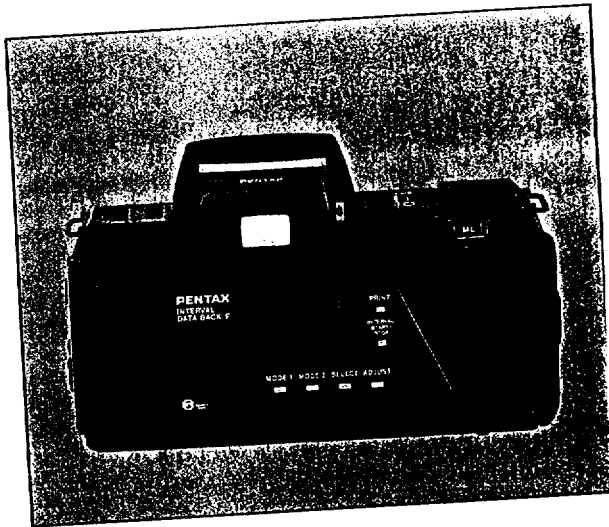


PENTAX®

INTERVAL DATA BACK F

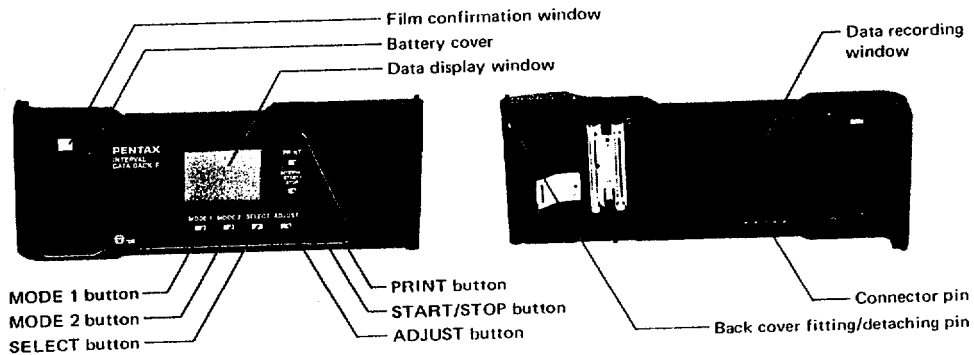


Thank you very much for purchasing the PENTAX Interval Data Back F. Replacing the camera's back cover with the Interval Data Back F cover will enable you to imprint the year/month/day, month/day/year, day/month/year, day/hour/minute (A/P hour/minute) as well as count and fix numbers on the pictures you take. Also, the INTERVAL function enables automatic camera control such as setting the time to take a picture, changing the picture taking intervals, and setting the number of frames. Please read this manual carefully and familiarize yourself with all the features and functions so that you can fully benefit from all it has to offer.

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NAMES OF PARTS

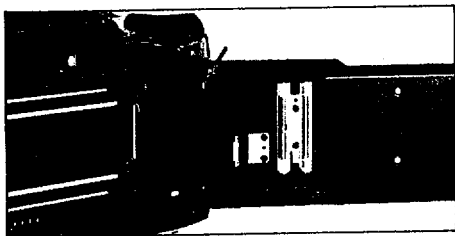


GENERAL PRECAUTIONS

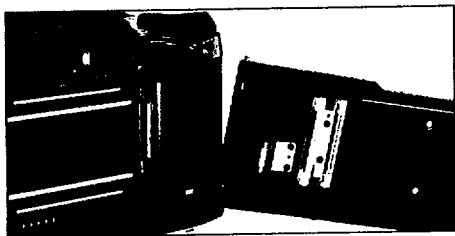
The data (year/month/day or hour: minute) is printed on the lower right-hand corner of the picture, as shown in the accompanying photograph. Select the desired imprint data on the display window and simply set the PRINT function, and the selected data will be imprinted on the picture whenever the shutter is released. This data will be hard to see if this part of the picture is whitish or yellowish in color, so try to take pictures in such a way as to make this part of the picture have a dark background whenever possible.



