Vehicle to Trailer Wiring - 4-wire flat and 5-wire flat

VEHICLE Ground / White Tail / Brown Right / Green Brake / (Red or Blue) Left / Yellow With this wiring plan, the vehicle trailer connector is a 5-wire flat, and can

With this wiring plan, the vehicle trailer connector is a 5-wire flat, and can work with EITHER a 4-wire flat trailer, or a 5-wire flat trailer. A 5-wire flat vehicle connector will physically plug into either a 5-wire flat trailer connector, or a 4-wire flat trailer connector. Expect when vehicle is connected to a 5-wire flat trailer, and applying the brake that the brake light and also both turn lights will illuminate. And when connected to a 4-wire flat trailer that when pressing the brake that both turn lights will illuminate as is normally. You COULD wire a 5-wire flat vehicle directly, without the converter, but this will never show any lights when the brake is applied for a trailer wired with a 4-wire flat. This plan works with either type of trailer.

A vehicle has completely separate brake and turn signals. Here we use a standard 3 to 2 wiring converter. Trailers with a 4-wire flat connector illuminate the brake by using both turn light bulb elements at the same time. A majority of trailers are wired for 4-wire flat. Trailers with a 5-wire flat have brake and turn signals fully separated and have separate brake and turn light bulb elements.

This multiplexing of brake and turn is NOT fed back to the vehicle itself.

