



Flash

Operating Instructions
Mode d'emploi
Manual de instrucciones
Bedienungsanleitung

HVL-F20AM

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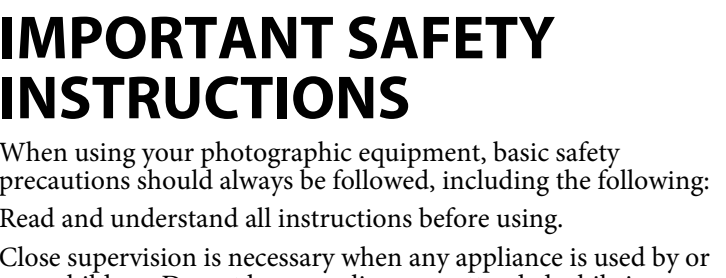
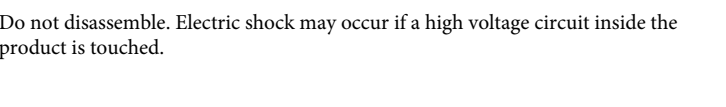
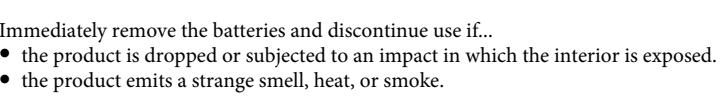
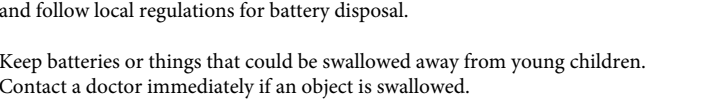
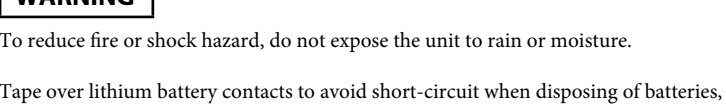
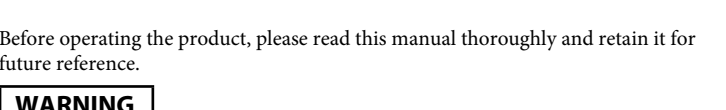
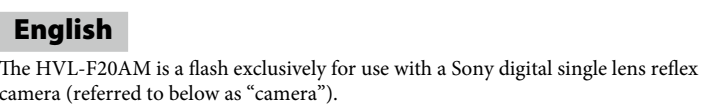
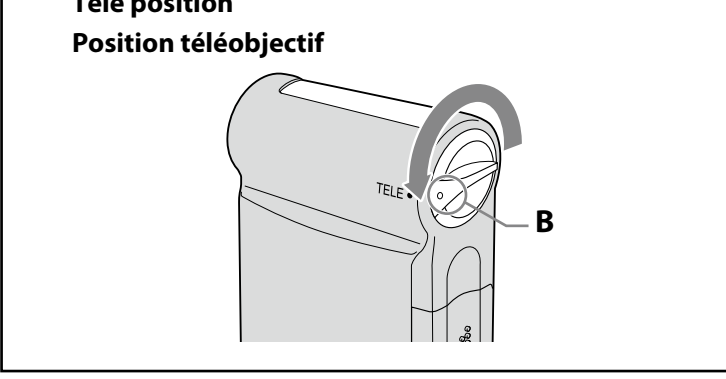
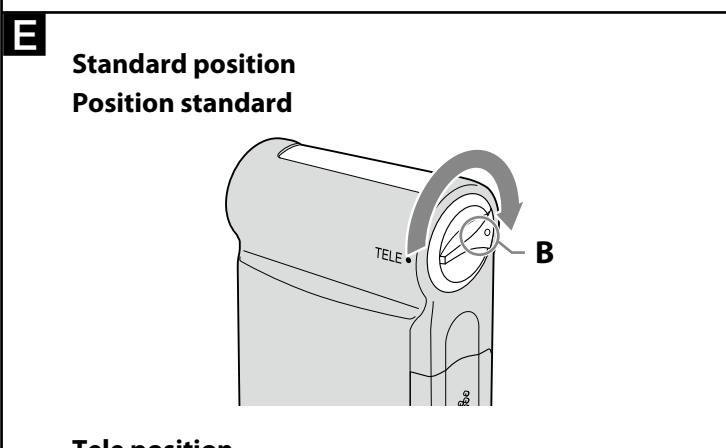
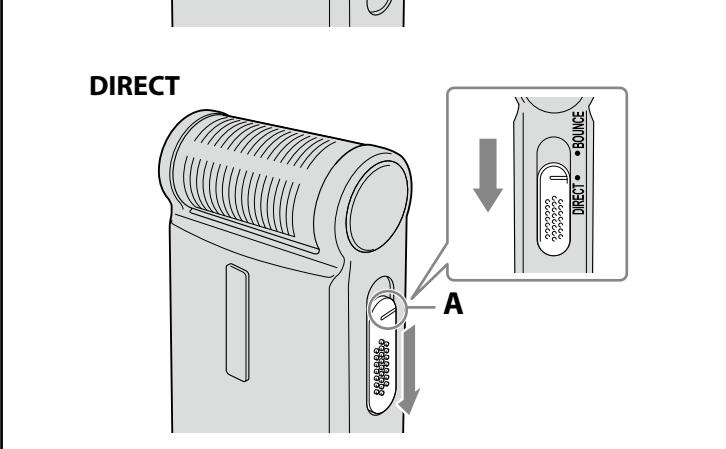
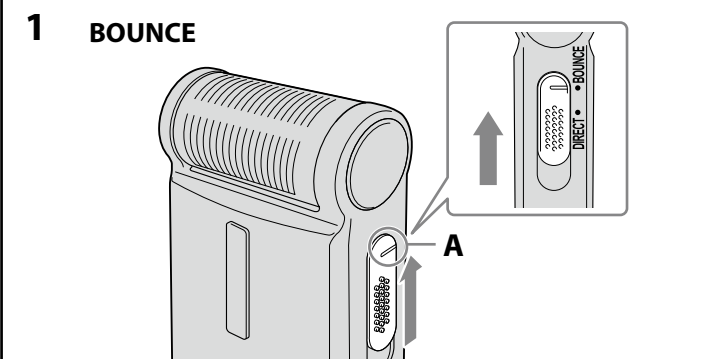
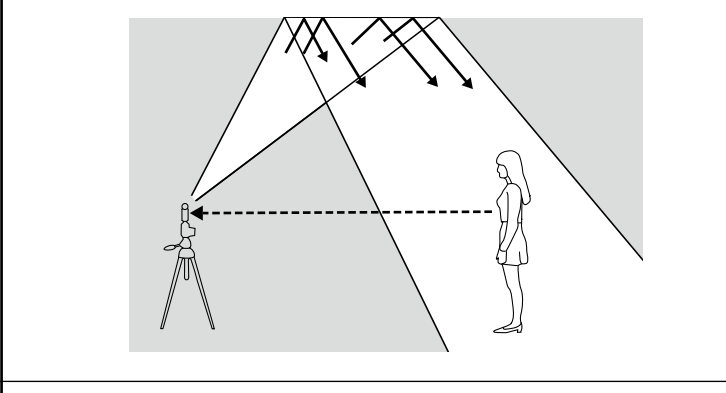
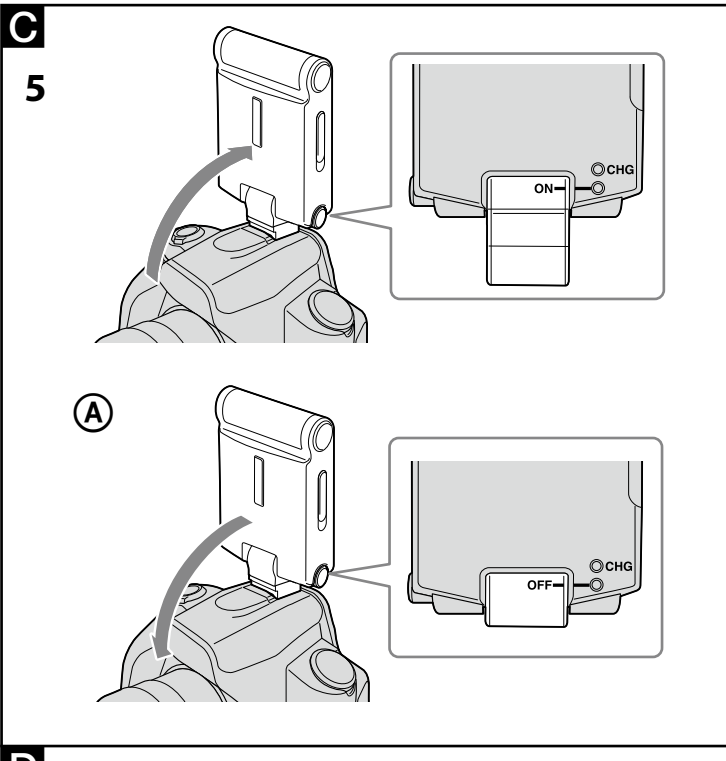
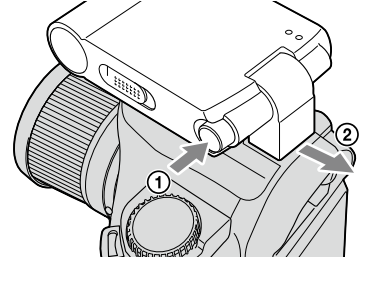
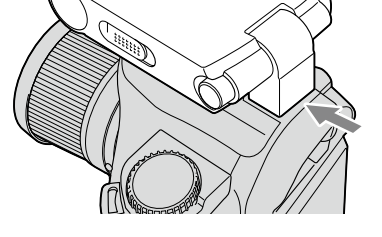
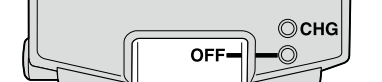
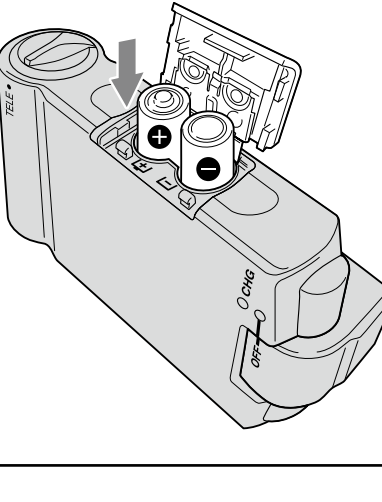
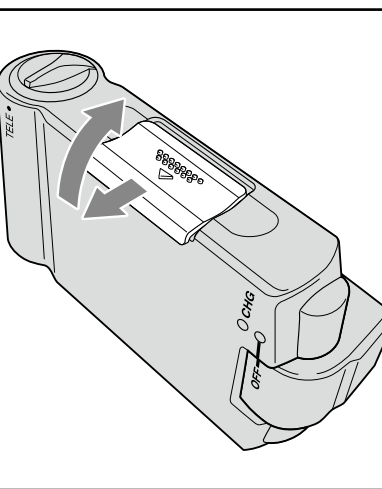
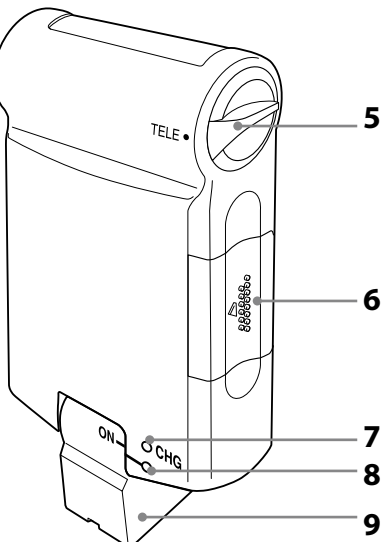
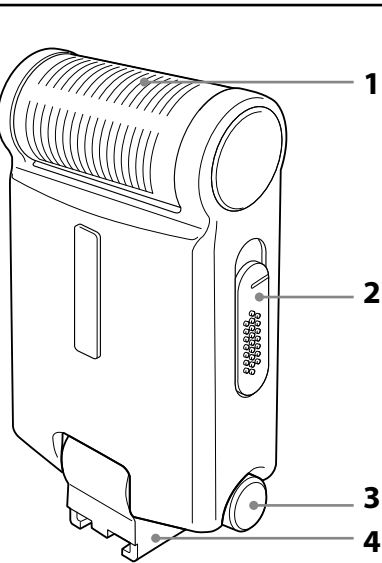


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• Printed in Japan



Batteries must be taken as burns can occur from touching hot parts. Do not operate appliance with a damaged cord or if the appliance has been dropped or damaged- until it has been examined by a qualified serviceman.

