



Plug & Play, OBD2-Controlled, OE Light Flash Module

Thank you for purchasing a genuine Z-WAGZ unit, the simplest OBD2-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.

Optional I/O Button Harness



Security Gateway Bypass (18+ FCA only)

Operation:

- 1. Connect the Z-WAGZ unit to the OBD2 port.
- 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 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

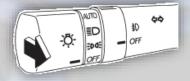
The hazards will blink twice indicating Pattern 2 has been selected. Repeat this process to switch to the next pattern.

5. To deactivate Z-WAGZ:

- Press and HOLD the *high beam* lever OR
- \circ $\,$ $\,$ 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 (1-4). Vehicles equipped with standard bulbs should use bulb patterns (5-8)
- 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 OBD CAN data.
- Z-WAGZ will retain the last used pattern, even after being disconnected from the OBD2 port.
- When in *Drive Mode*, turn signals, headlights & reverse lights will override pattern flashing, until turned off again.
- For FORD (only), *pattern 4* is an 'Alternative Mode' pattern. Some vehicles do not respond to typical data, therefore this pattern method was created.





Confirmed Vehicles*:

MAKE	MODEL	YEAR
Ford	Expedition	2018
	F150	2013-2019
	F250	2016-2019
	F350	2016-2019
Lincoln	МКС	2019
Dodge	Challenger	2018
	Charger	2013
	Durango	2016
	Journey	2019
	RAM 1500	2019-2021
Jeep	Grand Cherokee	2018





*Vehicles on this chart have been tested to function properly. More models will be added over time. Other vehicles not listed here may still function.

FCA (Chrysler, Dodge Jeep) vehicles manufactured 2018+ require the OE security module to be bypassed (included) for Z-WAGZ to function. The location of this module varies per vehicle.



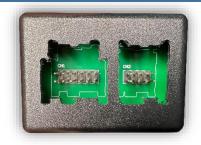
OE FCA Security Gateway Module



OE Security Gateway Module Locations

MODEL	SGW Location
Durango	Left side of pass footwell
Jeep Grand Cherokee	Left side of pass footwell
RAM 1500 Classic (DS: pre facelift)	Behind radio screen
RAM 1500 DT (facelift)	Directly above OBD2 port
RAM 2500-5500	Behind Cluster/Speedometer
Challenger	Behind radio screen
Charger/300	Left side driver's footwell
Journey	Driver's side dash, behind
	paneling

*If bringing vehicle to dealer, remove this gateway bypass and return connectors to factory module.

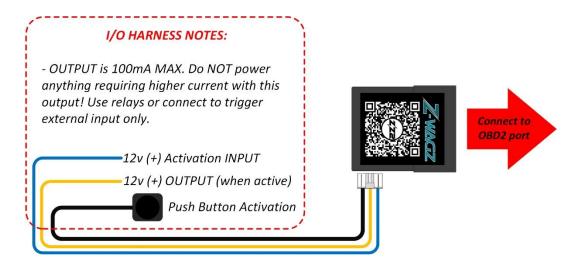


Once the gateway module is located and accessible, with the key off, remove both plugs and connect to the provided bypass module*. Secure with zip tie or other method to prevent pulling.





Connection Diagram



LED Status

START-UP INDICATION				
Description	LED Status	More Information		
Initial Wake Up	Blinks BLUE (1 time)	Upon connection to OBD port		
Unit recognizes CAN bus	Blinks BLUE (3 times)	Upon connection to OBD port		
Unit detects ACC info	Blinks GREEN (1 time)	Upon Turning Ignition ON		
Unit detects GEAR info	Blinks VIOLET (1 time)	Upon switching gears		
Unit detects HIGH BEAM press	Solid GREEN	Upon pressing High Beam lever or		
OR External button press		provided push button		
No response from vehicle/CAN	Solid OR Blinks RED	While connected to OBD and Z-WAGZ		
		activated		
PATTERN INDICATION				
Description	LED Status	More Information		
Pattern 1	Blinks BLUE	LED PATTERN		
Pattern 2	Blinks GREEN	LED PATTERN		
Pattern 3	Blinks <mark>RED</mark>	LED PATTERN		
Pattern 4	Alternates GREEN & BLUE	ALT MODE (FORD)		
Pattern 5	Alternates GREEN & RED	BULB PATTERN		
Pattern 6	Alternates BLUE & RED	BULB PATTERN		
Pattern 7	Alternates VIOLET & GREEN	BULB PATTERN		
Pattern 8	Alternates LIGHT BLUE & RED	BULB PATTERN		
	POWER CONSUMPTION			
Current Draw Active:	100mA MAX			
Current Draw idle:	4mA MAX			
Trigger wire act:	0V			
Trigger wire idle:	5V			
Current limit:	10mA			