

PENTAX

ACHIEVE THE IMPOSSIBLE
WITH THE IMPOSSIBLE ACHIEVEMENT:
THE PENTAX MX

PENTAX

MDX



SIZING UP THE **IMDX**

PENTAX **IMDX** **PROFESSIONAL** **MOTOR** **DRIVE** **CAMERA**



Despite its through-the-lens viewing and metering, interchangeable focusing screens and backs, as well as provision for auto winder and motor drive, the Asahi Pentax MX is smaller than a well-known (German) 35mm range-finder camera!

DYNAMITE !

Like a stick of dynamite, the Asahi Pentax MX is small, but packs a powerful wallop!

The most explosive thing to happen to photography in a decade, the MX destroys all the myths claiming that a rugged camera must be bulky and weighty.



• Length

Measuring merely 135.5mm in length, the MX is shorter than 99% of all other 35mm SLR's, offering just enough room for the perfect grip.

• Shoulder Height

Matched by none, the shoulder height of the MX is an incredible 60.5mm, or approximately the same height as a box of 35mm film!

• Maximum Height

With a maximum height of 82.5mm, the MX is no taller than the average pack of cigarettes.

• Depth

Regardless of the standard lens mounted on the MX, it is unbelievably slim. Just take a look at the figures below:

w/40mm f/2.8 lens	67.5mm
w/50mm f/1.7 lens	80.5mm
w/50mm f/1.4 lens	86.5mm
w/50mm f/1.2 lens	98mm

• Weight

As the Pentax ME is the only 35mm SLR lighter in weight than the MX, the MX is unquestionably the world's lightest motor drive 35mm SLR. See for yourself in the table below.

Body only	495g
w/40mm f/2.8 lens	605g
w/50mm f/1.7 lens	685g
w/50mm f/1.4 lens	735g
w/50mm f/1.2 lens	880g

The MX, then, sizes up to be the world's smallest and lightest professional motor drive 35mm SLR. Its minute size and light weight make it the paragon of portability, rapid handling, and operating ease.

WHY ALL THE FUSS?

The announcement of another high quality camera from Asahi Optical Company can hardly come as a surprise. After all, Asahi Optical has been manufacturing incomparable cameras for the past 25 years. With 6,000,000 Asahi Pentaxes already sold, there isn't anyone who hasn't heard of a Pentax camera. So why all the fuss about another one?

Well, a revolution is always exciting. Take the time Asahi Optical introduced the world's first through-the-lens metering system, there was a lot of excitement created then, and you have to admit the excitement was justified. The same is true for the time Asahi unveiled the first quick-return mirror, or the first aperture-priority automatic exposure 35mm single lens reflex. What specifically, then, is so exciting about the very latest Asahi Pentax, the MX? The big fuss is doubtlessly due to the fact that never before have so many revolutionary features been simultaneously incorporated into a single camera, features such as those appearing on the right.

- World's smallest 35mm SLR motor drive camera.
- World's lightest 35mm SLR motor drive camera.
- Absence of mirror shock.
- World's first camera with Gallium Arsenide Phosphide Photo Diodes.
- World's first professional ultra compact camera with full-information viewfinder.
- World's first "magic needle" loading system.
- 8 interchangeable focusing screens.
- Choice of Auto Winder (2 fps) or Motor Drive (5 fps).
- Accepts interchangeable data back.
- 250 exposure Bulk Film Back available.
- Extensive range of SMC Pentax lenses to choose from.
- Smaller camera, but bigger, brighter viewfinder.
- Smaller camera, but bigger, stronger parts.
- Tri-color LED exposure read-out.
- Center-weighted exposure measurement.
- Three-way focusing
- Hot shoe with built-in circuit breaker.
- Memo holder.
- Self-timer.
- FP and X synchronization.
- Depth of field preview.
- Unique meter switch.
- Shutter release button lock.
- Shutter cocked indicator.
- Extensive ASA range of 25 - 1600.
- ASA dial safety lock.
- Broad exposure measurement range of EV 1 - 19 (ASA 100, f/1.4).

SPECIFICATIONS

Type

35mm full-frame SLR camera with open-aperture center-weighted Through-The-Lens meter.

Lens mount

Pentax K bayonet.

