KONICA MINOLTA DYNAX 7D

The World's first*[1] Digital SLR camera with revolutionary, body-integral, Anti-Shake technology

Konica Minolta is delighted to unveil the Konica Minolta Dynax 7D. This groundbreaking 6.1 Megapixels resolution, interchangeable lens digital camera is the World's first digital SLR to contain a body integral CCD-Shift, "Anti-Shake" (camera shake compensation) technology that enhances picture quality, performance and improved handling characteristics.

The Dynax 7D is compatible with the full range* of Dynax AF lenses.

The Konica Minolta Dynax 7D is an interchangeable lens digital SLR camera that inherits many of the high specifications and much of the Award winning performance from the Dynax Series SLR cameras.

Introduced in 1985, the Minolta 7000; the first 35mm film SLR with body integrated AF system designed to use interchangeable AF lenses.

The new model's high technological standards and heritage make it an intensely appealing camera.

The Dynax 7D is a digital SLR created using a broad range of sophisticated photographic technologies each developed with years of camera making experience and expertise.

The unique built-in CCD-Shift type "Anti-Shake" technology endows the new camera the first digital SLR to feature body-integral Anti-Shake function. The key benefit of Anti-Shake is it can support all Dynax AF lenses. *[2] Anti-Shake technology allows photography with reduced blur due to camera shake, even when shooting dimly lit scenes or when using telephoto lenses and shooting macro subjects without the aid of flash or a tripod.

Other key contributors to the new camera's performance are its 6.1 million effective pixels, housed on an APS-C size CCD and the Konica Minolta proprietary CxProcess™ III image

processing technology, that delivers high definition, natural looking images.

High speed image processing is achieved through the all new Advanced LSI Engine, designed to help provide fast data handling for improved camera responsiveness and control.

The camera also sports a large, easy to view, high definition, 2.5-inch colour LCD monitor housed on its rear panel. The large screen provides a large clear display for menu navigation and image display. It also displays relevant shooting information and camera settings.

In keeping with its acclaimed Dynax film SLR counterpart the Dynax 7D inherits a similar, simple to use Mode Dial and Lever Operation system. To enhance handling further the new model also features a superbly bright, easy to view, high performance optical viewfinder.

In addition, the new digital SLR offers a comprehensive function set designed to meet a diverse range of photographic challenges and user needs. The Konica Minolta Dynax 7D is complemented by a broad range of Dynax accessories that offers photographers a complete system back up.

Product Highlights

1. World's first*[1] digital SLR to be equipped with a body integral, CCD-Shift camera shake compensation. Anti-Shake technology that supports all genuine Dynax interchangeable AF lenses. *[2]
2. Excellent picture quality derived from a high resolution 6.1 million pixels (effective) APS-C size CCD and original CxProcess™ III image processing technology
3. A large easy to view 2.5-inch high-definition colour LCD monitor that combines menu navigation with image and data display.
4. Combines simple operation in a stylish, compact package inheriting the product ideals of the Dynax range of film SLRs. Versatile imaging functions designed to satisfy any photographer's needs, whether they are an amateur or enthusiast.
5. Excellent system back up and accessories to cater to a broad range of subject genres and conditions.

Dynax 7D Features

1. **The World's first*[1] digital SLR with body integral Anti-Shake Technology and CCD-Shift Mechanism. Providing simple compatibility with Dynax A Mount optics and allowing all Dynax interchangeable AF lenses to be used.*[2]**

2. **Konica Minolta award winning Anti-Shake technology has been selected as "European Photo Innovation of the Year 2004 – 2005" by EISA*[4] and provides an equivalent correction effect*[3] allowing the use of a shutter speed 2 - 3 steps slower.**

   Now it's possible to reduce blur caused by camera shake. Even when taking photos in dimly lit or twilight scenes or in natural light with a telephoto lens, as well as macro shots – without relying on a higher ISO setting, the aid of a flash or tripod.

   Anti-Shake responds quickly to both broad, low velocity slow-swaying motion of the camera body and the higher frequency movement typical of camera shake caused by a photographer's muscle.