Let appliance cool completely before putting away. Loop cord loosely around appliance when storing.

To reduce the risk of electric shock, do not immerse this appliance in water or other liquids.

To reduce the risk of electric shock, do not disassemble this appliance, but take it to a qualified serviceman when service or repair work is required. Incorrect reassembly can cause electric shock when the appliance is used subsequently.

The use of an accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.

Batteries may become hot or explode due to improper use. Use only the batteries specified in this instruction manual.

Do not install the batteries with the polarity (+/-) reversed.

Do not substitute batteries to fire or high temperatures.

Do not attempt to recharge (except for rechargeable batteries), short or disassemble.

Do not mix, batteries of different types, brands or ages.

SAVE THESE INSTRUCTIONS

CAUTION
Do not touch the flashtube during operation, it may become hot when the flash fires.

For customers in Europe

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Notice for the customers in the countries applying IEC Directives

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The European representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

For the customers in the U.S.A.

CAUTION
You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur at particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Before Use

For details, refer to the operating instructions supplied with your camera. This unit is not dust-proof, splash-proof or waterproof.

Do not place this unit in the following locations

Regardless of whether this unit is used, do not place it in any of the following locations. Doing so may lead to a malfunction.

- Placing this unit in locations subject to direct sunlight such as on dashboards or near a heater may cause this unit to deform or malfunction.
- Locations with excessive vibration.
- Locations with strong electromagnetic
- Locations with excessive sand

In locations such as the seashore and other sandy areas or where dust clouds occur, protect this unit from sand and dust. This may lead to a malfunction.

Features

- Simple, compact external flash with 24 mm slim design.
- ON/OFF switch integrated in the mounting foot. Folding this unit turns it off and makes it safe to carry while mounted on your camera.
- Unique bounce flash feature lets you change the light direction at the flip of a switch.
- Can be used with compatible lenses to enable AEI (Advanced Distance Integration) flash metering, which is not affected by the reflection rate of the background or subject.

- Corrects the white balance automatically using the color temperature information (with all Sony digital single lens reflex cameras except the DSLR-A100)
- Real-eye reduction flash capability (with Sony digital single lens reflex cameras except the DSLR-A100, DSLR-A200, DSLR-A300, DSLR-A350, DSLR-A700 and cameras that have no built-in flash)
- TELE switch with [Tele position] at which the flash can reach further. You can shoot a subject about 3/4 head with sufficient lighting (ISO100 - m, F4).
- Wireless control feature lets you control an off-camera flash via this unit mounted on a camera that has no built-in flash. (Lighting control ratio setting is not available).

Identifying the Parts

- Flashtube
- BOUNCE switch (default: BOUNCE)
- Mounting-foot release button
- Mounting foot
- TELE switch (default: Standard position)
- Battery compartment cover
- CHG lamp
- POWER lamp
- Shoe POWER switch

The status of the CHG lamp and POWER lamp changes as follows according to the condition of this unit.

Condition of unit	CHG lamp	POWER lamp
During charging	Off	Green light
When charging is completed	On	Green light
When the proper exposure is achieved after shooting	Blinks	Green light
When batteries are low	Off	Red light
When this unit is overheated	Off	Red blinking light
When camera setting is [Flash off]	Off	Green light

Preparation

Insert batteries in this unit and then attach this unit to your camera.

Use either of the following battery pairs:
• Two AAA alkaline batteries
• Two AA nickel-metal hydride (Ni-MH) batteries*
*Always charge Ni-MH batteries fully with a specified battery charger before use. Batteries are not included.

- Press the battery compartment cover in the direction illustrated to open it.
- Insert the batteries into the battery compartment as marked inside.
Make sure the batteries are installed correctly.
- Close the cover.
Do the reverse procedure to open the cover.

Compatibility
Information on digital single lens reflex cameras compatible with this unit, visit our website:
<http://www.sony.net/>

Notes on Use
During shooting

- Do not fire the flash directly in front of someone's eyes. It produces strong light.
- Do not stare at the flash 20 or more times in succession. Doing so can cause overheating and deterioration of this unit and its batteries.
- If you fire the flash a certain number of times in succession, leave it to cool down naturally for at least 10 minutes.
- Do not carry your camera by holding this unit as it is attached. Always hold the camera itself.
- When changing the shoe POWER switch to the [OFF] position, be careful not to catch your finger in the hinge. It may cause injury.

Attaching this unit to your camera and turning it on (see illustration 3 4)

- Make sure that the shoe POWER switch of this unit is set to [OFF]. If it is not, set to [OFF].
(See step 5 for how to turn this unit on and off.)
- Make sure the built-in flash of your camera is in the down position. If your camera has a built-in flash and the flash is in the up position, return it to the down position.
- Slide the mounting foot of this unit into the accessory shoe of your camera in the direction of the arrow until it locks.
When this unit is properly attached to the shoe, it automatically locks. To remove this unit, press the mounting-foot release button and slide the mounting foot in the opposite direction to the attaching procedure. (see illustration 3 4)
- Turn your camera on.
- Turn this unit on.
When you flip this unit up until it clicks, it turns on and the POWER lamp lights up.
To turn this unit off, flip it down. (see illustration 5 6)

Power save
If you do not operate your camera or this unit for more than 1 minute after your camera has entered the power save state, this unit automatically turns off to save power, and the POWER lamp and CHG lamp turn off.
This unit also enters the power save state when you set the POWER switch of your camera to [OFF] (with all Sony digital single lens reflex cameras except the DSLR-A100).

To exit the power saving state, turn this unit back on or operate your camera.

Shooting

1 Make sure that your camera and this unit are turned on.

2 Set your camera to the desired shooting mode.

Refer to the operating instructions of your camera for shooting modes.

When you set your camera to shutter speed priority (S) mode or manual exposure (M) mode, you cannot select a shutter speed faster than the flash sync speed.*

* Flash sync speed is the maximum shutter speed that you can use with a flash.

3 After charging of this unit is completed, press the shutter button to shoot a subject.

When charging is completed, the CHG lamp of this unit turns amber.

When the proper exposure can again be obtained after shooting, the CHG lamp blinks amber.