HOW TO FIT THE DATA BACK COVER ON



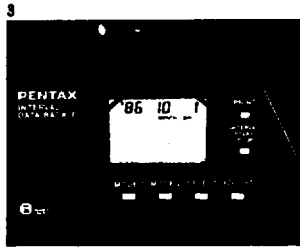
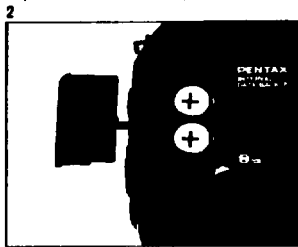
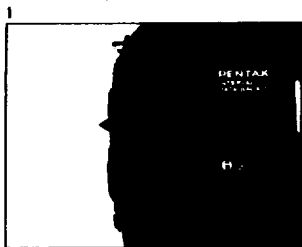
When replacing the back cover with the Data Back cover, first remove the back cover by flipping it open and inclining it outward while pushing on the fitting/detaching pin shown by the arrow. Store the removed back cover in the accessory casing in order to keep it from deforming. When fitting Interval Data Back F on, first fit the lower shaft stem into the camera, and then fit the upper



shaft stem in while pushing on the fitting/detaching pin, then release the fitting/detaching pin.

Caution: Do not tamper with the data recording window. Blow off any dust with a blower, and whenever soiled, clean with a soft cloth.

HOW TO INSERT THE BATTERIES



1. As shown in the photograph, remove the battery cover by pulling it in the direction of the arrow.
2. Insert two batteries into the battery compartment with the positive terminals facing upward, then replace the cover by fitting it into its grooves and pushing it in until it clicks.

3. Inserting the batteries will light the data display window. If the display lamp is not properly lit (no display, weak or flickering), check to make sure the batteries have been properly inserted, or replace with new batteries.
 - After inserting the batteries, adjust the display in conformance with the data adjusting instructions, which are explained on page 6~10.

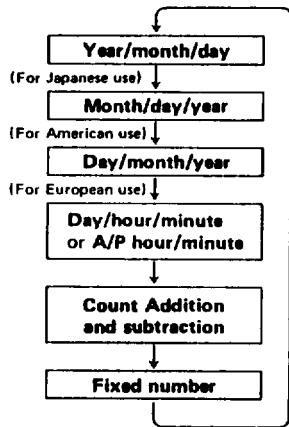
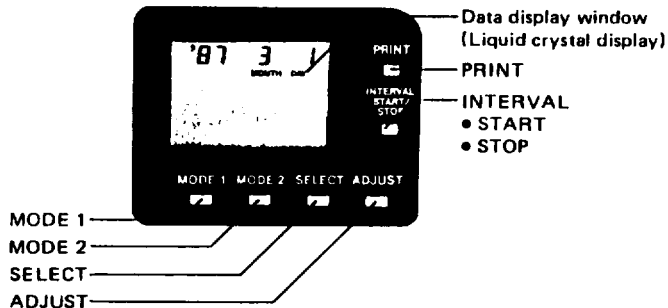
ON BATTERIES

- Two batteries of either of the following types can be used:
 - 1.5V alkaline mini battery
 - 1.5V silver-oxide mini batteryBatteries with the same shape but having different voltages cannot be used.
- Be sure to insert the batteries in correctly. Otherwise, electrolyte leakage, excessive heating, or damage to the camera may result.



- When replacing batteries with new ones, change both batteries at the same time, using the same kind of batteries made by the same manufacturer. Do not use an old and new battery or different kinds of batteries together.
- When not using the camera for long periods of time, remove the batteries. Old batteries may leak and damage the camera's casing. Store the removed batteries in a safe place, out of the reach of children.
- Tearing apart the batteries, recharging them, or casting them into a fire may cause them to explode.

DATA SETTING



*Push these pushbuttons with finger or matchstick.

Mode Switching

As shown in the accompanying diagram, pushing the MODE 1 pushbutton will sequentially shift the mode to the six different modes of year/month/day, month/day/year, day/hour/minute (A/P hour/minute), count, and fixed number, with each push of the button, to determine the data on the data display window. Release the button when the desired mode is obtained. Pushing the PRINT button will display "PRINT" on the bottom left of the display window, which will flicker for a few seconds to indicate the data imprint when the shutter is released. Pushing the PRINT button once again will cut the switch off, erase the PRINT indication, and terminate data imprint on the pictures.