The Anti-Shake technology can be switched on or off via a dedicated switch on the camera's back. When activated an Anti-Shake indicator is displayed in the viewfinder to keep the user informed how much shake is being detected.

3. **Consistently high picture quality is ensured by the 6.1 Million (effective) pixel APS-C size CCD, the unique CxProcess™ III image processing technology. This is delivered by a combination of Konica Minolta's expertise in photosensitive materials and exposure control technologies. Each is integrated here in this new model to ensure superb picture quality and to help make the most of any attached Dynax AF lens.**

   - A large 6.1 Million effective pixel APS-C size CCD allows shooting of high-resolution images that have a wide dynamic range but with reduced noise, in highlight and shadows.

   - A newly developed Advanced LSI image processing engine designed for the Dynax 7D enables high-speed processing of large quantities of data and has been designed to improve image processing at high-sensitivity settings, ensuring reduced image noise while retaining high picture quality. This combination also helps ensure a handling response similar to the smooth shooting rhythm associated with 35mm film SLRs.

   - CxProcess™ III is a Konica Minolta original, image processing technology designed to provide impressive and natural looking images. CxProcess™ III achieves these stunning, natural looking images by integrating a broad range of photographic technologies gained from the Konica Minolta experience in this area. It ensures clear and crisp pictures, natural skin tones and packs in detail ideal for recording faithfully landscapes or macro subjects.

4. **A large, easy to view monitor that works as both the menu Navigation Display and Image Review Screen.**

   - Easy to view 2.5-inch High Definition LCD Monitor mounted on the camera's back-plate is the large, easy to view 2.5-inch, high resolution 207,000-pixel colour

monitor. It quickly and clearly displays captured shots for fast image appraisal. Image histogram data can be overlaid without obscuring the displayed image Thanks to its large size, it can also display up to a 16-frame thumbnail index display.

- Menu and Navigation Display

  The LCD monitor works as a Navigation Display allowing seamless operation with clear and concise camera settings displayed with comprehensive shooting information, indicated with large and easy to read text. Aiding ease of use further, the display automatically switches from horizontal to vertical format when shooting in the upright "portrait" format.

5. Simple operation and a stylish design ethos inherits design features and ease of use from its Dynax 7, 35mm film SLR camera predecessor.

- Intuitive Operation with Mode Dial and Lever System

  The new model inherits the dial and lever operation system from the Dynax 7, a system highly regarded by owners or its user-friendliness. It offer's intuitive operation making it particularly familiar to users moving up to the new digital model from the silver halide SLR predecessor. The exposure compensation dial and easy to use exposure mode dial is also inherited from the Dynax 7, making it familiar and helping users respond quickly to changing shooting conditions or rapidly changing picture opportunities. A separate white balance lever is provided for fast white balance control, enhancing ease of use even further.

- Easy to view High Performance Viewfinder

  A spherical acute matte focusing screen is used in the viewfinder for accurate, bright, critical focusing assessment. The new model incorporates an optical glass pentaprism viewfinder with 0.9X Magnification Factor and 95% Field of View for easy scene assessment and composition.

- Highly Durable and Reliable Magnesium Alloy Body

  The Dynax 7D has a robust build quality due to its magnesium alloy front body panel and base. The tough build also enhances camera reliability.

6. Enhanced shooting functions and versatile control designed to satisfy photographic enthusiast and amateur users.

- High Performance - High Speed AF

  The new model incorporates a central cross hair type 9-point and 8-line AF sensor array. This provides high precision AF and high performance subject tracking of moving subjects within the frame. The AF system enables both Predictive Focus Control and Subject Tracking for high speed focus adjustment of moving subjects making it ideal for capturing fleeting moments or use in sports photography.

- RAW+JPEG Simultaneous Recording

  You can choose to shoot either JPEG or RAW images or both combined with the simultaneous RAW + JPEG Dual-format Capture Mode for improved post-shoot workflow.

