

Fantasea Line

FA-3 LED Strobe Trigger (Cat. No. 6553)

Instruction Manual

The **FA-3 LED Strobe Trigger** triggers underwater strobes and flashes to fire in sync with the camera using fiber optic cables. Using the LED Strobe Trigger eliminates the need for the camera built-in flash to fire, thereby extending camera battery life and allowing for longer shooting sessions. Eliminating the camera built-in flash also keeps the camera from heating up, resulting with less condensation in humid conditions. The LED Strobe Trigger's super quick recycle time allows for rapid shooting and triggering of the strobes without having to wait for the camera built-in flash to charge.



COMPATIBILITY

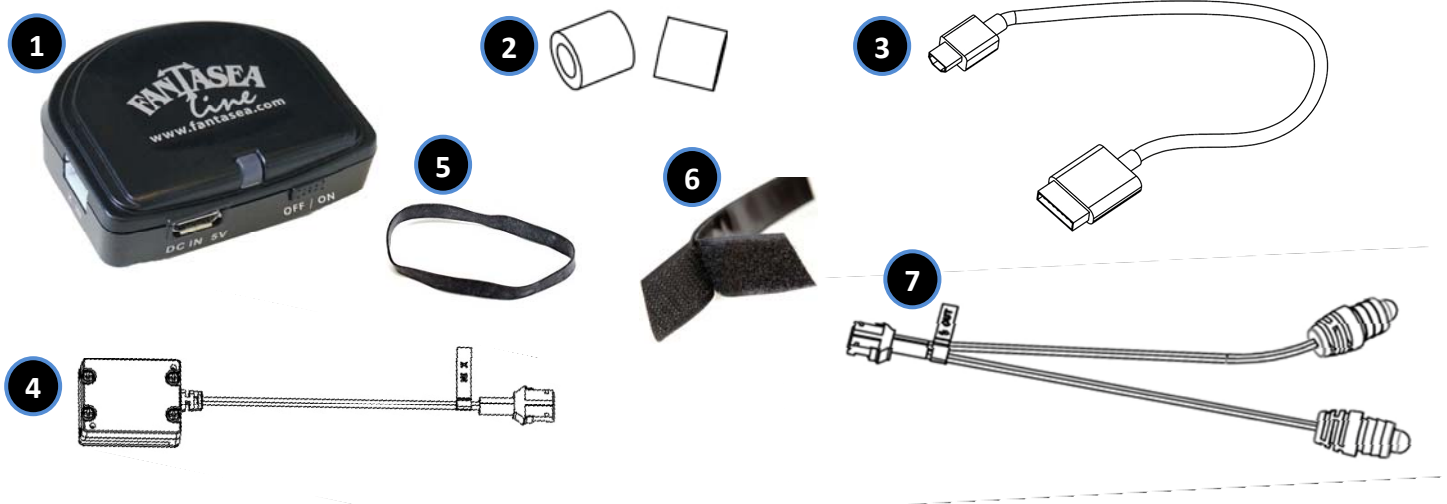
The **FA-3 LED Strobe Trigger** can be connected to any camera featuring a hot-shoe connection. It can be installed inside any camera housing offering sufficient space, anywhere inside the housing, for the main unit to be placed. For LED Strobe Triggers specially designed for Fantasea housings, please visit the Fantasea website – www.fantasea.com

The **FA-3 LED Strobe Trigger** is capable of triggering most underwater strobes available in the market. Note that when using the LED Strobe Trigger, strobe output is controlled manually only.

