# DSC-W650

Capture brilliant HD video and 360 degree pictures. With a 16.1MP sensor and 3.0" LCD, it's easy to view dazzling images. Optical Steady Shot Image stabilization reduces blur, while iAuto and Picture Effect modes allow you to get more creative with your photos.



Compact digital camera

# Bullets

- Capture your videos in HD Movie mode (720p)<sup>1</sup>
- Take stunning iimages in Sweep Panorama™ mode-up to 360°
- 16.1 megapixel plus a 3.0" LCD screen for easy viewing
- Optical SteadyShot™ image stabilization reduces blur
- Picture Effect for more expressive photos
- iAuto mode automatically optimizes camera settings
- Face Detection and Smile Shutter™ technologies
- Anti-blink, Face Priority and Red-eye Reduction functions
- Soft Skin mode reduces visible blemishes and wrinkles
- iSCN detects 8 scene conditions and adjusts camera settings
- Natural Flash corrects color balance for lifelike shots

# Features

# 720p MP4 HD Movie Mode

In 720p MP4 movie mode the camera shoots 1280 x 720 high definition movies at 30 fps, a standard format when working with a PC. Users will create high quality movies with full use of optical zoom in files small enough to transfer to compatible PC or Mac® computer.4 Once transferred to your computer and connected to the internet, you can effortlessly upload your media to popular photo and video-sharing websitessuch as Photobucket® and YouTubeTM.

#### Sweep Panorama™ mode (up to 360°)

Reach beyond the traditional wide angle lens, and capture more breathtaking shots with Sweep Panorama<sup>™</sup> mode. Simply press the shutter button and sweep the camera in the desired direction and the camera continuously shoots at a high speed, then seamlessly stitches the images together with automatic position adjustment to create one stunning panoramic image. Available in wide and up to 360° full circle, the camera can take a variety of panoramic shots. Now capturing wide landscapes is as easy as press and sweep.

# 16.1 Megapixel Super HAD™ CCD Image Sensor

A powerful 16.1 megapixel 1/2.3" Super HAD<sup>™</sup> CCD image sensor helps you capture gorgeous images with superb contrast and clarity down to the finest detail. With 14.1 megapixels, you can create stunning, photo-quality prints up to A3+ (13x19") size, or crop your images and still come away with high resolution shots.

# 3.0" (230K dots) Clear Photo™ LCD display

Large 3.0" (230K dots) Clear Photo™ LCD display features sharp, natural color that makes it easy to compose shots, read menus, and view photos, even in bright sunlight.

# Optical SteadyShot<sup>™</sup> image stabilization

Optical SteadyShot™ image stabilization uses a built-in gyro sensor to detect camera shake and automatically shifts the lens to help prevent blur without sacrificing image quality.

# Picture Effect for more expressive photos

Picture Effect adds a new level of expression to photos, making ordinary landscapes and portraits come to life by heightening mood and emphasizing certain attributes. Select models have up to nine effects.

#### Intelligent Auto Mode

Unlike traditional auto mode, Intelligent Auto (iAuto) mode thinks for you, recognizing scenes, lighting conditions, faces, and adjusts settings resulting in clear images, faces with natural skin tone and less blur. Take advantage of all the technology without leaving Auto mode. Kids on the playground, landscape shots, a beautiful flower or an indoor birthday party; result in clear images without leaving auto mode.

#### Face Detection technology

Face Detection technology detects up to eight individual faces and adjusts focus, exposure, and white balance to help deliver crisp, properly lit images of family and friends.

#### Smile Shutter™ technology

Smile Shutter<sup>™</sup> technology captures a smile the moment it happens. Simply press the Smile Shutter<sup>™</sup> button and the camera does the rest. You can also select adult and child priority and indicate the degree of Smile Detection sensitivity. Intelligent Scene Recognition can now be used together with Smile Shutter<sup>™</sup> mode when the Intelligent Auto mode is on. This means that beautiful smiles can be captured with settings optimized for the particular scene, even in difficult conditions such as twilight and backlighting.

#### Anti-blink Function

It's frustrating to capture the perfect shot, only to review it later and discover subjects blinked during the photo. The Anti-blink function works to help counter blinking and squinting. When the camera is set to Soft Snap, the Anti-blink function captures two images, recording only the photo with less squinting. If a blink is detected in other shooting modes, a warning will be displayed after you take the shot.

#### Soft Skin mode

Portrait subjects will love the results. Soft Skin mode recognizes skin tones and reduces the appearance of blemishes and wrinkles without affecting the rest of the shot.

#### Intelligent Scene Recognition (iSCN) Mode

Intelligent Scene Recognition (ISCN) Mode automatically detects seven different types of scenes and, within just 1/30th of a second, selects the appropriate camera settings: Backlight, Backlight Portrait, Twilight, Twilight Portrait, Twilight using a tripod, Portrait, Landscape and macro. ISCN has two modes: Auto and Advanced. In Auto Mode, the camera takes a single shot using the optimal settings. In Advanced Mode, the camera takes a photo with the optimal settings and, if in difficult lighting (low light or back light) immediately takes a second photo with another optimized setting so you can choose which to keep.

#### Natural Flash

Conventional point-and-shoot camera flash shots just don't capture colors the way the eye sees them. Natural Flash mode takes a reference shot without flash and then uses that reference to correct the color, for far more lifelike images

#### Dynamic Range Optimizer

#### Standard and Plus

Dynamic Range Optimizer (DRO) Standard and Plus uses a sophisticated algorithm to help recover shadows and highlights. The result is more natural images with clearer details that more closely match what your naked eye sees. DRO is particularly effective when shooting backlit portraits or any scene with a dramatic contrast between background and foreground lighting. DRO Plus allows for even greater optimization by analyzing each region of an image and performing additional image processing.