- High-Speed Continuous Advance and Image Processing with Large Capacity Image Buffer

  The new model allows high speed continuous shooting of up to 9 consecutive frames at up to 3-frames per second in both RAW or RAW+JPEG modes due to the inclusion of a high capacity image buffer. Additionally it also allows continuous shooting of up to twelve 3008x2000 JPEG images at the extra-fine image-quality setting and fifteen JPEG images the same size at the fine image-quality setting. These high-speed shooting capabilities are ideal for capturing momentary expressions, sports or fleeting action shots, while retaining high picture quality throughout.

- Comprehensive Image Adjustment and Control for Creative Picture Capture

  a) Image correction: 5-step fine control adjustment for sharpness, contrast, colour saturation and hue.

  b) White balance (WB) setting: In addition to the auto mode the new camera has six presets for WB plus a custom mode for precise white balance settings in difficult lighting conditions. This model also features numerical setting for

colour temperature which gives photographers a higher degree of colour temperature matching. Fine-tuning is possible over a range from 2500K to 9900K in 100K increments providing a broader range than with the Auto White Balance or Preset White Balance alone. This feature also allows precise control when directly input from accurate measurements calculated by the Konica Minolta Colormeter IIIF.

c) Zone Matching: A new technology that allows the precise reproduction of tonal gradations in highlights and shadows; essential in difficult shooting conditions with predominant highlights and helps ensure noise free lowlight images. The Zone Matching system permits effective control of high and low key tone capture; the former important for highlight capture in shots such as white of a wedding dress; the latter for low light situations.

7. A wide variety of system accessories are also available adding versatility for all shooting styles and adding flexibility for any photographer's needs.

- The dedicated VC-7D Vertical Control Grip for Dynax 7D connects to the camera body and provides a reassuringly firm grip on the camera. It enhances, upright camera control and overall ease of use, particularly for portrait format shots.

a) Comfortable operation and handling for vertical shooting

The VC-7D's sure-hold grip gives confident handling characteristics. The grip has a dedicated shutter-release button, front and rear control dials, AF/MF control button, AE lock button and AF area selector button, thereby delivering comfortable and reassuring handling characteristics to the camera in either horizontal or vertical shooting situations.

b) Dual lithium-ion batteries can be inserted and used in tandem

The VC-7D allows two lithium-ion batteries to be used simultaneously for an enhanced power supply. This allows photographers to take advantage of shooting many more images without worrying about recharging batteries.

c) AA batteries can also be used

Adding still more versatility, high capacity AA Ni-MH batteries can also be used.

- A broad range of Dynax system accessories are available including D-Series flash units, remote cords and an angle viewfinder. The D-Series flash and D-Series lenses, which include built-in focus distance calculation, the new model gives improved exposure accuracy. Combined with high-precision ADI flash metering the camera provides high-precision lighting control that answers the most demanding and diverse needs.

- DiMAGE Master is optional software to improve creative workflow for advanced users. Diversified tools for classifying and comparing images boost work efficiency in selecting the best shots. A newly developed RAW processing program enables more accurate colour reproduction.

NOTES:

*1) As an interchangeable lens digital SLR camera

*2) Use of Anti-Shake with some specialist lenses may be subject to particular usage conditions.

*3) Anti-Shake picture blur correction effect amount varies with shooting conditions and lenses used.

*4) The European Imaging and Sound Association who publish 50 major photography and AV magazines in 20 European countries.

Konica Minolta Dynax 7D

Technical Specifications

Camera Type: Interchangeable-lens Digital SLR camera

Lens Mount : Minolta A-type bayonet mount

Image Capture: Total pixels:6.3 million, APS-C size(23.5mm x15.7mm),Interline primary colour, interlace scan

Sensitivity: Auto and 100, 200, 400, 800, 1600,and 3200 ISO equivalents

Aspect ratio: 3:2

Recording: Recording Media: Type Ⅰ and Type Ⅱ CompactFlash cards, Microdrive, SD Memory Cards and MultiMedia Cards with optional CompactFlash Adapter SD-CF1

File format: JPEG, RAW, RAW+JPEG

(DCF 2.0 compliant, DPOF(supported by printing functions in ver/1.1), Exif 2.2)

Number of recorded pixels:

L:3008x2000,M:2256x1496,S:1504x1000

Storage capacity: Approximate storage capacity of a 256MB CompactFlash card:

