NEWS RELEASE

CASIO

Casio Launches High Speed EXILIM with Powerful Image Stabilization

Ready to Capture High-quality Hand-held Night Scenes and Zoom Shots
Equipped with Time Lapse for Playing Back Long-time Changes in a Short Time

EX-ZR800

Norderstedt, August 7, 2013 — Casio Europe GmbH and its parent company, Casio Computer Co., Ltd., today announced the release of the EX-ZR800, a new model in its popular High Speed EXILIM line of digital cameras. With all the responsive photo-taking features of a High Speed EXILIM, the new camera also packs a powerful 18x optical zoom and comes with 5-axis, 5-stop[*1] image stabilization.

*1. When optical image stabilization and technology for combining high-speed burst images are used together. Based on a Casio survey.

With the aim of providing digital cameras that enable people to capture fleeting moments with beautiful images, Casio has been pursuing the full potential of the compact digital camera using its original high-speed technologies. This effort is based on the company's "Triple Zero" development objective, which seeks to minimize and eliminate shutter lag, out-of-focus shots, and image blurring due to camera shake.

The new EX-ZR800 uses highly advanced image stabilization technology to virtually eliminate the impact of camera shake, a common problem which has been the cause of many a ruined photograph.

A powerful 25 mm wide-angle,[*2] 18x optical zoom lens is fitted elegantly into the compact body. When shooting in HS Anti Shake mode, camera shake occurring along five axes[*1] (Vertical Shift, Horizontal Shift, etc.) is precisely corrected. Going even further, Casio has integrated optical image stabilization (2 stops[*3]) with its technology for combining high-speed burst images (up to 9 shots) to achieve stabilization equivalent to 5 stops slower[*1] in terms of shutter speed. This allows users to take amazingly crisp, clear photos without a tripod—even night scenes and zoom shots—making the camera ideal for capturing images like city lights while traveling or zoom photos of children playing or competing in sporting events.

*2 When converted to 35mm film format

*3 CIPA standard (340mm when converted to 35 mm film format).

The new camera also features other enhanced shooting functions. This is the first EXILIM to have a Time Lapse function that allows users to capture the movement of clouds in the sky, or people and cars at an intersection, showing long-time movement sped up. Casio has added a new “sparkling shot” filter effect to ART Shot, which lets users create original artistic photos and movies. These functions make it easy to take creative shots without changing lenses or making complicated settings.

Main Features of the EX-ZR800

Powered by the new EXILIM Engine HS Ver. 3

The new cameras are equipped with EXILIM Engine HS Ver. 3 driven by a dual-CPU, two parallel image processors, a reconfigurable processor and a vector graphics core. The reconfigurable processor delivers functional and performance flexibility plus high-speed processing based on the latest technologies from Casio, while the vector graphics core smoothly produces two-dimensional images. In addition to high-speed shooting response,[*4] the new models feature an intuitive display screen that is easy to view, thanks to its high-quality graphic user interface.

*4 Start-up time of 1.3 seconds, high-speed auto focus time of 0.18 seconds, shutter response of only 0.016 seconds, and a capture interval of as short as 0.26 seconds. These times are CIPA standard compliant

Compact body with high-quality high-power zoom

The EX-ZR800 is equipped with a wide-angle 25 mm, 18x optical zoom lens. The zoom maintains super resolution image quality to a maximum zoom of 36x, thanks to Multi Frame SR Zoom technology.

HS Anti Shake performs 5-axis, 5-stop[*5] image stabilization

Camera shake which occurs in the five axes[*5] of pitch, yaw, vertical shift, horizontal shift and roll is precisely corrected. Casio has employed an optical lens that achieves stabilization equivalent to approximately 2 stops*[6] slower in terms of shutter speed. Bringing this effect together with combined high-speed burst images results in image stabilization equivalent to about 5 stops slower[*5] in terms of shutter speed. This allows users to minimize blur while holding the camera to take pictures, which can easily result in camera shake, even for shots of night scenes and when zooming. (Results may vary depending on the shooting environment and camera settings). In addition, the EX-ZR800 employs a lens-shift optical lens, which further reduces image blur on the LCD screen when recording movies or holding the camera.

*5. When optical image stabilization and technology for combining high-speed burst images are used together, Based on a Casio survey.

*6. CIPA standard (340mm when converted to 35 mm film format).

