VersaTrigger – User Manual

Introduction

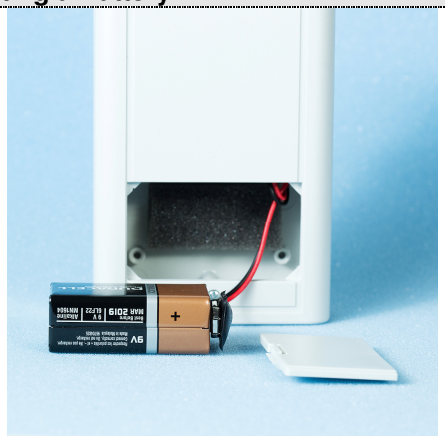
The VersaTrigger is a self-contained system which allows a camera or flash (strobe) to be triggered from one of a variety of input sources, these include:

- a switched contact
- a microphone
- an interrupted laser beam
- a light source.

1 Naming of Parts

1. On/Off and Gain Adjust
2. Delay Adjust
3. Mic Input
4. Aux Input
5. Outputs
6. Indicator LED

2 Fitting a Battery



1. Place the VersaTrigger face-down on a flat surface, remove the battery cover by gently pulling the retaining clip down.
2. Fit a new PP3 battery by pressing the battery snap on to the battery, replace the cover.

3 The Accessory Kit

1. Light Sensor
2. Laser Pen
3. Microphone
4. PC sync cable

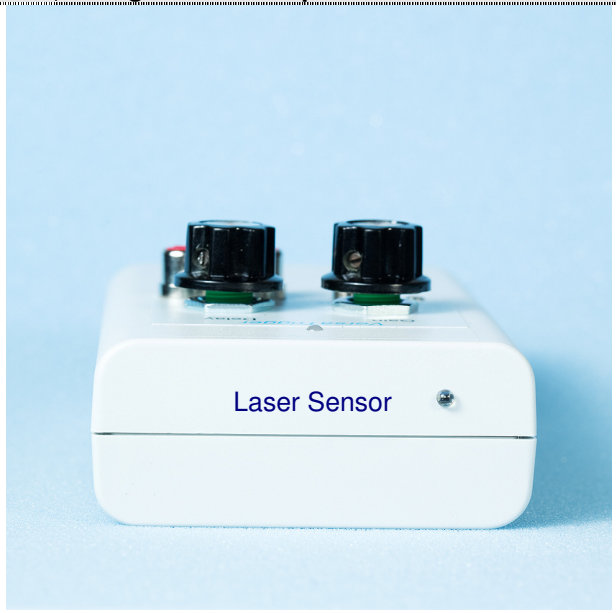
4 Using the Mic Input

1. Plug the microphone into the Mic Input, place the microphone near the sound source (there is no need to move the microphone in order to adjust delay).
2. Switch the VersaTrigger on, turn the Delay Adjust for minimum delay (fully anti-clockwise).
3. Initiate the sound source and turn the Gain Adjust clockwise to the point where the VersaTrigger triggers the camera or flash.

5 Using the Aux Input

1. Plug the light sensor into the Aux Input.
2. Switch the VersaTrigger on, turn the Delay Adjust for minimum delay (fully anti-clockwise).
3. Expose the light sensor to a light source and check the VersaTrigger triggers the camera or flash.

6 Using the Laser Input



1. Remove any sensors plugged into the Mic or Aux Inputs.
2. Switch the VersaTrigger on, turn the Delay Adjust for minimum delay (fully anti-clockwise).
3. Fit 2 x AAA batteries into the laser pen (note. Do not point the beam at anyone) and align the beam onto the laser sensor of the VersaTrigger. When the beam is correctly aligned the Indicator LED will glow green.
4. Check VersaTrigger operation by passing your hand between the laser beam and the laser sensor, the indicator LED will momentarily glow red.
5. Position the VersaTrigger and laser pen across the location where the beam will be broken.

