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Take your HD filming to new heights with Canon HF Series camcorders



HF10



HF100

Hi-res versions of these and other images can be downloaded from http://www.canon-europe.com/press_centre/image_library/index.asp

Amstelveen, The Netherlands, 07 January, 2008: Canon expands its award-winning High Definition (HD) camcorder range with the announcement of two groundbreaking flash memory-based models. The compact Canon HD Camcorders HF10 and HF100 will thrill creative moviemakers who want maximum mobility and the chance to shoot High Definition footage in challenging new environments. The HF10 features a new Dual Flash Memory system, whilst the HF100 offers the convenience of shooting straight to memory card.

Flash Memory allows HF models to offer a range of benefits compared to camcorders based on other media: like Hard Disk Drives (HDD), they provide extended recording times; but they are more compact than DVD camcorders; and they provide superb image quality, comparable with the standard set by High Definition Video (HDV). Featuring the acclaimed Canon HD Camera System, the HF10 and HF100 models are also the first HD camcorders from Canon to record at 1920x1080 Full HD video resolution.

More power-efficient and robust than other recording media, flash memory also results in significantly smaller, lighter HD camcorder designs – the HF10 and HF100 weigh in at approximately 380g.

Both camcorders record directly to standard SD or SDHC memory cards, but thanks to the Dual Flash Memory system, the HF10 also offers an impressive

additional 16GB of internal memory as standard. Using the internal flash memory and an optional 16GB SDHC card, for example, provides enough capacity to store over 12 hours of HD footage in a camcorder that is small enough to slip in a pocket.

“The HF10 and HF100 extend Canon’s High Definition range with the very latest in recording technology,” said Mogens Jensen, Head of Canon Consumer Imaging Europe. “Combining the quality of the Canon HD Camera System with flash memory and 1920x1080 Full HD recording – not to mention the unique advantages of Dual Flash Memory with the HF10 – these products re-define what can be achieved with a Canon HD camcorder.”

The new HF10 and HF100:

- Dual Flash Memory: HF10 records to either 16GB internal memory or SD/SDHC (High Capacity) memory card
- HF100 stores video and stills direct to SD/SDHC memory card
- Stylish, lightweight design with the power of 1920x1080 Full HD recording
- Canon HD Camera System for outstanding quality¹
 - 12x optical zoom Canon HD Video Lens with Super Range Optical Image Stabilizer (OIS)²
 - New 3.3MP Full HD CMOS sensor³
 - DIGIC DV II image processor⁴
- Instant AF for super-fast, accurate auto focusing⁵
- Versatile recording system: new mini Advanced Accessory Shoe, microphone input with manual audio controls; HDMI and component outputs; compatible with Canon’s new Canon DVD burner DW-100
- New Intelligent battery system, with extended battery life
- Advanced photo features, including 3.1MP still image capture
- Multiangle Vivid LCD screen
- Bundled software: Canon Solution Disk and Pixela ImageMixer 3 SE

Dual Flash Memory recording

The new HF10, one of the first Canon HD camcorders to benefit from Dual Flash Memory recording, offers a number of advantages to the adventurous moviemaker.

The HF10 gives users the flexibility to record to either removable memory cards or 16GB of internal flash memory. With space to store over 6 hours of high quality HD footage – improved on only by bulky HDD models – the HF10 allows filming to

¹ See *Technologies Explained*.

² See *Technologies Explained*.

³ See *Technologies Explained*.

⁴ See *Technologies Explained*.

⁵ See *Technologies Explained*.

continue even without a memory card. For particularly long shoots, the SD/SDHC memory card slot provides additional, scalable capacity. Video and stills can even be copied across from the internal memory to a memory card for back up or for sharing at a later date.

The HF100 records Full HD movies directly to standard SD or SDHC memory cards. Versatile and compact, these removable cards are ideal for sharing movies with friends and family. Video is easily transferred to a computer for editing or uploading to the web via a single USB cable, or by inserting cards into a compatible reader. Recording capacity is only limited by the size of the card.

Flash memory: smaller, lighter, safer

Flash camcorders offer several key advantages. They require less power and offer faster start up times than camcorders that use traditional recording media. Flash memory is also physically smaller than other media, allowing for a significantly lighter and smaller camcorder design. Finished in high quality silver (HF100) or sophisticated black (HF10), both models are compact enough to be carried in a jacket pocket. Since flash memory involves no moving parts, footage is less vulnerable to the knocks and bumps a camcorder is often subjected to.

