



PENTAX K10D
CHALLENGE LIGHT.

PENTAX

INTOXICATING COLOURS: PENTAX PRECISION OPTICS.

Light is the element of seeing and it brings colour into the world. PENTAX has excelled in this medium for over 85 years. Since our beginning our engineers have brought forth innovative precision optical equipment year after year. PENTAX optics – photo cameras, medical endoscopes as well as industrial and measurement optics – are always ahead of their time regarding quality, precision and innovation.

Founded in Tokyo in 1919 as Asahi Optical Joint Stock Co., PENTAX succeeded in 1954 with a break-through in modern photography: the Asahiflex IIB the – world's first SLR camera with a quick-return mirror. A success story that has continued until today. In 1971 the PENTAX ES introduced the first SLR with TTL auto exposure. The same year witnessed another milestone: the acclaimed SMC coating process for lenses that reduce light losses in lenses to a minimum. And in 1975 the PENTAX K2DMD – a genuine classic – pioneered the K-mount bayonet system for interchangeable lenses. These historical breakthroughs can be traced all the way through to today with the successor to these legends: the PENTAX K10D – the latest shining light in a range of exacting SLR technology. You owe it to yourself to learn all about it.

CONTENTS

PENTAX PRECISION OPTICS	2
THE NEW K10D	4
SPEED	6
DURABLE TECHNOLOGY, SHAKE AND DUST REDUCTION	8
LIGHT CONTROL	10
DATA STORAGE	14
PENTAX LENSES	16
PENTAX FLASHES GUNS	18
ORIGINAL PENTAX ACCESSORIES	20
FUNCTIONS AND STRUCTURE	22
TECHNICAL DATA	24

FOR ANYTHING THAT COMES TO LIGHT: THE PRECISION PENTAX K10D.

PHOTOGRAPHY WITHOUT LIMITS.

The PENTAX K10D not only opens new perspectives to you, with maximum speed and also with maximum performance. It works more rapidly, more precisely, and more realistically than any other digital SLR in its class. All components and functions are attuned to highest photographic requirements. It can shoot up to 3 fps – with a resolution of 10 megapixels. Recording delays are virtually non-existent because the new image processing system PRIME (PENTAX Real Image Engine) calculates the graphic data remarkable speed. Brilliance in sharpness and colour as well as simplicity in operation and comfort are always there. And further intelligent systems are provided: supersonic direct-drive technology for ultra-fast focusing, "Dust Reduction" (DR) against finest dust particles and "Shake Reduction" for blur-free photographs. Everything is there so that you can concentrate on what is really important: creative perfection.



FOR AMAZING RESOLUTION: 10 MEGAPIXELS.

The new 23.5x15.7mm CCD sensor records photos with a resolution of up to 10 megapixels. This is enough for you to produce truly astounding fine-grained prints of up to 50x70cm without difficulty.

FOR REMARKABLE PROCESSING SPEED: PRIME.

The new PRIME processor (PENTAX Real Image Engine) greatly accelerates the image processing of the PENTAX K10D compared to other current digital SLRs. For this a DDR2 component is used. This has a reading rate of 800 MB/sec. making it 600% faster than SDRam and 100% faster than the conventional DDR memory.

FOR PRECISE COMPOSITION: PENTAPRISM FINDER.

The bright pentaprism viewfinder shows the quality of the photo perfectly regarding colours, brilliance and picture composition with a 0.95x magnification and a 95% image field – also in back light conditions or during night photography. The focussing screen can be changed for special applications.

FOR PIN-SHARP FOCUS: SUPERSONIC 11 POINT AUTOFOCUS.

You can individually select each of the 9 AF cross-sensors or 2 vertical sensors. The sophisticated Automatic Mode can automatically focus on the subject with utmost precision, even when it is positioned off centre. Piezo electronics are integrated into our newest lenses that allow automatic focusing at ultrasonic speeds.

FOR SHAKY SITUATIONS: SHAKE REDUCTION.

The opto magnetic 3D-Sensor suppresses camera shake: it works within the housing independently of the lens and counteracts camera shake when shooting with long focal lengths or under low light. It offers an outstanding compensation effect equivalent to between two and four shutter-speed steps.

FOR DUST-FREE PICTURES: DUST REDUCTION.

The special nanotechnology fluorine coating on the low-pass filter seals the upper surface and prevents dust on the sensor. The "Dust Reduction" system removes remaining particles by short, intensive vibrations. For the photographer this means an end to annoying dust specks and time-intensive retouching.

CATCH THE LIGHT WITH THE LIGHTNING-FAST K10D.

FOR SPEED AT THE RIGHT MOMENT.

It takes exactly 8 minutes and 19 seconds for a ray of light to travel from the sun to the earth. Each passing moment is unique and if an opportunity presents itself there isn't a second to lose. The new PENTAX K10D is always ready to capture the moment in an instant.

THE ANSWER FOR DAZZLING SPEED: PRIME.

Where it comes to speed, all components must work together perfectly. The new PRIME processor has been exclusively developed for the PENTAX K10D: controlling all the procedures of the image processor and memory transfer, the K10D achieves a speed advantage beyond those of conventional digital SLR cameras. What does "speed" actually mean? With the new PRIME computer processing speeds of 800 MB/sec. are attainable. That is 6x faster than the standard SDR processors.

For the photographer this directly effects how fast he can shoot. The K10D can shoot at an astonishing 3 fps, in JPEG format, until the memory is full, and shooting RAW files will yield up to 9 pictures. And the K10D is fully compatible with SDHC memory cards that are currently available with capacities up to 4 gigabytes.

