



Information

PENTAX

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PENTAX Optio A40 – A top class, compact digital camera with 12.0 effective megapixels

PENTAX Corporation is pleased to announce the PENTAX Optio A40, the latest model in the “Optio A” series- PENTAX’s top class compact digital cameras that pursue high image quality and high performance. The Optio A40 has an increased 12.0 effective megapixels and high image quality rivaling that of SLR cameras.



Main Features:

1. 12.0 effective megapixels for higher image quality and enhanced performance

The Optio A40 is PENTAX’s first digital camera with 12.0 effective megapixels, which enables for ultra high-definition images. It is newly equipped with a large, 1/1.7-inch CCD that has a wide light receiving area that is superior in tone reproduction. Through the incorporation of a new image engine that has excellent color reproducibility and smc PENTAX lens, which has a reputation as having high resolving power, the Optio A40 pursues even higher image quality and further enhanced performance.

2. Three types of anti-shake functions to suit any photography situation

(1) SR(Shake Reduction) mechanism

The SR mechanism is unique to PENTAX, and corrects camera shakes when photographing still images by shifting the image sensor (CCD) horizontally and vertically in relation to the amount of shaking that the high-accuracy gyro sensor detects. The shake reduction technology used in PENTAX’s digital SLR cameras is applied to the Optio A40 as well, and highly corrective effects that are equivalent to shutter speeds of approximately 2.5 to 3.5 steps can be achieved.

(2) “Digital SR” (Shake Reduction) ^{*1}

Digital SR (Shake Reduction) mode automatically adjusts sensitivity, to as high as the ultrahigh sensitivity of ISO 3200 according to the brightness of the subject, and effectively reduces camera shakes and subject blurring when photographing still images. With fast shutter speeds, photography with reduced blurring is available.

^{*1}: Recording size is fixed at 5M(2592x1944 pixels) when “Digital SR” is selected

(3) “Movie SR” (Shake Reduction) ^{*2}

The Movie SR function electronically reduces camera shakes exclusively during the shooting of movies. This function uses software to effectively correct distortions in images caused by camera shakes during the capturing of movies.

^{*2}: When using “Movie SR”, the field of view is narrower than that during normal recording

3. “Face Recognition AF&AE” function that photographs portrait more beautifully with simple operation

The Optio A40 is equipped with a “Face Recognition AF&AE” function ^{*3} that automatically detects and focuses on faces. In addition, the Optio A40 also comes with new functions that apply face recognition technology, such as “Natural Skin Tone” mode, which smoothly presents skin texture based on the detected information, and “Half-length Portrait” mode ^{*4}, which automatically takes a close-up photograph of the bust by trimming the people recognized in photo frame.

^{*3}: This Camera’s “Face Recognition AF&AE” function uses the Face Tracker face recognition technology from FotoNation.

^{*4}: Recording size is fixed at 3M (2048x1536 pixels) when “Half-length Portrait” is selected

4. New “Dynamic Range Adjustment” function to prevent white outs and black outs

The Optio A40 is newly equipped with a “Dynamic Range Adjustment” to prevent white outs and black outs by correcting the tones for the highlighted areas or the shadowed areas of a subject with significant differences in contrast. When photographing people against the sun, it is possible to depict subjects brightly while keeping the tones of the background

5. Bright and easy-to view LCD monitor

This LCD monitor is a high intensity type equipped with an LCD booster that adjusts the brightness of screen, which users can easily check the screen even at the outdoors. With 2.5-inch and high resolution of approximately 232,000 pixels, it is easy to confirm picture compositions and the focus. Due to its wide viewing angle, the screen can also be easily viewed, since there is little change in brightness and colors even when looking at the monitor diagonally.

6. 3X optical zoom and 6X digital zoom for a maximum of 17.9X magnification

The Optio A40 features a 3X optical zoom lens with a focal range covering angles of view equivalent to those of a 37-111mm lens in 35mm format, which is ideal for a broad spectrum of subjects from landscapes, through memorial photographs,

to portraits. Such zooming power can also be combined with 6X digital zoom to achieve a total of approximately 17.9X zoom capability.

