SONY
make.believe

3D Production System

The new dimension in creativity

Sony Digital Cinema
4K

HDCAM SR™

R SERIES

The world is going 3D. From cinematic spectaculars to stadium concerts to live sports on television, 3D is transforming entertainment. From movie theaters to epic videogames to Blu-ray Disc packaged media, 3D is everywhere, adding a new dimension of realism, immersion and excitement.
Sony should know. We're active in every aspect of 3D from the sound stages of Hollywood to the playing fields of international sports to the projection rooms of cinemas everywhere. We know 3D from the lens to the living room and all points in between. It's no accident that our best broadcast cameras are designed to be mounted using "T" adaptors in 3D rigs. It's no coincidence that we introduced our HDCAM SR™ portable recorder years ago with 3D capability built in.
We've been listening to—and working with—the leading content creators in this 3D revolution. You see some of the results on these pages. But this is just the beginning. Sony continues to address the formidable challenges of 3D workflow, to make 3D a practical reality for professionals at every level.

Sony: Leading the way in 3D

3D begins with a pair of cameras capturing images from the position of both the right and left human eyes. 3D ends with a display and glasses capable of presenting these images properly to the left and right eye. In between camera and display, the entire production chain must handle the two information streams with high resolution and perfect synchronization. This impacts every stage of the workflow, from production to transmitting; recording, editing, and final presentation on the screen. That is the formidable challenge of 3D content creation. And to this challenge, Sony has a full range of practical solutions.
We can capture the image with a range of cameras suitable for 3D mounting. In fact, many of the most successful and visible 3D projects to date were shot with Sony cameras. Sony meets the challenge of 3D recording with the HDCAM SR field recorder and studio deck, which record dual streams of exceptional quality. For broadcasting, our MVS-8000G and MVS-8000X production switchers offer Dual Stream mode. In the theater, our SRX-R320 digital cinema projector helps today's 3D movies look their best. These are landmark 3D systems. But at Sony, we consider them simply the starting point. We continue to devote intelligence and imagination to the challenges of 3D production.

3D Production

Cameras

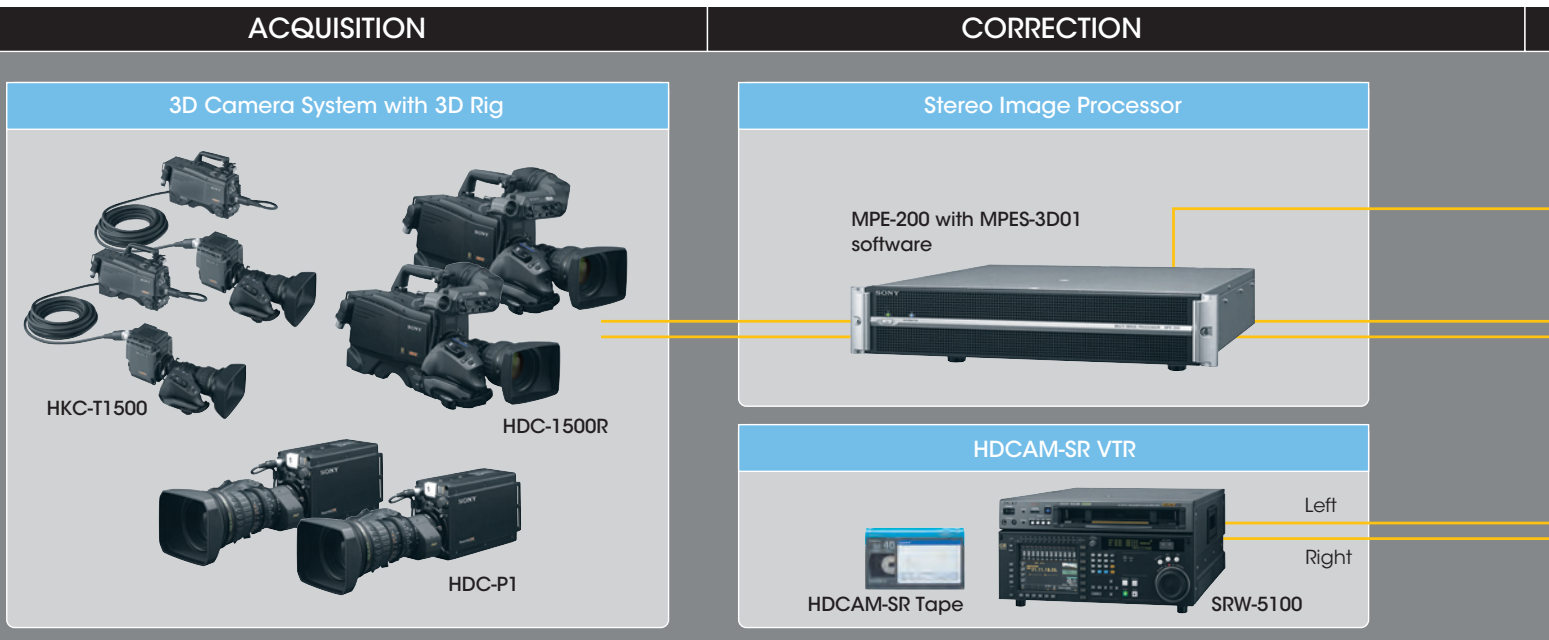
To perform in the real world, a 3D camera rig must combine high performance, light weight and compact size. Sony has anticipated these challenges.