1920x1080 Full HD recording

HF10 and HF100 are the first HD camcorders from Canon to record HD1080i video at the maximum resolution permitted by the AVCHD (Advanced Video Codec for High Definition) standard: 1920x1080 Full HD. Perfectly matched with the latest Full HD TVs, this picture size delivers the very best possible image quality. Boosting image quality even further, both camcorders have an increased maximum average data rate of 17Mbps during recording. In total, users can choose between four recording quality modes.

Canon HD Camera System

The HF10 and HF100 benefit from cutting edge technological advances and refinements made to the Canon HD Camera System.⁶ Both camcorders benefit from the improved resolution and image quality of Canon's new 3.3MP Full HD CMOS sensor, the extended range of the new 12x optical zoom Canon HD Video Lens, and the DIGIC DV II processor. Since Canon manufactures all of these key components in-house, each is designed to integrate seamlessly with the other – providing the best possible performance and image quality.

The 12x optical zoom lens incorporates Canon's Super Range Optical Image Stabilizer (OIS), an advanced system that combines two methods of shake

⁶ See <http://www.camcorderinfo.com/content/CamInfo-Selects-2007-33545.htm>

detection to better eliminate vibrations caused by a variety of factors – from slow breathing patterns to the rapid vibrations of a car journey.

Instant AF

Instant AF is an extremely fast, highly accurate auto focus system that has been specially designed to meet the requirements of HD resolution imaging. Inherited from Canon's professional XH series HD camcorders, Instant AF makes it easy to achieve absolute HD clarity.

Expandable system

Enabling full shooting freedom, the HF10 and HF100 offer a number of advanced features for ambitious moviemakers.

A dedicated microphone input connection allows an external microphone to be attached: allowing filmmakers to capture sound more accurately, distracting background noise is reduced. Optional peripherals can be attached to the camcorder via a mini Advanced Accessory Shoe.

For playback, HDMI and component output ports allow the camcorder to be connected directly to an HD TV. A USB connection enables easy transfer of footage to a computer. Data transfer and live capture via HDMI is also possible with compatible computers. Both camcorders come supplied with software for management of video and stills.

Share and archive on DVD

To make sharing footage with friends and family even easier, both camcorders are compatible with Canon's new standalone Canon DVD Burner DW-100.

The burner connects directly to the camcorder, allowing videos to be copied to a standard DVD without the need for a computer. The DW-100 can be used to burn discs in either AVCHD format, for HD footage, or standard DVD-R format when used with a Standard Definition camcorder. The DVD burner can also be used to play back AVCHD DVD's when connected to a TV via a compatible camcorder.

Intelligent battery

A new Intelligent lithium-ion battery provides a clear indication of power levels during shooting. Accurate to the minute, the system makes it easier to avoid those awkward moments when power unexpectedly runs out.

Offering extended battery life as standard, the HF10 and HF100 are also compatible with Canon's high capacity battery pack (BP-819) – the perfect accessory for extended shooting days.

DIGIC DV II and advanced digital photography

Canon's unique DIGIC DV II processor is designed to handle the increased data rate of HD images. It employs advanced noise reduction technology to deliver sharp, crisp HD video. DIGIC DV II optimises recorded colours, ensuring that they appear as vibrant and bright as they do in real life.

DIGIC DV II is also the driving force behind both camcorders' advanced still photography features. Alongside a built-in flash, PictBridge connection and histogram display for monitoring brightness levels, it allows users to capture still photographs while shooting video: since digital photos have unique colour requirements, DIGIC DV II provides separate processing paths for video and stills – optimising colours for each.

Multiangle Vivid LCD screen

The HF10 and HF100 both feature Canon's 2.7" Multiangle Vivid LCD. With the broadest colour gamut of any Canon camcorder LCD, the screen has HCAR surface treatment to minimise glare. Its exceptionally wide 135-degree viewing angle makes it easier for friends to gather around the screen and review footage.

