

Q: Which OS is the OptioMX compatible with?

Please refer to the information below.

USB interface:
Windows 98/98SE/Me/2000/XP, or Mac OS 9.2/10.1/10.2/10.3, and a standard equipped USB port (Driver installation required for Windows 98/98SE only).

Working environment for ACDSee for PENTAX packaged software:

	Windows	Macintosh
OS	98/98SE/Me/NT/2000/XP	Mac OS 8.6 or later
CPU	Pentium or later (Pentium III 500MHz or faster)	Power Macintosh 266MHz or faster
Memory	64MB or more (128 MB or more)	8MB or more
HDD volume	40MB or more (50MB or more)	6MB or more
Other	Requires CD-ROM drive Internet Explorer 5.5 or later, QuickTime 6.0 or later, DirectX 9.0 or later, and Windows Media Player 9.0 or later.	Requires CD-ROM drive, QuickTime 4.0 and the latest version of CarbonLib. Classic environment is required for using ACD Photostitcher on Mac OS X or later.

Note :
An SD memory card reader is required for Windows NT and Mac OS 8.6 environments which do not support USB connection.
The OS should be pre-installed.
Working status is not guaranteed for all qualifying PCs.
Figures within parentheses above represent the minimum system requirements for using ACD Showtime! for PENTAX.
ACD Showtime! for PENTAX is compatible with Windows only.

Q: What are the accessories?

The OptioMX comes complete with an exclusive broad and rigid strap, a rechargeable lithium-ion battery and software as standard. A wide conversion lens are available as optional accessories.

Q: Is the exterior of the camera made of metal?

The exterior is made mostly of plastic.

Q: In which languages can the OptioMX display messages?

The OptioMX can display menus and messages in 9 languages comprising English, French, German, Spanish, Italian, Russian, Chinese (both traditional and simplified), Korean and Japanese.

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PENTAX



SALES GUIDE



An entirely new concept in digital imaging — a single unique advance offering high-quality stills and enhanced movie performance.

Optio *mx*



for your
precious moments

What’s so unique about the OptioMX?

With just a glance, you'll recognize the OptioMX as a camera that flies in the face of convention. Born of the concept of true user friendliness and ultimate shooting comfort, each and every element has been reappraised to produce the most effective results possible.

In order to make digital photography as comfortable and enjoyable as possible in myriad shooting situations, the OptioMX has three key features — 10X optical zooming, refined movie capability in MPEG-4 format and USB2.0 compatibility.

10X optical zooming can even be combined with 10X digital zoom for a total zoom capacity of an impressive 100X. The OptioMX additionally has the ability to record up to 120 minutes of smooth, refined movies in MPEG-4 format. And for high-speed data transfer to a PC, the OptioMX offers USB2.0 connectivity.

Another noteworthy feature is its innovative grip, which can be rotated back through 180 degrees and used at absolutely any angle within that entire range. In addition, the handy LCD monitor can be swiveled both through 180 degrees horizontally and 210 degrees vertically. With use of the grip and the LCD, low-angle and high-angle shooting situations can be tackled in a much more user-friendly manner.

When recommending the OptioMX, please keep the following sales points in mind.

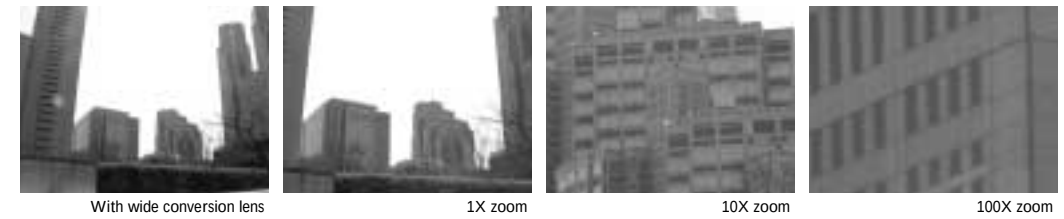
- 10X optical zoom** (can be combined with 10X digital zoom for a total zoom capacity of 100X)
- The advantage of movie recording in **MPEG-4** format
- USB2.0** connectivity for high-speed data transfer to PCs
- Vertical- & horizontal-swiveling, 1.8-inch, CG silicon TFT color **LCD monitor** featuring **low-reflection glare control**
- Flexible, **backward rotating grip** for easy shooting at any angle
- Optional **wide conversion lens**
- Exclusive power sources: **rechargeable lithium-ion battery** and **AC adapter kit**
- ACD Showtime!** software for easy movie editing
- Streaming recording** for movies
- PictBridge** compatibility

A unique single package offering the utmost in cost performance, PENTAX believes the OptioMX has big enough potential in worldwide markets to pioneer an entirely new market segment. Please read on to find out more about the OptioMX, arming yourself with the information to plan and refine a strong sales strategy.

1. 10X optical zoom (can be combined with 10X digital zoom for a total zoom capacity of 100X)

The OptioMX incorporates a renowned smc PENTAX 5.8mm-58mm power zoom lens, which offers 10X optical zoom capability, thereby offering a focal range covering angles of view equivalent to those of a 38-380mm lens in 35mm format. What's more, this lens operates throughout its entire range without extending from the body of the camera, allowing the camera to remain surprisingly compact and ensuring the lens mechanism is protected at all times by the camera body. Such 10X optical zooming can also be combined with 10X digital zooming to achieve a total zoom capacity of 100X. Just take a moment to imagine how much freedom of composition this gives the photographer and how the customer can benefit from the ability to take all kinds of shots ranging from wide-angle compositions to telephoto ones.

The OptioMX offers two-step zooming speeds of approx. 3 sec. in a high-speed mode and approx. 10 sec. in low-speed mode. With the low-speed mode, you will probably feel zooming is easier to control. With the high-speed zoom mode, you can achieve stress-free fast zooming when using the 10X optical and 10X digital zooming capability.



