



## **SR-R1000**

Memory Storage Unit

## **SR-R1/SR-R4**

Portable Memory Recorder

## **SRPC-5/SRPC-4**

Memory Data Transfer Unit

## **SR-256S15/SR-512S25/SR-1TS25**

## **SR-256S55/SR-512S55/SR-1TS55**

Memory Card

# SRMASTER: "SR" Re-defined

Since its introduction in 2003, the HDCAM-SR™ VTR format has become the industry standard for digital acquisition, content delivery, mastering, and archiving. Over the years Sony has relentlessly refined the format by enhancing the product lineup and its feature set. In order to meet the escalating demands to store more image data at less cost of ownership, Sony proudly announces the SRMASTER™ family of products, a new breed of storage products that are based on state of the art solid-state recording technology and high-speed file based network connectivity. From HDTV production to 3D/4K feature movie production, SRMASTER offers the best in recording speed, quality, cost, and reliability.



## SRMASTER Lineup\*



**SR-R1000**  
Memory Storage Unit



**SR-R1**  
Portable Memory Recorder



**SR-R4**  
Portable Memory Recorder



**SRPC-5**  
Memory Data Transfer Unit



**SR-PC4**  
Memory Data Transfer Unit

\*For details of supported recording/playback formats and schedule, please refer to the "Supported Format" table on page 14.

# SRMASTER Key System Features

## SRMASTER Format – HD to 4K Mastering Quality Files

SRMASTER is a powerful format which offers maximum creativity to the professionals from the HD television to 4K cinema production. SRMASTER format includes both the MPEG-4 SStP (Simple Studio Profile) and F65RAW recordings.

The MPEG-4 SStP is the image compression scheme that's also used by the HDCAM-SR™ VTR product range. Fully tested and proven, SStP is an intra-frame/field visually lossless compression algorithm that records 10- or 12-bit RGB or 10-bit 4:2:2 image files, and numerous nonlinear editing platforms support native file editing. As well as existing SR-HQ (880 Mbps) and SR-SQ (440 Mbps) modes, SRMASTER products support an additional compression level called SR-Lite (220 Mbps at 1080/59i) to serve HDTV program production. Up to 16 channels of uncompressed audio track and associated metadata can be recorded, all wrapped in an industry-standard MXF wrapper.

The new F65 digital motion picture camera outputs super-rich 16bit RAW signal and SRMASTER is the only viable recording technology that can sustain real-time recording of F65RAW files without missing a frame. Due to the wide recording bandwidth of SRMemory™ cards, up to 59 minutes of F65RAW footage at 24p or up to 24 minutes of 120p high frame rate image can be recorded on 1 TB SRMemory card.

## Multi-format & Future-proof

SRMASTER products support 3G-SDI (SMPTE 424M) for a real-time image/audio/data interface. All SRMASTER products support full-bandwidth RGB, 4:2:2/1080/60p, and stereoscopic 3D recording, while certain products additionally support real-time 4K (4096 x 2160) and QFHD (3840 x 2160) recording/playback. Depending on SRMemory card speed, multiple camera streams can be recorded/played back simultaneously from a single card.\* Native recording files can be shared in the post-production environment, thanks to the network connectivity of the SR-R1000 recorder, SRPC-5 and SR-PC4 data transfer unit.

\* On the SR-R1000 recorder only.

## SRMemory – High-speed, High-capacity Removable Storage

The SRMASTER Series adopts the SRMemory card as its recording media. SRMemory cards are unique in the industry for achieving a guaranteed read/write speed of up to 5.5 Gbps, and offering a storage capacity of up to 1 TB, within a smaller, lighter removable device than is typical in personal digital assistants (PDAs). Unlike other general purpose IT memory cards, SRMemory card guarantees the data throughput thanks to the Sony proprietary memory control algorithm. With this extreme recording/playback capability, SRMemory cards are ideal storage devices for multiple HD camera work including 3D production, high frame rate digital cinematography, and high-resolution digital cinematography.

## High Security

The SRMASTER series has a powerful built-in data salvage system which means that precious images and data can be retrieved in the event memory chip failure caused, for example, by power loss.\* To prevent unauthorized access to content, SRMemory cards and the files they hold can be password protected.\*\*

\* In some instances, it may not be possible to restore images recorded just before an accident. No warranty is given on always achieving content restoration.

\*\* Password protection function of the SRMemory card will be available after 2012.

### SRMASTER License Program:

Sony offers a license program to support 3rd party company's development for SRMASTER format - which supplies technical documents and SDK.  
For more information, please contact : [sr-license@jp.sony.com](mailto:sr-license@jp.sony.com)

# SR-R1000 Memory Storage Unit

The SR-R1000\* is an ultra-high-speed, new-generation storage system suitable for a variety of applications in live, broadcast, and post-production, including multi-camera ISO recording, instant replay clip feeder, high-speed multi-ingest, cash storage, and more.

Thanks to the outstandingly high bandwidth of the SRMemory platform, the SR-R1000 can handle 2D, 3D, 1080p, and 4K, all in one unit, offering unparalleled support to professional creativity.

\* For details of supported recording/playback formats and schedule of the SR-R1000, please refer to the "Supported Format" table on page 14.



## MPEG-4 Simple Studio Profile

The SR-R1000 offers outstanding picture quality by incorporating Sony's industry-standard HDCAM-SR codec, the MPEG-4 Simple Studio Profile (SSiP).

A variety of operating levels are supported from SR-Lite (220 Mbps), and SR-SQ (440 Mbps) up to SR-HQ (880 Mbps). Both 4:2:2 (10-bit) and RGB 4:4:4 (10- and 12-bit) recording are supported. Uncompressed recording is also supported.

## 4 x Dual-stream Channels

The SR-R1000 comes as standard in a 1-Out configuration, and can be expanded to handle up to four channels in flexible configurations - 3-In/1-Out, 2-In/2-Out, 1-In/3-Out, or 4-Out - by installing optional SRK-R201 or SRK-R202 HD Input/Output boards.

Each A/V channel of the SR-R1000 is designed to handle up to dual-stream video, which allows users to record and playback one pair of 3D stereoscopic signals or key/fill signals just with one A/V channel.

All four A/V channels can be operated simultaneously, thanks to high-speed SRMemory cards. This increases productivity during live operation and post-production.

## Powerful Stereoscopic 3D Operation - 1080p 3D & RGB 3D

The SR-R1000 brings a new 3D production level to live operation and post-production. Each A/V channel of the SR-R1000 comes equipped with a dual-link 3G-SDI interface, making 3D stereoscopic production easier and more affordable. The SR-R1000 can handle up to four channels of 1080p 3D signals, or RGB 4:4:4 3D signals.

