

# MINOLTA DiIMAGE X20 DIGITAL CAMERA

## *Specifications*

<b>Number of effective pixels</b>	2.0 million
<b>CCD</b>	1/3.2-type interline primary-color CCD Total pixels: 2.1 million
<b>Camera sensitivity</b>	Auto (between ISO 64 –200 equivalent), ISO 64,100, 200, 400 equivalents
<b>Focal length</b>	4.8 – 14.4mm (35mm equivalent: 37 – 111mm)
<b>Lens construction</b>	10 elements in 9 groups (includes two double-sided aspheric elements)
<b>Maximum aperture</b>	f/2.8 – f/3.7
<b>Minimum focus distance</b>	3.9 inches (0.10m) from front of camera
<b>Maximum magnification</b>	0.111x (1:9.01) Equivalent to 0.857x (1: 1.17) in 35mm format
<b>Area covered at maximum magnification</b>	1.57 x 1.18 inches (40 x 30mm)
<b>Monitor LCD</b>	1.6 inch (4.0cm) digital-interface TFT color monitor with anti-reflection coating Total pixels: 84,960 Automatic monitor amplification
<b>Shutter</b>	CCD electronic shutter and mechanical shutter
<b>Shutter speed range</b>	4 - 1/1000 second
<b>Autofocus system</b>	Video AF
<b>Autofocus areas</b>	Wide focus area (five-point AF)
<b>Metering</b>	Multi-segment
<b>Multi-segment metering</b>	256 segments
<b>Exposure control</b>	Programmed AE
<b>Exposure compensation</b>	±2 EV in 1/3 increments
<b>Flash range</b>	Wide: 0.3 – 11.8 ft. (0.1 – 3.6 m) (approximately) Telephoto: 0.3– 8.9 ft. (0.1 – 2.7 m) (approximately) (Camera sensitivity: auto)
<b>Flash modes</b>	Autoflash, Autoflash with red-eye reduction, Fill-flash, Flash cancel, Night portrait
<b>Continuous advance</b>	Available
<b>Self-timer</b>	Approximately 10 seconds
<b>Self-portrait</b>	Subject program used with the mirror on the front of the camera.
<b>Multi frame</b>	To capture 9 sequential images at 3 frames per second displayed in a 3x3 grid in a single frame
<b>Image pasting</b>	Embeds an image within another image
<b>Movie recording</b>	Recording time dependent on memory card capacity and image size. Frame rate: 15 frames per second Monaural audio only.
<b>Audio</b>	Voice memo: Maximum 15 seconds Audio caption: Maximum 15 seconds Monaural audio only
<b>White balance control</b>	Automatic, Preset (Daylight, Cloudy, Tungsten, Fluorescent)
<b>Toning</b>	Neutral black and white, Sepia, Red tone, Blue tone, Green tone
<b>Portrait mode</b>	Optimizes camera settings to enhance skin tones.

