

HDC-Z10000 / Specifications

SENSOR SECTION	
Image Sensor	1/4.1" MOS Sensor x 3 x 2
Total Pixels	9.15 megapixels (3.05 megapixels x 3)
Effective Pixels	Motion Image [2D] 6.57 megapixels (2.19 megapixels x 3) [16:9] [3D] 6.21 megapixels (2.07 megapixels x 3) [16:9]
LENS SECTION	
F Value	[2D] F1.5 (WIDE) / F2.8 (TELE) [3D] F1.5 (WIDE) / F2.7 (TELE)
Optical Zoom	[2D] 12x [3D] 10x
Focal Length	[2D] 2.84 - 34.1 mm [3D] 2.84 - 28.4 mm
35 mm Film Camera Equivalent	Motion Image [2D] 29.8 - 368.8 mm [16:9] [3D] 32.0 - 320.0 mm [16:9]
CAMERA SECTION	
Standard Illumination	1400 lx
Minimum Illumination	5 lx (A mode ON: 1/30)
Minimum Shooting Distance	[2D] Approx. 1.2 m (all zoom range), Approx. 3.5 cm (Wide range macro) [3D] Approx. 2.5 m (all zoom range), Approx. 45 cm (Wide range macro)
Focus	Auto / Manual
White Balance	Auto / White Set / 3200K / 5600K / Ach / Bch
Zoom	Intelligent Zoom [2D] 23x
Image Stabilizer	[2D] HYBRID O.I.S. + (5 axis) [3D] POWER O.I.S.

* In PAL areas, 1080/60i, 1080/30p, and 1080/24p for 3D, and 1080/60p, 1080/30p, and 1080/24p for 2D in NTSC areas.

** 1080/25p is recorded in 1080/50i mode
*** 24p=23.98p

• Design, functions, and specifications are subject to change without notice.
• All monitor pictures are simulated.

RECORDING SECTION	
Recording Media	SD / SDHC / SDXC Memory Card
SD Memory Card slot	2 slots
Recording Format	AVCHD 2.0 Standard (AVCHD 3D / Progressive) Compliant
Signal System*	[3D] 1080/50i, 1080/25p**, 1080/24p*** [2D] 1080/50p, 1080/50i, 1080/25p**, 1080/ 24p***
AUDIO SECTION	
Recording System	Dolby Digital 5.1 / 2 ch, Linear PCM 2 ch
Internal Microphone	5.1 Surround Mic, Zoom Mic, Gun Mic, Stereo Mic
XLR Input	XLR 3-pin x 2 (INPUT 1, INPUT 2)
GENERAL SECTION	
LCD Monitor	8.83 cm (3.48") 16:9 Wide 3D LCD monitor (1,152,000 dots)
View Finder	11.5 mm (0.45") 16:9 Wide EVF (Approx. 1,227,000 dots)
Manual Ring	Zoom, Focus, Iris
Manual Dial	3D Convergence
Standard Accessories	AC Adaptor Yes AC Cable Yes DC Cable Yes Rechargeable Battery Yes (5,400 mAh) Battery Charger Yes IR Remote with Lithium Metal Battery Yes Component AV Cable Yes USB Cable Yes Lens Cap Yes Bundled Software HD Writer XE 1.0

