Modul-Connect Light Bar
Owner's Manual

19796-04

608 mm / 10 modules

19791-04

1137 mm / 18 modules

19792-04

1269 mm / 20 modules

19793-04

1401 mm / 22 modules

For safe and optimum performance, the **Light Bar** must be used properly. Carefully read and follow all instructions and guidelines in this manual and give special attention to the **CAUTION** and **WARNING** statements.

PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE

Disclaimer
While every precaution has been taken to ensure the accuracy of the contents of this guide, Modul-System assumes no responsibility for errors or omissions. Note as well that specifications and product functionality may change without notice.

Important
Please be sure to read and save the entire manual before using your Light Bar. Misuse may result in damage and/or cause harm or serious injury.

Product Numbers:

19796-04	**Light bar 608**
19791-04	**Light bar 1137**
19792-04	**Light bar 1269**
19793-04	**Light bar 1401**

Spare Parts:

19797-03	**Side cover, light bar**
19799-04	**LED module, light bar**

Control:

24000-03	**Modul-Connect Main Box**
24000-032	**Modul-Connect Main Box PRO**

Switching Options:

24040-03	**Modul-Connect Display Switch Panel**
24035-03	**Modul-Connect Backlit Switch Panel**
24030-03	**Modul-Connect Remote Control**

Or

19795-03	**Light Bar Control Panel**

Document Part Number
MSMCLB 1.2.07

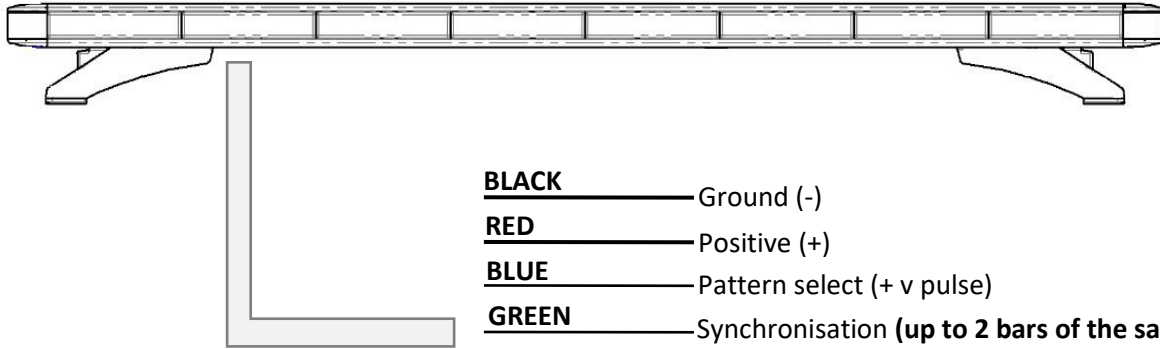**Service Contact Information**
E-mail: modul-connect@modul-system.com
Phone: +46 31 746 87 00
Web: www.modul-system.com

1.   Product description

The Modul-Connect Light Bar includes the features listed below:

- Ultra slim design.
- Aluminium construction for durability.
- Possibility to synchronize 2 light bars (of the same specification).
- 15 flash patterns for warning light.
- Traffic advisor on the rear side.
- Zero (0) consumption on the Main +12v Power cable when Off.
- 7 meters of attached cable to facilitate installation.
- Ability to keep the selected Flash Pattern.
- Use of KST waterproof connectors to standardise the LED light heads.
- Temporary label for the fitting orientation, which is applied to the top of the Light Bar for ease of fitment to show direction of travel (i.e. traffic advisor at rear).
- Default supplied pattern (with no control input) is (No 8) ECE R65 Double flash R/L Alternate.