Notes

- If you shoot before charging is completed, you may not be able to get enough lighting (under exposure).

- When using the flash in self-timer shooting, make sure that charging is completed before pressing the shutter button.

- When your camera is in auto flash mode, the flash may not fire depending on the lighting conditions.

Overheat protection
Overheat protection is a function for protecting this unit from overheating. If this unit gets warm when used in continuous flash mode or in a hot environment, flash firing is automatically disabled.

- When overheating is detected, the POWER lamp blinks in red at one-second intervals.
- Flash firing cannot be re-enabled until this unit cools down.
- When this unit is in an overheated state, leave it without any operation for 10 minutes to cool down.

D BOUNCE Switch

If you fire a flash directly at a subject just in front of a wall, harsh shadows appear on the wall (see illustration 1 2).

When shooting in a room with a low ceiling, you can soften these shadows by setting the BOUNCE switch to [BOUNCE] so that the flashtube of this unit tilts upward and emits light at the ceiling. Light reflects off the ceiling and illuminates the subject to produce a soft-light image (see illustration 1 2).

In outdoor shooting, setting the BOUNCE switch to [DIRECT] lets you illuminate a subject at a distance that a built-in flash cannot reach.

- BOUNCE: the flashtube is set at 75 degrees upward (bounce flash)
- DIRECT: the flashtube is set at 0 degrees (direct flash)

Slide the BOUNCE switch to the desired position (see illustration 1).

Notes

- Make sure you slide the BOUNCE switch until the A mark is aligned with the desired position mark.

- The ceiling or wall that reflects the flash light should be white or very pale. If it is colored, the color may affect the image.

- If the lens angle is wider than the selected flash angle, the outer areas of the image may become dark. See "Zoom flash range" for the flash range of each position.

- The TELE switch is enabled only when the BOUNCE switch is set to [DIRECT].

- If this unit is attached to a camera with a built-in flash that operates as an AF illuminator, AF accuracy may be greatly reduced in night view shooting.

Wireless Control

If your camera does not have a built-in flash, you can attach this unit to your camera and use it as a wireless controller for an off-camera flash. An off-camera flash is a flash used separately from a camera.

In this manual, a flash attached to the camera is referred to as a controller and a flash used separately from the camera is referred to as an off-camera flash. An off-camera flash may also be referred to as a remote flash.

- Connect this unit to your camera, and set the power switches of your camera, off-camera flash and this unit to [ON].

- Set the mode of your camera and off-camera flash as follows.

Camera:
Set the mode to [Wireless].
Refer to the operating instructions of your camera for details.

Off-camera flash:
Set the camera mode to [Wireless remote mode] and the wireless channel to [CH1]. Refer to the operating instructions of your off-camera flash for details.

- Set your camera and off-camera flash.

Refer to the operating instructions of your off-camera flash for how to set it.

- Make sure the off-camera flash and this unit are fully charged.

- Fire a test flash to check the off-camera flash.

- The flash test differs depending on the camera. Refer to the operating instructions of your camera.

- If your off-camera flash does not fire, change the position of your camera, off-camera flash and the subject and try a test flash again.

- Make sure that this unit and your off-camera flash are charged, and press the shutter button fully down to shoot.

Notes

- This unit cannot be used as an off-camera flash.
- Lighting ratio control setting (RATIO) is not available.

Auto WB Adjustment with Color Temperature Info

White balance is automatically adjusted based on color temperature information sent by this unit when the flash is fired (with all Sony digital single lens reflex cameras except the DSLR-A100).

This function works in TTL flash mode using the clip-on connection to your camera.

Maintenance

Remove this unit from your camera and wipe it with a dry soft cloth. Lightly blow any sand off this unit. Scrubbing it before blowing sand off may scratch the surface of this unit. To remove stains, wipe them off with a cloth lightly dampened with a mild detergent, and then wipe the unit clean with a dry soft cloth. Never use strong solvents such as thinner or benzine, otherwise the surface finish will be damaged.

Compatibility

Information on digital single lens reflex cameras compatible with this unit, visit our website:
<http://www.sony.net/>

Notes on Use

During shooting

- Do not fire the flash directly in front of someone's eyes. It produces strong light.
- Do not stare at the flash 20 or more times in succession. Doing so can cause overheating and deterioration of this unit and its batteries.
- If you fire the flash a certain number of times in succession, leave it to cool down naturally for at least 10 minutes.
- Do not carry your camera by holding this unit as it is attached. Always hold the camera itself.
- When changing the shoe POWER switch to the [OFF] position, be careful not to catch your finger in the hinge. It may cause injury.

Batteries

- The displayed battery level may be lower than the actual battery capacity depending on the temperature and storage conditions. The displayed level usually becomes accurate after you use this unit a few times.
- The output of Nickel-metal hydride batteries drops suddenly when the batteries become low. You may not be able to use this unit soon after the POWER lamp turns red.
- The frequency and number of flashes of this unit may be different from those shown in the specification table even when new batteries are installed, depending on their date of production.
- Turn the power off and wait several minutes before removing the batteries. Be careful when touching the batteries because they may be hot, depending on the battery type and conditions of use.
- Remove and store the batteries if you do not intend to use this unit for a long time.

Temperature

- The operating temperature range of this unit is between 0 °C and 40 °C.
- Do not expose this unit to extremely high temperatures (e.g. in direct sunlight inside a vehicle) or high humidity.

- A drastic temperature change may cause condensation inside this unit. When bringing this unit from a cold place such as a ski slope to a warm place, first put it in a plastic bag, remove the air from the bag and seal it. After bringing it to the warm place, leave it for a while until it reaches room temperature and then remove it from the bag.

- Battery output decreases as temperature decreases. When using in a cold environment, use new batteries or prepare spare batteries kept warm and use them interchangeably with another set. The POWER lamp may temporarily turn red in a cold environment even though the batteries still have remaining capacity. If the battery output becomes low due to low temperature, leave the batteries indoors until they reach room temperature. The battery output will return to normal.

- This unit is not waterproof. When using this unit on a beach, be sure to keep it away from water or sand. Any water, sand, dust, or salt remaining in this unit may cause a malfunction.

Français

Le HVL-F20AM est un flash conçu exclusivement pour les appareils photo numériques réflex à objectifs interchangeables Sony (appelés ci-dessus « appareil photo»).