FOR GENUINE BEAUTY: THE CCD SENSOR.

To convert light into perfect digital photos the K10D possesses a particularly efficient CCD sensor with 10 megapixel resolution and a sensitivity range of ISO 100 to ISO 1600. Among its other applications, PRIME provides extremely low picture noise and also higher sensitivity.

As a result, white is really white because the white balance works outstandingly well. Apart from the usual pre-setting and the manual white balance adjustment, 3 different colour temperature values can be entered manually.

FROM LIGHT TO PHOTO: 22 BIT A/D CONVERTER WITH 2 CHANNEL OUTPUT.

The K10D processes graphic data from the CCD over two channels to the 22 bit analogue-to-digital converter where the picture signals in the digital data are converted. This new technology affords a substantially higher dynamic range resulting in a finer tuning of colours compared to conventional 12 bit converters.

With this new technology PENTAX is again a step ahead of the market. The photographer is the winner: digital pictures are now virtually indistinguishable from analogue film pictures in terms of colour and dynamic range.

FOR FOCUS AT THE SPEED OF LIGHT: THE SUPERSONIC PRINCIPLE.

When the action is fast, the camera must be able to follow and adjust focus in fractions of a second. Think of a striker zigzagging across the pitch for a showdown at the goal. PENTAX has developed a Piezoelectronic based autofocus control that focuses the lens faster and more precisely than ever before. PENTAX will introduce a selection of new lenses and will continually expand the range. An important note regarding speed: the K10D is already impressively fast when it comes to focusing conventional AF lenses. With supersonic technology the focusing speed will be truly extraordinary. With the supersonic motors in the new lenses the K10D will become an indispensable tool for all fast-action sport events.

WE HAVE DEVELOPED A RESISTANCE TO AGAINST THE NATURAL ENEMIES OF BRILLIANT PHOTOS.



PERFECTLY RESISTANT: AGAINST HUMIDITY, SPRAY AND DUST.

Whether you're shooting on a drizzling Autumn morning, on a snowy mountain side, along a dusty desert trail or in a tropical rain forest: the seals around the durable K10D body reliably protects the inner components against humidity and the finest dust particles. Other design defences further protect the K10D from the forces of nature. The fibre-reinforced polycarbonate body surrounding the high-rigidity stainless-steel chassis provides for the necessary robustness for rugged daily use.



A complete system: the K10D is protected by 72 seals and the battery grip with an additional 38, assuring complete protection against humidity, dust or sand. PENTAX currently offers the highest level of protection.



Durable and solid: the stainless-steel chassis is also insensitive to corrosion and is extremely stable.

FOR SHARP RESULTS: SHAKE REDUCTION.

The new developed PENTAX "Shake Reduction" technology solves one of the oldest photographic problems: blur caused by camera shake. The new K10D produces sharp photos in challenging situations without having to use a tripod: hand-held photography is now possible with long telephoto lenses or when long exposure times are required due to poor lighting.

The PENTAX "Shake Reduction" system is integrated into the camera body and is totally independent of the lens in use. The principle behind operation is simple: movement sensors in the body recognise camera shake. The optomagnetic 3D sensor ensures that at the moment of exposure the compensating movements of the CCD sensor provides for blur-free pictures. The advantage is obvious: you can increase your hand-held shooting by up to 4 stops. If you are consciously moving the camera when shooting – while panning an F1 car along the track, for example – you can simply deactivate the "Shake Reduction" system.



CCD plate with electromagnets to control the "Shake Reduction" mechanism is connected to permanent magnets to the metal frame as a unit.



NO DUST IN THE PICTURE: THE DUST REDUCTION.

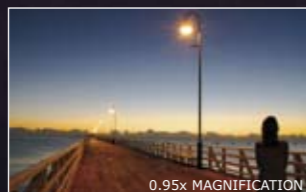
The K10D offers yet another surprise: the movable sensor utilised for the "Shake Reduction" system makes one more important detail possible: Dust Reduction. Behind the "Dust Reduction" designation lies an entire system unto itself – a system that ensures dust flecks on the picture are a thing of the past. The first component is the surface of the low pass filter is sealed with a nanotechnology based fluorine coating. This ensures that dust cannot adhere to the sensor surface. In the next step, dust that still remains on the surface is shaken off when the SR system shifts the CCD at high speed. The dust that is shaken off the CCD falls onto an adhesive sheet eliminating any possibility of its returning to the CCD surface. This function can often be arbitrarily repeated, and be implemented automatically when desired when switching the camera on. Dust flecks are now a thing of the past – along with annoying and time consuming retouching work.

ART INVOLVES SHOWING LIGHT IN ITS ENTIRE SPECTRUM.

THE BALANCE BETWEEN LIGHT AND DARK.

How can you always measure of the right intensity of light? The PENTAX K10D makes it easy. On the one hand it features numerous automatic as well as semi-automatic exposure functions. On the other hand it helps you if you want to determine the actual lighting parameters yourself in relation to the composition of your shot. The CCD sensor works in the broad range of sensitivity between – ISO 100 and ISO 1600 – and with shutter speeds up to 1/4,000 second. With the K10D is there no situation – whether day, night or twilight – where you can't bring extreme contrasts into perfect brilliance and balance.

YOU SEE WHAT YOU GET WITH A PENTAPRISM FINDER.



The greatest advantage of SLR technology is that you see in the viewfinder the exact scene before you release the shutter. The K10D perfects this idea with a true pentaprism viewfinder that features a 0.95x magnification – offering a view that fills your vision. It shows everything brightly, brilliantly, and in true-to-life colour that makes demanding photography possible even in back lighting or in night photography. And it's a snap to change the ground-glass focussing screen for even more demanding photographic applications.

