

Benefits of View-DR/DynaView/Visibility Enhancer

Benefits of View-DR and DynaView™ Technologies

Wide-D

State of the art technology that expands the video dynamic range of the camera and improves visibility of images even in extremely high-contrast environments. Wide-D is a powerful feature to compensate for scenes with extremely poor contrast.

DynaView Technology

DynaView is one of Sony's Wide-D technologies. With DynaView technology, the camera captures two images for each frame using an electronic shutter – the first image is taken with a standard exposure time and the second image is taken with a very short exposure time. The dark areas in the scene are clearly reproduced in the first image and the bright areas are reproduced without appearing 'washed out' in the second image. The two images are then combined into one, using an advanced DSP LSI, to reproduce a high-contrast image.

DynaView

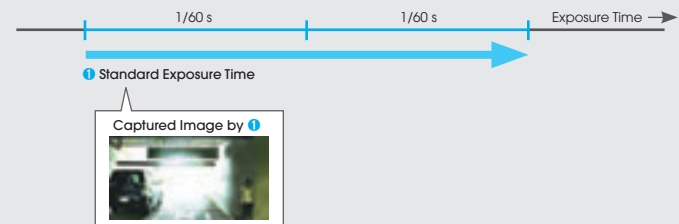
View-DR Technology

View-DR™ is Sony's latest technology that produces images with an extremely wide dynamic range. View-DR technology is a combination of Sony's full-capture Wide-D technologies, the high-speed Exmor™ CMOS sensor, and Visibility Enhancer (VE) technology. The full-capture Wide-D technology used in View-DR technology uses an electronic shutter to capture multiple images and reproduce each frame. One image is taken using a standard exposure time and either one or three images are taken using very short exposure times, depending on the camera type. With the newly developed View-DR algorithm, all of the electrons converted from the captured light are fully used by the imager, which is quite different from DynaView and some other Wide-D technologies in the industry which discard approximately half of these electrons. As a result, View-DR technology nearly doubles the sensitivity that is offered by conventional Wide-D technologies.

In order to capture multiple HD resolution images at a very high speed, the Exmor CMOS sensor is used because of its high-speed readout characteristics. During the process of combining multiple images, the Visibility Enhancer (VE) provides a high level of chrominance and luminance. With View-DR technology, the monitored images become very visible – sometimes being even more visible than when viewed with the naked eye.

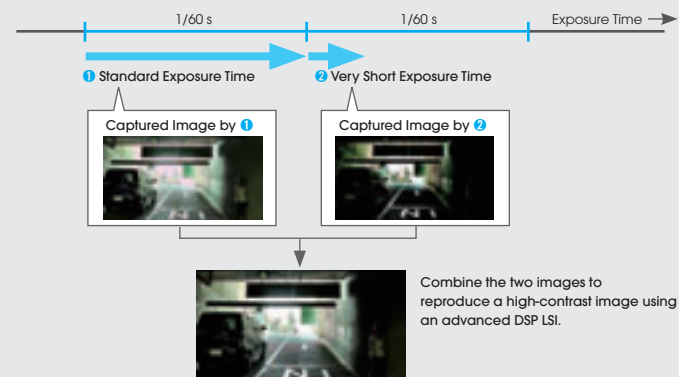
View-DR

No Wide-D



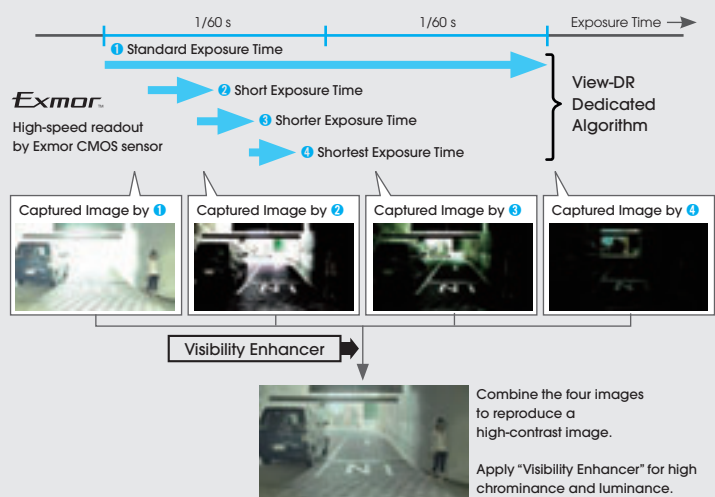
DynaView Technology

Two images for each frame using electronic shutter – The first image is taken with a standard exposure time and the second image is taken with a very short exposure time.



View-DR Technology

One image is taken using a standard exposure time and either one or three images are taken using very short exposure times, depending on the camera type. (This illustration shows one standard exposure time and three very short exposure times.)