Afin de faciliter votre production, liste attentivement ce mode d'emploi et conservez-le pour toute référence ultérieure.

AVERTISSEMENT

Ne pas laisser les piles ou de petits accessoires à la portée de jeunes enfants qui pourraient les avaler. En cas d'ingestion accidentelle, contacter immédiatement un médecin.

Retirer immédiatement les piles du flash si:
• L'appareil est tombé et a reçu un choc à la suite duquel il s'est brisé et laisse apparaître ses composants internes.
• L'appareil chauffe anormalement ou émet une fumée ou une odeur étrange.

Ne pas démonter le flash. Risque d'électrocution lié à la présence de circuits haute tension.

Consignes de Sécurité Importantes

Lors de l'utilisation de votre matériel photographique, il convient d'observer des précautions de sécurité de base, à savoir, entre autres :

Prendre connaissance de toutes les instructions à respecter avant toute utilisation.

Lorsqu'un appareil est utilisé par un enfant ou à proximité d'un enfant, une surveillance attentive est obligatoire.

Ne pas laisser l'appareil sans surveillance pendant l'utilisation.

Il convient d'être prudent car les parties chaudes peuvent entraîner des brûlures.

Ne pas utiliser l'appareil lorsque le cordon est endommagé ou si l'appareil est tombé ou a été endommagé, tant qu'il n'a pas été examiné par un technicien qualifié.

Laisser l'appareil refroidir complètement avant de le ranger. Enrouler le cordon autour de l'appareil sans le serrer lors du rangement.

Pour réduire les risques d'électrocution, ne pas immerger cet appareil dans l'eau ou d'autres liquides.

Pour réduire les risques d'électrocution, ne pas démonter cet appareil et confier l'entretien ou les réparations éventuelles à un technicien qualifié. Un montage incorrect peut entraîner une électrocution lors de l'utilisation suivante de l'appareil.

L'utilisation d'un dispositif de fixation pour accessoires non recommandé par le fabricant peut constituer un risque d'incendie, d'électrocution ou de blessure des personnes.

Les piles peuvent chauffer ou exploser suite à une utilisation incorrecte.

Utiliser uniquement les piles indiquées dans ce mode d'emploi.

Ne pas mettre les piles en place avec une polarité inversée (+/-).

Ne pas soumettre les piles au feu ou à de fortes températures.

Ne pas essayer de les recharger (sauf pour les piles rechargeables), ne pas les mettre en court-circuit, ne pas les démonter.

Ne pas mélanger différents types et différentes marques de piles, ni des piles anciennes et nouvelles.

CONSERVER CES CONSIGNES

ATTENTION

Lors de l'émission de l'éclair, le tube à éclair peut être très chaud. Ne pas le toucher.

Pour les clients en Europe

Traitement des appareils électriques et électroniques en fin de vie (Applicable dans les pays de l'Union Européenne et aux autres pays européens disposant de systèmes de collecte sélective)

Ce symbole, apposé sur le produit ou sur son emballage, indique que ce produit ne doit pas être traité avec les déchets ménagers. Il doit être remis à un point de collecte approprié pour le recyclage des équipements électriques et électroniques. En s'assurant que ce produit est bien mis au rebut de manière appropriée, vous aiderez à prévenir les conséquences négatives potentielles pour l'environnement et la santé humaine. Le recyclage des matériaux aide à préserver les ressources naturelles.

