# BACKSCATTER

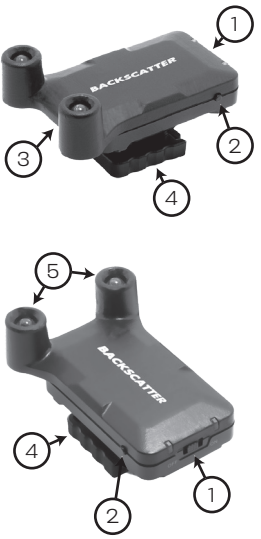
## TTL FLASH TRIGGER FOR SONY CAMERAS NAUTICAM HOUSINGS

The Backscatter TTL trigger for Sony provides automatic flash exposures with the Backscatter Hybrid Flash. It will also allow High-Speed Sync (HSS) operation with the Hybrid Flash and Mini Flash 2. The Backscatter TTL trigger for Sony is only compatible with the Backscatter Hybrid Flash and will not work with other strobes in TTL operation, but can be used in manual operation with 3rd party strobes.

**Please refer to the Backscatter Hybrid Flash and Backscatter Mini Flash 2 instruction manuals for important information regarding required camera and flash settings for TTL, Manual, and HSS use.**

**INCLUDED ITEMS:**
- Backscatter Sony TTL Trigger
- USB-C Charging Cable
- Protective Travel Case
- Protective cap for Sony hot shoe connector

**NAME OF PARTS:**
1. On/Off Switch
2. Battery Level Check Button
3. USB-C Charging & LED Light Port
4. Hot Shoe Connector
5. LED Trigger Lights







**HOW TO CHARGE THE BATTERY:**
Connect the USB-C cable to the USB-C port. The battery indicator blinks while charging and turns solid when full. It takes 2 hours to charge from empty, but for a quick turnaround between dives, the flash trigger can be charged within a shorter amount of time to a lower battery level that will still provide shooting time.

**NOTE:** High-voltage USB-C cables and high-amp chargers are not compatible with the trigger, please use the included USB-C cable.

**HOW TO CHECK THE BATTERY POWER LEVEL:**
Press the battery check button to see the current power level. It will blink from 1 to 5 times to indicate battery level, with 5 times being the maximum battery level and 1 being 20% or less battery remaining.

The trigger can be in active mode for 13 continuous hours of shooting. The trigger will go to standby to save power when the camera goes to sleep or is turned off to save battery power. This way, the trigger can be installed and sealed in the housing the night before and still have plenty of battery power for multiple days of shooting. When opening up the housing to change the camera battery or swap memory cards, it is a good time to check the flash trigger's battery power level.

**CAMERA SETTINGS FOR MANUAL MODE:**
To use the trigger in manual mode with the Hybrid Flash or any other strobe, set the flash to ***Wireless Flash*** ON in the camera's flash menu.

**CAMERA SETTINGS FOR TTL MODE:**
TTL operation occurs when the ***Wireless Flash*** is set to OFF. To easily switch between TTL and manual operation, it is recommended to assign one of the custom buttons on the camera to ***Wireless Flash*** for easy one-button access to switch between TTL and manual.

**INSTALLING THE TRIGGER INTO THE HOUSING:**
The Nauticam Sony Trigger was custom designed to fit directly into Nauticam full frame Sony housings. To install it, simply slide the trigger onto the camera's hotshoe, then load the camera into the housing.

**WATCH THE VIDEO:**
For a detailed walkthrough of how to setup and use the trigger and Hybrid Flash, refer to this instructional video:

*backscatter.com/ttl-flash-triggers*

**SPECIFICATIONS :**

| | |
|---|---|
| Model Number | BS-TR-SN2 |
| Description | Backscatter Flash Trigger<br>For Nauticam Housings |
| Compatible Camera Models | Sony Cameras<br>*(TTL , MANUAL, MANUAL HSS)*<br>Other Cameras *(Manual Mode only)* |
| Compatible Housing Model | Nauticam Full Frame Housings |
| Main Material | ABS |
| Data Transmitters LED Type | High Power Infrared LED |
| LED Data Transmitters | 2-Way LED |
| Power Consumption | 40mW |
| Battery Power | Built-in Rechargeable Lithium Polymer Battery *(3.7V 110mAh)* |
| Battery Charging | By USB Charger DC5V, 0.5A<br>Approx. 2 hours for a full charge |
| Battery Operation Time | 13 Hours<br>*(Continuous Operation)* |
| Auto Standby Time | Use With Sony Camera :<br>follows camera's standby state<br>Use With Other Camera : 1 minute |
| Dimensions | 43 x 27 x 21 mm / 1.7 x 1.1 x 0.8 inch |
| Weight | 16.3 g / 0.57 oz |
| Accessories | EVA Carry Case,<br>USB-C Charging Cable |

# BACKSCATTER

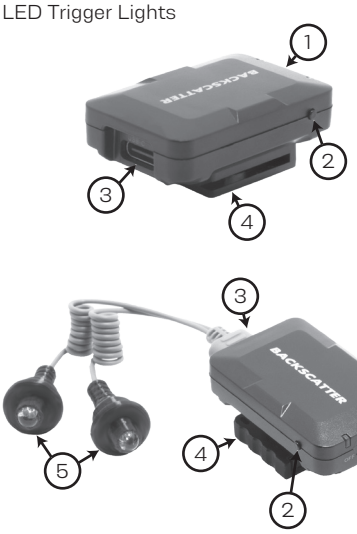
## TTL FLASH TRIGGER FOR SONY CAMERAS UNIVERSAL

The Backscatter TTL trigger for Sony provides automatic flash exposures with the Backscatter Hybrid Flash. It will also allow High-Speed Sync (HSS) operation with the Hybrid Flash and Mini Flash 2. The Backscatter TTL trigger for Sony is only compatible with the Backscatter Hybrid Flash and will not work with other strobes in TTL operation, but can be used in manual operation with 3rd party strobes.

**Please refer to the Backscatter Hybrid Flash and Backscatter Mini Flash 2 instruction manuals for important information regarding required camera and flash settings for TTL, Manual, and HSS use.**

**INCLUDED ITEMS:**
- Backscatter Sony TTL Trigger
- LED Trigger Lights with attached USB-C connector
- USB-C Charging Cable
- Protective Travel Case
- Protective cap for Sony hot shoe connector
- Universal foam block mount with self-stick adhesive

**NAME OF PARTS:**
1. On/Off Switch
2. Battery Level Check Button
3. USB-C Charging & LED Light Port
4. Hot Shoe Connector
5. LED Trigger Lights




**HOW TO CHARGE THE BATTERY:**
Connect the USB-C cable to the same port as the LED lights. The battery indicator blinks while charging and turns solid when full. It takes 2 hours to charge from empty, but for a quick turnaround between dives, the flash trigger can be charged within a shorter amount of time to a lower battery level that will still provide shooting time.

**NOTE:** High-voltage USB-C cables and high-amp chargers are not compatible with the trigger, please use the included USB-C cable.

**HOW TO CHECK THE BATTERY POWER LEVEL:**
Press the battery check button to see the current power level. It will blink from 1 to 5 times to indicate battery level, with 5 times being the maximum battery level and 1 being 20% or less battery remaining.

The trigger can be in active mode for 13 continuous hours of shooting. The trigger will go to standby to save power when the camera goes to sleep or is turned off to save battery power. This way, the trigger can be installed and sealed in the housing the night before and still have plenty of battery power for multiple days of shooting. When opening up the housing to change the camera battery or swap memory cards, it is a good time to check the flash trigger's battery power level.

**CAMERA SETTINGS FOR MANUAL MODE:**
To use the trigger in manual mode with the Hybrid Flash or any other strobe, set the flash to ***Wireless Flash*** ON in the camera's flash menu.

**CAMERA SETTINGS FOR TTL MODE:**
TTL operation occurs when the ***Wireless Flash*** is set to OFF. To easily switch between TTL and manual operation, it is recommended to assign one of the custom buttons on the camera to ***Wireless Flash*** for easy one-button access to switch between TTL and manual.