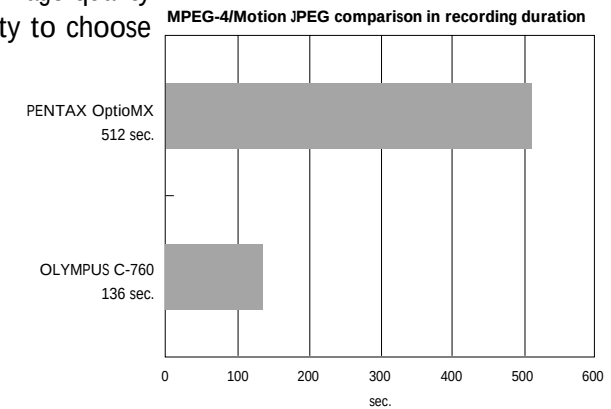
Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
10X optical zoom +10X digital zoom (Max.100X)	5.8X optical zoom +10X digital zoom (Max. 58X)	10X optical zoom + 4X digital zoom (Max. 40X)	10X optical zoom + 4X digital zoom (Max. 40X)	10X optical zoom + 3.2X digital zoom (Max. 32X)

2. The advantage of MPEG-4 movie recording

Whenever there are subjects or occasions that could be better expressed with a movie than a still, the customer will be free to enjoy the benefits of MPEG-4 compatibility — recording up to an incredible 120 minutes of movies in a satisfyingly smooth, refined manner.

The user can also react to potential “movie moments” with speed and ease. In fact regardless of whether the user is in a still shooting or playback mode, movie recording can be instantly activated with the press of an independent movie button. Located at the top of the versatile grip, this can be easily, intuitively pressed with the thumb without delay. The movie function also provides the user with control over recording quality too, with a choice of 640 x 480, 320 x 240, and 160 x 120 recording pixels. Image quality and frame rate are also selectable, with the user having the ability to choose from Best, Better and Good, and 30fps and 15fps.

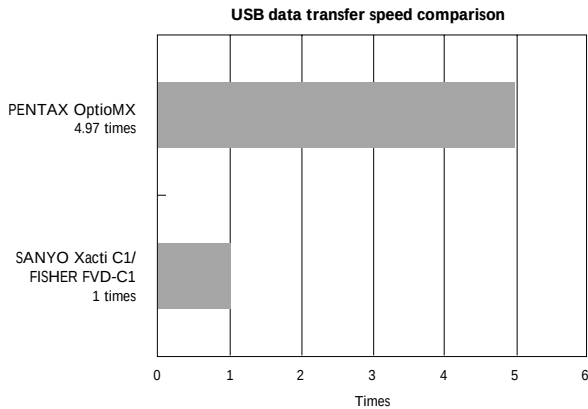


Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
MPEG-4, 30/15fps with sound, up to 120 min.	MPEG-4, 30/15fps, up to 60 min.	MPEG-4, 30fps (soundless)/ QuickTime Motion JPEG/15fps (with sound, up to 100 min.)	Motion JPEG 30/15fps, up to180 min.	Motion JPEG 30/15fps, up to 60 min.

3. USB2.0 connectivity for high-speed data transfer to PCs

To simplify and speed the transfer of large volumes of recorded images to a wide range of common PC applications, the OptioMX features an exclusive USB2.0 port.



Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
USB2.0	USB1.1	USB1.1	USB2.0	USB1.1

4. Vertical- & horizontal-swiveling, 1.8-inch, CG silicon TFT color LCD monitor featuring low-reflection glare control

The LCD monitor can be swiveled through 180 degrees horizontally and 210 degrees vertically. This makes it easy for the user to compose satisfying shots or record movies even when shooting from high or low angles. Furthermore, it also employs a new low-reflection system too, which has been specially designed to maximize visibility even when used in bright sunlight.



Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
1.8-inch, CG silicon TFT color LCD (low-reflection type)	1.5-inch, TFT color LCD (semi-low-reflection type)	1.8-inch, TFT color LCD	1.5-inch, TFT color LCD	1.5-inch, TFT color LCD

5. Flexible, backward rotating grip for easy shooting at any angle

The unique “gun grip” of the OptioMX gives the user the freedom of a new style of shooting and also reduces fatigue when the camera is used over an extended period of time. From the resting position it can be rotated backward through 180 degrees. What’s more this is done in a smooth, stepless manner, allowing users to set the grip exactly where they want it. And to make it easier to hold for people with large hands, the grip can be pulled out when rotating it backwards. This ergonomic grip also features an independent movie button, which can be comfortably pressed with the thumb, and the grip also acts as the housing for the battery too, thereby making the most efficient use of space. Furthermore, the rotating comfort of the grip is compounded by the ability to manipulate the LCD panel too, enabling the user to shoot from above the head, or from the hip with ease.

Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
Rotating gun grip (180 degrees)	Stationary grip	Stationary grip	Stationary grip	Stationary grip

6. Optional wide conversion lens

In addition to its excellent zooming capabilities, the OptioMX can also be combined with an easily mounted optional wide conversion lens. This effectively modifies the focal range to cover angles of view equivalent to those of a 28.5mm lens in 35mm format. The camera also features a built-in auto flash too, which has been specially designed to pop up high enough to provide optimal lighting assistance despite the diameter of the wide conversion lens.

Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
Wide conversion lens available	Not available	Compatible only when used with an optional adapter	Available	Available

7.Exclusive power sources: rechargeable lithium-ion battery and AC adapter kit

Operating with a rechargeable lithium-ion battery housed within its versatile grip, the OptioMX offers the user a choice of power source. What's more, there's also an international AC adapter kit available as an option too, which is ideal for conserving battery power when making full use of the camera's long-duration shooting capacity. As its name suggests, it can be used with different types of power sockets around the world.



Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
Rechargeable lithium-ion battery and AC adapter	Lithium-ion battery, AC adapter & battery charger	Rechargeable lithium-ion battery	Four AA batteries	Four AA batteries

8. ACD Showtime! software for easy movie editing

The OptioMX comes complete with a CD-ROM containing an application called ACD Showtime! for PENTAX, which allows the user to edit video files with extreme ease.

All the user has to do is run the ACD Showtime! for PENTAX application and click the “Create Video File” icon at the center of the screen to display the following screen.



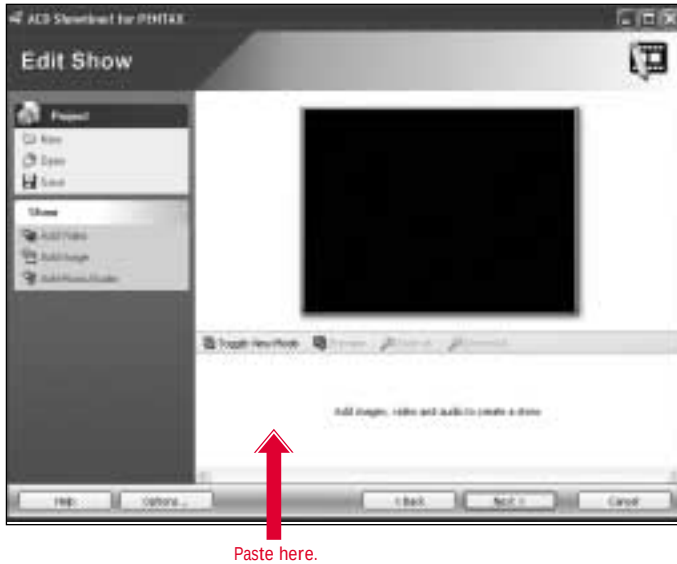
With a single click of the pasted file, the image is displayed on the upper half of the screen. Then a click of the blue button is all that's required to activate playback.



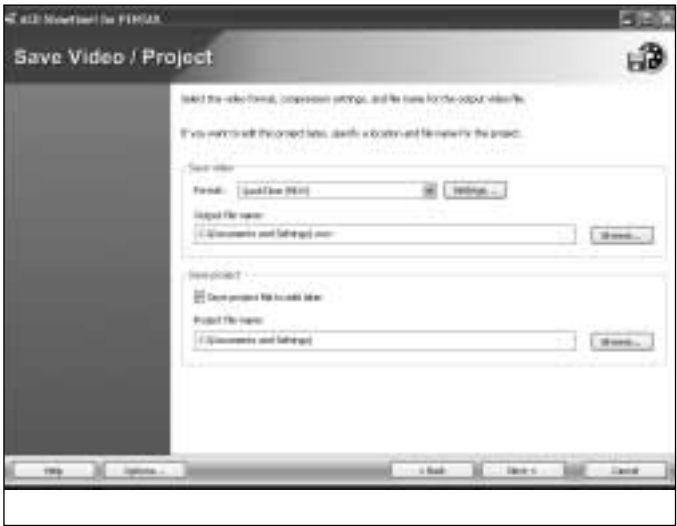
Next, a “transition” can be selected from the choice shown on the left of the screen, and a sound file can be added if desired.

A click on “Display mode switching” will bring up the screen shown below on the right. Now simply click on the microphone to paste in a sound file.

A movie or still file can then be pasted in by simply clicking the icon and pasting the file, as is shown here.



Click on “Code” to play the file back again for checking. Then click the preview area on the screen and the coding begins. The file is then ready to be saved.



• Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
ACD Showtime! for PENTAX	Sanyo software Pack 7.0	VideoStudio 7 SE Basic	Videolmpression Ver.2	Arcsoft Videolmpression

9. Streaming recording for movies

Unlike systems which pool all image data on a buffer prior to storing it in the memory in one go, the OptioMX employs a streaming system. As a result, the OptioMX directly processes image data while shooting a movie, writing it simultaneously to an SD memory card. Due to the use of this technology, the OptioMX is able to shoot movies with significantly extended durations.

Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
Compatible with streaming recording	Compatible with streaming recording	Compatible with streaming recording	Compatible with streaming recording	Compatible with streaming recording

10. PictBridge compatibility

The OptioMX supports PictBridge — a new direct-print standard released by the CIPA (Camera and Imaging Products Association). PictBridge compatibility means the OptioMX can be easily connected to a compatible printer via USB cable to make printouts of recorded images without the need for a PC. The OptioMX handles Single Image Print, All Image Print and DPOF Auto Print. PictBridge also offers a range of other handy direct functions too, enabling even more freedom of control with functions such as resizing, trimming, and digital filters.

Competitor comparison

PENTAX	SANYO/FISHER	OLYMPUS	KONICA MINOLTA	CANON
Optio MX	Xacti C1/FVD-C1	C-770 Ultra Zoom	DiIMAGE Z2	PowerShot S1 IS
PictBridge compatible	PictBridge compatible	PictBridge compatible	PictBridge compatible	PictBridge compatible