7. Video recording function enabling high-quality recording for long period of time

The Optio A40 smoothly captures movies at 30fps (frames per second) at sizes up to 640x480 pixels with image quality rivaling camcorders. Since it employs the DivX® (MPEG-4) movie format^{*5}, the Optio A40 can record long, high-quality movies.

^{*5}:The Optio A40 is DivX® certified. Movie playback is not supported on Macintosh operating system

8. Others

Users can freely choose “Shutter-Priority AE” mode and “Manual Exposure” mode, depending on the effect they are aiming to achieve

An “Intelligent zoom” function enables images to be magnified shooting, while maintaining the image quality of optical zoom

“Auto Picture” mode automatically determines the best settings for the shooting conditions

Mode palette provide quick access of 18 shooting modes and 15 playback modes

Approximately 21.0 MB of built-in-memory

Compatible with SD memory cards and SDHC memory cards

FotoNation’s red eye compensation function for flash shots

Includes the ACDSsee for PENTAX 3.0 image viewer/image management software that support Windows Vista™

Support PictBridge, DPOF functions, Exif Print, and PRINT Image Matching III

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This product supports PRINT Image Matching III. PRINT Image Matching enabled digital still cameras, printers and software help photographers to produce images more faithful to their intentions. Some functions are not available on printers that are not PRINT Image Matching III compliant

