

## Pentax K-1 Mark II

Publisert 21.02.2018 23:00

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På Lager !

camera-pentak-12

Nå lanserer Pentax et nytt flaggskip med fullformatsensor. Den nye modellen **Pentax K-1 Mark II** har fått forbedret autofokus, enda høyere ISO, og en ny funksjon for å ta ultraoppløste bilder på frihånd.

Nye **Pentax K-1 Mark II** bygger videre på det fremgangsrike konseptet fra forgjengeren, et kamera for fotografer med høye krav til både byggekvalitet og bildekvalitet. Den nye modellen benytter samme robuste og værsikrede, men samtidig uvanlig kompakte kamerahus som tidligere, med en unik LCD- skjerm som kan vinkles i alle retninger, og en stor og klar søker som viser 100% bildeutsnitt. Den nye teknologien som er utviklet, gjør K-1 Mark II til et enda bedre verktøy for frihåndsfotografering, og for fotografering av bevegelige objekter.

#### Støyreduserende prosessor gir ISO 819 200

Hjertet i kameraet er en 36.4 megapiksel fullformatsensor som leverer enestående detaljrike bilder med høy skarphet helt ned til pikselnivå, takket være løsningen uten et lavpassfilter.

Pentax K-1 Mark II har en spesiell støyreduksjonsprosessor mellom sensoren og bildeprosessoren Prime IV, som gjør at det nye kameraet gir enda bedre bildekvalitet ved høye ISO-verdier og kameraets følsomhetsområde har kunnet økes helt opp til ISO 819 200. En forbedring på to steg sammenlignet med forgjengerens allerede imponerende maxfølsomhet på ISO 204 800.

#### **Pixel Shift Resolution II**

Som tidligere har K-1 Mark II 5-akset bildestabilisering gjennom den bevegelige bildesensoren. Det gjør det mulig å ta bilder på inntil 5 lukkertrinn lenger enn man normalt må benytte for å få skarpe bilder uten stativ.

Den fantastiske teknologien Pixel Shift Resolution som først ble introdusert i K-1, har nå fått en ny smart modus, kalt Dynamic Pixel Shift Resolution, som spesielt er beregnet på frihåndsfotografering. I denne modusen tar kameraet 4 eksponeringer i rask rekkefølge, og leser av forskjellene i motivets posisjon som oppstår mellom hver eksponering. Dette utnyttes for å skape et kombinert bilde med ultrafine detaljer, mer fargeinformasjon og mindre bildestøy. Funksjonen kan også kombineres med bildestabiliseringen.

Pixel Shift Resolution II, som den nye teknologien kalles, fungerer som tidligere også med stativ for best mulig resultat ved lange lukkertider.

#### Raskere og bedre følgefokus

Pentax K-1 Mark II har avansert autofokus med 33 fokuspunkter der hele 25 punkter er krysspunkter, og disse punktene kan stille skarpt både på horisontale og vertikale elementer i motivet. Det fungerer ved lysnivåer ned til -3 EV, så mørkt at man så vidt kan se motivet med det blotte øye. Ved hjelp av forbedrede algoritmer har autofokuseringen nå også blitt enda raskere, og har fått bedre evne til å følge bevegelige objekter i AF-C-modus (kontinuerlig autofokus).

#### Pris og levering

Det nye kameraet kom på lager **10. april**, og vil koste **kr. 19.995,-**Kan bestilles **her** 

#### Hovedegenskaper Pentax K-1 Mark II:

- 36.4 megapiksel fullformatsensor uten lavpassfilter
- Kompakt, robust og værsikret kamerahus i metall
- Innebygget 5-akset bildestabilisering, effektiv opp til 5 lukkertrinn
- NYHET: Egen støyreduksjonsenhet gir enda bedre bildekvalitet ved høye ISOverdier, og øker følsomhetsområdet opp til ISO 819 200
- NYHET: Pixel Shift Resolution System II for bilder med ultrafine detaljer og lavere bildestøy. Fungerer nå både med stativ og på frihånd
- NYHET: Raskere autofokus med bedre evne til å følge bevegelige motiver i AF-C modus
- 33 AF-punkter, 25 av dem krysstype, og autofokusering i lysnivåer ned til -3 EV
- Seriefotografering inntil 4,4 bilder pr sekund, opp til 17 bilder i RAW eller 70 bilder i JPEG
- Optisk søker som viser 100% bildeutsnitt
- Vridbar 3,2" LCD- skjerm med 1.037 000 punkter
- Videoopptak i Full-HD (1920x1080 piksler, 60i/30p) og uttak for ekstern mikrofon
- Belysning: Seks LED-lys plassert på kamerahuset for å lette betjening i mørket
- Innebygget GPS, samt Wi-Fi for trådløs overføring til smarttelefon eller nettbrett
- Innebygget Astrotracer ta knivskarpe bilder av stjerner selv ved lange lukkertider

#### Ekstra tilbehør K-1 Mark II

Det samme tilbehøret som passer til nåværende K-1 kamera.

