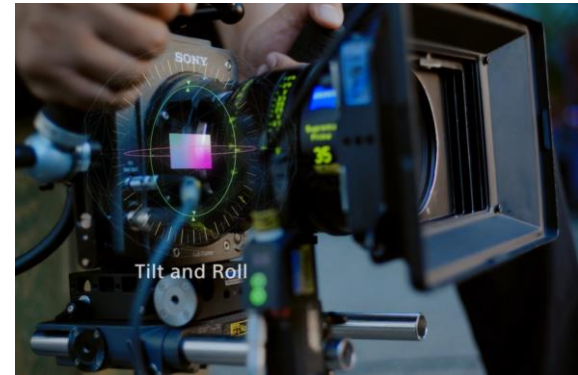
Compatible with
VENICE and VENICE2
with firmware update

- [VENICE V6.3](#)
- [VENICE2 V2.0](#)

RIALTO 2 : New Features

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- 4 x ASSIGN BUTTONS (5 to 7).
- When the imager block is extended, spirit level, gauge information of the extension can be displayed.



VENICE V6.3

CBK-3620XS Camera Extension System support

- Connection with a CBK-3620XS Camera Extension
- System is supported.
- Supports configuration of CBK-3620XS
- assignable buttons (5 to 7).
- When the imager block is extended, spirit level
- gauge information of the extension can be
- displayed.

Firmware version display at startup

- When the camera is turned on, the firmware
- version is now displayed at the same time as the
- CineAlta mark.

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Security

The security function has been enhanced.

VENICE 2

Firmware Version 2.0

New Extension system support

- Supporting the mounting of RIALTO 2

New recording flavour

- ProRes 4444 XQ

Additional imager modes

- 8.6K 17:9 up to 48 FPS
- 8.2K 2.39:1 up to 72FPS
- 8.1K 16:9 up to 48FPS
- 5.8K 4:3 up to 60FPS
- 5.5K 2.39:1 up to 120FPS

Recording function

- LUT and CDL are embedded in clips

Monitor Out function

- Zoom to Fit for Anamorphic lens operation
- Position change of recording status icon
- Output the same image as viewfinder from Monitor out
- Change brightness and transparency of Frame Line

Shooting assist function

- The area for focus Magnifier can be selected
- Playback function
- Displaying the playback position in the clip
- Frame-by-frame playback
- Applying EI recorded in metadata when playback a clip
- Sync function
- Phase shifting of Genlock
- Display of locked frequency when Genlock
- In HFR shooting, Genlock is available when the frame rate (fps) is N-fold* of the Genlock frequency *N must be 2 or above. When N is 1, Genlock is not available

Boot-up

- When the power is turned on, the sensor (8K or 6K) and firmware version are displayed



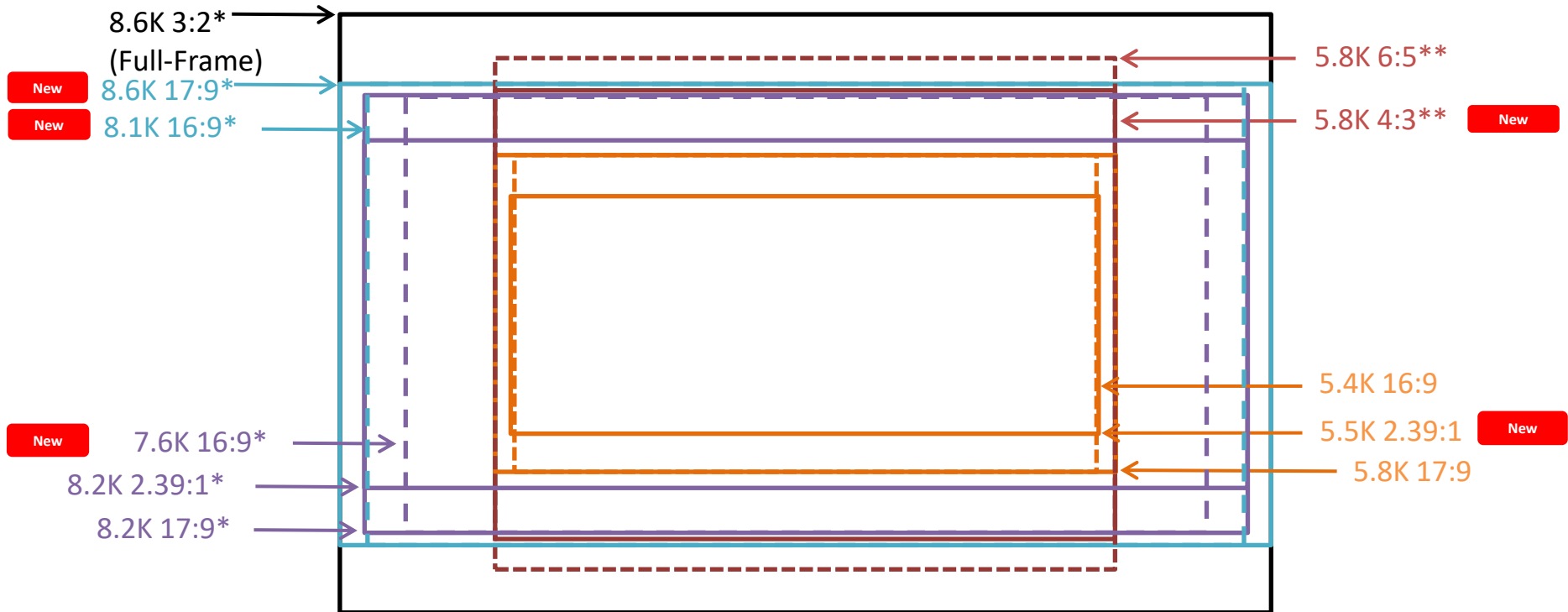
CBK-3620XS Camera Extension System connection function