7 Connecting a Flash (Strobe)

A cable for connection between the VersaTrigger and a flash unit with a PC connector is included with the system, plug the red connector into one of Output connectors on the VersaTrigger and plug the other end of the cable into the flash. A different cable will be required if the VersaTrigger is to be connected to a studio type flash (Bowens, Elinchrom etc), this may be purchased from us. The VersaTrigger unit can trigger a flash with a sync voltage of up to 250 volts making it an ideal method of isolation between the low-level drive from a camera and the high-voltage output of some studio flashes. Note. It is recommended that, if driving a flash with a high sync voltage, the red connector be plugged into the Output connector of the Versatrigger *before* plugging the other end into the flash unit.

8 Connecting a Camera

The appropriate cable for your camera will need to be purchased from us before a camera can be triggered. Plug the red connector into the Output connector of the VersaTrigger and plug the other end into the remote shutter release connection of your camera.

9 Using the Delay Adjust

In some cases it may be found that a time delay is needed between the trigger event and either the camera being triggered or the flash firing, situations could be the time between the sound of a splash and the presence of the water crown or the time between something breaking the laser beam and then moving in front of the camera.
The Delay Adjust can be used to increase this time gap up to approximately 500ms, turning the Delay Adjust clockwise increases the delay, turning anti-clockwise will decrease it. The nominal delay through a VersaTrigger control unit (with the delay control set to minimum) is typically 600µs. Moving the microphone away from the sound source will also add delay, this method is not recommended as it will result in a reduction in the level of sound being picked up by the microphone.

How to use VersaTrigger

Fast Photography – Flash trigger

- Event may be detected by using either a microphone or a break in a laser beam.
- Set up image to be taken and manually focus the camera on this scene.
- Decide on sensor to be used to detect event and connect to VersaTrigger.
- Using PC sync cable, connect the flash to the VersaTrigger.
- Dim lights.
- Set camera for a 5 to10 second exposure.
- Run event (drop fruit into water, drop coins etc etc).
- If required, adjust Gain or Delay.

Note: if the exposure results in a blurred picture due to the flash operating for too long a period try reducing the flash energy (intensity), this will often result in a shorter duration flash.

Fast Photography – Camera trigger

- Event may be detected by using either a microphone or a break in a laser beam.
- Set up image to be taken and manually focus the camera on this scene.
- Decide on sensor to be used to detect event and connect to VersaTrigger.
- Using the camera cable, connect the camera to the VersaTrigger.
- Run event (drop fruit into water, drop coins etc etc).
- If required, adjust Gain or Delay.

Slave flashes

- Connect the VersaTrigger Aux input to the hotshoe on the camera (this cable may be purchased from us).
- Connect 1 or 2 flash units to the VersaTrigger Outputs.

Alternatively, plug the light sensor into the Aux connection of the VersaTrigger and use to detect the on-camera flash..

Finally, the VersaTrigger has a 2.5 second secondary trigger inhibit function designed in, the purpose of this is to prevent a double exposure when using the system in flash trigger mode. This means that the system will be disabled for 2.5 seconds after being triggered.
If no sensors are plugged into the VersaTrigger the indicator LED will glow red, when a sensor is plugged in or the in-built laser sensor detects a laser beam, the indicator LED will glow green showing that the system is armed and ready to be triggered.

Note. Earlier production units had the On/Off switch as part of the Delay Adjust, due to customer feedback, all units now have the on/off switch as part of the Gain Adjust.

A note on delay

Flash

In most cases, setting a flash unit to the highest output intensity will result in a flash of the longest duration. The consequence of this is that if we take a photograph using the flash trigger method it can result in a blurred image. Reducing the output intensity of the flash, such that the light is still adequate for the shot, may reduce the duration of the flash output and produce a better image.

Camera

The largest source of delay here is the shutter lag of the camera, this is typically 40-50ms although it may be higher. A method of factoring this into the setup is to place the sensor away from the event being photographed. Some examples are:

If capturing an air rifle pellet piercing a balloon, place the sound sensor next to the rifle, not the balloon. The rifle firing (not the balloon exploding) will trigger the VersaTrigger, the Delay Adjust can then be fine-tuned to compensate. The secondary trigger inhibit function will stop the Versatrigger re-triggering when the balloon explodes.

The laser sensor response time is quite fast, try to position the laser break line away from the event being photographed. An alternative approach is laser make triggering using the light sensor, place an object in the path of the laser beam, when it is removed the VersaTrigger will trigger.