Manuals+ — User Manuals Simplified.

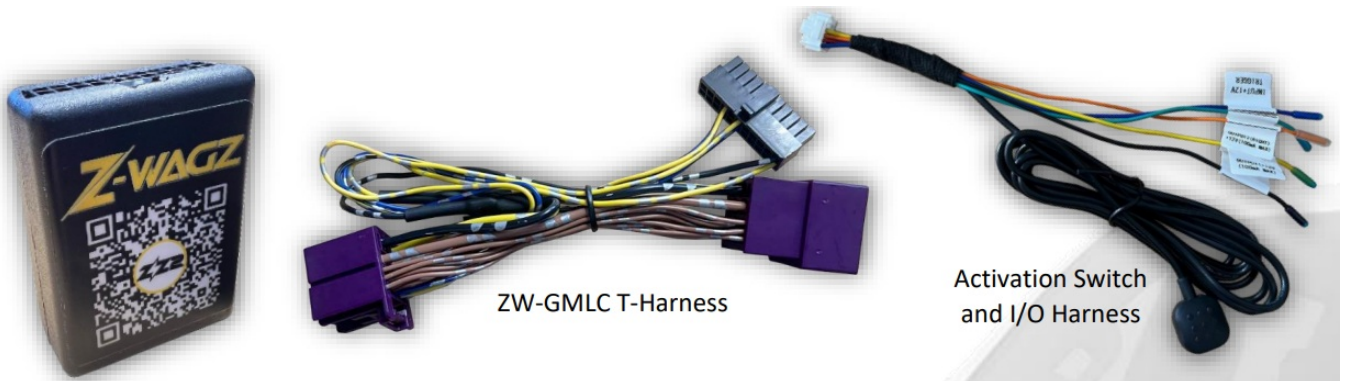# Z-WAGZ ZZ-2 Light Controller Connected Module Adapter Owner's Manual

ZW-GMLC

Plug & Play, OE Light-Controller for GM vehicles!

ZW-GMLC T-Harness

Activation Switch and I/O Harness

Thank you for purchasing a genuine Z-WAGZ unit, the simplest Plug & Play module for flashing OEM lights with a press of a button. This unit comes pre-programmed with 3 different light patterns, some for halogen systems & some for LED systems.

Operation for all GM modules is the same:

1. Install the Z-WAGZ unit to the OE Light Control Module. Follow instructions on page 2 for more details and important information.

2. Turn Ignition ON or start vehicle (Ignition must be on for proper operation)
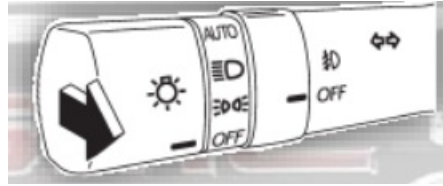
3. To activate Z-WAGZ:

   o Press and HOLD the high beam lever (5 sec) OR

   o Press and HOLD the provided push button (3 sec) OR

   o Send a 12v (+) signal to the blue wire (designed to be extended for OE up-fitter switches or any aftermarket toggle) OR

   o Press LOCK>UNLOCK>LOCK>UNLOCK on the key fob (dip switch 6 must be ON, ignition is NOT required for this method)

   Pattern 1 will begin to flash. Once pattern 1 begins, the turn signal indicators in the gauge cluster will blink 1 time then stay solid, indicating Pattern 1 has been selected. The LED on the unit will blink BLUE. See chart on page 4 for remaining pattern color indication.

4. To change to the next pattern: (ZWAGZ must be currently active)

   o Engage either turn signal, then press and HOLD the high beam lever once more (5 sec). OR

   o Press & release the provided push button one time

   The turn signals will blink twice (then stay solid) indicating Pattern 2 has been selected. Repeat this process to switch to the next pattern.

5. To deactivate Z-WAGZ:

   o Press and HOLD the high beam lever (5 sec) OR

   o Press and HOLD the provided push button (3 sec) OR

   o Release 12v (+) signal to the blue wire (if connected this way) OR

   o Turn vehicle OFF
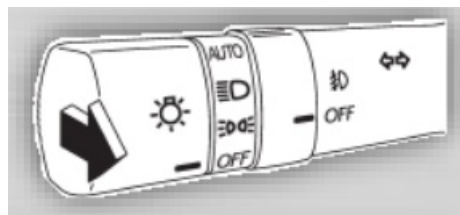
GENERAL NOTES:

