

SIGMA**ELECTRONIC FLASH
EF-140 DGSA-STTL**

使用説明書

ISTRUZIONI PER L'USO

INSTRUCTIONS

BRUGSANVISNING

BEDIENUNGSANLEITUNG

用戶手冊

MODE D'EMPLOI

사용자 설명서

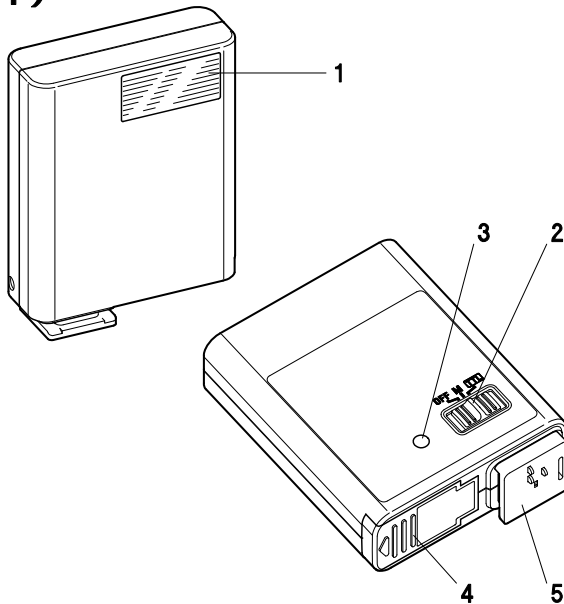
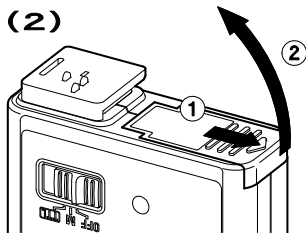
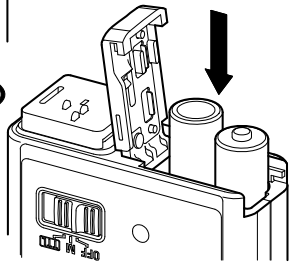
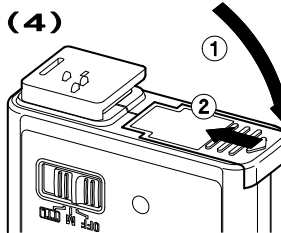
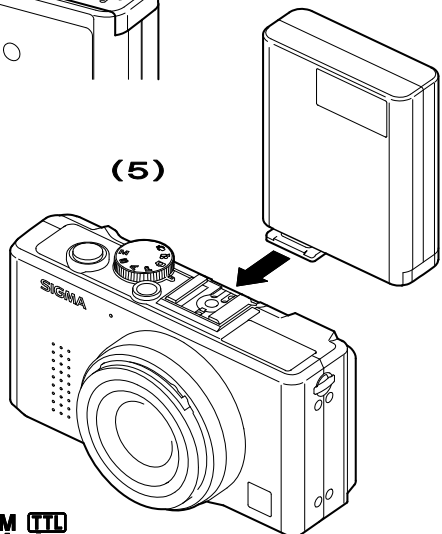
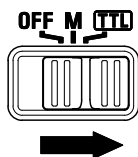
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РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ

INSTRUCCIONES

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<http://www.sigma-photo.co.jp>**(1)****(2)****(3)****(4)****(5)****(6)**

Thank you for purchasing the Sigma EF-140 DG SA-STTL Electronic Flash. This product is specifically developed for the SIGMA DP1 camera. To make the most of all these features, and to get the maximum performance and enjoyment from your flash, please read this instruction booklet, together with your camera's instruction manual, before using the flash, and also keep it handy for your future reference.

PRECAUTIONS

- ⚠ Symbol denotes the important points, where warning and caution are required.
- ⊘ Symbol contains information regarding the actions that must be avoided.

⚠ Warning !!
Disregarding this warning sign when using the product might cause serious injury or other dangerous results.

- ⊘ This flash contains high voltage circuits. To avoid electric shock or burns, do not attempt to disassemble the flash. If the outside shell of the unit is broken or cracked, do not touch the mechanism inside.
- ⊘ Do not fire the flash close to eyes. Otherwise the bright light could damage the eyes. Keep at least 1m/3feet distance between the face and the flash unit when taking a picture with flash.
- ⊘ Do not touch the synchro terminal of your camera when the flash is attached to hot shoe. High voltage circuitry could cause electric shock.
- ⊘ Never use your camera in an environment where flammable, burnable, gas, liquids or chemicals, etc, exist. Otherwise, it might cause fire or explosion.

⚠ Caution!!
Using the product and disregarding this caution sign might cause injury or damage.

