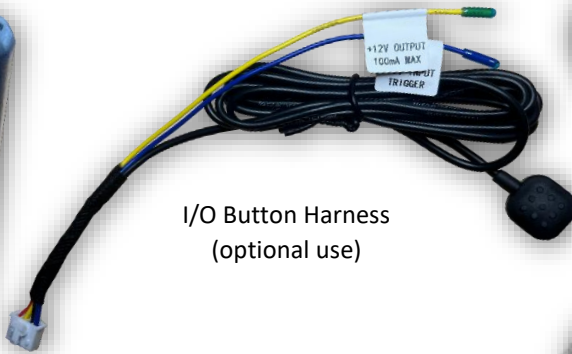


Z-WAGZ

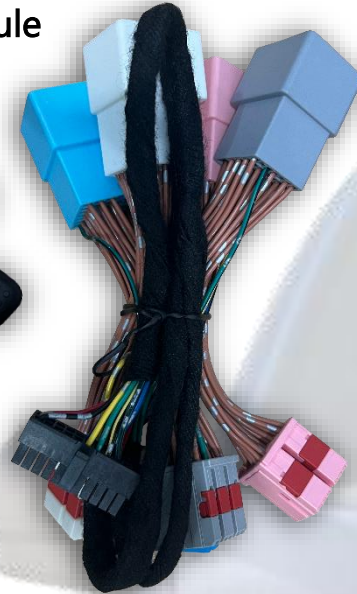
BCM



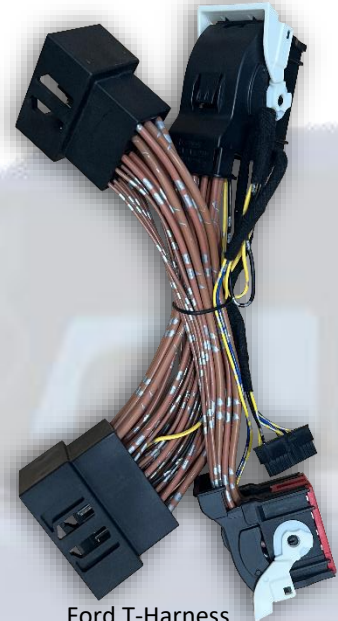
Plug & Play, BCM-Controlled, OE Light Flash Module



I/O Button Harness
(optional use)



GM T-Harness
(ZW-BCM-GM only)

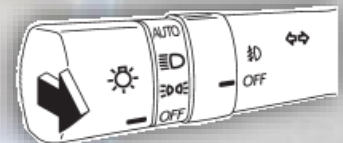


Ford T-Harness
(ZW-BCM-FRD only)

Thank you for purchasing a genuine Z-WAGZ unit, the simplest BCM-module for flashing OEM lights with a press of a button. This unit comes pre-programmed with 8 different light patterns, some for halogen systems & some for LED systems – see below for full operation information including on-board LED status.

Operation for Ford and GM vehicles is the same:

1. Install the Z-WAGZ unit to the OE BCM unit. Follow instructions on page 2 (for Ford) or 3 (For GM).
2. Turn Ignition ON (Ignition must be on for proper operation). Leave vehicle in Park.
3. **To activate Z-WAGZ:**
 - Press and HOLD the **high beam** lever (5 sec) OR
 - Press and HOLD the provided push button (3 sec) OR
 - Send a latched 12v (+) signal to the **blue wire** (designed to be extended for OE up-fitter switches)

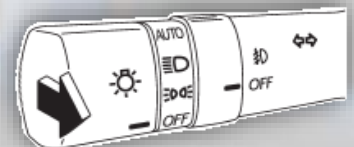


Pattern 1 will begin to flash. Once pattern 1 begins, the hazards in the gauge cluster will blink 1 time, indicating Pattern 1 has been selected and the LED on the unit will blink **BLUE**. See chart for remaining pattern color indication.

4. **To switch to Pattern 2:** (Pattern 1 must be currently active)
 - Engage either turn signal, then press and HOLD the **high beam** lever once more (5 sec). OR
 - Press & release the provided push button

The hazards will blink twice indicating Pattern 2 has been selected. Repeat this process to switch to the next pattern.