	L	M	S
RAW	30 frames	-	-
RAW+JPEG	22 frames	25 frames	27 frames
Extra fine	43 frames	76 frames	165 frames
Fine	85 frames	147 frames	306 frames
Standard	1145 frames	1245 frames	485 frames

Colour mode: Natural: sRGB, Natural +: sRGB, Adobe RGB

Image quality mode:

Standard, Fine, Extra-fine, RAW, RAW+JPEG (Fine)

Image correction: Contrast, Colour saturation, Sharpness, Hue

(5 levels)
Colour temperature setting: available
Noise reduction: Available (at shutter speed longer than 1 s, ON/OFF selectable)
Delete function: Single frame, Marked frames or All frames in a single folder in card can be deleted.

White balance control Automatic, Preset (Daylight, Shade, Cloudy, Tungsten, Fluorescent, Flash), Custom, Colour temperature setting available

Playback: LCD monitor: 2.5-inch type TFT colour
Total pixels: 207, 000
Navigation system (Enlarged display, Automatic rotate function)
Number of frame(s) displayed: Single, Index (4 frames, 9 frames,16 frames selectable)
Display mode: Image only, Image + text, Image + text + histogram
Enlarged playback (Up to approx. 5x), Luminance limit Display (flashing), File browser, Slideshow, Instant bracket playback

Autofocus System: Type: Through-the-lens (TTL) phase-detection system
Sensor: CCD line sensors (9 points, 8 lines with centre cross-hair sensor)
Sensitivity range: EV-1 –EV18 (ISO 100)
Autofocus area: Wide focus area, any local focus area is selectable from 9-point sensors.
Focus mode: Autofocus/Manual focus can be selected.
Autofocus mode: Single-shot AF, Continuous AF, Automatic Autofocus, Direct Manual Focus (DMF) is selectable in menu).
Predictive focus control for moving subjects. Auto-tracking focus point display
Focus lock: Available (by pressing the shutter release button halfway down)

AF illuminator: Available (with pre-flash) 1.0-5.0m/3.3-16.4 ft.

Auto Exposure System: TTL metering using 14-segment honeycomb-pattern SPC
(14-segment Honeycomb-pattern/Centre-weighted/Spot metering)
Metering range: EV 0 - 20 (EV 3 - 20 in spot metering) *at ISO100 with f/1.4 lens

Exposure modes: P/Full-auto program (Programmed AE with program shift), A (Aperture priority), S (Shutter priority), M (Manual)
Exposure-compensation compensation:
+/– 3 EV in 1/2 increments
+/– 2 EV in 1/3 increments

AE lock: Automatically activated with AE lock, Available with AE lock button

Flash: Flash metering: Advance Distance Integration (ADI), Pre-flash TTL, Manual flash control
Guide number: 12 (in meters at ISO 100), 17(in meters ISO 200)
Coverage: 24mm
Recycling time: 3s (approx.)
Control: Manual switchover. Lift-up for Fill Flash, push down for Flash Cancel.
Flash modes: Fill Flash, Flash Cancel, Red-eye Reduction (pre-flash), Wireless/Remote Off-camera Flash, Rear Flash Sync. , High Speed Sync.
Flash compensation: +/– 2 EV in 1/2 stop increments

External-flashes: Program Flash 5600HS(D), 3600HS(D), 2500D,
Macro Twin Flash 2400*, Macro Ring Flash 1200* with flash

sync. terminal.

*Macro Flash Controller is necessary.

Shutter: Type: Electronically-controlled, vertical-traverse, focal-plane shutter

Range: 30-1/4000s, Bulb

Flash sync speed: 1/160 s (with Anti-shake OFF), 1/125s(with Anti-shake ON)

Drive: Drive modes: Single, Continuous, 10s/2s self-timer, Single bracket, Continuous bracket

Continuous advance: Approx 3 fps

Approximate number of frames that can be captured at one time:

	L	M	S
RAW	9 frames	-	-
RAW+JPEG	9 frames	9 frames (JPEG)	9 frames (JPEG)
Extra fine	12 frames	14 frames	20 frames
Fine	15 frames	19 frames	30 frames
Standard	19 frames	26 frames	43 frames

