



HDR-PJ220 **NEW**

- Tover elk oppervlak om tot een thuisbioscoop met de ingebouwde projector.
- Maak stabiele opnames terwijl u loopt en leg elk detail vast, ook bij weinig licht.
- U bent perfect uitgerust voor elke opname, van een grote groep mensen tot een close-up van gezichten, met de Carl Zeiss groothoeklens en de 32x zoomfunctie.

Technische specificaties

General	
Camera Type	Digital HD Video Camera Recorder
Colors	(B)Black
Imaging Sensor	
Imaging Sensor	1/5.8 type(3.1mm) back-illuminated "Exmor R" CMOS Sensor
Processor	BIONZ® image processor
Pixel Gross	Approx.2390K pixels
Effective Picture Resolution(movie)	Approx.2150K pixels(16:9)/Approx.1610K pixels(4:3) *1
Effective Picture Resolution(still)	Approx.2290K pixels(16:9)/Approx.1710K pixels(4:3)
Color Filter System	RGB primary color filters
Recording	
Media Type	Memory Stick PRO Duo™ (Mark 2)
	Memory Stick PRO-HG Duo™
	Memory Stick XC-HG Duo™
	SD/SDHC/SDXC Memory Card(Class 4 or Higher)
Internal Media	-
Still Image File Format	DCF Ver.2.0 compatible, Exif Ver.2.3 compatible, MPF Baseline compatible
Still Image Mode	JPEG
Still Image Max Effective	8.9 megapixels

Still Image Size(Movie Mode)	L:8.9 megapixels 16:9 (3984x2240),6.7 megapixels 4:3 (2992x2240)
	S:2.1 megapixels 16:9 (1920x1080),0.3 megapixels 4:3 (640x480)
Still Image Size(Photo Mode)	L:8.9 megapixels 16:9 (3984x2240),6.7 megapixels 4:3 (2992x2240)
	S:2.1 megapixels 16:9 (1920x1080),0.3 megapixels 4:3 (640x480)
Still Image Size(Sweep Panorama)	-
Video Format	AVCHD format ver.2.0 compatible:MPEG4-AVC/H.264
	MPEG2-PS:MPEG-2 (Video)
	MP4: MPEG-4 AVC/H.264
Video Mode(Resolution)	HD:1920x1080/50p(PS), 50i(FX,FH), 1440x1080/50i (HQ,LP)
	STD:720x576/50i
	MP4: 1280x720 25p
Movie Recording Rate(Average Bit Rate/VBR) *2 *3	HD PS:Approx.28Mbps/FX:Approx.24Mbps/ FH:Approx.17Mbps/HQ:Approx.9Mbps/L P:Approx.5Mbps
	STD HQ:9Mbps
	MP4: Approx.6Mbps
Video Actual (Pixel)	Approx.2150K pixels(16:9),Approx.1610K pixels(4:3) *1
Video Signal	HDTV
	PAL color, CCIR standards
Progressive Mode	HD:50p, Progressive recording
	MP4: 25p, Progressive recording
Recording and Playback Times(in Internal Media)(5.1ch) *4 *5	-
Recording and Playback Times(in Internal Media)(2ch) *4 *5	-
Number of Recording Pictures(in Internal Media) *6	-
Photo Capture from Movie	-
Dual Record *7	8.9 megapixels 16:9 (3984x2240) 2.1 megapixels 16:9 (1920x1080)
Audio Format	Dolby® Digital 2ch Stereo, Dolby® Digital Stereo Creator *8
	MPEG-4 AAC-LC 2ch *9
Microphone/Speaker	Built-in Zoom Microphone Monoral Speaker
Mic Level Control	Yes(2steps)
Wind Position	Yes(Off/On)
Auto wind noise reduction	-
Play List Edit	-
Optics/Lens	
Lens Type	Carl Zeiss® Vario-Tessar® Lens
Lens Stabilization	-
Aperture	F1.9-F4.0
Optical Zoom	27x
Extended Zoom	32x
Digital Zoom *10	320x
Focal Distance	f=2.1-57.0mm
	f=3/32-2 1/4inch

