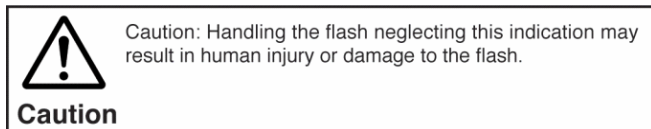
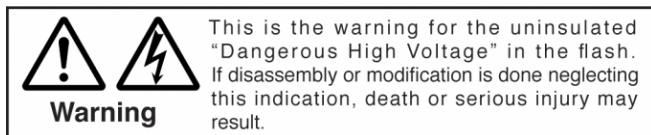


Quantaray by Sunpak QF30 Flash Instructions

Congratulations on your purchase of this Quantaray by Sunpak QF30 Canon E-TTL II or Nikon i-TTL flash. This flash is dedicated for Canon or Nikon digital and film single lens reflex cameras. Never use the flash on any camera brand other than the one noted on the base of the flash. Before use, please read the instructions carefully to take full advantage of its features and safe usage.



Flash Safety

- * For maintenance, inspection or repair, return to ToCAD America Inc.
- * Never try to open, repair or modify the flash. Such action may result in fire, shock hazard or injury due to high voltage.
- * Never use accessories not specified by Sunpak. Using them may result in fire, shock hazard or injury.
- * If the flash is dropped or damaged, or impacted, return to ToCAD America Inc. for service and repair.
- * Never use the flash at close distances to subject's eyes, especially babies and newborns. Using the flash at close distances to subject's eyes may result in visual impairment. When shooting infants or newborns, keep the flash at a minimum distance of 3 feet or greater.
- * When loading batteries, install in the correct polarity. When replacing the batteries, replace both at the same time, use only the same model and type and from the same manufacturer. Incorrect battery usage may result in leakage, over heating, rupture, short battery time and loose contacts.
- * Never use the flash near glass or near containers holding cosmetics or chemicals. If cosmetics or chemicals enter the flash, it may result in fire, shock hazard or injury.
- * Never use the flash in a place with high humidity, such as in the bathroom or near a humidifier. It may result in fire, shock hazard or injury.
- * When cleaning or caring for the flash, be sure to remove the batteries.
- * Never use the flash in a place where flammable gas or explosive gas may exist in the air.
- * Keep batteries away from babies so that they will not be swallowed or ingested.
- * Never place the flash in a dusty environment, subject to direct sunlight or area of high humidity. Increased temperatures may result leading to serious damage, shock hazard or fire.
- * Never use the flash without the locking ring securely tightened. If left un-tightened it may fall or drop from the camera resulting in injury.

Other Cautions

- * Never use benzene, thinner or alcohol to clean the flash. Use a soft cloth without chemicals or solvents.
- * If subject to moisture, remove the batteries and dry completely before re-using.
- * Neglecting any of these instructions may lead to injury or damage.

Before use

- * Mount the flash on the camera and securely tighten the locking ring to secure to the camera. For operation, be sure to hold the body of the camera, not the flash. If the flash is used to hold the camera, the camera will break from the flash causing serious damage to the flash and camera.
- * For additional operating instructions and camera compatibility, go to www.sunpak.jp.

Mounting

When the QF30 is mounted on or dismounted from the camera, be sure to turn OFF the Power switch. If the QF30 is mounted or dismounted with the power ON, malfunction or failure of the camera may result.

1. Insert the flash into the camera's shoe firmly and turn the Locking Ring clockwise to secure the flash to the camera.
2. After mounting the flash on the camera, turn on the camera and flash. 3. The shutter speed of the camera will automatically be set.
4. To confirm a correct exposure, the Auto Check function of the Test Charge indicator will flash approximately two seconds. If Auto Check function of the Test Charge indicator does not blink indicating a correct exposure, the distance from the flash to the subject is too great. Move closer to the subject if possible until confirmation of the Auto Check Test Charge indicator confirms the correct exposure.