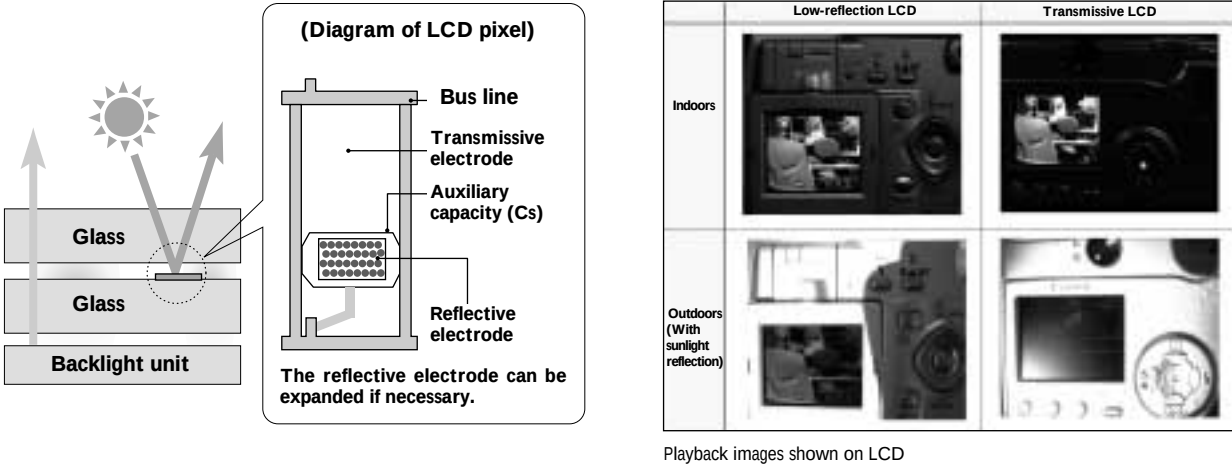
1.8-inch, CG silicon TFT color LCD monitor featuring low-reflection glare control

CG silicon TFT

Whereas the LCDs of competitors use low-temperature silicon TFTs and TFDs or amorphous silicon TFTs, the Thin-Film Transistor of the OptioMX's LCD is made of a material known as CG (Continuous Grain) silicon. This enables the LCD of the OptioMX to feature a higher dot density. It also allows the circuit to be positioned directly on the LCD glass panel.

Low-reflection glare control maximizes visibility in bright light

With conventional TFT LCDs, no particular additional treatments are applied to the transmissive area. In the case of the TFT LCD employed by the OptioMX, however, the LCD is specially treated so that only the area not used for transmissive display is reflective. As a result, it provides a level of transmissive quality on a par with conventional TFT LCDs, yet also provides improved visibility when used in circumstances with high levels of ambient light, such as when shooting outdoors in fine weather.

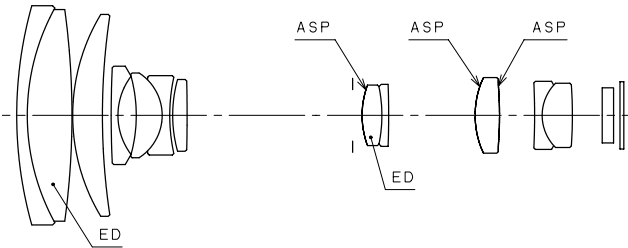


The smc PENTAX 5.8mm-58mm power zoom lens

An excellent example of the renowned smc PENTAX series, the lens of the OptioMX is composed of 8 groups of 12 elements and enables impressive 10X optical zooming.

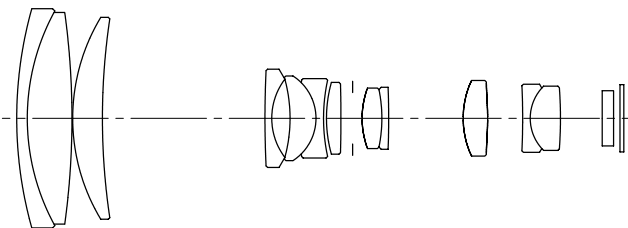
Wide-angle shooting

Enabling the capture of expansive scenes, the lens of the OptioMX offers an angle of view equivalent to that of a 38mm lens in 35mm format.



Telephoto capability

The OptioMX also allows the user to benefit from the versatility of telephoto shooting too, zooming in to an angle of view equivalent to a 380mm lens in 35mm format.



