

Dear user,

Thanks for choosing the TURTLE 2 SMART TTL trigger!

Our product was designed for the demanding underwater photographers who want to use sophisticated TTL or Manual control of their external strobes. The TURTLE 2 SMART is a device which ensures the communication between the camera and the strobes. It can be connected via fiber optic cables or sync cords.

The package contains:

- 1x TURTLE 2 SMART device
- 1x LED panel or Sync cord cable
- 1x USB cable for charging and programming



Compatibility of the s-TURTLE 2 SMART TTL trigger

Compatible camera models (as of 11.2022.): TTL/MANUAL mode A72, A7R2, A7S2, A73, A7R3, A7S3, A7R4, A74, A1, A7C, 6X00 series (HI+ continuous shooting is available in A74, A1, A7R5, A92 tested)

Compatible strobes (as of 11.2022.): Ikelite DS160, Inon Z240/Z330, Sea&Sea D1, D2J, YS-D3, SUBTRONIC 270, Retra Pro X (3.4) and Backscatter Mini Flash 2 (HSS mode available in manual (FP) mode!)

As we regularly add new models please check the compatible camera and strobe types on the website.

Using the TURTLE SMART

Important!

Setup via USB connection is possible only if you use the TURTLE 2 SMART triggers, do not try this with the older TURTLE trigger models! It's not possible to upload different camera manufacturer's software to your specific TURTLE 2 SMART unit! We use a simple color code, the TURTLE 2 SMART logo on the unit should be the same color as the logo in the matching software. The s-TURTLE 2 SMART for Nikon MILC is the blue, the o-TURTLE SMART for Olympus and Panasonic is the green and the s-TURTLE SMART for Sony is the yellow one.

Initial setup

1. Download FTDI chip driver to and install to your computer

The TURTLE 2 SMART strobe types can be selected and downloaded via USB 2.0 connection. To ensure the communication between the PC and the TURTLE SMART you will need the specific software for your unit. The USB FTDI CHIP driver will emulate a virtual COM port in your PC.

To download the driver please visit our website or look for the official FTDi website. The new Windows versions contain the driver, in this case you don't need to download it.

If you need more information you can find all details here: <http://www.ftdichip.com/Documents/InstallGuides.htm>

2. Download the loader software

After the driver has been installed, the next step is to download the TURTLE 2 SMART loader and install it. All softwares are available in the webshop, you can find them in the product details page.

Please download the software made to your specific TURTLE 2 SMART trigger. To setup your s-TURTLE 2 SMART for Sony Mirrorless camera models please download the s-TURTLE 2 SMART setup software.

3. Using the loader software (setup the TURTLE 2 SMART)

Our easy to use setup software lets you choose your strobes, and download the control software to your TURTLE 2 SMART unit. Please choose your strobe model carefully, the TURTLE 2 SMART works properly when you downloaded the correct control software to your camera and strobe setup. Whenever we add a new underwater strobe to the software, you need to download the new loader version before uploading the new software to your TURTLE SMART.

To setup your TURTLE SMART you will need only this software which has a simple menu system to choose your strobe model. You can upgrade the settings of your TURTLE 2 SMART anytime, you can change your strobe setup easily.

The new software has 3 different features.

- 1. Setup TURTLE : Here you can setup the TURTLE 2 SMART, choose the strobe and special strobe features.
- 2. Check TURTLE: Here you can check the strobe setup and also you can check the Battery level.
- 3. About: There are some important links.

1.Setup TURTLE

Please follow these steps (You can find these also in the setup software):

1. Start the TURTLE setup software and click the Setup TURTLE menu point.
2. Switch OFF the TURTLE 2 SMART
3. Connect the USB cable to the TURTLE 2 SMART and the PC
4. Switch ON the TURTLE SMART unit and click the FIND serial port button.
5. If you connected correctly the unit the „waiting for connection” status will change to „Connected”.
(In that case if you have more then 1 device wich use virtual com port, you have to find which is the TURTLE trigger.)
6. If the TURTLE SMART is connected properly the point No. 5 will be active and you can choose the strobe type from the drop down list.

The TTL setup is done. The next few steps will setup the manual (WL) mode. WL mode is the special manual mode with TURTLE. This is not real wireless. In this mode the trigger disables the preflash and makes only main flash.

7. In the 6 menu point is possible to set normal manual mode: 1st curtain/2nd curtain or stroboscope mode.
The manual mode is a normal manual mode, same as in the surface. (1st curtain and 2nd curtain without preflash)
The stroboscope mode is a special mode of the TURTLE trigger. There is possible to set 1-10 flashes during the exposure. This function works if you use manual mode and the shutter speed is set between 2 sec and 1/10.
In manual mode we can set the manual flashing power from 1/128 to Full.. (We usually use 1/32 or 16. in this case the poor quality optical cables works fine.

During the download in the configured system window there is a “downloading” sign.

After the download in the configured system window you can check which strobe setup is downloaded to the TURTLE 2 SMART.

8. Disconnect the PC and the TURTLE 2 SMART.
9. Switch OFF and ON the TURTLE 2 SMART before using.

2.Check TURTLE

1. Start the TURTLE setup software and click the Setup TURTLE menu point.
2. Switch OFF the TURTLE 2 SMART
3. Connect the USB cable to the TURTLE 2 SMART and the PC
4. Switch ON the TURTLE SMART unit and click the FIND serial port button.
5. If you connected correctly the unit the „waiting for connection” status will change to „Connected”.
(In that case if you have more then 1 device wich use virtual com port, you have to find which will be the TURTLE trigger.)
6. If the TURTLE SMART is connected properly click the Setup checking button and you can see the details of setup and the battery level.
7. Disconnect the PC and the TURTLE 2 SMART.
8. Switch OFF and ON the TURTLE 2 SMART before using.

Connecting the camera and the strobe (How to use the TURTLE SMART)

To connect and use the strobes you should do these steps only once.

The TURTLE SMART can control the strobes via fiber optic cables (LED) or sync cords

- 1.To use fiber optic cables with LEDs :Just connect the LEDBOARD directly to the TURTLE SMART and mount the LEDs in the housing’s window.
If you need advice about mounting LEDs in a specific housing, just contact us!
- 2.Sync cord: It is recommended to leave it to a technician.If you use “Y” sync cord cable you have to make the correct wiring between the TURTLE and the bulkhead.



1. LED +
2. LED -
3. GND
4. Quench
5. Trigger

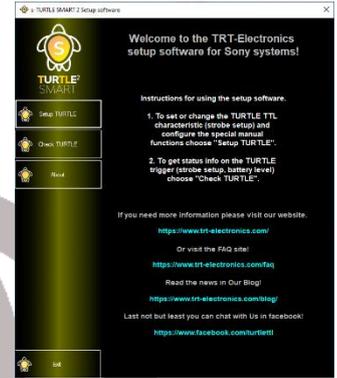
The TURTLE does not use the SP, READY POWER, S pins.

You have to connect only 3 pins! Not more! X, Q, GND. N5 IKELITE Sea and Sea Warning!

It is not permitted to use 4,5,6 pins. It can lead to the damage of the device. We do not take responsibility for these damages

Charging

The device can be charged only when it is turned OFF



1. Switch off and connect the USB cable to the TURTLE SMART device.
2. Wait until the device, is fully charged (red light off). During the charging the red light is on.

Storing

If you won't use your TURTLE SMART TTL converter for a longer period, charge the battery fully, and turn off the main switch.

Support

If you have any questions don't hesitate to write us : support@trt-electronics.com

We wish you great dives, and hopefully you will shoot cool pictures with your new TURTLE 2 SMART!



www.trt-electronics.com