SPECIFICATIONS

- LED type: Ultra bright white LED
- LED ports: 2
- Voltage: 3.7 V
- Power consumption: 5 milliwatt
- Battery: 110mAh Lithium Polymer battery
- Charging time: 1.5 hours
- Flash capacity: 10,000 (when fully charged)
- Battery life: Up to 72 hours (when fully charged)
- Auto power-off time: 3 hours
- Dimensions: 40.5 x 45 x 13 mm / 1.6 x 1.77 x 0.51 inch
- Weight: 16.8 g / 0.51 oz
- Included in package: LED Strobe Trigger main unit, LED cable, Hot-shoe cable, Spongy LED trigger ports, Velcro sticker, Rubber band and USB cable

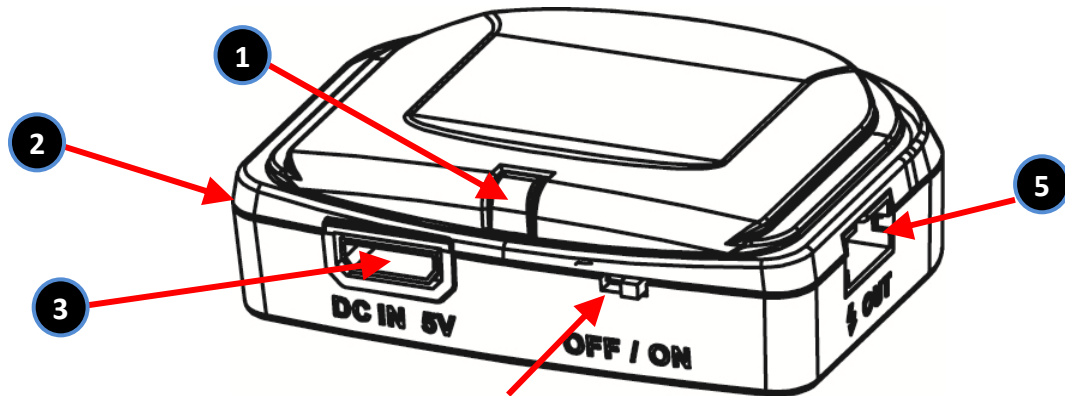
INCLUDED IN PACKAGE



The following descriptions refer to *INCLUDED IN PACKAGE* items drawings on the previous page:

- | | |
|---------------------------------|-------------------|
| 1. LED Strobe Trigger main unit | 5. Rubber Band |
| 2. Spongy LED trigger ports | 6. Velcro sticker |
| 3. USB cable | 7. LED cable |
| 4. Hot-shoe cable | |

IDENTIFICATION OF MAIN UNIT PARTS



- | | |
|------------------------|-------------------|
| 1. Indicator light | 4. Power switch |
| 2. Hot-shoe cable port | 5. LED cable port |
| 3. 5V DC port | |

INSTRUCTIONS FOR USE

1. **Charging the FA-3 LED Strobe Trigger main unit:**
 - a. Connect the micro-USB end of the USB cable to the main unit's 5V DC port (Fig.1).
 - b. Connect the other end of the USB cable to a USB port or USB charger (Fig.2).
 - c. The unit should start charging and the indicator light should start flashing green (Fig.3).
 - d. When charging is complete, the indicator light stops flashing and remains green.



Fig.1

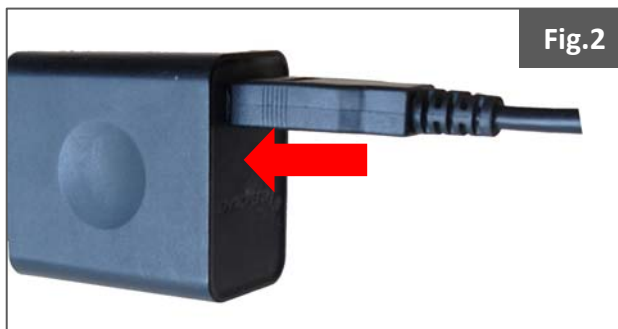


Fig.2



Fig.3

2. FA-3 LED Strobe Trigger Installation

- a. Connect the **LED cable** to the main unit using the **LED cable port** (Fig.4). Make sure you're connecting the **LED cable** to the correct port and note that accidentally connecting the LED cable to the **Hot-shoe port** will result with failure to operate the LED Strobe Trigger.
- b. Connect the **Hot-shoe cable** to the main unit using the **Hot-shoe cable port** (Fig.5). Make sure you're connecting the Hot-shoe cable to the correct port and note that accidentally connecting the **Hot-shoe cable** to the **LED Cable port** will result with failure to operate the LED Strobe Trigger.



