



PENTAX K-1

THE ULTIMATE K

Description	Art. Code	EAN
K-1 Black BODY KIT	19567	0027075294974



ADVANTAGES

Image Quality

- ✓ 36x24mm sensor with 36 MP CMOS Sensor with AA filter less technology and Pixel Shift Resolution guarantees for outstanding picture quality
- ✓ High ISO 204800 supported by new PRIME IV engine standing for a wide area of usable Sensitivity range with Low noise

Basic Function

- ✓ 100% FOV TTL- Prism Finder for sharp and clear view
- ✓ New designed shutter unit for compactness
- ✓ Fast and accurate 33 point SAFOX 12 AF System up from -3EV
- ✓ Scene Analyze with auto Exposure Mode. The 86000 pixel RGB analysis exposure information, color, faces movement etc. and create a perfect exposure value for this
- ✓ 9 Exposure Modes and Hyper Operating system for 100% control of the exposure parametres
- ✓ A lot of Settings for control of the picture (HDR, Skin Tone, CTE, Digital Filter)
- ✓ Some creative functions as Multi Exposure or Intervall Shooting Mode
- ✓ Movie Shooting Full-HD with 4K Interval Movie

Functionality

- ✓ Compatible with all PENTAX Lenses Automatic Switch of usable Sensor field if DA-lenses will be used
- ✓ 5 axis built in Shake Reduction II improve performance for 5 shutter steps
- ✓ Dust proof and weather resistant and -10°C cold resistant
- ✓ Dust removal II system - ultrasonic vibration remove dust
- ✓ Operation assist lights with Outdoor View Setting
- ✓ Built in GPS, Astrotracer
- ✓ Tough and Durable Body with a construction of a chassi from metal and a framework with magnesium alloy
- ✓ Newly Designed 1/8000 sec High Speed shutter for a minimum of 300000 releases
- ✓ Flexible and new designed Tilt Type vari angle LCD 3,2»
- ✓ WiFi and Image Sync for Remote Shooting, Image Viewing and Image Transfer

Operability

- ✓ Outstanding Operability with new Smart Function Dial - Instand setting supporting photographer not to miss the shutter chance
- ✓ Customization of buttons and Control Panel
- ✓ 5 USER modes

Weight: 925g (body only)

SUPPLIED ACCESSORIES

Rechargeable-Ion Battery D-LI90(B) - 39830
 Battery Charger D-BC90 - 39832
 Finder Cap for me - 31011
 AC plug cord D-CO2E - 39475
 PENTAX Strap O-ST162 - 38477
 Eyecup FT - 30128
 Hotshoe cover FK - 31040
 Body mount Cap KII - 31000
 Synchro Terminal 2P Cap - 31042
 PENTAX K-1 Triangular Ring - 38599
 PENTAX K-1 Protective Cover - 38600
 Software (CD-ROM) S-SW162 - 38557

OPTIONAL ACCESSORIES

Rechargeable-Ion Battery D-LI90(B) - 39830
 AC Adapter Kit K-AC132E - 38779
 Battery Charger Kit K-BC90E - 39834
 Battery Grip D-BG6 - 38607
 PENTAX Magnifying Eyecup O-ME53 - 30150
 PENTAX Remote Control O-RC1 - 39892
 Cable switch CS-205 - 37248
 PENTAX AF 201 FG Electro Flash W/Case - 30458
 PENTAX AF 540 FGZ II W/Case - 30456
 PENTAX AF 360 FGZ II W/Case - 30438
 Strap O-ST1401 black - 38613
 Strap O-ST1401 red - 38614





TECHNICAL SPECIFICATIONS

MODEL DESCRIPTION

Type	TTL autofocus, auto-exposure SLR digital-still camera
Lens Mount	PENTAX K _{AF2} bayonet mount (AF coupler, lens information contacts, K-mount with power contacts)
Compatible Lens	K _{AF3} , K _{AF2} (power zoom compatible), K _{AP} , K _A mount lens

