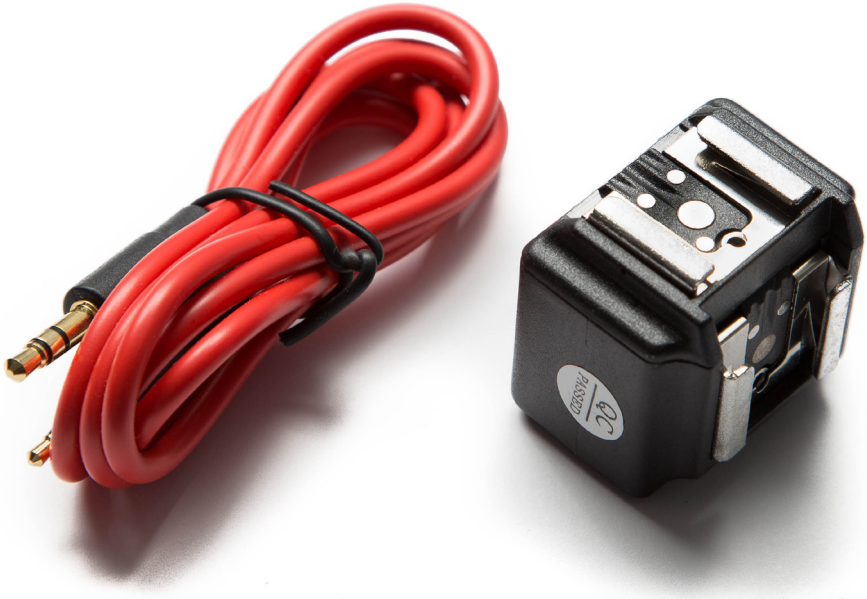
Triggertrap Flash Adapter

User Manual

TT-FA1



Triggertrap

Updated: 27 November 2013

Table of Contents

Introduction

Triggertrap Flash Adapter is a dual hotshoe mount and cable that enables you to trigger your flash using a range of triggering modes when used with the Triggertrap Mobile Dongle and Triggertrap Mobile app on an iOS device or with a Triggertrap hardware product.

Please note: this manual does not cover the triggering modes available in the Triggertrap Mobile app. For information on how to use the app please see the Triggertrap Mobile manual for your Android or iOS device.

DID YOU KNOW?

You can always get the most recent version of Triggertrap Mobile manual from our website – point your browser at http://tri.gg/manual

Compatible flash units

All modern flash units that connect to a standard hotshoe should be compatible with Triggertrap Flash Adapter. This means that unfortunately Sony/Minolta flashes are not supported, unless you use a standard hotshoe adapter for them.

WARNING

Never attempt to use the flash adapter with studio equipment or with high-voltage flashguns as this may damage your smartphone.

iOS only

Although Triggertrap Mobile is compatible with both iOS and Android devices, the audio latency on Android devices is generally too large to achieve the high speed photography that Triggertrap Flash Adapter is capable of. We therefore suggest that for best results Triggertrap Flash Adapter should only be used with iOS devices. Triggertrap Mobile is available on any iOS device running iOS 6.1 or newer including iPhones, iPads and iPod touches.

To read more about audio latency and Triggertrap Mobile check out our blog article here: https://triggertrap.com/ttm-high-speed-triggering-android/.

Why would I need to use Triggertrap flash Adapter?

There are a few reasons why you may want to use a flash with Triggertrap Mobile, but it all comes down to one key point, and that's speed!

Triggering a camera takes time. Before the camera fires, there's a load of mechanical stuff that has to happen first. This delay (known as shutter lag) can make a huge difference, especially when you're doing high speed photography. Firing a flash on the other hand is mighty fast - there's nothing mechanical to slow it down!

The maximum shutter speed on a camera is typically 1/4000 or, if you're lucky, 1/8000 of a second. Now, this is pretty fast for most photography, but often not fast enough for high speed shoots.

Using a flash is MUCH faster. For example, at its lowest power, a Nikon SB-800 has a flash duration of 1/41600 of a second, which is substantially faster than the fastest shutter speed.