Fig.4

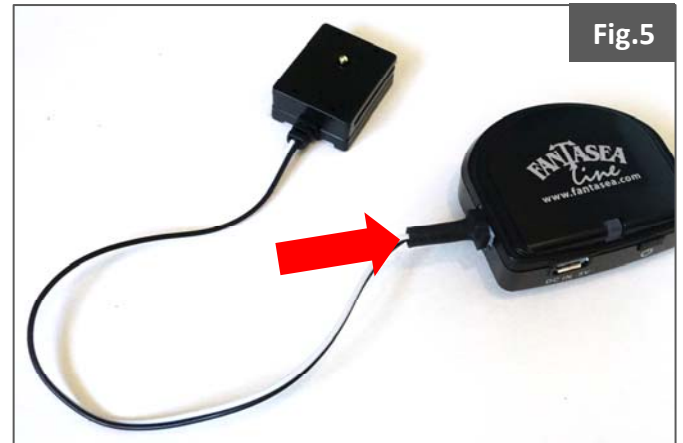


Fig.5

- c. Install the hot-shoe connector featured at the end of the hot-shoe cable on the camera by gently sliding the hot-shoe connector all the way through the hot-shoe mount featured on top of the camera (Fig.6). Note that if a protective cover is installed on the camera hot-shoe mount, it should be removed prior to installing the hot-shoe connector of the LED Strobe Trigger.

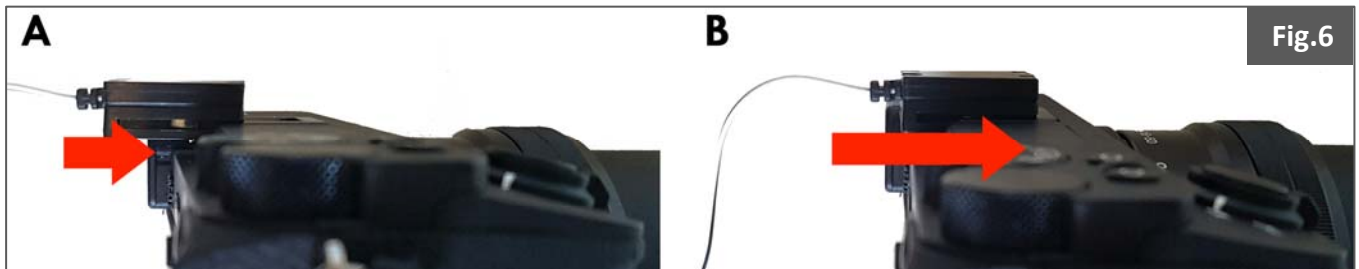


Fig.6

- d. Test the LED Strobe Trigger:
 - i. Turn the camera on. Note that there's no need to set the camera flash mode, as the LED Strobe Trigger is activated whenever an image is captured, even if camera flash mode is set to "Flash Off".
 - ii. Turn the LED Strobe Trigger on by sliding the power switch featured on the main unit to the "ON" position. The indicator light should start flashing green (if fully charged).
 - iii. Capture an image by fully depressing the camera shutter release while carefully observing the two LED's featured at the end of the LED cable. Depressing the shutter release should flash both LED's (Fig.7 on the following page). If depressing the camera shutter release and capturing an image doesn't flash the LED's, reinstall the LED Strobe Trigger following the steps above or refer to section 4 - "Troubleshooting".