IMAGE CAPTURE UNIT

Image Sensor	Size: 35.9 x 24.0 mm, CMOS-Sensor, Primary color filter
Total / Effective Pixels	Approx 36.77 M / 36.40 M
Sensitivity	ISO AUTO/100 to 204800 (EV steps can be set to 1EV, 1/2EV or 1/3EV)
Image Stabilizer	5 Axis Sensor Shift Shake Reduction (SR II)
Dust Removal	Image sensor cleaning using ultrasonic vibrations «DR II» Sensor-shift shake reduction (SR II: Shake Reduction) (6axis)
AA Filter Simulator	Moiré reduction using SR unit. OFF/Type1/Type2/Bracket (3 images)

FILE FORMATS

Pixel Shift Resolution	High resolution Pictures based on the use of each Pixel for all RGB-ColorInformation - Now also for moving subjects.
File format	RAW (PEF/DNG), JPEG (Exif 2.30), DCF2.0 compliant
Recorded Pixels	[35mm Full Frame] JPEG: L(36M: 7360x4912) M(22M:5760x3840) S(12M:4224x2816) XS(2M:1920x1280), RAW: (36M:7360x4912) [APS-C size] JPEG: L(15M: 4800x3200) M(12M:4224x2816) S(8M:3456x2304) XS(2M:1920x1280), RAW: (15M:4800x3200)
Quality Level	RAW (14bit): PEF, DNG, JPEG: ★ (Best), ★★ (Better), ★★★ (Good), RAW + JPEG simultaneous capturing available sRGB, AdobeRGB
Color Space	SD, SDHC and SDXC Memory Card (Conforms to USH-1 standards)
Storage Medium	Sequential Use, Save to Both, Separate RAW/JPG, Image copy between slots possible
Dual SD slot	Folder name: Date (100_1018,101_1019...) or User assigned folder name (Default "PENTX")
Storage Folder	File name: "IMGP****" or User assigned file name
Recording File	File name numbering: Sequential, Reset

VIEWFINDER

Type	Pentaprism Finder
Coverage (FOV)	Approx. 100%
Magnification	Approx. 0.70x (50mmF1.4 at infinity)
Eye-Relief Length	Approx. 20.6mm (from the view window), approx 21.7mm (from the center of lens)
Diopter adjustment	Approx. -3.5m to + 1.2m ⁻¹
Focusing Screen	Fixed Natural-Bright-Matte III focusing screen
Viewfinder Overlay	AF Points, Grid Display, Electronic Level, AF Frame, Spot Metering Frame, Crop

LCD MONITOR

Type	Wide viewing angle TFT color LCD, Air-gapless glass, Flexible-tilt.
Size	3.2 inch (aspect ratio 3:2)
Dots	Approx. 1037K dots
Adjustment	Brightness, Saturation and Colors adjustable
Outdoor View Setting	Adjustable ±2 step

LIVE VIEW ON LCD MONITOR

Type	TTL method using image sensor
Focusing Mechanism	Contrast detection (Face detection, Tracking, Multiple AF points, Select, Spot) Focus Peaking: ON/OFF
Display	Field of View approx. 100%, Magnified view (up to 16x), Grid Display (4x4 Grid, Golden Section, Scale display, Square 1, Square 2, Grid Color: Black/White), Histogram, Bright area warning, Composition Adjustment

WHITE BALANCE

Type	Method using a combination of the image sensor and the light source detection sensor
White Balance	AUTO WB, Multi Auto WB, Daylight, Shade, Cloudy, Fluorescent Light (D:Daylight Color, N:Daylight White, W:Cool White, L:Warm White), Tungsten Light, CTE, Manual WB (up to 3 settings), Color Temperature Configuration (up to 3 settings), Copying the white balance setting of a captured image
Fine Adjustment	Adjustable ±7 steps on A-B axis or G-M axis

AUTOFOCUS SYSTEM

Type	TTL: phase-matching autofocus
Focus Sensor	SAFOX 12, 33 point (25 cross type focus points in the center)
Brightness Range	EV-3 to 18 (ISO 100 / at normal temperature)
AF mode	Single AF (AF.S), Continuous AF (AF.C)
AF Point Selection	Spot, Select, Expanded Area (S, M, L), Zone select, Auto (33 AF points)
AF Assist Light	Dedicated LED AF assist light