Panasonic

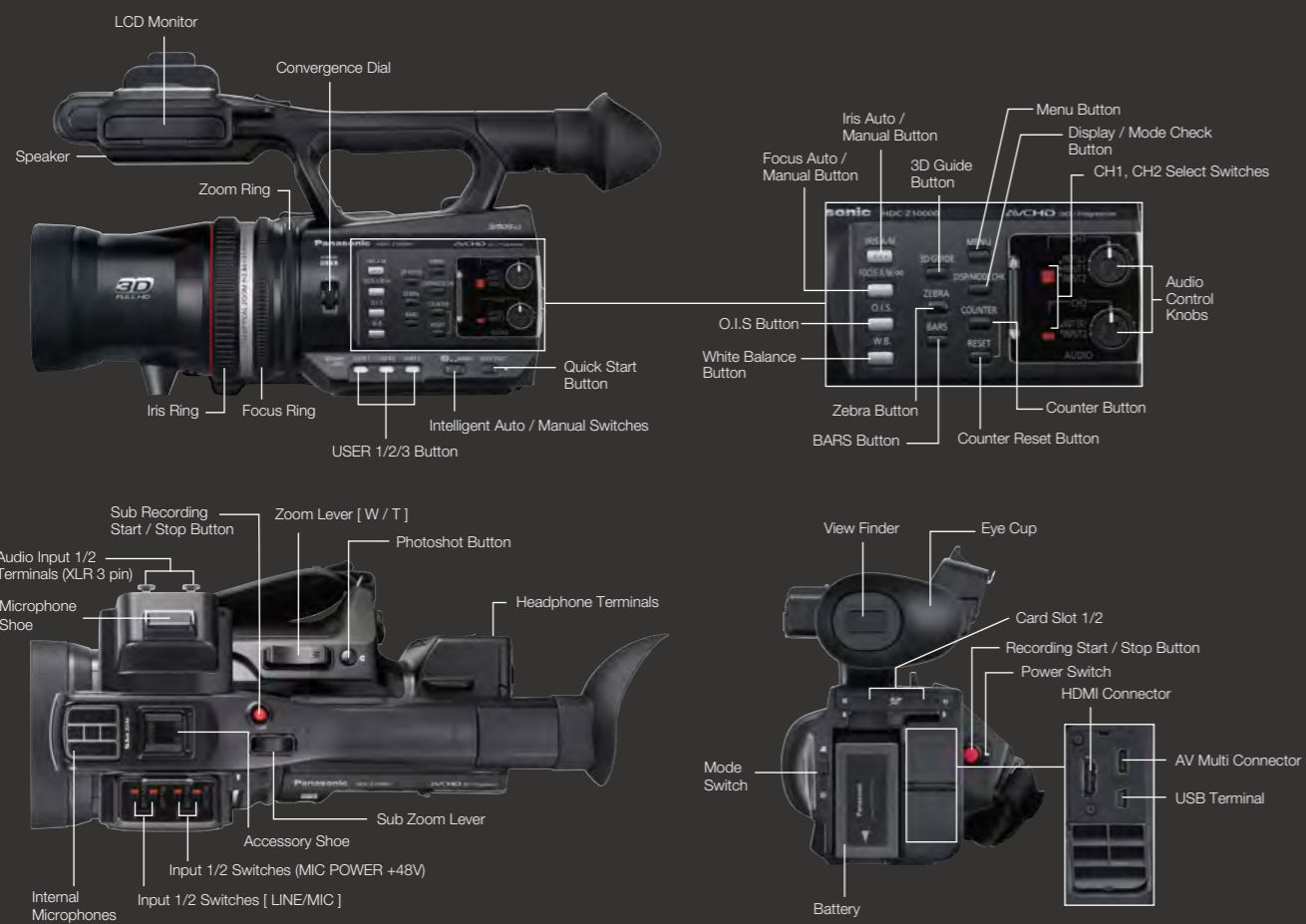
ideas for life

Integrated Twin-Lens 2D/3D Camcorder

HDC-Z10000

For Creative Minds

Main Parts and Controls



Panasonic

<http://panasonic.net/camcorder>

AVCHD
3D / Progressive

3D
FULL HD

Professional-ism. The Answer from Panasonic.

The HDC-Z10000 leads* the world in officially supporting the new AVCHD 3D/Progressive standard. Even with its compact, handheld size, this advanced camcorder is filled with original imaging technologies like the Double 3MOS System. It produces outstanding images in both 2D and 3D. It also features the industry's shortest* close-up range of approx. 45cm for 3D macro shooting, versatile manual functions that create the exact images that you want, Intelligent Auto (iA) functions that make sure you catch every shooting opportunity, and a powerful, HYBRID O.I.S.+**. This powerful camcorder is designed to single-handedly meet the level of quality that is demanded both for 2D image production, and for the growing need for 3D image production.

* As of August 31, 2011.
** For 2D shooting only. POWER O.I.S. for 3D shooting.

High-Quality Picture and Sound

3MOS Sensor

Red (R), green (G) and blue (B) colors are each processed by a dedicated sensor. This makes an effective pixel count of 6.57 megapixels*, to reproduce colors that are highly faithful to the originals.