- Vehicles equipped with LED lights should use LED patterns. Vehicles equipped with standard bulbs should use bulb patterns but may get away with LED patterns (although some consistency may be lost).
- Not all lights on the vehicle are necessarily used, some lights are not controllable via CAN data commands.
- Z-WAGZ will retain the last used pattern, even after being disconnected from the harness (if ever).
- Turn signals, headlights & reverse lights will override pattern flashing when used, until turned off again.
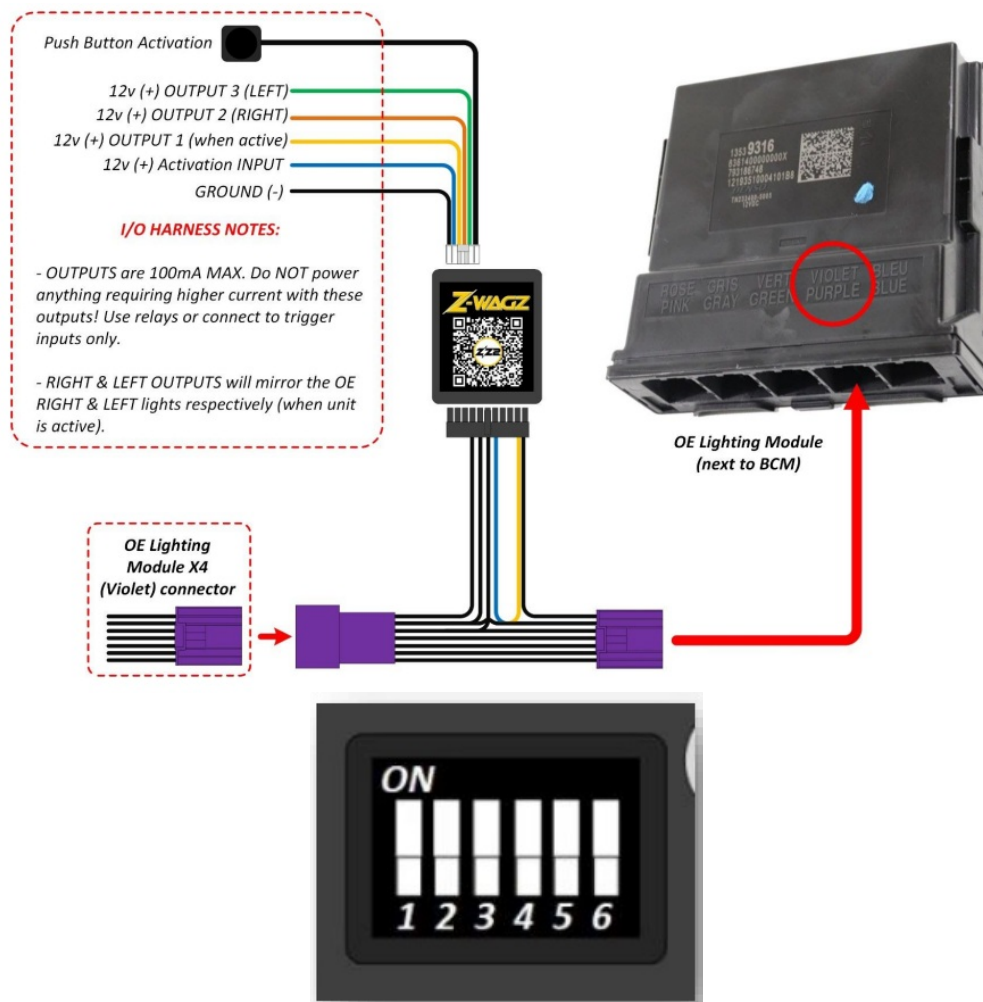- Lights on the external mirrors will only flash if connected with turn signals.

Module Installation

Please fully read once through before beginning installation!
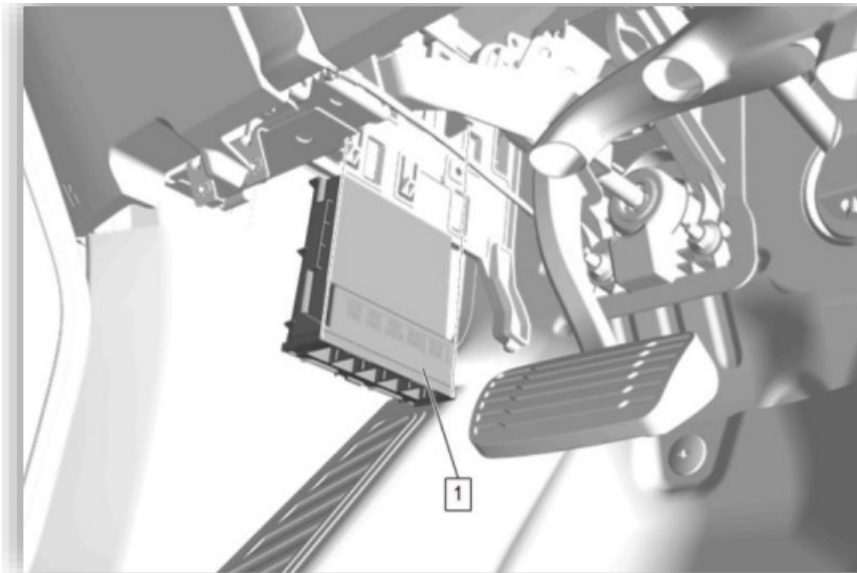
(1) OE GM Light Module

