Fantasea Line

FG7X II A M16 Housing

(Cat. No. 1360)

for Canon G7 X Mark II

Instruction Manual



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DISCLAIMER

While every effort has been made in order to ensure that the information included in this instruction manual is accurate and complete, no liability will be accepted for any errors or omissions. Fantasea Line reserves the right to change product specifications and features described herein at any time without prior notice. No part of this instruction manual may be copied, translated or reproduced without the prior written permission of Fantasea Line. Fantasea Line makes no warranties aside from limited product warranty as described at the end of this manual.

INTRODUCTION

Note	Please read this manual carefully in order to properly operate the **FG7X II A M16 Housing**. Store this manual in a safe place for further reference once you have read it.

General Information

The **FG7X II A M16 Housing** features a stylish and ergonomic design, specifically created for the **Canon G7 X Mark II** digital camera. The **FG7X II A M16 Housing** is manufactured to the highest professional standards of function, style and durability. It is depth rated to 60m/200 feet and features ergonomically designed and labeled controls. The Fantasea **FG7X II A M16** is the ultimate waterproof home for the **Canon G7 X Mark II**. The **FG7X II A M16 Housing** is ideal for outdoor and underwater photography. Underwater photographers can dive or snorkel and capture all the excitement of this fascinating world, while outdoor photographers also have the option of capturing the action of outdoor and water sports activities, such as paddle sports, sailing, boating, surfing, fishing, hunting, backpacking and camping. The **FG7X II A M16 Housing** is shock resistant and protects the camera from water, sand, dust, frost, impact, as well as other damaging elements and harmful occurrences. The **FG7X II A M16 Housing** was designed to be compatible with a complete accessory system, enabling photographers to enhance the quality of their images.

Features & Specifications

- M16 port for optional Vacuum Safety Systems*
- Moisture detector and alarm
- Depth rated to 60m/200 feet
- Ergonomic design
- Made from durable injection molded Polycarbonate
- Full access to all essential camera controls & functions with clearly marked controls
- Shock resistant
- Double O-ring seal
- Special mount for lighting accessories
- Removable double fiber optic cable connection
- Removable flash diffuser
- Easy and secure installation of camera
- Removable anti-glare hood for the LCD screen
- Port Cover
- Dedicated video control button for easy video filming in any shooting mode
- Compatible with a wide range of underwater photo accessories
- Weight (with camera on land): 1,134g
- Weight (without camera on land): 830g
- Dimensions (without accessories): 16.5 x 14.5 x 13 cm \ 6.5 x 5.7 x 5.1 inch (W x D x H)
- Manufacturer's warranty included

** Vacuum system is not included with this housing*

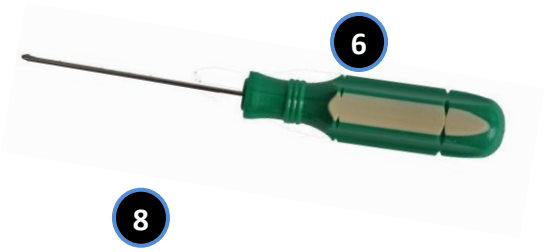
INCLUDED IN PACKAGE

1. FG7X II A M16 Housing
2. Removable flash diffuser with secure line
3. Hand lanyard
4. Silicone grease
5. Anti-glare hood for LCD screen
6. Screwdriver
7. Silica gel packs
8. O-ring remover
9. Spare back door O-ring seal
10. Diffuser quick release secure string (housing side)
11. Lens Port Cover



Camera not included



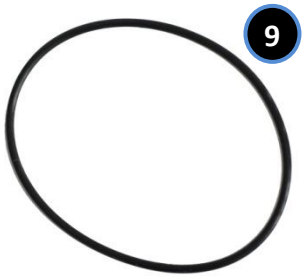


















IDENTIFICATION OF HOUSING PARTS

Note	1. Please refer to the Canon G7 X Mark II camera instruction manual for detailed descriptions and instructions regarding all camera controls and functions. 2. It is strongly recommended that you familiarize yourself with all the controls topside before using these controls underwater.

Top of Housing - *Corresponding numbered descriptions are found on the following page*



Numbered descriptions below refer to corresponding numbers on the top housing graphic (previous page):

1. **Zoom Control –** Turning this control activates the camera zoom button.
    a. In Shooting Mode –
        i. Turn the zoom control clockwise to zoom out, increasing the area visible in the frame.
        ii. Turn the zoom control counterclockwise to zoom in, so that the subject fills a larger area of the frame and for close-up and macro images to be taken.
    b. In Playback Mode - use the zoom control as an index or playback lever.

2. **Shutter Release –** Activates the camera shutter release button and auto focus prior to taking the picture.

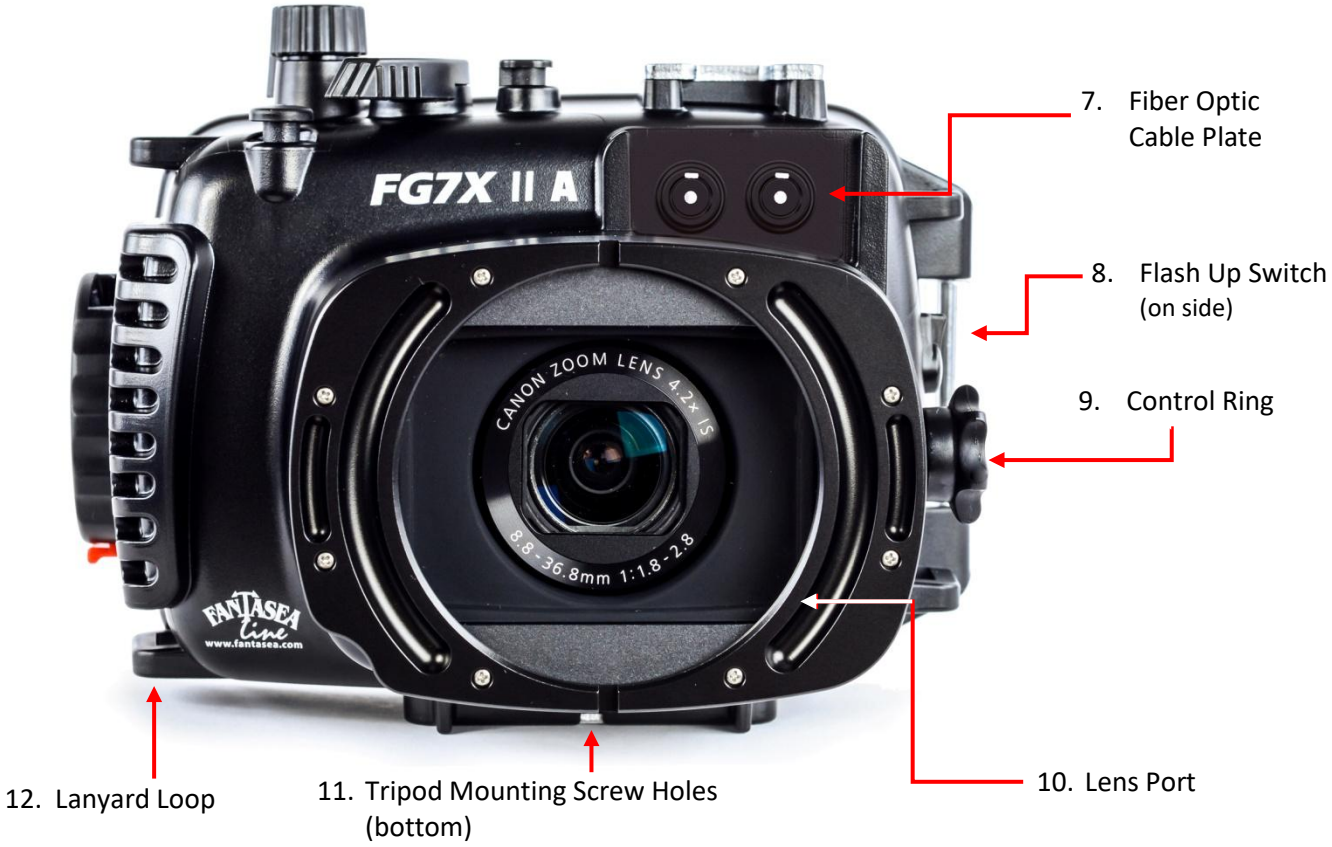
3. **On/Off -** Pushing this control activates the camera power switch button and turns the camera on/off.