* 6.21 megapixels when shooting in 3D.



Newly Developed Crystal Engine Pro II

The HDC-Z10000 features the newly developed, ultra-high speed Crystal Engine Pro II. By using this engine to perform high-speed processing of the 4K2K-equivalent pixels that are obtained with pixel shift technology, superb Full-HD quality is achieved in detailed images with minimal noise.



F1.5 Lens with Nano Surface Coating

This bright new F1.5 29.8mm* wide-angle lens with 12x** optical zoom is ideal for shooting in dimly lit places. It is the first*** handheld camcorder to use a nano surface coating on the lens surface. This dramatically suppresses ghosts and flaring to render crisp, clear images with stunning transparency.

* 35mm camera equivalent.
** For 2D shooting.
*** As of August 31, 2011.



AVCHD Progressive Compliant 1080/50p Recording*

AVCHD Progressive

* 1080/60p Recording in NTSC areas.

Dolby Digital 5.1-ch Surround Sound

Linear PCM Recording



Linear PCM Recording



*XLR microphone is optional.

Professional Features

Triple Manual Rings

Zoom, focus and iris can each be individually fine-tuned. This allows delicate framing and image composition to match the photographer's intent.



1.15cm/0.45" EVF with 1,227,000-dot Resolution

Scene Custom Function

Up to six sets of camera setting data can be recorded within the camera.

Function Memory / Independent Control Buttons

Functions that are frequently used for recording are arranged as separate buttons.

Color Bar / Zebra Pattern / 3D Guidelines / Auto Iris / Auto Focus / White Balance and more

Multi Format Recording

Select the recording mode from AVCHD 3D (1080/50i, 1080/25p*, 1080/24p), AVCHD Progressive (1080/50p), AVCHD (1080/24p, 1080/25p*, and 1080/50i PH/HA/HE)**.

* Images shot in the 1080/25p mode are recorded as 1080/50i.
** In PAL areas. AVCHD 3D (1080/60i, 1080/30p and 1080/24p), AVCHD Progressive (1080/60p), and AVCHD (1080/24p, 1080/30p, and 1080/60i PH/HA/HE) in NTSC areas.

AVCHD 3D / Progressive

Based on the AVCHD format, which offers high compression and excellent compatibility, this new standard has been upgraded to AVCHD 3D, which uses MVC (Multiview Video Coding) to record and play 3D images via the Frame Sequential Method, and AVCHD Progressive for progressive formats.

Quick, Ready-to-Shoot Features

HYBRID O.I.S.+*

The new HYBRID O.I.S.+* corrects the kind of roll direction hand-shake that often occurs when shooting while zooming or walking. It lets you record steady images under various conditions.

* For 2D shooting only.
POWER O.I.S. for 3D shooting.



iA (Intelligent Auto)

With the press of a button, the subject's condition is automatically recognized, and the optimal settings are selected by the camera.



Quick-Start / Quick Power-On

The Quick-Start (0.6 sec) and Quick Power-On (2 sec) functions allow shooting to begin almost instantly.

Editing Feature

HD Writer XE 1.0

The included HD Writer XE 1.0 software makes it easy to write MVC format FULL HD 3D images to a Blu-ray Disc™, and edit cuts of 1080/50p(60p) Full-HD images. Naturally, it also allows data to be saved to a PC or SD Card.

3D FULL HD

3D Macro Close-ups to approx. 45cm

The original stereoscopic lens structure and unique O.I.S. technology achieve the industry's No. 1* close-ups of approximately 45cm for macro shooting**, while maintaining an equivalent 32mm wide angle*** of view. It records images that were conventionally difficult to capture, such as flowers, food and small animals, with 3D close-ups and clear detail.

* As of August 31, 2011.
** Approx. 3.5cm when shooting in 2D.
*** 35mm camera equivalent.