5. **To deactivate Z-WAGZ:**
 - Press and HOLD the **high beam** lever OR
 - Press and HOLD the provided push button OR
 - Release 12v (+) signal to the **blue wire** (if connected this way)



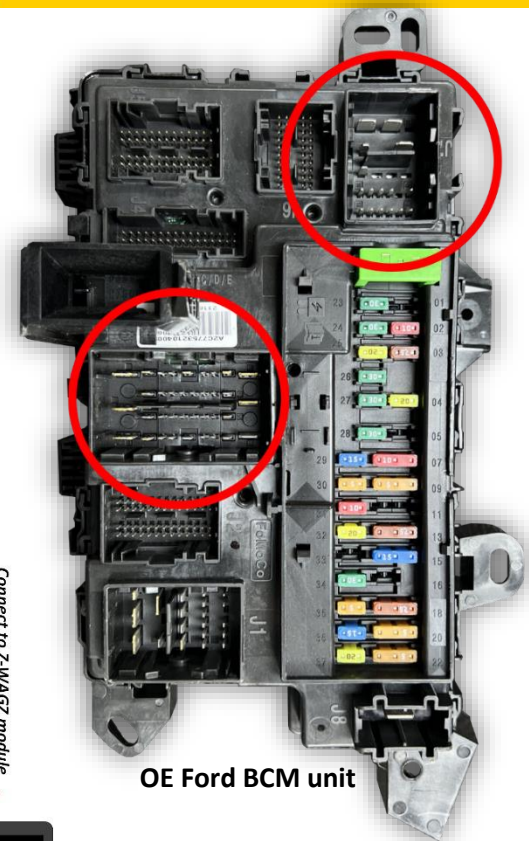
NOTES:

- Vehicles equipped with LED lights should use LED patterns. Vehicles equipped with standard bulbs should use bulb patterns.
- *Drive Mode* (anything outside of PARK gear) will emit its own, separate pattern from whatever pattern is currently selected. This is a limitation of the vehicle and how light data is handled when not in *PARK* gear.
- Not all lights on the vehicle are necessarily used, some lights are not controllable via BCM CAN data.
- Z-WAGZ will retain the last used pattern, even after being disconnected from the BCM (if ever).
- When in *Drive Mode*, turn signals, headlights & reverse lights will override pattern flashing, until turned off again.
- When on some patterns, in some vehicles, the reverse camera image may show up/flash on the OE screen (if equipped). This is a factory limitation and is normal. If you want to avoid this, use a pattern which removes the reverse light flashing.

Ford Vehicle Installation



1. Locate the BCM unit. The chart below indicates the BCM location in various vehicles.
2. With the vehicle OFF: disconnect the (2) circled plugs shown. Connect the male side of each T-Harness to the BCM and the (removed) plugs into the female side of the Z-WAGZ BCM harnessing. These connectors can only fit in one place and connect in one way.
3. Connect the Z-WAGZ BCM unit to the 22-pin connector, tie-wrap the unit to another harness if desired.
4. Return to page (1) for operation instructions.

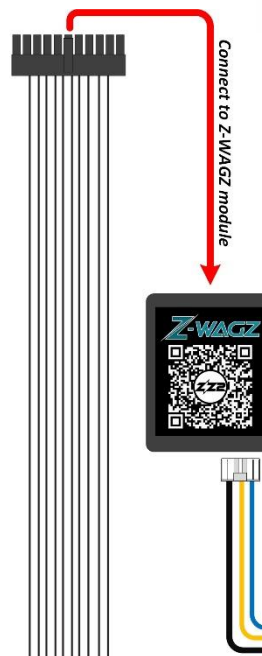


Ford BCM Locations:

MODEL	LOCATION
F-Series Trucks (all)	Passenger side kick panel
Explorer	Behind lower dash panel, left of steering wheel