THE MOST IMPORTANT NUMBER IN EXPOSURE MEASUREMENT: 16.

As the director of your pictures you're responsible for the light: the K10D easily handles that requirement with its 16 segment metering system. It can accurately assess the balance between the bright and dark areas within the segments automatically, or, alternatively, you can opt for centre-weighted or spot metering yourself.

THE 11 POINTS OF THE SHARPNESS: AUTOFOCUS.



The focus determines the crucial overall impression of the photo: determining what aspect of the shot needs to be in sharp focus resolves the meaning of the photo. The K10D utilises an 11 point autofocus system. In automatic operation (AUTO) the camera recognises which object is nearest and chooses that as the main focus point. If you want more

direct control you can select any of the 11 points individually by selecting your preferred focus point on the focussing screen. It is also possible to simply select centre of the image as your main point of focus.



With continuous autofocus the focus is continually being adjusted, even if you move the camera. With certain lenses it is possible to manually tweak the focus after the autofocus system has selected its reference point – or, should you prefer more direct control, you can always focus manually. However, one thing is certain, whether auto or manual focussing, you can always rely on the accuracy of the 9 cross and 2 vertical sensors.

SENSITIVITY IS EVERYTHING: THE ISO RANGE.

The K10D has a wide range of sensitivity, operating between ISO 100 and ISO 1600. Naturally, you can select the ISO value manually – even selecting intermediate values. What's more, in automatic operation you can determine the ISO range in which you want to work, and the camera selects the optimal ISO value depending on the specifics of each shot. With the new Sv Automatic mode the sensitivity can be changed at will simply by turning the selector wheel – even with the camera at eye level while you're concentrating on the composition. Additionally, the ISO setting can easily be read in the viewfinder by simply pressing a button.

THE RIGHT COLOUR: WHITE.

The white balance determines colour accuracy. With the K10D you can either specify one of the standard programs or make your choice manually. What is your preferred reference point? The K10D gives you the colour options of either 100 Kelvin or 20 Mired temperature degree steps. And if that isn't enough, you can fine-tune colour temperatures further – you can even preview your shot to help make the right determination. If you find yourself shooting regularly under certain conditions, you can manually enter 3 colour temperature settings into memory. The colour system in which your photos are to be recorded is also freely selectable. You can opt for one of two standards: Adobe® RGB (optimal for electronic image processing and reproductions) and S-RGB (optimal for art work).

THE CRUCIAL DETAIL: PROGRAM SHIFT.



You'll always get the right exposure – and with the settings you want: when shooting on the K10D in the Programmed Automatic Mode you can use Hyper Program (Shift Function) to instantly change the shutter speed or aperture. When you change either of these settings the other exposure parameter automatically changes accordingly. The Hyper Program function is accessible by two ergonomically placed dials on the front and the back of the camera.

The K10D presents multiple options for automatic exposure. A new Sensitivity-Priority AE (Sv) mode, which is designed to automatically select the optimum combination of aperture and shutter speed for a user-selected sensitivity. In the Sv mode the sensitivity can be shifted simply by turning a dial. The Shutter Priority (Tv) mode lets you choose the optimal shutter speed and the Av mode lets you select the appropriate aperture. Another exposure mode offered by the K10D is Shutter & Aperture-Priority AE (TAv) mode, which is designed to automatically select the most appropriate sensitivity for a user-selected shutter-speed & aperture combination.

If you are working with PENTAX FA-, DA- or DFA- series lenses you can benefit from the MTF Automatic mode: an microchip in the lens passes information to the camera regarding the optically optimal and lens-specific aperture to use.

EVERYTHING IN VIEW: THE LARGE 2.5" WIDE ANGLE MONITOR.

See the result immediately on the large TFT monitor – 6.3 cm (2.5") diagonal – with ease and comfort. The monitor is particularly bright and sharp and allows an off-axis viewing angle of up to 140°. With a high resolution of 210,000 pixels even a twenty fold enlargement is not a problem – you can critically judge the details of each shot and clearly read the on-screen menus and camera functions.



WHEN YOU REALLY NEED TO CHECK THE DETAILS: THE PREVIEW FUNCTION.

Not even professionals get the shot right the first time. Is the exposure exactly as you wanted? With the Preview function you can capture the image using the parameters that you consider to be approximately correct. You can then preview the image on the monitor to see the results and then adjust your fine-tuning. Not only can you adjust the white balance, contrast or colour saturation, but you'll also see the results immediately and how each change affected the image. This preview image can even be magnified for more critical evaluation. Other valuable aids to the photographer are an RGB histogram, separated according to channels as well as a HotSpot warning.

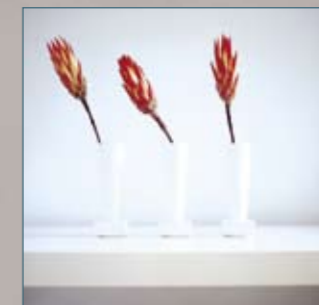
ALWAYS ON THE RIGHT SIDE: THE AUTO IMAGE ROTATION.

No matter whether you take photos in landscape or portrait format the K10D always stores the image right side up so that you can avoid the annoying rotation of the pictures before viewing.

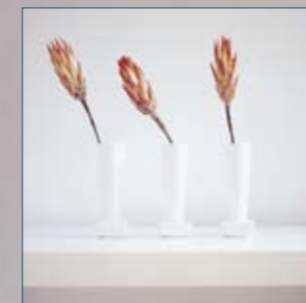
THREE TIMES DIFFERENTLY: BRACKETING EXPOSURE.