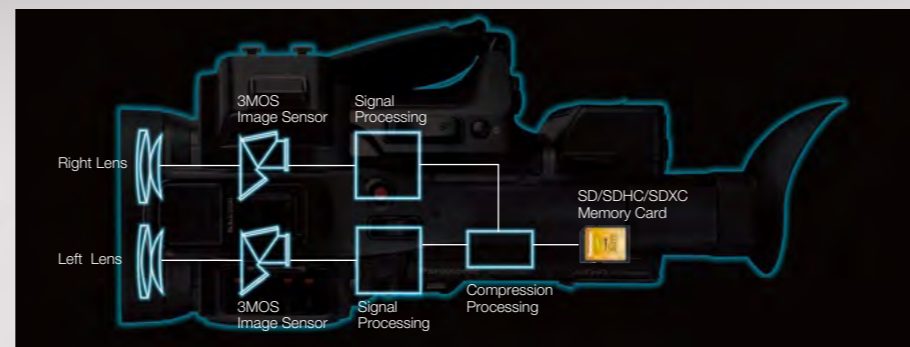
Double 3MOS System

Two new, large-diameter F1.5 lenses and two high-sensitivity 3MOS sensors (with an effective pixel count for 6.57 megapixels*) are independently mounted left and right, and the newly developed Crystal Engine Pro II

provides high-speed processing. This system records extremely lifelike FULL HD 3D images.

* 6.21 megapixels when shooting in 3D.

3MOS x2



8.8cm/3.5" 3D-Compatible LCD with 1,152,000-dot Resolution

Parallax barrier control allows 3D viewing with no special eyewear required. This makes it easy to check 3D effects on-site while shooting without having to connect to a monitor.



3D Convergence Control

This function controls the degree of leaping effects and depth to provide just the amount of 3D effects desired.

Compatible with the New-Standard AVCHD 3D (1080/50i*, 1080/24p)

* 1080/60i Recording in NTSC areas.



The 3D Still Picture Recording Function Lets You Shoot or Cut Out Still Images

HDC-Z10000

Caméscope Full HD 3D semi-professionnel

Enregistrements de qualité professionnelle en 2D et en 3D

Vidéo Macro 3D à 45 cm minimum

Fonctions manuelles pour régler les images au plus précis

Système audio avec 2 entrées XLR et compatibilité Audio PCM Linéaire

Bague de réglage de la convergence 3D

Fonctions vidéo en 3D : Grand-angle 32 mm / zoom optique 10x



Caméscope 3D à double objectif pour des images de qualité professionnelle

CAPTEUR

Capteur d'image	2 x 3 capteurs MOS 1/4.1
Total Pixels	9.15 megapixels (3.05 megapixels x 3)

Pixels effectifs

Vidéo	[2D] 6.57 megapixels (2.19 megapixels x 3) [16:9] [3D] 6.21 megapixels (2.07 megapixels x 3) [16:9]
Photo	[2D] [3D] 7.08 megapixels (2.36 megapixels x 3) [3:2] 6.57 megapixels (2.19 megapixels x 3) [16:9] 6.87 megapixels (2.29 megapixels x 3) [4:3]

OBJECTIF

Valeur F	[2D] F1.5 (Grand-angle) / F2.8 (Télé) [3D] F1.5 (Grand-angle) / F2.7 (Télé)
Zoom optique	[2D] 12x [3D] 10x
Longueur de la focale	[2D] 2.84 - 34.1 mm [3D] 2.84 - 28.4 mm
Séparation optique des couleurs	Prism system

Equivalent 35 mm

Vidéo	[2D] 29.8 - 368.8 mm [16:9] [3D] 32.0 - 320.0 mm [16:9]
Photo	[2D] 29.8 - 369.0 mm [3:2], 29.8 - 368.8 mm [16:9], 31.0 - 372.0 mm [4:3], [3D] 32.0 - 320.0 mm [16:9]

FONCTIONS

Standard Illumination	1400 lx
Eclairage minimum	5 lx (iA mode ON : 1/30)
Distance minimum de prise de vue	[2D] env.1.2 m (toutes les focales), env. 3.5 cm (macro) [3D] env.2.5 m (toutes les focales), env. 45 cm (macro)
Mise au point	Auto/ Manuel
Balance des blancs	Auto/ Réglages blancs / 3200K / 5600K / canal A / canal B

Vitesse d'obturation

Auto Slow Shutter ON	Modes 50p, 50i, 25p : 1/25 - 1/8000 s. Mode 24p : 1/24 - 1/8000 s.
Auto Slow Shutter OFF	Modes 50p, 50i, 25p : 1/50 - 1/8000 s. Mode 24p : 1/24 - 1/8000 s.
Iris	Auto/ Manuel

Zoom

Zoom optique	[2D] 12 x [3D] 10 x
Zoom Intelligent	[2D] 23 x
Zoom Digital	[2D] 30 x / 120 x
Stabilisateur d'image	[2D] Hybrid O.I.S.+ [3D] Power O.I.S.