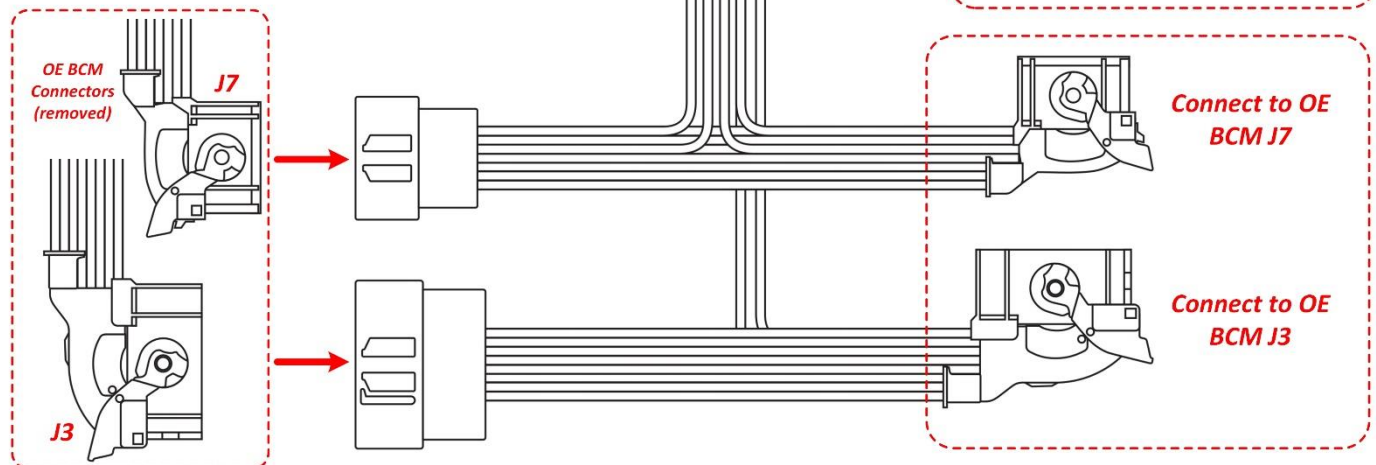
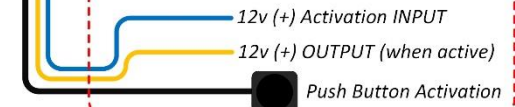
Confirmed Vehicles:

MAKE	MODEL	YEAR
Ford	Expedition	2018
	F150, Raptor	2015-2023
	Explorer	2019-2022
	Super Duty F250-F350	2019-2022



I/O HARNESS NOTES:

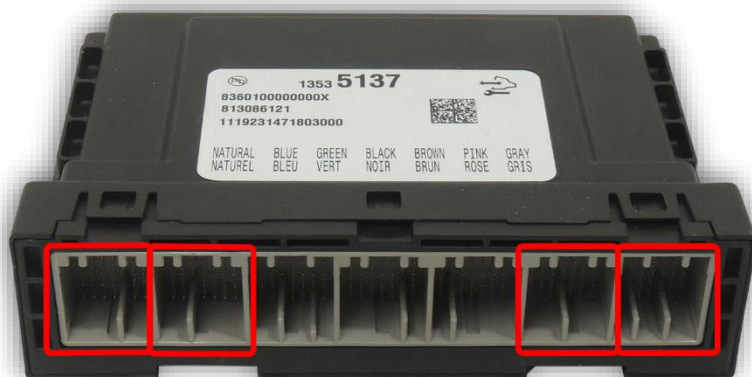
- OUTPUT is 100mA MAX. Do NOT power anything requiring higher current with this output! Use relays or connect to trigger external input only.



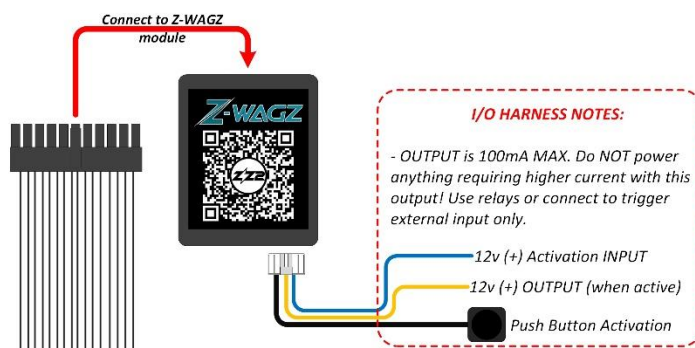
GM Vehicle Installation



1. Locate the BCM unit. The chart below indicates the BCM location in various vehicles.
2. With the vehicle OFF: disconnect the (4) highlighted plugs shown. Connect the male side of each T-Harness to the BCM and the (removed) plugs into the female side of the Z-WAGZ BCM harnessing. These connectors can only fit in one place and connect in one way and are color matched to the OE plugs.
3. Connect the Z-WAGZ BCM unit to the 22-pin connector, tie-wrap the unit to another harness if desired.
4. Return to page (1) for operation instructions.