4. **Mode Dial –** Turn this dial to change shooting modes.
   Important Notice! It is recommended to align housing and camera mode dials prior to installing the camera inside the housing. Please refer to the section "Installing the Camera" for more information.

5. **Exposure Compensation Dial -** Rotating this knob operates the camera's Exposure Compensation Dial to the opposite direction.
    a. In order to set a higher exposure compensation value, rotate the exposure compensation dial clockwise.
    b. In order to set a lower exposure compensation value, rotate the exposure compensation dial counterclockwise.

6. **Cold-Shoe Mount for Lighting Accessories-** Enables mounting a flash, video light, torch or focus light on top of the housing by using a dedicated connector. For further information regarding such connectors, please visit the Fantasea website – www.fantasea.com

Front Side of Housing - *Corresponding numbered descriptions are found below the image*



7. **Fiber Optic Cable Plate-**
    a. When installed on the housing, the fiber optic cable plate and the two adaptors inserted inside it allow for an easy attachment of 2 fiber optic cables to the housing. For further instructions, please refer to the section “External Flashes”.
    b. Remove the fiber optic cable plate from the housing in order to make use of the internal camera flash during your dive. In order to remove the plate, insert your fingers beneath the adaptors installed inside the plate and pull the plate upwards till it is removed from its slot. Note that when photographing using the camera built-in flash only, the flash diffuser accessory should be installed, or else unwanted shading will occur in most images taken.
    c. Make sure the fiber optic cable plate is secured to the housing by its secure line in order to avoid losing it during the dive.
    d. If using only one external flash, make sure the second fiber optic cable adaptor remains in its place to block any light coming out of the exposed adaptor hole.

8. **Flash Up Switch** - Rotating this control clockwise (pulling it towards the back of the housing) will pop-up the camera built-in flash. Note that once the camera built-in flash has been popped up, it can be disabled again using the *Flash / Right* control and selecting "flash disabled" on the flash mode menu. Rotating the *Flash Up Switch* counterclockwise will not have any effect on the built-in flash.

9. **Control Ring** – Rotating this knob activates the function that you have assigned to the Control Ring. Please refer to the camera instruction manual to assign a function to the Control Ring.
   Important Notice! The preferred Control Ring function should be assigned on the camera prior to inserting the camera into the housing, as in various shooting modes, Control Ring assignment might not be accessible through the housing.

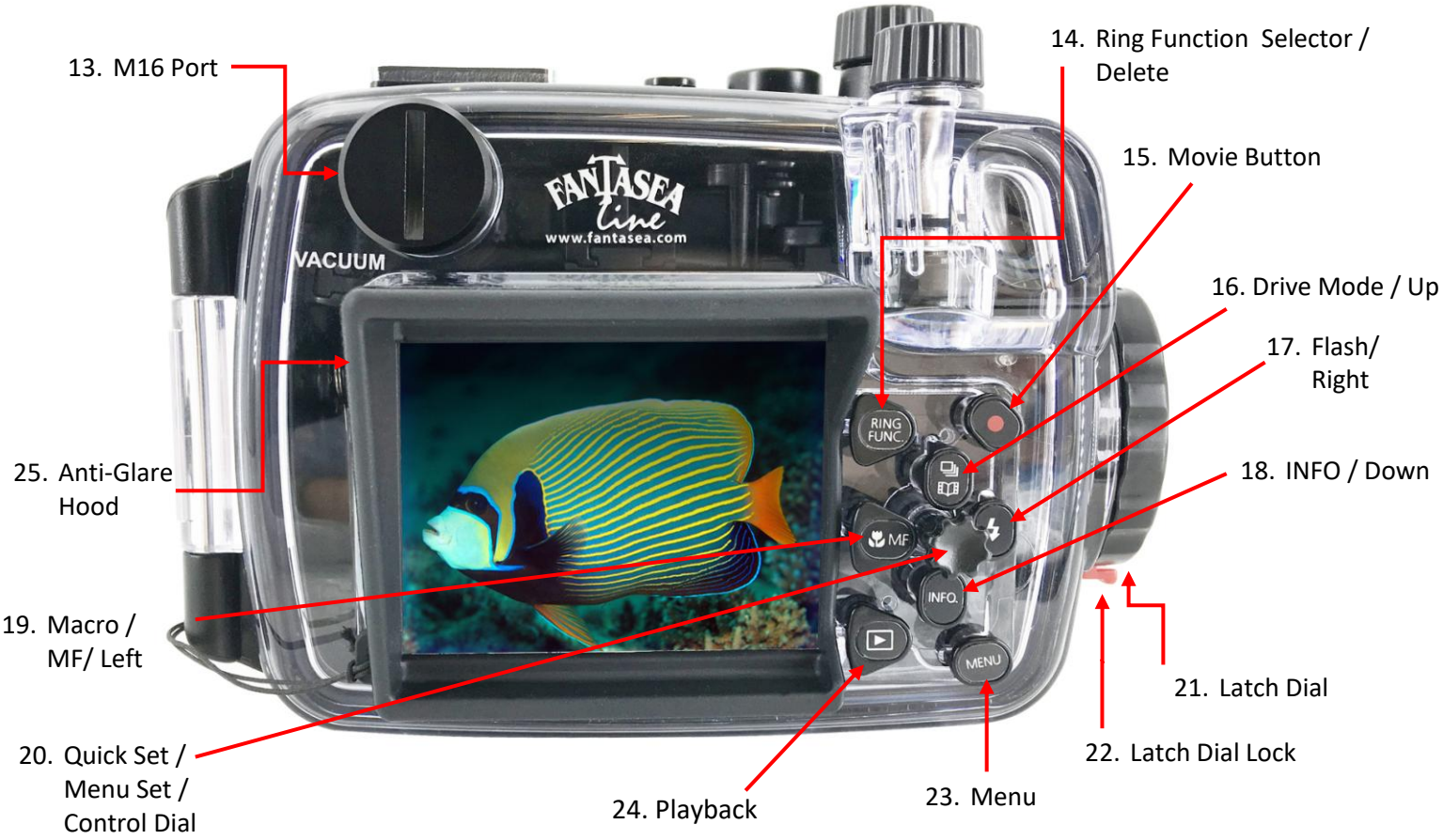
10. **Lens Port-** The housing lens port features a 67mm thread and it's compatible with a wide variety of "wet" accessory filters and lenses, including macro lenses, wide angle lenses and color correction filters. In order to maintain the threads of the lens port, it is recommended to apply a small amount of silicone grease to the threads on the housing port and on the accessory lens prior to installation. For a selection of lens accessories available, visit the Fantasea website www.fantasea.com

11. **Tripod Mounting Screw Holes –** Enable mounting the housing on a tray, thereby allowing for the addition of various image enhancement accessories to your underwater photo system. By choosing any one of 3 adjustment positions, you can better determine how and where to position the housing on the tray. This configuration also allows for the use of 2 set screws for the tray mount, thereby preventing any swiveling of the housing on the tray.

