

Canon DATA BACK

Instructions

English Edition



Canon Data Back

The Canon Data Back is a data imprinting device designed exclusively for Canon's F-1 camera. It superimposes entered numerals on roll film at the bottom part of each frame. Data can be imprinted using up to 12 digits, with six digits each on the left and right hand sides. The Canon Data System is composed of a Data Back with its imprinting mechanism, and a Data Controller for entering the instructions which activate the imprinting process. They are joined by a connector cord. A Canon Dry Battery Cassette, which holds four

Standard Type Specifications:

Camera Used: Canon F-1

Composition: F-1 Body, Data Back and Data Controller

Data Back: Data Back exclusive for F-1, 12 pieces of Light Emitting Diode, and synchronization cord for simultaneous imprinting of the data on the photos.

Data Size: 1.1mm high x 0.9mm wide

Data Digit: 12 digits

Display Window: 2 groups of digital display with a total of 12 digits.

Controller: Ten key desk-top calculator type for data input.

Data Setting Switch: Data can be displayed up to 12 digits, with six digits on the left hand and right hand sides each. With the data setting switch at "Counting Position", the figure displayed by the right six digits changes to the next number after each exposure.

Data Input: By pressing ten keys, the data will be displayed on the display window according to the designation of the data setting switch.

Exposure Adjustment of Data: The exposure adjustment will be made with the four-position Exposure Adjustment Knob.

Way of Exposure:

2 different ways of exposure. In the case of automatic operation, exposure will be decided by the shutter release of the camera with the shutter release synchronized with the "ON" of the synchronization contact for the flash unit. In the case of optional operation, the exposure will be decided by depressing the Optional Exposure Button.

Cord: A 30 conductor cord with a 4m length for connecting with Data Back. The synchronization cord branched from Data Back for

1.5V penlight batteries (size AA), is used as a DC power source. An AC power source can also be used when the Data System is connected to it through the Cannon AC Adaptor AD-1. The six digits on the left hand side imprint entered numerals, while the six digits on the right hand side can be used for imprinting entered numerals or changing numerals to function as a counter adding on one figure with each exposure. The counter function can be conveniently used for imprinting code numbers, dates, and serial numbers.

connecting with the synchronization socket of F-1.

Power Source: DC 6V (4 penlight dry batteries, size AA)

The Canon AC Adaptor AD-1 is required for using an AC power supply.

Battery Check: With the main switch on, the battery checker needle points to either the red zone or blue zone. The checker needle in the blue zone shows that it is ready for operation.

Size and Weight:

	Size	Weight
Data Back	48.5mm x 90mm x 17.2mm	180g
Controller	190mm x 240mm x 63mm	1,560g

