



Underwater Photo Solutions

Fantasea F580EX Mark II Flash Housing for Canon 580EX Mark II Speedlite



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GENERAL INFORMATION

FANTASEA F580EX MARK II FLASH HOUSING

Fantasea F580EX Mark II is a housing designed specifically for the Canon 580EX Mark II Speedlight. The F580EX Mark II provides full controls for all flash functions including eTTL when used with Fantasea Canon DSLR Camera Housings. Kit includes the Fantasea 6 pin sync cable.

GENERAL FLASH HOUSING DESCRIPTION

The **Fantasea F580EX Mark II** is rated to a maximum working depth of 60m/200 ft. It is an injection molded plastic housing, constructed to take the rigorous environments that underwater photographers and outdoor photographers experience, and will protect the Canon 580EX Mark II Speedlight in these demanding activities. The housing offers push button controls which provide access to the all controls and features of the flash.

When accommodating the Canon 580EX Mark I Speedlite in this housing, the housing provides access to all important controls except the power switch. Therefore, the flash should be turned on prior to installing it into the housing. When the flash enters the standby mode during the dive, it can be activated again by simply pushing the camera housing's shutter release control.

GENERAL FLASH DESCRIPTION

New features for full control:

An intuitive and ergonomic interface includes a new select dial for fast and direct control over settings such as flash exposure compensation. A bounce lock release button provides immediate control over the bounce head angle and 14 custom functions can be pre-set for fast access to commonly used settings. Despite high power and short recycling times, the unit is small and lightweight. A new left-right 180° bounce allows either left or right vertical camera orientation. A retractable catch light reflector is built-in for portrait photography. The Speedlite 580EX Mark II is a key component of the integrated flash system for both analogue and digital SLR cameras, and is fully compatible with the distance linked E-TTL II system found on recent EOS cameras.

GENERAL SPECIFICATIONS OF HOUSING

- Test Pressure Fantasea housings are individually tested to 300 feet
- Closure Design Air-lock watertight system
- Body Material Polycarbonate
- Overall Size 180 x 110 x 210 mm (DxWxH)
- Total Weight Approximately 1 kg (housing only)
- Buoyancy
(with flash) Approximately neutral in salt water

FEATURES AND ACCESSORIES INCLUDED WITH THE HOUSING

FEATURES

- Visible main gasket seal for final pre-dive check
- Double O-ring design on all controls
- Bulkhead and hot-shoe plug for external eTTL strobe

ACCESSORIES INCLUDED

- Spare main gasket seal
- Universal tool
- Silicone O-ring grease
- Cleaning Kit
- 6 pin sync cable

FUNCTION CONTROLS

1. **Power-**
turns flash off and on
2. **Zoom-**
to adjust firing angle
3. **LCD Panel-**
panel indicators include: zoom value, light intensity, distance and setting and more
4. **Mode-**
to select flash control mode: shown on LCD panel
5. **Light-**
press to light up control panel
6. **Selection-**
dual motion button: turn to select function or press down to confirm selection



BACK OF HOUSING

MAINTENANCE OF THE MAIN GASKET SEAL

Each housing is individually inspected and hydrostatically tested in the factory. The design of the special gasket seal is among the most reliable in the industry and the watertight integrity is excellent. This special gasket design provides a perfect seal even if there is any movement between the body and lid due to change of ambient pressure.

With this in mind, the gasket seal is the only barrier between the water outside and the air space within the flash. It is an effective barrier only if the seal is properly maintained. The gasket seal should be inspected before every dive. The following information is provided for your guidance in using and maintaining the gasket seal.

MAINTAINING THE GASKET SEAL

If the main body to lid gasket is not installed, install the gasket before diving. This is the only user serviceable gasket. Its care and maintenance is critical to the watertight integrity of the housing. The gasket should be replaced at the proper service interval (see Section on Service). If the gasket is contaminated, or not already installed, inspect and install the gasket according to the following guidelines.