It is often difficult to judge the correct exposure – even for an experienced photographer. This is where Auto bracketing renders valuable assistance. Choose between a series of 3 or 5 exposures with each shot varying from over- to under-exposure. One of the series is sure to be the shot you want. But if that is not enough, the K10D also allows you to shoot a series bracketed for white balance, focus, saturation and contrast.



Bracketing: contrast



Bracketing: white balance

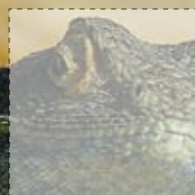


Bracketing: saturation

IF YOU'RE ALREADY TAKING GREAT PHOTOS HOW CAN YOU GET MORE OUT OF THEM?

THE QUALITY QUESTION: 10 MEGAPIXELS OR 6 MEGAPIXELS?

With the resolution of 10 megapixels the K10D produces digital photos of the highest standard. You create optimal quality prints up to 50x70 cm. But you don't always have to work with the maximum resolution – you can easily shoot at a lower resolution if your images are only meant to be used on the Internet. The K10D offers the possibility of selecting resolutions between of 2, 6 or 10 megapixels. However, photos with 10 megapixels have a crucial advantage: they keep all options open for later use. You can easily crop a shot for greatest impact without having to accept a noticeable loss of quality.



LOCATION IS EVERYTHING: SDHC MEMORY CARDS.

Taking a rapid series of shots at high resolution produces very large data files. To ensure that you always have enough available memory, the K10D is compatible with the new SDHC memory cards that are currently available with a capacity of up to 4 Gb.

GLOBAL FORMATS: DNG AND JPG.

The raw data of your digital photos are as high-quality as negatives or slides of the film age. Instead of conventional RAW files, which can be worked on only with the respective manufacturer's software, the K10D has the option of storing your photos in DNG format, which is compatible with Adobe® Photoshop®.

For simple purposes or for archiving you can also select compressed JPG format. With a push of the RAW button the camera stores your photos in parallel as both the DNG- and in JPG format.

GETTING MORE OUT OF IT: IMAGE PROCESSING IN THE CAMERA.

The processing of images begins in the camera. During the basic set-up the photographer can set his or her personal preference on how they want their the pictures to appear: do they prefer the images to be neutral in colour rendition, or would they prefer something a bit more elaborate and colourful. The user can also store their preferred parameters for sharpening, contrast and colour saturation. These settings can be different for Program mode control and the User Program.

Something entirely new is the RAW converter in the camera. Photos that were taken in RAW can be directly converted to JPEG files in camera, as they are stored. The following parameters can be selected and adjusted for conversion:



- Resolution
- Compression
- White balance
- Sensitivity
- Colour intensity
- Saturation
- Sharpness
- Contrast

DREAMS OR REALITY: COLOUR FILTERS.

The world does not always look so rosy. Sometimes you have to work a little extra to make it appear more interesting. One proven and important method for doing this is with a filter. Whether for colour photography or for black-and-white, the PENTAX K10D offers a rich selection of filters. During processing a mysterious and interesting black-and-white picture may develop from a colour shot. For fun effects there is even a filter to make your subject appear to be slimmer – or broader (if you dare!).

Even if the picture is already "in the box" it may not be finished – in fact, the creativity has only just begun.

HOW DO YOU REALLY WANT TO SEE THE WORLD? WE HAVE THE RIGHT LENS.

FAST, BRIGHT AND COMPATIBLE.

Highest quality optical systems have been the goal of PENTAX since 1919. Even other well-known camera manufacturers use our lens systems. For its range of discerning SLR cameras PENTAX has always followed the principle of manufacturing timeless high-quality lenses that will be compatible with future camera models. Regardless of their targeted application the new lenses are noted for being particularly bright, flexible and compact. Whether a zoom for an increased focal length range, a telephoto to bring distant objects near or a macro lens to give life to the smallest subject – the PENTAX lens system offers the range for today's cameras.



smc-DA 70mm/
2.4 Limited

PREMIUM LENSES: LIMITED EDITION.

In the time when the rest of the photographic industry was controlled by key words like "budget price", "enormous zoom range", plastic lenses and plastic lens housings, PENTAX embarked on a unique programme of producing very special lenses. Very soon the first lenses bearing the designation "Limited Edition" were offered for our 35mm SLR range. These were compromised of high-quality lenses with fixed focal lengths. The First-rate optical quality is underlined through their costly precision lens housings: the f/stop numbers and depth-of-field scales are engraved into the metal lens barrel instead of being screen printed. The lens hood is a rigid component part of the lens construction – that reflects the beauty and function of the design – and is precisely adapted to the lens. The new 2.4/70 mm is the latest representative of this acclaimed series.

And why Limited?

Given these very refined details, it is easily understood that lenses such as these do not roll off the assembly line in great quantities. The daily output may be limited, but the lifetime of the lens most certainly is not.

THE LATEST CRITERION FOR PENTAX LENSES: SPEED.

PENTAX has developed a new lens range for the K10D: the DA* series. The new lenses work with particularly quick supersonic technology: Piezo electronics-based autofocus control adjusts the focus of the lens at lightning speed. Additionally, the K10D recognises the "digital finger print" of the lens and knows the optimal setting values for exposure (MTF technology) for each DA* lens. The new supersonic lenses are – like the K10D – completely protected from humidity and dust.