OE GM BCM unit

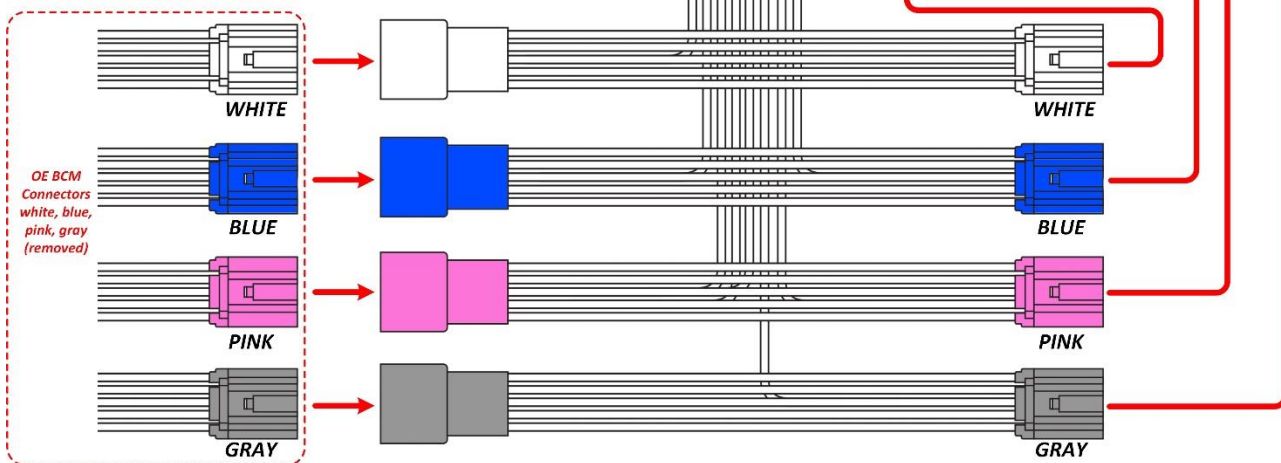


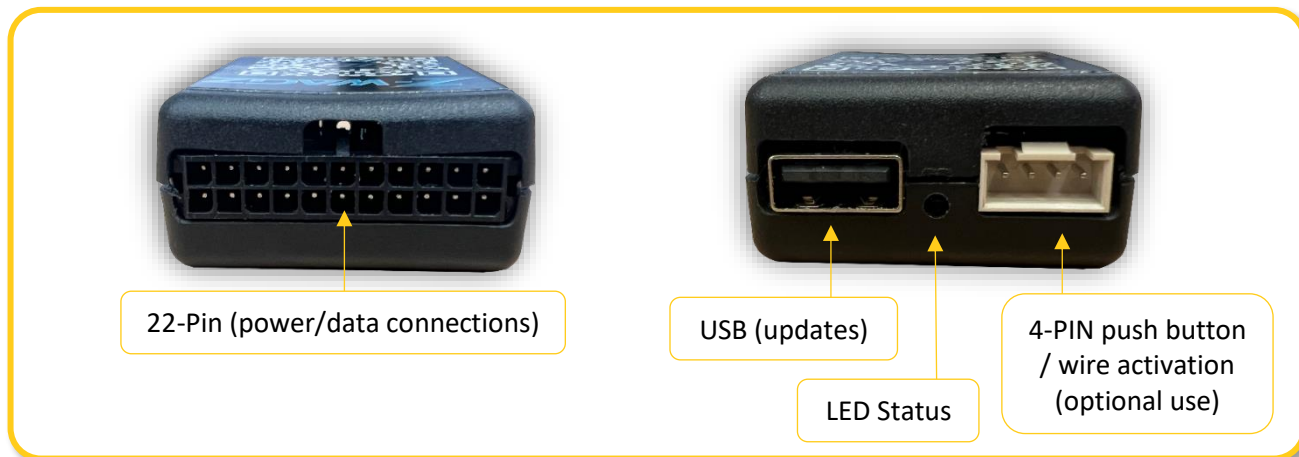
GM BCM Locations:

MODEL	LOCATION
Silverado/Sierra/Colorado	Underneath steering wheel / dash area

Confirmed Vehicles:

MAKE	MODEL	YEAR
GM	Silverado	2018- 2022
	Colorado	2018-2022
	Sierra	2018-2022
	Sierra 2500/3500 HD	2018-2022
	Tahoe/Suburban	2018-2021





GM LED Status / Patterns

START-UP INDICATION

Description	LED Status	More Information
Initial Wake Up	Blinks BLUE (1 time)	---
Unit recognizes CAN bus	Blinks BLUE (3 times)	Upon CAN data wake
Unit detects ACC info	Blinks BLUE (1 time)	Upon Turning Ignition ON
Unit detects GEAR info	Blinks VIOLET (1 time)	Upon switching gears
Unit detects HIGH BEAM press OR External button press	Solid BLUE	Upon pressing High Beam lever or provided push button
No response from vehicle/CAN	Solid OR Blinks RED	While Z-WAGZ is activated

