Larson Electronics LLC WWW.LARSONELECTRONICS.COM
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LEDB-2

INSTALLATION AND MOUNTING

Magnetic Mounting:

WARNING: As with any magnetically mounted warning device, its use on the exterior of a moving vehicle is at the sole discretion and responsibility of the user.

This magnetic mount provides a secure, temporary installation in most circumstances and is recommended for stationary use only.

The magnetic based beacon provides a secure, temporary installation. The beacon should be placed in the center of the roof where the least amount of curvature occurs. Check the magnet for debris before installation. Any foreign matter can reduce holding power and scratch the vehicle. The roof surface should be dry and have a dull, not glossy finish. A glossy, highly waxed surface will reduce the magnet's holding power. When placed, the beacon should adhere firmly. The user should not attempt to drive with the beacon in place should the unit slide or move easily.

Permanent Mounting:

The permanent mount beacon provides a secure, permanent installation. Use the supplied foam gasket and screws to mount the beacon in the desired location. Wire routing should be taken into consideration when choosing a mounting location.

Pipe Mounting (optional):

The beacon base will accept a standard 1" NPT pipe. Hand tighten the beacon base on the pipe thread until the pipe bottoms out inside the unit. **DO NOT** over tighten- Base is plastic.

WIRING INSTRUCTIONS

Magnetic Mounting:

The magnetic mount beacon is equipped with a light plug rocker switch, that plugs into a 12 Volt DC cigarette lighter outlet; rotate and push with reasonable moderate force to insure the best possible connection.

Permanent Mounting:

The beacon is terminated with a 6" long 4-wire cable harness that may be connected as follows:

Color	Function	Connect To
Red	Power	+VDC
Black	Ground	Chassis Ground
Blue	Pattern Switching	Chassis Ground to Activate
Yellow	Synchronization	See Synchronization Section

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OPERATION:

Synchronization (Permanent Mount Only):

To sync two beacons, configure both lights to display the same Phase 1 pattern. With the power off, connect the YELLOW wires from each light together. When the lights are activated, their patterns will be synchronized. To configure the two lightheads to alternate their patterns, advance the pattern of either beacon to the Phase 2 mode of the current pattern. A maximum of 8 lights may be synchronized.

Setting the Flash Pattern (Magnetic Base):

Depress the rocker switch on the lighter plug:

- Less than 1 second for the NEXT pattern
- 1 to 3 seconds for the PREVIOUS pattern
- 3 to 5 seconds for the DEFAULT pattern
- Greater than 5 seconds to TURN OFF the beacon

Setting the Flash Pattern (Permanent Base):

Connect Blue wire to the Black wire (chassis ground):

- Less than 1 second for the NEXT pattern
- 1 to 3 seconds for the PREVIOUS pattern
- 3 to 5 seconds for the DEFAULT pattern
- Greater than 5 seconds to TURN OFF the beacon

MAINTENANCE

The beacons are completely sealed units designed to be maintenance free. Refer to the guide below for help with troubleshooting. Should the unit be diagnosed as malfunctioning, remove unit and replace with a new module.

TROUBLESHOOTING		
Problem	**Probable Cause**	**Remedy**
Lighthead does not activate	a. No power to unit	a. Check wire for loose connection
	b. Power input wire reversed	b. Reverse power wires
	c. Damaged or shortaged cabling	c. Check cables for damage
	d. Defective lighthead	d. Replace lighthead module
Lighthead is constantly ON	a. Control wire permanently grounded or shorted to GND	a. Avoid permanent grounding of control wire

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FLASH PATTERNS

PATTERN NO.	PATTERNS	SYNCHRONIZE
1	75 FPM Triple Alter Phase 1	YES
2	75 FPM Triple Alter Phase 2	YES
3	75 FPM Quad Flash Phase 1	YES
4	75 FPM Quad Flash Phase 2	YES
5	Double Flash 75 FPM Phase 1 CAT 13	YES
6	Double Flash 75 FPM Phase 2 CAT 13	YES
7	Double Flash 150 FPM Phase 1	YES
8	Double Flash 150 FPM Phase 2	YES
9	Singe Flash 75 FPM Phase 1 CAT 13	YES
10	Single Flash 75 FPM Phase 2 CAT 13	YES
11	Single Flash 150 FPM Phase 1	YES
12	Single Flash 150 FPM Phase 2	YES
13	Single Flash 375 FPM Phase 1	YES
14	Single Flash 375 FPM Phase 2	YES
15	Triple Alter D 75 FPM	YES
16	Quad Flash D 150 FPM	YES
17	Double Flash D 150 FPM	YES
18	Double Flash D 75 FPM	YES
19	Single Flash D 375 FPM	YES
20	Single Flash D 150 FPM	YES
21	Single Flash D 75 FPM	YES
22	Dynamic Flash Phase 1	YES
23	Dynamic Flash Phase 2	YES
24	Modulation Action Flash Phase 1	NO
25	Modulation Action Flash Phase 2	NO
26	Rotator 50 FPM	YES
27	Rotator 75 FPM	YES
28	Rotator 125 FPM	YES
29	Rotator 250 FPM	YES

30	NFPA Quad Flash	NO
31	Single Flash 75 FPM CAT 13	NO
32	Double Flash 75 FPM CAT 13	NO
33	ECE 65 Double Flash Phase 1	YES
34	ECE 65 Double Flash Phase 2	YES
35	ECE 65 120 FPM Single Flash Phase 1	YES
36	ECE 65 125 FPM Single Flash Phase 2	YES
37	ECE 65 125 FPM Rotator Flash	YES
38	Steady Burn	NO
39	Autorun (random)	NO
40	OFF	