L: 3008x2000, M: 2256x1496, S: 1504x1000

Exposure bracketing: With 0.3/0.5 EV increments, 3/5 frames

Interval recording: Interval time: 30s/1-10,15,20,30,45,60min. 2 -240 frames. Start timer is equipped. (Setting: 0.5 to 24H, in 0.5 increments)

Other functions: Instant playback, Customising, Zone matching

Anti-Shake: CCD-Shift Anti-Shake system with LED indicator in viewfinder

Anti-Shake effect: Equivalent to 2 – 3 steps in shutter speed (Actual effect varies depending on shooting conditions and the lens used)

Viewfinder: Type: Eye-level fixed pentaprism
Focusing screen: Spherical Acute Matte (G-type as standard)
Field of view: Approx. 95%
Magnification: 0.9X (with 50mm lens focused on infinity)
Dioptre control: –3.0 to + 1.0 m^{-1}
Eye-relief: 25mm from the eyepiece, 21mm from the eyepiece cup in -1 m^{-1}
Eyepiece cup is removable.
*Interchangeable focusing screen is available (type M, L, ML) at service facilities.

Video output: NTSC / PAL

Audio signal: Yes

Printing output control: Exif Print, PRINT Image Matching Ⅱ, PictBridge

Others:

PC interface : USB 2.0 High-Speed

Remote function: Remote data storage: TBC. (Remote-storage function software 'DiMAGE Transfer' for Dynax 7D to become available for free download .It is planned for release in January 2005.

Power: Battery: One NP-400 Li-ion battery
Battery condition indication: 4-stage indicator appears when the camera is turned on.
External power source: 6V DC (with specified AC adapter AC-11), Vertical Control Grip VC-7D

Battery Performance (with fresh batteries): Number of recording images:

① Approx 400 frames. (CIPA measurement*1)Conforming to CIPA standard test method with a CompactFlash card and

an NP-400 lithium-ion battery.

② Approx 600 frames (Konica Minolta measurement A*2)

③ Approx 2000 frames (Konica Minolta measurement B*3)

Conditions: Anti-Shake: ON, Recording media :512MB CompactFlash Card, Battery: Li-ion Battery NP-400, *1:CIPA:Camera & Imaging Products Association *2: Flash: OFF, other conditions are same as CIPA measurement. *3: Drive mode: 5 frames continuous shooting, Flash ;OFF, Instant Playback: NO

Dimensions (W x H x D): 150 x 106 x 77.5mm (5.91 x 4.17 x 3.05 inches)

Weight: 760g (without batteries and recording media)
26.81 ounces

Operating temperature: 0 - 40 °C (32-104 °F)

Standard accessories: DiMAGE Viewer CD-ROM, Li-ion Battery NP-400, Li-ion battery charger BC-400, Wide Strap WS-4, Shoe-Cap SC-1000, Eyepiece cap Ⅱ, Eyepiece cup EC-1400, Body Cap BDC-1000, Remote cord clip, LCD Monitor Protect Panel MPP-1000, USB Cable USB-2, Video Cable VC-500

Main Optional accessories: Vertical Control Grip VC-7D, Camera Case CS-7D, AC adapter AC-11, SD-CF1 card adapter, Remote Cord RC-1000S, Remote Cord RC-1000L.

Compatible computers: IBM PC/AT compatible computers：Windows 98*/Me/2000(Professional)/XP(Home/Professional)，Macintosh OS9.0-9.2.2/OS X v10.1.3-10.1.5/v10.2.1-10.2.8/v10.3-10.3.5

- The computer and operating system must be guaranteed by their manufacturers to support USB interface.

- Problems may be encountered depending on what other USB devices are being used in parallel with this product.
- Only a built-in USB port is supported. Problems may be encountered when the camera is connected to a USB hub.
- Normal operation may not be possible even when all the system requirements are met.

* Users with Windows 98 and Windows 98 Second Edition operating system must install dedicated driver software included in the DiMAGE viewer CD-ROM.

System requirements are based on the latest information available at the time of printing and are subject to change without notice.

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