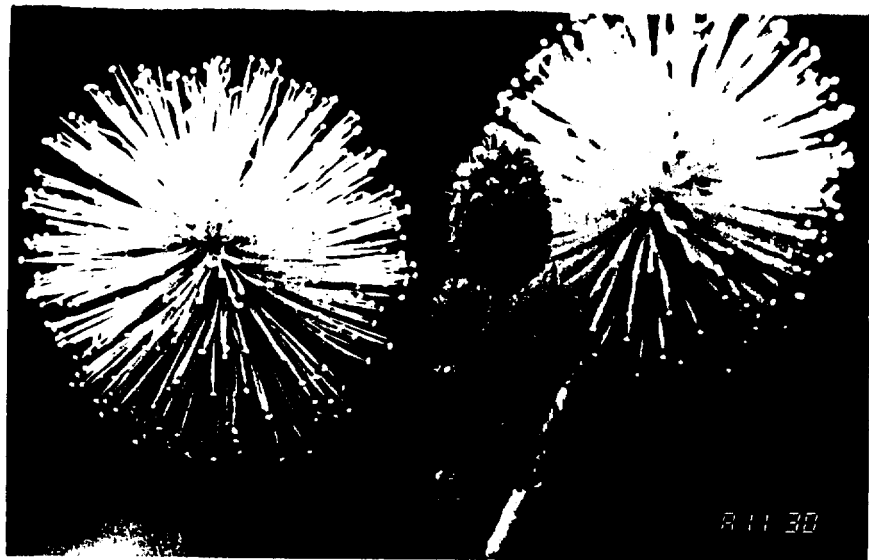
Day/Hour/Minute ↔ A/P Hour/Minute Switching

1. Push the MODE 1 button to switch to day/hour/minute (24-hour display) or to A/P hour/minute (12-hour display).
2. Pushing the ADJUST pushbutton for 2~3 seconds will permit alternate switching to the date or to A/P (morning/afternoon).

For example: 21 15:30 ↔ P 3:30
(A)

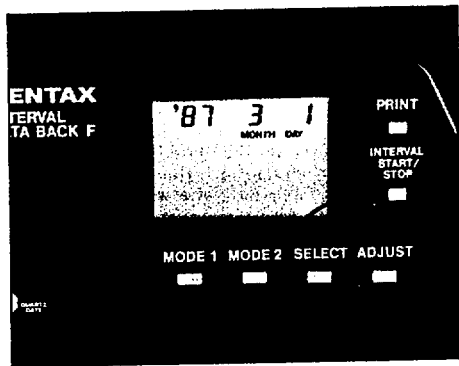
For A ↔ P switching, push the ADJUST pushbutton for 2~3 seconds.

Photographed
at 11:30 a.m.



Data Adjustment

- Pushing the SELECT pushbutton will cause the display to flicker, and pushing it again will shift the display each time, so push the button until the display data you want to adjust appears.
- Push the ADJUST pushbutton when changing the display data that is to be adjusted. The numerical value will advance each time the ADJUST pushbutton is pushed, and pushing the pushbutton for 2~3 seconds will result in the fast forward of numerical values. In this case, the pushbutton will have to be released before the desired numerical value is reached in order to prevent overrunning it. After making the adjustment, push the MODE 1 button to stop the flickering.



Adjustment of "Second" Display

1. With the setting matched to "day/hour:minute" or to "A/P hour:minute," push the SELECT pushbutton and cause the colon(:) to flicker.
2. Keeping track of the time, push the ADJUST pushbutton when the second indicator reaches zero, which will set the "second" indication at zero (the flickering will stop for an instant).

Adjustment of Hour/Minute and Year/Month/Day Display

1. Push the SELECT pushbutton and cause the numerical values of the hour/minute or year/month/day display to flicker, whichever is to be adjusted.