The PENTAX K-1 Mark II uses the same full-frame Anti-aliasing (AA)-filterless CMOS sensor with 36.4 effective megapixels as its predecessor model. However, Ricoh has added a new accelerator unit to the PENTAX K-1 Mark II that—along with the camera's PRIME IV image processor—enables it to produce high-resolution images with minimal noise in even in the most challenging low-light conditions, up to ISO 819200. This makes the new camera ideal for low-light photography where higher shutter speeds are required.

The camera also incorporates Pixel Shift Resolution System II. This new, PENTAX-developed technology uses the same in-camera shake-reduction (SR) mechanism and sensor-shift capabilities as the original Pixel Shift Resolution System found in the PENTAX K-1, which captures four images of the same scene, and then synthesizes them into a single, super-high-resolution composite image. With the Pixel Shift Resolution System II, the camera also obtains RGB color data, resulting in images with significantly finer details and truer colors than those produced by typical full-frame sensors.

A new feature in the Pixel Shift Resolution System II is Dynamic Pixel Shift Resolution mode. This mode allows photographers to produce crisp, ultra-high pixel shift resolution images without the need of a tripod, extending the camera's use to a wider variety of subjects and scenes.

The PENTAX K-1 Mark II also comes equipped with many unique features and functions designed to facilitate creativity and ensure operational comfort that have become the hallmark of PENTAX cameras. These include a sturdy magnesium-alloy body with dustproof, weather-resistant construction; an optical viewfinder with a nearly 100-percent field of view for real-time subject confirmation; Astro Tracer, which simplifies the tracing and photographing of celestial bodies by coupling GPS data with the camera's sophisticated SRII mechanism; and a flexible tilt-type LCD monitor to accommodate various shooting angles.

#### | Main Features |

1. Newly incorporated accelerator unit delivers high-quality images and excellent super-high-sensitivity imaging performance

The PENTAX K-1 Mark II features a 35mm-format full-frame CMOS image sensor with an AA (anti-aliasing) filter-free design to produce high-resolution images with approximately 36.4 effective megapixels. It also features a new accelerator unit, which optimizes the image data obtained by the full-frame image sensor before delivering it to the high-performance PRIME IV imaging engine. As a result, the camera is capable of producing high-quality images with minimal noise, while retaining excellent resolution at all sensitivity levels, from normal to super-high sensitivities. PENTAX has also updated all imageprocessing parameters to ensure colors are true to life, with special emphasis on deep blues and lively greens. PENTAX has also dramatically improved the camera's noise-reduction performance at a high-sensitivity range — up to ISO 819200 — to expand creative possibilities in super low-light shooting.

2. Pixel Shift Resolution System II produces super-resolution images and enables handheld shooting

Building upon the original PENTAX-developed Pixel Shift Resolution System — the super-resolution technology that uses the camera's in-body shake-reduction mechanism to capture four images of the same scene by shifting the image sensor by a single pixel for each image, and then synthesizes them into a single composite image — is the Pixel Shift Resolution System II,\* making its debut in the PENTAX K-1 II. This new system obtains RGB color data for each pixel, resulting in super-high-resolution images with finer details and more realistic colors than those produced by cameras with ordinary full-frame sensors. The Motion Correction functions provides ON/OFF switching, which detects moving elements of the continuously captured images to minimize the effect of subject movement during the image synthesizing process.\*\*\*The new Dynamic Pixel Shift Resolution mode,\*\* which can be used during handheld shooting, works together with the camera's shake-reduction mechanism, by synthesizing the composite images while detecting the slight fluctuations of the subject's position during the capture process.

This technology comes from the reverse thinking of pixel shift technology to utilize the minute camera shake itself to product the composite images. Therefore, by detecting the camera shake in three dimensions, the continuously captured four images are analyzed based on the detected camera shake information and combined into a single file to produce one super high resolution image.

\* When using this system, the user is advised to stabilize the camera firmly on a tripod. Even if a moving subject is captured in the camera's image field, the image may not be reproduced clearly, partially or in total.

\*\* The captured images may not be properly synthesized with certain subjects or under certain conditions. By capturing images in the RAW or RAW+ format, the user can process the images unsuitable for the synthesizing process as normal RAW-format images within the camera body.

The images may not be properly synthesized in a composite image

\*\*\* The movement may not be sufficiently corrected when the object is moving in a certain direction and/or pattern. This function does not guarantee that the movement is properly corrected with all subjects.