Time Lapse plays back long-time changes in a short time for a new form of expression

The new Time Lapse feature allows users to capture the slow movement of clouds in the sky, or of people and cars on a street, and then show long-time movement sped up. The capture interval and time for clouds, night views, vehicles, street scenes and so on are preset, so all the user has to do is simply select the scene to shoot to get the optimum setting. Of course, users can also adjust the settings manually.

Triple Shot reduces shutter lag from the photographer’s reflexes close to zero

The new cameras feature Triple Shot, which combines high-speed burst shooting with high-speed response for worry-free photography. The feature not only takes an image when the shutter button is pressed, but also captures images immediately before and after. As a result, Triple Shot enables users to capture decisive moments with quickly moving subjects such as children and pets.

Inset display for reviewing shots on part of the LCD screen while taking photos

The new model also features an inset display on part of the LCD screen to show images just taken. This feature is convenient for photographing children because it allows users to check each shot, while responsively taking more pictures. Users can select from two different inset display screens.

AF-CS keeps moving subjects in focus even while continuously shooting

Casio has accelerated the frame rate in the auto focus (AF) mode and optimized the camera's lens drive control, image sensor control and AF algorithm for parallel processing of AF operations and high-speed continuous shooting. Built into the EX-ZR800, this makes it possible to achieve AF-CS up to 30 frames and as fast as five frames-per-second, which makes it possible to take clear photos of moving subjects such as children and pets.

All-In-Focus Macro and Blurred Background deliver total focus control with high-speed continuous shooting

The EX-ZR800 comes with All-In-Focus Macro, which selects only in-focus areas from continuously shot images at different focus settings to produce a composite image. This achieves photos with every area coming out in focus, from foreground subjects to far-away backgrounds, which are hard to produce using a conventional camera. Also, Casio has employed its high-speed continuous shooting technologies to create Blurred Background, an original technique for processing the background scene of a shot like the soft blur effect attainable using a single-lens reflex camera, thereby accentuating the subject of the photo. Users can select from three different processing levels of blur effects to set the background focus just as they wish.

Premium Auto Pro function produces beautiful photos with just a press of the shutter button

The Premium Auto Pro function automatically analyzes the shooting scene to choose the best settings and perform image processing. It automatically combines images from high-speed burst shooting according to shooting conditions to create gorgeous photos. Users can easily take sophisticated photos at the press of the shutter button, thanks to the automatic activation of functions such as HDR technology, which combines photos of differing exposures to handle high-contrast conditions, as well as High Speed Night Scene mode for night shots and High Speed Anti Shake for high-power zoom shooting, both of which combine highly sensitive, continuously shot images, taken with camera shake kept at a minimum, to reduce noise in the resulting image. For movies, the Premium Auto Movie function automatically analyzes the scene to choose the best settings.

HDR technology faithfully reproduces images as they really appear, avoiding under- or over-exposure

The new model also uses HDR technology developed by Casio to allow each press of the shutter button to take several shots at different exposures and then instantly combine them into a single image with a high dynamic range. This minimizes over-exposed or under-exposed areas in the image, creating a photo that captures all the rich tonal gradation of the scene just as it appears in real life.

HS Night Shot eliminates camera shake even in dark settings

With HS Night Shot, the EX-ZR800 detects shooting conditions and conducts high-speed burst shooting of numerous frames determined automatically with a level of light sensitivity as high as ISO 25600. High-precision positioning alignment technology suppresses any low-frequency camera shake that may not be completely eliminated by the optical Anti Shake correction function. The company's latest image-processing technology also completely removes low-frequency color noise, which has typically been very difficult for cameras to eliminate. These technologies work together to produce beautiful photos with minimal blur, even in low-light conditions.

HDR-ART for creating artistic photos; freedom to create artistic images with ART Shot

Users can create artistic photos using the HDR-ART function, which combines continuous shots with differing exposures while performing advanced analysis to locally change the intensity of

contrast and color saturation. Users can now choose from a total of five different processing levels of art effects to enjoy creating more freely expressive images. Additionally, to create the artistic photos of the user's preference using Art Shot, new "sparkling shot" filter effect has been added to eight different filter effects previously available: toy camera, soft focus, light tone, pop art, sepia, monochrome, miniature and fisheye. Users can select from three different color and processing levels for each filter (select an area from six patterns for miniature), and can view the effect on the display and adjust the result prior to actually taking a picture. Even better, all of these filters except "sparkling shot" can be used for shooting movies, too. The HDR-ART function simultaneously saves both the HDR-ART image and the standard photo with a single press of the shutter button.