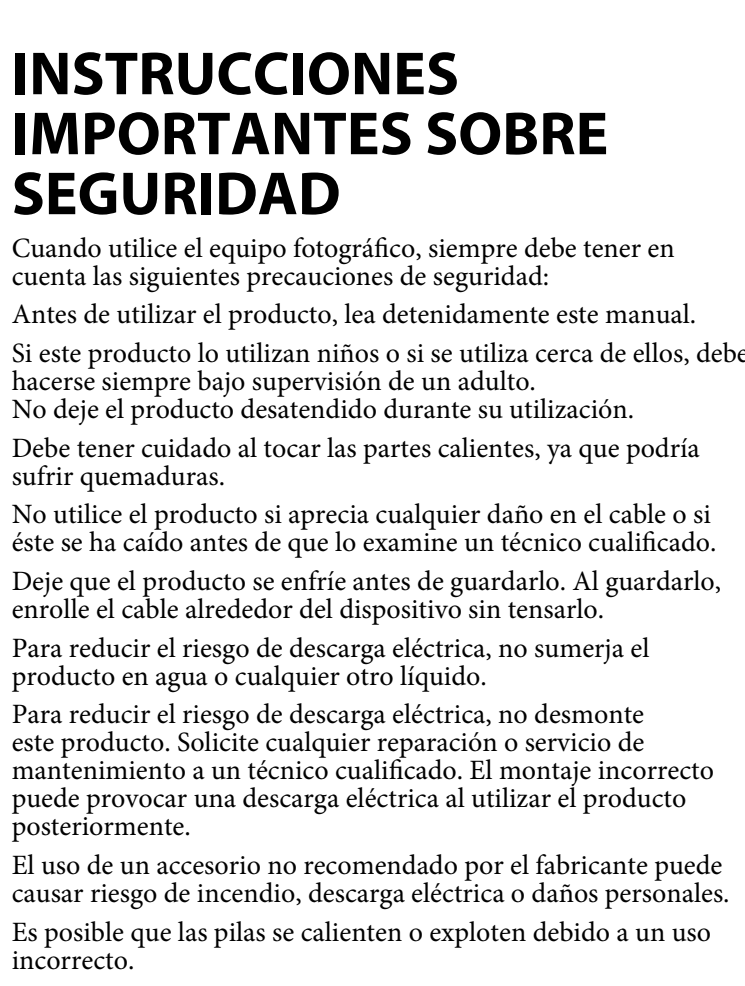
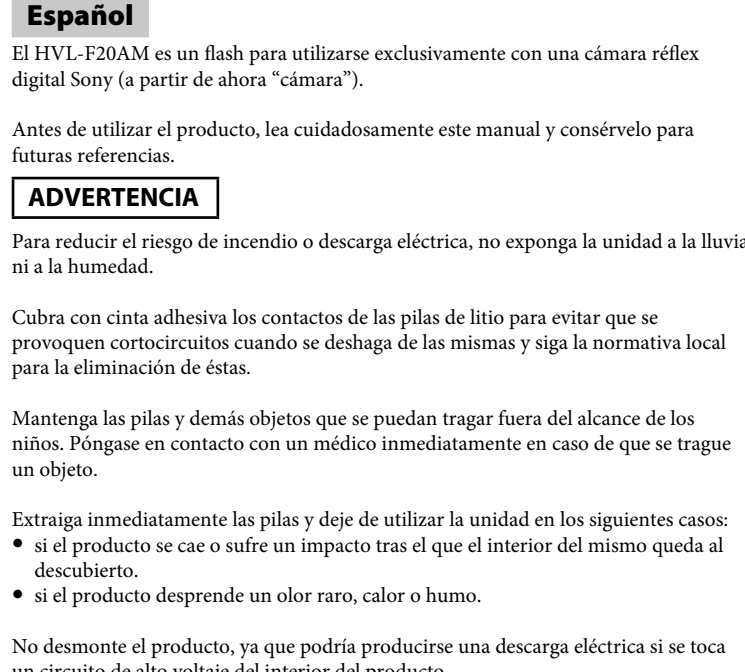
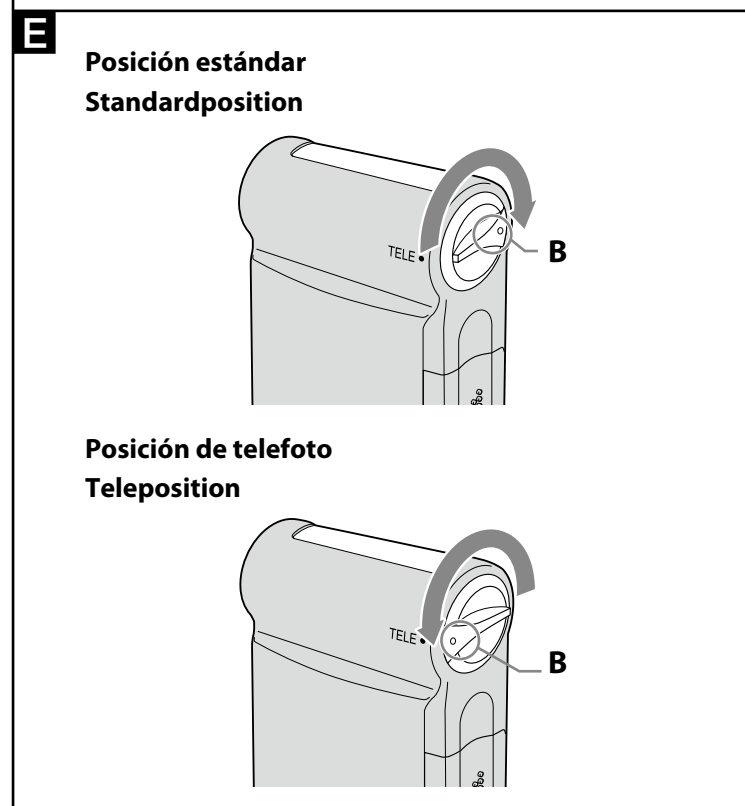
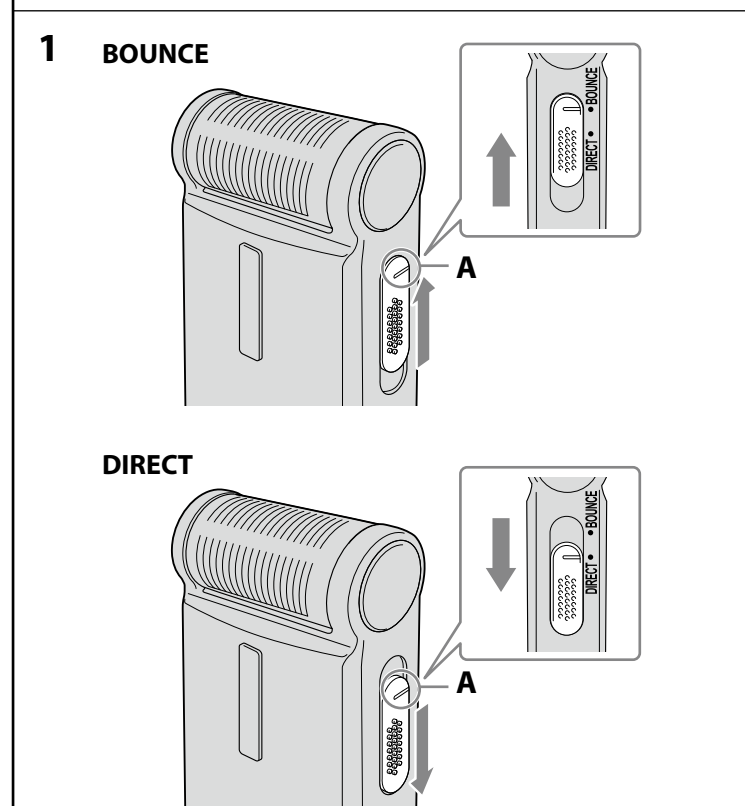