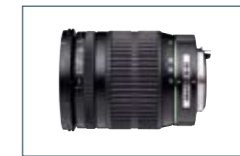
smc-DA 14mm/2,8 ED



smc-DA 10-17mm f/3,5-4,5 ED (IF) (15-25,5mm) Fish-Eye



smc-DA 12-24mm f/4,0 ED (IF) (18-36mm)



smc-DA 16-45mm f/4,0 ED (24-67mm)



smc-DA 18-55mm f/3,5-5,6 AL (28-83mm)



smc-DA 50-200mm f/4,0-5,6 ED (75-300mm)



smc-DFA 50 mm f/2,8 Macro (75mm)



smc-DFA 100mm f/2,8 Macro (150mm)

LENSES – AVAILABLE SEPARATELY

(The values in brackets are the equivalent focal lengths for digital cameras with a lens factor of 1.5.)

LENS	GROUPS/ELEMENTS	ANGLE OF VIEW (°)	MIN. APERTURE	MIN. FOCUSING DISTANCE	MAG. RATIO	DIAMETER/LENGTH	WEIGHT	FILTER SIZE
Special lenses for digital cameras								
smc-DA 14mm f/2.8 ED (IF) (21mm)	11/12	90	22	17cm	1:5,3	83,5x69mm	420g	77mm
NEW smc-DA 21mm f/3.2 Limited (32mm)	8/5	68	22	20cm	1:5,9	63x25mm	140g	49mm
smc-DA 40mm f/2.8 AL (60mm)	5/5	39	22	40cm	1:7,7	63x15mm	85g	49mm
NEW smc-DA 70mm f/2,4 Limited	6/5	23	22	70cm	1:8,3	63x26mm	130g	49mm
smc-DA 10-17mm f/3.5-4.5 ED (IF) (15-25.5mm)	8/10	180-100	22~32	14cm	1:4,2	68x71,5mm	320g	-
smc-DA 12-24mm f/4.0 ED (IF) (18-36mm)	11/13	99-61	22	30cm	1:8,3	87,5x84mm	430g	77mm
smc-DA 16-45mm f/4.0 ED (24-67mm)	10/13	83-35	22	28cm	1:3,8	72x92mm	365g	67mm
smc-DA 18-55mm f/3.5-5.6 AL (28-83mm)	9/12	76-29	22~38	25cm	1:3	67,5x68mm	225g	52mm
smc-DA 50-200mm f/4.0-5.6 ED (75-300mm)	10/11	31,5-8,1	22~32	110cm	1:4,2	66,5x78,5mm	255g	52mm
Digital lenses compatible with all SLR cameras (digital/film)								
smc-DFA 50mm f/2.8 Macro (75mm)	7/8	47	32	19,5cm	1:1	67,5x60mm	265g	49mm
smc-DFA 100mm f/2.8 Macro (150mm)	8/9	24,5	32	30,3cm	1:1	67,5x80,5mm	345g	49mm
Film lenses compatible with all SLR cameras (digital/film)								
smc-FA 31mm f/1.8 AL (47mm)	7/9	70	22	30cm	1:6,3	65x68,5mm	345g	58mm
smc-FA 77mm f/1.8 (115mm)	6/7	31,5	22	70cm	1:7,1	64x48mm	270g	49mm
smc-FA 20-35mm f/4.0 AL (10-53mm)	8/10	94-63	22	30cm	1:6,3	69,5x68mm	245g	58mm
smc-FA 28-105mm f/3.2-4.5 (42-158mm)	11/12	75-23,5	22~38	50cm	1:5,3	65,5x66mm	255g	58mm
smc-FA 35-80mm f/4.0-5.6 (53-120mm)	7/6	63-30,5	22~32	40cm	1:4	65x58,2mm	160g	49mm
All SLR cameras with aperture control on the body (digital/film)								
smc-FAJ 18-35mm f/4.0-5.6 AL (28-53mm)	10/12	100-63	22~32	28cm	1:5,5	72x68,5mm	190g	67mm
smc-FAJ 28-80mm f/3.5-5.6 (42-120mm)	8/8	75-30,5	22~38	40cm	1:4	63x67mm	180g	58mm
smc-FAJ 75-300mm f/4.8-5.8 (113-450mm)	10/12	32-8,2	32~38	130cm	1:3,3	69x116mm	385g	58mm
Converters for all cameras without Autofocus (digital/film)								
smc-A 1,4x S	4/5	-	-	-	-	64,5x21,5mm	145g	-
smc-A 2x S	6/7	-	-	-	-	64,5x39mm	210g	-
smc-A 1,4x L	5/5	-	-	-	-	65,5x28,5mm	175g	-
smc-A 2x L	5/6	-	-	-	-	65,5x63mm	255g	-
smc-F 1,7x Autofokus adapter	4/6	-	-	-	-	64x26mm	135g	-

SELECTING THE BEST TOOL FOR THE JOB: THE RIGHT LENS.



18mm



21mm



28mm



35mm



43mm



55mm



75mm



120mm



140mm



200mm



300mm



600mm

(equivalent to 35mm film format)

IF THE LIGHT NEEDS CONTROLLING, IT WILL DO SO ON YOUR COMMAND.

ALWAYS THE RIGHT LIGHT: PENTAX FLASH UNITS.

Light is the element of seeing and the essence of photography. If the natural lighting and the camera's integrated flash are not sufficient then take one of the flashguns from the PENTAX accessories range: they accurately supply the appropriate amount of light for varying conditions and with many added functions. For the PENTAX K10D we recommend the AF-360 FGZ as a universally applicable flash apparatus, or the top-of-the-line AF-540 FGZ that features a high guide number, bounce/swivel flash head and fast continuous flash shooting.



HOT SHOE ADAPTER F

The Hot Shoe Adapter F is particularly suitable for the SF- and Z-series cameras and the in the FTZ- and FGZ range flash units. It allows for the connection of a sync cable and a flash unit, up to 4 units can be connected together.



