Signal Light bar





Product information

The Signal Light bar provides visual and audible indication of a machine's status, notifying the machine operator.

Safety information

Instructions are given by stages for all actions required and are intended to be used by qualified personnel and electrical specialists.



DANGER! **RISK OF INJURY DUE TO ELECTRICAL CURRENT**

- Work on electrical instalations must be performed by qualified electricians.
- The power supply must be disconnected when attaching and detaching electrical connections.

WARNING! **RISK OF INJURY DUE TO SOUND PRESSURE**

- Wear hearing protection when the noise level is above L_{EX 8h}=80 dB(A) (EU regulation) to reduce noise exposure level and the risk of hearing loss.
- Current national regulations regarding hearing protection must be observed.

UL/CSA applications:

If the product is being used in accordance with UL 60947-5-1 or CSA 22.2 No. 60947-5-1, the following condition must also be met:

> Use a fuse rated max 2.5 A, min 30 V DC to UL 248 to protect the 24 V power supply to the device.

Product description

The Signal Light bar can generate sound levels of 75 dB(A), 85 dB(A) and 98 dB(A) at a distance of 1 meter. The sound level adjustment is in sequential manner.

Signal light bar control elements:

Volume button

The Signal Light bar features a sound level adjustment in sequential manner. The default sound level is set to 75 dB (at 1 meter distance) during initial power cycle. Once the volume button is pressed, the buzzer will produce sound feedback for approximately 1 second (indicating the selected sound level).



During operational state acoustic signal ON, will not provide the feedback.

Brightness adjustment button

Two brightness levels are avalaible to be selected:

High

Low

The default is set to the highest brightness level. Once the brightness button is pressed, all the light indicators will be turned-on for approximately 1 second (indicating the selected brightness level).

The optical indication cannot be turned off. The difference between the Lowest and Highest levels of brightness is approximately 55%.



We highly recommend not to exceed the IP class, as well as the temperature range.

Type label and accessories



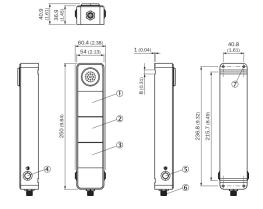
- ① Type code
- Serial number

Accessory	Options	
	2095652 (2m)	
Cable accessories	2095653 (5m)	
	2095654 (10m)	

You may order the self-locking stainless-steel band, with manufacturing part of MLTFC6S-CP316 at:

Panduit.com

Dimensional drawings Dimensions in mm (inch)



① Red LED segment (visual signal display) 2 Yellow LED segment Green LED segment Function button for volume control Function button for light intensity levels "Power & I/O signal " connection 8-pin 12M male connector 4X mounting holes, M5

LED optical indicators (when used with Backup Assistance System 2.0)

Green

- Vehicle Reverse Signal engaged
- Yellow
 - Object detected in monitored area 1 (Warning zone)

Red - Object detected in monitored area 2 (Stop zone)

Mounting

Primary mounting option

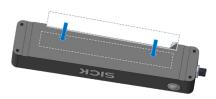
There are four M5 holes on the back side of the bar for the primary mounting option. Tightening torque should be selected based on the screws used. The body of the bar is aluminum



Secondary mounting options (no drilling required)

VHB adhesive

 Clean and dry the surface found behind the Signal Light bar module before placing the provided industrial VHB tape. Position and adhere the first side of the adhesive VHB tape on the metal mounting surface.



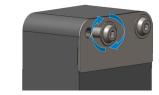
Peel-off the second side of the VHB adhesive tape and firmly affix it to the desired mounting area.



Self-locking band (Metal strap)

Position the metal band holder behind the device and secure the provided 4x M5 screws with a 3mm hex wrench in a clockwise motion. The recommended applied tightening torque is 3.5 Nm.





Place the rubber pad to protect the mounting surface. Insert the provided self-locking band through the metal strap holder and secure the strap with sufficient force (at least 100N, but no more than 450N). The length of the self-locking band (2 x 520 mm) can be shortened by cutting off the excess end.



