

**PLUG & PLAY,
OE LIGHT-CONTROLLER
FOR GM VEHICLES!**

Flash

VEHICLE FLASHER

USER MANUAL | V1.1



Thank you for purchasing the Z-Flash LCM, 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.



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-Flash 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.



OPERATION FOR ALL GM MODULES


1. Install the Z-Flash unit to the OE Light Control Module.

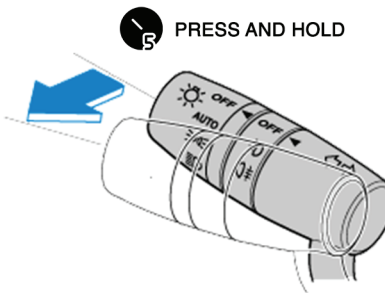
(Follow instructions on [page 2](#) for more details and important information)

2. Turn Ignition ON or start vehicle

(Ignition must be on for proper operation)

3. To activate Z-Flash:

- 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)



4. 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)

To switch to Pattern 2:  (Pattern 1 must be currently active)

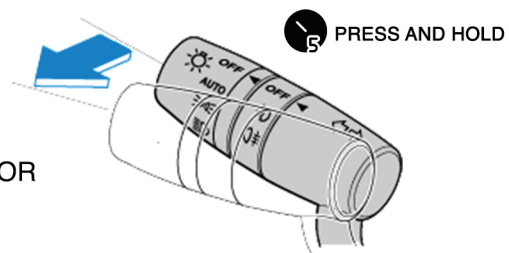
- o Engage either turn signal, then press and HOLD the high beam lever once more (5 sec). OR
- o Press & release the provided push button one time

The turn signals will blink twice (then stay solid) indicating Pattern 2 has been selected.

Repeat this process to switch to the next patter


5. To deactivate Z-Flash:

- 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





MODULE INSTALLATION

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 check engine 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).

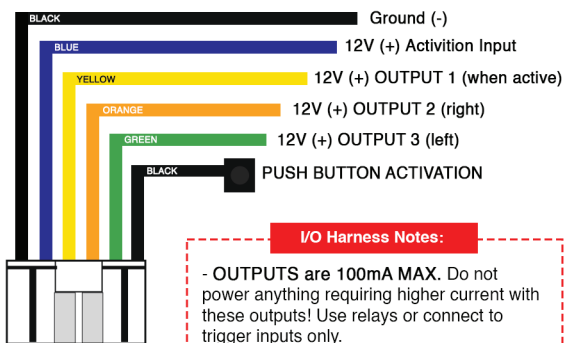
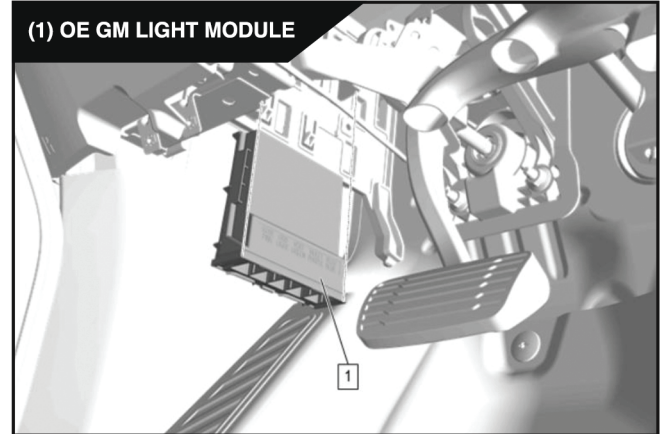
3. With the vehicle OFF (for 5 mins minimum): Disconnect the violet plug from the OE module shown. Connect the male side of the provided T-Harness to the Light Module and the (removed) plug into the female side of the Z-Flash harness. These connectors can only fit in one place, connect in one way and are color matched to the OE plug.