- iv. Test the LED Strobe Trigger with the strobe. Make sure the strobe is properly charged prior to performing the test. Turn the strobe on and set it to “Manual” operation mode. Turn the camera and the LED Strobe Trigger on. Place the strobe in front of the camera so it faces the camera lens. Place one of the LED’s featured at the end of the LED cable



Fig.7

- in front of the strobe slave sensor. Capture an image by fully depressing the camera shutter release. The light emitted by the LED should trigger the strobe to fire in sync with the camera, resulting with an overexposed image, in which the output of the strobe is visible. If the strobe isn’t triggered by the LED, refer to section 4 – “Troubleshooting”.
- e. If your housing features built-in LED trigger ports, proceed to step e below. If your housing doesn’t feature dedicated LED trigger ports, the spongy LED trigger ports included in the package should be installed inside the housing:
 - i. Peel the protective film off the sticker side of the spongy LED trigger ports and stick them inside the housing, against the fiber optic cable ports facing the camera built-in flash. Make sure that the center of the spongy LED trigger ports is positioned exactly opposite to the center of the fiber optic cable ports to allow for the light emitted by the LED’s to be transmitted through the fiber optic cables (Fig.8).

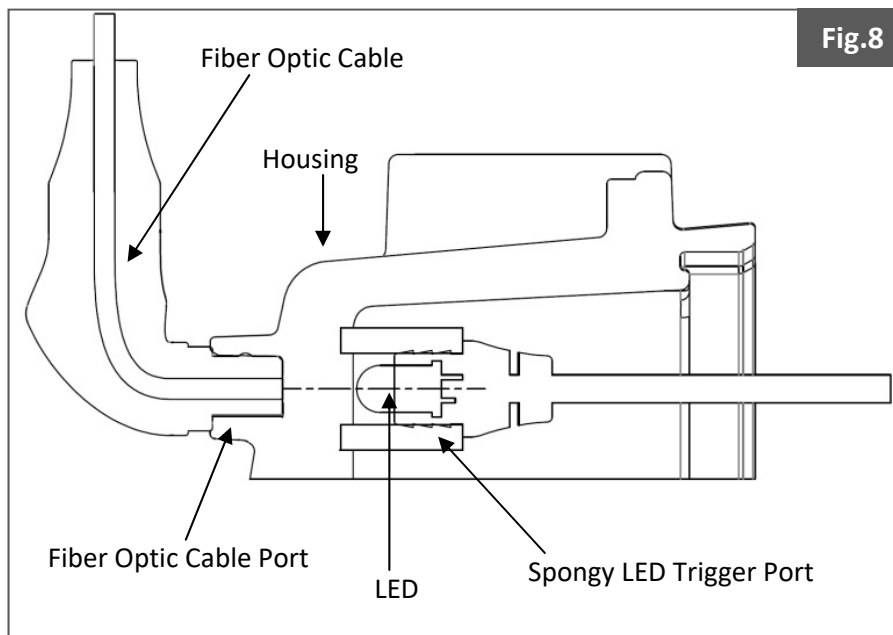


Fig.8

- ii. If your housing features a transparent window against the camera built-in flash instead of fiber optic cable ports, it is best to attach the fiber optic cables to the transparent window

prior to installing the spongy LED trigger ports in order to allow for perfect alignment of the spongy LED trigger ports with the fiber optic cables.

- f. Attach the LED cable port to the housing LED trigger ports (spongy or built-in) by inserting the LED's featured at the end of the cable into the housing LED trigger ports and gently pushing them all the way in (Fig.9).