Important Notice	*Screws longer than 7mm should not be screwed into the housing Tripod Mounting Plate, as they might damage the plate and housing.*

12. **Lanyard Loops –** The 4 lanyard loops featured on the housing are used to attach a Hand Lanyard or Hand Strap to the housing, as well as to secure accessories using snap cords or secure strings.

Back Side of Housing - *Corresponding numbered descriptions are found below the image*



13. **M16 Port –** Allows installing the *Fantasea Hybrid Vacuum Safety System* inside the housing. The *Hybrid Vacuum Safety System* is an optional pre-dive vacuum test and leak detector safety system, which allows confirming the watertight seal of the housing prior and during the dive. For further information and installation instructions, please visit www.fantasea.com or contact us at info@fantasea.com.

14. **Ring Function Selector / Delete** –
    a. In shooting mode, press this button to reassign control ring functions.
    b. In playback mode, press this button to delete a single image.

15. **Movie (Video Control) Button –**
    a. Push the Movie button in any shooting mode to start recording a video. The camera beeps once as recording begins and the record symbol (REC) appears with the elapsed time.
    a. Push the Movie button again in order to stop recording.

Multi-Selector buttons (16-20)

16. **Drive Mode / Up** – Pushing this control activates the camera's Drive Mode / Up button.

17. **Flash / Right** – Pushing this control activates the camera's Flash Mode / Right button.

18. **Info / Down** – Pushing this control activates the camera's INFO / Down button.

19. **Macro / MF / Left** – Pushing this control activates the camera's Macro / Left button.

20. **Quick Set / Menu Set / Control Dial** –
    a. In shooting mode, pushing this control gives you access to commonly used functions, which can be customized as described in the camera's instruction manual.
    b. When browsing through camera menus, pushing this control activates the camera Menu Set (confirm selection) button.
    c. Rotating this control operates the camera Control Dial, thereby enabling to alter exposure values, navigate through menus and other functions assigned to this dial.

21. **Latch Dial –** This dial ensures the housing is properly closed and watertight sealed, when locked fully into place. For further instructions, please refer to the sections "Opening the Housing" and "Closing the Housing".

22. **Latch Dial Lock (red lever) -** Ensures the secure dial doesn't accidently open during the dive. For further instructions, please refer to the sections "Opening the Housing" and "Closing the Housing".

23. **Menu –** Pushing this control activates the camera menu button.

24. **Playback –** Pushing this button allows you to enter the playback mode and to review images or videos stored on the memory card.

25. **Removable Anti-Glare Hood –** The anti-glare hood enables a better view of the LCD screen when shooting in bright conditions. It can be removed and installed during the dive. For further instructions, please refer to the section "Preparing the Housing".

SETTING UP THE HOUSING

Note	**<u>It is important that a first dive is always carried out with the housing empty (no camera installed inside)</u> in order to verify that the housing watertight seal has not been affected during transport and after long periods of storage.**

PREPARING THE CAMERA

1. Install a (preferably empty) memory card (16 GB+ capacity recommended) and a fully charged battery inside the camera.
2. Remove the camera strap from the camera if one was installed.
3. Rotate the Mode Dial so the Auto shooting mode is selected and aligned with the white mark on the left of the wheel. This will allow for the camera and housing mode dials to be aligned, so the housing mode dial will indicate the proper mode selected by the camera dial.
4. It is recommended to program the camera to the most frequently used underwater photo mode, lighting and other key settings prior to installing the camera in the housing.

PREPARING THE HOUSING

1. When using the housing for the first time-
    a. Peel the transparent plastic screen protector off the back door exterior of the housing.
    b. Install the hand lanyard on the housing by inserting it through the lanyard loop on the bottom right of the housing (facing from back), then pulling it through itself and testing it in order to make sure it is secure (image #1).
    c. Install the housing side of the diffuser quick release secure line by tying it around the upper rectangular loop at the top left side of the housing, where the Fiber Optic Cable Plate secure string is attached to as well (image #2). Please note that this line may come assembled and then there is no need for installation.
    d. Open the housing (see section “Opening the Housing”) and remove the anti-glare hood out of the housing. Secure the anti-glare hood to the housing by tying its secure string around the lower rectangular loop at the bottom left side of the housing. Install the anti-glare hood over the anti-glare hood rails at the back of the housing. First install the anti-glare hood over the top rail (image #3) and then gently and carefully stretch it

downwards to install it on the bottom rail, making sure it's sitting securely on both upper and lower rails (image #4).

e. **<u>It is important that a first dive with the housing is always made without the camera in order to verify that the housing watertight seal has not been affected during transport and after long periods of storage</u>.**



Image #1

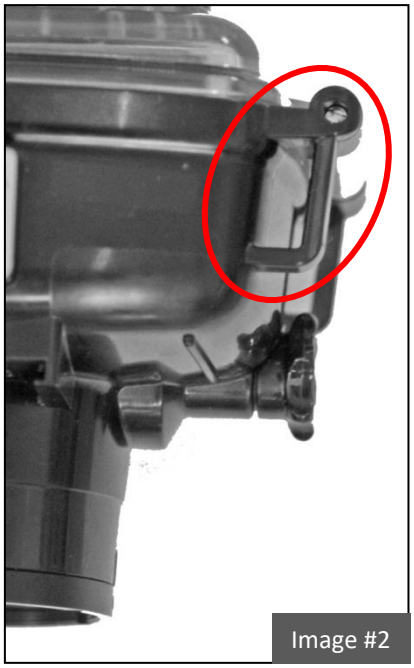


Image #2

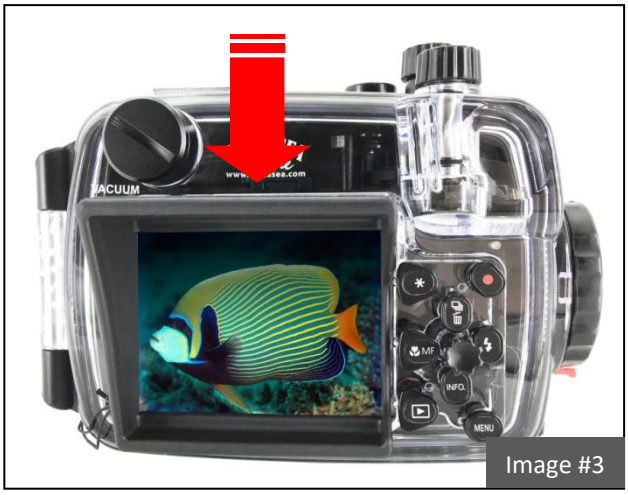


Image #3



Image #4

OPENING THE HOUSING

1. Pull the small red tab located at the bottom of the latch dial outwards (up and away from the housing), as indicated by the arrow direction (image #5). There is no need to apply any force.
2. While holding the lock dial up, turn the latch dial counterclockwise until the red latch tab is located at the top of the latch and cannot be turned any further (image #6). There is no need to apply any force.
3. Carefully open the back side of the housing.