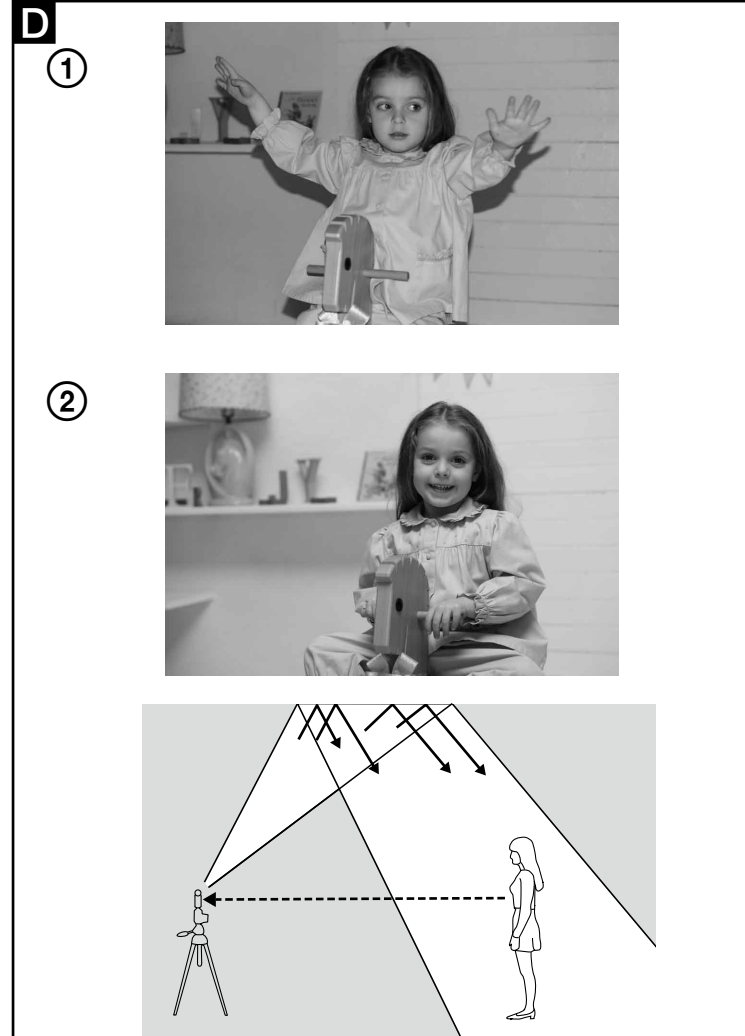
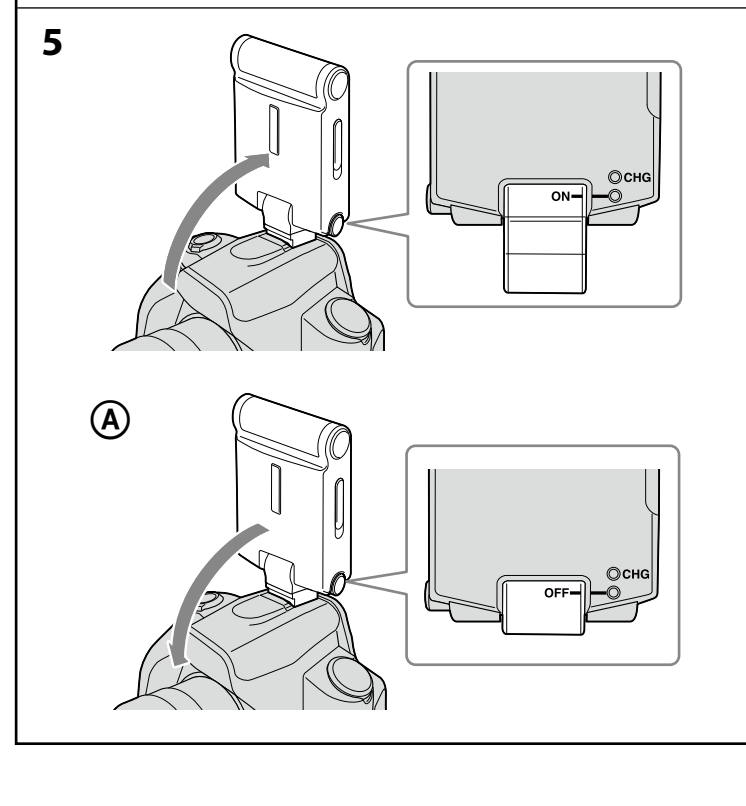
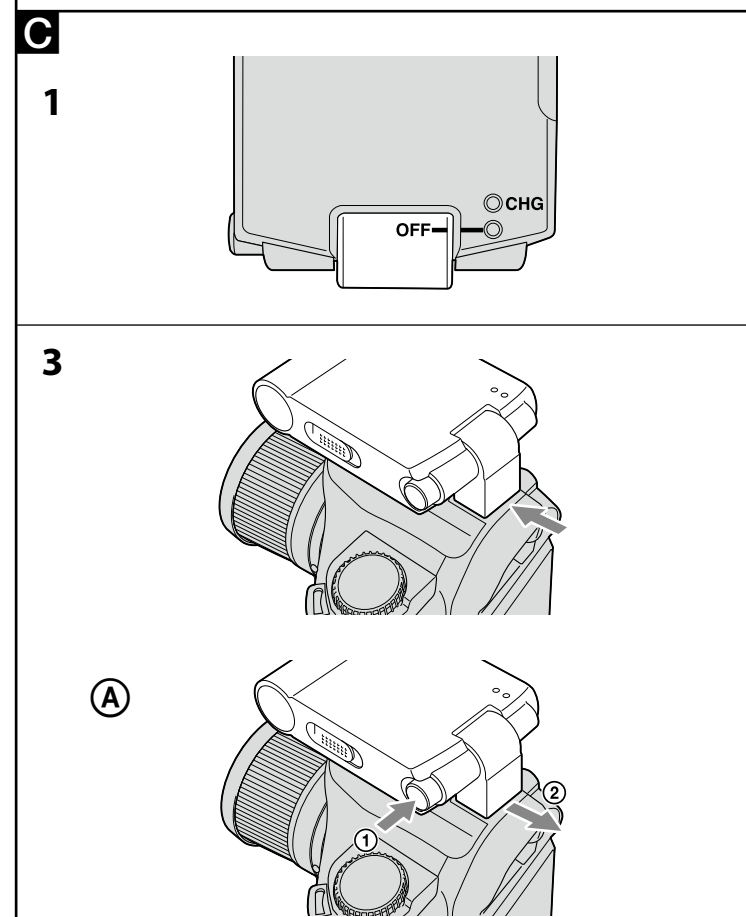
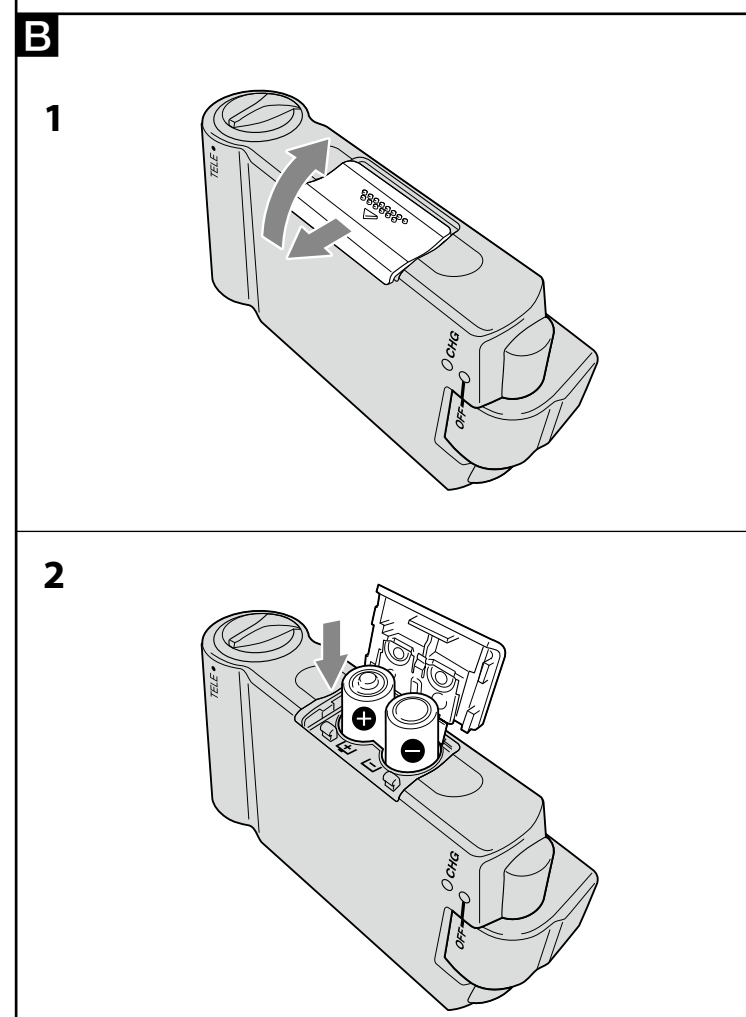
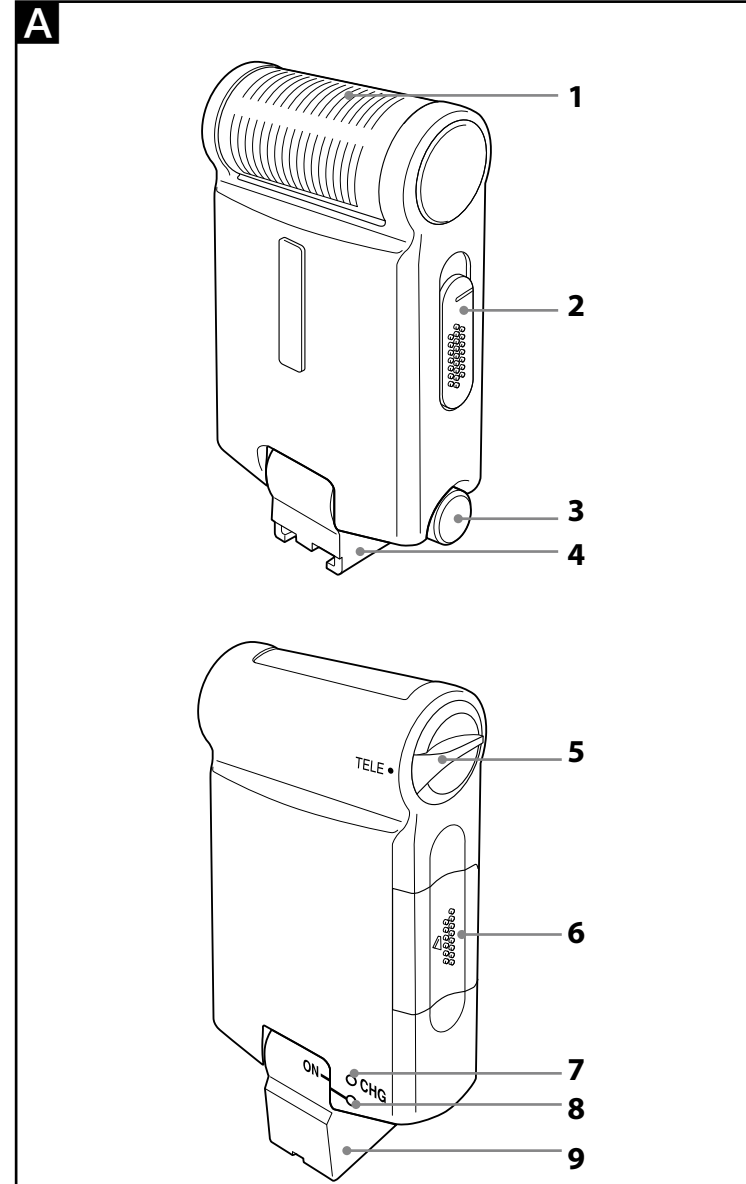
Pour toute information supplémentaire au sujet du recyclage de ce produit, vous pouvez contacter votre municipalité, votre déchèterie ou le magasin où vous avez acheté le produit.