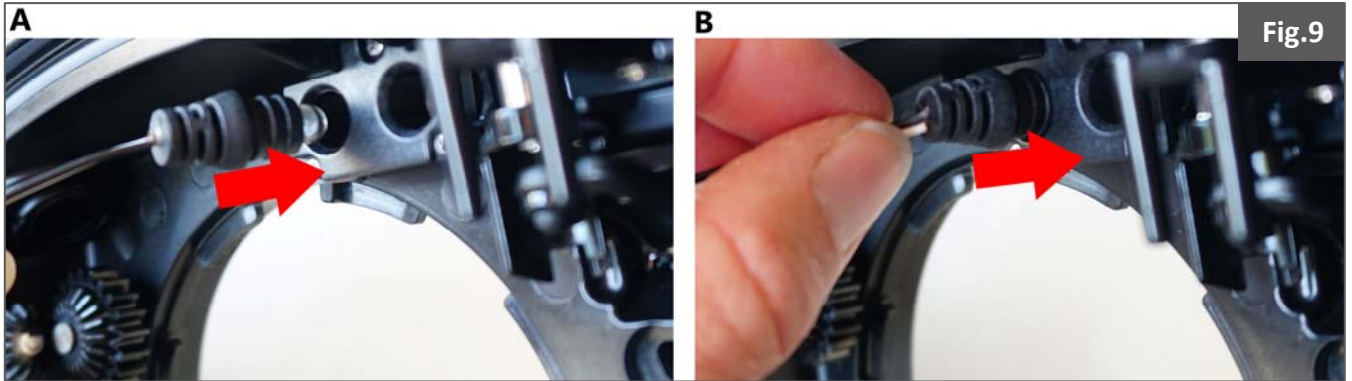


Fig.9

- g. Install the camera inside the housing as described in the housing instruction manual. Make sure that LED Strobe Trigger components (main unit, LED cable and Hot-Shoe cable) don't interfere with proper camera installation by moving them away from the camera slot.
- h. Once the camera is installed inside the housing, secure the main unit inside the housing by attaching it to one of the housing side panels using the Velcro sticker included (Fig.10). When selecting where to secure the main unit, make sure that LED Strobe Trigger components – including the main unit and the various cables – don't interfere with camera operation or housing watertight seal. Although the main unit can be removed from the housing by detaching the Velcro, it's best to select a location that allows leaving the LED Strobe Trigger inside the housing even when the camera is removed. The top side panel, if featuring sufficient space, is usually the best choice.
- i. Once all components have been installed inside the housing, use the rubber band to bundle excess length of the LED cable in order to ensure it doesn't interfere with camera operation or housing seal.



Fig.10

- j. **When closing and locking the housing, make sure that no cables get caught in the way, as this might interfere with a proper housing seal.** Upon closing the housing and prior to diving with it, 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, no water is entering and the moisture alarm (if installed inside the housing) doesn't beep.
- k. Once the system is completely installed, make sure that the light emitted by the LED's of the LED Strobe Trigger doesn't escape the LED trigger ports and reflect on your lens port. Turn on the camera and LED Strobe Trigger. Cover the housing lens port with its port cover (or any other cover that completely blocks light from entering the lens port) and capture an image. View the image you've captured and make sure that it's a completely dark one with no reflections.

3. FA-3 LED Strobe Trigger Operation

- a. Setup the entire underwater camera system, including camera, housing, LED Strobe Trigger, strobes and fiber optic cables installation.
- b. Note that the strobes should be set to manual operation mode and their output level should be manually controlled.
- c. Turn the LED Strobe Trigger on by sliding the power switch featured on the main unit to the "ON" position. The indicator light should start flashing once in 2 seconds.
- d. The color of the flashing indicator light indicates battery charge level:
 - i. Green (100%-50% power)
 - ii. Yellow (50-25% power)
 - iii. Red (25-1% power)
- e. Close the housing as described in the housing instruction manual. **When closing and locking the housing, make sure that no cables get caught in the way, as this might interfere with a proper housing seal.** Refer to *section 2, step h* for shallow water testing of the housing seal prior to the dive.
- f. Capturing images by fully depressing the housing shutter release control will flash both LED's featured at the end of the LED cable inside the housing. The light emitted by the LED's is transmitted to the slave sensor of the strobes through the fiber optic cables, thus triggering them to fire in sync with the camera. In case of failure to trigger the strobes to fire in sync with the camera, please refer to section 4 - "Troubleshooting".
- g. Note that there's no need to set the camera flash mode, as the LED Strobe Trigger is activated whenever an image is captured, even if camera flash mode is set to "Flash Off".
- h. During the dive, preventing the strobes from firing can be carried out by either turning the strobes off or disconnecting the fiber optic cables from the strobes or camera housing. Disabling the flash through camera menus will have no effect in this case, as the LED Strobe Trigger is activated whenever an image is captured regardless of the selected camera flash mode.
- i. Turn the LED Strobe Trigger off when not in use by sliding the power switch featured on the main unit to the "OFF" position.
- j. Note that if the LED Strobe Trigger isn't operated for a period of 3 hours, it will automatically enter standby mode and the indicator light will turn off. The LED Strobe Trigger can be turned back on by capturing an image with the camera (thus flashing the LED's) or by sliding the power switch to "OFF" and then back to "ON" again.
- k. To prevent the strobe from overheating as a result of being frequently triggered, please refer to the strobe instruction manual for guidelines and precautions.