Standard lenses

SMC Pentax 50mm f/1.2	SMC Pentax-M 50mm f/1.4
SMC Pentax-M 50mm f/1.7	SMC Pentax-M 40mm f/2.8

Shutter

Horizontal-run, rubberized silk focal-plane shutter; speeds from 1 to 1/1000 sec. plus B; shutter lock and "Cocked" indicator.

Flash synchronization

FP and X-sync terminals, plus hot shoe;

1/60 sec. X synchronization.

Self-timer

Delays shutter release by 4 - 12 seconds; self-timer start button provided.

Viewfinder

Silver-coated pentaprism finder; split-image microprism focusing screen (8 interchangeable screens); 95% of picture-taking area visible and 0.97x magnification with 50mm lens at infinity); -1.0 diopter eyepiece.

Information viewfinder shows f/stop, shutter speed and tri-colored LED read-out dots. Correction lens adaptor M, Magnifier M and Refconverter M fit the viewfinder frame.

Mirror and diaphragm

Instant return mirror and automatic diaphragm. Depth-of-field preview with self-timer lever.

Film wind and rewind

Ratchet-type rapid wind lever, plastic-tipped for winding comfort. 162° throw with a stand-off angle of 20°. Rewind crank for speedy film rewind.

Film loading

New magic-needle quick/sure loading.

Automatic winder

MX camera body accepts Winder MX for approx. 2 frames-per-second (single-frame and consecutive exposure operation possible) and Motor Drive MX for up to 5 frames per second (single-frame and consecutive exposure operation possible), for automatic, speedy film wind and shutter cocking.

Exposure counter

Automatic reset type.

Exposure meter

Open-aperture, center-weighted Through-The-Lens meter, with GPD cells for fast light response, with tri-colored LED exposure read-out, rapid wind lever and shutter release button acting as meter switch. Exposure range: EV 1 - 19 (ASA 100, f/1.4), Film speed range: ASA 25 - 1600.

Power source

Two 1.5V alkaline or silver-oxide batteries. LED's double as battery check lamp.

Back cover

Standard back with memo holder, interchangeable with Magazine Back MX, Dial Data MX for data recording on film.

Body size

135.5mm x 82.5mm x 49.5mm.

Body weight

495g.

CAPTAIN OF ONE'S DESTINY

Granted, the MX is not for everyone. But it is for the one who demands to be the captain of his destiny, for the one who wishes to control all decisions governing the outcome of each and every photograph. The MX is for the decisive photographer who wishes to have all the information available at a glance for last-minute reference before releasing the shutter. The full-information viewfinder of the MX allows the photographer to control the final result of each photograph without the necessity of removing the camera from one's eye. This factor, coupled with the compact size and light weight of the MX, means rapid handling and uninterrupted shooting capabilities.

• Aperture Read-Out

Found on the face of the pentaprism housing and centered above the name "PENTAX" is the small Aperture Read-Out Prism Window. The aperture in use is read directly off the Aperture Ring, appearing in the viewfinder centered above the focusing screen. Although other cameras employing a prism for direct reading of the Aperture Ring have the Prism Window located in a pentaprism extension which lies immediately above the Aperture Ring, the MX utilizes a unique design in which the pentaprism — despite the inclusion of the Prism Window — is amazingly compact. This incredible feat has been accomplished by having the Prism Window read OBLIQUELY. Thus, the Pentax design solves the problem of overhead light being prevented from reaching the Aperture Ring because of a pentaprism extension. As a result, the Aperture Read-Out of the MX is always brightly illuminated for maximum visibility.



A Prism Window
B Oblique Reading
C Conventional Design



• Choice of Aperture

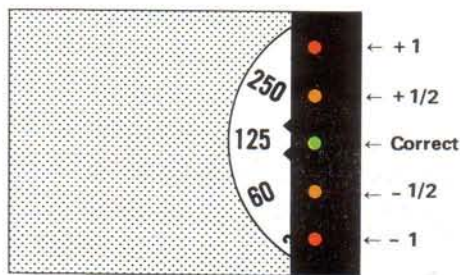
Since the aperture in use is indicated in the viewfinder of the MX, the photographer can always ascertain that depth of field will meet his requirements. He may shoot wide open, for example, for minimum depth of field to isolate his subject from a distracting background or to create an ethereal atmosphere. On the other hand, he may decide to shoot at a moderate aperture for optimum resolution and balanced depth of field, or he may select a small aperture for extensive depth of field to add a fantastic sense of depth to his photographs. Of course, the photographer not only KNOWS the aperture, thanks to the Aperture Read-Out in the viewfinder, but he can actually SEE depth of field as well, merely by pushing in on the Self-Timer Lever which doubles as the Depth of Field Preview Lever.