2. Push the ADJUST pushbutton and adjust the numerical values.

Year = '01~'99

Month = 1~12 (January to December)

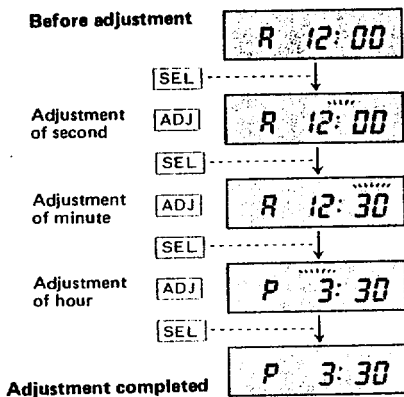
Day = 1~31 Hour = 0~23 (A/P 1~12)

Minute = 00~59

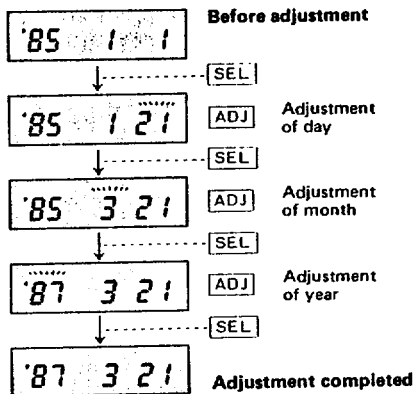
The diagram at right shows an example of how the display data "12:00 A.M., January 1, 1985" is changed to "3:30 P.M., March 21, 1987."

- Adjusting the year/month/day or the hour/minute in a given mode will automatically adjust the other mode.
- Releasing the shutter during "flickering" display will not enable data imprint, so be sure to push the MODE 1 pushbutton and stop the flickering after the adjustment is made. Incidentally, the flickering will automatically stop after about two minutes if left as is.

Adjustment of "Day/Hour/Minute" Display



Adjustment of "Year/Month/Day" Display



Setting of Count Display

The COUNT number will increase or decrease from the preset number with each releasing of the shutter, in an endless progression.

Up (addition): → 00 → 01 → 02 → 03 . . . 99 → 00
← . . . 97 ← 98 ← 99 ← (subtraction) DOWN

In addition, the counter may be used to indicate a group of pictures such as in time lapse photography.

1. Switch to either addition (UP) or subtraction (DOWN) as desired by setting to COUNT. Continued pushing of the ADJUST pushbutton will enable switching to UP or DOWN display.
2. Selecting and setting one of the letters from A to F displayed at the left will enable continuous imprint of that particular character.

- The COUNT number will be imprinted from the preset display value.
- Whenever a switch is made to other displays, such as year/month/day or day/hour/minute during photography, the COUNT will stop temporarily and will not advance any further. Therefore, it is possible to take a separate picture and then return to taking the original series of pictures.
- UP and DOWN are memorized separately.
- The COUNT number will continue to be added or subtracted on as long as the COUNT display is on, even if no data is being imprinted.

Fixed Number Setting (NO INPUT)

This function may be used for arranging technical data or sample numbers neatly. Numerical values can be input into a maximum of six spaces. The set values are fixed, and the same numerical values will be imprinted continuously unless the setting is changed.

1. Any optional numerical value from among (0~9, -, or blank) can be inscribed into the [-] positions.

-	-	-	-	-	-
-	1	2	3	4	5
1	2	-	-	5	6

(All blank)					
		4	5	6	
		1	5	-	1

- The symbol [-] will be imprinted as [-]. In order to imprint this symbol as an empty space, push the COUNT pushbutton once more to erase the symbol [-].

PRECAUTIONS WHEN TAKING PICTURES

- "Year/month/day" and "hour:minute" cannot be printed on the picture simultaneously.
- Releasing the shutter causes the PRINT indication in the data display window to flicker for 2~3 seconds and the data to be imprinted onto the picture.
- The working temperature for data printing is 0°~50°C.
- The films that can be used are those with ISO 25~1600, and the camera is automatically set with the ISO film speed.
- Using high-speed films (ISO 1,000~1,600) may blur the printed characters.
- Using films with speeds that are less than ISO 50 may result in the characters and numerals coming out dim.

Regarding Batteries

Whenever the clock function performs abnormally, or the data display flickers, becomes dim, or disappears, replace the batteries as quickly as possible.