2.   Operation

BLACK ——— Ground (-)
RED ——— Positive (+)
BLUE ——— Pattern select (+ v pulse)
GREEN ——— Synchronisation **(up to 2 bars of the same spec)**
YELLOW ——— Traffic advisor (L to R)   YELLOW+ORANGE
ORANGE ——— Traffic advisor R to L)   **(Center out)**
WHITE ——— Dim mode (+ v)
BROWN ——— Steady Burn 'Cruse' mode (+ v)
PURPLE ——— Light Bar Activation (+ v**)**

OEM Cable	Colour	Function	Input	Volume	Light Head	ECU Amp Draw	Amp Draw	Amp Draw
						Peak		
						Red Cable		
Red		ECU	Positive	Constant		10.38 10.75		
Black		ECU	Chassis Ground					
Purple		On	Positive	Switched	Amber			
Blue		Pattern	Positive	Trigger				3Ma
Orange		R>L Traffic Advisor	Trigger			0,71		
Yellow		L>R Traffic Advisor			Amber		1,3	
Orange + Yellow		Go Around Traffic Advisor		Switched				
White		Dim			50% Amber			3Ma
Green		Sync	N/A					
Brown		Steady Burn	Positive Trigger		Dim Amber			3Ma

3.   Mounting

The light bar can be mounted using the supplied mounting 'feet', the mounting feet can be infinity adjusted width ways to align with an appropriate mounting position.
To aid fitting, a temporary label for the fitting orientation is supplied, this ensures that the traffic advisor function is to the rear of the vehicle.

- **Please remove this label after fitting and testing the light bar.**

The Light Bar also has 7 meters of multi core cable which makes installation easier when connecting to the Modul-Connect Main box.

Cable 7 meters

Temporary installation label

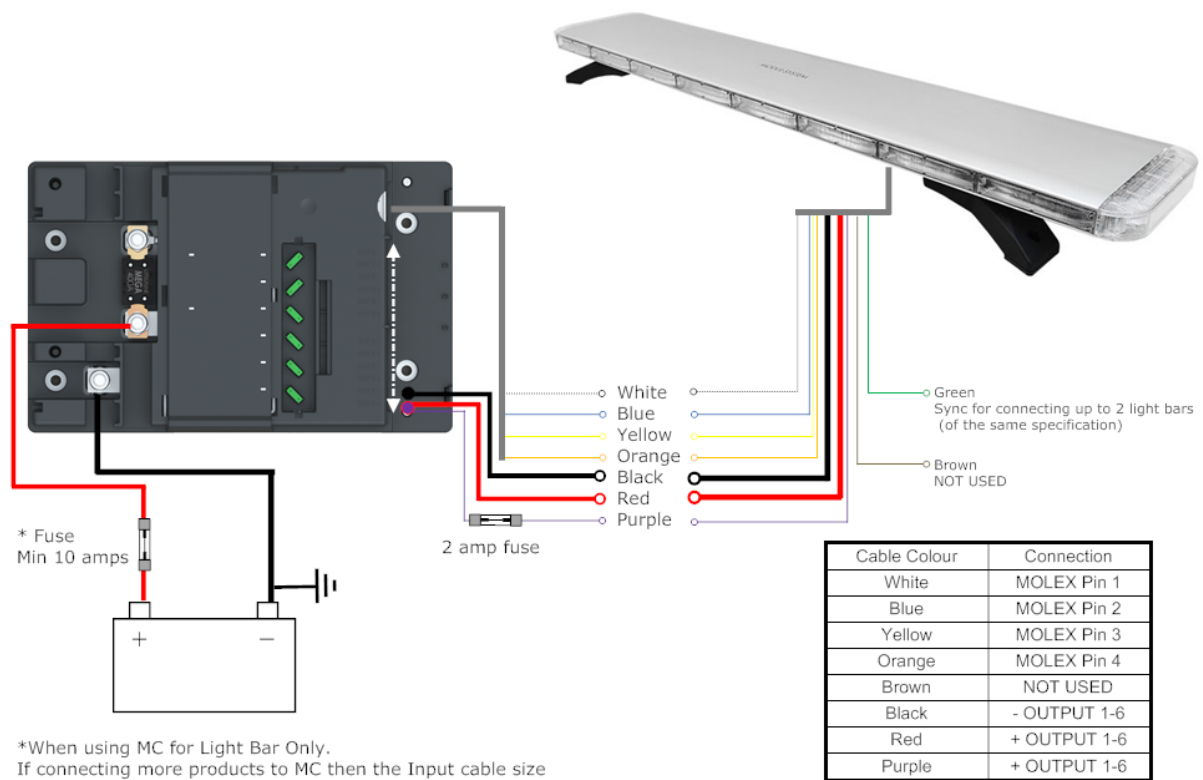|		
↑ Front Of Vehicle Direction of Travel	**Temporary Installation Label - Remove after installation**	Front Of Vehicle Direction of Travel ↑
Avant du véhicule Direction du voyage	**Étiquette d'installation temporaire - Retirez après l'installation**	Avant du véhicule Direction du voyage
Frame av fordonet Färdriktning	**Tillfällig installationsetikett - Ta bort efter installationen**	Frame av fordonet Färdriktning