- Connection with a CBK-3620XS Camera Extension System is supported.
- Supports configuration of CBK-3620XS assignable buttons (5 to 7).
- When the imager block is extended, spirit level gauge information of the extension can be displayed.



Added imager modes for 8K sensor

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VENICE2 V2.0 : Recording format

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Imager mode	Max FPS	X-OCN			4K/QFHD ProRes		
		LT	ST	XT	422 HQ	4444	4444 XQ
5.4K 16:9	90	✓	✓	75	75	60	60
5.5K 2.39:1	120	✓	✓	110	75	60	60
5.8K 17:9	90	✓	✓	75	75	60	60
5.8K 4:3	60	✓	✓	✓	✓*	✓*	✓*
5.8K 6:5	48	✓	✓	✓	✓*	✓*	✓*
7.6K 16:9	60	✓	✓	30	✓	✓	✓
8.1K 16:9	48	✓	✓	30	✓	✓	✓
8.2K 17:9	60	✓	✓	30	✓	✓	✓
8.2K 2.39:1	72	✓	✓	50	✓	60	60
8.6K 17:9	48	✓	✓	30	✓	✓	✓
8.6K 3:2	30	✓	✓	✓	✓**	✓**	✓**

Imager mode	Max FPS	X-OCN			4K/QFHD ProRes		
		LT	ST	XT	422 HQ	4444	4444 XQ
3.8K 16:9	110	✓	✓	✓	90	60	60
3.8K 16:9 SV	48	✓	✓	✓	✓	✓	✓
4K 2.39:1	120	✓	✓	✓	90	60	60
4K 17:9	110	✓	✓	✓	90	60	60
4K 17:9 SV	48	✓	✓	✓	✓	✓	✓
4K 4:3	75	✓	✓	✓	✓*	60*	60*
4K 4:3 SV	30	✓	✓	✓	-	-	-
4K 6:5	72	✓	✓	✓	✓*	60*	60*
5.7K 16:9	72	✓	✓	✓	✓	60	60
6K 2.39:1	90	✓	✓	✓	75	60	60
6K 17:9	72	✓	✓	✓	✓	60	60
6K 1.85:1	72	✓	✓	✓	-	-	-
6K 3:2	60	✓	✓	✓	✓**	✓**	✓**

* QFHD is also available when Zoom to Fit is 16:9.

** 4K : Available when Zoom to Fit is 17:9. QFHD: Available when Zoom to Fit is 16:9.

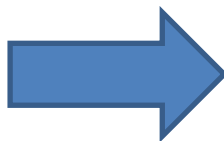
Max FPS of V2 recording format

✓ : Imager's Max FPS is available

NUMBER: Available lower Max FPS than Imagers'

LUT embedded in clips

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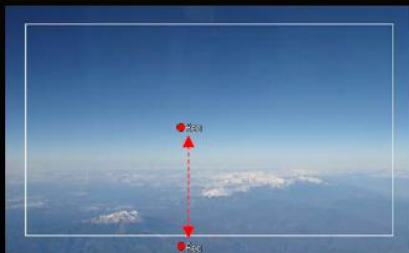
LUT is embeded in MXF

Quick applied on [RAW viewer 4.1](#)



{
A001C001_2205313F.mxf
A001C001_2205313FL02.cub
A001C001_2205313FD01.cdl
}

Monitor out function



With peaking



With peaking

- Position change of recording status icon
- Output the same image as viewfinder from Monitor out
- Change brightness and transparency of Frame Line