## Multi-format - 720p, 1080p, 2K, 4K

Building on the extraordinary multi-format recording capability of HDCAM-SR VTRs, the SR-R1000 supports the following formats: 1280x720/4:2:2, 1920x1080/4:2:2, 1920x1080/4:4:4, 2048x1080/4:4:4, and 2048x1556/4:4:4. When configured to handle four streams of HD/2K signal, the SR-R1000 can record 4K images (3840x2160, 4096x2160) over quad HD-SDI or quad 3G-SDI.

\* Super Slow Motion (180i) will be supported with a future option.

## 16-channel Audio

Each A/V channel supports 16-channel uncompressed digital audio (24-bit, 48 kHz), along with a split-edit capability for audio and video.

## 4 TB Removable Storage (8 TB Internal Storage\*)

The SR-R1000 has four slots for removable SRMemory cards. Each slot can be loaded with a 256 GB, 512 GB, or 1 TB memory card, providing up to 4 TB of storage capacity. As soon as, for example, a live event finishes, the user can instantly eject the SRMemory cards to bring to the editing facility - no more wasting time waiting for data to off-load.

\* 8 TB of internal fixed memory storage will be available in 2012.

| System Format | Bit depth | Frame Rate | Recording Mode | Data Rate | 1TB SRMemory x4 (4 TB) | 8TB Internal Fixed Storage | Total    |          |
|---------------|-----------|------------|----------------|-----------|------------------------|----------------------------|----------|----------|
| 1920 x 1080   | 4:2:2     | 10 bit     | 59.94i         | SR-Lite   | 220 Mbps               | 30 hours                   | 60 hours | 90 hours |
|               |           |            |                | SR-SQ     | 440 Mbps               | 15 hours                   | 30 hours | 45 hours |
| 1920 x 1080   | 4:2:2     | 10 bit     | 59.94p         | SR-SQ     | 880 Mbps               | 8 hours                    | 16 hours | 24 hours |

## Network Capability

The SR-R1000 has a network file transfer capability over Gigabit Ethernet (GbE)\* and supports FTP-protocol file transfer in the MXF (MPEG-4 SStP) format.

\* 10GbE option will be available in 2012.

## Format Converter & Multi-monitor Output\*

The SRK-R202 HD Output Board is equipped with an internal format converter that provides SDTV down-converted outputs from 1080 and 720 recordings, 2-3 pull-down, cross-conversion between 1080 and 720, and between 4:2:2 and 4:4:4. Multi-monitor output enables real-time monitoring of all four SR-R1000 video channels in quad-split display.

\* Format Converter and Multi-monitor Output will be available in 2012.

## Versatile Control Protocol & Interoperability

The SR-R1000 can be fully controlled by switcher and slow-motion controllers, separately for each A/V channel. The system is compatible with the most popular control protocols such as Sony's VTR/Disk protocol and VDCP\*. When working in a live operation or post-production environment with MVS switchers, the SR-R1000 is best used as a 2D/3D clip feeder, synchronized key/fill source, graphics feeder, or temporary buffer for compositing. The SR-R1000 also offers flawless integration with third-party tools and the most popular craft editors, including Avid Media Composer and Apple Final Cut Pro.

\* VDCP protocol will be supported in 2012.

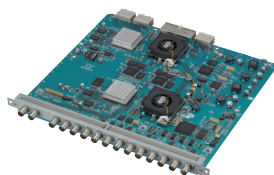


SR-R1000 Front Panel

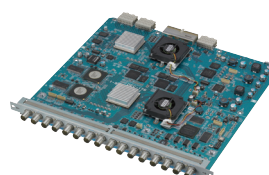


SR-R1000 Rear Panel  
(SRK-R201/R202 boards are installed.)

## Optional Accessories



SRK-R201 HD Input Board



SRK-R202 HD Output Board

# SR-R1/SR-R4 Portable Memory Recorder

A line-up of two portable recorders is offered for the SRMASTER family, to meet a variety of production demands. The SR-R1\* is designed for high-quality HD recording while the SR-R4 is a 16 bit linear RAW recording system specifically developed for Sony's new top-end F65 cinematography motion picture camera. These recorders take full advantage of the ultra-high-speed SRMemory platform, raising quality and creativity standards in professional production.

\* For details of supported recording/playback formats and schedule of the SR-R1, please refer to the "Supported Format" table on page 14.

## SR-R1

The SR-R1 is a highly portable recording system compatible with any cameras, camcorders, and other equipment with an HD-SDI interface. Dual-link HD-SDI/3G-SDI is supported to provide stunning recording capabilities including 1080 50p/59.94p and RGB 4:4:4 recording. This system also offers a dual-stream recording capability which is useful for 3D stereoscopic image capturing. SR-Lite (220 Mbps) and SR-SQ (440 Mbps) are supported as standard; SR-HQ (880 Mbps) and uncompressed recording are supported as options.

### Main Features

- HD-SDI/3G-SDI dual-link In/Out
- Full-bandwidth RGB 4:4:4 recording
- 4:2:2 1080 50p/59.94p recording
- SR-Lite and SR-SQ recording
- SR-HQ including RGB 12-bit and uncompressed recording (option: SRK-R311)
- 16 channels of 24-bit audio
- 3D stereoscopic (dual-stream) mode (up to 29.97p, RGB 4:4:4 dual-stream is optional)
- DC operation
- Timecode In/Out
- Control panel supplied
- RS-422 remote control
- Dockable style operation with Sony camcorders (via optional adaptor)



SR-R1 Connectors



HDW-F900R with SR-R1 attached\*

\* Requires power supply to both camcorder and SR-R1.