GUIDELINES FOR INSPECTION, CLEANING AND RE-INSTALLATION OF THE GASKET SEAL

Materials Needed:

You will require a soft cotton cloth or Q-tip. Make sure these are free of all chemicals or contamination such as loose fibers. You can moisten the cotton or cloth and wipe the surface of gasket clean—no silicon grease or lubricant is necessary. It is advised to carry out the following procedure on a firm clean level surface, e.g. at a table, to prevent skidding. This is especially useful if you are doing this maintenance from your diving boat as it moves.

Maintenance of the O-Ring Seal:

Remove the gasket periodically for inspection. It is not necessary to remove, clean and re-install the gasket after every dive provided the gasket did not become contaminated. The flash housing may be required to be

opened between dives, to recharge the batteries. Before opening, make sure the outside of the housing is thoroughly toweled dry. After removing the lid and servicing the flash, replace the lid straight away rather than leaving it lying around. Before replacing the lid, make sure that no contamination such as dust, hair, salt, etc. has fallen onto the gasket or its recess.

Procedure for Gasket Maintenance:

1. Place the lid on a firm non-slip level surface.
2. The gasket can be extracted using a gasket extractor tool (make sure the tool has no sharp edges). Alternatively use the flat surface of your thumbs to gently stretch the gasket on two faces [see figure below] thus making a small loop protruding a few mm. The loop can then be grasped between finger and thumb, to pull the gasket over the lip.



PROVIDING A LOOP IN THE O-RING

3. Clean the seal recess (the square groove where the gasket sits) with a cotton bud.
4. Inspect the gasket all the way round its surface for damage such as cuts, tears or contamination. This should be done visually and also by feeling the surface texture between finger and thumb.
5. IF THE GASKET IS DAMAGED OR SUSPECTED OF BEING DAMAGED, DISCARD IT IMMEDIATELY. A spare gasket is supplied with your housing, or a replacement gasket can be obtained from Fantasea. If the gasket is contaminated or suspected of being contaminated, clean it with a cotton cloth that is free of all chemicals or contamination. After cleaning inspect the gasket again.
6. Replace the gasket into the groove; run a finger round the gasket to make sure it is snugly seated in the groove.

EXCLUSIVE PRESSURE RELEASE PLUG

The body and lid are uniquely designed with a "no clip" closure arrangement. Our testing has shown that this arrangement allows the water to exert an even pressure on the O-ring, thus increasing the reliability of the watertight seal. To open the housing, the pressure release plug must be first unscrewed and then pulled all the way out. This provides a channel for the air to pass through and eliminate the pressure differential between the inside of the housing and the ambient air pressure.

The plug consists of an internal double O-ring seal on a stainless steel slide shaft. These internal O-rings form the watertight seal. There is also a large outer O-ring under the knob. This O-ring serves to prevent contamination [dirt or salt] of the slide shaft, and is not required for watertight integrity. If this O-ring should become detached, it can simply be pushed back in place.



Important

Before diving, make sure the pressure release plug is pushed closed, and then screwed home, do not over tighten this plug (finger tighten only).

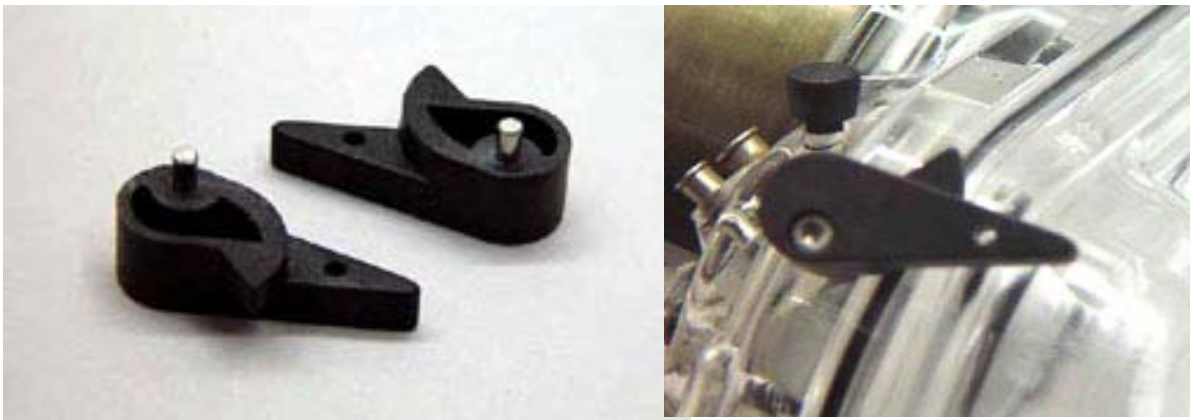
OPENING LEVERS

After unscrewing and pulling out the pressure release plug, the lid can be opened. To overcome the friction of opening, two levers are used to push against the lid with a cam action. On some models these opening levers are bolted to the body. On the other models, they are detachable levers.