**INSTALLING THE LEDs INTO THE HOUSING:**
If your housing has LED bulkhead ports, first see if the LED will fit directly into the port. If not, the included universal foam blocks can be used if room allows. Peel back the paper on the block to reveal the sticky tape to attach to the housing, then insert the LED in the foam block. The foam block can be cut with scissors to fit. Make sure the LED is centered within the LED bulkhead to ensure accurate signaling.

An optional M16 dual fiber optic bulkhead port can also be purchased separately for easy compatibility with the flash trigger LEDs. To install, remove the M16 bulkhead port from the housing and screw in the M16 dual fiber optic bulkhead port, making sure to use O-ring grease on the included O-ring before installing. Tighten until snug. Insert the LED into the bulkhead inside the housing; the bulkhead will accommodate two fiber optic cables.

**WATCH THE VIDEO:**
For a detailed walkthrough of how to setup and use the trigger and Hybrid Flash, refer to this instructional video:

*backscatter.com/ttl-flash-triggers*

**SPECIFICATIONS :**

| | |
|---|---|
| Model Number | BS-TR-SN1 |
| Description | Backscatter Flash Trigger Universal Version |
| Compatible Camera Models | Sony Cameras *(TTL, MANUAL, MANUAL HSS)* Other Cameras *(Manual Mode only)* |
| Compatible Housing Model | Universal Housing *(with available housing space above the camera)* |
| Main Material | ABS |
| Data Transmitters LED Type | High Power Infrared LED |
| LED Data Transmitters | 2-Way LED cable with USB Type-C End |
| Power Consumption | 40mW |
| Battery Power | Built-in Rechargeable Lithium Polymer Battery *(3.7V 110mAh)* |
| Battery Charging | By USB Charger DC5V, 0.5A Approx. 2 hours for a full charge |
| Battery Operation Time | 13 Hours *(Continuous Operation)* |
| Auto Standby Time | Use With Sony Camera : follows camera's standby state Use With Other Camera : 1 minute |
| Dimensions | 43 x 27 x 21 mm / 1.7 x 1.1 x 0.8 inch |
| Weight | 16.3 g / 0.57 oz |
| Accessories | EVA Carry Case, Foam Block Mount for LED Sockets, LED Data Transmitter cable, USB-C Charging Cable |

# BACKSCATTER

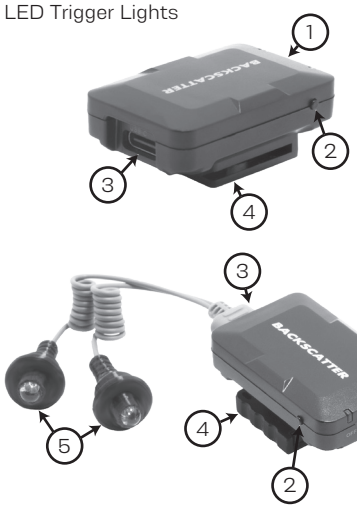
## TTL FLASH TRIGGER FOR OM SYSTEM & OLYMPUS CAMERAS UNIVERSAL

The Backscatter TTL trigger for OM System and Olympus provides automatic flash exposures and High-Speed Sync (HSS) operation with the Backscatter Hybrid Flash and Mini Flash 2. The Backscatter TTL trigger for OM System and Olympus is only compatible with the Backscatter Hybrid Flash and Mini Flash 2 and will not work with other strobes in TTL operation but can be used in manual operation with 3rd party strobes.