Image #5



Image #6

4. Note that when opening the housing for the first time or when opening it after airplane trips, increased resistance might be encountered. **Therefore, it is important not to lock the housing and to leave it slightly open when transporting by air**.

CHECKING THE O-RING

1. Prior to each closure of the housing, the back door **black** O-ring should be visually inspected. If there is any debris present, including dirt, sand, dust, hair or any other matter, it must be cleaned to ensure a proper watertight seal.
2. In order to clean the **black** O-ring, first remove it from the housing:
   a. Insert the O-ring remover between the black O-ring and the groove it is seated in (image #7).

b. Slip the tip of the inserted O-ring remover below the black O-ring, while making sure the O-ring doesn't get damaged (image #8).
c. Carefully hold the O-ring with your fingertips in order to remove it from the groove.



Image #7



Image #8

3. Cleaning the O-ring is a simple matter of wiping it with a damp, soft cloth to remove the foreign matter. **Be careful the cloth you use does not leave any of its own material behind as this can also affect the effectiveness of the seal**.
4. Apply a slight layer of silicone grease on the black O-ring. Please note that the amount of lubrication required on the O-ring is only enough to allow it to slip into place without friction, so it does not twist or become dislodged. More grease is not necessarily better, and in some cases might interfere with the watertight seal of the housing.
5. When replacing the O-ring, place it back into the groove starting at one corner and gently pressing it into the groove all around the housing until it is all seated in the groove and no part of it is sticking up or out of the groove.
6. The white O-ring featured on the back side of the front door should be visually inspected prior to each dive. If there is any debris present, gently wipe the area with a soft microfiber cloth in order to cleanse it.
7. **The white O-ring featured on the back side of the front door shouldn't be removed unless it's damaged.**

INSTALLING THE CAMERA

Since the **FG7X II A M16 Housing** is specifically designed for the **Canon G7 X Mark II** digital camera, installing the camera in the housing is quite simple.

1. Make sure the camera is turned off.

2. Hold the camera parallel to the housing and then gently install it inside (image #9). Avoid inserting one side of the camera prior to the other, as this will make the installation difficult and might cause damage to the camera or housing.
3. **<u>Take special care not to touch or damage the Moisture Detector unit when installing the camera.</u> The unit is located inside the housing on the inner right side of the housing, opposite the latch dial (image #10).**

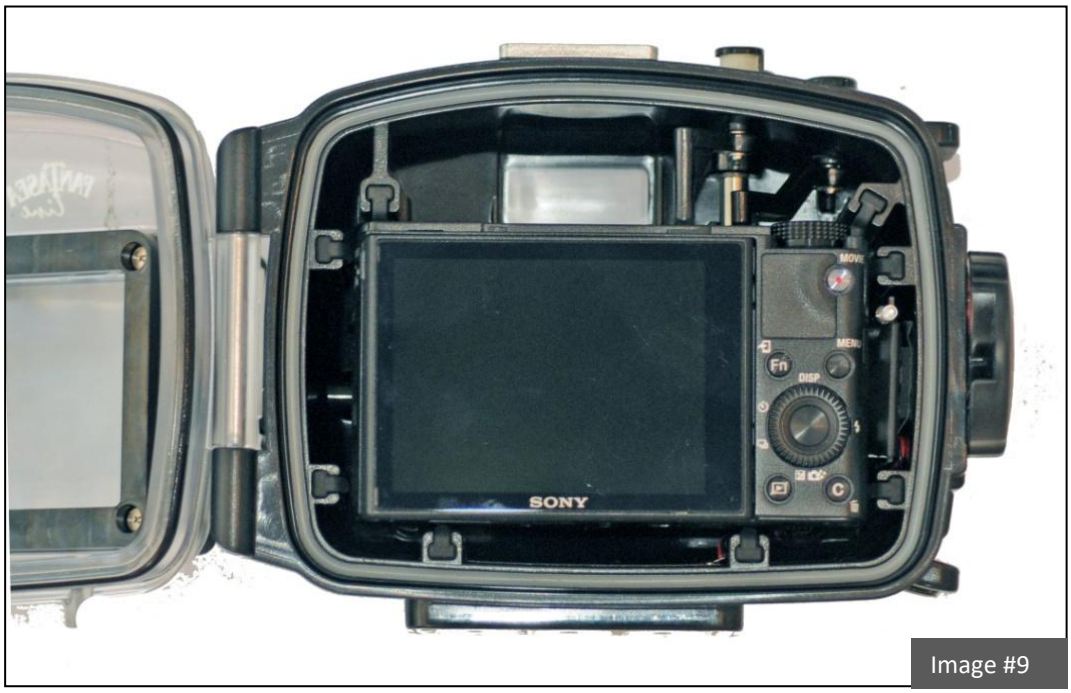


Image #9

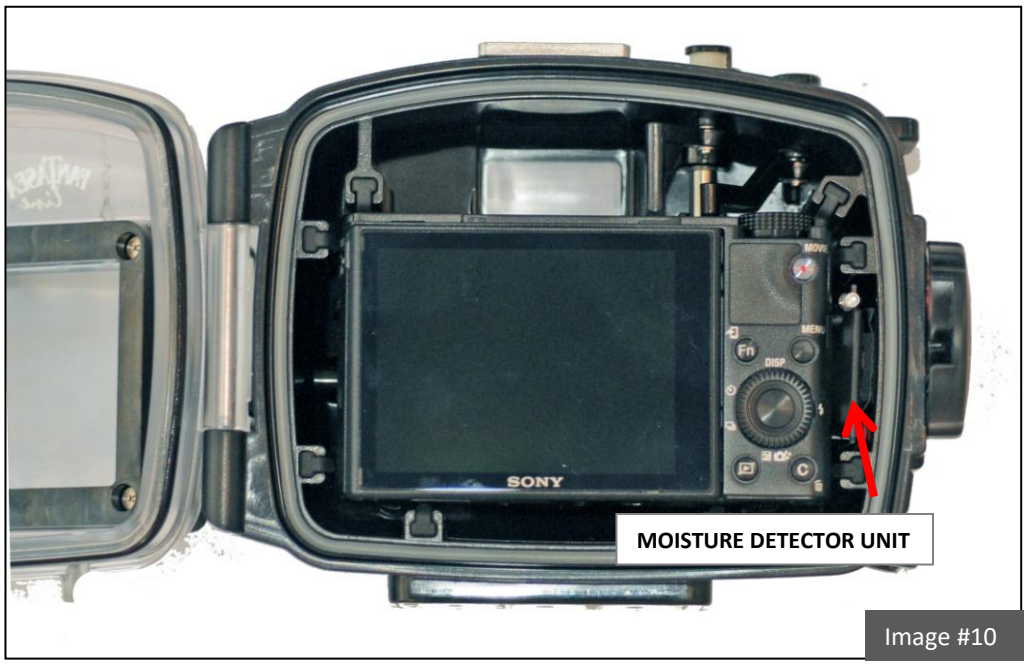


Image #10

4. If inserting a silica gel pack inside the housing in order to prevent moisture, it is best to insert it on the left side of the camera, in the slot midway up between the two rubber shock absorber mounts, where it doesn't interfere with proper housing operation. It is important to make sure that the silica gel pack doesn't stick out, or else it might interfere with the watertight seal of the housing.

