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PENTAX *KP*

LOW LIGHT PHOTOGRAPHY IN A NEW DIMENSION

Description	Art. Code	EAN
K-P Black BODY KIT	16017	0027075298798
K-P Silver BODY KIT	16037	0027075298934

Badges: WEATHER RESISTANT BODY · SHAKE REDUCTION · 24 MEGA PIXELS · DUST REMOVAL II · ISO 819200 · VIEWFINDER 100% · LCD 3,0" · FULL HD VIDEO

ADVANTAGES

Perfect Pictures
√ 24MP APS-C CMOS sensor for high resolution images
√ Incredible range of sensitivity from ISO 100-819200 allowing capture of images in low light settings with minimal noise
√ Built in Shake Reduction with 5 axis image stabilisation
√ Pixelshift resolution for finer detail and capture of full colour information

Perfectly Equipped
√ Pentaprism viewfinder with 100% coverage for clear and accurate views
√ 3" Tiltable TFT colour LCD monitor featuring an air-gapless screen and a tempered glass front panel
√ SAFOX 11 with 27 point focus points (25 cross types in the centre)
√ Built-in pop up P-TTL flash
√ AE and AF memory button (individual setting)
√ Electronic shutter up to1/24000
√ Bracketing for Depth of field, Motion and Metering
√ Multi Exposure (Composite Modes: Additive, Average and Bright)
√ Interval Shooting for Images and Video
√ Continuous Shooting up to 7.0 frames per second (approx.)
√ Function Dial with 6 functions (3 individual Custom functions, 3 options), 3 Function buttons and 5 User presets
√ Custom Image Function for unique picture enhancement
√ Filter effects for application during or after shooting
√ In camera RAW Development
√ 'Scene Analyze' for perfect exposure and picture results

Functionality
√ Compatible with all PENTAX Lenses (A and M-Series with limitation)
√ 67 Seals - Dust and Water protected, and cold resistant down to -10°
√ Dust Removal II: Sensor Cleaning System
√ Built in Wireless for remote control of a variety of camera functions

SUPPLIED ACCESSORIES

Rechargeable Lithium-ion Battery D-LI109
Battery Charger D-BC109
AC plug cord D-CO2E
Strap O-ST162
Eyecup FR
Hot shoe cover FK
Viewfinder Cap FR
Body mount cover KII
Grip S O-GP 167
Grip M O-GP 1671
Grip L O-GP 1672
Software (CD-ROM) S-SW167

OPTIONAL ACCESSORIES

Lithium-Ion battery D-LI109 - 39067
Battery Charger kit K-BC109E - 39032
AC Adapter K-AC 168E - 38542
Battery Grip D-BG7 - 38598
GPS-Receiver O-GPS1 - 39012
PENTAX Magnifying Eyecup 1,2x O-ME53 - 30150
Focussing Screen Standard, MF-60 - 38578
Focussing Screen Divided, ML-60 - 38579
Focussing Screen with Coordinate, MI-60 - 38580
Focussing Screen without any marks, ME-60 - 38581
Cable switch CS-310 - 30239
PENTAX Flash AF 201 FG - 30458
PENTAX Flash AF 360 FGZ II - 30438
PENTAX Flash AF 540 FGZ II - 30456
Strap O-ST1401, black - 38613
Strap O-ST1401, red - 38614

Weight: 643g (body only)

131.5mm
76mm
101mm

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$_{AF4}$, K$_{AF3}$, K$_{AF2}$ (power zoom compatible), K$_{AF}$, K$_A$ lens

IMAGE CAPTURE UNIT

Image sensor	Size: 23.5 x 15.6mm, CMOS-Sensor, Primary color filter
Total / Effective pixels	Approx. 24.71 M / 24.35 M
Sensitivity	ISO AUTO/ 100 to ISO 819200 (EV steps can be set to 1EV, 1/2EV or 1/3EV)
Dust removal	Image sensor cleaning using ultrasonic vibrations «DR II» with the Dust Alert function
Image stabilizer	5-axis Sensor-shift shake reduction (SR: Shake Reduction)
AA-FilterSimulator	Moiré reduction using SR unit. OFF/Type1/Type2/Bracket (2 or 3 images)

FILE FORMATS

Pixel Shift Resolution	ON/OFF *Motion Correction ON/OFF
File format	RAW (PEF/DNG), JPEG (Exif 2.30), DCF2.0 compliant
Recorded pixels	JPEG: L (24 MP: 6.016 x 4.000), M (14 MP: 4.608 x 3.072), S (6 MP: 3.072 x 2.048), XS (2 MP: 1.920 x 1.280) RAW: (24 MP: 6.016 x 4.000)
Quality level	RAW (14 Bit): PEF, DNG, JPEG: ★★★ (Best), ★★ (Better), ★ (Good), RAW + JPEG simultaneous capturing available
Color space	sRGB, AdobeRGB
Storage Medium	SD, SDHC and SDXC Memory Card (Conforms to USH-I standards)
Storage Folder	Folder Name: Date (100_1018,101_1019...) or User assigned folder name (Default «PENTX»)
Recording File	File Name: «IMGP****» or User assigned file name File name numbering: Sequential, Reset