4.   Basic Connection

- Connect the Black cable to -12v. (Chassis Earth)
- Connect the Red cable to a fused +12v positive.
- Connect the Purple (switching) cable to a fused +12v positive to turn on the Light Bar.
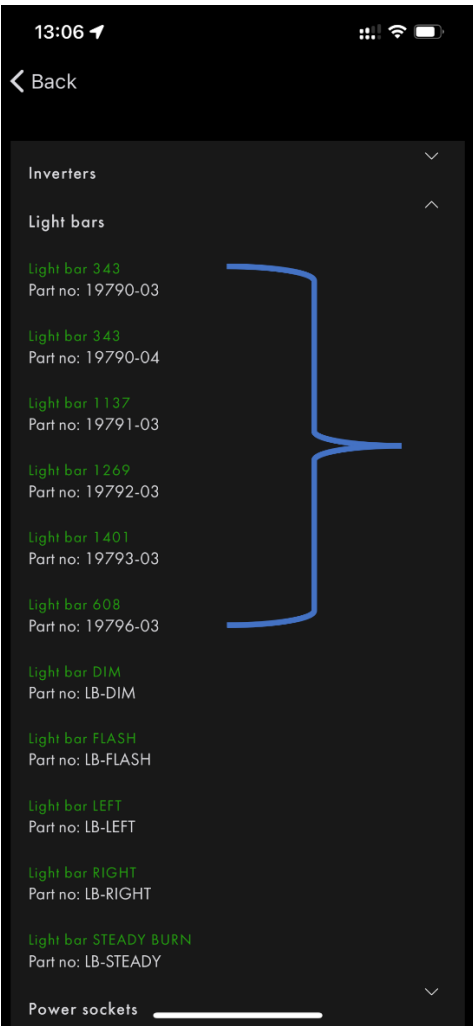
5.   Connection to Modul Connect

Light Bar has 7 meters of cable which will work better with our installations.

(A) For FULL Light bar functionality wire the Light bar as below:

* Fuse
Min 10 amps

2 amp fuse

White   Green
Blue   Sync for connecting up to 2 light bars (of the same specification)
Yellow
Orange   Brown
Black   NOT USED
Red
Purple

*When using MC for Light Bar Only.
If connecting more products to MC then the Input cable size and fuse must be calculated accordingly.

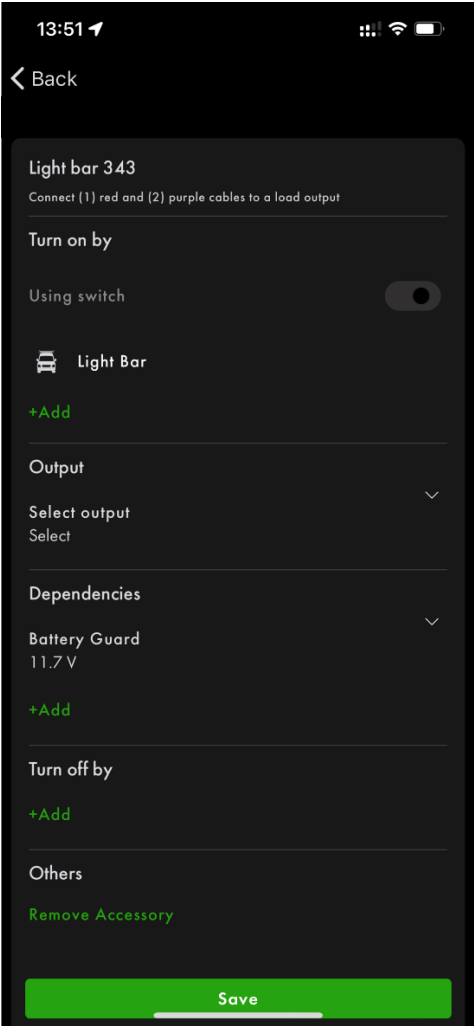| Cable Colour	Connection
White	MOLEX Pin 1
Blue	MOLEX Pin 2
Yellow	MOLEX Pin 3
Orange	MOLEX Pin 4
Brown	NOT USED
Black	- OUTPUT 1-6
Red	+ OUTPUT 1-6
Purple	+ OUTPUT 1-6