This may sound confusing because we are talking about the flash speed and not the shutter itself but you can still use this flash speed as your exposure time. If you set up your high speed photo shoot in a totally darkened room, with the camera on bulb and your flash set to the lowest power, the only light exposure you'll record is the short burst of light from the flash, making your exposure duration extremely short!

WARNING

Always ensure you use the Triggertrap Mobile Dongle, and never attempt to connect your flash directly to your iOS device. Connecting the iOS device and the flash without a dongle could harm your flash, your iOS device, or both.

Setting up a flash with Triggertrap FLash Adapter

Manual mode

Most flash units will have a manual mode you can set them to. This mode best enables Triggertrap to control how and when the flash is triggered. If your flash unit does not have a manual mode, please refer to the manual to find the mode that best enables external trigger control.

Lowest power output

Using the lowest power output setting on your flash means that the flash duration is much shorter and your flash unit can work at its fastest, meaning that you will be able to achieve the highest speed possible.

Dual hotshoe

Triggertrap Flash Adapter's dual hotshoe mount allows you to control two flash units at the same time, giving you double the amount of light and a much more even and controllable spread of light.

Even though the flash adapter only has two hotshoes, there are still options for using multiple flashes for more intricate lighting setups .You could plug a radio trigger, like a Pocket Wizard or Radio Popper on one of the hotshoes, or you could set up other flashes with optical slaves. One thing to consider is that using radio triggers may slow things down slightly.

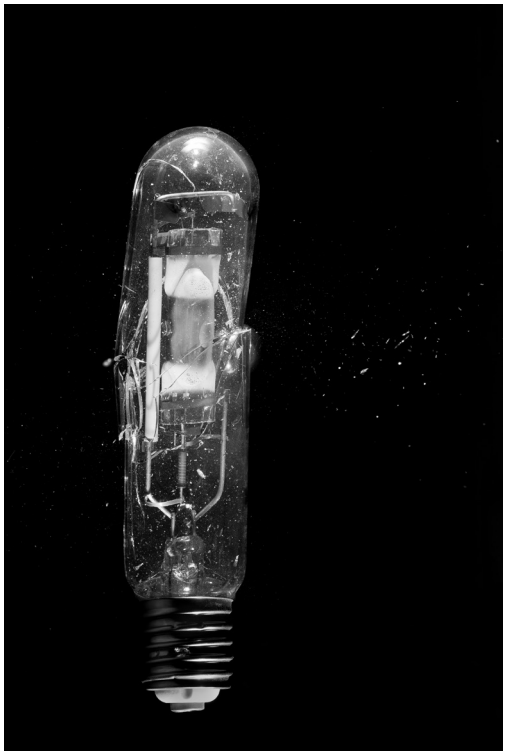


Photo: Bulb Smash by Paul Traviss

How to set up Triggertrap Mobile to work with Triggertrap Flash Adapter

Pulse Length

The Pulse Length is the duration Triggertrap Mobile sends a signal to your flash. When you first launch the app, you will be greeted with a welcome screen. You will then be taken to the Menu.
From the Menu, select Settings. On this page you will see a box called Pulse Length. Set this to 30ms - Fast.

Sensor Reset Delay

The sensor reset delay controls how quickly you want your sensor to reset before taking another photograph. You may want to consider setting a sensor reset delay in order to minimise any accidental multiple exposures or a strobe effect. Setting a delay of 5 seconds will cause Triggertrap Mobile to wait 5 seconds before firing the flash again.

Once this is done, plug the Flash Adapter into your Mobile Dongle, then plug the dongle into your smart device.

Photo: Balloon Splash by Gabe Toth

Example: Capturing a water balloon popping

One easy (yet seriously fun) way of experimenting with the flash adapter is to capture a water balloon popping! Here is our guide to setting up your photo shoot.

Environment

You'll need to either set up for these photos in a darkened room (with something to catch the water from the balloon) or outside when it is dark, away from any sort of lights. In other words, the darker the better!

Flash

As mentioned above, set your flash to the lowest power possible. Point the flash at where you intend to pop the balloon, make sure the flash is far enough away so that you do not drown the image in light and overexpose it, but not too far away.

