

PENTAX digital cameras

K20D



What counts are the results: perfecting your passion.

- > New CMOS sensor with an impressive resolution of 14.6 megapixels, delivering extremely finely resolved, brilliant photos. Disturbing picture noise is reduced to a minimum. The PENTAX "Dynamic Range Enlargement" (DRE) provides an expanded contrast range of the photos.
- > PENTAX "Shake Reduction": the special advantage is that it is integrated into the camera body so it is always available and usable with any lens.
- > Along with the pentaprism finder the K20D offers "Live View", permitting perfect picture control directly on the wide angle (160° viewing angle) monitor. This permits easy composition from difficult camera angles.
- > Reliable system against dust on the sensor: seals prevent dust contamination, coating of the Low Pass filter prevents adhesion of dust particles, vibration eliminates dust from the sensor, an adhesive strip collects dust shaken from the sensor and the "Dust Alert" system warns of persistent adhering particles on the sensor.
- > PRIME Processor – the heart of the camera, provides for the optimal operational sequence of the camera's internal processes. From the moment that the shutter is released to when the image is stored in memory PRIME assures sufficient computing power.
- > Comprehensive features for the professional photographer, e.g.: pixel mapping, focus correction, monitor calibration and many others.
- > Colour management by "Custom Image". Five colour or black-and-white settings permit a selection of image characteristics similar to standard film renditions.

K20D Code No.	19385
Barcode	0027075130852

Standard accessories	Code No.
AV cable I-IVC28	39262
USB cable I-USB17	39233
AC cable D-CO2E	39475
Battery charger D-BC50	39583
Li-Ion battery D-LI50	39581
Shoulder strap O-ST53	39323
Body cap	31016
Eyepiece cap ME	31011
Eyecup FP	30184
Accessory shoe cover FK	31040
Software S-SW74	
Delivered without lens	

Optional accessories

Art.-Nr. 50099	Art.-Nr. 50154	Art.-Nr. 50158
SLR case (body + 2 lenses)	Backpack for a complete system	Aluminium case
Art.-Nr. 39557	Art.-Nr. 37377	Art.-Nr. 37248
Battery grip D-BG2	IR Remote Control F	Cable Release CS 205
Art.-Nr. 30333	Art.-Nr. 30425	Art.-Nr. 39357
Flash with case AF-360 FGZ	Flash AF-540 FGZ	Sensor Cleaning Kit
Art.-Nr. 30150	Art.-Nr. 38575	Art.-Nr. 38576
Viewfinder loupe O-ME53	Focusing screen, latticed	Focusing screen, scaled
Art.-Nr. 21510	Art.-Nr. 22190	Art.-Nr. 21700
smc PENTAX DA 14mm f/2.8 ED [IF]	smc PENTAX DA 35mm f/2.8 Makro Limited Edition	smc PENTAX DA* 200mm f/2.8 ED [IF] SDM
Art.-Nr. 21767	Art.-Nr. 21650	Art.-Nr. 21660
smc PENTAX DA* 300mm f/4.0 ED [IF] SDM	smc PENTAX DA* 16-50mm f/2.8 ED AL [IF] SDM	smc PENTAX DA* 50-135mm f/2.8 ED [IF] SDM



PENTAX

TECHNICAL DATA

Additional information available at www.pentax.co.uk

SENSOR

- 15.07 Megapixels – total
14.6 Megapixels – effective
- 23.4x15.6mm CMOS sensor with Primary Colour Filter
- Colour depth: 3x12 Bit in RAW, 3x8 Bit in JPEG (internal 3x14 Bit)
- Resolution:
JPEG: (JPEG Baseline in quality steps of Premium, Optimal, Better, Good)
14.6 MP (4,672x3,120), 10 MP (3,872x2,592),
6 MP (3,008x2,000), 2 MP (1,824x1,216)
- RAW: 14.6 MP (4,688x3,120)
- Sensitivity: Automatic, Manual selectable
(ISO 100, 200, 400, 800, 3,200, 6,400)

Lens

- PENTAX K_{AF2} bayonet
- Compatible with PENTAX K_{AF2} , K_{AF} and K_A lens mounts.
Support for K_{AF} Power Zoom functions
(K-mount lenses – with adapters – M42 and medium format lenses are mechanically compatible. Due to the high resolution of camera and lack of electronic contacts on the lenses no general statement can be made regarding full compatibility of functions.)

Viewfinder

- Built-in, non-interchangeable Pentaprism finder
- Viewing area 95% with finder magnification of 0.95x
(with 50mm f/1.4 lens at infinity, -1m⁻¹)
- Interchangeable "Natural Bright II" focusing screen
- Viewfinder indications below image area
- Dioptre correction -2.5 dpt. – +1.5 dpt.