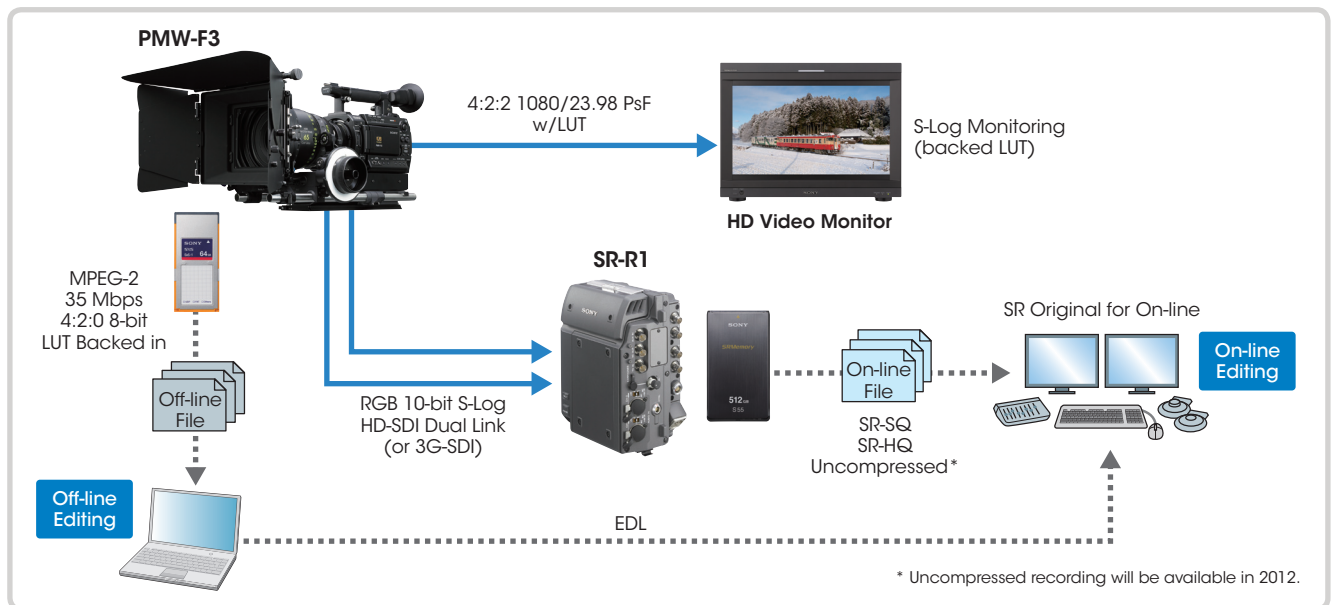
## Perfect Companion Storage for PMW-F3

The SR-R1 offers a high-quality on-line storage solution for Sony's PMW-F3. SR-quality on-line recording is provided with SRMemory cards while MPEG-2 off-line media can be simultaneously recorded on SxS™ cards in the PMW-F3. Both media have perfectly synchronized timecodes and duration, offering a truly efficient workflow.

- RGB S-Log recording
- Select FPS - 4:2:2 17 fps to 60 fps, RGB 17 fps to 30 fps
- Synchronized REC trigger
- Simultaneous recording on SxS (off-line) and SRMemory card (on-line) with synchronized timecodes



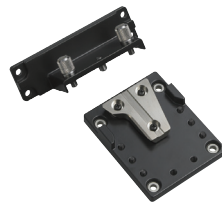
## PMW-F3 & SR-R1 RGB S-Log Workflow



## Optional Accessories

SRK-R311\* HQ Record Option

\* SRK-R311 will be available in 2012.



SRK-R302 Attachment Kit

## Chrosziel Accessories



401-R119 Mount on 19 mm Rod  
401-R115 Mount on 15 mm Rod  
(photo shows 401-R119)



3305 Hand Grip



## SR-R4

The SR-R4 is exclusively designed as the companion on-board recorder for Sony's new top-of-the-line F65 digital motion picture camera. It takes full advantage of the ultra-high-speed SRMemory platform to record super-rich RAW data from the F65 at speeds as fast as up to 5.5 Gbps. Together with the newly developed, state-of-the-art image sensor of F65, the SR-R4 delivers amazing, never-seen-before image quality.

Furthermore, HD recording in MPEG-4 SStP format\* is also offered with the F65 and SR-R4 for HDTV program production.

### Main Features

- Dockable with the F65 camera
- F65RAW (16-bit Linear RAW) recording
- 59 minutes of RAW recording onto a 1 TB SRMemory card at 24 fps
- 120 fps high frame rate recording
- HD MPEG-4 SStP recording\*
- Select FPS – variable frame rate image capturing from 1 fps to 60 fps in Normal mode, and 1 fps to 120 fps in HFR mode
- 16 channels of 24-bit audio recording
- 2 channels of analog audio inputs
- Timecode In/Out
- Control panel (option: SRK-CP1)

\* To be supported in future.



### Optional Accessory



SRK-CP1 Control Panel

## F65 Digital Motion Picture Camera

The F65 is the Sony's brand-new top-end digital motion picture camera. At the heart of the F65 camera is Sony's newly developed 8K CMOS sensor, which delivers pristine HD, 2K, and true 4K resolution today – and will go far beyond 4K in the future, as the industry needs evolve.

### Main Features

- Unique 8K CMOS sensor with approx. 20M pixels
- Wide color gamut, ideal for AMPAS-IIF workflow
- Rotary shutter model to prevent motion artifacts
- 1 to 120p high frame rate image capturing
- 16 bit Linear RAW output
- HD-SDI output
- Built-in ND filter
- Wi-Fi control from tablet device





## SRPC-5 Memory Data Transfer Unit

The SRPC-5\* is a rack mount type data transfer unit that allows SRMemory data viewing, logging, and ingesting to editing applications. The unit offers a web-based GUI, which is used for viewing and ingesting SRMemory content for review at post-production acceptance. In addition, it can duplicate valuable materials to HDCAM-SR tape.

\* For details of supported playback formats and schedule of the SRPC-5, please refer to the "Supported Format" table on page 14.



### Main Features

#### • Fast Ingest

- The SRPC-5 allows fast data transfer from SRMemory cards to servers and/or NLEs via GbE or an optional 10GbE network interface.
- It also enables fast ingest from HDCAM-SR tapes\*, at up to twice\*\* the normal playback speed

#### • Simple Viewing

- When a material is recorded in SR Video mode, it is capable to browse and view on broadcast monitor.

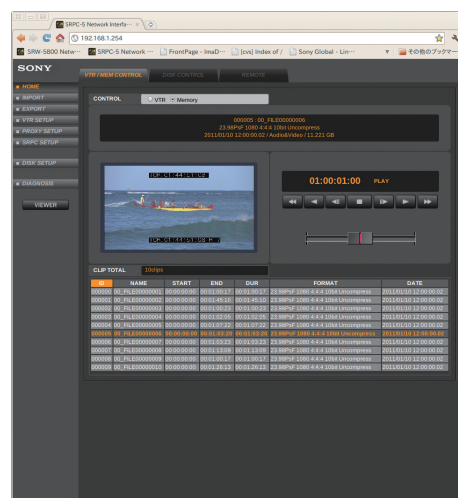
#### • Tape Backup\*

- When connected to SRW-5800, the recorded materials on SRMemory can be duplicated to HDCAM-SR tape without decode/re-encode processes. Users can simply duplicate a whole SRMemory contents or select clips to be cloned

#### • 1RU high frame, fitting a 19-inches rack unit

\* HDCAM-SR tape ingest and tape backup function will be supported in 2012.

\*\* Refers to MXF files.