FOV	-
Focal Length(35mm equivalent)(Movie Mode)	f=29.8-953.6mm(16:9),f=36.4-1164.8mm (4:3) *1
	f=1 3/16-37 5/8inch(16:9),f=1 7/16-45 7/8Inch(4:3)
Focal Length (35mm equivalent) (Photo Mode)	f=29.8-804.0mm(16:9), f=36.4-984.0mm(4:3)
	f=1 3/16-31 3/4inch(16:9), f=1 7/16-38 3/4Inch(4:3)
Filter Diameter	-
	-
Minimum Focus Distance	Approx.1cm(Wide) ,Approx.80cm(Tele) ,Approx.37cm(Tele Macro)
	Approx.13/32inch(Wide) ,Approx.31 1/2(Tele)
	,Approx.14 5/8(Tele Macro)
Aperture Blade	-
Viewfinder	
Type	-
Field of View	-
LCD Display	
LCD Type	6.7cm(2.7 type) Clear Photo LCD™ display (230K) Wide(16:9)
Touch Panel	-
Angle Adjustment	Opening Angle:max.90 deg., Turning Angle:max.270 deg.
Brightness Control *11	Yes(Menu)
Coverage	100%
Histogram	-
Grid Display	Grid Line *12
Display Panel	
Display Panel	-
Projector	
Light Output	Up to 13 lumen
Resolution Output	640 x 360
Screen Coverage	10 type - 100 type
Throw Distance	Approx. 0.5m(1.6feet) or over
Endurance (Battery Life)	Approx. 50min(Supplied Battery)
Projector Input	-
Focus Control	
Focus System	Contrast AF
Focus Points	-
AF Modes	Auto/Manual(Menu)
Focus Area	Full range Focus
Manual Focus Assist	-
Focus Features	-
Tele Macro	Yes
Exposure System	
Metering Modes	Multi-segment
Exposure Compensation	-
Exposure Settings	Auto
	Manual(Menu)
LOW LUX Mode	Yes

Scene Mode(s)	Auto/Night Scene/Sunrise & Sunset/Fireworks/Landscape/Portrait/Spotlight/Beach/Snow
D-RangeOptimizer	-
Backlight Compensation	Yes(Auto)
Noise Reduction	Yes
White Balance Mode	Auto/Onepush/Outdoor/Indoor
WB Shift	-
Minimum Illumination	Standard:6 lux(1/25 Shutter Speed) Low Lux:3 lux(1/25 Shutter Speed)
Auto Iris Control	F1.9 - F10
Manual Iris Control	-
Manual Exposure Assist	-
Drive System	
Drive Mode	Photo Mode:Single-shot/Self-timer
Self-timer	Approx.10sec.(Still Image)
Shutter Speed Auto Control Range	1/6-1/10000
Shutter Speed(Standard)	1/25-1/10000
Shutter Speed(Manual Iris Control)	-
Shutter Speed(Manual Shutter)	-
Shutter Speed(Smooth Slow Rec)	-
Convenience Features	
Built-in USB Cable	Yes(USB Charge Available)
Multi Selector	Yes
Manual/Auto Lens Cover	Manual
S/S & Zoom button on LCD	-
Red Eye Reduction	-
Fader Effect(s) *13	White/Black
Digital Picture Effects/Picture Effects	-/-
Date/Time Stamp	Yes(Rec Date and Time, Camera info)
Erase/Protect	Yes/Yes
Media/Battery Indicator	Yes(recordable time, free and used media space)/Yes(recordable time, remaining capacity)
On Screen Main Indicators	Intelligent Auto Status Zoom Position Recording/Playback/Editing Media Recording Status Recording Mode Recording Image Quality(HD/MP4/STD) Photo Size Shooting Mode Status
Multiple Language Display	English French Italian German Spanish Dutch Simplified Chinese Portugese Greek Traditional Chinese Simplified English

	Thai
	Turkish
	Polish
	Czech
	Hugarian
	Roma
Still Image Playback Options	Slide Show
Video Playback Options	Highlight Playback(HD Movie Only)
	Highlight Playback Save and Share(Translate into STD quality)
	Highlight Scenario(Save/Playback/Erase)
	Highlight BGM(Preinstalled 4 music files)
Built-in Video Light Coverage	-
	-
Remote Control	-
Self Recording	Yes
One Touch Disc Burn	-
Color Slow Shutter	-
Easy Handycam/Help Function	-/-
Advanced Features	
Wi-Fi(built-in)	-
Interval Recording	-
Closer Voice	-
AGCLimit	-
Audio Level Display	-
3D Depth Adjustment(Recording)	-
3D Depth Adjustment(Playback)	-
Power Save	Yes
Built-in"PlayMemories Home(Lite Version)"	-
Pre-installed "PMB Portable"	-
Cinematone	-
S-Master	-
Assignable Dial	-
Embedded GPS	-
Face Detection	Yes
Priority Setting(for Face Detetection)	Auto/Child Priority/Adult Priority
Smile Shutter *7	Dual Capture/Always On/Off
Golf Shot	-
Smooth Slow Rec	-
Image Stabilization	Electrical SteadyShot™ image stabilization w/ Active mode (Wide to Tele)
Intelligent Auto	Portrait/Baby/Tripod/Backlight/Landscape/Spotlight/Twilight/Macro/Low light
View&Index	Event
Panorama	-
NightShot® infrared System	-
x.v.Color™	Yes
Water Proof	-
Dust Proof *14	-