Configuration in Modul-Connect App

Click on 'Manage Vehicle' on the start screen and 'Add accessory'. Choose the relevant Light bar and configure the light bar.
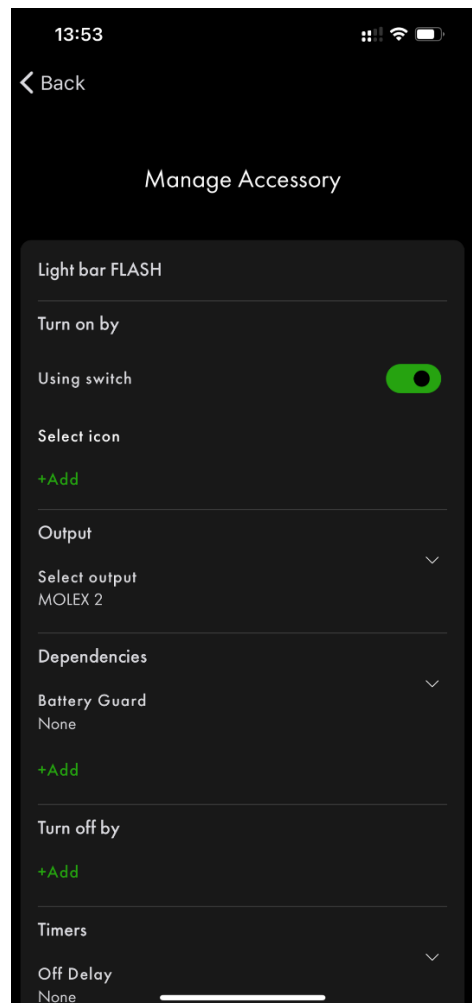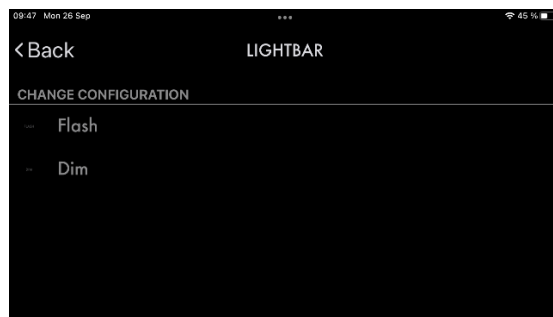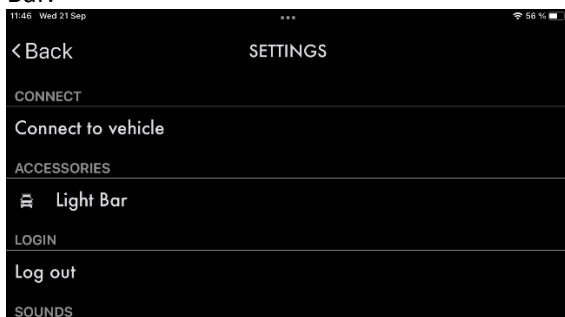