VIEW FINDER

Type	Pentaprism Finder
Coverage (FOV)	Approx. 100%
Magnification	Approx. 0.95x (50mmF1.4 at infinity)
Eye-Relief Length	Approx. 20.5mm (from the view window), Approx. 22.3mm (from the center of lens)
Diopter adjustment	Approx. -2.5m to +1.5m^{-1}
Focusing Screen	interchangeable Natural-Bright-Matte III focusing screen

LCD MONITOR

Type	Tiltable TFT color LCD monitor featuring an air-gapless structure, tempered-glass front panel
Size	3.0 inch (aspect ratio 3:2)
Dots	Approx. 921.000 Dots
Adjustment	Brightness, Saturation and Colors adjustable
Outdoor View Setting	Adjustable ±2 step
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, Highlight Alert, Composition Adjustment
Autofocus	AF Method: Contrast detection AF Mode: Single AF (AF.S), Continuous AF (AF.C) *Continuous AF (AF.C) is available with the dedicated lens. AF Active Area: Face detection, Tracking, Multiple AF points, Select, Spot Focus Peaking: Highlight Edge/Extract Edge/OFF
Night Vision LCD Display	ON/OFF

WHITE BALANCE

Type	TTL method using image 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 11, 27 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), Auto select AF (AF.A)
AF Point Selection	Auto (27 AF points), Zone select, Select, Expanded Area (S, M, L), Spot
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, USER1, USER2, USER3, USER4, USER5
EV Compensation	±5EV (1/2EV steps or 1/3EV steps can be selected)
AE Lock	Can be assigned to the AF/AE-L button, Fx1 button, Fx2 button, Fx3 button

SHUTTER

Type	Electronically controlled vertical-run focal plane shutter / Electronic shutter
Shutter Speed	Mechanical shutter: Auto: 1/6000 to 30 sec., Manual: 1/6000 to 30 sec. (1/3EV steps or 1/2EV steps), Bulb (Timed exposure setting possible from 10 sec. to 20 min.) Electronic shutter: Auto: 1/24000 to 30 sec., Manual: 1/24000 to 30 sec. (1/3EV steps or 1/2EV steps)

FLASH

Built-in Flash	Built-in retractable P-TTL flash, GN: approx. 6.0 (ISO100/m), Angle of view of 28mm lens (35mm format equivalent)
Flash Modes	Auto Flash Discharge (Scene Analyze Auto), Auto Flash + Red-eye Reduction (Scene Analyze Auto) Flash On, Flash On+ Red-eye Reduction, Slow-speed Sync, Trailing Curtain Sync, Manual Flash Discharge (Full-1/128), Wireless (Controller)
Sync Speed	1/180 sec.
Flash Exposure Compensation	-2.0~+1.0EV
External Flash	P-TTL, Leading Curtain Sync, Trailing Curtain Sync, Contrast-control-sync, High-speed sync, Wireless sync * Contrast-control-sync and High-speed sync requires two or more dedicated external flash

DRIVE MODES

Mode Selection	[Still Image] Single Frame, Continuous (H, M, L), Self-timer (12s, 2s, Continuous), Bracketing (2, 3 or 5 frames), Depth of Field Bracketing (3frames), Motion Bracketing (3frames), Mirror-up, Multi-Exposure, Interval Shooting, Interval Composite, Interval Movie Record, Star Stream [Movie] Remote Control
	* Bracketing, Interval Shooting, Interval Composite, Interval Movie Record and Star Stream are possible to use with Self-timer * Depth of Field Bracketing is available in Av mode. Depth of Field Bracketing is possible to use with Self-timer * Motion Bracketing is available in Tv mode. Motion Bracketing is possible to use with Self-timer * Multi-Exposure is possible to use with Continuous Shooting or Self-timer
Continuous Shooting	Max. approx. 7.0 fps, JPEG (L: ★★★ at Continuous H): up to approx. 28 frames, RAW: up to approx. 8 frames, RAW+: up to approx. 7 frames Max. approx. 3.0 fps, JPEG (L: ★★★ at Continuous M): up to approx. 70 frames, RAW: up to approx. 15 frames, RAW+: up to approx. 10 frames Max. approx. 0.8 fps, JPEG (L: ★★★ at Continuous L): up to approx. 100 frames, RAW: up to approx. 100 frames, RAW+: up to approx. 25 frames *ISO100 *Continuous shooting speed slows down with Electoronic shutter or High sensitivity
Multi-Exposure	Composite Mode (Additive/Average/Bright) Number of Shots (2 to 2000 times)
Interval Shooting	[Interval Shooting] Interval: 2s. to 24h./ Standby Interval: Min. 1s. to 24h., Number of shots: 2 to 2000 times, Start Interval: Now/Self-timer/Set Time
	[Interval Composite] Interval: 2s. to 24h./ Standby Interval: Min. 1s. to 24h., Number of shots: 2 to 2000 times, Start Interval: Now/Self-timer/Set Time, Composite Mode: Additive/Average/Bright, Save Process: ON/OFF
	[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 times (8 to 500 times at 4K), Start Interval:Now/Self-timer/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 times (8 to 500 times at 4K), Start Interval: Now/Self-timer/Set Time, Fade-out: OFF/Low/Medium/High