Feature/Function		PENTAX OptioMX	SANYO Xacti C1/FISHER FVD-C1	OLYMPUS C-770 Ultra Zoom	KONIKA MINOLTA DiIMAGE Z2	CANON PowerShot S1 IS
Effective Pixels		3.2 megapixels	3.2 megapixels	4.0 megapixels	4.0 megapixels	3.2 megapixels
Sensor		1/2.7 inch CCD	1/2.7 inch CCD	1/2.5 CCD	1/2.5 CCD	1/2.7 inch CCD
Recorded Pixels	Still	2048 x 1536, 1600 x 1200, 1024 x 768, 640 x 480	2048 x 1536, 1600 x 1200, 640 x 480	2288 x 1712, 2288 x 1520, 2048 x 1536, 1600 x 1200, 1280 x 960, 1024 x 768, 640 x 480	2272 x 1704, 1600 x 1200, 1280 x 960, 640 x 480	2048 x 1536, 1600 x 1200, 1024 x 768, 640 x 480
	Movie	640 x 480, 320 x 240, 160 x 120	640 x 480, 320 x 240, 176 x 144	640 x 480, 320 x 240, 160 x 120	800 x 600, 640 x 480, 320 x 240, 160 x 120	640 x 480, 320 x 240
Sensitivity		Auto, fixed (equivalent to ISO 100, 200, 400)	Auto, manual (50, 100, 200, 400)	Auto, fixed (equivalent to ISO 64,100, 200, 400)	Auto and equivalent to ISO 50,100, 200, 400	Auto and equivalent to ISO 50,100, 200, 400
File Formats	Still Movie Sound	JPEG (Exif 2.2), DCF, DPOF, Print Image Matching II MOV (MPEG-4), Streaming, 30/15 fps, with sound (PCM, monaural) Voice memo/Voice reocrding: WAV (ADPCM), monaural	JPEG (Exif 2.2, DCF, DPOF) MPEG-4, 30/15 fps AAC	JPEG (DCF) / TIFF, DPOF, Exif2.2, Print Image Matching II MPEG-4 (30 fps) / QuickTime Motion JPEG (15 fps), with sound still : WAVE format	JPEG, DCF2.0, DPOF (Ver.1.1), Exif2.2.1 Motion JPEG(MOV), 30/15 fps, with sound (monaural)	JPEG, DCF, DPOF AVI(Motion JPEG), 30/15 fps
Quality Levels	Still Movie	★★★★(Best), ★★ (Better), ★(Good) ★★★★(Best), ★★ (Better), ★(Good)	3.2M, 2.0M, 0.3M TV-SHQ, TV-HQ, TV-S, Web-HQ, Web-S	TIFF, SHQ, HQ, SQ1, SQ2 MPEG-4, SHQ, SQ	Fine, Standard, Economy	Superfine, Fine, Normal VGA-Fine, VGA, QVGA
Storage Media		SD memory card	SD memory card	xD picture card	SD memory card, MMC	CF card (Type I or Type II)
Lens		smc PENTAX power zoom 5.8mm-58mm (equivalent to 38mm-380mm in 35mm format) F2.9-F3.5, 12 elements in 8 groups (1 dual-sided aspherical elements and 1 aspherical element) Thread for filter attachment (37mm), with lens cap	5.8mm-33.8mm 38mm-220mm in 35mm format F3.5-F3.7, 11elements in 8 groups ND filter	6.3mm-63mm 38mm-380mm in 35mm format F2.8-F3.7, 11elements in 7 groups (2 aspherical elements and 1 ED lens)	6.3mm-63mm 38mm-380mm in 35mm format F2.8-F3.7, 11elements in 7 groups	5.8mm-58mm 38mm-380mm in 35mm format F2.8-F3.1, 11elements in 9 groups
Digital Zoom		Max 10X (Max approx. 100X zoom)	MAX 10X (Max approx. 58X zoom)	4X (Max approx. 40X seamless zoom)	4X (Max approx. 40X seamless zoom)	3.2 X (Max approx. 32X seamless zoom)
Focusing System	Type	TTL contrast detection autofocus system Manual focus / Infinity-landscape mode available 5-point autofocus, spot autofocus	5-point autofocus Standard: 0.1m (0.33 ft.) to infinity (W), 0.8m (2.62ft.) to infinity (T) Super macro: 0.02m (0.06 ft.) to 0.6m (1.97 ft.) (W)	TTL contrast detection autofocus system Manual focus / Infinity-landscape mode available Normal: 0.6m (1.97 ft.) to infinity (W), 2.0m (6.56 ft.) to infinity (T) Macro: 0.07m (0.23 ft.) to 0.6m (1.97 ft.) (W), 1.2m(3.93 ft) to 2.0m (6.56 ft.) (T) Super macro: 0.03m (0.5 in.)	A combination of a passive AF sensor and a video AF system one-shot AF, Continuous AF, Full-time AF, Manual focus available 3-point wide focus area Normal: 0.5m (1.6 ft.) to infinity (W), 2.0m (6.56 ft.) to infinity (T) Macro: 0.07m (0.2 ft.) to 1.0m (3.3 ft.) (W) Super macro: 0.03m (1.2 in.) to 1.0m (39.4 in.)	TTL contrast detection autofocus system Manual focus available 1-point AF (Any position is available) 0.1m (0.33 ft.) - Infinity (W), 0.93m (3.1 ft.) - Infinity (T) Manual focus: 0.1m (3.9 in.) - Infinity (W) 0.93m (3.1 in.) - Infinity (T)
	Still	Normal: 0.4m (1.31 ft.) to infinity at 5.8mm / 1.2m (3.9 ft.) to infinity at 58mm Macro: 0.1m (0.33 ft.) to 0.5m (1.64 ft.) at 5.8mm / 0.6m (1.97 ft.) to 1.5m (4.9 ft.) at 58mm Super macro: 0m (0 ft.) to 0.15m (0.49 ft.) at 5.8mm Manual focus available (0m (0 ft.) to infinity)				
Exposure Compensation	Movie	Normal: 0.1m (0.33 ft.) to infinity at 5.8mm / 1.2m (3.9 ft.) to infinity at 58mm Macro: 0.1m (0.33 ft.) to infinity at 5.8mm / 1.2m (3.9 ft.) to infinity at 58mm Super macro: 0.1m (0.33 ft.) to infinity at 5.8mm / 1.2m (3.9 ft.) to infinity at 58mm				
Movie		Continuous shooting time: approx. 120 min. (max.)	Approx. 60 min.	Max approx. 100 min.	Max approx. 180 min.	Approx. max. 60 min.
Shutter Speed		Approx. 1/2000 sec. to 4 sec.	1/2000 sec. to 2 sec.	1/1000 sec. to 4 sec.	1/1000 sec. to 30 sec.	1/2000 sec. to 15 sec.
Flash	Effective Range	Built-in series-control retractable flash Approx. 0.1m - 5.1m (0.33 ft. - 16.73 ft.) (5.8mm at sensitivity ISO 200) Approx. 0.6m - 3.8m (1.97 ft. - 12.46 ft.) (58mm at sensitivity ISO 200)	Approx. 0.1m - 1.2m (0.33 ft. - 3.93 ft.) (wide) Approx. 0.8m - 1.1m (2.62 ft. - 3.61 ft.) (tele)	Built-in flash, Hot-shoe for optional external flash Approx. 0.3m - 4.5m (0.98 ft. - 14.76 ft.) (wide) Approx. 1.2m - 5.2m (3.93 ft. - 17.05 ft.) (tele)	Auto flash Approx. 0.16m - 6.0m (0.52 ft. - 19.68 ft.) (wide) Approx. 1.2m - 4.5m (3.93 ft. - 14.76 ft.) (tele)	Built-in flash Approx. 1.0m -4.2m (3.28 ft. - 13.77 ft.) (wide) Approx. 1.0m -3.8m (3.28 ft. - 12.46 ft.) (tele)
White Balance		Auto, Daylight, Shade, Tungsten light, Fluorescent light, Manual setting	Auto, Fine weather, Cloudy weather, Fluorescent light, Incandescent light	iESP auto TTL, Pre-set manual (Daylight, Overcast, Tungsten and Fluorescent)	Automatic, Preset (Daylight, Tungsten, Fluorescent, Cloudy, Flash Custome)	Auto, Pre-set (Daylight, Cloudy, Tungsten, Fluorescent, Fluorescent H, Flash), Manual
Auto-Bracket		Exposure, White balance, Saturation, Sharpness, Contrast		Selectable from 1/3EV, 2/3EV and 1EV steps, 5 images		
LCD Monitor		1.8 inch, CG Silicon TFT color LCD (low-reflection type), with brightness adjustment (Approx. 134,000 pixels) Swiveling 210 degrees vertically, 180 degrees horizontally	1.5 inch TFT color LCD (trans-refraction type) with brightness adjustment (Approx. 110,000 pixels) Swiveling 293 degrees	1.8 inch TFT color LCD Approx. 118,000 pixels	1.5 inch TFT color LCD Approx. 113,000 pixels	1.5 inch TFT color LCD (Approx. 114,000 pixels) 100%
PictBridge	Printing Mode	Single image print, All images print, DPOF auto print	○	○	○	○
Interfaces		AV output terminal, USB terminal (USB2.0), DC input terminal	AV output terminal, USB1.1	AV output terminal, USB terminal	USB2.0	USB (mini-B), AV-Out
Video Output		Compatible with NTSC and PAL formats (monaural sound)	NTSC / PAL	NTSC / PAL	NTSC / PAL	NTSC or PAL selectable monaural audio
Power Sources		Rechargeable D-Li7 lithium-ion battery Optional AC adapter also available	Litium-ion battery AC adapter and battery charger	Rechargeable Litium-ion battery Optional AC adapter also available	Four AA Ni-MH batteries, AA alkaline batteries (External power source pack) Optional AC adapter also available	Four AA alkaline batteries Four AA NiMH batteries (NB-2AH) AC adapter (CA-PS700)
Dimensions (WxHxD)		73 x 59 x 103.5mm (2.9 x 2.3 x 4.1 inches) (excluding protrusions)	69 x 108 x 34mm (2.7 x 4.2 x 1.3 inches)	104.5 x 60 x 68.5mm (4.11 x 2.56 x 2.7 inches) (excluding protrusions)	109.5 x 77.5 x 80.0mm (4.27 x 3.0 x 3.12 inches)	111 x 78 x 66.1mm (4.37 x 3.07 x 2.6 inches) (excluding protrusions)
Weight		330g (11.6 oz.) without battery and SD memory card 375g (13.1 oz.) loaded and ready	155g (5.5 oz.) without battery and SD memory card 174g (6.1 oz.) loaded and ready	300g (10.6 oz.) without batteries and xD picture card	305g (10.8 oz.) without batteries and recording media	Approx. 370g (13.1 oz.) without batteries and CF card