Choose which Light Bar to add

The additional functionality of the Light bar is set up separately as its own accessory.
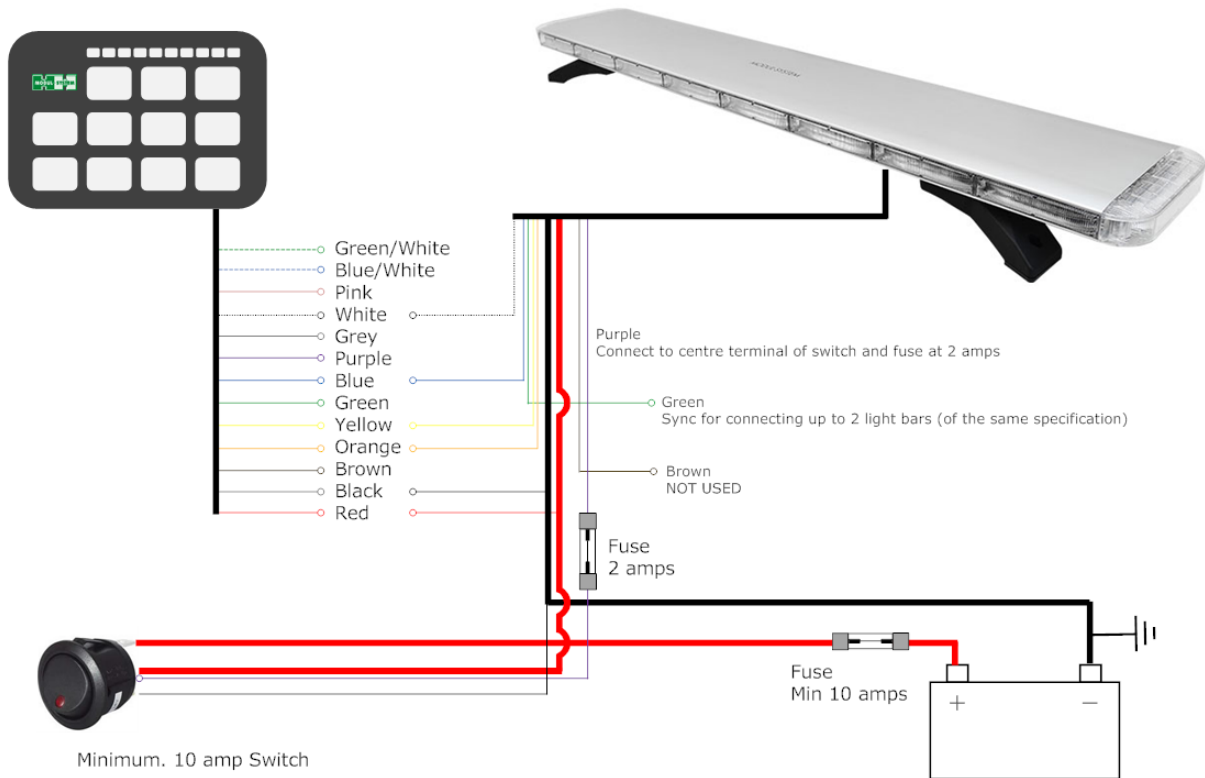

Choose which which functionality to add

The flash pattern, dimming, left/right traffic advisor is controlled via the setting menu, under Ligh Bar.

6.   Connection to Light Bar Control Panel

For connection to 19795-03 Light Bar Control Panel, refer to instruction supplied with that unit and the schematic below:

Sync
- For two Light bars on the same vehicle Use GREEN wire to connect to two lights bars (of the same specification)
  Connect the GREEN wires of both light bars together first before turning the power on.

Dim
- When switching the White cable to DIM the light bar it will reduce the brightness 50% from original.

7.   Flash Patterns

When the Light Bar is turned off the last Selected Flash Pattern will be kept.