• Shutter Speed Read-Out

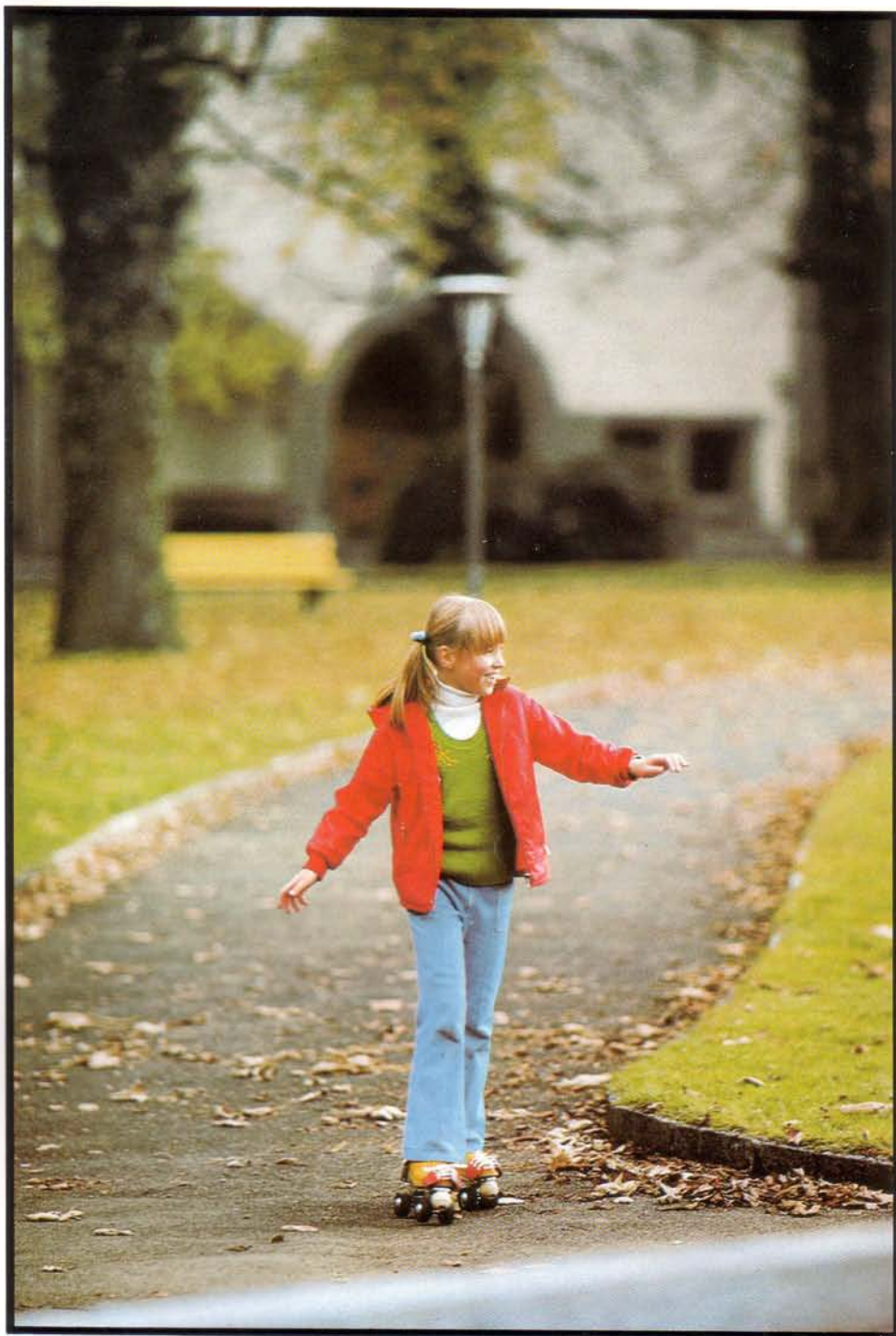
Centrally located on the right side of the focusing screen is the Shutter Speed Read-Out which, in addition to the shutter speed in use, also displays the two adjacent speeds for instant reference. As the shutter speed is displayed, the photographer can always ascertain at the last moment whether or not he is using a shutter speed of sufficiently short duration to ensure sharp results when handholding the camera. He is also free to select a very short speed, such as 1/1000 sec., to "freeze" a passing moment of time into an eternity of stillness. Moreover, he may choose a long shutter speed, such as 1/4 sec., to emphasize motion or create anonymity. Regardless of whether the photographer is preoccupied with shutter speed or depth of field, all the information is visible at a glance so that he may place the emphasis where he wishes at anytime.