ENREGISTREMENT

Types de cartes acceptées	Carte mémoire SD : 512 Mo, 1 Go, 2 Go Carte mémoire SDHC : 4 Go, 6 Go, 8 Go, 12 Go, 16 Go, 24 Go, 32 Go Carte mémoire SDXC : 48 Go, 64 Go
Port de carte mémoire	2 ports
Format	Conforme au standard AVCHD 2.0 (AVCHD 3D/ Progressif)
Compression Method	[2D] MPEG-4 AVC/ H.264 [3D] MPEG-4 MVC/ H.264
Système	[3D] 1080/50i, 1080/25p**, 1080/24*, [2D] 1080/50p, 1080/50i, 1080/25p**, 1080/ 24p*

Affichage de miniatures 20 miniatures/page, 9 miniatures/page, 1 miniature/page

Mode Photo

Format JPEG (DCF/Exif2.2), MPO (CIPA-007-2009)

Rapport largeur/hauteur 16:9

Taille d'image 3 megapixels [JPEG], (2304 x 1296),
2.1 megapixels [JPEG], (1920 x 1080),
2.1 megapixels [MPO+JPEG], (1920 x 1080)

FONCTIONS AUDIO

Système d'enregistrement Dolby Digital 5.1 / 2 ch, PCM linéaire 2 ch

Fréquence d'échantillonnage 48 kHz

Quantization 16 bit

Débit compressé Dolby Digital : 384 kbps (5.1 ch), 256 kbps (2 ch), PCM linéaire 1.5 Mbps (2ch)

Internal Microphone Micro 5.1 Surround, Micro zoom, Micro Gun, Micro Stéréo

Entrée XLR XLR 3-broches × 2 (INPUT 1, INPUT 2)
LINE: 0 dBu, MIC: -50 dBu/-60 dBu (sélectionnable dans le menu)

Sortie HDMI Dolby Digital, PCM linéaire

Sortie casque Mini-jack Stéréo (diamètre 3.5 mm) × 1

Haut-parleur intégré Type dynamique (rond)

FONCTIONS GENERALES

Température de fonctionnement 0 °C - 40 °C (32 °F - 104 °F)

Humidité de fonctionnement 10 % to 80 % (No condensation)

Ecran LCD Grand écran LCD orientable 3.48" (8.83 cm) 16:9 (1 152 000 points)

Viseur Grand viseur électronique 0.45" (11.5 mm) 16:9 (env. 1 226 880 points)

Bagues manuelles Zoom, Mise au point, Iris

Molette de réglage Convergence 3D

HDMI

Borne HDMI 1 terminal de type A,

Sortie HDMI 1080p, 1080i, 480p, 576p

Sortie HD SDI Non

Language OSD Anglais, Allemand, Français, Italien, Espagnol, Polonais, Tchèque, Néerlandais, Turc, Suedois, Hongrois, Russe

Accessoires Standard

Adaptateur Oui

Câble d'alimentation (AC) Oui

Câble d'alimentation (DC) Oui

Batterie rechargeable Oui (5,400 mAh)

Chargeur de batterie Oui

Télécommande infrarouge avec batterie lithium metal	Oui
Câble AV	Non
Câble composant	Oui
Câble S	Non
Câble D	Non
Câble HDMI	Non
Câble USB	Oui
Carte SD	Non
Styler	Yes
Cache d'objectif	Oui
Logiciel fourni	HD Writer XE 1.0
NOTE	*24p=23.98p **1080/25p is recorded in 1080/50i mode. Les caractéristiques sont soumises à modification sans préavis.