No.	Pattern	Remark
1	STEADY BURN	
2	SINGLE, ALL-SIM + C/S-ALT	SAE
3	QUAD, ALL-SIM	SAE
4	SINGLE, ALL-SIM	
5	QUAD, R/L-ALT	SAE
6	SINGLE, R/L-ALT	ECE
7	QUAD, ALL-SIM	ECE
8	**DOUBLE, R/L-ALT ('New out of the box' Default)**	**ECE**
9	SINGLE, ALL-SIM + C/S-ALT	ECE
10	ROTATE, OPPOSITE	
11	SINGLE, R/L-ALT	
12	QUAD, C/S-ALT	SAE
13	Rotate Wave 120 RPM	
14	SINGLE+QUAD, R/L-ALT	
15	SINGLE+QUAD, ALL-SIM	

8.   Traffic Advisor Function

The Traffic Advisor Function only works on the rear side of the Light Bar.
Tap "YELLOW" wire to (+) VDC – Left to Right

Left --➤ Right

Left Arrow

Tap "ORANGE" wire to (+) VDC – Right to Left

Right ◄-- Left

Center out

Tap "YELLOW + ORANGE" wire to (+) VDC – Center out

Right ◄-------------------- Center --------------------➤ Left

9.   Specifications

Note: The specifications are subject to change without notices.

Part number Description	19796-04 Light bar 608	19791-04 Light bar 1137	19792-04 Light bar 1269	19793-04 Light bar 1401
Total length (mm)	608	1137	1269	1401
Total depth (mm)	238	238	238	238
Total height (mm)	88	88	88	88
Weight (kg)	4.5	8.5	9.5	11
Operating voltage	10-30Vdc			
Power supply	12Vdc / 24Vdc			
Operating temp.	-30°C to +50°C			
Storage temp.	-40°C to +90°C			
Maximum power	90W	162W	180W	198W
Amp draw	4.88A peak	10.38A peak	10.46A peak	10.75A peak
LED	90 pcs 1W LED	162 pcs 1W LED	180 pcs 1W LED	198 pcs 1W LED
Lumen (lm)	7000	12960	14400	15840
Lens	LIN			
LED color	Amber			
Lens color	White			
Flash pattern	15	15	15	15
Synchronisation	≤ 2 Pcs			
Cable length	7 m			
Mount	Surface mount			
Material specification	Aluminium housing Polycarbonate lens Plastic mounting bracket			
IP	IP65			
Certification	ECE R65 class 2, ECE R10			

10. Warranty

TWO YEAR LIMITED WARRANTY
The limited warranty program is the only one that applies to this unit, and it sets forth all the responsibilities of Modul-System. There is no other warranty, other than those described herein. Any implied warranty of merchantability of fitness for a particular purpose on this unit is limited in duration to the duration of this warranty.

This unit is warranted, to the original purchaser only, to be free of defects in materials and workmanship for two years from the date of purchase without additional charge. The warranty does not extend to subsequent purchasers or users.

Manufacturer will not be responsible for any amount of damage in excess of the retail purchase price of the unit under any circumstances. Incidental and consequential damages are specifically excluded from coverage under this warranty.

This warranty does not apply to damage to units from misuse or incorrect installation/connection. Misuse includes wiring or connecting to improper polarity power sources.

RETURN/REPAIR POLICY:
If you are experiencing any problems with your unit, please contact our customer service department at info@modul-system.com or phone +46 31 746 87 00 before returning product. After speaking to a customer service representative, if products are deemed non-working or malfunctioning, the product may be returned to Modul-System within 30 days of original purchase. Any defective unit that is returned to manufacturer within 30 days of the date of purchase will be replaced free of charge.

If such a unit is returned more than 30 days but less than two years from the purchase date, manufacturer will repair the unit or, at its option, replace it, free of charge. If the unit is repaired, new or reconditioned replacement parts may be used, at manufacturer's option. A unit may be replaced with a new or reconditioned unit of the same or comparable design. The repaired or replaced unit will then be warranted under these terms for the remainder of the warranty period. The customer is responsible for the shipping charges on all returned items.

LIMITATIONS:
This warranty does not cover accessories, such as adapters and batteries, damage or defects result from normal wear and tear (including chips, scratches, abrasions, discoloration or fading due to usage or exposure to sunlight), accidents, damage during shipping to our service facility, alterations, unauthorized use or repair, neglect, misuse, abuse, failure to follow instructions for care and maintenance, fire and flood.

If your problem is not covered by his warranty, contact our Customer Service Department info@modul-system.com or +46 31 746 87 00 for general information if applicable.