● Exposure Read-Out

The Exposure Read-Out is a five dot LED panel which lies outside of the focusing screen area and alongside the Shutter Speed Read-Out. For correct exposure under normal circumstances, the Aperture Ring or Shutter Speed Dial is rotated until the central green LED illuminates (fig. 3, p. 4).



The four additional LED's not only inform the photographer when he is approaching the correct exposure or going beyond the coupling range of the meter, but also allow him to make subtle exposure compensation. $\pm 1/2$ stop over and underexposure are indicated by yellow LED's, and red LED's are used to indicate ± 1 stop (or more) compensation. In the strongly backlit scene shown in fig. 1, for example, exposure has been compensated by +1 full stop for correct rendering of the subject. Fig. 2 depicts a sidelighted scene which has been compensated by +1/2 stop to brighten up the shadows. On the other hand, since the dark background in the scene shown in fig. 4 can cause slight overexposure of the subject, exposure has been compensated by -1/2 stop, and because the scene in fig. 4 has a much darker background, -1 stop exposure compensation has been made.



ANOTHER PENTAX FIRST ! GALLIUM ARSENIDE PHOSPHIDE PHOTO DIODES

A camera is merely a tool to take pictures. This simple fact is often forgotten. If your pictures are constantly over or underexposed, your camera cannot be considered a very good tool. In this regard, the exposure meter can be considered the very heart of any camera. This is a point worth considering when selecting your next camera.

As the first maker to put the exposure meter where it belongs, behind the lens of the camera, Asahi Optical Company is the acknowledged leader in the field of exposure measurement. Thus, it comes as no surprise that Asahi Optical is responsible for the latest development in photo diodes, that is, the receptors that measure the light passing through the lens. While most manufacturers are still in the process of switching from CdS cells to the superior Silicon Photo Diodes, Asahi has introduced a revolutionary new type of light sensor, the Gallium Arsenide Phosphide Photo Diode, and the Pentax ME and MX are the world's first cameras utilizing these new super sensitive diodes.

• 1,000 Times Faster in Response

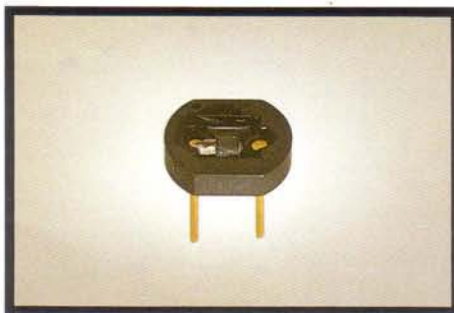
The new Gallium Arsenide Phosphide Photo Diode, GaAsP-PD or GPD for short, is 1,000 times faster in response than the CdS cells still used in the majority of cameras. Consequently, there is no time lag in exposure measurement when suddenly switching from a bright, to a dark subject.

• Completely Insensitive to Infrared Rays

Although superior to CdS cells, Silicon Photo Diodes are sensitive to infrared rays. For example, when photographing a snow covered landscape painted red by the evening sun, Silicon Photo Diodes respond to the infrared rays causing underexposure. To eliminate the above problem, SPD's are fitted with a special filter to absorb the unwanted rays. However, the filter is not entirely successful, as a small portion of infrared rays still find their way through the filter. But the new GPD's developed by Asahi Optical are entirely insensitive to infrared, thereby assuring the ultimate in exposure measurement accuracy every time.

