

Brake Light pro

Installation and Operation Manual

Model BLP-U01

For use on ALL motorcycles, ATVs, cars and other vehicles

1. Foreword

Congratulations on your purchase of a HealTech Brake Light Pro programmable brake light flasher module. This product will fit all vehicles and will power all types of 12V bulbs (incandescent, halogen) and LED lights. It is simple to install, connects in-line with the brake light wire.

The BLP module is the next generation of brake light flashers with features not found in competing products – touch sensor for easy programming and maximum reliability, high power FET with short circuit protection, and extremely small size for trouble free fitment in tight spaces.

Rear end collisions are the most common type of road accident. Motorcycle Safety Foundation (MSF) and training literature suggest that you pump your brakes (flash your brake lights) for improved visibility at the start of deceleration. The use of this device will increase safety, especially on motorcycles. On cars, we recommend flashing the 3rd brake light only. Premium cars with flashing brake lights are being introduced on more and more markets.

Warning: Check local vehicle statutes to see if brake light flashers are allowed in your country/state, since the Brake Light Pro can save lives but can be illegal in some countries. If the use of brake light flashers is restricted in your country or state, we recommend setting the unit to mode "1" which simulates manual flashing of the brake light (3 slow flashes). You are responsible to comply with the laws of your region. E.g. California Vehicle Code 25250 allows a maximum of four flashes within four seconds. Mode "1" complies with this regulation.

2. Specifications

Dimensions:

30x20x13 mm (11.8x7.8x5.1 inches)

Voltage range:

6V to 20V

Maximum load:

120W

Operating temp:

-40C to +80C (-40F to +176F)

Light patterns:

11 modes + bypass + demo mode

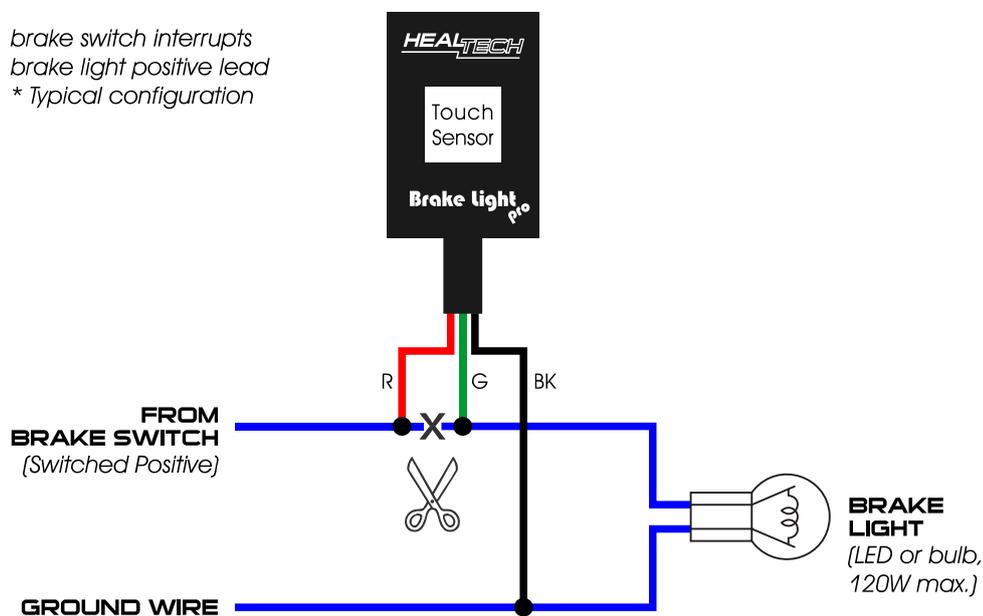
3. Installation

Disclaimer: Do not attempt to install the product if you don't have basic mechanical skills. HealTech Electronics Ltd. and its distributors shall not be liable for any loss or damage caused by improper installation.

This product may or may not be legal for use on public roads in your country/state. Installation and use is entirely at the customer's discretion.

On motorcycles, it is recommended to make the connections under the seat, near the brake light. On cars, make the connections at the wire which goes directly to the 3rd brake light.