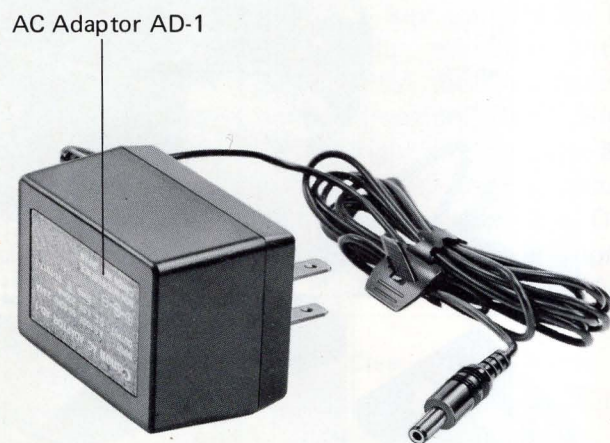
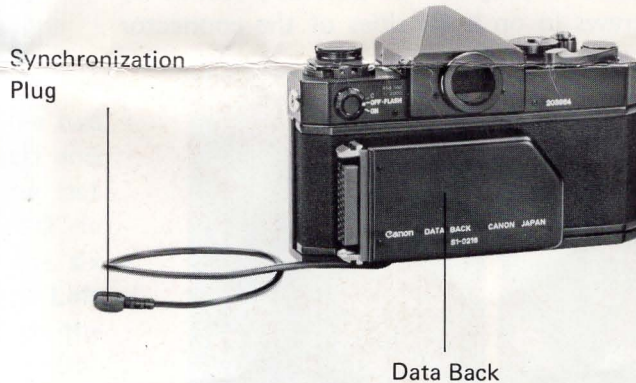
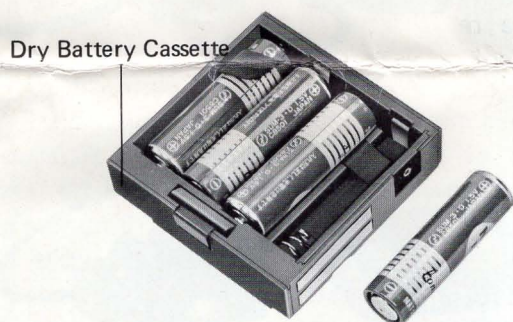
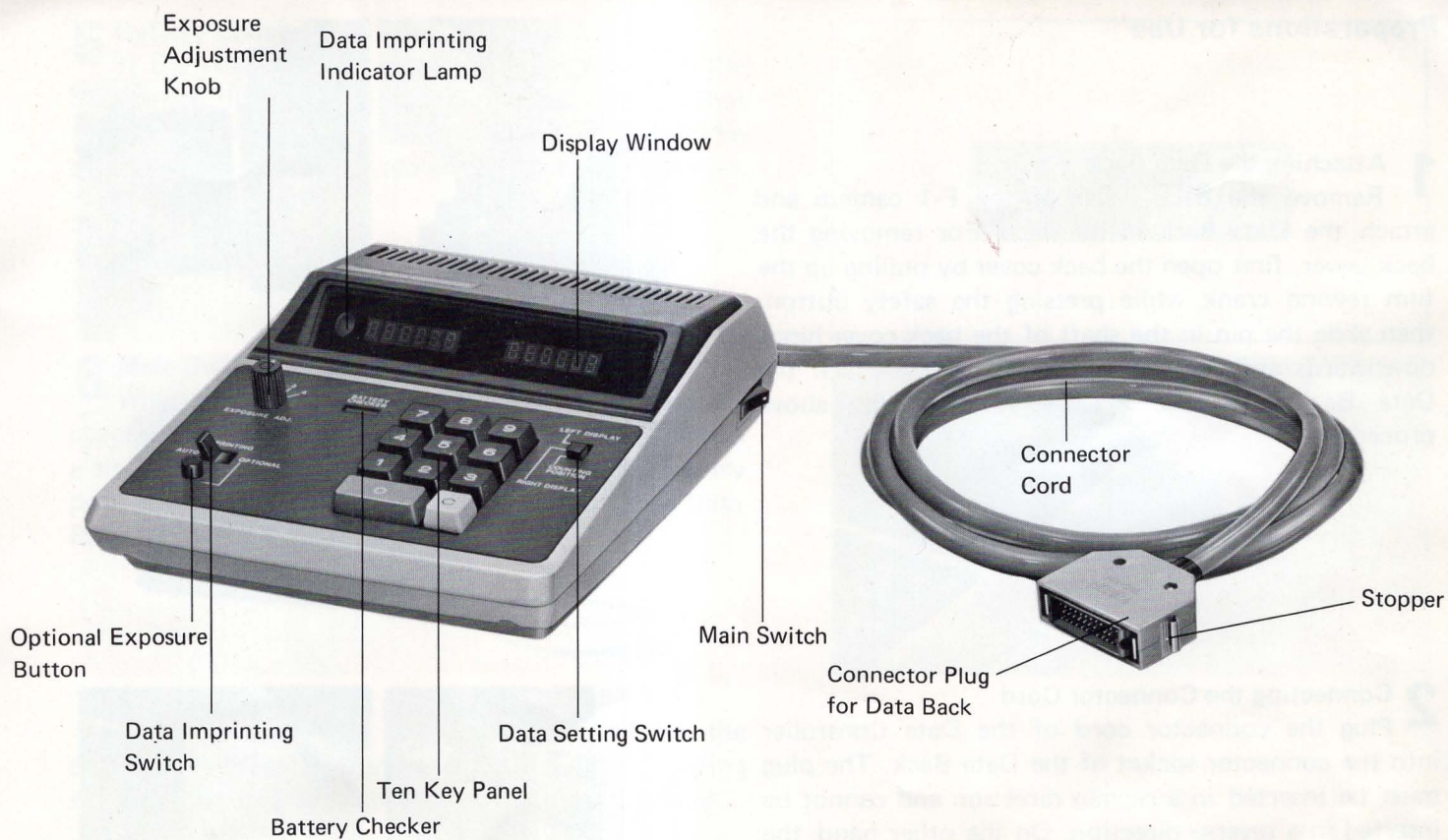
Others

1. Flash Photography

As the synchronization terminal of the F-1 is connected with the synchronization cord branched from the Data Back, use the Flash Coupler L or the Flash Coupler D when the direct-coupled flash type strobo is used. Additionally use a direct-contact shoe adaptor when the cord-contact type strobo is used.