PATTERN INDICATION

Description	LED Status	More Information
Pattern 1	BLUE , off, BLUE , off	BASE PATTERN (LED PATTERN)
Pattern 2	RED , off, RED , off	BASE PATTERN + HIGH BEAMS (LED PATTERN)
Pattern 3	BLUE , RED , BLUE , off	WATERFALL PATTERN (LED PATTERN)
Pattern 4	RED , BLUE , RED , off	BLINK 2x PATTERN (LED PATTERN)
Pattern 5	BLUE , off, RED , off	BASE PATTERN (NO REV LIGHT) (LED PATTERN)
Pattern 6	BLUE&RED , off, BLUE&RED , off	BASE PATTERN (NO LOW BEAM) (LED PATTERN)
Pattern 7	BLUE , BLUE&RED , BLUE , off	BASE PATTERN (NO LOW BEAM, NO REV) (LED PATTERN)
Pattern 8	RED , BLUE&RED , RED , off	BASE PATTERN SLOWER (BULB PATTERN)
Pattern 9	BLUE , off, BLUE&RED , off	BASE PATTERN + HIGH BEAMS SLOWER (BULB PATTERN)
Pattern 10	RED , off, BLUE&RED , off	WATERFALL PATTERN SLOWER (BULB PATTERN)
Pattern 11	BLUE&RED , BLUE , BLUE&RED , off	BLINK 2x PATTERN SLOWER (BULB PATTERN)
Pattern 12	BLUE&RED , RED , BLUE&RED , off	BASE PATTERN (NO REV LIGHTS) SLOWER (BULB PATTERN)
Pattern 13	BLUE , RED , off, off	BASE PATTERN (NO LOW BEAM) SLOWER (BULB PATTERN)
Pattern 14	RED , BLUE , off, off	BASE PATTERN (NO REV or LOW) SLOWER (BULB PATTERN)

POWER CONSUMPTION

Current Draw Active:	100mA MAX	
Current Draw idle:	4mA MAX	
Trigger wire act:	0V	
Trigger wire idle:	3.3V	
Current limit:	10mA	

FORD LED Status / Patterns

START-UP INDICATION		
Description	LED Status	More Information
Initial Wake Up	Blinks BLUE (1 time)	---
Unit recognizes CAN bus	Blinks BLUE (3 times)	Upon CAN data wake
Unit detects ACC info	Blinks BLUE (1 time)	Upon Turning Ignition ON
Unit detects GEAR info	Blinks VIOLET (1 time)	Upon switching gears
Unit detects HIGH BEAM press OR External button press	Solid BLUE	Upon pressing High Beam lever or provided push button
No response from vehicle/CAN	Solid OR Blinks RED	While Z-WAGZ is activated
PATTERN INDICATION		
Description	LED Status	More Information
Pattern 1	BLUE , off, BLUE , off	BASE PATTERN (LED PATTERN)
Pattern 2	RED , off, RED , off	BASE PATTERN + HIGH BEAMS (LED PATTERN)
Pattern 3	BLUE , RED , BLUE , off	BASE PATTERN + MIRROR BLINKERS (LED PATTERN)
Pattern 4	RED , BLUE , RED , off	BASE PATTERN + MIRROR BLINKERS + HIGH BEAMS (LED PATTERN)
Pattern 5	BLUE , off, RED , off	BASE PATTERN (NO REV LIGHT) (LED PATTERN)
Pattern 6	BLUE&RED , off, BLUE&RED , off	BASE PATTERN BACK SIDE LIGHTS SLOWER (BULB PATTERN)
Pattern 7	BLUE , BLUE&RED , BLUE , off	BASE PATTERN + ALL LIGHTS SLOWER (BULB PATTERN)
Pattern 8	RED , BLUE&RED , RED , off	BASE PATTERN + ALL LIGHTS + MIRROR BLINKERS SLOWER (BULB PATTERN)
Pattern 9	Off, BLUE , off, BLUE&RED	BASE PATTERN + ALL LIGHTS + HIGH BEAM SLOWER (BULB PATTERN)
Pattern 10	Off, RED , off, BLUE&RED	BASE PATTERN + ALL LIGHTS + HIGH BEAM + MIRROR BLINKERS SLOWER (BULB PATTERN)
POWER CONSUMPTION		
Current Draw Active:	100mA MAX	
Current Draw idle:	4mA MAX	
Trigger wire act:	0V	
Trigger wire idle:	3.3V	
Current limit:	10mA	