Camera

Set the camera on a tripod, put it in manual focus and manual exposure. Set the shutter speed to bulb, the aperture to a moderate value (e.g. f/8), and set the ISO. You'll want to take a series of test images as the ISO will need to be set so that the exposure is correct for the flash power. Manual focus the camera on the position you will be popping the balloon. To do this easily, place something (or someone!) where you are going to pop the balloon and focus on it (them).

Triggertrap Mobile

Open up the app, go into Settings and make sure you have the Pulse Length set to 30ms. Also set a Sensor Reset Delay of 5s.

Once this is done, go into the Sound Sensor Mode, set the threshold to a level at which the flash wont be fired by any ambient noise. Place the iOS device at a safe distance from where you are going to pop the balloon.

Water Balloons

In order to set Triggertrap Mobile off, you'll need a pop! If you have no luck getting a pop with a balloon full of water, blow some air into the balloon once you've part filled it with water.

When you're ready, start the sound sensor mode and clap to ensure the flash fires. Once you know the flash is ready to fire, open the shutter on the camera. Then it's time to pop the water balloon! One popped, close the shutter and you should have one extremely cool photo.

Troubleshooting with Triggertrap Flash Adapter

The flash is taking forever to fire, what's up?!

One key thing to consider when using the sound trigger is how far away you place the smart device from the action. The closer to the source of the sound, the faster the flash will fire. This is simply because the further away the device is from the source of the sound, the further the sound has to travel.

For optimum results, place the iOS device as close as possible to the source of the sound. The closer to the source of the sound the device is, the quicker the device will react to the sound (as the sound has less distance to travel) and therefore the faster the flash is able to fire.

The flash is firing too early

If your flash is firing before the action you want to capture has happened, you have two options.

You can move your iOS device further from the sound and/or from the scene you are trying to capture. This will give your device the necessary time to send the signal to your flash before the explosion happens! One metre is usually a good rule of thumb. Getting this right really does mean experimenting in order to get all relative distances correct for the perfect shot.

The other option is to go into the Triggertrap Mobile app settings and add a Sensor Delay, creating a set delay length before the flash is fired.

The flash keeps firing in quick succession and ruining my photos

1. First of all, check the settings on your flash unit. Are you in manual mode? Make sure you have turned off any presets that might allow your flash unit to strobe like this.
2. Check the threshold in the sensor mode you are using in Triggertrap Mobile. Is the threshold set too low, meaning that the sound level remains over the threshold for too long?
3. Go into Settings in Triggertrap Mobile and select a Sensor Reset Delay of about five seconds.
4. If none of the above seem to have helped, send us an email on hello@triggertrap.com

The flash won't fire at all!

1. Turn on your flash and press the 'test' button - does the flash go off?
2. Do NOT use the Triggertrap Mobile Dongle for this test: Connect your flash to the Triggertrap Flash Adapter, and connect the cable to the Flash Adapter. Now, please short-circuit the side of the cable that you usually plug into the Triggertrap Flash Adapter, using some aluminium foil. Does that trigger the flash?
3. Presuming step 1 and 2 resulted in your flash triggering correctly - have you tried your dongle with your camera? Does that work?
4. If none of the above work, send us an email to hello@triggertrap.com and we'll help you out!

Do you still have questions?

We've done everything we can to make this manual as thorough as possible, but if you're still stuck, we'd love to help you out!

We have an extremely lively and helpful support forum on http://tri.gg/forum. If you've got a problem, search here first – chances are that someone has already asked your question, and you'll be able to find your problem here.

We also have an FAQ Knowledge Base that lives at http://tri.gg/faq that will provide you with some clearer and more in depth explanations for some of our more commonly asked product questions.

If you're still stuck, you can email our super friendly support team at hello@triggertrap.com

The small print

We have taken all care to ensure that this manual is as complete and as accurate as possible, but there may be mistakes here and there. If you spot any errors, please contact us on hello@triggertrap.com so we can fix it in the next version of our manual!

We are Triggertrap.

We love photography.

For more information,
visit us on the web at:
triggertrap.com

We have taken all care to ensure that this manual is as complete and as accurate as possible, but there may be mistakes here and there. If you spot any errors, please contact us at support@tri.gg so we can fix it in the next version of our manual.

Triggertrap™