1. Make sure the vehicle is fully OFF, with driver door OPEN for 5 minutes before connecting unit.
   WARNING: this is vital to avoid tripping a checkengine light.
2. Locate the factory Light Module. In all trucks, it is mounted underneath steering wheel / driver's side kick panel area. The module is mounted right next to the BCM unit and has (5) connectors (see picture, right).
3. With the driver door OPEN & vehicle OFF (for 5 mins minimum): disconnect the violet plug from the lighting module shown. Connect the male side of the provided T-Harness to the OE Light Module and the (removed) plug into the female side of the Z- WAGZ harness. These connectors can only fit in one place, connect in one way and are color matched to the OE plug.
4. Connect the Z-WAGZ unit to the 22-pin connector LAST. Tie-wrap the unit to another harness if desired.
5. If wanting to use the optional push button, this can be connected and run to a convenient location for access from the driver. Otherwise, the unit is fully functional from the OEM high-beam lever.
6. If wanting to connect any optional wires provided from the I/O harness, see diagram below.
7. Return to page (1) for operation instructions.

Push Button Activation

12v (+) OUTPUT 3 (LEFT)
12v (+) OUTPUT 2 (RIGHT)
12v (+) OUTPUT 1 (when active)
12v (+) Activation INPUT
GROUND (-)

I/O HARNESS NOTES:

- OUTPUTS are 100mA MAX. Do NOT power anything requiring higher current with these outputs! Use relays or connect to trigger inputs only.

- RIGHT & LEFT OUTPUTS will mirror the OE RIGHT & LEFT lights respectively (when unit is active).

OE Lighting Module (next to BCM)

OE Lighting Module X4 (Violet) connector

Located on the back side of the unit is a bank of (6) dip switches – you will need a pick-tool to adjust.
All dip switches are LIVE, do not unplug the module to change.
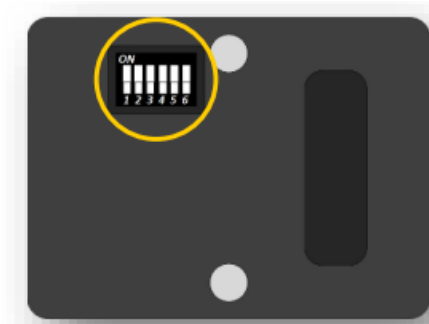
DIP	1	2	3	4	5	6*
ON	Disable High Beam	Disable Low Beam	Enable Reverse Light (May cause reverse camera to show on screen while active)	For HALOGEN equipped (slower)	Disable STROBE Mode (Removes strobe every 3 seconds)	Enable Fob Activation (see notes below)
OFF	Enable High Beam	Enable Low Beam	Disable Reverse Light	For LED equipped (faster)	Enable STROBE Mode	Disable Fob Activation