2. As data imprinting requires 1/30 to 1/2 of a second, do not wind the film before the data imprinting indicator lamp goes out. In using the Motor Drive, set the main switch of the Motor Drive at the "S" position and keep pressing the shutter release button until the data imprinting indicator lamp goes out.

Subject to alterations

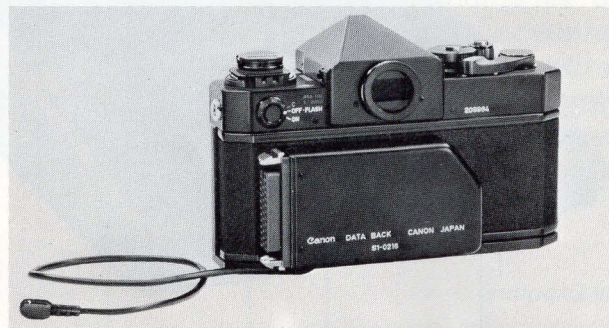


There are five varieties of the Canon AC Adaptor AD-1, each to suit a different voltage. They are 100V, 115V, 120V, 220V and 240V.

Preparations for Use

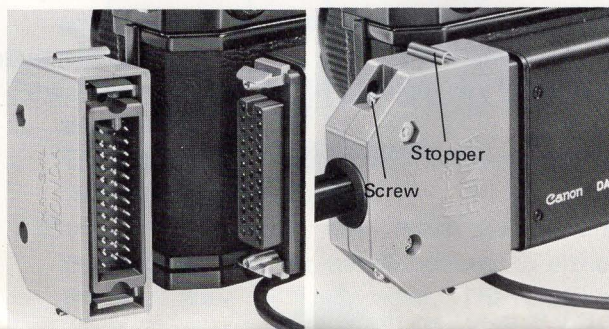
1 Attaching the Data Back

Remove the back cover of the F-1 camera and attach the Data Back in its place. For removing the back cover, first open the back cover by pulling up the film rewind crank while pressing the safety button, then slide the pin in the shaft of the back cover hinge downwards and lift off the back cover. Attach the Data Back onto the F-1 by reversing the above procedure.



2 Connecting the Connector Cord

Plug the connector cord of the Data Controller into the connector socket of the Data Back. The plug must be inserted in a certain direction and cannot be inserted in a reverse direction. On the other hand, the connector plug can be removed by first pressing the stoppers on both sides and pulling out the connector plug. The connector plug can be perfectly locked by driving the screws in on both sides of the connector plug.



3 Connecting the Synchronization Cord

When the data imprinting is required simultaneously with the camera exposure, insert the synchronization plug of the Data Back into the flash terminal of the F-1.



4 Penlight Battery

When using a 1.5V penlight battery cassette, replace all four 1.5V penlight batteries (size AA) with new ones of the same brand and load them into the dry battery cassette. The dry battery cassette can be loaded into the battery compartment only in the correct direction with the contacts of both compartment and battery cassette coming together.



5 Battery Check

If the needle of the battery checker points to the blue, when the main switch is turned on, it means that the voltage of the battery is sufficient. If the needle should point to the red, replace the penlight batteries.

6 Main Switch

When the main switch is turned on, the battery checker needle will jump, and on the display window, a single "0" figure lights up at the left and right entry positions. Keep the switch off when not using the Data Back.