<b>Noise reduction</b>	Auto																
<b>Digital zoom</b>	Maximum 4x in 0.1x increments Digital zoom can be disabled																
<b>E-mail Copy function</b>	Creates a compressed 640x480 or 160x120 JPEG image for transmission.																
<b>Favorites</b>	To collect compressed 640x480 JPEG images on the memory card.																
<b>Slide show</b>	With automatic dissolve effects.																
<b>Rotate</b>	To manually orient vertical images for viewing.																
<b>Date imprinting</b>	Year/month/day (Format can be changed.) Month/day/hour:minute Imprinting can be disabled.																
<b>Key customization</b>	The function activated by the left and right keys of the controller can be changed.																
<b>Image-quality modes</b>	Fine, Standard, Economy																
<b>Number of recorded pixels (Still images)</b>	1600 x 1200, 1280 x 960, 640 x 480																
<b>Number of recorded pixels (Movie clips)</b>	320 x 240, 160 x 120																
<b>Storage capacity</b>	Approximate storage capacity of an 8 MB SD (Secure Digital) Memory Card:  <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>1600x1200</u></th> <th style="text-align: center;"><u>1280x960</u></th> <th style="text-align: center;"><u>640x480</u></th> </tr> </thead> <tbody> <tr> <td>Fine</td> <td style="text-align: center;">6 frames</td> <td style="text-align: center;">10 frames</td> <td style="text-align: center;">31 frames</td> </tr> <tr> <td>Standard</td> <td style="text-align: center;">12 frames</td> <td style="text-align: center;">18 frames</td> <td style="text-align: center;">48 frames</td> </tr> <tr> <td>Economy</td> <td style="text-align: center;">22 frames</td> <td style="text-align: center;">31 frames</td> <td style="text-align: center;">68 frames</td> </tr> </tbody> </table> Movie: 19 seconds with 320x240 images; 1 minute 14 seconds with 160x120 images * Still images recorded without voice memo or audio caption ** Actual number of images may vary depending upon the subject and memory card.		<u>1600x1200</u>	<u>1280x960</u>	<u>640x480</u>	Fine	6 frames	10 frames	31 frames	Standard	12 frames	18 frames	48 frames	Economy	22 frames	31 frames	68 frames
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<b>File formats</b>	JPEG, Motion JPEG (MOV), WAVE DCF 1.0-compliant DPOF-compliant (Supported by printing functions in version 1.1) Exif 2.2																
<b>Folder name formats</b>	Standard, Date																
<b>Printing output control</b>	Exif Print, PRINT Image Matching II																
<b>Recording media</b>	SD (Secure Digital) Memory Cards, MultiMediaCards																
<b>Computer interface</b>	Full-speed 12Mbps USB																
<b>Direct print</b>	Epson USB DIRECT-PRINT																
<b>Remote camera</b>	Live video feed without audio for web transmission																
<b>AV output</b>	NTSC, PAL (selected on the camera)																
<b>Batteries</b>	Two AA batteries: Alkaline, Ni-MH																
<b>Battery performance (Playback)</b>	Approximate continuous playback time: 260 min. with alkaline batteries.																
<b>Battery performance (Recording)</b>	Approximate number of recorded images: 110 frames. Based on the following test conditions: alkaline batteries, Full-size images (1600 x 1200), Standard image quality, No instant playback, No voice memo, Flash used with 50% of the frames.																
<b>External power source</b>	3V DC with specified AC adapter (sold separately)																
<b>Dimensions (WxHxD)</b>	3.39 x 2.64 x 0.93 inches (86 x 67 x 23.5mm)																
<b>Weight</b>	Approximately 4.1 oz. (115 g) without battery or recording media																
<b>Operating temperature</b>	32-104°F (0-40°C)																
<b>Standard accessories</b>	Neck Strap NS-DG500, AV Cable AVC-200, USB Cable USB-																

	500, 8MB SD (Secure Digital) Memory Card, Two AA Alkaline batteries, DiMAGE Viewer
<b>Optional accessories</b>	Metal Chain Neck Strap NS-DG100, AC Adapter

### **System Requirements**

Compatible computers when the camera is used as mass storage device:

IBM PC/AT compatible computers with Windows XP Home, Windows XP Professional, Windows Me, Windows 2000 Professional, Windows 98\*, or Windows 98 Second Edition\* and with a USB port as standard interface.

Apple Macintosh computers with pre-installed Mac OS 9.0 – 9.2.2, Mac OS X v10.1.3 – 10.1.5, and v10.2.1 – 10.2.6 and with a USB port as standard interface.

\* *Users with Windows 98 and Windows 98 Second Edition operating systems must install dedicated driver software included in the DiMAGE X20 package.*

### **Minimum system requirements for the remote camera function:**

Computers	IBM PC/AT compatible computers with a USB port as standard interface
CPU	Pentium II 300MHz or later processor (*1)
Operating systems	Windows XP Home, Professional, Me, 2000 Professional, or 98 Second Edition
RAM	128 MB of RAM. 256 MB with Windows XP. (*1)
Hard-disk space	200 MB of free hard-disk space
Monitor	800 x 600 monitor capable of displaying 16-bit color quality.
Tested applications	Microsoft NetMeeting, Windows Messenger (*2)
Other	CD-ROM drive

\*1 *The CPU and RAM must satisfy the requirements of the operating system.*

\*2 *The application software must be guaranteed by the manufacturer to work with the operating system.*

- 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.

*Specifications, accessories and system requirements are subject to change without notice.*

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