HOT SHOE ADAPTER FG

The Hot Shoe Adapter FG is designed so that the camera's built-in flash be used in conjunction with the adapter. The top of the adapter has a socket for the sync cable.



OFF SHOE ADAPTER F

The Off Shoe Adapter F is particularly suitable for use with the FTZ- and FGZ range flashes. The top of the Off Shoe Adapter F contains an additional hot shoe with 4 flash contacts for mounting a flash. The bottom of the adapter features a standard tripod screw mount.



SYNC CABLE F

The sync cable F connects flash adapters and is available as a 0.5m coiled cable or a 3m straight cable.



OFF CAMERA SHOE CLIP

The clamping attachment has a flash hot shoe (without electrical contacts) and is used to attach a flash to an object up to 2.5cm thick.



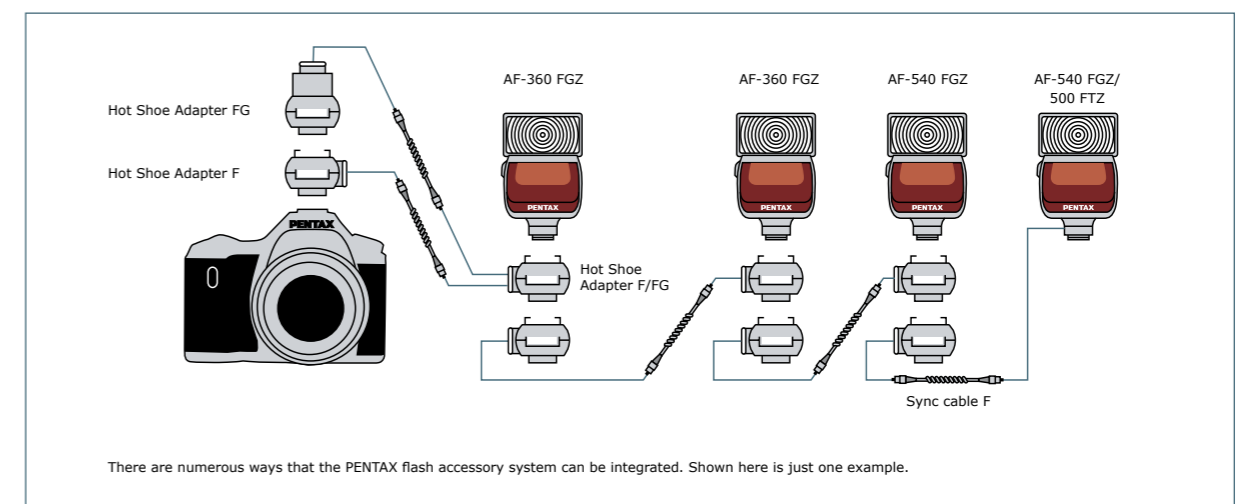
Type	AF-540 FGZ Electronic flash with zoom head		
Guide number	54 at 80mm, 45 at 5 mm (ISO 100)		
Compensation	Flash exposure -3.0 to +1.0 EV , in 0.5 EV steps		
Flash functions	P-TTL, A-TTL, Automatic , Manual (7 steps 1/1-1/64), Slave, Wireless, Flash with 1st and 2nd curtain sync, SB function for distance measurement, Contrast Control, High-Speed-Synchronisation		
Head	Auto zoom, manual zoom, vertical bounce: -10°, 0°, 45°, 60°, 75°, 90° horizontal rotation: right: 0°, 30°, 60°, 90°, 120°, 150°, 180° / left: 0°, 30°, 60°, 90°, 135°		
Flash range	0.8-8m at f/ 5.6 / ISO 100		
Power requirements	4x AA batteries (or rechargeable)		
Battery life		Recycle time	No. of flashes
	Alkali-Manganese (LR6)	approx. 6sec.	approx. 200
	Nickel Metal Hydrid (Ni-MH)	approx. 6sec.	approx. 160
Compatibility	Digital, 35mm, 645, 67 (medium format)		
Dimensions	76x142x107mm (WxHxD)		
Weight	380g (without batteries)		
Accessories	Soft case		

Type AF-360 FGZ ELECTRONIC FLASH WITH ZOOM HEAD

Guide number	36 bei 80mm / 30 bei 50mm (ISO 100)		
Compensation	Flash exposure -3.0 to +1.0 EV , in 0.5 EV steps		
Flash functions	P-TTL, A-TTL, Automatic , Manual (6 steps 1/1-1/32), Slave, Wireless, Flash with 1st and 2nd curtain sync, SB function for distance measurement, Contrast Control, High-Speed-Synchronisation		
Head	Auto zoom, manual zoom, vertical bounce: -10°, 0°, 45°, 60°, 75°, 90°		
Flash range	0,7-5,4m at f/ 5.6 / ISO 100		
Power requirements	4x AA batteries (or rechargeable)		
Battery life		Recycle time	No. of flashes
	Alkali-Manganese (LR6)	approx. 6sec.	approx. 250
	Nickel Metal Hydrid (Ni-MH)	approx. 6sec.	approx. 160
Compatibility	Digital, 35mm, 645, 67 (medium format)		
Dimensions	76 x 142 x 107 mm (WxHxD)		
Weight	270g (without batteries)		
Accessories	Soft case		



FLASH SYSTEM



TO COMPLETE THE KIT: A GRIP FULL OF POWER.

If you have the K10D you'll have everything that a photographer really needs. But there are, however, a few important accessories that can facilitate the work of everyday life and any photo safari: original PENTAX accessories. The quality, ergonomics and relevance are as well thought out and sophisticated as anything that you've come to expect from PENTAX.