Type		Compact-type digital still camera with built-in zoom lens, autofocus, auto exposure and auto flash	
Effective Pixels		3.2 megapixels	
Sensor		3.34 megapixels (total pixels) 1/2.7 inch interline transfer CCD with a primary color filter	
Color Depth		12 bit	
Recorded Pixels	Still	2048 x 1536 pixels, 1600 x 1200 pixels, 1024 x 768 pixels, 640 x 480 pixels	
	Movie	640 x 480 pixels, 320 x 240 pixels, 160 x 120 pixels	
Sensitivity		Auto, fixed (equivalent to ISO 100, 200, 400)	
File Formats	Still	JPEG (Exif 2.2), DCF, DPOF, Print Image Matching II	
	Movie	MOV (MPEG-4), Streaming, 30/15 fps, with sound (PCM, monaural)	
	Sound	Voice memo/Voice recording: WAV (ADPCM), monaural	
Quality Levels	Still	Best, Better, Good	
	Movie	Best, Better, Good	
Storage Media		SD memory card	
Lens		smc PENTAX power zoom 5.8mm-58mm (equivalent to 38mm-380mm in 35mm format) F2.9-F3.5, 12 elements in 8 groups (1 dual-sided aspherical elements and 1 aspherical element), thread for filter attachment (37mm), with lens cap	
Digital Zoom		Max 10X (Max approx. 100X zoom available combined with 10X optical zoom)	
Focusing System			
	Type	TTL contrast detection autofocus system Manual focus/Infinity-landscape mode available	
	Focusing Areas	5-point autofocus, spot autofocus	
	Focusing Range		
	Autofocus	Still	Normal: 0.4m (1.31 ft.) to infinity at 5.8mm / 1.2m (3.9 ft.) to infinity at 58mm Macro: 0.1m (0.33 ft.) to 0.5m (1.64 ft.) at 5.8mm / 0.6m (1.97 ft.) to 1.5m (4.9 ft.) at 58mm Super macro: 0m (0 ft.) to 0.15m (0.49 ft.) at 5.8mm Manual focus available (0m (0 ft.) to infinity)
		Movie	Normal: 0.1m (0.33 ft.) to infinity at 5.8mm / 1.2m (3.9 ft.) to infinity at 58mm Macro: 0.1m (0.33 ft.) to infinity at 5.8mm / 1.2m (3.9 ft.) to infinity at 58mm Super macro: 0.1m (0.33 ft.) to infinity at 5.8mm / 1.2m (3.9 ft.) to infinity at 58mm
Exposure Control			
	Metering System	TTL metering: Choice of Multi-segment metering, Center-weighted metering, Spot metering	
	Exposure Modes	Picture mode, Program, Shutter-Priority, Aperture-Priority, Manual	
	Picture Modes	Landscape, Flower, Portrait, Self-portrait, Surf & Snow, Sunset, Night-scene, Soft, Illustration, Panorama	
	Digital Filter	Black & White, Sepia, Red, Pink, Purple, Blue, Green, Yellow (in playback mode only)	
	Exposure Compensation	± 2 EV (1/4 steps)	
Movie		Continuous shooting time: approx. 120 min. (max.) (depending on memory card capacity)	
Shutter		Programmed AE electronic lens shutter with CCD electronic shutter	
	Shutter Speed	Approx. 1/2000 sec. to 4 sec.	
Drive Modes		One-shot, Self-timer (10 sec. / 2 sec.), Continuous (normal/high-speed), Auto bracket (exposure, white balance, saturation, sharpness, contrast)	
Flash		Built-in series-control retractable flash Automatic discharge under low lighting conditions in auto modes. Flash-on and Flash-off modes. "Red-eye" reduction function employs a pre-discharge.	
	Effective Range	Approx. 0.1m - 5.1m (0.33 ft. - 16.73 ft.) (5.8mm at sensitivity ISO 200) Approx. 0.6m - 3.8m (1.97 ft. - 12.46 ft.) (58mm at sensitivity ISO 200) Auto, Daylight, Shade, Tungsten light, Fluorescent light, Manual setting	
White Balance		Exposure, White balance, Saturation, Sharpness, Contrast	
Auto-Bracket			
LCD Monitor		1.8-inch, CG Silicon TFT color LCD (low-reflection type), with brightness adjustment (Approx. 134,000 pixels) Swiveling 210 degrees vertically, 180 degrees horizontally	
LCD Function		One-frame, Nine-image, 1X-12X magnification, Scroll, Slide show, Movie, Histogram, Rotation, Digital filter	
World Time		Displays the time in 62 cities (28 time zones)	
PictBridge	Printing Mode	Single image print, All images print, DPOF auto print	
Interfaces		AV output terminal, USB terminal (USB2.0), DC input terminal	
Video Output		Compatible with NTSC and PAL formats (monaural sound)	
Power Sources		Rechargeable D-Li7 lithium-ion battery Optional AC adapter also available	
	Recording / Playback Capacity	Still: approx. 200 shots (CIPA testing) (using rechargeable lithium-ion battery at 23 degrees celsius room temperature with the LCD monitor on and flash used for 50% of the shots) Movie: approx. 100 min. (in-house testing) (using rechargeable lithium-ion battery at 23 degrees celsius room temperature with the LCD monitor on and flash used for 50% of the shots) Playback: approx. 200 min. (in-house testing) (using rechargeable lithium-ion battery at 23 degrees celsius room temperature with the LCD monitor on and flash used for 50% of the shots)	
Dimensions		73 (W) x 59 (H) x 103.5 (D)mm (2.9 x 2.3 x 4.1 inches) (excluding protrusions)	
Weight		330g (11.6 oz.) without battery and SD memory card 375g (13.1 oz.) loaded and ready	