Electrical Installation/connection

- The Signal Light bar should be installed in an upright position, e.g., Buzzer on top; connector at the bottom.
- It should be positioned where it can be directly heard and seen by the operator. It should be placed where possible damage is minimized.
- Connect the I/O cable into the connector.

Pin assignments



8-pin M12 male connector

Pin	Connector
1	Buzzer
2	Not connected
3	Green light
4	GND
5	+24 V DC, Power
6	Yellow light
7	Not connected
8	Red light

Service and Maintenance

The Signal Light bar contains no user serviceable parts. Faulty Signal Light bar shall be replaced.

- ► The Signal Light bar should be regularly checked for its functionality.
- Check screw connections and connectors at regular intervals.
- Clean the device with a soft cloth (non-abrasive), dry or dampened with a mild water diluted agent without powder additives.

Technical data	SL324-1	120 (IEC	60947-5-1)	
Supply voltage	24 V DC, ± 10 %			
Recommended overcurrent protection of the supply voltage source	Fuse max. 2.5A, min. 30VDC, characteristic T			
Power consumption idle	Typ. 0.5 W (at Ue=24V DC)			
Power consumption max	Typ. 4 W (at Ue=24V DC)			
Power consumption (Buzzer)*	Typ. 0.7 W (at Ue=24V DC)			
Power consumption (LED section)**	Typ. 1.5 W (at Ue=24V DC)			
Optical indicators	3 x 9 LEDs indicators: Green - 525 nm Yellow - 590 nm Red - 633 nm			
Acoustic indicators	Buzzer (75, 85, 98 dB, OFF, at 1m distance), 3.5kHz (±15%)			
Control elements	2 buttons (Volume & Brightness adjustments)			
Enclosure rating	IP 65/67 (IEC 60529:1989+AMD1:1999+AMD2:2013)			
Protection class	III (EN 61140:2016-1)			
Pollution degree	3 (environment of the equipment), 2 (internal parts, not accessible by user)			
Connection	M12, 8PIN (A-coded, male)			
Digital input, acoustic & optical indication	Low: UIN < 1.5V; High: 13V < UIN < 27.6V (internal pull-down resistor, IHigh=0.5+3mA)			
Housing material	Aluminum (Black anodized) PC (Polycarbonate) Zinc (Nickel plated)			
Window material				
Connector material				
Weight	545 g	555 g + VHB	595 g + mounting kit and strap	
Dimensions (W x H x L)	40.5 mm x 250 mm x 54 mm			
Electromagnetic compatibility (EMC)	Emission: EN 61000-6-3:2017+AMD:A1:2011 (residential area); EN 12895:2015+A1:2019 (industrial trucks) Immunity: EN IEC 61000-6-2:2019 (industrial environment); EN 12895:2015+A1:2019 (industrial trucks) IEC 60068-2-27:2008 (50g, 11ms, ±3 single shocks/axis; 25g, 6ms, ±1000 continuous shocks/axis; 50g, 3ms, ±5000 continuous shock/axis)			
Shock resistance***				
Vibration resistance***	IEC 60068-2-6:2007 (sine resonance scan 10+1000Hz, 1g; sine test 10+500Hz, 5g, 10 frequency cycles) IEC 60068-2-64:2008 (noise test 10+250Hz, 4.42g RMS, 5h)			
Ambient operating temperature****	-20 °C +50 °C			
Storage temperature****	-20 °C +55 °C			
Maximum altitude	5100 m			
Tensile strength (Metal band)	Max. 450N			
Adhesion strength (VHB tape)	480KPa			
# 6:2!!: Sht b				

- Signal Light bar power consumption with Buzzer ON set to maximum volume. LED sections are OFF.
 Signal Light bar power consumption when one LED section is ON and set to maximum brightness. Buzzer is OFF.
- For primary mounting option.

Made in SICK VSE s.r.o. Ukrajinská 2a, 10100

www.sick.com

Prague 10, Czech Republic

Permissible relative air humidity: 0 % ... 90 % (non-condensing).



More information can be found at

Signal Light bar detailed product data sheet