Asahi Pentax K2 DMD Motor Drive MD

With the motor drive unit specifically designed for it attached, the Asahi Pentax K2 DMD is capable of consecutive exposures of two frames per second when using shutter speeds of 1/60 second or shorter (1/60 ~ 1/1000 sec.). Moreover, it is possible to combine the Data Back MD with the Pentax K2 DMD and Motor Drive Unit MD for the imprinting of data upon the film as it is automatically transported. For instructions on using the Data Back MD, refer to the separately enclosed booklet on the Asahi Pentax Data Back KM/KX, as instructions are the same. Please note, however, whenever the imprinting of data is not desired, set the switch to OFF (see p.7, Fig. 16) so that the data lamp will not illuminate.

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As the K2 and K2 DMD share most features in common, be sure to carefully study the separately enclosed instruction manual for the Asahi Pentax K2. Additionally, the K2 DMD has several features not enjoyed by the K2 which are indicated below:

**Aperture Read-Out**: When any of the SMC Pentax lenses from 17mm fish-eye to 300mm ultra telephoto (with the exception of the Shift 28mm f/3.5) are used, the aperture in use is indicated in the viewfinder (fig. 1).

**Exposure Compensation Warning**: Whenever the automatic exposure is compensated by 1/4, 1/2, 2, or 4X, the aperture read-out changes from white to orange as a reminder, or warning (fig. 2).

**Built-in Eyepiece Blind**: The automatic exposure system of the camera can be safely used even when the camera is used away from the eye by rotating the shutter speed dial to the position (fig. 3) which will close the built-in eyepiece blind (fig. 4) and prevent extraneous light from entering the eyepiece and causing an erroneous exposure. This feature is especially useful when using the camera overhead, using remote control, when copying, and on similar occasions.
Low Battery Voltage Warning. When battery voltage drops to a level too low to assure accurate function-
ing of the K2 DMD camera, "Shutter Lock" occurs
the moment the shutter release button is depressed.
That is, the shutter will open and lock, the mirror
will lock in the upraised position blocking out the
viewfinder, and the film advance lever will lock, the
above serving as a warning to the user that it is time
to replace batteries. After "Shutter Lock" occurs,
the camera can be returned to normal by rotating
the shutter speed dial to "B". (fig. 5). When the
batteries are completely depleted, the K2 DMD
behaves exactly as the K2.

Photo Memory Lock. By pushing down on the
mirror lock-up lever (1) fig. 6), the automatic
exposure will be memorized. For example, in a
back-lit scene, point the camera downward to
exclude the sky, push down on the mirror lock-up
lever to lock in (or memorize) the automatic
exposure, aim at your subject and while still
pushing down on the mirror lock-up lever, release
the shutter. When the automatic exposure is
memorized, the shutter speed indicator needle,
visible in the viewfinder, also locks into place.

Extended Photo Memory. Pushing up on the lever
and locking the mirror in the up position (1)
fig. 7) will also cause the camera to memorize the
automatic exposure setting for the lighting
conditions prevailing just before the mirror was
raised. There is no need to apply pressure to the
lock-up lever once it is raised, and the automatic
exposure will be memorized for approximately ten
minutes.

Split-Microprism Focusing Aid (fig. 8). To facilitate
focusing ease, the focusing screen of the K2 DMD is
provided with a split-microprism (central split-image
rangefinder surrounded by microprism and ground
glass collars) (fig. 8). Accurate focusing can be
accomplished with the rangefinder, microprism area,
or ground glass collar, according to the photo-
grapher's preference or subject requirement.

**Interchangeable Backs.** To remove the back cover (fig. 9) insert the screwdriver-like tool (fig. 9) between the back cover hinge (4) and the black felt material of the camera body, just beneath the large white dot appearing near the top of the back cover hinge (5). Next, push the tool down (toward the camera base plate) to disengage the upper hinge from the camera body (fig. 10). Finally, gently lower the back cover to disengage the lower hinge, freeing the back cover.

When attaching the back cover to the camera body reverse the procedure by first engaging the lower hinge of the back cover to the camera body, and then use the tool to push down the pin at point (5) (fig. 9) so that the upper hinge of the back cover will align with that of the camera body, and finally, remove the tool to free the pin, locking the back cover to the camera body.

The above procedure for changing backs applies to those who purchase a K2 DMD body and at a later date purchase Data Back MD, or to those who purchase a K2 DMD with Data Back MD preattached and purchase the standard back (fig. 11) at a later date. However, in the former case, a small adjustment must first be made at an authorized Asahi Pentax service center.
NOMENCLATURE  K2 DMD + Motor Drive MD + Battery Grip M + Data Back MD

12
Motor drive MD trigger release
Prism window for aperture read-out
Motor drive MD grip
Battery grip M trigger release
Motor drive MD
Motor drive MD remote control socket

13
Exposure counter set dial
Exposure counter
Data back MD
Rewind lever
Rewind lever lock button
Battery grip M remote control socket
Battery grip M C/S dial
Motor drive MD C/S dial
Battery grip M

14
3m power cable M

15
10m power cable M
When using the K2 DMD with Data Back MD, first be sure to turn on the Data Switch located on the base plate of the camera (6 fig. 16) by rotating it clockwise.

When this is done, a light shield will appear at the lower right-hand corner of the film plane (7 fig. 17). Next, securely attach Motor Drive MD (8 fig. 18) to the tripod socket of the camera by rotating the tripod socket screw (9) clockwise.