## SR-PC4 Memory Data Transfer Unit

The SR-PC4\* is an SRMemory data transfer unit specifically designed for portable environment. It can be smartly integrated into PC-based production environment such as on-set video village, on-set dailies system, and production office. Materials shot by the F65 can be instantly reviewed via SR-PC4's web-based GUI just after shooting.

\* For details of supported playback formats and schedule of the SRPC-4, please refer to the "Supported Format" table on page 14.

### Main Features

- DC operation (AC adapter supplied)
- SRMemory READ/WRITE\*
- Fast data transfer from SRMemory card to servers and/or NLEs via GbE or an optional 10GbE\*\* network interface. Files and clips can be easily browsed by the SR-PC4 GUI.
- F65RAW monitoring (optional)
- Direct data copy to shuttle drives via an optional eSATA\*\* interface

\* SRMemory WRITE and F65RAW monitoring option will be available in 2012.

\*\* 3rd party PCIe card



# SR-256S15/SR-512S25/SR-1TS25/SR-256S55/SR-512S55/SR-1TS55\* Memory Card



The SRMemory card is an ultra-high-speed, high-capacity, and high-reliability flash memory media for SRMASTER series products, ideal for demanding professional applications including 3D production, high-frame-rate recording, and high-resolution digital cinematography. The SRMemory card line-up includes three speeds and three capacities in six different models, to best accommodate the full range of user requirements. Thanks to its sustained data throughput, the SRMemory card can record and playback multiple streams simultaneously and supports data rates that can handle up to 4K.\*\*

\* SR-1TS55 card will be available in 2012.







\*\* Depending on the data rate of the recording signal (such as 4K, dual-stream, and I/O configuration), usable SRMemory card may be limited.

## Main Features

- Up to 5.5 Gbps ultra-high-speed sustainable read/write speed
- Compact, high-capacity removable media
  - 60 x 9.4 x 105 mm, approx. 100 g  
(2 3/8 x 3/8 x 4 1/4 inches, 3.5 oz)
  - Up to 1 TB storage capacity
- HD to 4K real-time and multi-stream recording
  - YPbPr422, RGB444, 1080 59.94p, 3D, 4K, uncompressed
- High data security and high data reliability
  - Sony's original data redundancy method for high data reliability
  - High data security such as card/file password protection and device authentication\*

\* Data security function will be available after 2012.

## Maximum Recording Time (min.)\*

| Series           |          | S15   | S25   |  | S55   |   |  |     |
|------------------|----------|---|---|--|---|---|--|-----|
|                  |          | 1.5 Gbps  | 2.5 Gbps  |  | 5.5 Gbps  |   |  |     |
| Model Name       |          | <br><b>SR-256S15</b> | <br><b>SR-512S25</b> | <br><b>SR-1TS25</b> | <br><b>SR-256S55</b> | <br><b>SR-512S55</b> | <br><b>SR-1TS55**</b> |     |
| Capacity         |          | <b>256 GB</b>   | <b>512 GB</b>   | <b>1 TB</b>  | <b>256 GB</b>   | <b>512 GB</b>   | <b>1 TB</b>  |     |
| HD               | 59.94i   | SR-Lite 422   | 114   | 228  | 457   | 114   | 228  | 457 |
|                  |          | SR-SQ 422/444   | 60  | 120  | 241   | 60  | 120  | 241 |
|                  |          | SR-HQ 444   | 32  | 64   | 128   | 32  | 64   | 128 |
|                  | 59.94p   | SR-Lite 422   | 60  | 120  | 241   | 60  | 120  | 241 |
|                  |          | SR-SQ 422/444   | 32  | 64   | 128   | 32  | 64   | 128 |
|                  |          | SR-HQ 444   | N.A.  | 32   | 65  | 16  | 32   | 65  |
|                  | 50i      | SR-Lite 422   | 137   | 274  | 549   | 137   | 274  | 549 |
|                  |          | SR-SQ 422/444   | 72  | 144  | 290   | 72  | 145  | 290 |
|                  |          | SR-HQ 444   | 38  | 76   | 153   | 38  | 76   | 153 |
|                  | 50p      | SR-Lite 422   | 72  | 144  | 290   | 72  | 145  | 290 |
|                  |          | SR-SQ 422/444   | 38  | 76   | 153   | 38  | 76   | 153 |
|                  |          | SR-HQ 444   | N.A.  | 39   | 78  | 19  | 39   | 78  |
|                  | 23.98PsF | SR-Lite 422   | 142   | 285  | 572   | 142   | 286  | 572 |
|                  |          | SR-SQ 422/444   | 77  | 155  | 311   | 77  | 155  | 311 |
|                  |          | SR-HQ 444   | 40  | 80   | 160   | 40  | 80   | 160 |
| Uncompressed 422 |          | 27  | 55  | 110  | 27  | 55  | 110  |     |
| Uncompressed 444 |          | N.A.  | 34  | 69   | 17  | 34  | 69   |     |
| 4K               | 23.98PsF | F65RAW  | N.A.  | 29   | 59  | 14  | 29   | 59  |
|                  | 120PsF   | F65RAW HFR  | N.A.  | N.A.   | N.A.  | 5   | 11   | 23  |

\* Depending on the data rate of the recording signal (such as 4K, dual-stream, and I/O configuration), usable SRMemory card may be limited.  
In case of 3D recording, maximum recording time will be approximately half.

\*\* SR-1TS55 card will be available in 2012.

## Specifications

|                                |  |
|--------------------------------|--|
| Transfer Speed (Sustained)     | SR-256S15: 1.5 Gbps  |
|                                | SR-512S25/SR-1TS25: 2.5 Gbps   |
|                                | SR-256S55/SR-512S55/SR-1TS55: 5.5 Gbps                                 |
| Capacity (User Capacity) *     | SR-256S15/SR-256S55: 256 GB (approx. 225 GB)                           |
|                                | SR-512S25/SR-512S55: 512 GB (approx. 450 GB)                           |
|                                | SR-1TS25/SR-1TS55*: 1 TB (approx. 900 GB)                              |
| Input Voltage                  | 3.3 V DC $\pm$ 10%   |
| Power Consumption              | Max. 10 W  |
| Operating Temperature/Humidity | Complies with the operating condition of the supported device          |
| Storage Temperature/Humidity   | -40 °C to +80 °C (-40 °F to +176 °F)/95% or less (non condensation)    |
| Dimensions                     | 60 x 9.4 x 105 mm (2 3/8 x 3/8 x 4 1/4 inches) (excluding protrusions) |
| Mass                           | Approx. 100 g (3.5 oz.)  |
| Supplied Accessories           | Card case, Card label sheet, Operation manual                          |

\* The SR-1TS55 will be available in 2012.