CLOSING THE HOUSING

1. Turn the latch dial so that the small red tab located on the latch is pointed towards the front side of the housing (image #11).
2. Carefully close the back door of the housing, pushing it against the front door, while making sure there is nothing sticking out of the housing or impairing the smooth closure of the back door. Then firmly press the back door against the forward section of the housing.
3. Turn the secure dial clockwise till the lock dial clicks. The small red tab should then be pointed towards the bottom of the housing (image #12).

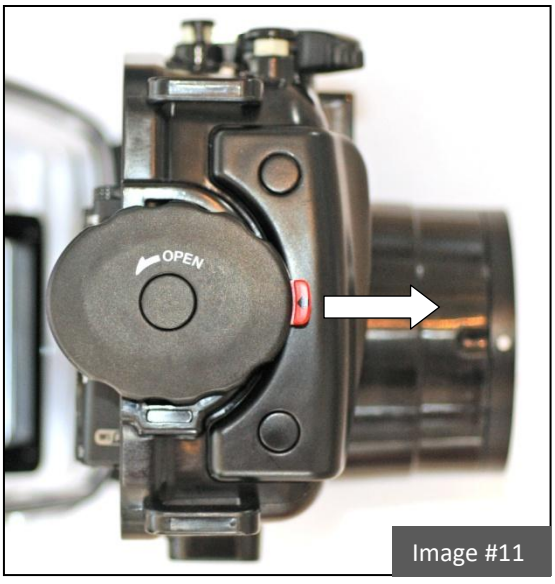


Image #11



Image #12

4. Gently try pulling the back door away from the front door. If the housing is properly closed, it should be impossible to open the back door.
5. Visually inspect the black O-ring through the transparent back door for proper closure. Make sure it isn't twisted or out of the groove and that no foreign matter has been caught in the seal, such as secure lines, sand, grit, hairs or any other foreign substance.

6. Turn the camera on and check that the extended camera lens does not catch or bend the black rubber seat on the inside of the lens port. It is vital that this rubber seat does not disturb the lens (image #13).
7. Test housing control buttons to make sure that the camera was properly installed inside the housing and that nothing interferes with normal operation of the camera. It is recommended to take a few images once the camera has been installed inside the housing and prior to the dive in order to ensure proper operation.



Image #13

8. If making use of the internal camera flash, install the removable flash diffuser on the housing and attach the flash diffuser quick release secure string in order to avoid losing it underwater.
9. Prior to diving with the housing, submerge it in a shallow tub of water or rinse tank. Carefully look at the housing to make sure no bubbles are escaping from it and that no water is entering.

REMOVING THE CAMERA FROM THE HOUSING

1. After use, thoroughly rinse the housing fresh water. Prior to opening the housing, make sure both your hands and the housing are clean and dry. It is recommended to have a clean, dry and soft towel handy in order to dry your hands and the water drops on the housing.
2. When opening the housing, it is important to hold it so the lens port is facing down. This will prevent the camera from slipping out of the housing while being opened.
3. Open the housing as described in the section “Opening the Housing” and carefully remove the camera from the housing. Take sufficient care that no water drips from your hair and body onto the housing and camera.

USING THE CAMERA BUILT-IN FLASH

1. The Canon G7 X Mark II camera has a built-in flash capable of illuminating nearby underwater subjects. For stronger lighting, illuminating subjects that are farther away, avoiding backscatter, eliminating shadowing effects and photographing in deep water, an accessory slave flash is recommended. For further information, please refer to the section “External Flashes”.
2. In order to make use of the built-in camera flash, remove the Fiber Optic Cable Plate from the housing. Insert your fingers beneath the adaptors installed inside the plate and push the plate

upwards till it is removed from its slot. Make sure the fiber optic cable plate is secured to the housing by the dedicated secure line in order to avoid losing it during the dive.

3. The removable flash diffuser included assists with softening the built-in flash output, increasing its angle of coverage and decreasing the amount of *backscatter* in the images *(*the unattractive snowstorm effect of the flash reflecting off suspended particles in the water).
    a. In order to install the flash diffuser, hold and align it against the housing lens port so the concave side of the flash diffuser is facing the lens port (Image #14).
    b. Gently push the flash diffuser against the housing lens port till it clicks.



Image #14

    c. Attach the flash diffuser quick release secure string to the other side of the string connected to the housing in order to avoid losing the flash diffuser underwater.
    d. In order to remove the flash diffuser from the housing, gently push it outwards first from its top and then from the bottom.
4. It is best to set the camera flash mode to “Flash Always” as artificial light is required in most compositions for the purpose of color and light reproduction. This will ensure the built-in camera flash fires on every image taken regardless of ambient light available. Please refer to the camera instruction manual for further instructions regarding such settings.
5. Rotate the *Flash Up Switch* clockwise (pulling it toward the back of the housing) in order to pop up the camera built-in flash.
6. Note that once the camera’s built-in flash has been popped up it can be turned off using the *Flash / Right* control and selecting the “Off” option. Rotating the *Flash Up Switch* counterclockwise will not have any effect on the built-in flash.

FANTASEA MOISTURE DETECTOR

Note!	**Never soak or wash the interior of the housing with water. This will set off the alarm in a way that cannot be disabled, eventually causing irreparable damage to the electronic unit!**
	The moisture detector is a bonus add-on component and not an integral part of the housing. Accordingly, it is not part of the housing warranty coverage. The moisture detector has no warranty coverage.

The alarm unit of the Moisture Detector is installed inside the housing, opposite the latch dial (image #15 – item **A**). The Moisture Sensor unit is installed just under the camera (image #15 – item **B**). A thin wire connects these units. Moisture detectors are very sensitive, so whenever moisture is detected by the sensor, the moisture detector LED light begins flashing and a warning alarm starts beeping, thereby alerting the user of a possible leak.