METERING

Type	TTL open aperture metering using 86K pixel RGB sensor, Multi-segment, Center-weighted and Spot metering
Metering Range	EV-3 to 20 (ISO100 at 50mm F1.4)
Exposure Mode	Scene Analyze Auto, Program, Sensitivity Priority, Shutter Priority, Aperture Priority, Shutter & Aperture Priority, Manual, Bulb, Flash X-sync Speed, USER1, USER2, USER3, USER4, USER5 ±5EV (1/2EV steps or 1/3EV steps can be selected)
EV Compensation	Button type (timer type: two times the meter operating time set in Custom Setting); Continuous as long as the shutter button is halfway pressed
AE Lock	

SHUTTER

Type	Electronically controlled vertical-run focal plane shutter * Electronic shutter when using Pixel Shift Resolution
Shutter Speed	Auto:1/8000 to 30 sec., Manual:1/8000 to 30 sec. (1/3EV steps or 1/2EV steps), Bulb

FLASH FUNCTION

Flash Control	Contrast-control-sync and High-speed sync requires 2 or more dedicated external flash guns
Sync Speed	1/200 sec.
Exposure Compensation	-2.0 to + 1.0EV

DRIVE MODES

Mode Selection	Single Frame, Continuous (H, M, L), Self-timer (12s, 2s, Continuous), Remote Control (0s., 3s., Continuous), Bracketing (2, 3 or 5 frames), Mirror-up, Multi-Exposure, Interval Shooting, Interval Composite, Star Stream * Bracketing, Interval Shooting, Interval Composite, Interval Movie Record, Multi Exposure and Star Stream are possible to use with Self-timer/Remote Control.
Continuous Shooting	[35mm Full Frame] Max. approx. 4.4 fps, JPEG (L: ★★★ at Continuous H): up to approx. 70 frames, RAW: up to approx. 17 frames Max. approx. 3.0 fps, JPEG L: ★★★ at Continuous M): up to approx. 100 frames, RAW: up to approx. 20 frames Max. approx. 0.7 fps, JPEG (L: ★★★ at Continuous L): up to approx. 100 frames, RAW: up to approx. 100 frames [APS-C size] Max. approx. 6.5 fps, JPEG (L: ★★★ at Continuous H): up to approx. 100 frames, RAW: up to approx. 50 frames Max. approx. 3.0 fps, JPEG L: ★★★ at Continuous M): up to approx. 100 frames, RAW: up to approx. 70 frames Max. approx. 1.0 fps, JPEG (L: ★★★ at Continuous L): up to approx. 100 frames, RAW: up to approx. 100 frames
Multi-Exposure Interval Shooting	Composite Mode (Additive/Average/Bright), Number of Shots (2 to 2000 images) [Interval Shooting] Interval: 2s. to 24h / Standby Interval: Min. 1s. to 24h., Number of shots: 2 to 2000 images Start Interval: Now/Self-timer/Remote Control/Set Time [Interval Composite] Interval: 2s. to 24h / Standby Interval: Min. 1s. to 24h., Number of shots: 2 to 2000 images Start Interval: Now/Self-timer/Remote Control/Set Time Composite Mode: Additive/Average/Bright, Save Process: On/Off

CAPTURE SETTING

Custom Image	Auto Select, Bright, Natural, Portrait, Landscape, Vibrant, Radiant, Muted, Flat, Bleach Bypass, Reversal Film, Monochrome, Cross Processing
Sharpness level	Fine Sharpness and Extra Sharpness improve sharpness and gives much better details
Cross Processing	Random, Preset 1-3, Favorite 1-3
Digital Filter	Extract Color, Replace Color, Toy Camera, Retro, High Contrast, Shading, Invert Color, Unicolor Bold, Bold Monochrome
Clarity	Adjustable ±4 step
HDR	Auto, HDR1, HDR2, HDR3, Advanced HDR, Exposure bracket value adjustable, Automatic composition correction function
Lens Correction	Distortion Correction, Peripheral Illumin. Correction, Lateral Chromatic Aberration Correction, Diffraction Correction
Dynamic Range compensation	Highlight Correction, Shadow Correction
Noise Reduction	Slow Shutter Speed NR, High-ISO NR
Horizon Correction	SR On: correction up to 1 degrees, SR Off: correction up to 2 degrees
Composition Adjustment	Adjustment range of ±1.5mm up, down, left or right (1mm when rotated); rotating range of 1 degree
Electronic Level	Displayed in viewfinder and LCD panel (horizontal and vertical); displayed on LCD monitor (horizontal and vertical)