*With DIP switch (6) turned ON, the unit can be activated using the OEM key fob, without the Ignition requirement (all other methods). To activate, while within range of the vehicle, quickly press LOCK>UNLOCK>LOCK>UNLOCK and the flash pattern will begin. Pressing LOCK once more will shut off the low/high beam light (so that they flash). Deactivate the unit by repeating the same process. If you enter the vehicle after the pattern has been activated using this method, the flash pattern will stay active until you disable it (using any method) or shut the
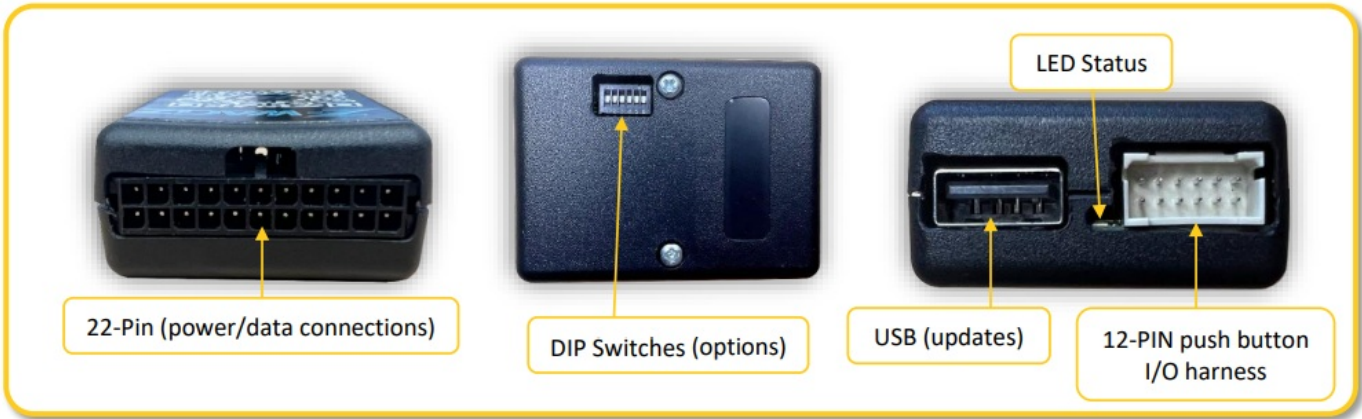
vehicle down.

WARNING: Using this method will keep the lights flashing indefinitely. Please consider the condition of your battery – although the module is not activating full ignition power (and therefore using far less current), if flashing is left ON, the battery will be actively discharging (it will likely take 1 hour + on a newer, good battery).

Confirmed Vehicles:

MAKE	MODEL	YEAR
CHEVY	Silverado 1500 ONLY (no HD)	2022+
CHEVY	Suburban, Tahoe	2021+
GMC	Sierra 1500 ONLY (no HD)	2022+
GMC	Yukon	2021+
CHEVY	Silverado HD 2500, 3500	2023+*
GMC	Sierra HD 2500, 3500	2023+*

*NOTE: 2023 HD trucks require a visual inspection for the presence of the Lighting Module.
2024 HD trucks are always compatible.

22-Pin (power/data connections)
DIP Switches (options)
LED Status
USB (updates)
12-PIN push button I/O harness

GM LED Status/Patterns

START-UP INDICATION

Description	LED Status	More Information
Initial Wake Up	Blinks BLUE (1 time)	Upon initial power connection
Unit recognizes CAN bus (car side ONLY)	Blinks BLUE (3 times)	Upon CAN data wake
Unit recognizes CAN bus (module side ONLY)	Blinks GREEN (3 times)	Upon CAN data wake
Unit recognizes CAN bus (properly)	Binks BLUE,GREEN (x3)	Upon CAN data wake
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 pull OR External button press(for activation)	Solid GREEN	Upon pressing High Beam lever or provided push button
Unit receives negative response for light commands	Blinks VILOET (x3)	–Contact ZZ2–
Unit not receiving confirmation for light commands	Blinks RED (x1)	–Contact ZZ2–
When unit goes to sleep	Blinks WHITE (x1)	—
CAN bus communication problem	Blinks RED + GREEN	While Z-WAGZ is activated

PATTERN INDICATION

Description	LED Status	More Information
Pattern 1	Blinks BLUE	BASE PATTERN
Pattern 2	Blinks GREEN	WATERFALL PATTERN
Pattern 3	Blinks RED	DOUBLE BLINK PATTERN

POWER CONSUMPTION/ADDITIONAL SPECS

Description	Specification	More Information
Current Draw Active:	100mA max	
Current Draw idle:	7mA max	
INPUT 1 Trigger wire act:	12V (+)	Hardwire activation trigger
OUTPUT 1: 12v (+)	100mA max	Outputs 12v (+) whenever unit is active
OUTPUT 2 (RIGHT): 12v (+)	100mA max	Mimics RIGHT turn signal pattern
OUTPUT 3 (LEFT): 12v (+)	100mA max	Mimics LEFT turn signal pattern
Trigger wire idle:	3.3V	
Current limit:	10mA	

Documents / Resources

Z-WAGZ ZZ-2 Light Controller Connected Module Adapter [pdf] Owner's Manual
ZZ-2 Light Controller Connected Module Adapter, ZZ-2, Light Controller Connected Module Adapter, Controller Connected Module Adapter, Connected Module Adapter, Module Adapter

References

- **User Manual**