Regarding the Liquid Crystal Display

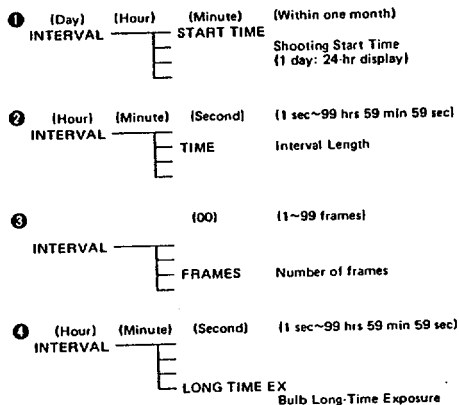
- Avoid storing or leaving the camera for long periods of time in a place that is too warm. Such place as the automobiles or near heaters are considered to be unsuitable.
- The liquid crystal display darkens at temperatures as high as 60°C, but its functions are restored when the temperature goes down to normal.
- At extra low temperature, the liquid crystal's display response may be delayed, but this is due to the properties of liquid crystal and not to any trouble.

HOW TO USE THE INTERVAL FUNCTION

Interval Function

Each time the MODE 2 pushbutton is pushed, the display will change from ① Shooting Start Time to ② Interval Length, ③ Number of frames, and ④ Bulb Long-Time Exposure, as shown in the following diagram. Regarding each of these items, cause the related numbers and letters displayed on the upper right-hand side to flicker with the SELECT pushbutton, and then set the desired number with the ADJUST pushbutton. When all these numbers and letters have been set, push the MODE 2 pushbutton to stop their flickering.

- Switch the camera's main switch to ON, set the drive mode to single shot, then start taking pictures.



① Shooting Start Time (START TIME)

1. Push the MODE 2 pushbutton and set to Interval Start Time.
2. On the upper part of the display is the current "day/hour/minute" (in 24-hr units). Set this to the desired shooting start time, then push the MODE 2 pushbutton to stop the flickering.
3. Pushing the Interval Start pushbutton on the right-hand side starts the time, and the shutter will automatically be released when the preset time arrives.

- The shooting start time can be set to a day/hour/minute lying within the period of one month.
- The interval function, after being set, can be canceled whenever desired simply by pushing the Interval Stop pushbutton.
- This Shooting Start Time function is unnecessary when taking pictures immediately, and set to ②, ③ and ④.

② Interval Length (TIME)

1. Push the **MODE 2** pushbutton and set to Interval Time.
2. Set to the desired photography interval "hour/minute/second" at the upper part of the display. This is possible within 1 sec~99 hrs, 59 min. and 59 sec (roughly 4 days and 4 hrs), then push the **MODE 2** pushbutton to stop the flickering.
3. Pushing the Interval Start pushbutton on the right-hand side will start the function, and the shutter will be released repeatedly and automatically in the preset time interval.

- Pictures can be taken repeatedly for the number of times set with the "number of frames" (explained on the next page) and this function stops automatically when the preset number of times expires.
- The display will continue to flicker during the interval function.

③ Number of Frames (FRAMES)

1. Push the MODE 2 pushbutton and set to Interval Frame.
2. Set to the desired number of frames in the upper part of the display. This is possible within 1~99 frames. Then push the MODE 2 pushbutton to stop the flickering.
3. Pushing the Interval Start pushbutton on the right-hand side will start the function, and the shutter will be released repeatedly and automatically up to the preset number of frames.

- This function serves to designate the number of frames to be photographed with the preset INTERVAL function ③.
- Starting the INTERVAL function without setting it to function ③ and with the display indicating "zero (0)" will not open the shutter. An improper setting alarm is indicated by flickering.
- Be sure to set the number of frames over 1. The shutter will not be released when set at 0 (zero).