3. High-performance five-axis, five-step SR II system

(1) In-body SR mechanism delivers optimal shake-reduction performance with all compatible lenses

The PENTAX K-1 Mark II comes equipped with the PENTAX-developed SR II (Shake Reduction II) five-axis mechanism, which provides accurate control of the large full-frame image sensor with all compatible PENTAX interchangeable lenses.\* In addition to camera shake caused by pitch and yaw, this advanced system also compensates for camera shake caused by horizontal and vertical shift (often generated in macro photography) and camera shake caused by roll, which is difficult for lens-installed shake-reduction mechanisms to handle. It has a compensation range up to five steps (measured in conformity with CIPA standards, using the HD PENTAX-D FA 28-105mm F3.5-5, 6ED DC WR at a 105mm focal length). When taking a panning shot, this system automatically detects the direction of the camera's movement, and efficiently controls the SR unit to produce the best image possible without requiring any mode switching operation.

(2) Innovative AA filter simulator to minimize moiré and inaccurate color rendition

By applying microscopic vibrations to the image sensor unit at the sub-pixel level during image exposure, the camera's anti-aliasing (AA) filter simulator\*\* provides the same level of moiré reduction as an optical AA filter. Unlike an optical filter, which always creates the identical result, this innovative simulator not only lets the user switch the AA filter effect on and off, but also adjust the level of the effect. This means that the ideal effect can be set for a particular scene or subject based on given photographic conditions.

#### (3) Additional shooting functions enabled by the SR II system

Since the camera's SR unit has a flexible design that tilts the image sensor unit in all directions, additional shooting functions are enabled, including auto level compensation, image-composition fine-adjustment, and Astro Tracer, a feature that works along with the built-in GPS, to produce super-sharp images of the night sky.

\* Lenses compatible with this mechanism: K-, KA-, KAF-, KAF2-, KAF3- and K AF4-mount lenses; screw-mount lenses (with an adapter); and 645- and 67-system lenses (with an adapter). Some functions may not be available with certain lenses.

\*\* This function works most effectively with a shutter speed of 1/1000 second or slower. This function may not be combined with some shooting modes, including the Pixel Shift Resolution system.

4. Flexible, tilting LCD monitor facilitates shooting in the dark

On its back panel, the PENTAX K-1 Mark II features a flexible, tilting LCD monitor, which can be adjusted to the desired angle horizontally, vertically or diagonally with a single adjustment, without deviating from the lens's optical axis. The user can not only tilt it approximately 35 degrees horizontally and approximately 44 degrees vertically, but also pull it out from its base to view the on-screen image from above for waist-level photography. This large, 3.2-inch LCD monitor has approximately 1,037,000 dots and a 3:2 aspect ratio, and provides a protective tempered-glass front panel for added durability. In addition to its wide-view design, it also features a unique air-gapless construction, in which the air space between LCD layers is eliminated to effectively reduce the reflection and dispersion of light for improved visibility during outdoor shooting. Its outdoor monitor function, which allows instant adjustment of the monitor's brightness to the desired level, has also been improved to provide greater visibility in dark locations. Its red-lit monitor display function facilitates monitor viewing when the photographer's eyes have become accustomed to a dark location during nighttime photography.

5. SAFOX 12 with 33 sensor points and full-frame-proportioned AF frame

Using a SAFOX 12 AF sensor module with 33 AF sensors (25 cross-type sensors positioned in the middle), the PENTAX K-1 Mark II optimizes the autofocus process, and assures high-speed autofocus operation in the AF.S (AF Single)

mode. The center sensor and two sensors located just above and below it are designed to detect the light flux of an F2.8 lens, making it easy to obtain pinpoint focus on a subject when using a large-aperture lens. Its AF Tracking algorithm has also been revised to improve tracking accuracy of fast-moving subjects in the AF.C (AF Continuous) mode.

# 6. PENTAX Real-Time Scene-Analysis System, developed using artificial intelligence technology

By combining an approximately 86,000-pixel RGB metering sensor with the high-performance PRIME IV imaging engine, the PENTAX K-1 Mark II's advanced PENTAX Real-Time Scene Analysis System performs real-time analysis of the brightness distribution over the image field and the subject's colors and movement. Based on this data, it then measures the subject's lighting conditions with great accuracy and optimizes the exposure. By adopting a breakthrough artificial intelligence technology, deep learning, to its algorithm,\* it assesses each individual scene more accurately, and optimizes the exposure settings for a given scene or composition.

\* Effective when the AUTO exposure mode is set to Scene Analyze Auto and the Custom Image mode is set to Auto Select.