Then, making sure to SET THE C/S SWITCH OF BATTERY GRIP M (11 fig. 19) TO "OFF" (the central green dot), attach the grip (10) to Motor Drive MD by using the tripod screw (12).
INSTRUCTIONS FOR USE

After loading the camera with film, set the C/S Dial of Battery Grip M (11) fig. 19) to "S" and make two blank exposures by depressing the Trigger Release of Motor Drive MD (13) fig. 20) (if blank exposures are made with the C/S Dial set to "C", there is the danger of taking excessive blank exposures, wasting film).

If the blank exposures are made by using the Film Advance Lever (14) fig. 20), the Shutter Release Button (15) may lock in place. At such a time, depress the Trigger Release to trip the shutter; however, if the Exposure Counter (18) indicates zero, be sure to first move the Set Dial (16) as indicated by the arrow. After blank exposures have been made, rotate the Exposure Counter Set Dial (16) fig. 21) in the direction of the arrow (17) and align the figure in the Exposure Counter (18) which corresponds to the maximum number of exposures for the film being used (usually 36 or 20) with the white index line (17). When the Exposure Counter reaches zero, the motor drive will automatically stop.

Either the Trigger Release (13) fig. 22) on the grip (19) of Motor Drive MD (8), or the Trigger Release (20) of Battery Grip M (10) may be used.

The C/S Dial on Motor Drive MD (21) fig. 23) is for use with the Trigger Release of Motor Drive MD (13). When using this Trigger Release (13), the C/S Dial of Battery Grip M (11) may be set to "C" or "S"; however, if it is set to "OFF" (the green dot), the motor drive will not function.

The "S" on the Motor Drive C/S Dial (21) signifies single-frame exposure. Depressing the Trigger Release will trip the shutter and advance the film one frame.

The "C" (fig. 24) signifies consecutive exposures, and exposures will be made in rapid succession (regardless of the position of the Shutter Speed.
NOTE: Be careful not to touch the Exposure Counter Set Dial during motor drive operation.

Dial of the camera) as long as the Trigger Release is depressed. The number of frames that can be taken per second is adjustable. If the C/S Dial is rotated counterclockwise to the right-hand extremity of the orange band, it is possible to take consecutive exposures at the rate of 2 fps when the Shutter Speed Dial of the camera is set to 1/1000 ~ 1/60 second. Setting the C/S Dial to the left-hand extremity of the orange band will lower the rate to 1/2 fps. When set exactly mid-way (fig. 24), the rate will be 1 fps. The C/S Dial can be set to any in-between position for stepless adjustments.

When using the Trigger Release of Battery Grip M (20) the C/S Dial of the grip (11) is used. "S" signifies single-frame exposure. However, when the dial is set to "C" (fig. 25), the consecutive exposure rate (fps) will be controlled by the position of the Motor Drive C/S Dial (21). If the Motor Drive C/S Dial (21) is set to "S" and the Battery Grip C/S Dial is set to "C", the rate will be 2 fps.

Although the consecutive exposure rate (fps) is adjustable for shutter speeds of 1/1000 ~ 1 second, when using the 2 ~ 8 sec. range, the film will be advanced as soon as the shutter closes, resulting in a fixed rate.

When the film has been completely exposed, depress the Rewind Lever Lock Button (22) (fig. 26), and while holding it in, push the Rewind Lever (23) in the direction of the arrow, and this will push in the Rewind Button of the camera body. Next, release the Rewind Lever (23), and rewind the film with the Film Rewind Crank as you would with the Pentax K2.

If you cannot lower the Rewind Lever (23), remove Motor Drive MD and depress the Rewind Button of the camera.
Remote Control
Remove Battery Grip M and attach the accessory 3m Power Cable (a 10m Power Cable is also available) to the Remote Control Sockets of Motor Drive MD (24) (fig. 27) and Battery Grip M (25). Even when remote control is being used, the Trigger Release of Motor Drive MD (13) will still function.

Changing Batteries
Move the Battery Holder Lock of Battery Grip M (26) (fig. 28) in the direction of the arrow to free the Battery Holder (fig. 29). Remove all batteries, replace with fresh batteries, and insert into holder taking care that the poles match the diagrams of the Battery Holder. Either standard or alkaline Penlight batteries may be used. As the batteries weaken, the film transport speed will drop, indicating it is time to change batteries.

Using Bulb
When the Shutter Speed Dial is set to B (Bulb), the shutter will not close until your finger is removed from the Trigger Release, regardless of whether the C/S Dial is set to "C" or "S".

When using B with the motor drive attached, the time exposure is powered by the batteries within the camera body (which will then have a maximum life of 15 hours). As this is considerably different from using B with just the K2 DMD body (a mechanical shutter speed, not requiring electrical power), exercise caution.
SPECIFICATIONS

Power Source: 12 penlight batteries (18V) for up to 40 rolls of 36 exposures
fps Rate:
  * Single-Frame Exposure
  * Consecutive Exposures steplessly adjustable from 1/2 to 2 fps
Exposure Counter: Subtractive type with automatic stop at zero
Trigger Release: Found on Motor Drive MD Grip and Battery Grip M
Shutter Speeds: 1/1000 – 8 seconds. During single-frame or consecutive exposure operation
Dimensions (WxHxD) and

Weight (with batteries): K2 DMD body with Data Back MD;
  144 x 92 x 81mm, 797g
K2 DMD body with Motor Drive MD;
  149 x 111 x 75mm, 1,038g
K2 DMD body with Data Back MD and Motor Drive MD;
  149 x 111 x 102mm, 1,140g
K2 DMD body with Data Back MD, Motor Drive MD, and Battery Grip M;
  149 x 253 x 102mm, 1,470g

Accessory: 3m Power Cable M