• Low Light Level Accuracy

Photo Diodes work on the principle of



Gallium Arsenide Phosphide Photo Diode

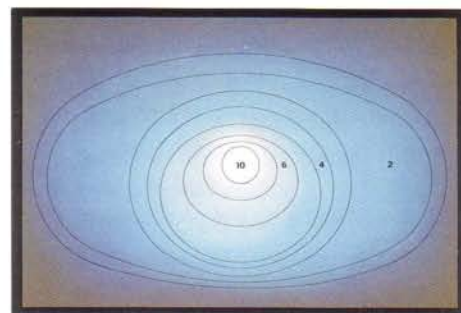
converting light energy into electrical energy. Ideally, when conducting an exposure measurement in absolute darkness, no current should flow through the metering system. Nevertheless, a minute flow of current is inevitable with present-day materials. Significantly, in absolute darkness, GPD's have an electrical flow varying from 1/10 to 1/100 that of SPD's. Thus GPD's offer unprecedented accuracy in low levels of illumination.

• Optimum Reliability

An inherent weakness of SPD's is their sensitivity to temperature changes. In temperature extremes, whether high or low, their reliability falters, resulting in imperfect exposure measurement. To overcome this obstacle, Asahi Optical developed the GPD's which exhibit a level of reliability never before attained. Moreover, to further enhance their already stable characteristics, a Temperature Compensation Circuit is employed to ensure Pentax MX users can take pictures with confidence in summer and winter, as well as spring, and in the tropics and frigid zones as well as in temperate climates.

• Center-weighted Exposure Measurement

Two GPD's are used, one on each side of the eyepiece, to make an exposure measurement with primary emphasis upon the central portion of the focusing screen. As you can see by the diagram above, little importance is attached to the four corners of the focusing screen. Therefore, regardless of how the camera is held, horizontally or vertically, the



The Center-Weighted pattern of the MX. Figures denote percentage of importance placed upon area by the GPD's.

GPD's concentrate on the most important area of your picture for perfect exposure every time.

EIGHT INTERCHANGABLE

The SMC Pentax family of lenses has grown over a relatively short period of time from a group of modest size to the complete system of nearly 40 lenses that it is today. Because it is comprised of a large variety of lenses, including fish-eye, ultra-wide, high speed, shift, macro, and ultra telephoto, it is desirable to have a set of interchangeable focusing screens available to assist the photographer in coping with the problems of trying to attain the highest degree of focusing accuracy with an extremely wide range of lenses. As the interchangeable focusing screens are specifically designed for use with SMC Pentax lenses, the photographer is assured of the ultimate in focusing ease. Moreover, the performance of the high quality focusing screens is considerably enhanced by the exceptionally large and brilliant viewfinder of the MX. The focusing screens are easily inserted in, or removed from, the mirror chamber. Furthermore, each screen is packed with a tool to simplify replacement.

"MAGIC NEEDLE" LOADING



"Magic Needle" Loading is a new instant-grip safe loading system developed by Asahi Optical Company.

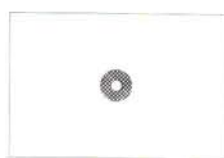
The Film Take-Up Spool of the MX consists of 16 "Magic Needles": white, semi-flexible, indestructible, plastic rods. To load film, simply insert the tip of the film leader between any two "Magic Needles," advance film until the perforations engage with the upper and lower sprockets, and close the back cover.

When inserting the tip of the film leader,

the "Magic Needles" instantly grasp the film regardless of the angle at which it is held and inserted. As the film leader is advanced, the "Magic Needles" automatically take up all of the slack, so that the film snugly and evenly hugs the needles. When the film is rewound, the film leader tip freely disengages from the "Magic Needles" for trouble-free operation.

For rapid, sure, and smooth loading, there is nothing quite like the new Pentax "Magic Needle" loading system.

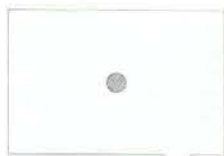
ABLE FOCUSING SCREENS TO CHOOSE FROM



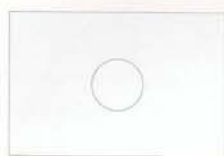
SC-1
Mat + Split + Microprism



SD-1
Mat + Central Cross



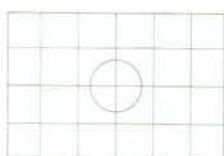
SA-1
Mat + Microprism



SE
Mat



SA-3
Mat + Microprism



SG
Mat + Cross



SB-1
Mat + Split



SI
Mat + Scales



Focusing screen, case, and replacement tool.

