

ElectroFlasher may "NOT" work on "CAN-BUS" Systems:

Example as in some BMW's Motorcycles:

On the BMW R1200RT and K1200GT, BMW does not use the standard wiring system like others on their rear brake lights. But they still use either one and/or two single-filament brake light bulbs.
Thus there is no "True Tail Light" filament.

The **ZFE** Control Module controls the motorcycle's lights, by sending pulsating voltage power to the brake light filament, even when the brake is off. What this means is, the voltage on the brake light filament is switching rapidly between 0-volts and 12-volts. It spends more time at 0-volts than at 12-volts, so the filament burns only as bright as a standard tail light, which is a bit dimmer than a normal brake light.

When the brakes are applied, the ZFE Lamp Controller increases the duty cycle to 100% so the voltage stays at 12-volts continuously. This in return, lights the brake filament up to its full brightness.

Adding an auxiliary tail/brake light system to these bikes can also be tricky, as there is "NO" tail light wire, but only a brake light wire. The auxiliary brake light cannot get power from the tail light wire as there isn't one, and it cannot get a Stable Source of Power from the brake light wire, as it is rapidly switching between 0 and 12 volts whenever the brakes are off.

The reason is not because some BMW's uses the CAN-Bus (Controller Area Network Bus) system, but because they use Multi Pulsating Voltage on their single-filament brake light systems.

Some later BMW models that use normal dual-filament bulbs, such as the R1200GS, can also cause trouble for some aftermarket lights. In addition to sending normal power to the tail light filament, the ZFE sends Pulsed Power to the brake light filament. (If you remove the plastic tail light shell and observe the tail light bulb. You will see that both filaments are lit up, even when the brakes are off.)

BMW uses this type of brake light system for two reasons. (1)... They get a brighter tail light without having to use a 2 filament bulb and/or add a second bulb. (2)... Also on the GS and other models, the tail light section is quite small, so there is no space for a second bulb anyway.

Another safety feature to the good! As many BMW owners are not aware of is, on some models if the ZFE senses that the tail light filament fails, it sends pulsed power to the brake light filament. Thus lighting it up as a redundant tail light, which is a neat safety feature. But may cause added equipment to short out!

Later and RIDE SAFE!

-TJ-