1. **Find** the **two brake light wires**, near the brake light.
2. **Identify** the brake light **positive wire**, which comes from the brake switch. To do this, use a voltmeter or 12V light bulb. Connect one end of the meter (or bulb) to chassis ground or battery negative terminal. Connect the other meter probe (or bulb) to one of the brake light wires, e.g. by backprobing at the brake light connector, using a thin needle. Apply the brake to turn the brake light on. If the voltmeter shows battery level (or the bulb turns on), you have found the brake light positive wire, now turn the ignition Off. Otherwise, try again with the second wire.
3. **Cut** the brake light **positive wire**, where you'd like to make the connections.
4. **Do** the **connections** as per this diagram:



To make the 3 splices, use the supplied red quick connectors. Do NOT strip the wires when using the red connectors.

Usage: Place one bike wire inside run channel. Close side cover until latched. Insert unstripped BLP wire completely and check its position. Insert the blade (u-contact) and press down by finger pressure. Then, depress the u-contact

with pliers. Close hinged top cover until latched. Remove the excess gel around the connector with dry cloth.

5. **Test** the Brake light operation. The light should flash for a few seconds.
6. Peel off the green plastic from the back of the unit, and mount it such a way that you can reach the top side of the box with your fingers. Secure the wires with the cable ties supplied.

4. Operation

The unit is fully functional after installation. If you wish, you can change the flashing mode easily with a few taps on the module.

Here's the list of available modes:

Mode #	Frequency [Hz]	Duration (s)	Total flashes
0 (bypass mode)	0	-	0
1	1.5	2	3
2	1.5	5	8
3	3	2	6
4	5	5	15
5	6	2	12
6	6	5	30
7	9	2	18
8	9	5	45
9	12	2	24
10	12	5	60
11 (deceleration warning signal)	sweeps from high to low frequency	3	8
12 (demo mode)	varies	endless loop	infinity

Notes:

- In bypass mode, the brake light works the same way as without the module installed. It can be activated with 3 taps.
- Modes 1 to 10 start with a 1 second pulse, which ensures the brake light reaches the maximum brightness within the shortest time. Then it flashes the light with 75% duty cycle (75% ON, 25% OFF) for best visibility (flashing light without loss of brightness).
- In modes 1 to 11, when the flashing cycle ends, the brake light remains ON as long as you apply the brake.
- Modes 7 to 10 are suited for LED lights only as bulbs can not follow the flashing speed of these modes.
- The setting is stored in flash memory, no need to re-program the device if you disconnected the battery.

To change the flashing mode:

- Have the ignition key in ON position, then **apply and hold the brake**, so the brake light turns ON and remains ON.
- **Wait until the flashing cycle ends** and the brake light remains steady. Do not release the brake at this point, hold until the end of the programming procedure.
- **Tap the Touch Sensor** with your finger **3 times** (*recommended rate: about one tap per second*). Now, the brake light turns off momentarily, then turns ON steady, indicating that mode "0" is active now. If you wish to leave the module in bypass mode, release the brake and the setting is stored.
- **Tap** the Touch Sensor **multiple times, depending on the mode you wish to select**. E.g. tapping the sensor 3 times (*about once a second*) will select mode "3". After each tap, the brake light will show the currently selected light pattern, so you can preview each mode before selecting the one you need and leaving the programming mode.
- **Release the brake** and the setting is stored.

5. Warranty

The BLP module is built to last with HealTech's industry leading build quality: all leads are protected against short circuits and high energy transients. Only high quality components have been used, and the epoxy layer construction gives extreme protection for the internal parts from shocks, vibrations and water.

To ensure trouble-free operation from the start, all units have been extensively tested prior to shipment. For this reason, please make sure you followed the install steps properly and check the connections before you report a problem.

Our dealers are offering a 30-day money-back guarantee on HealTech products if the product does not fulfill your expectations. (*All parts must be returned in original condition for full refund.*)

Furthermore the product is covered by our 2-year replacement warranty from the date of purchase.

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