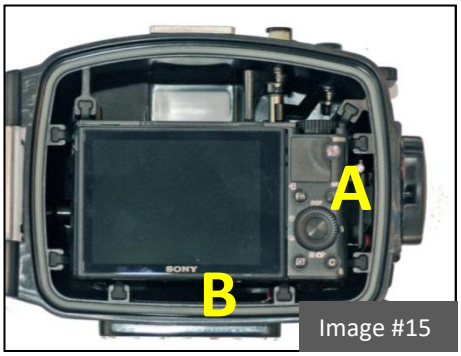
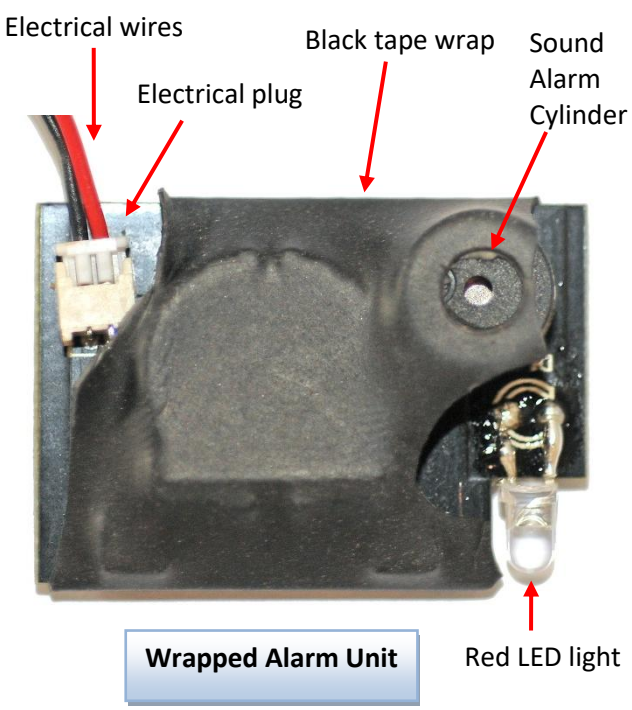
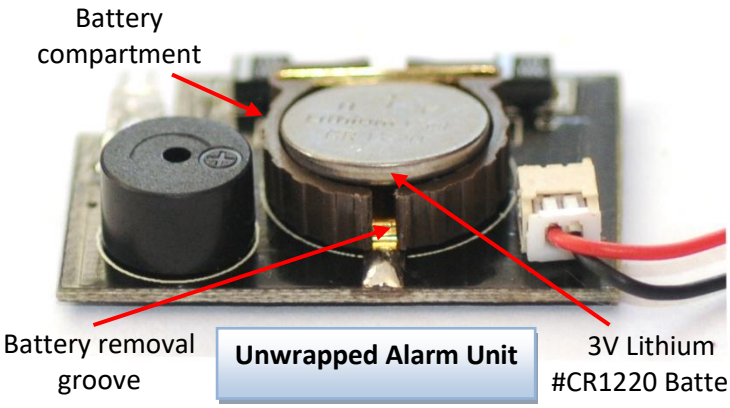


Image #15

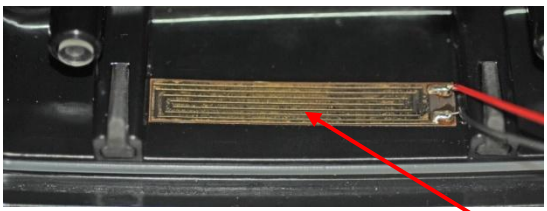
IDENTIFICATION OF PARTS



Wrapped Alarm Unit



Unwrapped Alarm Unit



Moisture Sensor Unit

SILENCING THE ALARM

1. In order to silence the alarm after it goes off, wipe the Moisture Sensor unit at the bottom of the housing gently with a soft dry cloth in order to dry it off.
2. If this doesn't help, remove the alarm unit from the housing by gently sliding it out of its slot (image #16).
3. Expose the white electrical plug under the black tape wrap (image #17).
4. Disconnect the electrical wires plug from the alarm unit socket.

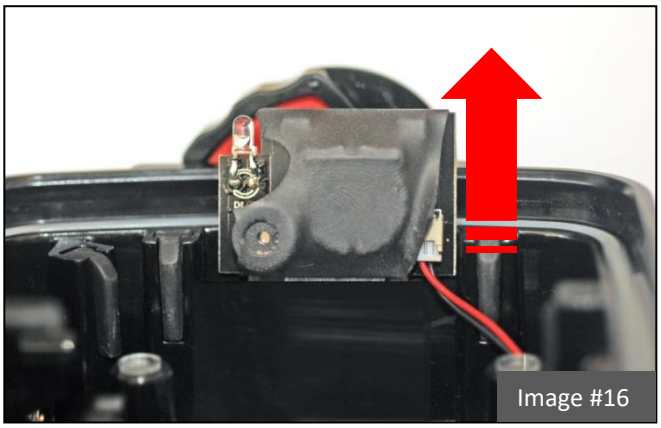


Image #16

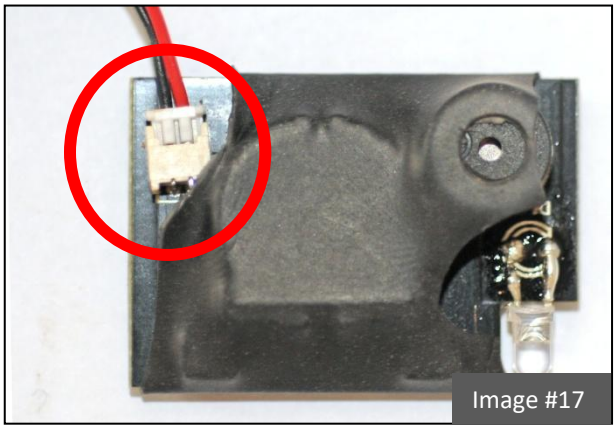


Image #17

REPLACING BATTERIES

1. Remove the alarm unit from the housing by gently sliding it out of its slot (image #16).
2. Disconnect the electrical wires plug from the unit socket (image #17).
3. Peel the black tape wrapped around the Alarm unit by gently cutting it with a utility knife (image #18). Make sure that the knife doesn't come in contact with the unit under the tape and that you only cut the tape.
4. Remove the old battery by lifting it with a small screwdriver through the battery removal groove (image #19).
5. Prepare a new **3V Lithium #CR1220** battery, widely available at any hardware store or watch repair shop.
6. **IMPORTANT! The battery should be installed with the "+" symbol facing up and out of the unit!**

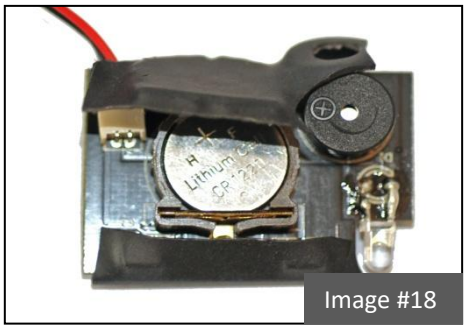


Image #18

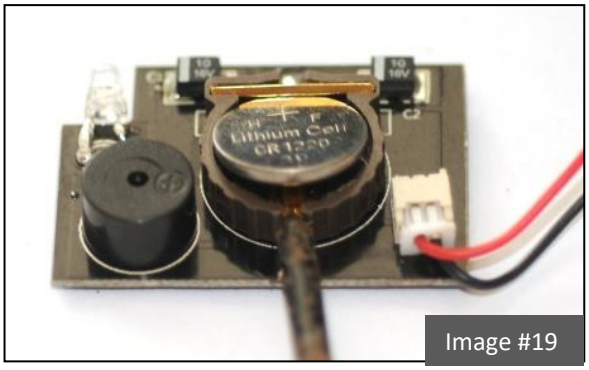


Image #19

7. Gently push the new battery it into the battery compartment and make sure it doesn't fall off easily.

   WARNING

   Install only 3V Lithium #CR1220 batteries inside the Moisture Alarm unit. Using any other type of batteries will cause irreparable damage to the electrical unit.

8. To secure the battery and make sure it doesn't fall out of place, wrap the battery compartment area with a small piece of electrical tape. Be careful not to cover the round cylinder which produces the alarm sound. Alternatively, you can wrap the whole alarm unit with tape and then make a hole over the alarm cylinder (image #20).
9. Insert the electrical wires plug back into the alarm unit socket.
10. Slide the alarm unit back into the dedicated slot inside the housing, opposite the buckle. Make sure to install the unit with the round alarm cylinder facing the housing interior and the LED pointing outwards, to the back of the housing (image #21).

