



## TECHNICAL DETAILS

	<b>Type</b>
Camera Type	TTL autofocus, auto-exposure digital SLR digital-still camera with built-in retractable P-TTL auto pop-up flash
	<b>Sensor</b>
Type	High sensitivity CMOS sensor with a primary colour filter
Size	23.7mm x 15.7mm
Effective Pixels	approx. 16.3 megapixels
Still	JPEG: [16M] 4928x3264 pixels, [10M] 3936x2624 pixels, [6M] 3072x2048 pixels, [2M] 1728x1152 pixels 4 levels of quality in JPEG (good, better, best, premium) RAW 14 bits : [16M] 4928x3264 pixels
Movie	FULL HD: 1960x1080 (16:9) at 25fps HD TV: 1280x720 (16:9) at 30 or 25fps VGA: 640x480 (4:3) at 30 or 25fps
Sensitivity	Auto, Manual: ISO 100 to 12800 (1/3EV, 1/2EV or 1EV steps) Extended sensitivity: from ISO 80 to 51200 Bulb mode: up to ISO 1600
Shake Reduction	Sensor-shift Shake Reduction, up to 3EV Compatible with ALL PENTAX lenses
Sensor Cleaning	Dust Removal II mechanism: Image sensor moving mechanism, SP Coating and Dust alert function
	<b>Lens</b>
Mount	PENTAX KAF2 bayonet mount PENTAX KAF3, KAF2 (power zoom not compatible), KAF, K-mount (with restrictions) lenses ; compatible with SDM ultrasonic lenses
Usable lenses	Compatible with S-mount lenses, 67 / 645 / M-42 lenses (adapters ref 37954, 38455 or 30120 required with restrictions)
	<b>Focusing System</b>
Type	SAFOX IX+ autofocus system with TTL phase-matching detection Focus modes: AF.A(auto), AF.S(single, with focus lock), AF-C(continuous)
Functions	11 AF points (9 cross type in the center) 5-point or 11-point Auto, Select or Center
AF assist	available (at front)

## Viewfinder

Type	Penta-prism
Field of View	approx. 100%
Magnification	approx. 0.92x (with FA 50mm F1.4 lens, at infinity)
Focusing screen	Natural Bright Matte III focusing screen, exchangeable
Diopter adjustment	approx. -2.5 - +1.5m-1

## Screen

	3" (7.62cm) TFT colour LCD monitor with AR coating
Type	Adjustable brightness and colours, Air-gapless glass Scratch resistant protective glass with AR coating
Resolution	170° wide-angle viewing, horizontally and vertically Approx. 921 000 dots
Playback	Single image or index view (up to 81 images), Image Comparison, Magnification (up to 32x, scroll and quick magnification available), Rotation, Calendar view, Folder view, Histogram (Y histogram, RGB histogram), Slideshow, Bright/Dark area warning, Resize, Cropping, Copyright and detailed Exif information display

## Liveview

LiveView	Field of view: Approx. 100% Enlargement: In AF mode: 2x, 4x, 6x, in Manual mode: 2x, 4x, 6x, 8x, 10x Autofocus: Contrast detection, Face detection, phase difference detection Options: Grid pattern, histogram display, bright/dark area warning
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## Shutter

Type	Electronically controlled vertical-run focal plane shutter Auto and Manual : 1/8000 - 30 sec. + Bulb (1/3 or 1/2 EV steps)
Speed	Continuous shooting: Max. approx. 7.0 fps, JPEG (16M: ★★★ at Continuous Hi): up to approx. 30 frames, RAW: up to approx. 20 frames*at ISO100 Max. approx. 1.6 fps, JPEG (16M: ★★★ at Continuous Lo): until SD Memory Card is full, RAW: up to approx. 40 frames

X-Synchronization	Custom Image: Bright, Natural, Portrait, Landscape, Vibrant, Muted, Reversal Film, Monochrome, Bleach Bypass Hot-shoe flash, 1/180 sec, high speed, P-TTL flash sync available with dedicated wireless system, with dedicated flash
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## Exposure system

Metering	Metering system: TTL open-aperture 77-segment metering Metering mode: Multi-segment, center-weighted or spot metering
Exposure Modes	Green, Program (P), Sensitivity-Priority (Sv), Shutter-Priority (Tv), Aperture-Priority (Av), Shutter and Aperture Priority (TAv), Metered Manual (M), Bulb, X, User, Video
Metering Range	EV-3 to EV 18 (at Standard ISO 100/at normal temperature)
Auto Exposure Lock	Assignable to AF/AE-L button through the menu
Compensation	± 5EV (selectable EV steps: 1/3 or 1/2 steps)

## Flash

Type	Built-in retractable P-TTL auto pop-up flash
Guide Number	approx 13 (ISO 100/m)

Modes Auto, manual (on/off), red eye reduction, slow-speed sync, rear curtain sync, high-speed sync and wireless sync with PENTAX dedicated external flash  
Synchronization: 1/180 sec., high speed, P-TTL, wireless