# SRV-10 Ver. 1.10\* SR Viewer

SRV-10 Ver.1.10 software is a simple-to-use PC application that allows easy viewing of SStP (Simple Studio Profile) MXF video clips imported from the SRMASTER products and SRW-5800/HKSR-5804. Once an SStP MXF file is imported, users can conveniently view the footage at any PC workstation installed with SRV-10 software.

## Functionalities

- Viewing SStP MXF files on a PC display and/or broadcast monitor when an HD-SDI video card is installed
- Supports 4:2:2 SR-SQ/SR-Lite and 4:4:4 SR-SQ formats
- Media metadata can be viewed on SRV-10 Ver.1.10
- Converts SStP MXF format files to sequentially-numbered DPX files
- Converts MXF V1.2 format files to MXF V1.3 files

## System Requirements

- CPU: Intel Xeon 2.33-GHz processor with 8 processing cores or higher
- Memory: 1 GB or more
- HDD: 100 MB or more of free hard disk space
- Monitor resolution: 1024 x 768 pixels or better
- Operating system: Microsoft Windows XP Professional Service Pack 2 32-bit or later, or Microsoft Windows Vista Business/Ultimate 32-bit or 64-bit, or Microsoft Windows 7 32-bit or 64-bit
- Other: DirectX 9.0c or later installed

\* This software is designed for use with an MS Windows® operating system (OS). U.S. export control regulations may require an export license for export/re-export of the Windows OS (for details, contact Microsoft Corporation).

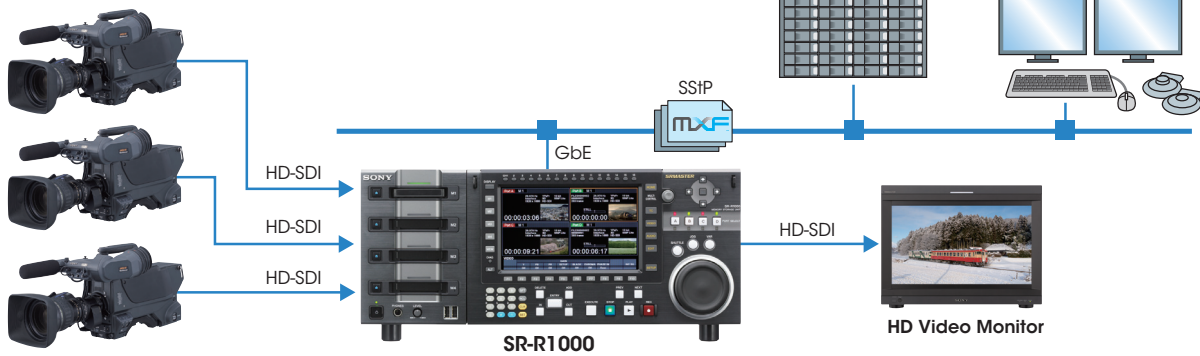


# System Example

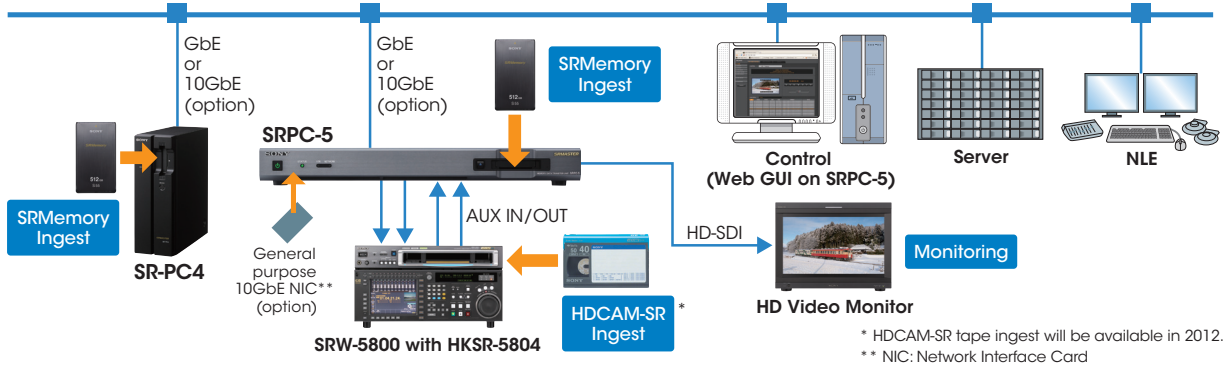
## SR-R1000 Instant Replay



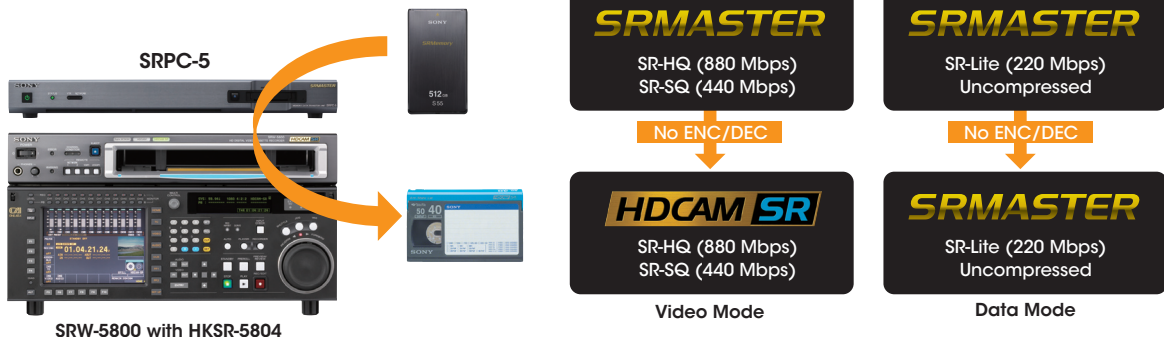
## SR-R1000 Multi-camera Studio Recording



## SRMemory Ingest



## SRPC-5 Tape Backup\*



# Supported Format

## Supported Format (2D)

| Image Format  | Frame Rate           | SR Recording   |  |   |  |
|---------------|----------------------|--|--|---|--|
|               |                      | HQ (12bit)   | HQ (10 bit)  | SQ (10bit)                                | Life (10bit)                             |
| 1280x720/422  | 50/59.94p            | -  | -  | SR-R1*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000  | SR-R1*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000 |
| 1920x1080/422 | 50/59.94p            | -  | -  | SR-R1**<br>SRPC-5<br>SR-PC4<br>SR-R1000*  | SR-R1**<br>SRPC-5<br>SR-PC4<br>SR-R1000* |
|               | 23.98/24/25/29.97PsF | -  | -  | SR-R1<br>SRPC-5<br>SR-PC4<br>SR-R1000     | SR-R1<br>SRPC-5<br>SR-PC4<br>SR-R1000    |
|               | 50/59.94i            | -  | -  | SR-R1<br>SRPC-5<br>SR-PC4<br>SR-R1000     | SR-R1<br>SRPC-5<br>SR-PC4<br>SR-R1000    |
| 1920x1080/444 | 50/59.94p            | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | -  |
|               | 23.98/24/25/29.97PsF | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1<br>SRPC-5<br>SR-PC4<br>SR-R1000     | -  |
|               | 50/59.94i            | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1<br>SRPC-5<br>SR-PC4<br>SR-R1000*    | -  |
| 2048x1080/444 | 23.98/24/25PsF       | SR-R1000*  | SR-R1000*  | -   | -  |
| 2048x1556/444 | 23.98/24/25PsF       | -  | SR-R1000*  | -   | -  |

SRPC-5/SR-PC4 V1 supports read only.