MOVIE

File Format	MPEG-4 AVC/H.264 (MOV)
Recorded Pixels	Full HD (1920x1080, 60i/50i/30p/25p/24p), HD (1280x720, 60p/50p)
Sound	Built-in stereo microphone, external microphone (Stereo recording compatible) Recording Sound Level adjustable, Wind Noise Reduction
Recording Time	Up to 25 minutes or 4GB; automatically stops recording if the internal temperature of the camera becomes high.
Custom Images	Auto Select, Bright, Natural, Portrait, Landscape, Vibrant, Radiant, Muted, Flat, Bleach Bypass, Reversal Film, Monochrome, Cross Processing
Cross Processing	Random, Preset 1-3, Favorite 1-3.
Digital Filter	Extract Color, Replace Color, Toy Camera, Retro, High Contrast, Shading, Invert Color, Unicolor Bold, Bold Monochrome
Interval Movie Record	[Interval Movie] Recorded Pixels: 4K/FullHD/HD, File Format: Motion JPEG (AVI), Interval: 2s. to 24h./ Standby Interval: Min. 1s. to 24h., Number of shots: 8 to 2000 images (8 to 500 images at 4K), Start Interval: Now/Self-timer/Remote Control/Set Time [Star Stream] Recorded Pixels: 4K/FullHD/HD, File Format: Motion JPEG (AVI), Interval: 2s. to 24h./ Standby Interval: Min. 1s. to 24h., Number of shots: 8 to 2000 images (8 to 500 images at 4K), Start Interval: Now/Self-timer/Remote Control/Set Time, Fade-out: Off/Low/Medium/High

PLAYBACK

Playback View	Single frame, Multi-image display (6, 12, 20, 35, 80 segmentation), Display magnification (up to 16, 100% display and quick magnification available), Grid display (4x4 Grid, Golden Section, Scale display, Square 1, Square 2, Grid Color: Black/White), Rotating, Histogram (Y histogram, RGB histogram), Bright area warning, Auto Image Rotation, Detailed information, Copyright Information (Photographer, Copyright holder), GPS information (latitude, longitude, altitude, Coordinated Universal Time), Orientation, Folder Display, Calendar Filmstrip Display, Slide Show, Delete single image, delete all, select & delete, delete folder, delete instant review image
Delete	
Digital Filter	Base Parameter Adj, Extract Color, Replace Color, Toy Camera, Retro, High Contrast, Shading, Invert Color, Unicolor Bold, Bold Monochrome, Tone Expansion, Sketch, Water Color, Pastel, Posterization, Miniature, Soft, Starburst, Fish-eye, Slim, Monochrome
RAW Development	RAW file select: Select Single Image, Select Multiple Images, Select a folder RAW Development Parameter: White Balance, Custom Image, Sensitivity, Clarity, Skin Tone, Digital filter, HDR, Pixel Shift Resolution, Shadow Correction, High-ISO NR, Distortion Correction, Peripheral Illumin. Corr., Lateral Chromatic Aberration Correction, Diffraction Correction, Color Fringe Correction, File Format (JPEG/TIFF), Aspect Ratio, JPEG Recorded Pixels, JPEG Quality, Color Space
Edit	Image Rotation, Color Moiré Correction, Resize, Cropping (Aspect ratio and Slant adjustment available), Movie Edit (Divide or delete selected frames), Capturing a JPEG still picture from a movie, Saving RAW data in buffer memory, Image Copy