Installing Batteries

1. Confirm that the Power switch is OFF before loading the batteries.
2. Press down on the Battery cover and slide it downwards to open it.
3. Carefully load 2 AA type batteries into the battery box in accordance with the + - illustrations. The flash is designed to prevent incorrect loading, but if the batteries are installed incorrectly, failure will result.
4. Close the battery cover and slide it upward to close securely. Turn power switch to the ON position. Charging will start with the beep sound. During the charging cycle, the Ready Lamp will blink indicating the charging cycle and then to continues on for full charge status. (When fully charged, the lamp changes from blinking to steady lighting.)
5. To turn off, turn the Power switch to the OFF position.

Before Mounting

- * When the flash is not mounted on a camera and turned on, use caution not to short-circuit the hot shoe terminals. If short-circuited, the flash may fire and cause an operational failure of the flash.
- * Nickel Metal-Hydrate (NiMH) batteries are highly recommended to shorten the charging time and increase the number flashes.

Information on the Ready Lamp

Confirm after each shot that the Ready Lamp is on and not blinking. If blinking, charging is still taking place. If the flash is fired without the Ready Light on continuously, there will be insufficient flash to illuminate the subject causing an under exposure image. Therefore it is highly recommended for images with the optimum amount of illumination, wait until Ready Light remains on continuously.

- * If the Ready lamp continuously blinks for more than 30 seconds without changing to a continuous illumination, the voltage of the batteries has dropped below the recommend voltage and must be replaced.

Test Lighting

The Test Charge button and Ready lamp are one in the same. For test lighting, press this button after the Ready Lamp is illuminated, the flash will fire and if the Auto Check function of the Test Charge button flashes for approximately two seconds, the exposure will be correct.

Auto Check lamp

When an object is within the Auto effective range, the Auto Check lamp will blink for approximately 2 seconds just after the flash is fired. The Auto Check lamp does not flash after the exposure, move closer to the subject if possible or select a larger aperture if possible. Another effective way to

achieve a correct exposure is to change the ISO sensitivity to the higher sensitivity value.

*Note that the effective range is shorter just after lighting of the Ready Lamp.

Brightness of an Image

QF30 is equipped with EV Adjustment buttons, allowing flash output adjustment. Use the EV Adjustment buttons in the following cases for effective flash photography by freely adjusting to the satisfactory brightness.

* When the amount of light is not enough for shooting with daylight synchronization (in order to mitigate the shadow of the object by sunlight, the flash is used as daylight fill flash) or back-light subjects.

* When shooting with various levels of brightness.

* When the light output is not great enough when using bounce flash.

Confirm the exposure with the Auto Check feature. When the image is too dark, press the + EV button of the EV Adjustment buttons once to turn on the +0.5 green LED lamp. In this state, the lighting becomes brighter by +0.5 EV. After shooting, confirm the image again. When the brightness is not yet strong enough, press the + EV button once to turn on the +1 green LED lamp and shoot again. The flash output can be increased up to +1.5 EV.

Naturally, it is also possible to adjust the brightness when it is too bright. In this case, press the - EV button one by one to adjust to the desired image.

EV Adjustment is not possible when the Auto Check indicator cannot confirm an exposure.

Use the EV Adjustment buttons after confirming that the Auto Check lamp goes On.

To cancel the EV Adjustment function, press the button for the opposite side of the setting until the indicator lamp goes out.

AF Assist Light

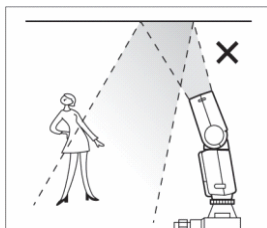
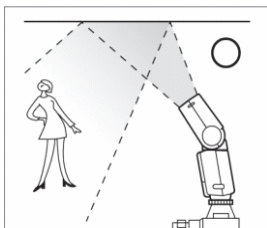
When shooting in a dark place or a place with low illumination, the AF assist light will automatically illuminate an area on the subject when the shutter button of the camera is depressed slightly just prior to releasing the shutter; this will aid in low light situations.

For cameras with multi-point focusing sensors, set the camera to the center focus sensor.

Bounce Flash

The QF30 allows bounce flash by moving the flash head upward. When shooting with the flash head aimed directly at the object, strong shadows may appear in the back of the subject.

However, it is possible to shoot more pleasing images with soft and



natural shadows by directing the flash head toward the ceiling. For bounce shooting, the amount of light may become insufficient, depending on the distance to the ceiling and the reflectivity of it. In such a case, adjust the light output with the EV Adjustment buttons to a positive EV setting.