Monitor

- 2.7" low-temperature polysilicon TFT Monitor with 230,000 dots, brightness adjustment and wide viewing angle (approx. 160°)
- Image review after recording:
Single image, double image, Histogram, recording data and Hot Spot Warning, 32x enlargement, Thumbnail index (4, 9 or 16), slide show, image rotation

Preview

- "Live View" (TTL over image sensor), 100% field of view, grid display optional, Depth-of-field preview button for focus depth preview, digital preview

Image Formats

- RAW (PEF, DNG), RAW + JPEG
- JPEG (Exif 2.21), DCF
- JPEG compression: JPEG Baseline in quality steps of Premium, Optimal, Better, Good

Memory

- SD, SDHC cards

Focus

- Autofocus system: TTL Phase Matching with 11 focussing points (SAFOX VIII) with indication in finder
Operational range: (EV 1 – EV 19)
- AF Single with focus lock or continuous AF (as a function of the exposure program)
- Focussing point selectable between automatic or manual choice, spot focussing
- AF-Assist with built-in flash
- Fully compatible for ultrasonic AF lenses

Metering

- 16 segment TTL open aperture metering coupled with AF and lens information, switchable between Multi segment, Centre weighted and Spot metering.
Operational range: EV 0 – EV 21
- Electronically controlled vertical-run focal plane shutter
Shutter speeds:
Automatic: 1/4,000 – 30sec. (stepless)
Manual: 1/4,000 – 30sec. (in 0.5 EV steps) and Bulb
Flash sync: 1/180 Sec.
- Green Mode, Programmed automatic (Hyperprogram), Sensitivity Priority, Aperture Priority, Shutter Priority, ISO Automatic, Manual, flash sync, long exposure
- Exposure compensation: ± 3EV in 1/2 steps, ± 2EV in 1/3 steps
- Auto bracketing: 3 or 5 exposures in 0.5 or 0.3 EV steps, extended auto bracketing modes for contrast, saturation, focus, and white balance
- Exposure memory button

Flash

- Built-in P-TTL automatic flash with automatic operation in poor lighting conditions
- Manual on/manual off
- Preflash for reduction of the "Red Eye" effect
- Flash compensation -2 – +1 EV in 0.5 EV steps
- GN 13 at ISO 100
- Hotshoe on camera top for use of system flashes, x-sync connector for 3rd party or studio system flashes
- High-Speed Synchronisation with appropriate PENTAX flashes
- Coverage 28mm (equivalent in 35mm film format)

Power requirements

- Rechargeable D-LI50 Li-Ion battery
- Battery compartment for spare D-LI50 battery

Connections

- USB 2.0 (High Speed)
- AV (compatible with NTSC and PAL)
- AC

Recording parameters

- 5 selectable colour profiles, as well as black-and-white photograph function with different filter options
- White Balance: Automatic or manual. TTL setting over image sensor: Daylight, Shade, Cloudy, Tungsten, Neon (W, N, D), Flash, manual balance, 6 selectable fine control settings for colour temperature
- Digital filters: B&W (6 options), Sepia (3 options), Colour (18 options), Soft filter and Slim Filter, Colour extracting (6 options), HDR (3 options)
- Drive Modes: Single, Series (Hi/Low): 2.8fps. to 38 images in JPEG (Hi), 16 images in RAW (DNG), Interval to 99 images/day. Auto Bracketing, Self-timer with 2sec. delay (mirror up lock) and 12sec. delay, IR Remote Control with 0sec. or 3sec. delay, IR Remote Control continuous.

Special features

- PENTAX Noise Control reduces image noise
- Focus error correction
- Calibrateable monitor
- Freely selectable file names
- Image manipulation in RAW format
- PENTAX developed opto/mechanical Shake Reduction (integrated in camera body). Adds approx. 4 stops to hand-held shots (for long exposures a tripod should be used)
- 3 step "Dust Removal" system:
 1. Special coating of Low Pass Filter,
 2. Vibration to remove dust
 3. Adhesive strip to capture dust
- "Dust Alert": remaining persistent dust is located on the sensor and its position is clearly indicated on the display.
- TTL "Live View" from image sensor: image viewing before recording with 100% image view.
- Compatible with ultrasonic lenses
- 36 individually selectable camera functions
- Metal chassis with fibre-reinforced plastic housing
- Weather-proofed body construction with 72 seals protecting against dust and spray
- World time for 72 cities in 28 time zones
- Menu languages: English, French, German, Danish, Swedish, Finnish, Dutch, Spanish, Portuguese, Italian, Polish, Czech, Hungarian, Turkish, Russian, Korean, Chinese, Thai, Japanese

Print Functions

- PictBridge, DPOF (Digital Print Order Form), PRINT Image Matching III

System requirements

- Integrated USB connector
- PC: Windows XP, Windows Vista
CPU: Pentium IV or newer
Memory: minimum 512MB
Free hard drive space: 1GB or more
Monitor resolution: 1,280x1,024 or more
- Mac: OSx10.2 or higher
CPU: POWER PC G5 or newer
Memory: minimum 512MB
Free hard drive space: 1GB or more
Monitor resolution: 1,280x1,024 or more

Software

- PENTAX PHOTO Browser 3/PENTAX PHOTO Laboratory 3 with integrated RAW converter

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