HDC-1500 portable camera / HKC-T1500 adaptor

Our HDC-1500 Series portable camera is a fixture in television studios and major league sporting venues. Sony has created an option for even smaller size and lighter weight. The HKC-T1500 adaptor enables operators to actually take the "business end" of the camera, the CCD block, out of the body and shoot with it. It's perfect for today's 3D rigs.

HDC-P1 point-of-view camera

For even greater portability, we took the essence of our HDC-1500 Series and built it into an ultra-compact point-of-view camera. Because side-by-side 3D rigs put an emphasis on slender cameras, the HDC-P1 is just 86 mm (3-1/2") wide. Features include three full HD 2/3-inch CCDs, 1080i and 720p possibilities, even Neutral Density and Color Correction filter wheels—everything professionals expect from a Sony camera. Sony also offers a 1080/24/25/30p option, the HCZ-PSFP1 software upgrade.



3D Recorders

After close consultation with Hollywood visionaries, Sony built the SRW-1 HDCAM-SR field recorder expressly for 3D capture, with the ability to record simultaneous left-eye and right-eye HD streams of exceptional quality. In Dual Stream mode, the images from two cameras can be recorded simultaneously. And in 3D Field Sequence mode, it's easy to monitor 3D images using a compatible 3D monitor.

Stereo image processor

To simplify the 3D workflow, Sony offers the sophisticated MPE-200 multi-image processor and optional stereo software. These empower you to analyze 3D images and make fine adjustments. You can use the MPE-200 to produce high-quality 3D from even simple camera rigs.

The processor is also versatile, providing a variety of 3D monitoring methods including 50% mix, above/below, anaglyph, difference, and side-by-side.

3D monitors

Professional 3D requires professional-grade monitoring. That's why Sony has created the LUMA™ Series LMD-4251TD and LMD-2451TD. These cover a range of applications with 42-inch and 24-inch screens (1067-mm and 613-mm viewing area, measured diagonally).

A micro polarizer screen attached to the LCD panel works in conjunction with supplied passive 3D glasses to separate right-eye and left-eye images. Because the glasses use circular polarization, you'll see virtually flicker-free 3D images, a huge advantage when you're spending countless hours in front of the monitor.

As with other high-specification LUMA monitors, these models offer Sony's ChromaTRU™ color matching, full HD resolution and wide viewing angle. With optional dual-stream HD-SDI interface boards, these monitors support 1080/59.94i, 1080/50i, 1080/24PsF and 1080/23.98PsF signals.

