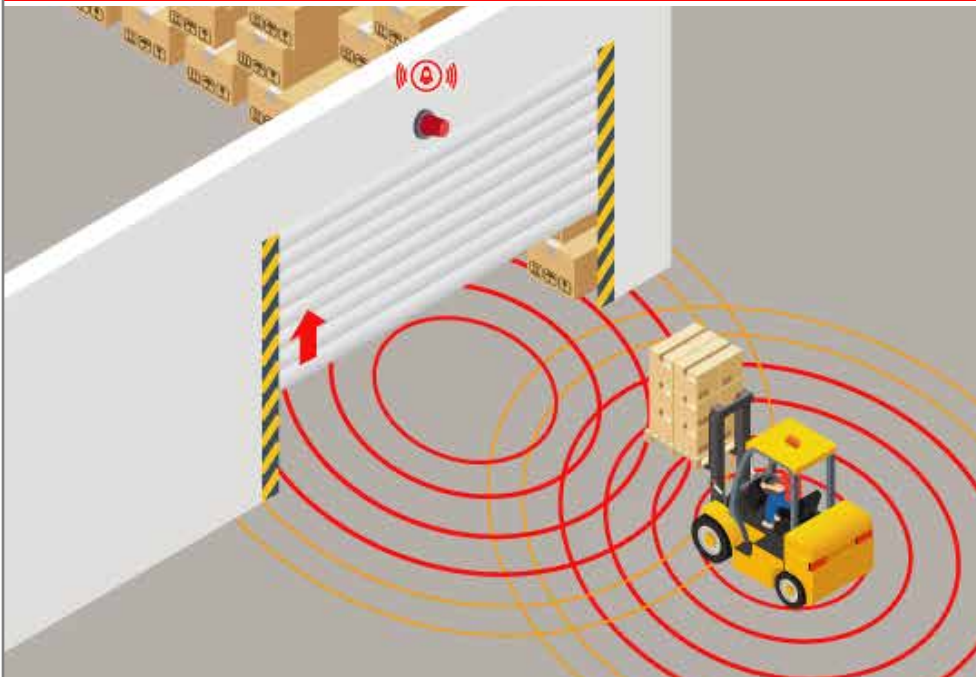




Instruction Manual

Laserglow Technologies Smart Proximity Detection System (SPDS) User Manual – Flashing Vehicle Beacon



Introduction

Thank you for purchasing Laserglow's SPDS product.

This product is a safety-assisting device to give warning signals by detecting the proximity of vehicles and pedestrians at industrial work sites. Laserglow will not be held responsible for any personal injury or property damage caused by improper use. Before using this product, please read this manual carefully.

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What Is SPDS FVB?

Laserglow's Smart Proximity Detection System (SPDS) Flashing Vehicle Beacon (FVB) is a safety-assisting device which helps to prevent collisions between pedestrians and vehicles in difficult situations such as blind corners and entryways.

Using the adjustable distance settings on the device, the Flashing Vehicle Beacon detects nearby vehicle tags and emits an audible and visible alert to pedestrians and vehicle drivers.

SPDS can be used with all industrial vehicles (excavators, forklifts, loaders, tractors, etc.).



Safety Information

Caution! Failure to observe the precautions in this manual may result in damage to property or serious personal injury.



This product requires 12 V or 24 V DC power. An optional AC adapter is available for permanent installations. If being installed on a vehicle, it can be connected to the vehicle's 12V or 24V DC power system. For vehicles with 36 V or 48 V DC power, a DC-DC stepdown converter must be used.



Do not immerse the product in water or place under running water. Doing so will result in permanent damage not covered under warranty.

Do not store or use the products near flammable materials or other sources of heat such as smelting equipment, cooking appliances, or open flames.

If the product begins to produce smells, smoke, or make abnormal noises, disconnect power immediately and call Laserglow for assistance.

Do not touch the electrical connectors or wiring with wet hands, as this may cause electric shock or fire.