4. Troubleshooting

In case of failure to trigger the strobes to fire in sync with the camera using the LED Strobe Trigger, please make sure that:

- a. All components of the LED Strobe Trigger have been properly installed, as described in section 2 – “FA-3 LED Strobe Trigger Installation”.
- b. The main unit of the LED Strobe Trigger has been properly charged.
- c. The **Hot-shoe cable** is connected to the **Hot-shoe cable port** and the **LED cable** is connected to the **LED cable port**. Note that if the LED’s featured at the end of the LED cable are shining continuously, this usually has to do with the cables connected to the wrong ports.
- d. The spongy LED trigger ports (if installed) are perfectly aligned with the fiber optic cable ports and the windows behind the fiber optic cable ports are clean. This can be tested similarly to as described in section 2, step c, only this time closely observing the LED’s from out of the housing, through the fiber optic cable ports or openings. If properly installed and the windows behind the ports are clear, you should be able to clearly see the LED’s flashing through the fiber optic cable ports whenever an image is captured with the camera.
- e. The fiber optic cables made use of are of high quality and sensitive enough to transmit the light emitted by the LED’s. Note that with some strobes, multi-core fiber optic cables are required for sufficient light transmission. This can be tested by removing the fiber optic cable from the strobe slave sensor and instead, placing one of the LED’s featured at the end of the LED cable in front of the slave sensor. If the strobe is now triggered by the LED when capturing an image with the camera, the fiber optic cable should most likely be replaced with a more sensitive one.
- f. Camera shutter speed is sufficiently low for triggering the strobe (usually 1/160 or lower).
- g. The strobe is fully charged and set to “Manual” operation mode.
- h. The strobe slave sensor is operative and intact. This can be verified by attempting to trigger the strobe by the camera flash. Turn the strobe on and set it to “Manual” operation mode. Turn the camera on and set the camera flash to “forced flash”. Position the camera flash in front of the strobe slave sensor and capture an image. If the strobe isn’t triggered by the camera flash, contact the strobe manufacturer for support.

CARE & MAINTENANCE

1. Please use the utmost care and do not use excessive force when assembling and disassembling the different accessories, in order not cause any damage to the products.
2. Keep the FA-3 LED Strobe Trigger away from water. After the dive and prior to opening the housing, make sure to dry it well in order to prevent water from dripping on the LED Strobe Trigger once the housing has been opened.
3. Keep the FA-3 LED Strobe Trigger away from extreme high temperatures, as under direct sunlight, since it might damage the product.
4. Do not clean the FA-3 LED Strobe Trigger with any chemical solvents or other materials, which might cause damage to the product.
5. When storing the FA-3 LED Strobe Trigger and during transportation, make sure that it is properly protected in order to prevent any damage to the product.
6. Do not store the FA-3 LED Strobe Trigger in presence of chemicals, solvents or fuels.
7. To prolong battery life of the FA-1 LED Strobe Trigger, it is important to fully charge the main unit prior to long periods of storage. Recharge the main unit every 3-6 months during storage in order to avoid battery over-drain.



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>.

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