Benefits of Visibility Enhancer

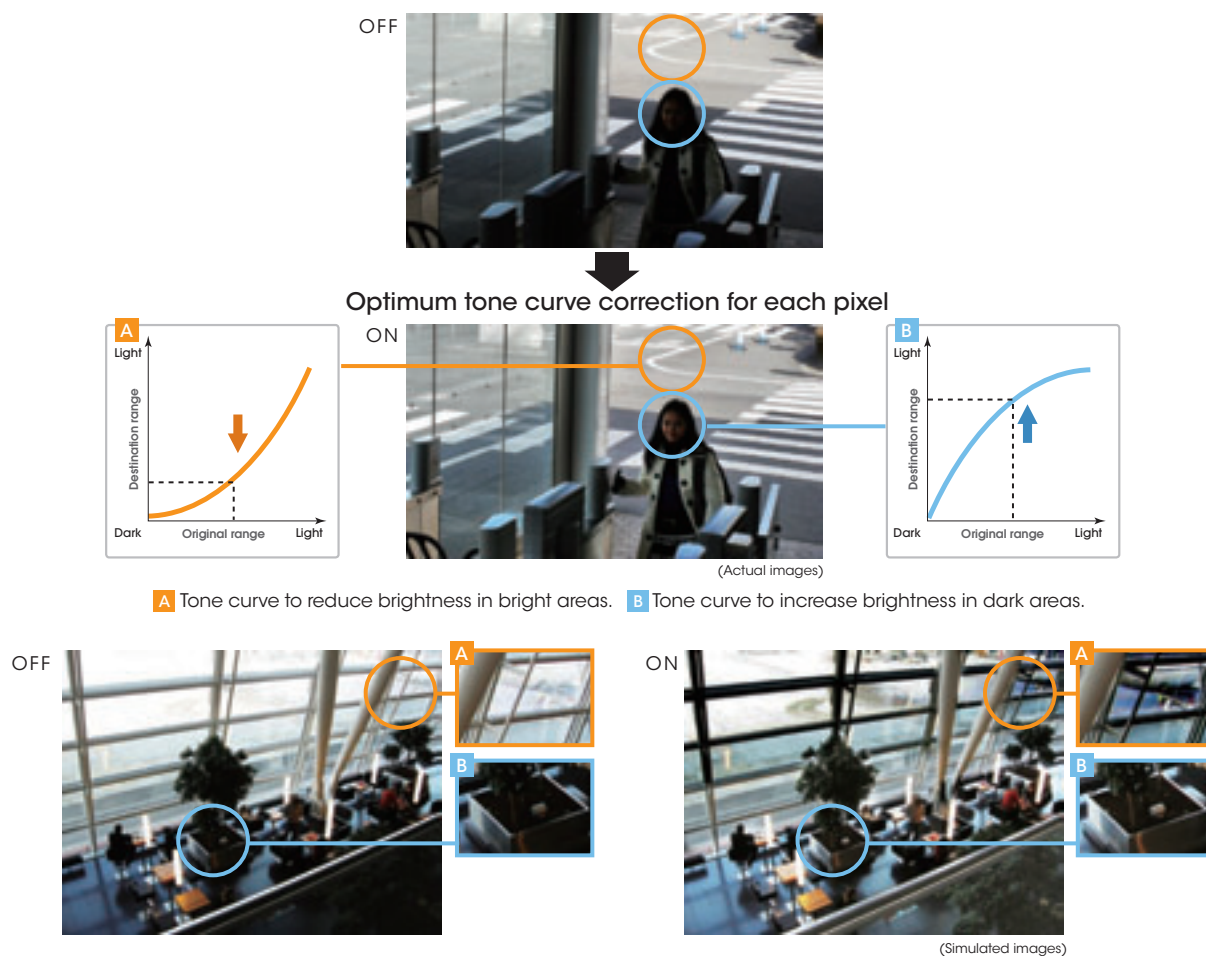
Visibility Enhancer

Visibility Enhancer is one of Sony's new technologies that optimizes contrast and makes a scene more visible.

It is ideal for scenes where objects are hard to recognize due to severe backlight or shadows.

Visibility Enhancer technology optimizes the brightness and color reproduction of an image dynamically on a pixel-by-pixel basis while continuously adapting to the scene. This method differs from the technique of using the preset gamma curves. Technically, Visibility Enhancer technology stretches the contrast in both the backlit portions and the shadows within the given dynamic range, which is different from Wide-D technologies.

Visibility Enhancer also contributes to the high sensitivity of the camera. By combining Visibility Enhancer with XDNR, the camera can reproduce clear and bright images in very low-light conditions, while keeping noise at a minimal level.



View-DR models: SNC-CH140, SNC-DH140, SNC-DH180, SNC-CH240, SNC-DH240

DynaView models: SNC-DF50N/P, SNC-DF85N/P, SNC-RX570N/P, SNC-RS44N/P, SNC-RS46N/P, SNC-RS84N/P, SNC-RS86N/P

Visibility Enhancer models: SNC-RS44N/P, SNC-RS46N/P, SNC-RS84N/P, SNC-RS86N/P, SNC-RH124, SNC-RH164, SNC-CH140, SNC-DH140, SNC-DH180, SNC-CH240, SNC-DH240, SNT-EX101, SNT-EX101E, SNT-EX104, SNT-EP104, SNT-EX154, SNT-EP154

This information is as of January 2010. The Models with these features may be added without notice. Please contact your nearest Sony office or authorized dealer for the latest information.

© 2010 Sony Electronics Inc. All rights reserved.
 Reproduction in whole or in part without written permissions is prohibited.
 Features and specifications subject to change without notice.
 Sony, make.believe and their respective logos,
 DynaView, Exmor and IPELA are trademarks of Sony.