\* To be supported in 2012.

\*\* V1 supports SelectFPS with the PMW-F3. Native 1080p will be supported in 2012.

## Supported Format (3D)

| Signal        | Frame Rate           | SR Recording   |  |  |   |
|---------------|----------------------|--|--|--|---|
|               |                      | HQ (12bit)   | HQ (10bit)   | SQ (10bit)   | Life (10bit)                              |
| 1280x720/422  | 50/59.94p            | -  | -  | SR-R1*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000*              | SR-R1*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* |
| 1920x1080/422 | 50/59.94p            | -  | -  | SR-R1000*  | SR-R1000*                                 |
|               | 23.98/24/25/29.97PsF | -  | -  | SR-R1*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000               | SR-R1*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000  |
|               | 50/59.94i            | -  | -  | SR-R1*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000               | SR-R1*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000  |
| 1920x1080/444 | 50/59.94p            | SR-R1000*  | SR-R1000*  | SR-R1000*  | -   |
|               | 23.98/24/25/29.97PsF | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000  | -   |
|               | 50/59.94i            | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | SR-R1 (w/SRK-R311)*<br>SRPC-5*<br>SR-PC4*<br>SR-R1000* | -   |
| 2048x1080/444 | 23.98/24/25PsF       | SR-R1000*  | SR-R1000*  | -  | -   |
| 2048x1556/444 | 23.98/24/25PsF       | -  | -  | -  | -   |

SRPC-5/SR-PC4 V1 supports read only.

\* To be supported in 2012.

# Specifications

| SR-R1000  |   |  |
|---|---|--|
| <b>General</b>  |   |  |
| Recording Format  | MPEG-4 SSIP format  |  |
| Power Requirements  | 100 to 240 V AC   |  |
| Power Consumption   | Max. 480 W  |  |
| Operating Temperature   | 5 °C to 40 °C (41 °F to 104 °F)   |  |
| Storage Temperature   | -20 °C to +60 °C (-4 °F to +140 °F)   |  |
| Humidity  | 25% to 90% (no condensation)  |  |
| Mass  | 23 kg (50 lb 11 oz) (with all options)                                      |  |
| Dimensions (W x H x D)  | 427 x 174 x 540 mm (16 7/8 x 6 7/8 x 21 5/16 inches) (excluding protrusion) |  |
| <b>Video (422 Format)</b>   |   |  |
| Sampling Frequency  | Y: 74.25 MHz, Pb/Pr: 37.125 MHz   |  |
| Quantization  | 10 bits/sample  |  |
| Compression   | MPEG-4 SSIP   |  |
| <b>Video (444 Format)</b>   |   |  |
| Sampling Frequency  | RGB: 74.25 MHz  |  |
| Quantization  | 10 bits/sample, 12 bits/sample*   |  |
| Compression   | MPEG-4 SSIP   |  |
| <b>Digital Audio</b>  |   |  |
| Sampling Frequency  | 48 kHz  |  |
| Quantization  | 24 bits/sample  |  |
| Headroom  | 20/18/16/15/12/9 dB selectable  |  |
| <b>Analog Audio</b>   |   |  |
| D/A Quantization  | 24 bits/sample  |  |
| <b>Input/Output</b>   |   |  |
| <b>When the SRK-R201 is installed (optional)</b>                            |   |  |
| HD-SDI Input  | A/B   | BNC (x2)<br>HD-SDI (1.485 Gbps) (SMPTE 292M/BTA-S004B standard)<br>3G-SDI (2.97 Gbps) (SMPTE 424M)   |
|   | Input Monitor A/B   | BNC (x2)<br>HD-SDI (1.485 Gbps) (SMPTE 292M/BTA-S004B standard)<br>3G-SDI (2.97 Gbps) (SMPTE 424M)   |
| HD-SDI Output   | Multi Monitor*  | BNC (x1)<br>HD-SDI (1.485 Gbps) (SMPTE 292M/BTA-S004B standard)  |
| Timecode Input  |   | BNC (x1)<br>0.5 to 18 Vp-p, 10 kΩ  |
| Timecode Output   |   | BNC (x1)<br>2.2 Vp-p, low impedance  |
| Digital Audio Input (AES/EBU)   |   | BNC (x8) (CH1/2, CH3/4, CH5/5, CH7/8, CH9/10, CH11/12, CH13/14, CH15/16)<br>AES/EBU format, unbalanced                                       |
| <b>When the SRK-R202 is installed (one SRK-202 is included as standard)</b> |   |  |
| HD-SDI Output   | A/B   | BNC (x6) (MONITOR includes character superimpose)<br>HD-SDI (1.485 Gbps) (SMPTE 292M, BTA-S004B standard)<br>3G-SDI (2.97 Gbps) (SMPTE 424M) |
|   | Multi Monitor*  | BNC (x1)<br>HD-SDI (1.485 Gbps) (SMPTE 292M/BTA-S004B standard)  |
| Timecode Output   |   | BNC (x1)<br>2.2 Vp-p, low impedance  |
| Digital Audio Output (AES/EBU)  |   | BNC (x8) (CH1/2, CH3/4, CH5/5, CH7/8, CH9/10, CH11/12, CH13/14, CH15/16)<br>AES/EBU format, unbalanced                                       |
| <b>SR-R1000 Standard Input/Output</b>                                       |   |  |
| Reference Input   |   | BNC (x2) (including one loop-through) 75 Ω with terminal switch<br>HD (tri-level sync)/SD (Black Burst)                                      |
| Remote  | 1/2/3/4   | D-sub 9-pin (female) (x4)  |
| Video Control   |   | D-sub 9-pin (female) (x1)  |
| GPIO (25P)  |   | D-sub 25-pin (female) (x1)   |
| Network   | 1/2   | RJ-45 jack (x2), 1000BASE-T  |
| Maintenance   |   | USB type (x3), RJ-45 jack (x1)   |
| Analog Monitor Output   |   | XLR-3-pin (male) (x2)  |
| Headphone   |   | Phone jack (x1)  |
| <b>Supplied Accessories</b>   |   |  |
|   | Operation Guide (1), Installation Manual (1), Operation Manual (CD-ROM) (1) |  |