① Bulb Long-Time Exposure (LONG TIME EX)

- 1. Push the MODE 2 pushbutton and set to LONG TIME EX interval.**
- 2. Set to the desired exposure time "hour/minute/second" with the bulb in the upper part of the display. This is possible within 1 sec~99 hrs, 59 min and 59 sec. Then push the MODE 2 pushbutton to stop the flickering.**
- 3. Set the SFX/SF1 camera's display panel to MANUAL, BULB, SINGLE, then select the proper f/stop to obtain proper exposure.**
- 4. Pushing the INTERVAL START pushbutton will start the function, making a long-time exposure according to the preset exposure time.**

- Set the ② Interval (TIME) to a time longer than the preset Bulb time; otherwise the exposure will not start and the display in the LCD window will flicker, warning you of the error.**

Interval Warning Display

- When using the INTERVAL function, an improper or inadequate setting will lock the START pushbutton and all the mistaken settings will be indicated by their flickering.
- Any erroneous setting on the camera will also lock the START pushbutton.
- When normal operation starts by pushing the START pushbutton all items related to the function will flicker.

Precautions

- To reduce the camera's power consumption, its power supply is cut off automatically about 2 seconds after the shutter is closed.
- The shutter can be released whenever necessary during the INTERVAL function. In this case, TIME will continue to proceed and the count to increase or decrease (within the range of the number of preset frames).
- The display contents of MODE 2 will not be printed out on the pictures.

Termination of Interval Function

- The INTERVAL function will be automatically stopped whenever the preset time or number of frames is reached.
- The camera's power unit will shut off about 2 seconds after the INTERVAL function end.
- The INTERVAL function, once started, can be stopped by pushing the INTERVAL STOP or MODE 2 pushbutton. Pushing the START pushbutton once again will restart the INTERVAL function from where it was earlier stopped.

Combined Use with Dedicated Flash Unit

- When using the AF400FTZ, the changing signal will enter the flash about 30 seconds before the preset INTERVAL TIME. Therefore, be sure to set the Interval Length (TIME) to exceed 30 seconds. If the Interval Length (TIME) exceeds 5 minutes or INTERVAL function was stopped, the flash power unit will be temporarily shut off to save the flash's batteries.
- When taking pictures with this function, leave the dedicated flash unit's power ON.

SPECIFICATIONS

Camera used:	PENTAX SFX/SF1
Mounting method:	Use in place of camera's back cover
Method of Data Imprint:	Prints out on back of film with 7-segment, 6-figure liquid crystal display (LCD) device
Data display window:	7-segment, 6-figure liquid crystal display (LCD), selectable of printout or not, flickering of "PRINT" for 2~3 sec at the time of printout
Data modes:	Six modes: "year/month/day," "day/month/year," "month/day/year," "day/hour/minute" or "A/P hour/minute," by MODE pushbutton switching. Also provided with auto-calendar function (Automatic correction of year, leap year, long and short months) Year ('00~'99) = (2-digit display of last two numbers of calendar year) Month (1~12) = January to December Day (1~31) Hour (0~23) or A/P 1~12 Minute (00~59) Monthly tolerance ± 20 sec Usable: Letters A~F, COUNT numbers up to 6 digits (including blank)
Location and Size of Imprinted Data:	Lower right-hand side of picture, with each character 0.7 x 0.4mm.
Data Adjustment:	Possible (fast-feed changing also possible)

INTERVAL Functions

START TIME: settable in day/hour/minute
TIME: setting of repetitive photography interval (1 sec~99 hrs, 59 min, 59 sec)

FRAMES: setting of number of photography frames (1~99 frames)

LONG TIME EX: setting of long-time exposure (1 sec~99 hrs, 59 min, 59 sec)

Use of AF400FTZ enables charging 30 seconds before photography by INTERVAL function, also issuance of instructions for stopping the charging 5 minutes later.

ISO 25~1600, automatic setting.

Two 1.5V alkaline or silver-oxide mini batteries.

Data display flickers when voltage drops

Approximately 5,000 times with alkaline batteries, liquid crystal service life of approximately 10 years (tested by our company under normal temperature and humidity conditions).

Possible below about 2 frames/sec.

Case.

144 (width) x 57 (height) x 25.5 (thickness) mm, 82g (without batteries)

Film Speed:

Power Source:

Battery Warning:

Number of Flashes:

Time Laps Photography:

Accessories:

Size and Weight:

* The batteries that come with Interval Data Back F are provided as a sample at the time the camera is shipped from the factory, so they may have become weak due to natural discharge.



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Specifications are subject to change without notice.

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