#### **Specifications**

Camera	
Camera Type	Compact zoom digital camera

Imaging Sen	sor
Imaging Sensor	1/2.3" Super HAD CCD Sensor

Processor	BIONZ®
Pixel Gross	16.4MP

# SONY make.believe

Effective Picture Resolution	16.1MP
Color Filter System	RGB primary color filters
Recording	
Media Type	optional "Memory Stick Duo" (No movie recording), optional "Memory Stick PRO Duo" (Mark 2 only for movie recording), optional "Memory Stick PRO-HG Duo", optional SD Memory Card (Class 4 or higher), optional SDHC Memory Card (Class 4 or higher), optional SDXC Memory Card (Class 4 or higher)
Still Image Mode	JPEG
Still Image Max Effective Resolution	Approx. 16.1 Megapixels
Still Image Size 16:9	12M(4,608 x 2,592) / 2M(1,920 x 1,080)
Still Image Size 4:3	16M(4,608 x 3,456) / 10M(3,648 x 2,736) / 5M(2,592 x 1,944) / VGA
Panorama Still Image Size	360°(11,520×1,080) / Wide(7,152 x 1,080/4,912 x 1,920) / Standard(4,912 x 1,080/3,424 x 1,920)
Video Format	MP4(AVC/H.264)
Video Mode	1280x720(Fine) (1,280x720/3 0fps)/1280x7 20(Standard) (1,280x720/30fps)/
Audio Format	AAC
Microphone/ Speaker	Mono/mono
Optics/Lens	
Lens Type	Carl Zeiss® Vario- Tessar®
Optical Zoom	5x
Focal Length (35mm equivalent)	Still 16:9: 28- 140mm / Still 4:3: 25-125mm / Movie 16:9:
Lens Construction	6 elements in 5 groups (including 3 aspheric elements)
Minimum Focus Distance	
Aspheric Elements	3
Steady Shot Mode:Active	Yes
Viewfinder	
Туре	None
LCD Display	

LCD Type	3.0" Clear Photo™ LCD (230K dots)
Brightness Control	5(Bright) / 4 / 3(Normal) / 2 / 1(Dark)
Focus Contro	bl
AF Modes	Multi Point AF / Center Weighted AF / Spot AF / Face Tracking Focus
AF Illuminator	Auto / Off
Exposure Syst	em
Metering Modes	Multi Pattern / Center Weighted / Spot
Exposure Compensation	Plus / Minus 2.0EV, 1 / 3EV step
Scene Mode(s)	High Sensitivity / Soft snap / Soft Skin / Landscape / Night Portrait / Night Scene / Gournet / Beach / Snow / Fireworks / Pet mode
D-Range Optimizer	Standard / Plus / Off
ISO	Auto / 80/ 100 / 200 / 400 / 800 / 1600 / 3200
White Balance Mode	Auto (Intelligent) / Daylight / Cloudy / Fluorescent 1 (White Fluorescent Lighting) / Fluorescent 2 (Natural White Fluorescent Lighting) / Fluorescent 3 (Day White Fluorescent Lighting) / Incandescent / Flash / One Push, One Push Set
Drive System	
Self-timer	Off / 10sec. / 2sec. / portrait1 / portrait2
Shutter Speeds	iAuto(2" - 1/1600) / Program Auto(1" - 1/1600)
Burst Mode	Approx 1 fps at 16.1MP (Maximum 100 shots)
Flash	
Flash Modes	Auto / Flash On / Slow Synchro / Flash Off
Flash Coverage	ISO Auto: Approx.0.3m to 3.7m(11 7/8 inches to 12 feet 1 3/4 inches)(W) / Approx.1.0m to 1.5 m(3feet 3 3/8 inches to 4 feet 11 1/8inches)(T), ISO3200: up to Approx.7.3 m(23 feet 11 1/2 inches) (W) / Approx.3.1 m(10 feet 2 1/8inches)(T)

Convenience	e Features
Red-Eye Reduction	Auto / On / Off
Erase/Protect	Erase: Single / Select / Date / Folder, Protect: Single / Select / Date / Folder
Advanced Fe	eatures
Sweep Panorama	Sweep Panorama / Sweep Panorama (360)
Smile Shutter™ technology	Yes
Image Stabilization	Optical SteadyShot™ with Active Mode Image Stabilization
In-Camera Editing	Trimming / Red Eye Correction / Unsharp Masking
Intelligent Auto	Yes
Shooting Tips	Yes
Tracking Focus	Off / Auto
Blink Detection	Yes
Interface	
Memory Card Slot	MS Duo and SD/ SDHC/SDXC Compatible
SD Output	Yes
HD Output	Composite
Dimensions (/	Approx.)
Dimensions (Approx.)	W x H x D: 3 3/4" x 2 1/4" x 3/4" (94mm x 56.mm x 19.1mm)
Weights and	Measurements
Weight (Approx.)	4.4 oz. (124g)
Weight(Approx) (Main unit only)	3.8 oz. (108g)
Power	
Battery Type	LITHIUM ION NP-BN 3.6V
Battery Capacity	typical: 2.3Wh (630mAh), minimum: 2.2Wh (600mAh)
Number of Still Images	typical: 2.3Wh (630mAh), minimum: 2.2Wh (600mAh)
Power Consumption (in Operation)	Approx. 1.1W
Power Requirements	AC 100V to 240V, 50/60 Hz, 2W
Accessories	
Supplied Accessories	Battery (NP-BN) Battery Charger Multi USB Cable Wrist Strap Instruction Manual

1. Recording limited to 29 minute segments

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