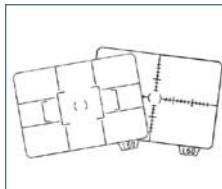
BATTERY GRIP

The PENTAX battery grip D-BG2 offers the necessary power to ensure an optimal performance of the K10D camera while it's in continuous use. The grip is equipped with the same Li-Ion battery as the camera.

The battery grip features an additional shutter release, adjusting dial for selecting aperture or shutter speed and other functional controls – particularly practical if shooting vertically. With proven PENTAX ergonomics the camera fits reliably and comfortably in the hand. The battery compartment provides storage space for a memory card and remote control next to the batteries.

PENTAX CROSSOVER BAG

The Crossover Bag is the last word in comfort when you're en route. You can carry it comfortably on your back but when that unexpected photo opportunity presents itself, you can quickly grab the hand strap, easily swivel it forward to access your safely stored equipment – all without taking it off. The Crossover Bag has sufficient storage for a camera body, two extra lenses, a flash, and sundry small articles that the photographer constantly needs.



INTERCHANGEABLE FOCUSING SCREENS

For specific professional applications you can replace the standard focussing screen of the K10D with either a grid screen or a plain ground-glass screen with graduated scale markings.



VIEWFINDER LOUPE O-ME3

With the Viewfinder Loupe attached the finest details will grab your attention. The 1.2x magnification facilitates the assessment of fine details more accurately.



CASE

Something extra up your sleeve: the PENTAX camera case easily accommodates a camera body, two lenses and various accessories.



RUCKSACK

Camera backpack with zipped closure especially designed for photo equipment (camera, two lenses, flash). Additional space for a laptop and everything you'd need for a day's outing.



REMOTE CONTROL F

Shutter release without blur: With the infrared remote control you operate the shutter from in front of or behind the camera up to 5 metres away.



CABLE RELEASE CS-205

The alternative to the IR remote control. This cable release permits blur-free exposures when the camera is mounted on a tripod and provides a shutter lock for long exposures.



REPLACEMENT BATTERY

Interchangeable power: with a pre-charged spare battery you'll never have to stop shooting.



DISPLAY PROTECTION FOIL

The protective plastic film protects the large 2.5" monitor against scratches or other damage that could be caused by something as simple as rubbing against the buttons of your clothes.





VIEWFINDER
The viewfinder provides 0.95x enlargement of the scene and shows precisely the shot that will be stored into memory. It features an integrated dioptre control.



4-WAY CONTROLLER
You need a mouse to navigate your way around a computer. With the K10D you use a 4-Way Controller. The controller is also used to select AF functions.



1. Exposure Bracketing Button
2. Rear e-dial
3. AE-L button
4. +/- button
5. AF button
6. AF point switching dial
7. Card cover unlock lever
8. Shake Reduction switch
9. Fn button
10. Playback button
11. Info button
12. Delete button
13. MENU button
14. Front e-dial
15. Main switch
16. Flash up button
17. Metering mode lever
18. RAW button
19. Focus mode lever
20. Built-in flash
21. Green button
22. Shutter release button

PROGRAM SELECTION DIAL

Program selector for exposure modes, user settings and flash sync setting of 1/180sec.



LCD DISPLAY

The upper display can be illuminated to give an overview of important settings such as shutter speed, aperture, ISO value, exposure mode, of operation, battery life indication, available memory, exposures remaining and exposure compensation.



THE K10D INFORMATION DATA BASE IS ALWAYS ON CALL.



HISTOGRAM
A Histogram with HotSpot indication is also available in the preview mode and can show channel separately.



PICTURE INFORMATION
All relevant data is shown for every photograph.



CAMERA SETTING OVERVIEW
Confirm the cameras settings at a glance. When the camera is switched on or an exposure function is changed the settings are shown on the monitor.



CUSTOM SETTINGS
Individualise your camera. Camera parameters are grouped and coloured coded. The photographer has access to 32 options with 81 choices in this menu.



"SHAKE REDUCTION"
The "Shake Reduction" works fast and reliably up to focal lengths of 800mm. Under normal conditions the camera automatically recognises the focal length. The focal length of older manual lenses must be entered manually. In addition to the focal length, 3 levels of "Shake Reduction" can be selected.



MULTI EXPOSURE
What photographer doesn't know about multiple exposures? Up to 5 shots can be taken to produce a single image. It can even calculate the proper exposures for you.

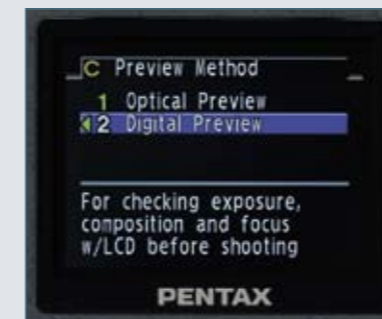


IMAGE PREVIEW
Opt for either digital preview (as test shot function) or for depth-of-field preview. You will always know the result before you shoot.



BATTERY SELECTION AND STATUS
You can choose which battery to use first, or let the camera decide. Regardless of the option selected the battery status is visible on the monitor.



ALLOCATION OF E-DIALS
With so many functions to choose from it is most helpful for the photographer to determine which parameter is to be adjusted with which dial. You can determine which functions are assigned to the front and rear e-dials.