- ⊘ Do not use this flash unit on any camera other than the SIGMA DP1 / SD14 cameras; otherwise the flash may damage the circuitry of these cameras.
- ⚠ This flash unit is not waterproof. When using the flash and camera in the rain or snow or near water, keep it from getting wet. It is often impractical to repair internal electrical components damaged by water.
- ⊘ Never subject the flash and camera to shock, dust, high temperature or humidity. These factors might cause fire or malfunctioning of your equipment.
- ⚠ When the flash is subjected to sudden temperature change, as when the flash unit is brought from a cold exterior to warm interior, condensation might form inside. In such a case, place your equipment in a sealed plastic bag before such a change, and do not use the flash unit until it reaches room temperature.
- ⊘ Do not store your flash in a drawer or cupboard etc., containing naphthalene, camphor or other insecticides. These chemicals will have negative effects on the flash unit.
- ⊘ Do not use a thinner, Benzene or other cleaning agents to remove dirt or finger prints from the component. Clean with a soft, moistened cloth.
- ⚠ For extended storage, choose a cool dry place, preferably with good ventilation. It is recommended that the flash be charged and fired several times a month, to maintain proper capacitor functioning.

DESCRIPTION OF THE PARTS (fig.1)

- 1.Flash Head 2.Power Switch 3.Ready Light
4.Battery Compartment Cover 5.Shoe

ABOUT THE BATTERY

This flash unit uses "AAA" type Alkaline dry cell batteries, Ni-MH rechargeable batteries, Oxryde dry cell batteries or Lithium batteries. Please replace the batteries if it takes more than 30 seconds to light the Ready Lamp.

To assure proper electrical contact, clean the battery terminals before installing the batteries

To prevent battery explosion, leakage or overheating, use two new AAA batteries of the same type and brand. Do not mix the type or new and used batteries.

Do not disassemble or short-circuit batteries, or expose them to fire or water; they may explode. Also, do not recharge the batteries other than Ni-MH rechargeable batteries.

When the flash will not be used for an extended period of time, remove the batteries from the flash to avoid the possibility of damage from leakage.

Battery performance decreases at low temperatures. Keep the batteries insulated when using the flash in cold weather.

BATTERY LOADING

1. Be sure to set the Power Switch to the off position then slide the battery cover in the direction of the arrow to open (fig.2).
2. Insert two AAA size batteries into the battery component. Be sure the + and - ends of the batteries are aligned according to the diagram in the component (fig.3).
3. Close the cover (fig.4).
4. Slide the Power Switch to the ON position. After few seconds, the Ready Lamp will light, indicating that the flash unit can be fired.

ATTACHING THE FLASH TO THE CAMERA

Be sure turn off the Power Switch. Remove the hot shoe cover of the camera and attach the flash unit to the camera as shown in the picture. (fig.5)

When you attach or remove the flash, grasp the bottom of the flash to prevent damage to the shoe foot and camera's hot shoe.

If the camera's built-in flash is set in the up position, please close it before you attach the flash unit.

TTL AUTO FLASH

In the TTL AUTO Mode, the camera will control the amount of flash lighting to get the appropriate exposure for the subject.

1. Slide the Power Switch to the TTL Position (fig.6).
2. Focus onto the subject.
3. Press the shutter button after the flash is charged.

To conserve battery power, the flash unit automatically turns itself off when the flash is not used within approximately 300 seconds. To turn the flash on again, press the camera shutter button halfway.

When the exposure mode is set to AUTO or P Mode or the ISO Setting is in Auto, the effective distance range is 0.3 meter to 7 meters.

MANUAL FLASH OPERATION

It is possible to use manual flash with this flash unit (Flash power level can be set to Full).

1. Set the camera's exposure mode to **M**.
2. Slide the power switch to the **M** position.
3. Set the aperture value calculated by the following formula.

$$GN \text{ (Guide Number)} / D \text{ (Flash to Subject Distance [m])} = F \text{ stop.}$$

4. When the Ready Light of the flash unit is illuminated, the unit is ready to use. The Guide Number will be varied depending on the ISO sensitivity value set in the camera. Please refer the following chart.

ISO 50	ISO 100	ISO 200	ISO 400	ISO 800	ISO 1600
10	14	20	28	40	56

For example, an ISO sensitivity value of 400 and the distance to the subject of 5 meters, the aperture value will be F5.6 according to the above.
28 (GN) / 5 (D) =5.6 (F)

If the DP1's Exposure Mode is set to "Auto Mode", Manual Flash cannot be used. Please set your camera's exposure mode to one of the following modes: P, A, S or M for using Manual Flash operation of the EF-140DG.

To prevent overheating of the flash unit, please do not use your flash unit for at least 10 minutes after continuously firing the flash for up to 10 continuous flash shots.

SPECIFICATIONS

TYPE: Clip-on type serial-controlled TTL auto electric flash
GUIDE NUMBER: 14 (ISO 100/m)

POWER SOURCE / RECYCLING TIME / NUMBER OF FLASHES :

Power Source (two pieces)	Recycling Time	Number of flashes
AAA type Ni-MH batteries	About 5.5 sec.	About 170 flashes
AAA type alkaline batteries	About 5.5 sec.	About 90 flashes
AAA type Oxryde batteries	About 5 sec.	About 100 flashes
AAA type Lithium batteries	About 6.5 sec	About 260 flashes

FLASH DURATION: about 1 / 2200 sec. (full power firing)

FLASH ILLUMINATE ANGLE: Covers the angle of a 16.6mm lens with DP1 and SD format

AUTO POWER OFF: Available

WEIGHT: 68g

DIMENSIONS : 56.5mm (W) x 73.5mm (H) x 20.5mm (L).