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About Canon Consumer Imaging (CCI), Canon Europe

Canon Europe is a subsidiary of Canon Inc., founded in Japan in 1937. CCI is a leading provider of digital products for the home and the office, including: photo, video, ink jet and laser printers, All-in-One devices, projectors, scanners and fax machines.

Canon's corporate philosophy is kyosei, a Japanese concept that focuses on living and working together for the common good. As an environmentally aware organisation Canon is a Conservation Partner of the WWF.

Further information about Canon Europe is available at: www.canon-europe.com

Additional Information

Supplied software and CANON iIMAGE GATEWAY

D128 series camcorders are supplied with Pixela ImageMixer 3 SE. This software allows users to organise, play back and edit their digital video clips, then convert them to alternative file formats – ideal for uploading to the internet or for copying to devices, such as personal media players.

ImageMixer 3 SE also offers DVD creation features – another easy way to share footage from each model. Users can burn AVCHD footage directly to standard 12cm DVD, or down-convert it for playback in a standard DVD-R player.

The camcorders are also supplied with Canon ZoomBrowser (Windows) and ImageBrowser (Macintosh) – software for easy image download, storage and retrieval, as well as management of image layout and printing.

Camcorder ownership also entitles the purchaser to register for 100MB storage space on the CANON iIMAGE GATEWAY, an online gallery where images can be stored in albums and shared to selected friends and family.⁷

⁷ CANON iIMAGE GATEWAY is not available in all European countries. Please see www.cig.canon-europe.com for available countries.

Canon Full HD CMOS sensor

Canon's CMOS sensor technology drives the renowned image quality of EOS, the world's most popular D-SLR camera system. After years of development and refinement, Canon now possesses unrivalled expertise in the design and manufacture of CMOS imaging sensors.

In 2006, Canon's commitment to in-house R&D resulted in the introduction of a CMOS sensor for HD video. Continuous refinement of this industry-leading technology has resulted in the 3.3MP Full HD CMOS sensor found in HF10 and HF100. Using a Bayer pattern RGB primary colour filter, video images are characterised by excellent colour and high resolution.

The advantages of CMOS for HD imaging are numerous. CMOS sensors allow for multi-channel pixel reading, resulting in faster data readouts than are possible with traditional CCD sensors. Additional circuitry can be integrated onto the imaging chip itself – the Canon HD CMOS image sensor incorporates on-chip noise reduction and pixel amplification. CMOS sensors also consume less power than CCD sensors, generating less heat and noise, and extending battery life. In contrast to CCD devices, CMOS sensors do not suffer from the vertical smearing caused by single pixel overflow, which can be seen when bright points of light are in the frame.

Instant AF

With higher resolution movies and stills, an accurate auto focus system is more important than ever since any focus errors are more easily visible. However, conventional TV AF (Auto Focus) systems are slow to react to large changes in subject distance and can often be confused by high frequency background patterns. Canon's unique Instant AF uses the combination of a high-speed External AF sensor to quickly detect the range of the subject, and an accurate TV AF sensor, for super-fine focusing.

Super Range Optical Image Stabilizer

Canon's Super Range Optical Image Stabilizer employs two methods of camera shake detection, combining lens gyros with vector-based detection that drives the lens shift elements more effectively. As a result, while conventional image stabilisation systems can detect medium and high frequency vibration, the Super Range Optical Image Stabilizer can also detect low frequency movements, such as the slow body movements associated with breathing. These are outside of the range of many regular OIS systems.

Super Range Optical Image Stabilizer is effective during video recording and digital still capture.

DIGIC DV II

DIGIC DV II is a digital signal processor that is unique to Canon camcorders. First employed on the flagship XL H1 professional HD camcorder, it was originally developed to handle the increased data rate and requirements of HD. (High speed processing of HD1080i data requires about 4x more capacity than SD video.) DIGIC DV II also has sufficient capacity to process the data necessary for high resolution still photographs.

Additional benefits of DIGIC DV II include a specially optimised noise reduction system, providing low noise images with excellent colour reproduction and wide tonal range.

As a core Canon technology, DIGIC DV II provides split path processing of separate video and photo signals in a single camcorder. Video and still images have different colour requirements: by processing the signals independently, each can be maximised for output. The result is rich and vibrant colours that are faithful to the original shooting subject, whether seen on a television screen or printed out as a photograph.