WINDER MX



- 1 Trigger Release Button
- 2 Winder Film Transport Coupler
- 3 Camera Body Film Transport Coupler Cap
- 4 Electrical contact for cordless connection
- 5 Guide Pin
- 6 Confirmation LED
- 7 C/S Dial
- 8 Tripod Socket Screw
- 9 Film Rewind Knob
- 10 Grip

Winder MX is designed specifically for the Pentax MX, attaching to the Tripod Socket in the base plate of the camera in a matter of seconds. A Guide Pin assures perfect registration between camera and auto winder, and both are electrically connected automatically for cordless operation. The large grip of compact and lightweight Winder MX affords a sure hold for the right hand, and its Trigger Release Button is readily accessible to the index finger for rapid operation.

WINDER MX SPECIFICATIONS

Type

Auto winder designed for exclusive use with the Asahi Pentax MX.

C/S Dial

Set three-position C/S Dial to C for consecutive exposure operation up to 2 fps; set dial to S for single-frame exposure operation (automatic transport, one frame at a time); set to OFF to extinguish power.

Usable Shutter Speeds

All shutter speeds, but B (Bulb).

Power Source

4 penlight batteries.

Shutter Release

Shutter is released with the built-in Trigger Release Button of the Winder MX Grip.

Confirmation of Proper Functioning

An LED found to the left of the C/S Dial flashes whenever Winder MX functions properly.

Attachment Method

Attaches to the Tripod Socket in the base plate of the camera; Guide Pin assures correct alignment.

Tripod Socket

Built-in Tripod Socket allows Winder MX to be attached to a tripod.

Dimensions

144mm(L) x 84mm(H) x 67mm(D)

Weight

230g

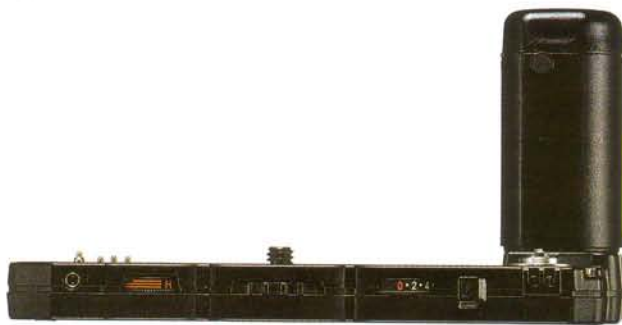
Additional

Built-in receptor to store Film Transport Coupler Cap of camera body.





MOTOR DRIVE **MX**



Motor Drive MX



Ni-Cd Battery Pack M



Battery Grip M

- **The Ultimate in Professional Motor Drive System**

Motor Drive MX is part of a vast motor drive system designed to answer every requirement of the professional photographer.

- **Compactness and Light Weight**

The Motor Drive MX unit + Ni-Cd Battery Pack M combination form an incredibly small package for the photographer on the move.

- **Rapid-Fire Consecutive Exposures**

Regardless of the power source used, Motor Drive MX offers a choice of single-frame exposure (automatic transport, one frame at a time) or consecutive exposures in a steplessly variable range of 1 - 5 fps.

- **Choice of Power Source**

For compactness, the 15V rechargeable Ni-Cd Battery Pack M is ideal, while the 18V Battery Grip M offers the convenience of replaceable penlight (12) batteries. For the laboratory, Power Pack M, which utilizes ordinary AC current, is invaluable.

- **Remote Control**

All of the power sources accept a power cable for remote control time-lapse photography.

- **Bulk Film Magazine**

The standard Back Cover of the MX is interchangeable with the Bulk Film Magazine Back MX which allows up to 250 exposures with bulk film.



MOTOR DRIVE MX SPECIFICATIONS

Type

Designed for exclusive use with the Asahi Pentax MX.

C/S Dial

Choice of single-frame exposure (automatic transport, one frame at a time) or consecutive exposures in a steplessly variable range of 1 - 5 fps.

Usable Shutter Speeds

All shutter speeds, but B (Bulb).

Power Source

15V DC Ni-Cd Battery Pack M, 18V DC Battery Grip M (12 penlight batteries), AC Power Pack M.

Bulk Film Magazine Back

Magazine Back MX quickly interchanges with the Back Cover of MX for cordless connection, providing up to 250 exposures with bulk film.

Remote Control

3m and 10m long Power Cables available for remote control, single-frame or consecutive exposures possible in conjunction with the Remote Trigger Connector.

Exposure Counter

Subtractive type with Automatic Stop when counter reaches zero.

Shutter Release

By the Trigger Release Button built into the Grip of Motor Drive MX, or by the remote control release button.