Wide conversion lens

The attachment of a wide conversion lens provides the photographer with a wider angle of view for shooting. And because it reduces the focal length, depth of field is extended at each aperture compared to that offered by a lens of greater focal length. Such qualities make it an ideal choice for capturing landscapes or making the most of relatively close subjects with a limited sense of depth.

MPEG-4

Standing for Moving Picture Experts Group phase 4, MPEG-4 is a type of image data compression complying with the MPEG format. In terms of playback, MPEG-1 offers quality akin to that of a VTR, while MPEG-2 offers quality comparable to that of a high-definition TV. Because the OptioMX employs MPEG-4, it offers smooth VGA 30/15fps movies for extended periods of time.

Streaming

Streaming refers to the ability to simultaneously handle a series of tasks, such as data processing and writing to an SD card while recording a movie at the same time. In the case of models featuring no streaming capability, image data is piled into a buffer until shooting is completed. This results in limited shooting time due to limited buffer capacity. With the streaming function the OptioMX does away with the need for a buffer and thus offers a maximum of 120 min. of movie shooting.

Low-reflection LCD monitor

Low-reflection LCD monitors actually use external light to an extent in order to enhance LCD visibility. When compared to conventional LCD monitors, they offer improved visibility in bright sunlight.

USB2.0

Standing for Universal Serial Bus 2.0, this is the latest advance in the USB format. It features 3 data transfer modes of LS (Low Speed: 1.5Mbps), FS (Full Speed: 12Mbps) and HS (High Speed: 480Mbps). FS mode is comparable to the speed of USB1.1. The OptioMX supports HS to achieve the fastest data transfer rate possible when it is connected to a PC.

MOV format

Developed by Apple, this movie file format makes use of a software called QuickTime, which has the ability to handle a variety of multimedia information on a computer. The OptioMX produces files in the MOV format and compresses the data in line with MPEG-4. MOV format files can be easily recognized as they feature “.mov” at the end of the file name.

PCM

PCM stands for Pulse Code Modulation — a non-compression conversion format used to convert voice into digital data.

ADPCM

ADPCM stands for Adaptive Differential Pulse Code Modulation. It is also a conversion format used to convert voice into digital data. ADPCM format has the ability to compress 16-bit data existing in simple PCM format into 12-bit data — without causing any deterioration in quality. The OptioMX employs ADPCM when recording, which allows 16-bit data to be compressed to 4-bit data.

CG silicon

CG stands for Continuous Grain. CG silicon is therefore a kind of silicon in which each crystallized grain is adhered to another, thereby adding resilience by eradicating all gaps.

TFT

TFT stands for Thin Film Transistor.

Q: Where does the name “MX” come from?

The M stands for Movie, while the X stands for 10X zooming capacity.

Q: Does the grip have to be pulled out when it is rotated backward?

No it doesn't. Pulling it out when holding the grip simply allows people with large hands to achieve a more comfortable grip. People with regular or smaller hands should find that the grip can be rotated backward easily without it being pulled out first.

Q: What is the range of the grip’s movement? How rigid is it?

The grip rotates through a range of 180 degrees. It has passed a rigidity test that verified it as withstanding torque of up to 30kgfcm. Technically speaking, this figure means that the grip can support a weight equivalent to a 30kg child.