### 7. Easy-to-focus optical viewfinder with nearly 100-percent field of view

Optimized for a 35mm full-frame digital SLR design, the camera's optical viewfinder provides a nearly 100-percent field of view and an approximately 0.7-times magnification. Using a combination of a condenser lens and aspherical lens, it provides a wide field of view and a clear, undistorted image of the subject. It comes with a Natural Bright Matte III focusing screen, acclaimed for ease of focusing during manual-focus operation, and true-to-life rendition of defocused areas in the viewfinder image. In addition, its transparent viewfinder display makes it possible to superimpose a wide range of photographic data over the viewfinder image.

#### 8. High-speed continuous shooting

The PENTAX K-1 Mark II allows continuous recording of as many as 17 images in the RAW format (or a maximum of 70 images in the JPEG Best format) in a single sequence, at a top speed of approximately 4.4 images per second. This is made possible by the combination of advanced mechanisms including a damper mechanism that effectively minimizes mirror shock; high-speed, high-precision control of the shutter and mirror units; and a high-speed data transmission system incorporated in the PRIME IV imaging engine. In the APS-C Crop mode, the drive speed can be boosted to as high as approximately 6.4 images per second, and as many as 50 images in a single sequence in the RAW format (or 100 images in the JPEG Best format) to assure quick response to fast-moving subjects.

9. Supportive shooting functions to improve picture-taking efficiency and operational comfort

?Operation-assist light function, which sets LED lights at four different spots around the camera body — above the lens mount, behind the LCD monitor, at the memory card slot, and at the cable switch terminal — to facilitate lens and memory card changes, attachment and removal of the cable switch, and control button operation at night and in poorly lit settings.

?Key lock function, which prevents erroneous operation of the four-way controller and other exposure-related control buttons.

?Smart Function, which allows the user to swiftly choose and set desired functions using just the function dial and the set dial on the camera's upper panel, without referring to the menu screen on the LCD monitor.

?Control panel customize function, which allows the user to change a listing and/or position of the on-screen menu.

10. Compact, rugged body with dustproof, weather-resistant construction

The camera's bottom panel and front and back frames are all made of sturdy yet lightweight magnesium alloy. Although the camera features a dependable, durable shutter unit that can withstand 300,000 shutter releases (measured under actual shooting conditions) for professional use, its body has been downsized to the minimum possible, thanks to the incorporation of a unique floating mirror structure. With the inclusion of 87 sealing parts in the body, the camera also boasts a dustproof, weather-resistant and cold-resistant construction, assuring solid operation at temperatures as low as -10°C. All these features make the PENTAX K-1 Mark II a dependable, all-purpose performer, even under demanding shooting conditions.

11. Full HD movie recording with an array of creative tools

The PENTAX K-1 Mark II captures Full HD movie clips (1920 x 1080 pixels; 60i/ 30p frame rate) in the H.264 recording format, and comes equipped with a stereo mic terminal for external microphone connection, and a headphone terminal. The user can also adjust the audio recording level manually, monitor sound pressure levels during microphone recording, and cut down wind noise using a new wind-noise reduction mode. In addition to a host of distinctive visual effects for movie recording,\* the camera also provides the interval movie mode, which captures a series of 4K-resolution (3840 x 2160 pixels) movie clips at a fixed interval.

\* When special image processing is required, the frame rate may vary depending on the selected special-effect mode.

#### 12. Built-in GPS module

The PENTAX K-1 Mark II provides a variety of advanced GPS functions, including the recording of location, latitude, longitude, altitude and UTC (Universal Time Coordinated) and direction at the time of shooting. The user can easily access images containing GPS data using a computer, to browse them, check on shooting locations and position data on the screen, or save them.

The camera also provides a set of other unique tools, including: Electronic Compass, which displays the camera's direction on its LCD monitor; GPS log, which keeps track of the photographer's movement; and Astro Tracer, which simplifies the tracing and photographing of celestial bodies by coupling GPS data with the camera's SR mechanism.

#### 13. Other features

?High-grade DRII (Dust Removal II) mechanism for effective elimination of dust on the image sensor using ultrasonic vibration

?Crop mode with a choice of image area from AUTO, FF (Full Frame), APS-C and 1:1

?Wireless LAN connection to support the operation with smartphones and table computers, the transfer of captured images, and remote shooting operations

?HDR (High Dynamic Range) shooting mode with RAW-format data filing, usable in handheld shooting

?The PENTAX-invented hyper operating system for quick, accurate response to the photographer's creative intentions

Pual SD card slots for memory card flexibility (compatible with SDXC UHS-1 speed class in SDR104 bus speed mode)

?Compensation of various parameters: lens distortion, lateral chromatic aberration, diffraction, and brightness level at image-field edges. Fringe effect compensation is also available in RAW-format processing.

?Bulb Timer function to improve operability in bulb shooting

?Compatibility with PENTAX Image Transmitter 2 tethering software (software update required from RICOH IMAGING official website)

?Digital Camera Utility 5 software (latest version) included