Angle of View Coverage Wide-angle lens, equivalent to 28mm in 35mm format

Exposure Compensation from -2 EV to +1EV (1/3EV steps)

#### Exposure Parameters

Modes One shot, Self-timer (2 or 12 sec), Continuous shooting (Hi, Lo), Remote control (0, 3 sec or continuous), Super-Impose (up to 9 pictures), Interval up to 999 pictures, Exposure bracketing (2, 3 or 5 frames, also available with self-timer and remote control), Mirror lock-up (w/ or w/o remote control)

White Balance Auto, Daylight, Shade, Cloudy, Fluorescent light (D, N, W, L), Tungsten light, Flash, CTE, Manual (configuration on monitor, colour temperature from 2 500 to 10 000K, 100K steps)

Digital Filter Toy Camera, Retro, High-contrast, Extract colour, Soft, Starburst, Fish-eye, Custom

#### Movie

Recording FULL HD: 1960x1080 (16:9) at 25fps  
HDTV: 1280x720 (16:9) at 30 or 25fps  
VGA: 640x480 (4:3) at 30 or 25fps

3 levels of quality (good, better, best)  
Movie editing available

Editing Movie processing: Custom Image (Bright, Natural, Portrait, Landscape, Vibrant, Muted, Monochrome, Reversal Film, Bleach Bypass), Cross processing (Shuffle, preset 1-3, favorite 1-3), Digital filters (Retro, Toy Camera, High-contrast, Extract Colour, Colour)

#### Playback

Digital Filter In Playback mode: Toy Camera, Monochrome, Retro, Colour, High Contrast, Soft, Extract Colour, Star Burst, Sketch, Water Colour, Fish-Eye, Pastel, Slim, Miniature, HDR, Posterization, Base Parameter Adjustment, Custom Filter

#### Storage

External Compatible with SD and SDHC memory cards  
Still images:  
RAW 14 bits (PEF, DNG), JPEG (Exif 2.21), DCF 2.0  
RAW and JPEG simultaneously recordable  
JPEG: 4 levels of quality (good, better, best, premium)  
Color space: sRGB, Adobe RGB

File Format Movies:  
AVI (Motion JPEG) with monaural sound

File Name Date (100\_MMDD...), PENTAX (100PENTAX...)

#### Special Features

- Features
- World Time: 75 cities (28 time zones)
  - 40 custom functions and memory modes,
  - USER mode (up to 5 settings),
  - RAW/Fx button (One push RAW+, Exposure bracketing, Digital preview, Composition adjustment, Electronic level display, GPS),
  - AF button (Enable AF, Cancel AF),
  - Dials customizable specifically to each exposure modes
  - RAW development
  - Copyright information
  - AF fine adjustment (+/- 10 steps, uniformal or individual adjustment)

- Resize
- Cropping (Aspect alteration, Slant adjustment available),
- Index,
- Movie Edit (Segmentation, Partial delete),
- Frame Crop (JPEG)

Image processing: Long-exposure Noise Reduction, High-ISO Noise Reduction, DRE (Dynamic Range Enlargement) which provides maximum details in highlights and shadows, Compensation of distortion and lateral chromatic aberration, Cross processing (Shuffle, Preset 1-3, Favorite 1-3), HDR (Auto, standard, Strong 1-3, automatic composition correction function), Multi-exposure (Auto, Standard, Strong 1-3, Automatic composition correction function), Automatic levelling, Composition adjustment (vertical and horizontal range:  $\pm 1.5\text{mm}$ ), Extended bracketing (White Balance, Saturation, hue, high/low key adjustment, contrast and sharpness bracketing)

Language English, French, German, Spanish, Portuguese, Italian, Dutch, Danish, Swedish, Finnish, Polish, Czech, Hungarian, Turkish, Greek, Russian, Korean, Chinese (Traditional/Simpl.), Japanese

#### Interface

Interface Mini-HDMI and AV outputs, compatible with NTSC and PAL, USB 2.0 mini-B (Hi-Speed), DC power input, cable release, X-sync socket, stereo mic. input

#### Power

Source Main: Rechargeable D-LI90 Lithium-ion battery  
Optional: Battery grip D-BG4 and AC adapter K-AC50E also available  
Approx. 740 shots with 50% flash\*, approx. 980 shots without flash and 440 min in play mode w/ D-LI90

Performance \* Tested in compliance with CIPA standard. Actual result may vary according to the shooting conditions/circumstances

#### Dimensions

Height 97mm  
Width 131mm  
Depth 72,5mm  
Weight 680g body only, 760g loaded and ready with Li-ion battery and SD card

#### Compatibility

PC Windows XP SP2, Vista™ and 7  
Mac OS X 10.3.9 or above

#### Accessories

Included Software PENTAX Digital Camera Utility 4

Kit Content AV cable, USB cable, Li-ion battery D-LI90, Battery charger D-BC90, AC cable, Strap, Eye cup FR and hot shoe cover (already mounted), Finder cap for ME, Body mount cover, Sync socket 2P cap, Bottom of body's cap, Software