Dimensions

143mm(W) x 71mm(H) x 64mm(D)

Weight

225.5g

Additional

LED flashes for confirmation of proper functioning. Built-in receptor for storage of Camera Body Film Transport Coupler Cap.

NI-CD BATTERY PACK M SPECIFICATIONS

Type

Designed for exclusive use with Motor Drive MX (for Pentax MX) or Motor Drive MD (for Pentax K2 DMD).

C/S Dial

Settings for OFF, single-frame exposure and consecutive exposure. Dial used in conjunction with C/S Dial of Motor Drive MX (or MD).

Remote Control

3m or 10m long Power Cable M is attached between Motor Drive MX and Ni-Cd Battery Pack M, Release Button of Battery Pack M is used to release the shutter.

Attachment Method

Attaches to Tripod Socket of Motor Drive MX.

Additional

Provided with built-on Tripod Socket to attach Battery Pack to tripod.

Power Source

Rechargeable 15V Ni-Cd battery which can be recharged in approximately 6 hours with the accessory Charger Pack M.



• Instant Conversion to a Data Camera

Not only is the standard Back Cover of the Pentax MX interchangeable with the Bulk Film Magazine Back, but it accepts the Dial Data MX back as well. The Dial Data MX back attaches in an instant, converting your MX into a data camera. In other words, each time a photograph is taken, the data of your choice is imprinted upon a corner of the film. The year, month, and day, for example, can be imprinted to date all of your photographs, making it a simple matter to keep an accurate record of progress, whether it be a record of your family over the years, or a record of the progress at a construction site, school laboratory, or art studio. Dial Data MX is also a valuable tool for the government (e.g., police departments and the military), as well as science and industry. In place of the date, the three dials of Dial Data MX can be used to imprint technical data: aperture, shutter speed, and frame number (0-36). Furthermore, letters of alphabet (A-O) can be added to the numerals (0-36) to provide a useful device for classification.

For those occasions when the recording of the time is of great importance, another data back is available. This second data back, Data MX, is used exclusively on a slightly modified MX camera: Asahi Pentax MX Data. The Data MX back has a built-in clock which is recorded in the corner of the frame and indicates the date, hour, minute, and second. Additionally, there is provision for adding additional information to the central portion of the clock. Moreover, a memo plate, upon which data of any type may be inscribed, can be substituted for the built-in clock.