4. Connect the Z-Flash unit to the 22-pin connector, 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.

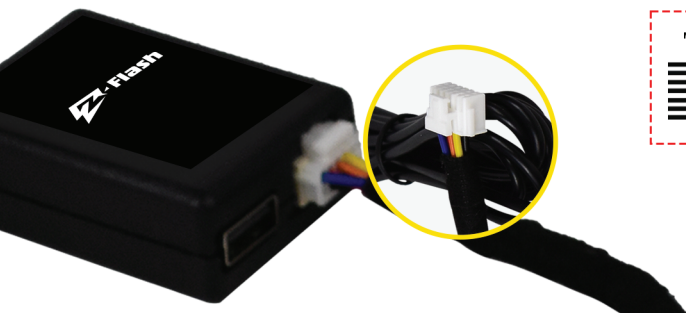
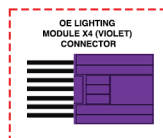
7. Return to page (1) for operation instructions.



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).



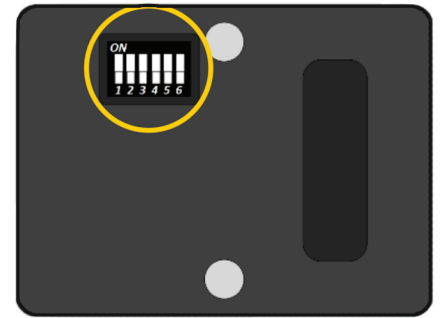
OE LIGHTING MODULE (next to BCM)



DIP SWITCH SETTINGS, EXTRA FEATURES



Located on the back side of the unit is a bank of (6) dip switches - you will need a pick-tool to adjust



DIP	1	2	3	4	5	6*
ON	Disable High Beam	Disable Low Beam	Enable Reverse Light <i>(May cause reverse camera to show on screen while active)</i>	For HALOGEN equipped (slower)	Disable STROBE mode <i>(Removes strobe every 3 seconds)</i>	Enable Fob Activation <i>(see notes below)</i>
OFF	Enable High Beam	Enable Low Beam	Disable Reverse Light	For LED equipped (faster)	Enable STROBE Mode	Disable Fob Activation

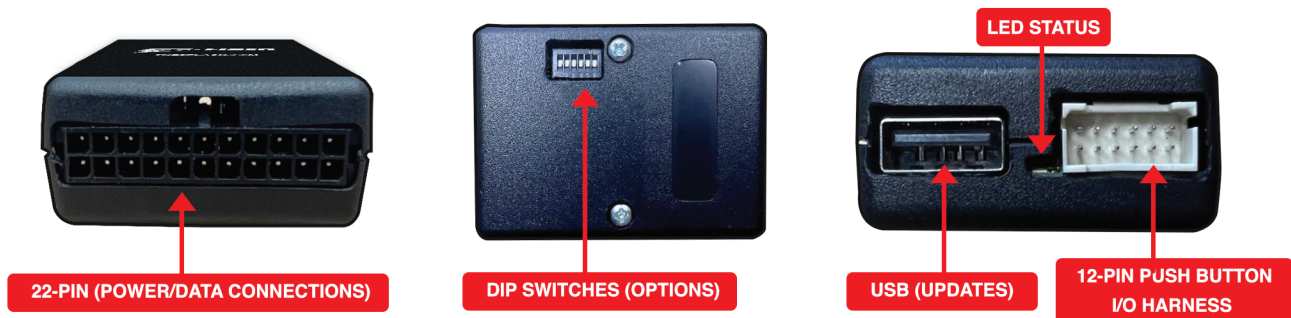
***With DIP switch (6)** turned ON, the unit can be activated using the OEM key fob, without the Ignition requirement *(all other methods)*.

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).



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)	Blinks 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 pushbutton
Unit receives negative response for light commands	Blinks VIOLET (x3)	Contact Support
Unit not receiving confirmation for light commands	Blinks RED (x1)	Contact Support
When unit goes to sleep	Blinks WHITE (x1)	--
CAN bus communication problem	Blinks RED + GREEN	While Z-Flash 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	LED Status	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	