

CAMERA HARDWARE

MODEL: K-7
TYPE: Digital SLR
PRODUCT CODE:
Body Kit: 17811, UPC: 027075155145

SENSOR

Type: CMOS with primary color filter and integrated Shake/Dust Reduction sensor movement system
Size: 23.4 x 15.6mm
Color depth: 8 bits/channel JPG, 12 bits/channel RAW
Effective pixels: 14.6 MP
Total pixels: 15.07 MP
Recorded resolutions
Still: 14M 4672x3104, 10M 3936x2624, 6M 3072x2048, 2M 1728x1152
Movie (resolution/FPS): 1280x720p30, 1536x1024p30, 640x416p30
Quality levels: ★★★★★ Premium, ★★★ Best, ★★ Better, ★ Good
Dust Removal: Supersonic vibration to low pass filter

LENS MOUNT

Type/construction: PENTAX K_{AF2} bayonet stainless steel mount
Usable lenses: PENTAX K_{AF3}, K_{AF2}, K_{AF}, and K_A (K mount, 35mm screwmount, 645/67 med format lenses useable w/ adapter and/or restrictions)
SDM function: Yes
Power zoom function: Yes

FOCUS SYSTEM

Type: TTL phase-difference 11 point (9 cross) wide autofocus system (SAFOX VIII+)
Focus modes: AF Single (w/ focus lock), AF Continuous, Manual
Focus point adjustment: Auto, user-selectable, center
AF assist: Yes, via dedicated AF assist lamp with SAFOX VIII+ system

VIEWFINDER

Type: Pentaprism
Coverage (field of view): 100%
Magnification: 0.92X (w/ 50mm F1.4 at infinity)
Standard focusing screen: Natural-Bright-Matte III
Diopter adjustment: -2.5 to 1.5
Depth of field preview: Optical (diaphragm stop down), Digital

LCD MONITOR

Type: 3.0" TFT IPS (In Plane Switching) color LCD with brightness/color adjustment and AR coating
Resolution: 921,000 dots
Wide angle viewable: Yes

LIVE VIEW

Type: TTL by CMOS image sensor
Field Of View: 100%
Display Modes: Magnification (2-6X AF, 2-10X MF), grid pattern overlay
Autofocus: Yes, contrast w/ face detection, contrast, phase difference

BUILT-IN FLASH

Type: Retractable P-TTL popup flash
Guide number: 13 (100/m)
Coverage: 28mm wide angle (equivalent to 35mm)
Flash modes: On, redeye, slow sync, slow sync + redeye, trailing curtain sync, wireless
Flash exposure compensation: -2 to 1 EV in 1/2 steps

EXTERNAL FLASH

Type: Hotshoe (P-TTL, high speed sync available), wireless with PENTAX dedicated flash, X-sync socket
Synchronization speed: 1/180 sec

STORAGE MEDIA

Internal memory: n/a
Removable memory: SD, SDHC

INTERFACES

Ports: USB 2.0 hi-speed, AV out, HDMI out, DC in, cable switch, 3.5mm stereo microphone
Video out: HD (1080i30, 720p30, 480p30), NTSC, PAL
Printer interfaces: n/a

POWER SUPPLY

Power source: Rechargeable Li-Ion battery D-LI90, D-BG4 Battery Grip (optional) for second D-LI90 battery or 6X AA batteries
Recordable images: Approx 980 (approx 740 w/ 50% flash, CIPA)
Playback time: Approx 440 min
AC adapter available: Yes (optional)

PHYSICAL SPECIFICATIONS

Body dimensions (W x H x D): 5.1 x 3.8 x 2.9"
Body weight
Without battery or removable memory: 22.9 oz
Loaded and ready: 26.5 oz
Construction material(s): Magnesium alloy shell over stainless steel chassis
Operating temperature: 14-104°F (-10 to 40°C)

LANGUAGE SUPPORT

English, French, German, Spanish, Portuguese, Italian, Dutch, Danish, Swedish, Finnish, Polish, Czech, Hungarian, Turkish, Greek, Russian, Korean, Traditional/Simplified Chinese, Japanese

IMAGE CAPTURE

IMAGE STABILIZATION

Type: Sensor-shift Shake Reduction with rotational compensation (4 stops max)
Electronic level function: Yes, verification via viewfinder and top LCD panel