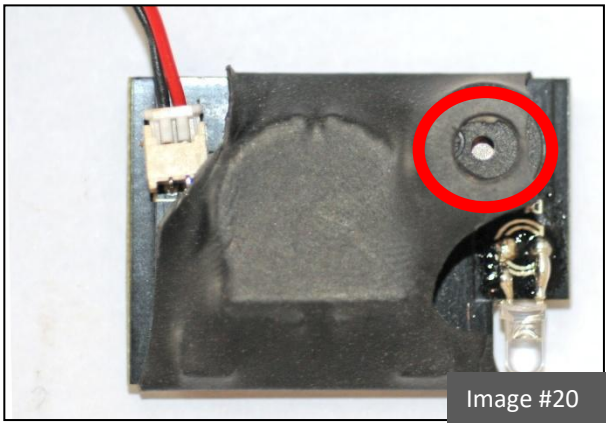


Image #20

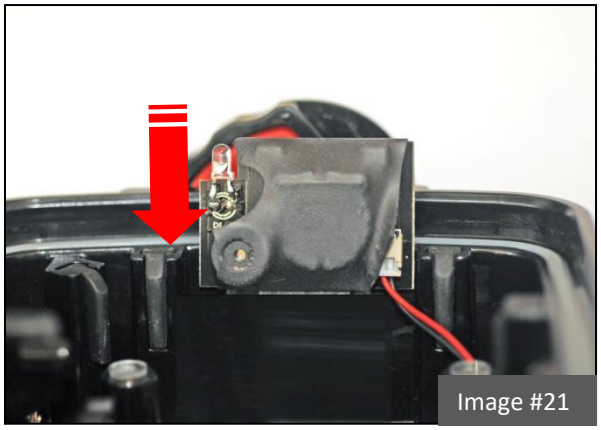


Image #21

11. You can test the Moisture Detector by placing a wet finger over the moisture sensor unit at the bottom of the housing. Once you have confirmed that the alarm is working, gently dry off the moisture sensor unit. This should silence the alarm.

REPLACING THE ALARM UNIT

1. Remove the alarm unit from the housing by gently sliding it out of its slot (image #22 on the previous page).
2. Expose the white electrical plug under the black tape wrap (image #17 on the previous page).
3. Disconnect the electrical wires plug from the alarm unit socket.
4. Connect the electrical wires plug to the socket of a new alarm unit.

5. Slide the alarm unit back into the dedicated slot inside the housing, opposite the buckle. Make sure to install the alarm unit with the round alarm cylinder facing the housing interior and the LED pointing outwards, to the back of the housing (image #21 on the previous page).
6. You can test the Moisture Detector by placing a wet finger over the moisture sensor unit at the bottom of the housing. Once you have confirmed that the alarm is working, gently dry off the moisture sensor unit. This should silence the alarm.

Important Notice	In case of installing the *Fantasea Vacuum Hybrid System* inside the housing, the moisture detector sensor should first be disconnected from the alarm unit and the alarm unit should be removed from the housing. Please contact us at info@fantasea.com for further instructions.

OPTIONAL ACCESSORIES

FOR THE FULL SELECTION OF FANTASEA ACCESSORIES COMPATIBLE WITH THE FG7X II A M16 HOUSING, PLEASE REFER TO THE FANTASEA WEBSITE – WWW.FANTASEA.COM

EXTERNAL FLASHES

Underwater flashes and strobes were designed to improve the color, lighting and quality of your underwater images. Since light and color are absorbed by water, using an external flash is recommended in all depths, during daylight and night dives. In addition to retrieving the color and light absorbed by water, underwater flashes also allow for creative lighting, assist in reducing the amount of backscatter and prevent the shadowing effect caused by the housing lens port when using the built-in camera flash, especially when accessory lenses are mounted on the housing.

The **FG7X II A M16 Housing** can be used with underwater slave flashes. These external flashes feature a slave sensor which triggers the external flash to fire in sync with the internal camera flash.

Most underwater slave strobes are capable of synchronizing with the internal camera flash without any cables under certain diving conditions. They feature a slave sensor that triggers the strobe to fire in sync with the camera built-in flash as long as the strobe and the camera are positioned on the same axis and as long as there is not much ambient light available. However, if the strobe slave sensor isn't pointed directly at the internal camera flash, or when photographing during daylight, in clear water and bright conditions, the slave sensor might fail recognizing the output of the internal camera flash. Connecting a fiber optic cable between the internal camera flash and the slave strobe ensures full synchronization in all angles and diving conditions.

Attaching Fiber Optic Cables to the Housing

1. When installed on the housing, the fiber optic cable plate allows for an easy attachment of up to 2 fiber optic cables to the housing.
2. Remove the Fiber Optic Cable Plate from the housing. Insert your fingers beneath the adaptors installed inside the plate and push the plate upwards till it is removed from its slot.
3. The Fiber Optic Plate receives most fiber optic cable brands, including Sea&Sea. In most cases, the plugs installed inside the plate can be removed and the fiber optic cable can be installed using the plug it comes with. If attaching fiber optic cables which already feature an adaptor:
    a. Housing adaptors should first be removed from the fiber optic cable plate. Use a pen or screwdriver to gently push them out of the plate. The adaptors should be pushed from the back of the plate and pulled out from its front side. Make sure not to damage the fiber optic cable plate when doing so.
    b. It's recommended to apply some silicone grease on the small o-rings of the adaptors installed on your fiber optic cables, so they can be installed and removed more easily.

c. Simply push the adaptor featured at the end of the cable into the dedicated slots on the front side of the plate, instead of the adaptors you've just pulled out, until they are fully fitted inside. Gently pull the fiber optic cable in order to make sure that it doesn't come off easily.

4. <u>If installing exposed fiber optic cables (without adaptors):</u>
   a. Prior to installing the fiber optic cable on the Fiber Optic Cable Plate, make sure that the two black adaptors are firmly and properly installed inside the plate (image #23).


Image #23

   b. Insert the exposed end of the fiber optic cable into the small hole of the adaptor unit, starting from the end that features a screw and pushing it towards the end that features an O-ring (image #24), until the fiber optic cable reaches the end of the adaptor, which can be verified by looking from the other side of the Fiber Optic Cable Plate. The fiber optic cable should be extending out no more than 1mm (image #25).

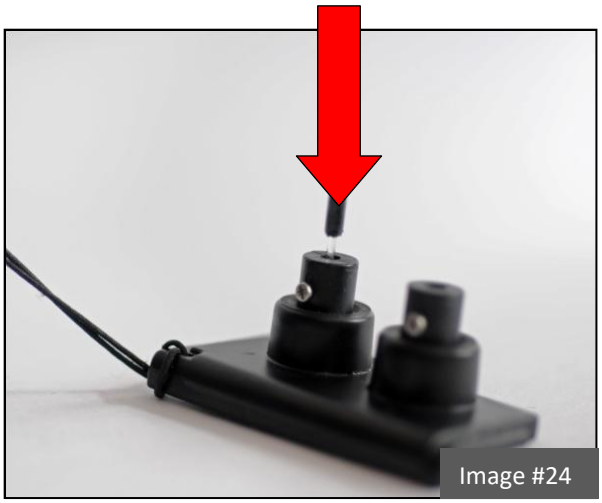

Image #24


Image #25

   c. Use the screwdriver included in order to tighten the screw on the adaptor (image #26). Tighten it enough to stabilize the fiber optic cable inside the adaptor, but don't tighten it too strongly. **Tightening the screw too much might damage the fiber optic cable.**


Image #26

5. Once the fiber optic cable has been installed on the Fiber Optic Cable Plate, install the Fiber Optic Cable

Plate by inserting it inside the dedicated slot on the housing and pushing it all the way in.