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Optio A40 Specifications

Lens		smcPENTAX zoom lens
	Focal Length	7 elements in 5 groups (2 dual-sided aspherical elements, 1 single-sided aspherical element)
	Aperture	7.9mm-23.7mm (equivalent to 37-111mm in 35mm format)
	Intelligent Zoom	F2.8-F5.4
Shake Reduction	Still	approx. 3.3X at 10M, approx. 3.9X at 7M, approx. 4.6X at 5M, approx. 5.7X at 3M
		approx. 11.4X at 1024, approx. 17.9X at 640 (including optical 3X zoom)
	Movie	1X - approx. 6X(Up to approx. 17.9X with optical 3X zoom)
		CCD-Shift-Type (SR: Shake Reduction) approx. 2.5 - 3.5 Shutter-speed steps
Focus System	Type	Hi-sensitivity anti-shake mode (Digital SR)
		Movie anti-shake (Movie SR)
	Still	TTL contrast detection auto focus system, AF assist lamp available
		5-point AF, Spot AF, Auto tracking AF
Face recognition	Still	Normal: 0.35m to infinity (whole zoom area)
		1.15ft to infinity (whole zoom area)
	Movie	Macro:0.12m to 0.4m (at full wide-angle setting - 11.5mm)
		0.39ft to 1.31ft (at full wide-angle setting - 11.5mm)
Sensor	Still	Supermacro:0.06m to 0.15m(at full wide-angle setting)
		0.20ft to 0.49ft(at full wide-angle setting)
	Movie	Infinity-landscape, Panfocus, Manual Focus: available
		Face priority AF&AE is available at all mode.
Effective pixels		1/1.7 inch interline transfer CCD with a primary color filter, 12.4 megapixels (total pixels)
Recorded pixels		12 megapixels
File Formats	Still	12M(4000x3000), 10M(3648x2736), 7M (3072x2304), 5M(2592x1944), 3M(2048x1536), 1024(1024x768), 640(640x480) pixels
	Movie	* During Digital SR mode and Multi-exposure mode, the recorded size is fixed to 5M. * During Half-length Portrait and Flame composition mode, the recorded size is fixed to 3M
Quality Levels	Still	640(640x480), 320(320x240) pixels
	Sound	JPEG(Exif 2.2),DCF,DPOF,PRINT Image Matching III
	Movie	AVI(DivX® compatible with MPEG-4), 30 fps, with sound, Movie anti-shake (The input image signal at 25fps is recorded as 30fps.)
Quality Levels	Still	WAV(PCM), monaural
Quality Levels	Movie	★★★(Best), ★★(Better), ★(Good)
Sensitivity		★★★(Best), ★★(Better), ★(Good)
Dynamic-Range Adjustment		Auto(ISO50 - 800), Manual (ISO50/100/200/400/800/1600) * The auto and fixed sensitivity can be selected up to 3200 at the Digital SR mode. * The range of auto sensitivity can be changed by the menu
White Balance		Dynamic-Range Adjustment available (Auto and Manual Adjustments at Capture mode)
LCD		Auto, Daylight, Shade, Tungsten light, Fluorescent light, Manual setting
Exposure Control	Metering System	2.5 inch, TFT color LCD (with back light), approx. 232,000pixels
	Exposure mode	Low reflection type, Wide viewing angle
Capture modes	Exposure Compensation	3 steps (Economy mode, Normal mode and LCD Bright Mode)
	Metering System	TTL metering: Choice of Multi-segment metering, Center-weighted metering, Spot metering
	Exposure mode	Picture mode, Program, Shutter priority, Manua
Playback modes	Exposure Compensation	±2EV(1/3EV steps)
	Auto Picture	Auto Picture, Program, Shutter-priority, Manual, Night Scene, Movie, Voice Recording, Landscape Flower, Natural Skin Tone, Portrait, Half-length Portrait, Kids, Digital SR, Sport, Surf&Snow, Pet, Text, Food, Frame Composite
	Date Imprint	Automatically chosen from "Landscape", "Portrait", "Night Scene" and "Normal"
Movie	Shooting Time	*Date Imprint Available (except Green)
	Shooting Time	Slideshow, Resize, Trimming, Image&Sound Copy, Image Rotation, Color Filter, Digital Flite Brightness Filter, Movie Edit, Red-eye Compensation, Voice Memo, Protect, DPOF, Start-up Screenshot, One Shot, Index (9 thumb nails), Enlargement (up to 8X, scroll available), Movie Playback, Soun Playback, Histogram, Select&Delete, Calenda
	Digital Effect	Color Filter(13), Digital Filter(5), Brightness Filter
Shutter Speed		Until the memory card becomes full (One file size is up to 2GB)
Flash		approx. 1/2000 sec.- approx. 4sec.
Drive Modes	Modes	Flash-on and Flash-off modes. "Red-eye" reduction function employs a pre-discharge. Soft flash
	Effective Range	Wide: approx. 0.06m to approx. 7.1m (ISO Auto)
		approx. 0.20ft to approx. 23ft (ISO Auto)
		Tele: approx. 0.35m to approx.3.5m (ISO Auto)
Storage Media	Effective Range	approx. 1.15ft to approx. 11ft (ISO Auto)
		One shot, Self-timer (10 sec, 2 sec), Continuous, Remote Control (3 sec, 0 sec), Multi-exposure
		*Remote Control Type is Infrared rays, Optional transmitter available
Clock Function	World Time	Built-in Memory (approx.21MB), SD Memory Card, SDHC Memory Card
Power	Battery life	75 cities (28 time zones)
Interfaces		Rechargeable D-Li68 lithium-ion battery, Optional AC adapter kit is also available
Video Output		Still: Approx. 240shots to be taken. (Rechargeable Lithium-ion battery)
PictBridge	Modes	Playback**: Approx. 250min. to be taken. (Rechargeable Lithium-ion battery)
Dimensions		Maximum charging time: approx. 115 min. (Rechargeable Lithium-ion battery)
Weight	Body	USB (2.0 Hi-Speed)/AV output terminal, DC Input terminal
Accessories	With battery & SD card	NTSC/PAL
		Single image, All images, DPOF, Paper Size, Paper Type, Paper Quality, Border
		91.0(W)×56.5(H)×23.5(D)mm (excluding protrusions.)
		130 g (4.6 oz.):without battery and SD memory card
		150 g (5.3 oz.):loaded and ready
		Rechargeable D-Li68 lithium-ion battery, Charger, AC cable, USB cable, AV cable, Software (CD-ROM), Strap

*The number of recordable images are based on the CIPA standard measurement, but it may vary with the conditions under which the camera is used.