Shockproof *14 *15	-
Airplane Mode	-
Flash	
Flash Type	-
Flash Metering System	-
Flash Modes	-
Flash Compensation	-
Flash Coverage	-
Interface	
Wi-Fi	-
Memory Card Slot	Memory Stick PRO Duo™ and SD/SDHC/SDXC compatible
STD Output	Composite Video Out(AV CABLE(sold separately))
HD Output	HDMI Out(micro)(supplied)
3D HD Output	-
USB Port(s)	TypeA(built-in)/USB2.0 Hi-speed (mass-storage/MTP)
Multi/Micro USB Terminal *16	Yes
BRAVIA Sync	Yes
PhotoTV HD	Yes
DVDirect	-
Headphone Jack	-
Microphone Input	-
Direct Copy	Yes
Accessory Shoe	-
PictBridge Compatible	-
DC IN	Yes
Remote Terminal	integrated into Multi/Micro USB Terminal *17
HDMI Terminal	Yes (HDMI micro) *18
Projector Input	-
A/V Remote Terminal	-
Weights and Measurements	
Dimensions(Approx.)(WxHxD including supplied battery) *19 *20	Approx.58mm x 57mm x 117mm(Approx.58mm x 57mm x 125mm)
	Approx.2 3/8inch x 2 1/4inch x 4 5/8inch(Approx.2 3/8inch x 2 1/4inch x 5inch)
Weight(Approx) (Main unit only)	Approx.210g
	Approx.7.4oz
Weight(Approx.) (Total) *21	Approx.254g(NP-FV30(supplied battery))
	Approx.263g(NP-FV50)
	Approx.308g(NP-FV70)
	Approx.407g(NP-FV100)
	Approx.9.0oz(NP-FV30(supplied battery))
	Approx.9.3oz(NP-FV50)
	Approx.10.9oz(NP-FV70)
	Approx.14.4oz(NP-FV100)
Power	

Battery Type	InfoLITHIUM® with AccuPower™ Meter System (V Series)
Charge on camcorder(Charging time with supplied Battery) *22	Yes(Approx. 1h 55min)
Power Consumption (in View Finder Operation) *23	-
Power Consumption (in LCD Operation) *23	HD:2.2W
	STD:2.1W
	MP4: 2.0W
Power Consumption (in Display Panel Operation) *23	-
Power Requirements	6.8V/7.2V (battery pack); 8.4V (AC Adaptor)
In the Box	
Supplied Accessory *24	Rechargeable Battery Pack(NP-FV30) (1)
	AC Adaptor (1)
	Power Cord (1)
	USB Connection Support Cable (1)
	HDMI(micro) Cable (1)
	"Operating Guide"(1)
Optics/Lens(details)	
Steady Shot Mode:Active(16:9)	f=35.8-964.8mm
Camera(details)	
Auto Non Flicker	Yes
Gain Control	Auto
Auto(Auto Slow Shutter ON)	-
Auto(Auto Slow Shutter OFF)	-
Scene Selection	1/6-1/10000
LOW LUX	1/25-1/10000
Manual Iris Control(Photo Mode)	-
Manual Shutter Control(Photo Mode)	-
Auto Control	Exposure,Color,Focus
Face Touch	-
Smile Sensitivity	Yes(3steps)
Imaging Sensor(details)	
Recording pixels(photo, 16:9)	Max. 8 900 000 pixels
Effective(movie, 16:9)	Approx. 2 150 000
Panel(details)	
blank	6.7cm(2.7 type) Clear Photo LCD™ display (230K) Wide(16:9) (960x240)
Projection(details)	
Projection type	DLP
Light source	LED(R/G/B)
Focus	Manual
Color repeatability	16 700 000
Contrast ratio	1500:01:00
Projector Input	-
USB Charging(details)	
blank	DC 5 V 500 mA/1.5 A
USB Power Supply	
blank	-
Convenience Features(details)	
TV Connect Guide	-
Image Management File Repair	Yes

Fast Playback	About 5 times/10 times/30 times/60 times
Slow Playback	Forwad:1/5 speed, Reverse:1/2 speed
Date&Time, Summer Time, Area Set	Yes
Auto Date&Time, Area Adjustment by GPS	-
Quick Format(Initialize)	Memory Card
Full Format (Erase All completely)	-
Internal Media --> Memory card	-
Memory card --> Internal Media	-
Dimensions(details)	
blank	-
Others(details)	
Conversion Lens Mode(w/ Optional Lens)	-
Wi-Fi(w/ optional Wireless adaptor)	-
XLRBox	-
5.1ch Center Mic Ready(w/ Optional microphone)	-
Demonstration Mode	Yes
Pre-Installed High Definition Demo Movie	-