

If you link to this page make sure you link to <http://www.iki.fi/vahonen/computer/digiphoto/G1flash.html> and not to the address in address bar !!! The address in address bar is just a temporary address and may change but the [www.iki.fi](http://www.iki.fi)... is going to be the same as long as I live.

[\[G1 General\]](#) [\[G1 Gallery\]](#) [\[G1 Flash\]](#) [\[G1 LensMate\]](#) [\[G1 Storage\]](#) [\[G1 Camera Bag\]](#) [\[G1 Depth of Field\]](#)

## G1 External flash

### Check the trigger voltage before using with G1

G1 hotshoe for external flash can't handle bigger voltage than 6 volts. Measure the voltage before using old flashes. G1 works very well with Nissin 360TW, which voltage is  $10.3 \pm 0.3$  volts. So far I have taken >1000 pictures and I haven't had any problems.

### Measuring flashes trigger voltage

Check the voltage between PC-cords center pin and outer ring of connector with voltmeter. The flash has to be turned on while measuring the voltage.

### Connection to flash

If your flash has hotshoe you can just put it in the camera. Some flashes don't have hotshoe but has PC-cord. Then you should get Hotshoe-To-PC-adapter (5-10 US\$).

It is useful also if your flash has extra pins in the hotshoe and you are not sure will they damage the camera. If your flash doesn't have PC-cord, you can use 2 adapters: first Hotshoe-To-PC then PC-to-Hotshoe and then you can safely (check the voltage too) use your extra pin flash.



I also have Kaiser slave trigger. It is very useful if you want use more than one flashlight in same picture. I had doubts that these slave systems are slow but picture with 1/1000s is as good as 1/125s (and yes Canon claims that non-Canon external flashes will not sync faster speeds than 1/125s)



### What's wrong with the EX-flashes

Why should you use manual mode with G1? Because you can't control field of depth with ETTL-flash. In Av mode you SHOULD be able to do that but G1 calculates shutter to your selected aperture without noticing the flash. For example in normal indoor shot you get 1s shutter time if you use F8 -> not useful for good quality pictures.

The Canon EX-flashes can't be used in Manual-mode, because they will fire with full power in M-mode. Only exception is 550EX but it is so expensive that you could get microdrive and cheap manual flash easily for same price. And in my opinion G1 owners have usually bought G1 because they want to use creative controls. Point & shoot type users usually buy a lot cheaper camera. I also don't like the pre-flash of EX-flashes, usually you end up photos where your subject is with half closed eyes (if the pause between preflash and main flash is as big as it is with G1 internal flash) I'm actually saying here that you really should get some other flash than Canon EX.

## Links

[Kevin Björke's flash page](#) is a very good page about using external flashes with Canon G1.

## My primary flash: Metz 32 MZ-3

I bought this flash later than the Nissin and I use it much like the same way I used Nissin when it was my only flash. It has 3 aperture automatics and it has zoom head. It swivels and bounces etc. see more details from [Metz](#). I measured the voltage and it is 3.3 volts.



## My secondary flash: Nissin 360TW

The flash has two strobes, main strobe and fill in strobe, which can be turned on or off. It has 90° bounce and 360° swivel. Guide number is 36. I have been quite happy with the flash. It required some work to get good exposure every time. But after the work is done it's quite easy to use. The voltage of the hotshoe is ~10 volts.



## Using external flash with G1

I have found three ways of taking photos with my flashes. Usually I use the 1st method but sometimes when I want to see see the subject clearly in the LCD I use 3rd.

**1st** [Camera M-mode, Flash in aperture automatic mode] Set the flash for certain aperture and ISO. Use same settings in the camera. If pictures aren't correctly exposed, try changing the aperture in the camera.

**2nd** [Camera M-mode, Flash in manual mode] Set the flashes power. Take test photos, underexposed = use bigger aperture/bigger ISO, overexposed = smaller aperture/smaller ISO. If you want you can calculate the aperture but it takes more time than taking couple of test photos. Formula is  $GN / F\text{-number} = \text{distance}$ . For example you are taking photo of something in 5 meters away with flash, which has GN 40 at ISO 100. GN is 20 for ISO 50, which you are going to use. You have to use aperture F4 because  $20m/5m = 4$ .

**3rd** [Camera Tv-mode, Flash in aperture automatic] Change the time to 1/125s and the camera is probably using F2.0 indoors. Set the flash to aperture automatic mode F2.

---

Copyright © [Samuli Vahonen](#)

*Last update 8.9.2001*