Avis aux consommateurs des pays appliquant les Directives UE

Le fabricant de ce produit est Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japon. Le représentant agréé pour la compatibilité électromagnétique et la sécurité du produit est Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Allemagne. Pour toute question relative à la garantie ou aux réparations, contactez-nous à l'adresse que vous trouverez dans les documents ci-joints, relatifs à la garantie et aux réparations.

Informations préliminaires

Pour tous les détails, reportez-vous au mode d'emploi de votre appareil photo.



Antes de utilizar el equipo fotográfico, siempre debe tener en cuenta las siguientes precauciones de seguridad:

Antes de utilizar el producto, lea detenidamente este manual.

Si este producto lo utilizan niños o si se utiliza cerca de ellos, debe hacerse siempre bajo supervisión de un adulto.

No deje el producto desatendido durante su utilización.

Debe tener cuidado al tocar las partes calientes, ya que podría sufrir quemaduras.

No utilice el producto si aprecia cualquier daño en el cable o si este se ha caído antes de que lo examine un técnico cualificado.

Deje que el producto se enfríe antes de guardarlo. Al guardarlo, enrolle el cable alrededor del dispositivo sin tensarlo.

Para reducir el riesgo de descarga eléctrica, no sumerja el producto en agua o cualquier otro líquido.

Para reducir el riesgo de descarga eléctrica, no desmonte este producto. Solicite cualquier reparación o servicio de mantenimiento a un técnico cualificado. El montaje incorrecto puede provocar una descarga eléctrica al utilizar el producto posteriormente.

El uso de un accesorio no recomendado por el fabricante puede causar riesgo de incendio, descarga eléctrica o daños personales. Es posible que las pilas se calienten o exploten debido a un uso incorrecto.

1 **BOUNCE**

2 **BOUNCE**

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