TECHNICAL DATA

TYPE	Digital SLR camera with interchangeable lenses TTL metering and integrated P-TTL automatic flash Metal chassis with fibre-reinforced polycarbonate body			
CCD	23.5x15.7mm Interline Interlace CCD with primary colour filter 10.75 Megapixel – total 10.2 Megapixel – effective Opto-mechanical sensor with "Shake Reduction" function			
LENS MOUNT	K _{AF} bayonet, compatible with K _{AF2} , K _{AF} , KA- lens mounts, KAF power zoom function available, K- lens mounts with with restrictions, M42 and medium format lenses with adapter subject to restrictions with exposure metering and control			
COLOUR DEPTH	3x8 bit in JPEG, 3x12 bit in RAW (internal 3x22 bit)			
IMAGE FORMATS/ RESOLUTION	RAW (PEF, DNG), JPEG (Exif 2.21), DCF, RAW (PEF, DNG) + JPEG			
	RAW	JPEG	JPEG	JPEG
Best	3,872x2,592	3,872x2,592	3,008 x 2,000	1,824 x 1,216
Better	237	804	1340	3657
Good		1371	2277	6034
		2366	3892	10057
	All capacities with 4 GB memory card (available optionally)			
MEMORY	SD, SDHC card compatible			
VIEWFINDER	Built-in pentaprism finder with a 95% field of view and 0.95x magnification (with 50mm F1.4 lens, infinity, -1m ⁻¹), with interchangeable "Natural Bright Matt II" focusing screen. Dioptre correction -2.5 – +1 dpt.			
PREVIEW	Optical depth of field preview, digital preview on LCD monitor			
MONITOR	2.5" low-temperature polysilicon TFT colour LCD Monitor with 210,000 pixels, brightness control and wide viewing angle (approx. 140°), single image review with 20x magnification, Hot Spot indicator and Histogram display with RGB channel indicators (also in Preview function), auto image rotation for orientation viewing			
FOCUS	TTL Phase Matching with 11 focus points (SAFOX VIII) with viewfinder indications adjustable between automatic and manual focus point selection, spot focus. Support for lenses with supersonic focusing motors. Manual focus			
EXPOSURE MODES	Program (Green Mode), Hyper Program, Sensitivity Priority, Shutter Priority, Aperture Priority, Shutter and Aperture Priority, Manual (Hyper Manual), Bulb, X-sync, Shutter speeds 1/4,000 to 30 sec.			
METERING SYSTEM	TTL open-aperture 16-segment metering coupled with lens and AF information, adjustable between multi-segment, centre-weighted and spot metering. Metering range 0 – 21 EV (at Standard Output Sensitivity 100 with 50mm f/1.4 lens)			

EXPOSURE	Exposure compensation: ±2EV (1/3 or 1/2EV steps), Sensitivity: automatic, manually selectable (ISO 100 – 1,600 in 1/3 EV or 1/2 EV steps)
DRIVE MODES	Single, Continuous (3fps unlimited JPEG, 9 RAW images), Auto Bracketing 3 or 5 frames, Self Timer 12 or 2sec. (with mirror lock up), IR remote control instant or 3sec. delay
FLASH	Built-in P-TTL Automatic Flash with automatic operation in low light conditions, guide number 15.6 at ISO 200, flash coverage 28mm (35mm equivalent) hotshoe on camera top for system flash, flash sync 1/180sec.
WHITE BALANCE	Automatic or manual, Daylight, Shade, Cloudy, Tungsten light, Fluorescent light (W, D, N), Flash, manual balance, 3 different settings for Kelvin and Mired values with fine adjustments
DIGITAL FILTERS	Black & White (4 choices), Sepia (3 choices), 18 colour, special effect, Slim filters and Playback Brightness
CUSTOM FUNCTION	32 custom-programmable functions available
PRINT OPTIONS	DPOF (Digital Print Order Form), Print Image Matching III, PictBridge
MENU LANGUAGES	12 languages, including GB, D, F, E, I
CAMERA OPTIONS	Dust Reduction, Shake Reduction, Supersonic Autofocus
POWER REQUIREMENTS	Rechargeable Li-Ion battery D-LI50 for approx. 500 exposures, Battery Grip D-BG2 for D-LI50 with vertical shutter release, AC mains adapter (available optionally)
DIMENSIONS	141.5x101x70mm (WxHxD)
WEIGHT	710g (without batteries or card), 790g loaded and ready with battery and SD card
SYSTEM REQUIREMENTS	PC: Windows 2000, XP Home Edition/XP Professional- Mac: OS x10.2 or higher
CONNECTIVITY	USB 2.0, AV connector (compatible with NTSC or PAL)
STANDARD ACCESSORIES	AV Cable I-IVC28 USB Cable I-USB17 Shoulder strap O-ST53 Body cap Eye/earpiece cap ME Eye cup FP Hot shoe cover FK 1x Li-Ion rechargeable Lithium Ion battery D-LI50 Battery Charger D-BC50 Software S-SW55 includes PENTAX Photo Browser 3, PENTAX Photo Laboratory 3

Japan	PENTAX Corporation 2-36-9, Maeno-cho, Itabashi-ku, Tokio 174-8639, JAPAN
Europe	PENTAX Europe GmbH Julius-Vosseler-Straße 104, 22527 Hamburg, GERMANY www.pentax-community.com, www.pentax.de
United Kingdom	PENTAX U.K. Ltd., PENTAX House, Heron Drive, Langley, Slough, Berks, SL3 8PN, UNITED KINGDOM, www.pentax.co.uk
Canada	PENTAX Canada Inc., 1770 Argentia Road, Mississauga, ON L5N 3S7, CANADA, www.pentax.ca

The manufacturer reserves the right to changes in technology,
design, equipment and scope of supply without notice.
September 2006

AP033001/ISM 15092006

YOUR DEALER

PENTAX