F65

Preliminary Information Subject to Change

PRELIMINARY INFORMATION

The F65 is a top-end motion picture camera. It features upgrade in sensor technology, using a 20 Mega pixel 8K CMOS sensor. The F65 runs up to 120Fps, creates HD/2K or genuine 4K or 8K resolution images have a color gamut beyond film print stock, with an outstanding 14 Stop dynamic range, and 800EI base sensitivity.

The docking SR-R4 SRMemory recorder records 16 bit linear RAW files directly on to an SRMemory card at up to 5.5 Gbps. This can be processed and edited with industry-standard NLEs from companies such as Adobe, Avid, Apple, Film light, Quantel, Sony and many others. For maximum operational flexibility, the SR-R4 can also support SStP SRMaster files (the same as HDCAM SR) recording which can be used natively on most NLEs.

Features

Super 35mm CMOS sensor with 20 Mega pixels

Compared to the 8.8 million photosites of the typical 4K sensor, the F65 sensor has 20 million photosites. Where most 4K sensor have half as many green photosites as there are 4K output pixels, the F65 sensor has a one-to-one ratio: one green photosite for each pixel of the 4K image output. This new “Zig-Zag” sampling structure results in the superior image sharpness, and includes a full 4K resolution on the all-important Green channel.

The large amount of over-sampling provides a wide choice of format composition without the quality loss of previous cameras, including 1.85:1, 1.78:1, 1.66:1, 1.33:1, 2.35 spherical, 1.3x anamorphic, or 2x anamorphic cropped. The F65 has 14-stops of latitude, a high base sensitivity of 800EI as well as an ultra-low noise level.

Supersampling HD and 2K

Even if your postproduction workflow and deliverable are currently 1920 x 1080 high definition or 2K, the 20 million photosites of the F65 deliver a powerful imaging advantage. The difference is the result of “super-sampling.” The finer the detail the harder it is to maintain the dynamic properties of the image. The smaller photosites of the F65 have the ability to transfer this information to the final image to improve the picture quality.

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Up to 120 frames per second

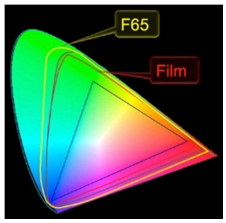
To support slow motion and fast motion, the F65 provides over and under cranking at frame rates of 1 to 60 frames per second (4K x 2K resolution), and up to 120 frames per second (4K x 1K resolution). In both modes, you get high-speed shots without the “windowing,” crop factor or change of effective focal length as with other cameras.

Rotary shutter

The F65 has a standard electronic shutter that will provide proper sampling in most production situations. The camera is also available with an optional mechanical rotary shutter that eliminates the rolling-shutter effect common to CMOS sensors. The Rotary Shutter option supplies four internal Neutral Density Filters to provide additional assistance with exposure control

Wide range of interfaces for on-set monitoring and control

The F65 provides a 16-bit linear RAW output for recording onto SR Memory using the docking SR-R4. Other interfaces include monitoring with or without a LUT via HD-SDI 4:2:2 and the HD viewfinder. Camera control is via the standard Sony camera remote connector, LAN connector, and Wi-Fi Camera Control (With both Apple and Android tablet applications). Lens reporting is available for those projects requiring lens data storage via metadata.



Wideband Color Gamut

It offers filmic color reproduction with an unrivalled color gamut. Most of the current cameras are limited to Rec. 709 color gamut, which is the standard for broadcast application in the US Market. The F65 surpasses the standard color gamut as well as the gamut of the current film stocks.

Compact and light-weight

Smaller and lighter than the F35, the F65 allows for even easier handling for applications such as Steadicam. The camera falls under the 11lbs. of the F35 while the SR-R4 docking recorder is 1/3rd the weight of the SRW-1 at just under 4lbs.

SR-R4 SRMaster Docking Portable Recorder

The SR-R4 is a 4K recording system specifically designed for Sony's new top-of-the-line F65 cinematography camera. It takes full advantage of the ultra high-speed SR Memory platform to record either 16-bit linear RAW data or SRMaster files from the F65 at speeds as fast as 5.5 Gbps.

SR Memory is unique – nothing can match its combination of capacity, sustained data throughput, security and portability. It opens up completely new ways for end-users to

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work. With huge transfer speeds up to 5.5 Gbps, SR Memory media also has massive capacity up to 1TB for long recording times of nearly an hour for 16-bit linear RAW captured at 23.98Psf.

The SR-R4 recorder provides 16 channels of 24 bit audio recording but only provides 2 analog audio inputs.

16-Bit linear Raw

The RAW data file of the F65 system maintains information from all 20 million pixels of the image sensor preserving the maximum resolution of the image. Sixteen-bit results in 65,536 shades of tonal gradation, maintaining the superb grayscale accuracy and dynamic range. The camera processing does not modify the stored image; this maintains the maximum potential for of the original image for manipulation in the Post Production process.