Scenes come alive in their full expansiveness with the Wide Shot function

The EX-ZR800 can combine continuous shots taken with high-speed continuous shooting when the user is moving the camera, enabling powerful super-wide-angle shots. Users can select wide-angle shooting modes equivalent to 15 mm or 19 mm.

Slide Panorama captures 360-degree panoramic images

The Slide Panorama function detects moving subjects and faces and adjusts them appropriately as the camera is moved, allowing users to create more natural-looking panoramic images just by panning the camera across a scene.

Mode dial for rapid access to shooting modes

The camera is fitted with a mode dial that lets users quickly choose from several shooting modes.

High-resolution 3.0-inch 920K LCD

The EX-ZR800 boasts a high-resolution 3.0-inch LCD with 920,000 pixels, displaying captured images beautifully on the screen.

EX-ZR800 Specifications

			EX-ZR800
Number of Effective Pixels			16.1 megapixels (/million)
Image Sensor			1/2.3-inch high-speed CMOS
	Total Pixels		16.79 megapixels (/million)
File Format	Still Images		RAW*1, JPEG (Exif Ver.2.3), DCF 2.0, DPOF
	Movies		MOV format, H.264/AVC, IMA-ADPCM (stereo)
Built-in Flash Memory (Image Area)*2			49.9MB
Recording Media			SD Memory Card, SDHC Memory Card , SDXC Memory Card compatible
Number of Recorded Pixels	Still Images		16M (4608 x 3456), 3:2 (4608 x 3072), 16:9 (4608 x 2592), 10M (3648 x 2736), 5M (2560 x 1920), 3M (2048 x 1536), VGA (640 x 480)
	Movies		FHD: 1920x1080 (30fps) / HD*3:1280x720 (15fps/20fps/30fps) / STD: 640x480 (30fps) / HS1000: 224 x64 (1000fps) / HS 480: 224x160 (480fps) / HS 240: 512x384(240fps) / HS 120: 640x480 (120fps) /HS 30-240 : 512x384 (30 to 240fps) / HS 30-120: 640x480 (30 to 120fps)
Recording Capacity (Maximum Image Size Setting)	Still Images (JPEG)	SD Memory Card 16GB*4	Fine: Approx. 1072 shots Normal: Approx. 1654 shots
	Movies	Recording Time	Maximum recording time per file: 29minutes*5*6
		SD Memory Card 16GB*4	Approx. 2 hours 13 minutes (FHD)
Continuous Shooting Speed			30 frames per second / 15 frames per second / 10 frames per second / 5 frames per second / 3 frames per second
Lens	Construction		11 lenses in 10 groups, including aspherical lens
	F-number		F3.5 (W) to F5.9 (T)
	Focal Length		f= 4.5 to 81.0mm
		35mm Film Equivalent	Approx. 25 to 450mm
Zoom Ratio			18.0 x optical zoom, 36.0x Multi SR Zoom, 4x digital zoom, 286.9x maximum digital zoom (in conbination with HD zoom, VGA size)
Blur Correction			LENS Shift image stabilization (still / movie)
Focusing	Focus Type		Contrast Detection Auto Focus
	Focus Modes		Auto, Macro, Manual
	AF Area		Intelligent, Spot, Multi, Tracking
	AF assist lamp		Yes
Focus Range*7 (From Lens Surface)	Auto		Approx. 4cm to infinity (W)
	Macro		Approx. 4cm to 50cm (W)
	Manual		Approx. 4cm to infinity (W)
Exposure	Exposure Metering		Multi pattern, Center Weighted, Spot by imaging element
	Exposure Control		Program AE, Aperture Priority AE, Shutter Speed Priority AE, Manual Exposure
	Exposure Compensation		-2EV to +2EV (in 1/3EV steps)
Shutter			CMOS electronic shutter and mechanical shutter
	Shutter Speed*8	Auto	1/4 to 1/2000 second
		Premium Auto Pro	4 to 1/4000 second
		Aperture Priority AE	1 to 1/2000 second
		Shutter Speed Priority AE/Manual Focus	15 to 1/2000 second (high-speed continuous shutter: up to 1/25000 second)
Aperture*9			F3.5 (W) to F7.0 (W)*10
White Balance			Auto WB, Daylight, Overcast, Shade, Day White FL, Daylight FL, Tungsten, Manual WB
Sensitivity (SOS)*11	Still Images		Auto, ISO80, ISO100, ISO200, ISO400, ISO800, ISO1600, ISO3200
	Still images (HS Night Shot)		Maximum ISO25600
	Movies		Auto
Self-Timer			10 seconds, 2 seconds, Triple Self-timer