METERING SYSTEM

Type: TTL open-aperture 77 segment metering
Sensitivity range: EV 0 to 22 (ISO 100, 50mm F1.4)
Multi-segment: Yes, 77 segments
Center weighted: Yes
Spot: Yes
Exposure compensation: +/- 5 EV (1/3 and 1/2 steps)
Exposure lock: Yes
Exposure bracketing: Yes, 3 or 5 frames, up to +/- 2 EV (1/2 or 1/3 steps)

ISO SENSITIVITY

Auto: ISO 100-3200 (1, 1/2, 1/3 steps), Bulb mode up to ISO 1600, expanded range available to ISO 6400, auto ISO range selectable
Manual: ISO 100-3200 (1, 1/2, 1/3 steps), Bulb mode up to ISO 1600, expanded range available to ISO 6400

WHITE BALANCE*

Auto preset modes: Auto, Daylight, Shade, Cloudy, Fluorescent (D, N, W, L), Tungsten, Flash, CTE
Manual mode(s): Yes, manual and 3 color temperature selections available
* WB fine adjustment available in all modes

SHUTTER

Type: Electronically controlled, vertical run, focal plane shutter
Shutter speed: 1/8000 to 30 sec, bulb

CAPTURE MODES

Mode selection: Green, Program (P), Sensitivity Priority (Sv), Shutter Priority (Tv), Aperture Priority (Av), Shutter and Aperture Priority (TA_v), Metered Manual, Bulb, X-Speed, USER, Movie
Green simplified mode available: Yes
P/A/S/M/B: P, A, S, M, B (extended modes Sv, TA_v)
Date stamp: n/a
Digital filters (capture): Custom Image Function includes Bright, Natural, Portrait, Landscape, Vibrant, and Muted modes, each with gamut radar and fine adjustment of saturation, hue, high/low key, contrast, and sharpness (regular and fine adjustment scales). Monochrome mode includes adjustment for filter effects (green, yellow, orange, red, magenta, blue, cyan, infrared), toning (sepia warm/cool), high/low key, contrast, and sharpness (regular and fine adjustment scales). Other capture filters include Toy Camera, Retro, High Contrast, Extract Color, Soft Focus, Starburst, Fisheye, Custom Filter.
Data record: Folder name (standard, date), file name (standard, customizable), embed copyright

DRIVE MODES

Mode selection: Single, Continuous (Hi, Lo), Self-Timer (12s, 2s), Remote (0s, 3s, continuous), Bracketing (standard, timer, remote), Mirror Lockup (standard, remote), HDR Capture, Multi-Exposure, Interval
Continuous FPS
- 5.2 FPS (40 JPG Continuous Hi, 15 RAW PEF, 14 RAW DNG)
- 3.3 FPS (unlimited JPG Continuous Lo, 17 RAW PEF/DNG)
Self-timer: Yes (12s, 2s)
Remote control: Yes, infrared (0s, 3s, continuous) and cable switch

PLAYBACK MODES

Mode selection: One Shot (no data, basic data, full data, color channel histogram), Multi Image Display (4, 9, 16, 32, 81 thumbnails), Calendar Filmstrip, Folder, Magnification, Select & Delete, Movie Playback (no data, basic data, full data)
Mode pallet: Image Rotation, Digital Filter, Resize, Cropping, Slideshow, Save as Manual WB, RAW Development, Index Print, Image Comparison, Protect, DPOF
Magnification: Up to 32X, scrollable
Digital filters (playback): Toy Camera, Monochrome (filter effects, toning), Retro, Color (6), High Contrast, Soft Focus, Extract Color (6), Starburst, Water Color, Fisheye, Pastel, Slim, Miniature, HDR, Base Parameter Adj, Custom Filter

FILE FORMATS

Still: RAW (PEF, DNG), JPG (Exif 2.21), DCF 2.0 (design rule for camera file system), DPOF, Print Image Matching III
Movie (compression): AVI (Motion JPG)

CUSTOM FUNCTIONS

Functions available: 37

FILE STORAGE MATRIX (BASED ON 1GB MEMORY)

JPG	★★★★	★★★	★★	★
14M	73	117	206	408
10M	102	163	289	564
6M	167	267	468	902
2M	516	805	1373	2518
RAW				
14M	40			
MOVIE (H:M:S)	★★★	★★	★	
1280x720p30	0:02:21	0:03:20	0:04:41	
1536x1024p30	0:01:51	0:02:36	0:03:40	
640x416p30	0:07:59	0:11:11	0:15:29	

COMPUTER SYSTEM REQUIREMENTS*

*For device connectivity. Bundled software requirements may vary.
Windows: Windows XP/Vista, USB 2.0 port