 Important

Be sure they are inserted all the way flat to the housing before turning to avoid damaging the protrusions on the lid.

The body has two holes on opposite corner edges of the housing for opening. Gently lever off the lid with the supplied cams taking care not to twist the lid excessively. The lid should be opened keeping it approximately parallel to the body at all times. If using a single lever, turn first one side a little, then the other an equal amount, and repeat again until the lid is opened. **Remember** to unscrew and pull out the pressure release plug all the way first, otherwise the air pressure will resist attempts at opening. Lay the lid on a flat stable surface after opening.



MOUNTING THE SPEEDLIGHT IN THE HOUSING

Since the **Fantasea F580EX Mark II Flash Housing** was specifically designed for the Canon 580EX Mark II Speedlight, insertion is a simple matter of placing the flash into the housing. Make sure the flash is properly aligned and that it sits perfectly flat. There are no screws or mounts to worry about or any other alignments once the flash is properly inserted.

Set the flashlight in an upright position. Slide the flashlight all the way into the hot-shoe of the housing until it stops.

Notes:

1. **It is recommended first to attach the flash to the camera's hot shoe to determine if it is functioning properly.**
2. **Once this is determined, insert both into their respective housings.**



SLIDE THE FLASHLIGHT INTO THE GUIDE

Turn the lock ring follow the direction “LOCK”. Take care not to excessively tighten the screw. Note: If you find that control levers do not locate properly with the buttons, please check again that the flashlight is properly seated to the limit of the guide rail.



LOCK THE FLASHLIGHT



REPLACE THE LID

Important

When accommodating the **Canon 580EX Mark I Speedlite** in this housing, the housing provides access to all important controls except the power switch. Therefore, the flash should be turned on prior to installing it into the housing. When the flash enters the standby mode during the dive, it can be activated again by simply pushing the camera housing's shutter release control.

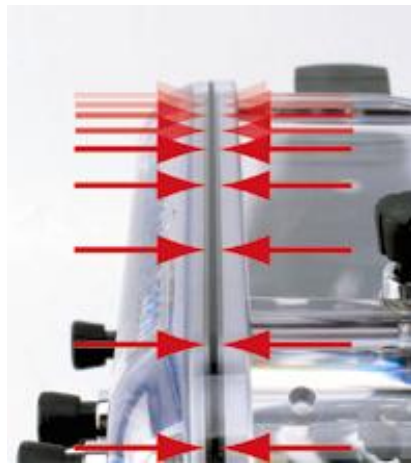
CLOSE HOUSING

1. Place housing back over front and align the complete mating surface of the housing and the gasket, forming a proper seal.
2. Ensure that the pressure release plug is pulled all the way out while closing, otherwise the air cannot escape.
3. Squeeze the lid closed all the way, you will hear the hiss of air being expelled.

4. Screw home the pressure release plug; you need not excessively tighten this plug. The seal is made by the internal O-rings. The O-ring on the underside of the plug is just to keep out dirt and other debris. The plug is shown in the figure above.
5. Inspect the gasket seal for proper closure. A complete seal can be visually confirmed by looking for the black line made by the gasket around the complete circumference of the housing.

Note!

If the gasket is in good contact, a thin black line, about 0.5-1mm in width should be visible where the gasket is in contact with the lid. Follow this line all the way round the edge of the seal as a final check that the seal is good. The housing is now ready for the dive.



INSPECTION OF O-RING

ATTACHING THE SYNC CORD

The sync cord is a 6 pin Nikonos type sync cord. The sync cord connects the flash to the camera housing. Both ends of the cord are identical so either side can be inserted into the flash and camera housings. When you insert the cord into the port you must exercise caution—the pins inside the cord are delicate and must not be damaged.