6. When installed on the housing, the Fiber Optic Cable Plate blocks the internal camera flash, so only the external slave flash illuminates the subject. This diminishes the effects of backscatter, as well as eliminates any shadowing effect caused by housing lens port, especially when lens accessories are mounted on the housing.
7. Follow the instructions in your strobe manual on how to synchronize your camera with the external strobe and to select the proper pre-flash program for your camera. It is recommended to test the synchronization when photographing opposite a mirror. In this case, the output of both the built-in camera flash and the strobe should be visible in the test shot taken.

FLASH & VIDEO LIGHTING SETS

A variety of Fantasea flash and video lighting sets are available for the FG7X II A M16 Housing, enabling you to further enhance your images and videos. These sets include trays, Flex arms, slave flashes, powerful and sturdy yet stylish video lights, fiber optic cables, focus lights, padded bags and more.

LENS ACCESSORIES

The FG7X II A M16 Housing lens port features a 67mm thread, which can accommodate all 67mm conversion lenses and color correction filters, such as:

- **Optical Wide Angle Wet Lenses:** Wide angle lenses allowing for high quality wide angle images up to 14mm.
- **BigEye Wide Angle Lenses**: Perfect for shooting seascape, divers, ship wrecks and schools of fish, without moving further away from the subject, thereby still taking full advantage of water clarity and artificial light sources.
- **SharpEye Macro Lenses**: Perfect for shooting close-up images of fish, corals, textures and more. These macro lenses magnify the subject and enable the camera to focus on short distances for creating super sharp images.
- **RedEye & PinkEye Color Correction Filters**: Used to restore the colors absorbed by the water. In shallow depths, these filters can serve as an attractive alternative to artificial light sources. These filters can be mounted directly on the housing lens port, and can also be installed inside BigEye and SharpEye accessory lenses.
- **EyeGrabber Lens Holders**: Attach to Flex or Ball & Joint arms, enabling safe, secure and easily accessible storage for your lens accessories when not in use during the dive.

CARE & MAINTENANCE

The Fantasea **FG7X II A M16 Housing** requires only a minimum amount of care for safe and reliable performance. The following tips will enable you to get the best results:

1. Always rinse your housing in streaming fresh water and if possible soak the housing in a fresh water tub or rinse tank for about 20 minutes after every dive in order to dissolve the salt water crystals from around the controls and openings of the housing. Manipulate each of the movable controls to assist the removal of salt particles from these tight areas.
2. Allow the housing to dry thoroughly before packing away for the day or for the trip home. You may use a soft towel or cloth to dry the housing. Be sure there is no grease or other debris on the towel.
3. Visually check the condition of the black O-ring before every dive. If it is dirty, clean it with fresh water and dry it with a soft cloth as described throughout the manual. If it is damaged in any way, such as cut or perforated, replace it before using the housing again.
4. It is recommended to slightly lubricate the black O-ring periodically. It's important to note that the amount of lubrication required on the O-ring is only enough to allow it to slip into place without friction, so it does not twist or become dislodged. More grease is not necessarily better, and in some cases might interfere with the housing watertight seal.
5. Use only the supplied silicone grease for lubricating the back door black O-ring. Use of any other grease might impair the watertight seal of the housing.
6. Avoid removing the white O-ring featured on the back side of the front door unless it's damaged.
7. Be careful not to get greasy fingerprints or dirt on the lens port. This will affect the image quality. Wipe any dirt or grease off with fresh water and a soft cloth.
8. Never handle the housing with your hands coated in suntan, oil or cream. Avoid getting any oils, creams or petrol-related substances or liquids on the housing surface, as this can distort and damage the housing materials.
9. Do not drop the housing on hard surfaces, it could crack and its watertight seal might be damaged.
10. Do not disassemble or modify the housing, as this may cause leaks.
11. Do not leave the housing in direct sunlight, inside a car in hot weather, or near a heater. Heat may warp the housing and cause leaks. If you have to leave the housing in the sun, it is important to cover it with a towel.
12. Travel with the housing protected in a padded case. It is best to remove the camera from inside the housing when traveling and to provide it with its own protective case or compartment.
13. Always leave the housing slightly open when transporting by air.
14. Never dive with the Fantasea **FG7X II A M16 Housing** to a depth greater than 60 meters/200 feet.
15. It is important to carry out the first dive without the camera inside the housing. Check that the watertight seal has not been affected during transport and long periods of storage.
16. It is likewise recommended to visually monitor the housing during every descent, especially for the first 10 meters/33 feet. If water is observed entering the housing or bubbles escaping from it,

the housing should be rotated to a *port down position* and held that way as you return to the surface immediately and get it out of the water.

17. When mounting wet lenses on the housing lens port, it is recommended to follow the guidelines below in order to avoid wearing out the threads of the housing lens port and lenses over time:
    a. Prior to installing the lens on the housing, it is recommended to apply a small amount of silicone grease on the threaded area of the lens (and adaptor, if used) to reduce the amount of friction.
    b. Install the lens on the housing lens port underwater only and remove it prior to ending the dive. Once removed, the lens can be mounted on a lens holder. Avoid having the lens assembled on the housing on land as much as possible, as it is heavier and exerts more pressure on the threads.
    c. It is recommended to reduce wearing of the threads by using lens mounting accessories such as bayonet mounts or flip adaptors.
    d. These guidelines apply to all wet lenses brands and models, but especially important when making use of relatively heavy wet lenses.

FANTASEA PRODUCT CONSUMER LIMITED WARRANTY

"Fantasea" warrants this Fantasea Line branded product against defects in materials and workmanship under reasonable use for a period of ONE (1) YEAR, (two years, where required by law as determined by the origin of the authorized dealer). This warranty is effective from the date of retail purchase from Fantasea or an authorized Fantasea dealer, by the original end-user purchaser ("Warranty Period"). This warranty does not cover any commercial use of the product. If a product defect arises and a valid claim is received within the Warranty Period, at its option, Fantasea, or its authorized service facilities will either (1) repair the product defect at no charge, (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product. The warranty will not extend beyond the original warranty period. Your Fantasea Product should be registered within 30 days of purchase. You must keep the proof of purchase which indicates the date on which the purchase was made; as you may be required to show proof of purchase if you need warranty service. The following conditions apply: 1. This warranty extends to the original purchaser only. It is not assignable or transferable. 2. The warranty does not cover damage resulting from misuse, abuse, negligence, or accidents. Proper maintenance of the Product is the responsibility of the owner. 3. The warranty does not cover damage directly or indirectly resulting from the use of unauthorized replacement parts or service performed by unauthorized facilities. 4. This warranty does not cover any damage to any other product used in conjunction with the Fantasea product, including cameras and lenses, and resulting from any defect in the product materials or workmanship. 5. The cost of sending the product back to Fantasea or its authorized service facilities is the responsibility of the customer. 6. The warranty does not cover any incidental damages resulting from any defects in the product. This expressly includes any travel reimbursements or any other costs associated with the purchaser's optional use of the product. The conditions of this warranty are expressly in lieu of all other expressed warranties, including the payment of consequential or incidental damages for the breach of any warranty. Please register your product on line at this URL: http://www.fantasea.com/registration.

For further information, please visit our website www.fantasea.com or contact us at info@fantasea.com