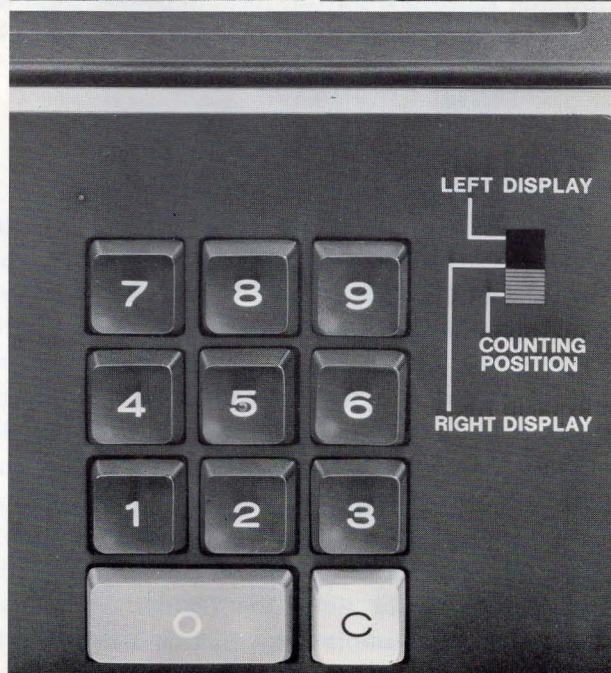
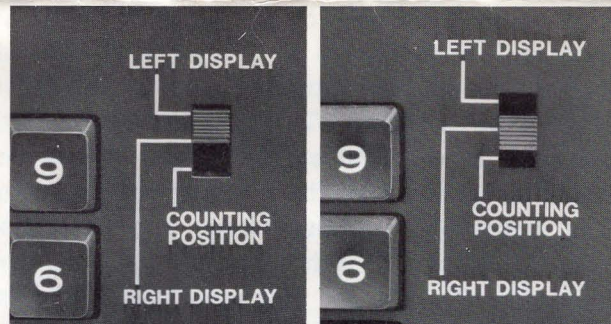
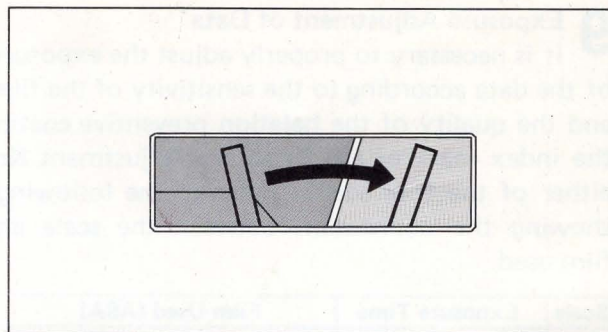
7 Loading Film

Please refer to the instruction booklet for the Canon F-1. When opening the back cover for loading the film, disconnect the cord when it gets in the way.

8 Data Setting

Data is entered separately by switch into the two groups of six digits each, displayed to the left and right. When the main switch is turned on, the last digit of both the left and right groups display "0" in the display window. For entering data into the six digits on the left, set the Data Setting Switch to "Left Display". For entering data into the six digits on the right, set the Data Setting Switch to "Right Display". For making entries, press the desired keys and the figures will appear in the display window in the order they are pressed. Press C key for clearing the window. Only the side on which the Data Setting Switch is set will be cleared. When the Data Setting Switch is shifted to "Counting Position" from "Right Display", the six digits on the right will function as a counter, adding on one figure with each exposure. Entries cannot be made, however, when the Data Setting Switch is set at the "Counting Position". Neither can the display be cleared with the clear key.

Switch Position	Entry	Clear	Counter
Left Display	6 digits on left	6 digits on left	Impossible
Right Display	6 digits on right	6 digits on right	Impossible
Counting Position	Impossible	Impossible	6 digits on right possible



9 Exposure Adjustment of Data

It is necessary to properly adjust the exposure time of the data according to the sensitivity of the film used and the quality of the halation preventive coating. Set the index mark of the Exposure Adjustment Knob at either of the four scales. Refer to the following table showing the connection between the scale and the film used.

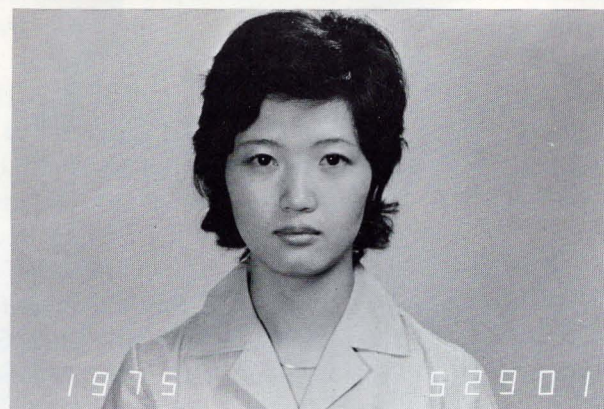
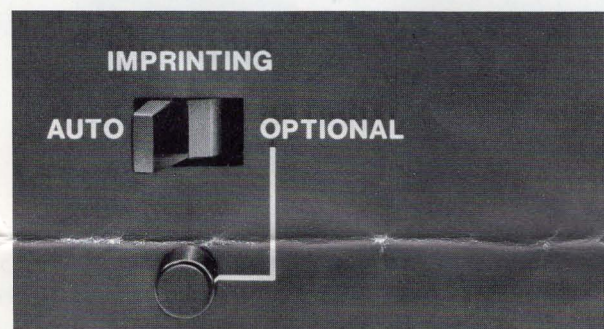
Scale	Exposure Time	Film Used (ASA)
1	30mS	Kodacolor II (80), Fujicolor F-II (100), Sakuracolor II (100)
2	75mS	Agfachrome 50S (50), Agfacolor CNS (80)
3	200mS	Kodachrome X (64), Fujichrome R100 (100), Sakuracolor R100 (100), Agfacolor CT18 (50), Tri X (400)
4	500mS	Fuji SS (100), Sakura SS (100), Fuji SSS (200), Sakura SSS (200), Neopan F (32), Kodak Panatomic X (32), Plus X (125), Kodachrome II (25), Minicopy (32), Infra Red



NOTE: The table on the left displays the standard relationship, but the situation will become somewhat different according to the conditions concerning the subjects. It is, therefore, requested that you do some testing after deciding which film is to be used.