		EX-ZR800
Built-in Flash	Flash Modes	Auto, Flash off, Flash on, Red eye reduction
	Flash Range*[12] (ISO Sensitivity: Auto)	Normal: Approx. 0.4 to 3.5m (W), approx. 1.5 to 2.1m (T)
	Flash Lighting Adjustment	+2,+1,0,-1,-2
	Flash Charge Time	Approximately 5 seconds
Recording Functions		Snapshot (Program Auto mode / Premium Auto Pro mode), Snapshot by Super resolution technology (Multi Frame), High Speed Continuous shooting, Prerecord (still image), AF-CS, Triple Shot, Macro, Self-timer, BEST SHOT, Blurred Background, All-In-Focus Macro, HDR, HDR Art, Slide Panorama, Wide Shot, Best Selection, ART SHOT(still / movie), Time Lapse, Face Detection, Make-up, High Speed Movie (with sound only when 30fps of HS30-120 and HS30-240), FHD Movie, STD Movie, HDR Art Movie, Prerecord (movie), YouTube™ Capture Mode, Wind noise cut, ISO High Limit, Double (HDR ART)
Playback Functions		Playback Zoom, Multi-image Screen, Start-up Images, Protect, Date & time Edit, Rotate, Re-size, Trimming, Copy, BGM Slideshow, Brightness, White Balance, Lighting, MOTION PRINT, Movie Editing, Continuous Shooting Multi Print, Continuous Shooting Frame Edit (DPOF Printing, Protect, Copy, Delete), Divide Group (Dividing Up a Continuous Shutter Group)
Other Functions		PictBridge, Auto Rotate, Create Folder, USB charge, ECO Mode, Date and Time: Recorded with image data, With time stamp function, Auto Calendar: To 2049, World Time, Eye-Fi, FlashAir™*[13]
Monitor Screen		3.0-inch TFT color LCD (Super Clear LCD), 921,600 dots
External connection terminal		Micro USB port (Hi-Speed USB compliance, USB charging) / HDMI™*[14] output (Micro/TypeD)*[15]
Microphone		Stereo
Speaker		Monaural
Power Requirements		Rechargeable lithium ion battery (NP-130/NP-130A) x 1
Battery Life	Number of Shots*[16]	Approx. 470 shots
	Continuous Playback (Still Images)	Approx. 6 hours 20 minutes
	Actual Movie Recording Time (FHD Movie)*[16]	Approx. 1 hours 30 minutes
	Continuous Movie Recording Time (FHD movie)	Approx. 2 hours 30 minutes
	Continuous Movie Recording Time (Time Lapse, FHD)	Approx. 4 hours 30 minutes
Dimensions	W×H×D*[16]	107.4 (W) x 60.0 (H) x 30.7 (D) mm (excluding projections; 25.5mm at thinnest point)
Weight*[15]		Approximately 222g (Including Battery and Memory Card*[4]) Approximately 182g (Excluding Battery and Memory Card)
Bundled Accessories		Rechargeable Lithium Ion Battery (NP-130A), USB-AC Adaptor (AD-C53U), AC Power Cord, Micro USB cable, Strap, Reference Manual

1 DNG file format is one type of RAW image file, and it is recommended by Adobe Systems Incorporated for use as a standard image file format.
2 Built-in memory capacity after formatting.
3 HD movie is available for ART/TL mode only.
4 When using SanDisk Corporation 16GB SDHC Memory Card.
5 Within limits of memory and battery life.
6 Maximum movie size per file is 4GB.
7 Using optical zoom causes the focus range to change.
8 Depending on user's setting of Camera.
9 Using optical zoom causes the aperture to change.
10 Using ND filter with no diaphragm.
11 SOS: Standard Output Sensitivity.
12 Range is affected by optical zoom.
13 For operability with FlashAir™ models, refer to the FlashAir™ page on the Toshiba Corporation website.
14 HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
15 1080/50i output is not supported for PAL output using an HDMI™.
16 In accordance with CIPA (Camera and Imaging Products Association) standards.