Q: How fast is the zooming speed?

Depending on the angle to which the zoom lever is turned, the OptioMX offers two-step zooming speeds (approx. 3 sec. in high-speed mode and approx. 10 sec. in low-speed mode) enabling excellent maneuverability between wide-angle and telephoto extremes. This feature is not offered by any competitor models. With the handy high-speed mode, you can achieve stress-free fast zooming even when using the 10X optical and 10X digital zooming capability.

Q: What types of batteries are compatible with the OptioMX?

The OptioMX is compatible with the exclusive, rechargeable battery D-LI7. It is not compatible with AA batteries.

Q: It looks like the grip should be able to house AA batteries. Why isn't it compatible with them?

From the perspective of optical design, the OptioMX needs to be able to control two groups of lenses simultaneously when zooming and focusing. This means that two pulse motors need be driven simultaneously when zooming. And though we did want to make the OptioMX compatible with two AA batteries (alkaline, nickel manganese, nickel hydride), unfortunately such a specification of battery is not capable of supplying sufficient power for these purposes.

Q: How long is the life of each battery?

Please refer to the table on the right.

Battery	Still shots (CIPA testing) With the LCD monitor on and flash used for 50% of the shots	Movie shots (in-house testing) With the LCD monitor on and flash used for 50% of the shots	Playback duration (in-house testing) With the LCD monitor on and flash used for 50% of the shots
D-LI7	Approx. 200 shots	Approx. 100 min.	Approx. 200 min.

Q: What are the shooting durations for movies?

Storage Capacity (with a Panasonic SD card)	16MB	32MB	64MB	128MB	256MB	512MB	1GB
640 x 480, High, 30fps	0:35	1:10	2:30	5:00	10:00	20:00	40:00
640 x 480, Middle, 30fps	0:50	1:45	4:00	7:00	15:00	30:00	58:00
640 x 480, Low, 30fps	1:05	2:20	5:00	10:00	19:00	38:00	76:00
640 x 480, High, 15fps	1:05	2:20	5:00	10:00	20:00	39:00	76:00
640 x 480, Middle, 15fps	1:35	3:00	7:00	14:00	28:00	57:00	110:00
640 x 480, Low, 15fps	2:00	4:00	9:00	18:00	36:00	72:00	141:00
320 x 240, High, 30fps	1:20	3:00	6:00	12:00	25:00	50:00	99:00
320 x 240, Middle, 30fps	2:00	4:00	9:00	18:00	36:00	72:00	141:00
320 x 240, Low, 30fps	4:00	8:00	16:00	31:00	62:00	126:00	248:00
320 x 240, High, 15fps	2:30	5:00	11:00	23:00	45:00	91:00	180:00
320 x 240, Middle, 15fps	4:00	8:00	16:00	31:00	63:00	126:00	248:00
320 x 240, Low, 15fps	5:00	12:00	25:00	50:00	100:00	203:00	400:00
160 x 120, High, 30fps	4:00	8:00	16:00	31:00	62:00	126:00	248:00
160 x 120, Middle, 30fps	5:00	10:00	20:00	42:00	84:00	168:00	332:00
160 x 120, Low, 30fps	7:00	15:00	31:00	64:00	126:00	254:00	500:00
160 x 120, High, 15fps	6:00	12:00	25:00	50:00	100:00	203:00	400:00
160 x 120, Middle, 15fps	7:00	15:00	31:00	64:00	126:00	255:00	502:00
160 x 120, Low, 15fps	10:00	20:00	42:00	85:00	170:00	342:00	674:00

High: 3Mbps
Middle: 2Mbps
Low: 1Mbps
The bit rate (image quality) has not been fixed for Movie mode.

Unit (min:sec)

Q: Once the power is switched off, are the settings automatically lost?

It depends on the setting. However, if the user wants to preserve settings even when the power is turned off, they can easily do so by setting them in the Mode Memory.

Q: Is it possible to record movies without sound?

No, it isn't.

Q: Is it possible to shoot a still shot while recording a movie?

No, it isn't. You would need to stop recording a movie momentarily in order to shoot a still image.

Q: Is it possible to edit a movie using only the OptioMX?

No it isn't.

Q: While shooting a movie, is it possible to use the optical zooming feature?

Yes, it is. The digital zoom can also be used.

Q: Can sound be edited also?

No, it can't.

Q: Does the OptioMX have a sound recording function?

There is a voice recording function (enabling recording up to available memory capacity) and a voice memo function (enabling recording up to 30sec. for attachment to a recorded still image).

Q: Is it easy to tell when optical zoom is switched to digital zoom?

Yes, a magnifying glass mark will appear.

Q: Is the OptioMX equipped with a super macro function?

Yes, it is. In comparison to other models, the OptioMX has much fewer mechanical restrictions, which results in its capability to shoot from a position of actually touching the subject*.

*When shooting at such proximity, light must be allowed to permeate.

Q: Can the OptioMX shoot using a self-timer?

Yes, it can. There is a choice of a 2- or 10-second self-timer. The LCD panel displays the countdown. The self-timer can not, however, be controlled by using the remote control unit.

Q: Can images be inverted or manipulated in a similar manner during playback?

Yes, they can.

Q: Can a date be imprinted on recorded images?

The OptioMX does not have a date imprinting function, however date imprinting can be done easily with the ACDSee software.

Q: How long does the date setting remain accurate when battery power runs out?

When a new battery is inserted into the camera and then removed after at least one day, the date setting will remain accurate for up to one day. During this day, the built-in clock will also continue to function accurately.

Q: Does the OptioMX have a built-in memory?

No, it doesn't.

Q: Does the OptioMX have a camera image stabilizer function?

No, it doesn't. However, the OptioMX design does maximize holding stability in order to minimize shaking caused by the hands.

Q: Does the OptioMX have a noise reduction function?

Yes, it does.