If the electrical connectors or wiring get wet, wipe with a dry towel. Leaving water or other liquids on these components may result in electric shock or fire.

Do not place heavy objects on the products or on electric wiring as this may cause damage that could result in electric shock or fire.

Do not disassemble or modify the products. There are no user-serviceable parts inside. Disassembling the products may result in damage or electric shock, and products damaged from disassembly will not be covered by warranty.

Any accidents caused by failure to observe the safety information are the responsibility of the user.

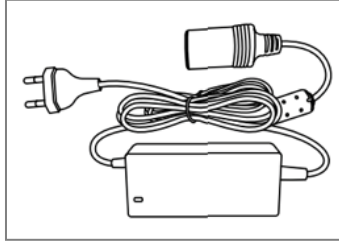
Component Names

COMPONENTS:

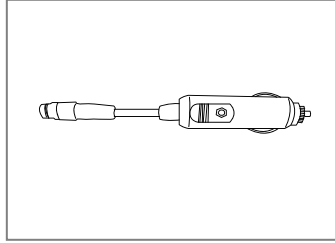
Flashing Vehicle Beacon (FVB)



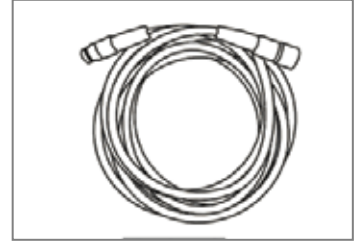
AC Power Adapter



Cigarette Lighter Adapter

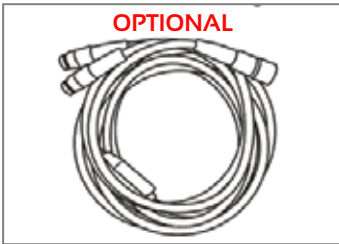


Extension Cable




Cable Harness (6m)

OPTIONAL



Specification

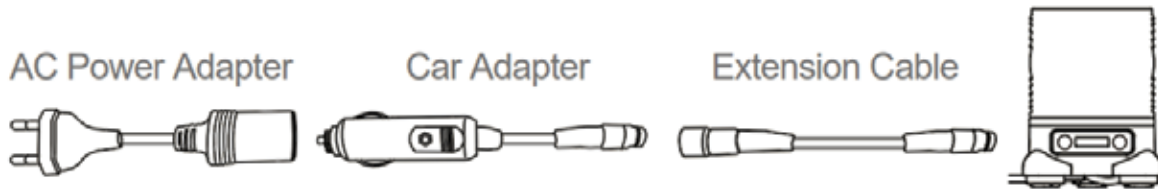
Specification	Flashing Vehicle Beacon
Product Image	
Input Voltage	12/24 V DC (9-32 V DC)
Current Draw	500 mA
Interface	CAN Bus 2.0
Alert Method	Flashing LED beacon + audible alarm
Sound Level @ Distance	88 dB @ 1 meter
Size	123 x 141 x 112 mm
Weight	484 g
Mounting Style	Magnetic
Operating Temperature	-30 to 85 °C
Storage Temperature	-40 to 85 °C
Waterproofing	IP65
Available Colors	Red or Amber
Standard Warranty	12 months

Some features may change without notice.

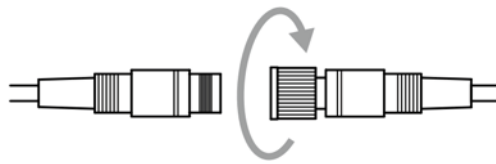
Installation

Caution! If the Flashing Vehicle Beacon (FVB) is to be installed onto a vehicle, it is recommended to do so while the vehicle power is off to avoid the possibility of electric shock.

When installing the Flashing Vehicle Beacon (FVB) into a stationary location, use the AC adapter with the car adapter. When installing onto a vehicle, use the car adapter or the open-wire adapter (sold separately).

