

Brake Lite

P.O.Box 2310

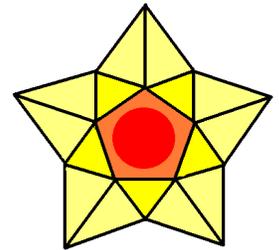
Reno,NV 89505

Phone: (775)825-7149

Fax: (413)375-9634

e-mail: k1arya@netzero.net

web page: <http://www.BrakeLite.com>

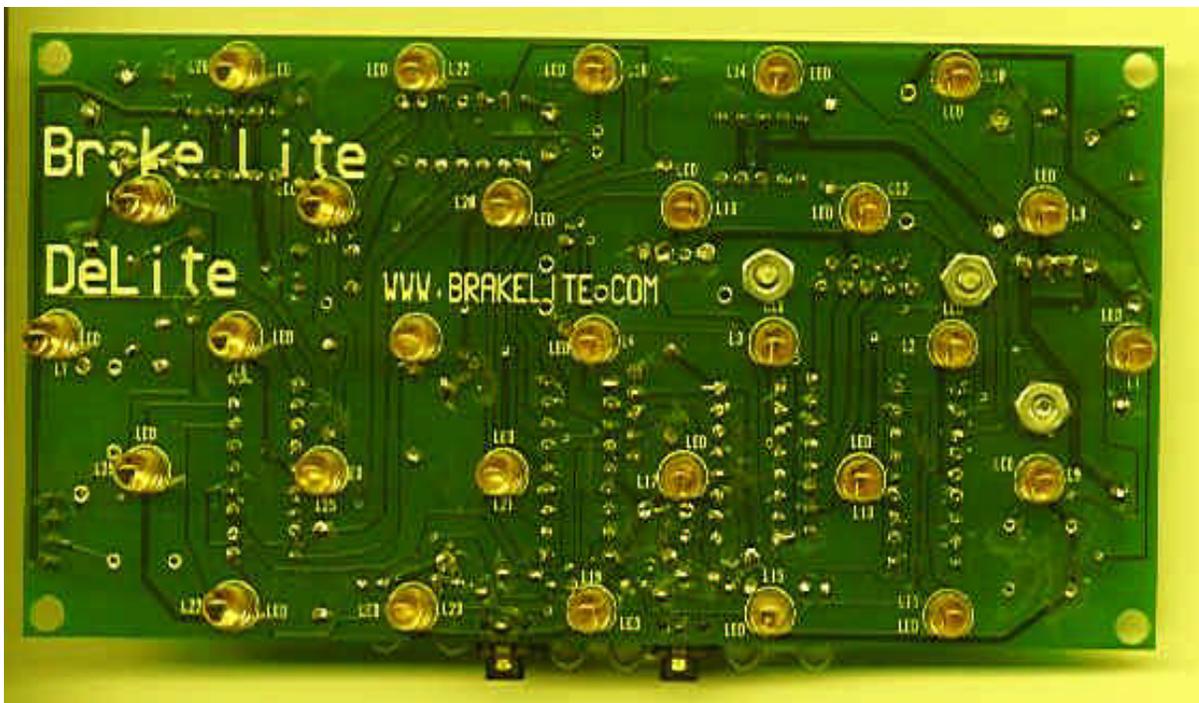


E Lite Price/Specification sheet : 9/5/03

29 LED multifunction lights

29 high intensity red LED's, power indicator LED , brake/tail/signal light has 16 sets of direction indicators selectable at power up 3 selectable speeds, 116000 mcd's. Works with +5 to +13 volts(10 Watts). Has 4 active high optically isolated inputs; brake, tail light, left & right. 9 pin D connector (DB09) for remote connections, pigtail 8" cable with 9 pin D connector , side 2.5 mm jacks, beeper and 2 Amp relays source for blinking left and right outputs that are synchronized with LED patterns rear side signals.