\* Multi monitor output and 12 bit recording will be available in 2012.

| SR-R1                           |  |   |
|---------------------------------|--|---|
| <b>General</b>                  |  |   |
| Recording Format                | MPEG-4 SSIP format, Uncompressed*  |   |
| Power Requirements              | 11 to 17 V DC  |   |
| Power Consumption               | 30 W (when recording at 422 23.98PsF SR-Lite mode)   |   |
| Operating Temperature           | 0 °C to 40 °C (32 °F to 104 °F)  |   |
| Storage Temperature             | -20 °C to +60 °C (-4 °F to +140 °F)  |   |
| Humidity                        | 10% to 95% (no condensation)   |   |
| Mass                            | 1.9 kg (4 lb 3 oz) (excluding control panel and SRMemory card)   |   |
| Dimensions (W x H x D)          | 141 x 97 x 190 mm (5 5/8 x 3 7/8 x 7 1/2 inches) (excluding protrusion)  |   |
| <b>Video (422 Format)</b>       |  |   |
| Sampling Frequency              | Y: 74.25 MHz, Pb/Pr: 37.125 MHz  |   |
| Quantization                    | 10 bits/sample   |   |
| Compression                     | MPEG-4 SSIP, Uncompressed*   |   |
| <b>Video (444 Format)</b>       |  |   |
| Sampling Frequency              | RGB: 74.25 MHz   |   |
| Quantization                    | 10 bits/sample, 12 bits/sample*  |   |
| Compression                     | MPEG-4 SSIP, Uncompressed*   |   |
| <b>Digital Audio</b>            |  |   |
| Sampling Frequency              | 48 kHz (synchronized with video)   |   |
| Quantization                    | 24 bits/sample   |   |
| Headroom                        | 20 dB  |   |
| <b>Analog Audio Input</b>       |  |   |
| A/D Quantization                | 24 bits/sample   |   |
| Reference Input Level           | Line: +4 dBV, Mic: -34/-46/-58 dBV   |   |
| Frequency Response              | 20 Hz to 20 kHz +0.5/-1.0 dB (reference level)   |   |
| Dynamic Range                   | 100 dB or more (1 kHz)   |   |
| Distortion                      | 0.05% or less (1 kHz, reference level)   |   |
| Crosstalk                       | -80 dB or less (1 kHz, between each channel)   |   |
| <b>Input/Output</b>             |  |   |
| <b>Input</b>                    |  |   |
| HD-SDI Input                    | A/B  | BNC (x2)<br>HD-SDI (1.485 Gbps) (SMPTE 292M/372M/BTA-S004B standard)<br>3G-SDI (2.97 Gbps) (SMPTE 424M) |
|                                 | Audio Input  | CH-1/CH-2: XLR-3-pin (female) (x2)<br>Line/Mic/Mic +48V selectable                                      |
| Timecode Input                  |  | BNC (x1)<br>0.5 to 18 Vp-p, 10 kΩ (SMPTE 12M standard)  |
| Auxiliary Input (Digital Audio) |  | BNC (x1)<br>HD-SDI embedded audio (1.485 Gbps)  |
| <b>Output</b>                   |  |   |
| Timecode Output                 |  | BNC (x1)<br>1.0 Vp-p (75Ω), 2.2 Vp-p (10 kΩ) (SMPTE 12M standard)                                       |
| HD-SDI Output                   | A/B  | BNC (x2)<br>HD-SDI (1.485 Gbps) (SMPTE 292M/372M/BTA-S004B standard)<br>3G-SDI (2.97 Gbps) (SMPTE 424M) |
|                                 | Earphones  | Stereo mini-jack (x1)   |
| <b>Input/Output</b>             |  |   |
| Remote                          |  | LEMO 14-pin (female) (x1)   |
| Control Panel                   |  | Control panel connector (x1)  |
| <b>Supplied Accessories</b>     |  |   |
|                                 | Control Panel (1), BKP spacer (1), Control Panel Bracket (1), Control Panel Cable (L600) (1), Remote Conversion Cable (1), Operation Manual (E)(1), (J)(1) |   |

\* Uncompressed recording and 12 bit recording will be available in 2012.

| SR-R4                           |  |  |
|---------------------------------|--|--|
| <b>General</b>                  |  |  |
| Recording Format                | F65RAW, MPEG-4 SSIP format*  |  |
| Power Requirements              | 11 to 17 V DC (from F65)   |  |
| Power Consumption               | Approx. 37 W (when recording at F65RAW 24 fps mode)  |  |
| Operating Temperature           | 0 °C to 40 °C (32 °F to 104 °F)  |  |
| Storage Temperature             | -20 °C to +60 °C (-4 °F to +140 °F)  |  |
| Humidity                        | 10% to 95% (no condensation)   |  |
| Mass                            | 1.8 kg (3 lb 15 oz) (excluding SRMemory card)  |  |
| Dimensions (W x H x D)          | 141 x 89 x 190 mm (5 5/8 x 3 3 5/8 x 7 1/2 inches) (excluding protrusion)                                  |  |
| <b>F65RAW</b>                   |  |  |
| RAW Signal                      | F65RAW   |  |
| Quantization                    | 16 bits linear   |  |
| Compression                     | Sony original  |  |
| <b>Video (444 Format) *</b>     |  |  |
| Sampling Frequency              | RGB: 74.25 MHz   |  |
| Quantization                    | 10 bits/sample, 12 bits/sample   |  |
| Compression                     | MPEG-4 SSIP  |  |
| <b>Digital Audio</b>            |  |  |
| Sampling Frequency              | 48 kHz (synchronized with video)   |  |
| Quantization                    | 24 bits/sample   |  |
| Headroom                        | 20 dB  |  |
| <b>Analog Audio</b>             |  |  |
| D/A Quantization                | 24 bits/sample   |  |
| <b>Input/Output</b>             |  |  |
| <b>Input</b>                    |  |  |
| Timecode Input                  |  | BNC (x1)<br>0.5 to 18 Vp-p, 10 kΩ                                  |
| Audio Input                     |  | CH-1/CH-2: XLR-3-pin (female) (x2)<br>Line/Mic/Mic +48V selectable |
| Auxiliary Input (Digital Audio) |  | BNC (x1)<br>HD-SDI embedded audio (1.485 Gbps)                     |
| <b>Output</b>                   |  |  |
| Timecode Output                 |  | BNC (x1)<br>2.2 Vp-p, low impedance (SMPTE 12M standard)           |
| Earphones                       |  | Stereo mini-jack (x1)  |
| <b>Input/Output</b>             |  |  |
| Control                         |  | LEMO 9-pin (female) for control panel (x1)                         |
| <b>Supplied Accessories</b>     |  |  |
|                                 | BKP spacer (1), Control Panel Bracket (1), Control Panel Cable (L600) (1), Operation Manual (E)(1), (J)(1) |  |

\* To be supported in future.