1. Unscrew the port cover cap and store in a safe place. Gently and accurately attach the sync cord to the port of the flash housing.
2. While securing the position of the sync connector, screw it into the housing using the locking screw of the sync cord.

Caution

LINE UP THE CORD TO THE HOUSING IN THE FOLLOWING MANNER:

There is a white dot on the terminal end of the sync cord which must line up with the marking the sync port.

You must insert the cord into the port carefully to assure proper alignment.

Hold firmly in place while fastening locking screw.

ATTACHING FLASH HOUSING TO ARM

You can either use the Fantasea Flex or Ball and Joint Arms to attach the flash housing to the camera housing.

Other arm systems can be used and Fantasea offers adapters to make this possible. Please check with Fantasea or your dealer regarding compatibility issues.

Insert the flat rounded end of the arm into the housing clamp and align so the threaded stainless steel pin can be inserted.

The pin goes through the non-threaded section of the clamp first and exits through the threaded section and is secured. There is no need for the use of force.

BATTERY LIFE

The Ni Cad and Alkaline batteries used with the flash are very efficient and usually last for more than one typical photo dive.

It is always wise to have backup batteries in case you do run out of power. The Ni Cad batteries can be recharged many times and offer an economical and environmentally friendly alternative to one-use disposable batteries. Check the user's manual of the Canon 580EX Mark II Speedlight for confirmation of compatibility with other batteries.

CLEANING & STORAGE

CARE AND MAINTENANCE

The body and lid of the housing are made of polycarbonate. Polycarbonate was selected for its outstanding tensile strength, hardness, toughness and its crystal clear transparency/ high gloss surface. It has good resistance to weathering, although long-term exposure to sunlight should be avoided. The normal operating temperature range is from 3°C to 36°C [37-97°F]--Storage temperature: -10°C to 50°C) [14-122°F].

It is good practice to rinse off your housing with fresh water after every dive. Avoid exposure to fine sand. After a series of 10 or more dives, e.g. after a dive holiday, it is recommended to immerse the housing for 2-3 hours in warm water to dissolve any salt deposits that may have built up. No chemical cleaners should be used. Mild detergents e.g. shampoo and soap based cleaners are permitted.

Important!

Polycarbonate may be harmed by some household chemicals--the housing should never be exposed to the following classes of chemicals:
benzene, toluene, xylene, chlorinated hydrocarbons,
methanol, any other solvents, strong acids and bases

FOR LONG-TERM STORAGE PLEASE REMOVE THE MAIN BODY TO LID GASKET.

TRAVELING

When transporting by air, please ensure the housing is not sealed to allow the air pressure to equalize; removing the gasket is recommended.

Please protect the housing during transportation by wrapping it in foam or other protective wrapping.

ACCIDENTS

The impact resistance of the housing is excellent. However after an accident the alignment of the housing may have been damaged. Therefore in the event of your housing suffering an impact force, e.g. being dropped, it is essential you do not use the housing for diving. Please return the housing immediately for

service. Please put a note inside to indicate the nature of the accident, so that we can assess the course of action to take to renovate the housing.

Note!

Always take the first dive without your flash in the housing just to make sure there is no leakage from damage to the housing. During the dive—especially at the beginning of descent—take special care to look at the housing to make sure no bubbles are escaping from it and that no water is entering. Generally, if there is a problem with the seal, you will discover it in the first seconds of the dive.

SERVICE

It is recommended to have annual maintenance of all Fantasea housings. It is likewise recommended to use an authorized Fantasea Service Center for this purpose. Please contact Fantasea Line by email: service@fantasea.com or visit the Fantasea Customer Service section on the web site www.fantasea.com. To ensure the continued performance of your housing, it should be serviced every year, or after every 200 dives. Please note the terms for servicing the housing posted on our website. A full service will include:

- Inspection of all components for wears or damage (report if repair necessary)
- Cleaning of all sealing surfaces, and replacement of all O-ring seals.
- Hydrostatic pressure test

Note: the replacement of damaged components (except replacement O-rings) may require additional cost.