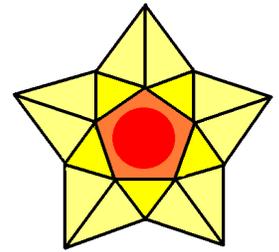
Warranty: Brake Lite products are warranted, to the original purchaser or gift recipient to be free from any manufacturing defects under normal use and conditions for One year. During that period, should the product fail to operate properly, return with your sales receipt to Brake Lite for Replacement. This warranty does not cover breakage caused by misuse, or damaged caused by not using the product according to instructions. Brake Lite assumes no liability whatsoever for any damage caused by a malfunctioning lights, the extent of this warranty is repair or replacement of the defective unit.



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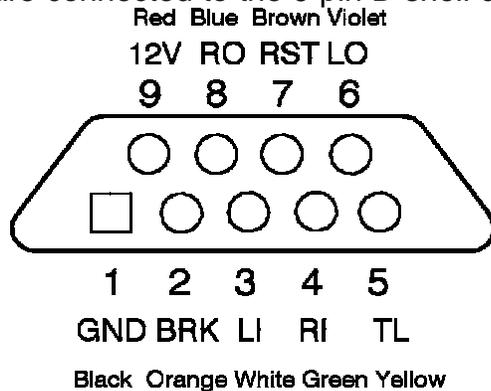
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E Lite wiring instructions and operation

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There are 4 inputs, **Brake (BRK)**, **Tail light (TL)**, **Right input (RI)** and **Left input (LI)**, 2 outputs **Right output (RO)** and **Left output (LO)** plus **Power(12V)** and **Ground (GND)** that are connected to the 9 pin D shell connector. This light can be wired in following ways:



The colors correspond to 8" wires of pigtail D connector

If you plan to connect the Left/Right inputs to your vehicle L/R, first verify compatibility by connecting 12V and TL to the vehicle 12V and the GND to the vehicle GND via jumpers, the light would be ON. Now connecting RI or LI to 12V would make the light signal. Next connect RI or LI to the plus side of the vehicle Right or Left lamp and set the vehicle L/R switch to R or L position, the light should signal just as when you connected the RI/LI to 12V. This is the case on most vehicles.

1.3 wires connection (stop light):

connect the GND to the vehicle ground or chassis, 12V to the vehicle battery and BRK to the vehicle brake signal. Use a separate L/R switch to activate turn arrows when the vehicle is parked.

2.4 wires connection:

connect the GND to the vehicle ground or chassis, 12V to the vehicle battery, BRK to the vehicle brake signal and TL to the vehicle Tail light. In addition to functioning as brake light when the vehicle tail light is on this light also turns on with low intensity.

3.6 wires connection:

connect the GND to the vehicle ground or chassis, 12V to the vehicle battery, BRK to the vehicle brake signal, TL to the vehicle Tail light and RI and LI to the vehicle's rear right and left signal lights. In addition to functioning as brake light when the vehicle tail light is on this light also turns on with low intensity and after the tail light is turned on upon activating RI or LI the light displays right or left turn signal.