CUSTOMIZATION

USER Mode	Up to 5 settings can be saved
Custom Functions	26 items
Mode Memory	16 items
Custom Button	Fx1 Button, Fx2 Button (One Push File Format, Outdoor View Setting, Flash Mode, Pixel Shift Resolution, Shake Reduction, Horizon Correction, Electronic Level) AF Button (AF1/ AF2/ Cancel AF) Preview Dial (Optical Preview/Digital Preview) Various settings for the action of the e-dials in each exposure mode can also be saved.
AF Customization	A.F.S: Focus-priority/ Release-priority 1st Frame Action in A.F.C: Release-priority/Auto/Focus-priority Action in A.F.C Continuous: Focus-priority, Auto, FPS-priority Hold AF Status: OFF, Low, Medium, High AF in Interval Shooting: Locks focus at 1st exposure, Adjusts focus for each shot AF with Remote Control: Off/On
Operation Control	Type 1: E-Dial, EV Compensation, ISO, Green Button, AE Lock
Lock	Type 2: 4-way controller, AF point change button, Change AF Point, OK Button, Menu Button
Text Size	Standard, Large
World Time	World Time settings for 75 cities (28 time zones)
Language	English, French, Germany, Spanish, Portuguese, Italian, Dutch, Danish, Swedish, Finnish, Polish, Czech, Hungarian, Turkish, Greek, Russian, Korean, Traditional Chinese, Simplified Chinese, Japanese
AF fine Adjustment	±10 step, Uniform adjustment, Individual adjustment (up to 20 can be saved)
Illumination Settings	LCD Panel (High/Low/Off), Backside Controls (High/Low/Off), Lens Mount (On/Off), Card Slot/Connector (On/Off)
Indicator Lamps	Wi-Fi (High/Low/Off), GPS (High/Low/Off), Self-timer (On/Off), Remote Control (On/Off)
Copyright Information	Names of "Photographer" and "Copyright Holder" are embedded to the image file. Revision history can be checked using the provided software.

GPS ELECTRONIC COMPASS

GPS	GPS Logging (Logging Interval, Logging Duration, Memory Card Options), GPS Time Sync
Electronic Compass	Available
Astrotracer	Possible
Satellites	GPS, QZSS, SBAS (WAAS/EGNOS/GAGAN/MSAS)
Reception Frequency	L1 1575.42MHz
Recorded Information	Latitude, Longitude, Altitude, Time (UTC), Direction
Geodesics	World Geodetic System (WGS84)
GPS Logging	KML format, Logging Interval: 5/10/15/30sec./1min., Logging Duration: 1-24hr. (Up to 9hours at Logging Interval 5sec. Up to 18hrs. at Logging Interval 10sec.)
Electronic Compass	Azimuth calculation using triaxial geomagnetic sensor and triaxial acceleration sensor, True north standard

POWER SUPPLY

Battery Type	Rechargeable Lithium-ion Battery D-LI90
AC Adapter	AC Adapter Kit K-AC132 (Optional)
Battery Life	Number of recordable images: Approx. 760 images. Playback time: Approx. 390 minutes * With a fully-recharged Rechargeable Lithium-ion Battery. Tested in compliance with CIPA standard. Actual results may vary depending on the shooting condition.

INTERFACES

Connection Port	USB2.0 (micro B), external power supply terminal, external cable switch terminal, X-sync socket, HDMI output terminal (Type D), Stereo microphone input terminal, Headphone terminal
USB Connection	MSC/PTP

WIRELESS LAN

Standards	IEEE 802.11b/g/n
Frequency (Center Frequency)	2412MHz ~ 2462MHz (1ch ~ 11ch)
Security	Authentication: WPA2, Encryption: AES

OPERATING ENVIRONMENT

Temperature	-10°C ~ 40°C (14°F ~ 104°F)
Humidity	85% or less (no condensation)
Dust and Water protected	87 Sealings protecting camera against Dust, Rain and Spraywater. Camera is not water protected.

DIMENSIONS AND WEIGHT

Dimensions	Approx. 136.5mm (W) x 110mm (H) x 85.5mm (D) (excluding protrusions)
Weight	Approx. 1010g (Including dedicated battery and 1x SD Memory Card) Approx. 925g (body only)

OPTIONAL ACCESSORIES

LENSES



HD D-FA 24-70mm F2.8 ED SDM WR



HD D-FA 28-105mm F3.5-5.6 ED DC WR



HD D-FA* 70-200mm F2.8 ED DC AW



HD D-FA 150-450mm F4.5-5.6 ED DC WR



smc FA 31mm / 1.8 Limited



smc FA 35mm / 2.0



smc FA 43mm / 1.9 Limited



smc FA 50mm / 1.4



smc D FA Macro 50 mm / 2,8



smc FA 77mm / 1.8 Limited



SMC D FA Macro 100mm F2.8



HD D-FA 15-30mm F2.8 ED SDM WR

OTHER ACCESSORIES

FLASH GUNS



AF 201 FG



AF 360 FGZII



AF 540 FGZII



AF 160 FC

ACCESSORIES



Battery Grip D-BG6



Sensor Cleaning stick



Film Duplicator



PENTAX Remote Control O-RC1