**Please refer to the Backscatter Hybrid Flash and Backscatter Mini Flash 2 instruction manuals for important information regarding required camera and flash settings for TTL, Manual, and HSS use.**

**INCLUDED ITEMS:**
- Backscatter OM System & Olympus TTL Trigger
- LED Trigger Lights with attached USB-C connector
- USB-C Charging Cable
- Protective Travel Case
- Protective cap for hot shoe connector
- Universal foam block mount with self-stick adhesive

**NAME OF PARTS:**
1. On/Off Switch
2. Battery Level Check Button
3. USB-C Charging & LED Light Port
4. Hot Shoe Connector
5. LED Trigger Lights







**HOW TO CHARGE THE BATTERY:**
Connect the USB-C cable to the same port as the LED lights. The battery indicator blinks while charging and turns solid when full. It takes 2 hours to charge from empty, but for a quick turnaround between dives, the flash trigger can be charged within a shorter amount of time to a lower battery level that will still provide shooting time.

**NOTE:** High-voltage USB-C cables and high-amp chargers are not compatible with the trigger, please use the included USB-C cable.

**HOW TO CHECK THE BATTERY POWER LEVEL:**
Press the battery check button to see the current power level. It will blink from 1 to 5 times to indicate battery level, with 5 times being the maximum battery level and 1 being 20% or less battery remaining.

The trigger can be in active mode for 13 continuous hours of shooting. The trigger will go to standby to save power when the camera goes to sleep or is turned off to save battery power. This way, the trigger can be installed and sealed in the housing the night before and still have plenty of battery power for multiple days of shooting. When opening up the housing to change the camera battery or swap memory cards, it is a good time to check the flash trigger's battery power level.

**CAMERA SETTINGS FOR MANUAL MODE:**
To use manual mode with the Hybrid Flash, Mini Flash 2, or any other strobe, make sure ***RC*** mode is turned OFF in the camera's flash menu.

**CAMERA SETTINGS FOR TTL MODE:**
TTL can only be used when ***RC*** mode is turned ON. To quickly switch between TTL and manual modes, you can save the ***RC*** mode setting to MY MENU or assign it to a custom mode, if your camera allows it.

**INSTALLING THE LEDs INTO THE HOUSING:**
If your housing has LED bulkhead ports, first see if the LED will fit directly into the port. If not, the included universal foam blocks can be used if room allows. Peel back the paper on the block to reveal the sticky tape to attach to the housing, then insert the LED in the foam block. The foam block can be cut with scissors to fit. Make sure the LED is centered within the LED bulkhead to ensure accurate signaling.

An optional M16 dual fiber optic bulkhead port can also be purchased separately for easy compatibility with the flash trigger LEDs. To install, remove the M16 bulkhead port from the housing and screw in the M16 dual fiber optic bulkhead port, making sure to use O-ring grease on the included O-ring before installing. Tighten until snug. Insert the LED into the bulkhead inside the housing; the bulkhead will accommodate two fiber optic cables.

**WATCH THE VIDEO:**
For a detailed walkthrough of how to setup and use the trigger and Hybrid Flash or Mini Flash 2, refer to this instructional video:

*backscatter.com/ttl-flash-triggers*

**SPECIFICATIONS :**

| | |
|---|---|
| Model Number | BS-TR-OM1 |
| Description | Backscatter Flash Trigger Universal Version |
| Compatible Camera Models | OM System & Olympus Cameras *(TTL, TTL HSS, MANUAL, MANUAL HSS)* Other Cameras *(Manual Mode only)* |
| Compatible Housing Model | Universal Housing *(with available housing space above the camera)* |
| Main Material | ABS |
| Data Transmitters LED Type | High Power Infrared LED |
| LED Data Transmitters | 2-Way LED cable with USB Type-C End |
| Power Consumption | 40mW |
| Battery Power | Built-in Rechargeable Lithium Polymer Battery *(3.7V 110mAh)* |
| Battery Charging | By USB Charger DC5V, 0.5A Approx. 2 hours for a full charge |
| Battery Operation Time | 13 Hours *(Continuous Operation)* |
| Auto Standby Time | Use With OM Cameras: follows camera's standby state Use With Other Cameras: 1 minute |
| Dimensions | 43 x 27 x 21 mm / 1.7 x 1.1 x 0.8 inch |
| Weight | 16.3 g / 0.57 oz |
| Accessories | EVA Carry Case, Foam Block Mount for LED Sockets, LED Data Transmitter cable, USB-C Charging Cable |