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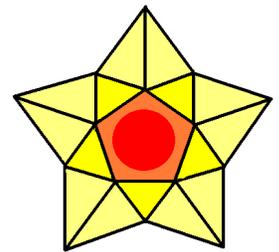
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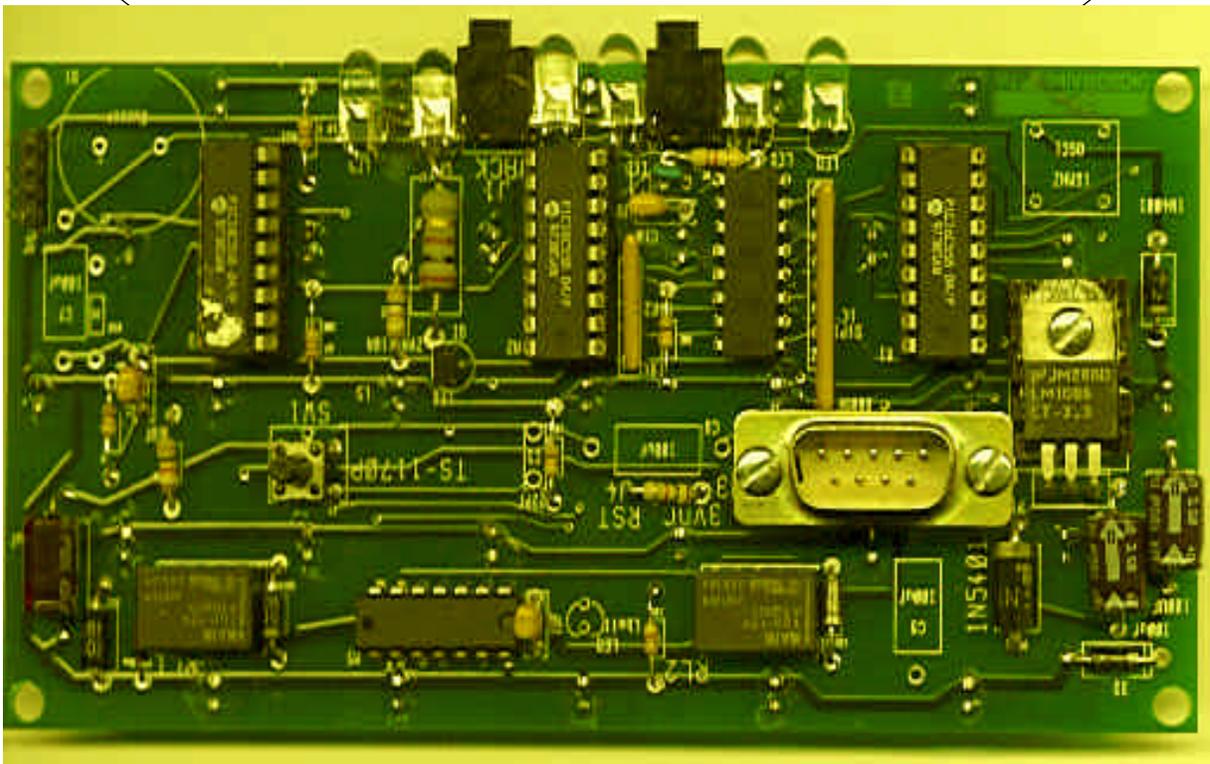
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4.8 wires connection for motorcycles only:

connect the GND to the vehicle ground or chassis,12V to the vehicle battery, BRK to the vehicle brake signal, TL to the vehicle hot on run 12V(switched 12V), RI and LI to the vehicle's rear right and left signals and disconnect them from lamps then connect the rear vehicle right and left lamps to RO and LO. In addition to functioning as brake light when the vehicle is turned on this light also turns on with low intensity (tail light is always on when the motorcycle is running). Upon activating RI or LI the light displays right or left turn signal. The rear vehicle's turn signal lamps would turn on and off synchronized with the LED's right or left turn signal arrows.

After connecting the 12V and GND lines to the vehicle press the reset pushbutton switch once.The light also would function if it's 12V line is connected to the vehicle hot on run (switched 12V) but then the turn arrow modes would not be preserved so in order to fully utilize the 16 modes connect it's 12V line to battery (always hot).Also note that the turn signals only would work after the tail light is turned on, if you need to activate turn signals when the tail light is off, order it with version 2 so



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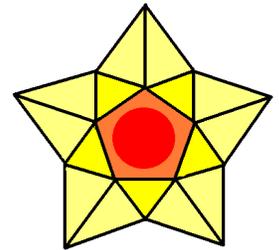
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Modes:

To turn the light On press the Off-On-Blink button , the light would turn on after 4 seconds. To turn off press again next time you press the light would blink, next it turns off and so on.