Zoom to Fit for Anamorphic lens operation

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V1.0:



- Imager mode: 4:3
- De-squeeze: x2.0
- Monitoring: 16:9 monitor
- In 16:9 project, an effective area monitoring is very small

V2.0: X-OCN Anamorphic mode



All SDI/HDMI/VF outputs

X-OCN



De-Squeeze and cut
left and right images

V2.0: X-OCN Anamorphic mode



All SDI/HDMI/VF outputs



ProRes



De-Squeeze and cut
left and right images

Playback function

SONY



- Displaying the playback position in the clip
- Frame-by-frame playback
- Applying EI recorded in metadata when playback a clip

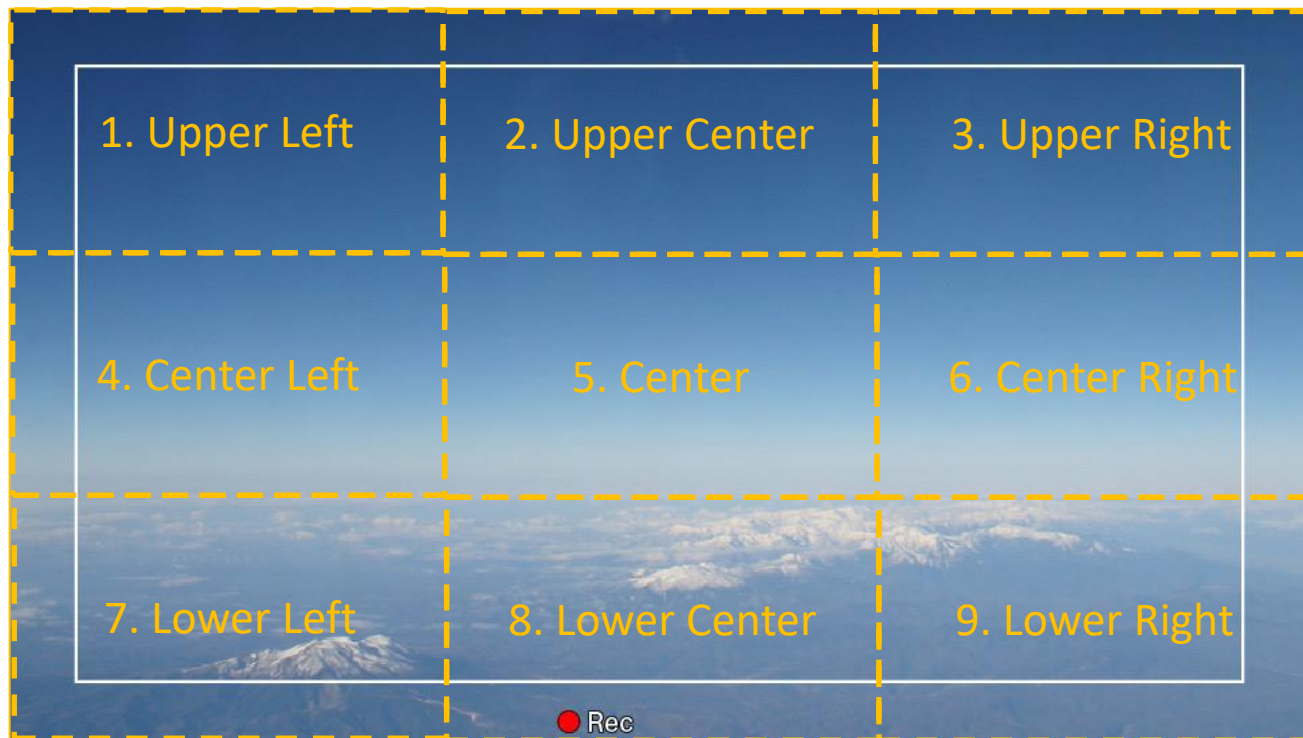
Number of Frame Jump

Playback position indicator

Shooting assist functions

SONY

The area for focus Magnifier can be selected



Sync functions

- Phase shifting of Genlock
- Display of locked frequency when Genlock
- In HFR shooting, Genlock is available when the frame rate (fps) is N-fold* of the Genlock, frequency *N must be 2 or above. When N is 1, Genlock is not available

Les sites Web VENICE à visiter:

- [VENICE](#)
- [VENICE2](#)
- [Inside VENICE](#)
 - Ressources
 - [Tools](#)
 - [Simulator](#)
 - [LUT Downloads](#)
 - [VENICE & VENICE 2 File size calculator](#)
 - [FAQ](#)
 - [Logiciels](#)
- [COMMUNITY](#)
- [Logiciels utiles au WF](#)