CAPTURE SETTINGS

Custom Image	Auto Select, Bright, Natural, Portrait, Landscape, Vibrant, Radiant, Muted, Flat, Bleach Bypass, Reversal Film, Monochrome, Cross Processing
Noise Reduction	Slow Shutter Speed NR, High-ISO NR
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, OFF, 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
Skin Tone	Type1, Type2, OFF
Horizon Correction	SR ON: Correction up to 1.0 degrees, SR OFF: Correction up to 1.5 degrees
Electronic Level	Displayed in viewfinder: Horizontal direction only, Displayed on LCD monitor: Horizontal and vertical direction

MOVIE

File Format	MPEG-4 AVC/H.264 (MOV)
Recorded Pixels	Full-HD (1.920 x 1.080, 60i/50i/30p/25p/24p), HD (1.280 x 720, 60p/50p)
Sound	Built-in stereo microphone, external microphone (Stereo recording compatible) Recording Sound Level adjustable
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

PLAYBACK

Playback View	Single frame, Multi-image display (6,12, 20, 35, 80 segmentation), Display magnification (up to 16x, Quick Zoom view 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	Delete single image, delete all, select & delete, delete folder, delete instant review image
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

TECHNICAL SPECIFICATION

CUSTOMIZATION

USER-Mode	Up to 5 settings can be saved
Custom Functions	24 items
Mode Memory	18 items
Button Customization	Fx1 Button (EV Compensation, ISO Sensitivity, Preview, AE Lock, Change AF Area, One Push File Format, Electronic Level, Wi-Fi, Night Vision LCD Display, Operation Control Lock) Fx2 Button (EV Compensation, ISO Sensitivity, Preview, AE Lock, Change AF Area, One Push File Format, Electronic Level, Operation Control Lock) Fx3 Button (EV Compensation, ISO Sensitivity, Preview, AE Lock, Change AF Area, One Push File Format, Electronic Level, Operation Control Lock) AF/AE-L button (AF1, AF2, Cancel AF, AE Lock) Various settings for the action of the e-dials in each exposure mode can also be saved.
Operation Control Lock	Type1: Disables exposure control operations in standby mode Type2: Disables the control functions of OK button, MENU button and Four-way controller in standby mode
AF Customization	AF.S: Focus-priority/ Release-priority 1st Frame Action in AF.C: Release-priority/Auto/Focus-priority Action in AF.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
Function Dial	(ISO Sensitivity, EV Compensation, Bracket Value, Custom Image, AF Mode, AF Active Area, Focus Peaking, Program Line, Shutter Mode Selection, Recorded Pixels, AA Filter Simulator, Grid Display, LCD Display Options, Image Magnification, Outdoor View Setting) * Recroded Pixles: [Still Image] L, M, S or XS selectable [Movie] Full HD or HD selectable
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)
Indicator Lamps	Self-timer (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.

POWER SUPPLY

Battery Type	Rechargeable Lithium-ion Battery D-LI109
AC Adapter	AC Adapter Kit K-AC 168E (Optional)
Battery Life	Number of recordable images: (with 50% flash usage): approx. 390 images, (without flash usage): approx.: 420 images Playback time: approx. 270 minutes * With a fully-charged Rechargeable Lithium-ion Battery under the temperature at 23°C. 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, Stereo microphone input / Cable switch input (ø3.5mm connector)
USB Connection	MSC/PTP (SlimPort compatible)
Video output	USB terminal * SlimPort-HDMI adapter required

WIRELESS LAN

Standard	IEEE 802.11 b/g/n
Frequency (Center Frequency)	2412MHz to 2462MHz (channels: Ch.1 to Ch.11)
Security	Authentication: WPA2, Encryption: AES

OPERATING ENVIRONMENT

Temperature	-10°C ~ 40°C (14°F~104°F)
Humidity	85% or less (no condensation)

DIMENSIONS

Dimensions	Approx. 131.5mm (W) x101.0mm (H) x 76.0mm (D) (excluding protrusions)
Weight	Approx. 703g (Including dedicated battery and SD Memory Card) Approx. 643g (body only)

OPTIONAL ACCESSORIES

LENSES

HD PENTAX-DA 20-40mm F/2.8-4 ED Limited DC WR

HD PENTAX-DA 15mm F/4 ED AL Limited

HD PENTAX-DA 21mm F/3.2 AL Limited

HD PENTAX-DA 40mm F/2.8 Limited

HD PENTAX-DA 70mm F/2.4 Limited

HD PENTAX-DA 35mm F/2.8 Macro Limited

smc PENTAX-DA 18-135mm F/3.5-5.6 ED AL [IF] DC WR

smc PENTAX-DA* 60-250mm F/4.0 ED [IF] SD

FLASH GUNS

PENTAX AF 201 FG

PENTAX AF 360 FGZ II

PENTAX AF 540 FGZ II

Film Duplicator

ACCESSORIES

Battery Grip D-BG7

Sensor Cleaning stick

Cable switch CS-310