10 Imprinting of Data

Two methods of imprinting data are possible. One is the automatic imprinting method which is synchronized with the exposure. The other is the optional imprinting method in which imprinting is performed at will. For synchronized data imprinting, connect the synchronization plug branched from the Data Back with the flash terminal of the Canon F-1. Also set the Data Imprinting Switch to "Automatic". The data is then simultaneously imprinted with the shutter release of the F-1. As it takes 1/2 of a second for imprinting of the data on the film at the longest, please hesitate momentarily and turn the film advance lever after the data imprinting indicator lamp goes out. For the optional method in imprinting the data, set the Data Imprinting Switch to "Optional" and depress the Optional Exposure Button located below. Data will be imprinted independent of the camera's operation of exposing pictures sequentially.



11 Counter Function

When the Data Setting Switch is set at "Counting Position" for synchronization with the camera's exposure, the last digit changes to the next number after each exposure. In the case of the optional imprinting method, the figure changes every time the Optional Exposure Button is depressed. The figure imprinted on the film is the figure which appeared on the display window immediately before the Optional Exposure Button was depressed. When using the optional imprinting method (with the Data Setting Switch set at "Counting Position"), please do not wind the film for the next exposure until the figures on the display window change completely, i.e., an indication as to the completion of data imprinting on the film.

12 Regarding Display

All the figures displayed, up to six digits to the left and right, will be imprinted. Clear the left or right hand side not needed for imprinting. However, a "0" will appear in the last digit of six digits each on the left and right hand sides, when half or the whole display has been cleared.

When it becomes necessary to display a "0" at the head of a figure, first enter one of the numerals other than "0". Next enter "0" then the five digits. Up to eight entries for successive increases in digits are possible, but as the display window has a six digit capacity, the numerals first entered disappear so that the six digit figure begins with zero.

Example: 2 0 1 2 3 4 5

If entries for 8 digits are made on the 6-digit display on the right, it becomes fixed as any further shifting of digits is impossible. In this case, however, the counter function (the change in the numeral linked with the individual film exposures) continues. Dates can be entered because of the 6-digit display.

Example: 7 5 0 7 1 8

The 6-digit counter on the right hand side is independent of the 6 digits on the left hand side. The 6 digits on the left can be used as designated reference numbers.

13 Use of Motor Drive

When using the Canon F-1 with the attachment of a Motor Drive, set the main switch of the Motor Drive at "S" position. Please remember it is only a device for automatic single-frame film transport. Avoid sequence shootings at short intervals as the data imprinting will be incomplete. Also, do not forget to leave your finger on the Motor Drive shutter release button about a second after the shooting as otherwise the film will be automatically transported to the next frame too quickly, i.e., not allowing sufficient time for imprinting of the data.

14 Flash Synchronization

The flash terminal of the Canon F-1 is used as a synchronization contact for imprinting of the data. The direct synchronization contact of the Canon F-1 is still available for flash photography for imprinting of the data. Therefore, flash photography can only be done by an electronic flash coupled to the camera with Flash Coupler L. As for the flash unit, the use of the Canon Speedlite 133D, which gives the information by way of the camera meter needle acting as a recycling indicator for proper exposure, is recommended.

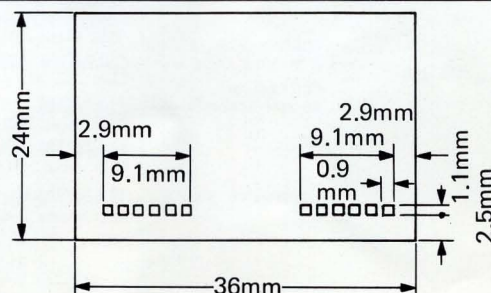


The data is imprinted in two blocks of 6 digits each on the lower left hand and right hand sides of the photograph as indicated on the right.

Each digit is 1.1mm high and 0.9mm wide.

The digits displayed by the LED of the Data Controller are printed below in their seven-segment-form.

1 2 3 4 5 6 7 8 9 0



Canon

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