EXTENDING ONE'S REACH: SMC PENTAX LENSES

SPECIFICATIONS

Type	Name of Lens	Minimum Aperture	Angle of View (Degrees)	Lens Construction (Groups-Elements)	Diaphragm	m.	Minimum Focusing Distance	Maximum Diameter & Length (mm x mm)	gr.	Weight	Filter Size (mm)
FISH-EYE	SMC Pentax Fish-Eye 17 mm f/4	22	180	7-11	FA	0.2	64.5 x 34	234		BI	
ULTRA-WIDE-ANGLE	SMC Pentax 15 mm f/3.5	22	111	12-13	FA	0.3	80 x 81.5	550		BI	
	SMC Pentax 18 mm f/3.5	22	100	11-12	FA	0.25	63 x 61.5	328		BI	
	• SMC Pentax-M 20 mm f/4	22	94	8-8	FA	0.25	63 x 29.5	150		49	
	SMC Pentax 24 mm f/2.8	22	84	8-9	FA	0.25	63 x 41.5	195		52	
WIDE-ANGLE	• SMC Pentax-M 28 mm f/2	22	75	7-8	FA	0.30	63 x 41.5	215		49	
	• SMC Pentax-M 28 mm f/2.8	22	75	7-7	FA	0.30	63 x 31	156		49	
	SMC Pentax 30 mm f/2.8	22	72	7-7	FA	0.30	63 x 39.5	215		52	
	• SMC Pentax-M 35 mm f/1.4	22	62	8-10	FA	0.40	61.5 x 64.5	420		58	
	• SMC Pentax-M 35 mm f/2	22	62	7-7	FA	0.30	63 x 42	206		49	
	• SMC Pentax-M 35 mm f/2.8	22	62	6-6	FA	0.30	63 x 35.5	174		49	
STANDARD	• SMC Pentax-M 40 mm f/2.8	22	56	4-5	FA	0.60	63 x 18	111		49	
	SMC Pentax 50 mm f/1.2	22	46	6-7	FA	0.45	65 x 48.5	391		52	
	• SMC Pentax-M 50 mm f/1.4	22	46	6-7	FA	0.45	63 x 37	238		49	
	• SMC Pentax-M 50 mm f/1.7	22	46	5-6	FA	0.45	63 x 31	185		49	
	• SMC Pentax-M 50 mm f/2	22	46	5-5	FA	0.45	63 x 31	165		49	
TELEPHOTO	• SMC Pentax-M 85 mm f/2	22	29	4-5	FA	0.85	62.5 x 46	250		49	
	• SMC Pentax-M 100 mm f/2.8	22	24.5	5-5	FA	1.0	62.5 x 55.7	224		49	
	• SMC Pentax-M 120 mm f/2.8	32	21	5-5	FA	1.2	62.5 x 63	275		49	
	SMC Pentax 135 mm f/2.5	32	18	6-6	FA	1.5	67.5 x 85.9	483		58	
	• SMC Pentax-M 135 mm f/3.5	32	18	5-5	FA	1.5	62.5 x 65.7	276		49	
	• SMC Pentax-M 150 mm f/3.5	32	17	5-5	FA	1.8	62.5 x 75	290		49	
	SMC Pentax 200 mm f/2.5	32	12	6-6	FA	2.0	89 x 145	950		77	
	• SMC Pentax-M 200 mm f/4	32	12	5-6	FA	2	63.5 x 111	400		52	
	• SMC Pentax-M 300 mm f/4	32	8.5	7-8	FA	4	84 x 131.5	815		77	
ULTRA TELEPHOTO	• SMC Pentax-M 400 mm f/5.6	45	6	5-5	FA	5	85 x 276.5	1,220		77	
	SMC Pentax 500 mm f/4.5	45	5	4-4	M	10	126.5 x 440	3,366		52	
	SMC Pentax 1000 mm f/8	45	2.5	5-5	M	30	143 x 738	5,294		52	
	SMC Pentax Reflex 1000 mm f/11	—	2.5	4-6	ND	8	119 x 248	2,300		BI/52	
	SMC Pentax Reflex 2000 mm f/13.5	—	1.3	4-6	ND	20	180 x 530	8,000		BI/52	
ZOOM	• SMC Pentax-M Zoom 24 mm ~ 35 mm f/3.5	22	82.5-64.5	9-9	FA	0.5	64 x 48	290		58	
	• SMC Pentax-M Zoom 24 mm ~ 50 mm f/4	22	84-46	10-12	FA	0.4	64 x 71	380		58	
	• SMC Pentax-M Zoom 28 mm f/3.5 ~ 50 mm f/4.5	22	75-46	10-10	FA	0.6	65 x 52	315		52	
	• SMC Pentax-M Zoom 35 mm f/2.8 ~ 70 mm f/3.5	22	62-34.5	7-7	FA	1	67 x 76	470		67	
	• SMC Pentax-M Zoom 40 mm f/2.8 ~ 80 mm f/4	22	57.2-30.9	7-7	FA	1.2	65.5 x 76	395		49	
	SMC Pentax Zoom 45 mm ~ 125 mm f/4	22	50.5-20	11-14	FA	1.5	69 x 127	612		67	
	• SMC Pentax-M Zoom 75 mm ~ 150 mm f/4	32	32.1-16.5	9-12	FA	1.2	63.5 x 111	465		49	
	• SMC Pentax-M Zoom 80 mm ~ 200 mm f/4.5	32	30-12	12-15	FA	1.6	65 x 141.5	555		52	
	SMC Pentax Zoom 135 mm ~ 600 mm f/6.7	45	18-4	12-15	M	6	105 x 582	4,070		52	
MACRO	• SMC Pentax-M Macro 50 mm f/4	32	46	3-4	FA	0.234	63 x 42.5	167		49	
	• SMC Pentax-M Macro 100 mm f/4	32	24.5	3-5	FA	0.45	64.6 x 77.5	357		49	
	SMC Pentax Bellows 100 mm f/4	32	24.5	3-5	FA/M	—	60 x 40	186		52	
SHIFT	SMC Pentax Shift 28 mm f/3.5	32	75	11-12	M	0.3	80 x 92.5	611		BI	

BI Filters built-in FA Fully automatic M Manual ND ND filters built-in • Compact lens
Note: Lens length does not include mount portion.



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