OPERATION INSTRUCTION
LED Beacons

7103

Specifications

SAE J845

The 7103 LED beacon serie offers cost effective, reliable LED warning solutions that meet SAE Class I and Class II requirements. It features in Roman lens,10-30V multiple flash patterns and sync control.

The aluminum alloy base is coated against corrosion, electronics are encapsulated in epoxy for dust, moisture and vibration protection while the thread-on polycarbonate lens allows easy flash mode selection. This cost-effective beacon series with extended long lifespan can easily replace old rotating or strobe beacons .

Do not install and/or operate this safety product unless you have read and understand the safety information contained in this manual.

1 Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of you and those you are trying to protect.

2 Exercise caution when working with live electrical connections.

3 This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.

4 Proper placement and installation are vital to the performance of this warning device. Install this product so that output performance of the system is maximized and the controls are placed within convenient reach of the operator so thats/he can operate the system without losing eye contact with the roadway.

5 It is the responsibility of the vehicle operator to ensure during use that all features of this product work correctly. In use, the vehicle operator should ensure the projection of the warning signal is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles, or other obstructions.

Product Specification

Model	SM7103-165	SM7103-130
LED Color	Amber / Blue / Red / White	
Input Voltage	12V / 24V	12V / 24V
Input Current	2.5A / 1.25A	1.5A / 0.75A
Max Power	30W	18W
Flash Pattern	10	
Size(A*B)	165x78	130x86

A
Φ5mm
Φ8mm
B
Unit:mm

Flash Patterns

Description	FPM	
	SM7103-165	SM7103-130
Single	150	150
Rotating - Anticlockwise,Fast	75	125
Rotating - Clockwise, Fast	75	125
Rotating - Anticlockwise,Slow	32	62
Rotating - Clockwise,Slow	32	62
Double	75	75
Quad	62	62
Mega	50	50
Combination 1		
Combination 2		

Permanent Mount: CAUTION! Permanent mounting of this product will require drilling. It is absolutely necessary to make sure that no other vehicle components could be damaged by this process. Check both sides of the mounting surface before starting. If damage is likely, select a different mounting location.

1. Use the base as a template and mark the three or two mounting holes off onto the mounting surface. Remove base. In the center between the mounting holes, mark the location of the wire access hole.

2. Drill mounting holes about 3.5mm into the mounting surface with a drill bit. Drill the wire access hole using a drill bit. Remove any burrs from the wire access hole.

3. The base seal goes between the beacon base and the mounting surface.

4. Feed the wires first through the base seal and then through the cable access hole. Place the base(with seal) on the mounting surface and align the beacon mounting holes with the mounting holes drilled in step 2. Secure the beacon firmly to the mounting surface using the supplied mounting screws.


ST4.2 X 25mm
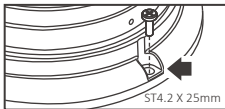
Magnetic and suction Mount: Wipe the suction cup clean and place the beacon onto a flat, metal surface and apply gentle pressure to ensure a good seal has been achieved. Plug it into the vehicle cigar lighter.

Pipe Mount:

One INCH (NPT) PIPE MOUNT:

Threading for a 1 inch (NPT) pipe mounting is precast in the base.

1. Feed power cable through the 1 inch pipe and connect the cable to the wires of the beacon.

2. Screw the beacon into the threads on the 1" pipe, taking precaution not to damage the connected power wires. Do not tighten base too hard as not to damage threads on base.
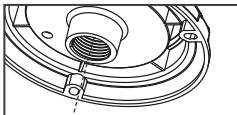

Wiring Instructions

IMPORTANT WARNING! Do not look directly at these LEDs while they are on. Momentary blindness and/or eye damage could result!

Sync-

To sync multi-beacons,configure beacons to display the same phase pattern.With the power off, connect the Yellow wires from each one together. When they are activated, their patterns will be synchronized. To configure their patterns, connect one of the Yellow wire to Red wire/+VBAT.(Not available on cigar plug models)

Flash Pattern Selection:

Flash patterns can be selected by touching the Yellow wire to the Red power wire for less than a second.

Color	Function	Connect to
RED	Power	+VBAT
BLK	Ground	Chassis Ground
YEW	Sync	See text
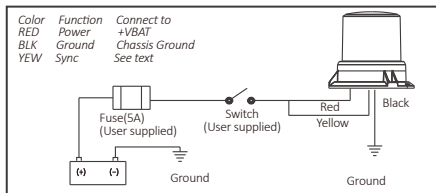
Cigar cord adaptor operaion:

Note

The cigar cord adaptor is equipped with an 8 Amp fuse.

Use a replacement fuse with an identical value.

Switch Functions:

SW1 = ON/OFF

SW2 = Select flash pattern

Maintenance & Troubleshooting

Maintenance:

This LED beacon has been designed for trouble free operation.
There are no periodic maintenance needs for this model.

Troubleshooting:

Most beacon failures, including intermittent or erratic operation as well as failure of operation can be traced to wiring or battery problems. Check all wiring, connections, fuse, switch, and battery