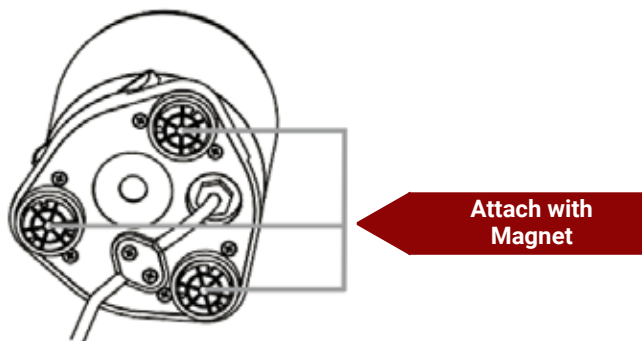


Fully tighten cable connections to ensure a good connection and water-tight seal.



Installation Tip: It is best to install the Flashing Vehicle Beacon (FVB) in a position where there is a 360° unobstructed view, or at least an unobstructed view of the directions from which vehicles will approach. Installing the Vehicle Tag in an area where line of sight is obstructed may reduce system detection range.

Laserglow's Smart Proximity Detection System (SPDS) is designed with the customer in mind for easy installation without the help of a professional installer. The powerful magnet on the bottom of the Flashing Vehicle Beacon (FVB) attaches easily and securely to vehicles and stationary structures made of steel or iron. A mounting bracket (sold separately) can be used to attach the unit to other surfaces using bolts or screws.



Flashing Vehicle Beacon Setting Adjustment

Pressing the button on the left side of the display will cycle through the settings that are adjustable. If no button is pressed for 3 seconds, the display will return to the default state.

Caution Distance Setting

This setting selects the distance at which Vehicle Tags are detected by the Flashing Vehicle Beacon (FVB). Press the right button to cycle through the available options: 5, 10, 15, 20, 25, and 30 meters.

Setting Tip: The Smart Proximity Detection System (SPDS) detects proximity every 0.5 seconds. Fast moving vehicles can cover large distances in 0.5 seconds – a vehicle moving at 30 km/h will move over 4 meters during that time. If the danger or caution distance is set to 5 meters, a collision could occur before the SPDS alert will sound. As a result, vehicle top speed must be considered when setting the proximity distances.

Buzzer Setting

This setting selects the sound of the audible alert that accompanies the flashing lights when the Flashing Vehicle Beacon detects a Vehicle Tag within range. Press the right button to cycle through the available options.

Buzzer Setting Options

Option	Sound
1	Continuous tone
2	Continuous beeping
3	Intermittent beeping
OFF	No audible alarm; flashing light only

Idle Time Setting

“Idle Time” is a setting that will deactivate the alarm after a set period of time if the detected Vehicle Tag(s) are not moving. Press the right button to cycle through the available options: OFF, 10, 20, 30, 40 or 50 seconds.

Example Use Case: A vehicle enters the detection area of the Flashing Vehicle Beacon (FVB), which in turn begins flashing and producing an audible alert. The driver then parks the vehicle and steps away for a few minutes. The FVB will continue to be in the alert state even though the moving vehicle hazard is no longer present; this is undesirable as it misrepresents the hazard level in the area and contributes to alarm fatigue. Setting the Idle Time of the FVB to 10 seconds will cause the alert to stop 10 seconds after the vehicle stops moving, so that vehicles can remain parked indefinitely within the detection radius without causing a constant alarm.

The alarm will resume once a stationary vehicle begins to move again or if a new moving vehicle enters the detection radius.

Default Settings

Caution Distance:	20 meters
Buzzer:	1
Idle Time:	OFF



Regulatory Information



Model No: SPDFVB

FCC ID: 2AWBN-SPDFVB

IC ID: 26108-SPDFVB

Manufacturer: Laserglow Technologies / CANADA

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: The following statement applies to all products that bear the FCC logo on the product label. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. See 47 CFR Sec. 15.105(b). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



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