Adjust the AF frame to the object in the finder, and press the shutter lightly. After confirming the lighting of the "lightning flash" mark in the finder, the shutter speed and the diaphragm value, shoot the object.

* Bending the flash with too strong a force or bending it more than the angle display, may break it. Handle it carefully.

* Bounce shooting can be done just in the same manner as normal shooting, except that the light emitting part is directed to the ceiling. Note that the amount of light decreases by about 25%, depending on the color and material of the reflection surface. Due to this reason, it is recommended to set the diaphragm value to the value as near to open (smaller value) as possible. For the bounce reflection surface, select a surface with a high reflection rate as near to white as possible. For color shooting, if the reflection surface is colorful, the object is colored by the color reflection. Colorful surfaces should be avoided.

Automatic Power Saving Function

When the QF30 is not operated for more than 15 minutes with the power ON, the automatic power saving function automatically starts in order to save the power consumption of the batteries. In the automatic power saving mode, all the EV Adjustment lamps are OFF (if this function is

used) and the Ready Lamp blinks quickly.

When the shutter of the camera is pressed lightly or when a button of the QF30 is pressed, the automatic power saving mode is released, and the QF30 changes to the standby mode for lighting instantly.

Note for Continuous Shooting

To prevent degradation by heat due to continuous flash, after shooting 15 times continuously, let the QF30 cool down for 10 minutes or longer before resuming operation.

QF30 Specifications and Performance

Guide number: (ISO 100) 100 feet @ 35mm

Flash coverage: 28mm lens or more with a 35mm, 20mm or greater with an APS size digital sensor single lens reflex camera

Flash duration: 1/800 sec. (full output)

Color temperature: 5600 degrees

TTL effective distance: AF assist light effective range 1 m to 5 m

Bounce mechanism: 0, 45, 60, 75, or 90 degree settings

Power supply: 2 size AA batteries (alkaline, NiMH and NiCd)

Temperature range: 32°F—104°F

Dimensions: Approx. 4.1" (H) x 2.7" (W) x 3.6" (D)

Weight: Approx. 7.1 ounces (excluding batteries)

* The external appearance and performance may partly be changed for improvement without advance notice.

Flash Cycles and Recycle Times

Cycles w/Alkaline batteries: (full output) approx. 100 @ 10 sec. flash intervals

Cycles w/NiMH batteries: (full output) approx. 140 @ 8 sec. flash intervals

2 AA alkaline batteries

2 AA nickel metal-hydride batteries

* The number of times of lighting is the number of times which new batteries, within 3 months after manufacture, can be lighted continuously at a 30 second interval and for which the Ready Lamp lights within 30 seconds after lighting at normal temperature.

* The lighting interval is the shortest time from lighting to turning ON of the Ready Lamp under the same conditions as for the lighting times.

Before requesting the repair, read this manual again. Also check whether the batteries supply enough voltage by replacing the batteries.

Sunpak One-Year Limited Warranty

This Sunpak product has been carefully manufactured, accurately adjusted, inspected and thoroughly tested before shipment to assure you of the highest quality.

Should this Sunpak product require service, we will repair or replace, at our option, any part of the product itself, which our examination shows to be defective in material or workmanship. This warranty does not apply to wear and tear associated with the normal use of the product. This warranty is non-transferable.

Repairs will be made to the product at no charge, under the terms of the warranty as stated above, only when accompanied by a dated and itemized bill of sale. This warranty does not include batteries.

Be certain to follow all assembly and/or operating instructions with this product. This warranty is not valid if the product has been misused or damaged in any way that is beyond our control or through normal wear and tear associated with use. This warranty applies only to the product and we are not responsible in any way for losses, damages or any inconvenience caused by equipment failure.

Some states do not allow the exclusion or limitation of consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may have other rights which may vary from state to state.

Should service be required, the product should be carefully packed and sent, prepaid and insured to the address listed below. A note briefly describing the nature of the defect should also be enclosed to expedite handling.

Proof of purchase and payment for shipping and handling must be included for warranty repairs.

ToCAD America Inc.

Sunpak Flash Division
53 Green Pond Road
Rockaway, NJ 07866
973-627-9600
www.tocad.com