**Measured based on PENTAX standard and may vary depending on the condition of use.

System requirements

ACDSee for PENTAX

Windows (ACDSee for PENTAX 3.0)

OS	Windows Vista™, Windows XP, and Windows 2000
CPU	Intel Pentium® or higher
Memory capacity	Over 256MB (512MB or higher recommended)
Hard disk capacity	Over 100MB (1GB or higher recommended)
Language	English, French, German, Spanish, Italian, Chinese [Traditional and Simplified], Korean, Russian, Japanese

Macintosh (ACDSee for PENTAX)

OS	Mac OS 9.2 (with the latest CarbonLib), Mac OS X (Ver. 10.1.2 or later)
CPU	Power Macintosh machines of 266MHz or higher
Memory capacity	8MB minimum
Hard disk capacity	6MB minimum
Language	English, French, German, Spanish, Italian, Japanese

USB

Windows

OS	Windows Vista™, Windows XP, and Windows 2000 preinstall
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Macintosh

OS	Mac OS 9.2, Mac OS X (Ver. 10.1.2 or later) preinstall
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* Operation is not guaranteed on all PCs meeting the system requirements.

Optio A40 Storage

Still

	12M (4000x3000)			10M (3648x2736)			7M 3072x2304)			5M (2592x1944)			3M (2048X1536)			1024 (1024X768)			640 (640X480)		
	★★★	★★	★	★★★	★★	★	★★★	★★	★	★★★	★★	★	★★★	★★	★	★★★	★★	★	★★★	★★	★
Built-in Memory*	3	5	8	4	6	9	6	10	14	9	14	20	15	22	31	40	58	81	74	108	150
64MB	11	17	24	14	21	30	20	30	42	29	43	60	45	66	92	117	170	236	216	313	434
128MB	25	36	51	30	44	62	43	63	87	61	89	123	93	135	187	239	346	479	439	635	880
256MB	50	72	101	60	87	121	85	124	172	120	174	242	183	264	367	467	675	935	857	1239	1716
512MB	100	145	201	120	174	242	170	246	342	240	347	481	363	525	728	927	1340	1856	1701	2457	3403
1GB	201	291	404	242	350	486	342	495	685	481	695	963	728	1053	1458	1856	2682	3714	3405	4918	6811
2GB	410	594	822	494	714	989	697	1007	1396	980	1416	1961	1483	2143	2967	3777	5456	7556	6926	10000	10000
4GB	807	1167	1616	971	1403	1944	1370	1980	2742	1925	2781	3852	2913	4209	5828	7418	10000	10000	10000	10000	10000

* Approximately 21 MB

Movie

	640X480			320X240		
	★★★	★★	★	★★★	★★	★
Built-in Memory	1m3s	1m19s	1m35s	4m5s	5m5s	5m51s
64MB	2m55s	3m39s	4m23s	11m17s	14m1s	16m9s
128MB	5m55s	7m25s	8m55s	22m56s	28m29s	32m51s
256MB	11m35s	14m30s	17m25s	44m47s	55m39s	64m10s
512MB	22m58s	28m47s	34m33s	1h28m53s	1h50m25s	2h7m18s
1GB	46m0s	57m38s	1h9m11s	2h57m56s	3h41m3s	4h14m52s
2GB	93m36s	1h57m15s	2h20m46s	6h2m0s	7h29m43s	8h38m30s
4GB	183m49s	3h50m16s	4h36m26s	1h50m54s	14h43m9s	6h58m14s

The limitation of the record time becomes it up to 2GB (one file).

Voice recording

Built-in Memory	24m7s
64MB	1h5m47s
128MB	2h13m19s
256MB	4h19m59s
512MB	8h35m26s
1GB	17h11m28s
2GB	34h58m0s
4GB	68h39m39s

*The continuous voice recording time is 24 hours.