There are 16 turn signal modes, the shape and animation of the LED turn arrows differ in each mode, the selected mode would be preserved when the vehicle is not used until it is changed. Upon pushing the reset button (not available on ML-129) the default mode 0 is selected.

To advance the mode press the brake once during first 4 seconds after the light is turned on , if the brake is not pressed the previously selected mode would still be active, so in order to select mode 4 you need to turn the tail light on 4 times and each time pressing the brake during the first 4 seconds.

To return to any given mode you need to do the above 16 times. Also note that there are only 8 pattern shapes and each odd and even mode only differ in animation timing.

Variable speed:

The position of vehicle's L/R switch at turning the light on determines the speed of animation for Normal leave this switch at center, for fast at Right and for slow at Left.

Attachments:

- | | |
|---|-----|
| S1. Bicycle brake sensor with cable and 2,5 mm plug | \$5 |
| S2. External L/R switch with 2.5mm plug and with or without handlebar mounting case | \$3 |

Options:

- | | |
|--|------|
| BP. Beeper for bicycle lights | \$3 |
| R. Relays and 9 pin D wrap connector for motorcycles | \$10 |

Part numbers:

- | | |
|---------------|------------------------------------|
| ML-229 | 29 LED lights with DB09 connection |
| ML-129 | 29 LED bicycle lights |

Custom Hardware:

Resized PCB and 10 Amps relays are available for 100+ quantities,10000 mcd LED's are available at a cost.

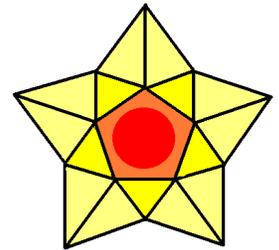
Custom software:

The software could be modified for your application. for such modifications contact: k1arya@netzero.net .Additional released versions are \$5 each (module M2, PIC16C558) version 3 flashes 5 seconds upon braking before turning brake light on and is useful on bicycles.

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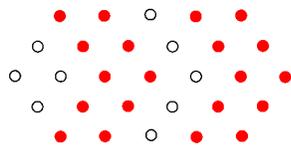


The external reset pushbutton:

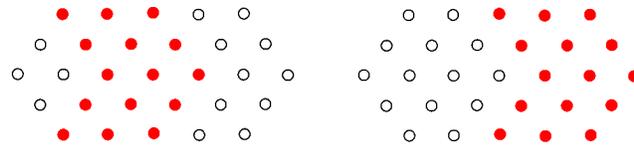
If supplied with the pigtail D connector mount on enclosure panel (grounded sheet metal).
mount the external pushbutton as you may need to reset after reconnecting vehicle battery
It also rest the light to Mode 0.

16 modes patterns:

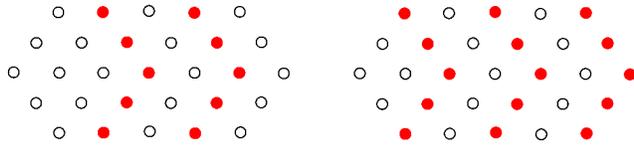
Modes 1 and 2



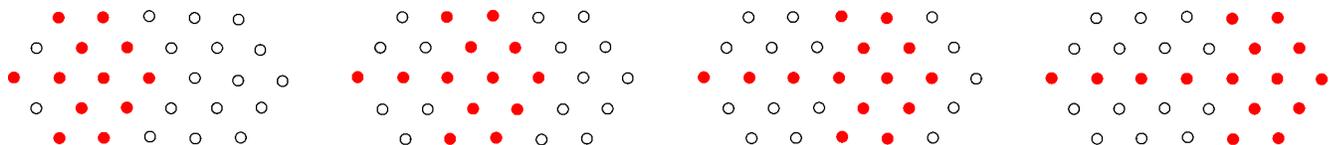
Modes 3 and 4



Modes 5 and 6



Modes 7 and 8



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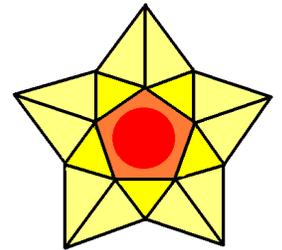
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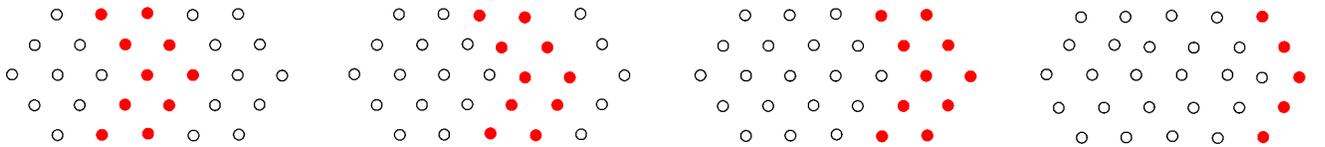
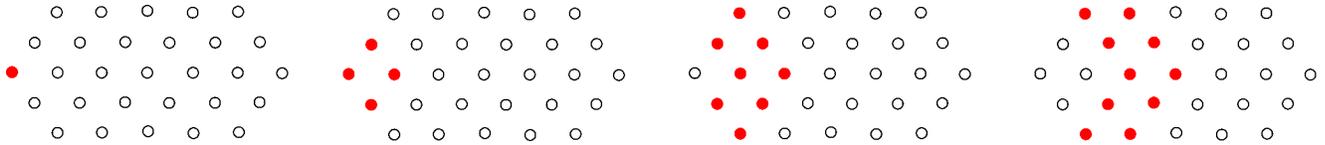
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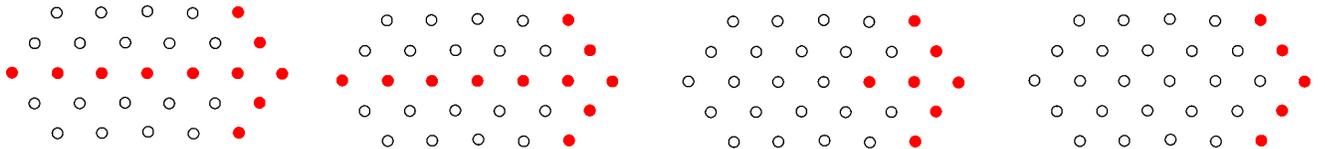
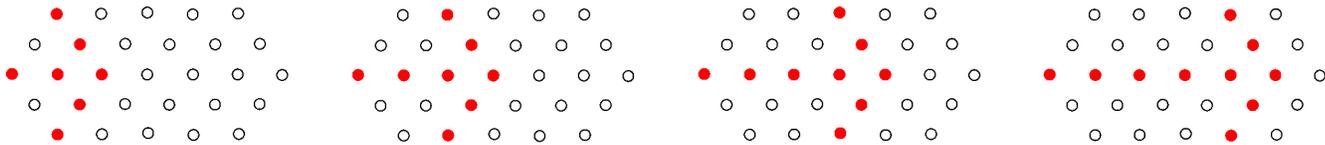
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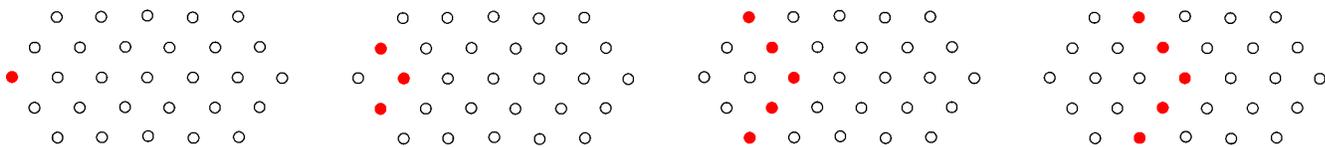
Modes 9 and 10



Modes 11 and 12



Modes 15 and 16



Modes 15 and 16

