

TF2219FA – Failure Alert Module

Failure Alert Module: Advanced 7 Lamp Bypass with lamp Failure Alert

This product is micro-controlled with buffered relays, bypassing all the vehicle's bulb-failure warning systems. It is quick and easy to fit, and very cost-effective.

Most modern cars send complex or modulated lamp signals to switch their rear lights, the Smart Bypass relay has built-in logic that analyses these signals and determines which of the trailer lights should come on. As an example, when the car uses a modulated lamp feed to make one single filament bulb perform the function of different lamps (e.g. brake and tail or fog and tail), the relay interprets the modulated signals and switches the correct trailer lamps on.



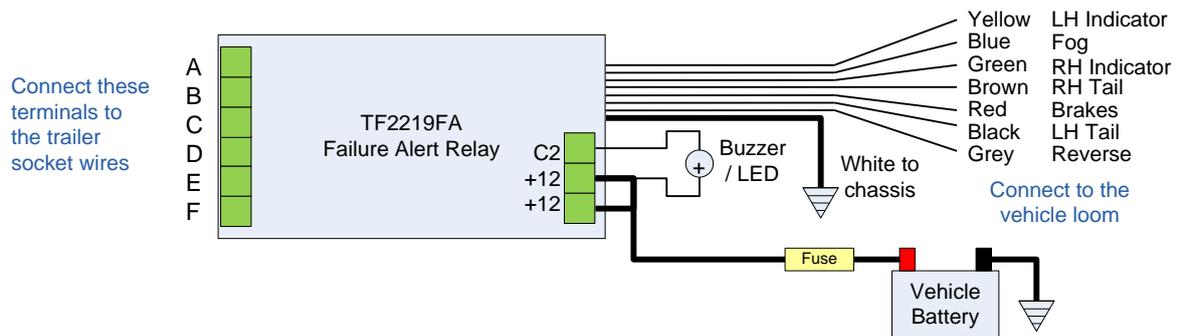
Upon power up, a full device self-check is automatically carried out and all relays exercised. Upon activating a lamp circuit, the Failure Alert Module provides a single Audible Alert signal (beep-beep) if a failed trailer bulb is detected.

Main Features

- **Universal** - use on modern Multiplexed/Modulated lamp circuits or conventional cars. Simple and quick fitting
- Integrated **Audible** Flasher Monitor, with Tell-Tale terminal output (for remote buzzer / LED)
- **Alerts** the driver of failed trailer light circuits.
- Auto **Self-check** – Power up health check
- Maintains correct trailer lights even when car swaps functions (or when the bulb fails)
- Completely transparent to the car – (Does not interfere with car circuit)
- **Low cost**
- Quiescent idle current less than **1mA**
- **Protected:** withstands rough treatment, accidental current reversals, etc. Fully snubbed against voltage spikes / electrical hazards
- Type-approved for EMC compliance
- TF2219FA is ready fitted with plain wires that connect into the vehicle's wiring loom

Fitting the TF2219FA

1. Route your power source cable(s) from the boot to the battery. Fit a fuse holder in line with the cable, close to the battery. Do not insert the fuse yet.
2. Connect together your 7-core cable, the relay and appropriate wires in the vehicle loom. Connect to a test board.
3. Insert the fuse.
4. Test the installation by turning the car lights on and off, whilst observing the test board lights.



TF2219FA series Technical Specifications

Supply Voltage:	9.5-16V
Fuse Rating:	15A
Idle Current:	< 1mA
Input current:	< 0.3mA per input
Operating temperature	-18 to +50 degree C
Case dimension	100 x 45 x 30 mm
Case material	ABS

Maximum average output current (Total < 15A):		
Indicators	L+R	5A
Tail	58L+58R	4A
Fog	54G	4A
Brakes	54	5A
Reverse		4A

Models in this Range

- TF2219FA-P** Advanced 7W Bypass module, with Audible Flasher Monitor & Bulb Failure Alert– 300mm plain wire
- TF2219FA-S** Advanced 7W Bypass module, with Audible Flasher Monitor & Bulb Failure Alert – 300mm wire + 6W Splice connector