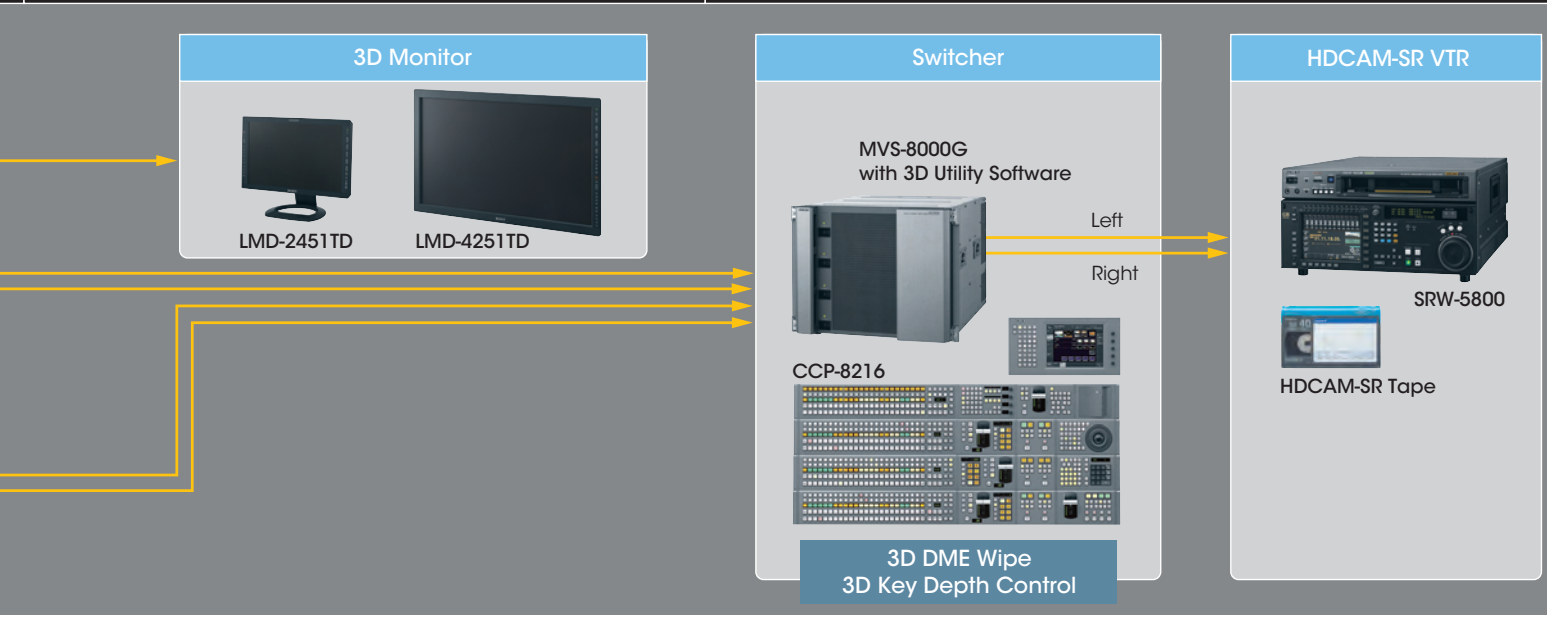
3D editing

You can play back stereo 3D tapes from the SRW-1 field recorder using the SRW-5800 and SRW-5100 studio decks. These machines are already fixtures in Hollywood movie studios, postproduction houses, broadcast centers and mobile production units. Both decks excel in linear and non-linear editing rooms.

3D live production

From the rock concert to the basketball arena to the football field and the soccer pitch, Sony equipment is well established in 3D live production. Sony's acclaimed MVS-8000G and MVX-8000X production switchers enable 3D production with the same familiar control surface and same operating facilities as in HD production. Optional software upgrades enable the switchers to stream simultaneous right-eye and left-eye images in full HD, and to output these images to 3D monitors, 3D projectors and 3D distribution channels.

EDITING

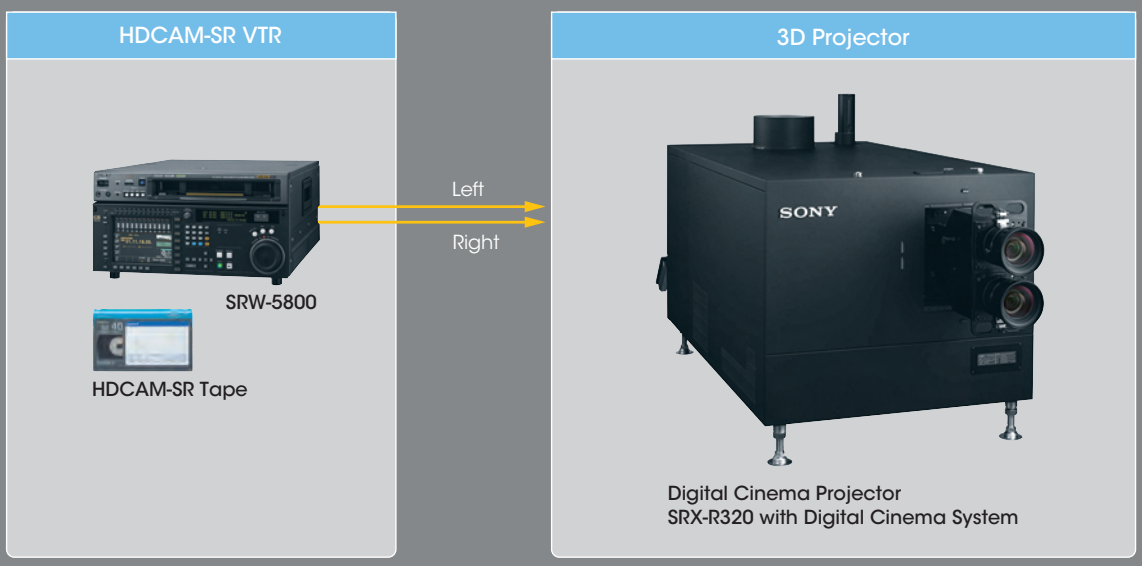


3D cinema projection

As delighted moviegoers can attest, Sony's 4K SXRD™ projector, the SRX-R320 excels at 3D cinema presentation. The projector presents 3D in conjunction with an optional 3D dual lens adaptor and 3D filters. Conventional digital 3D projectors use a "triple-flash" system, rapidly alternating between left-eye and right-eye pictures. Sony 4K projection has enough resolution to present both complete 2K images simultaneously. So both eyes receive all the resolution, all the time. It's, bright, realistic, high-quality 3D with more faithful reproduction of motion. Another part of the solution is Sony's LMT-300 Media Block, a digital cinema server that plays back industry-standard DCI Digital Cinema Package files.

Operating in 3D, the SRX-R320 projector supports screens up to 15 meters (50 feet) wide in Side Masking mode, up to 12 meters (40 feet) wide in Top-bottom Masking mode.

3D SCREENING



The HDC-1500R, HDC-P1, HKC-T1500, MPE-200, SRW-5800, MVS-8000G, SRX-R320, and LMT-300 are produced at Sony EMCS Corporation's Kosai Technology Center and at the Sony UK Ltd. Digital Technology Center Pencoed, which have received ISO14001, the Environmental Management System certification.

V-2465 (MK10670V1)

Printed in USA (10/10)