# Specifications

| SRPC-5                       |  |
|------------------------------|--|
| <b>General</b>               |  |
| Power Requirements           | 100 to 240 V AC (50/60 Hz)   |
| Power Consumption            | 120 W (with all options)   |
| Operating Temperature        | 5 °C to 40 °C (41 °F to 104 °F)  |
| Storage Temperature          | -20 °C to +60 °C (-4 °F to +140 °F)  |
| Mass                         | 10 kg (22 oz)  |
| Dimensions (W x H x D)       | 427 x 43.6 x 546 mm (16 7/8 x 1 3/4 x 21 1/2 inches) (excluding protrusion)  |
| <b>Video (422 Format)</b>    |  |
| Sampling Frequency           | Y: 74.25 MHz, Pb/Pr: 37.125 MHz  |
| Quantization                 | 10 bits/sample   |
| Compression                  | MPEG-4 SSIP  |
| <b>Video (444 Format)</b>    |  |
| Sampling Frequency           | RGB: 74.25 MHz   |
| Quantization                 | 10 bits/sample, 12 bits/sample   |
| Compression                  | MPEG-4 SSIP  |
| <b>Digital Audio</b>         |  |
| Sampling Frequency           | 48 kHz   |
| Quantization                 | 24 bits/sample   |
| Headroom                     | 20/18 dB   |
| <b>Analog Audio</b>          |  |
| D/A Quantization             | 24 bits/sample   |
| <b>Input/Output</b>          |  |
| <b>Input</b>                 |  |
| Auxiliary Input              | BNC (x2) for uncompressed data dubbing between SRW-5800s   |
| <b>Output</b>                |  |
| Auxiliary Output             | A/B BNC (x2)<br>HD-SDI (1.485 Gbps) (SMPTE 292M/372M/BTA-S004B standard)<br>3G-SDI (2.97 Gbps) (SMPTE 424M)  |
| <b>Input/Output</b>          |  |
| VTR Interface (Input/Output) | Local interface input A/B: BNC (x2)<br>Local interface output A/B: BNC (x2)  |
| Ethernet                     | RJ-45 jack (x1), 1000BASE-T  |
| Option                       | PCI Express slot (x1) (PCI Express x4 Gen1)  |
| <b>Supported Format</b>      |  |
| <b>SRMemory</b>              |  |
|                              | 1080 4:2:2 Lite/4:2:2 SQ/4:4:4 SQ/4:4:4 HQ<br>23.98PsF, 24PsF, 25PsF, 29PsF, 50p, 59.94p, 50i, 59.94i<br>720 4:2:2 50p, 59.94p   |
| <b>VTR</b>                   |  |
|                              | 1080 4:2:2/4:4:4 SQ/4:4:4 HQ<br>23.98PsF, 24PsF, 25PsF, 29PsF, 30PsF, 50i, 59.94i, 60i<br>720 4:2:2 50p, 59.94p  |
| <b>DATA</b>                  |  |
|                              | 29.97PsF, 25PsF  |
| <b>File Format</b>           |  |
|                              | DPX RGB/YPbPr 8/10/16 bit<br>CIN RGB 8/10/16 bit<br>TIFF RGB 8/16 bit (Max. image size: 4096 x 3112, 1 element file)<br>MXF (4:2:2Lite/4:2:2SQ/4:4:4SQ SRMemory or HDCAM tape import only) |
| <b>On-board Function</b>     |  |
|                              | 1D LUT, Down converter, Color space conversion   |
| <b>Supplied Accessories</b>  |  |
|                              | Rack Mount Angle (1), Installation Manual (1), Operation Manual (1)  |

| SR-PC4                      |  |
|-----------------------------|--|
| <b>General</b>              |  |
| Power Requirements          | DC 19.5 V  |
| Power Consumption           | 120 W (with all options)   |
| Operating Temperature       | 5 °C to 40 °C (41 °F to 104 °F)  |
| Storage Temperature         | -20 °C to +60 °C (-4 °F to +140 °F)  |
| Mass                        | 3.9 kg (8 lb 9 oz)   |
| Dimensions (W x H x D)      | 88 x 250 x 231 mm (3 1/2 x 9 7/8 x 9 1/8 inches) (excluding protrusion)  |
| <b>Video (422 Format)</b>   |  |
| Sampling Frequency          | Y: 74.25 MHz, Pb/Pr: 37.125 MHz  |
| Quantization                | 10 bits/sample   |
| Compression                 | MPEG-4 SSIP  |
| <b>Video (444 Format)</b>   |  |
| Sampling Frequency          | RGB: 74.25 MHz   |
| Quantization                | 10 bits/sample, 12 bits/sample   |
| Compression                 | MPEG-4 SSIP  |
| <b>Digital Audio</b>        |  |
| Sampling Frequency          | 48 kHz   |
| Quantization                | 24 bits/sample   |
| Headroom                    | 20/18 dB   |
| <b>Analog Audio</b>         |  |
| D/A Quantization            | 24 bits/sample   |
| <b>Input/Output</b>         |  |
| <b>Output</b>               |  |
| Auxiliary Output            | BNC (x1)<br>HD-SDI (1.485 Gbps) (SMPTE 292M/BTA-S004B standard)<br>3G-SDI (2.97 Gbps) (SMPTE 424M)                             |
| <b>Input/Output</b>         |  |
| Ethernet                    | RJ-45 jack (x1), 1000BASE-T  |
| Option                      | PCI Express slot (x1) (PCI Express x4 Gen1)  |
| <b>Supported Format</b>     |  |
| <b>SRMemory</b>             |  |
|                             | 1080 4:2:2 Lite/4:2:2 SQ/4:4:4 SQ/4:4:4 HQ<br>23.98PsF, 24PsF, 25PsF, 29PsF, 50p, 59.94p, 50i, 59.94i<br>720 4:2:2 50p, 59.94p |
| <b>File Format</b>          |  |
|                             | MXF (4:2:2Lite/4:2:2SQ/4:4:4SQ)  |
| <b>On-board Function</b>    |  |
|                             | 1D LUT, Down converter, Color space conversion   |
| <b>Supplied Accessories</b> |  |
|                             | AC Adapter (1), Installation Manual (1), Operation Manual (1)  |

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