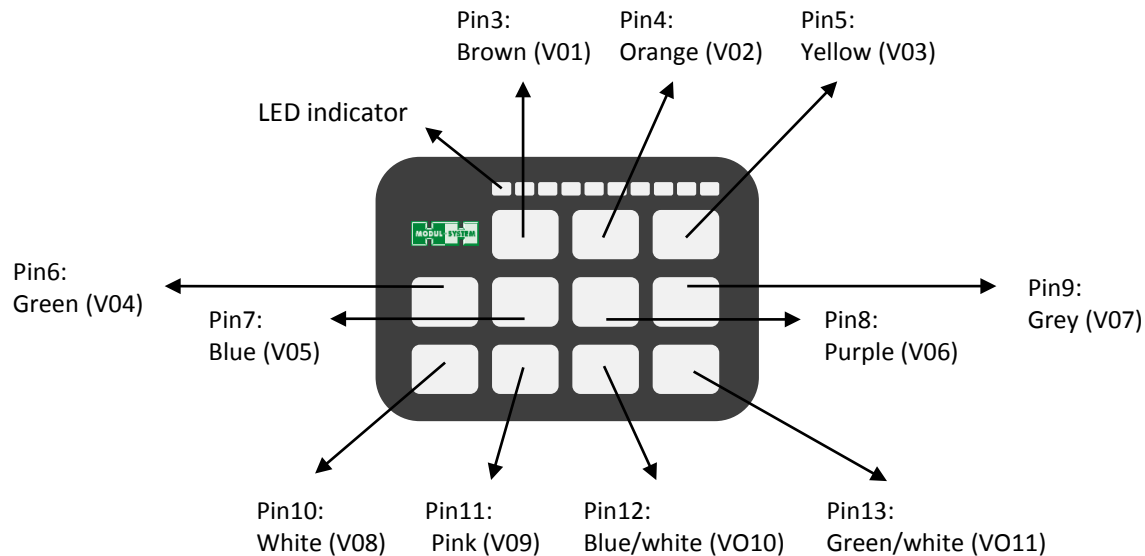


Light bar control panel

Instruction manual

WARNING

- Please read this instruction in its entirety prior to installation.
- Do not mount or place control unit in the deployment path of an airbag.
- 19795-03 is an electronic control module used for switching internal functions in the Modul System light bar range. It produces a signal (in milliamps) and cannot be used for direct switching of light bars, relays, lights or other accessories.



BACK LIGHT

- Backlight will be OFF when the control unit is not in use.
- When any button is pressed, back light will be ON.
- If any function is ON, the back light will be ON.
- If no function is activated within 30 seconds, the back light will automatically turn off.

FUNCTIONS FOR EACH BUTTON

The 11 buttons on the control panel can each be individually programmed to either have a 'latched' switched output, or a 'momentary' output. The 'latched' switched output supplies a constant (+12v) signal when the switch is pressed once, and then turned off when the switch is pressed again. The 'momentary' switched output supplies a pulse (+12v) signal for just 200ms when the switch is pressed once.

- 'Latched' switch output - Press the button and the switch is ON, press the button again and the switch is OFF. The red LED indicator in the button illuminates when the switch is ON and turns off when the switch is OFF.
- 'Momentary' switch output – Press the button and the switch pulses for 200ms. The red LED indicator in the button illuminates for 2 seconds, and then turns off.

Summary: The below functionality applies to all eleven buttons (V01-V011):

Function 1. 'Latched' Switch ON or OFF.

- When switched ON, the red LED light is illuminated and the back light is ON.
- When switched OFF, the red LED light is not illuminated and the back light is OFF.

Function 2. 'Momentary'.

- Press once and the red LED light will be illuminated. The back light will turn ON and go OFF after 30 seconds.

SWITCHING BETWEEN FUNCTIONS

Ensure that the control unit is powered with (+12v) to the red cable and (-12v) to the black cable. All other cables should be connected or terminated.

The control unit will save and store the function setting when the power is disconnected.

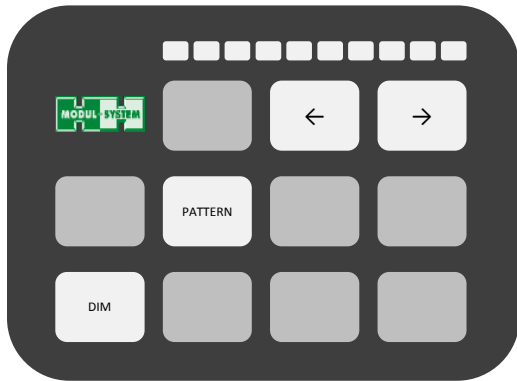
Switching from Function 1 ('Latched') to Function 2 ('Momentary'):

- 1) Ensure that the required button is turned OFF, i.e. the red LED light is not illuminated.
- 2) Press and hold the required button for 5 seconds until the red LED light illuminates for 2 seconds.
- 3) Release the button.
- 4) The button is now set to work as Function 2 'Momentary'.

Switching from Function 2 ('Momentary') to Function 1 ('Latched'):

- 1) Ensure the required button is turned OFF, i.e. the red LED light is not illuminated.
- 2) Press and hold the required button for 5 seconds until the red LED light illuminates for 2 seconds.
- 3) Release the button.
- 4) The button is now set to work as Function 1 'Latched'.

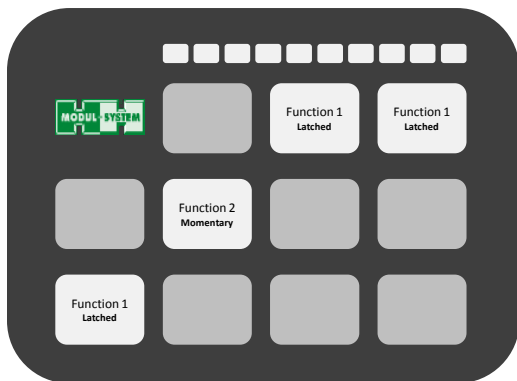
SUGGESTED BUTTON FUNCTIONS



Function	Description
←	Traffic Advisor (R to L)*
→	Traffic Advisor (L to R)*
Pattern	Scrolls through the 15 Patterns with each press of the button.
DIM	Dim mode. Press once to dim the light bar light output by 50% (reduced brightness from original). Press the button again to return to full brightness.

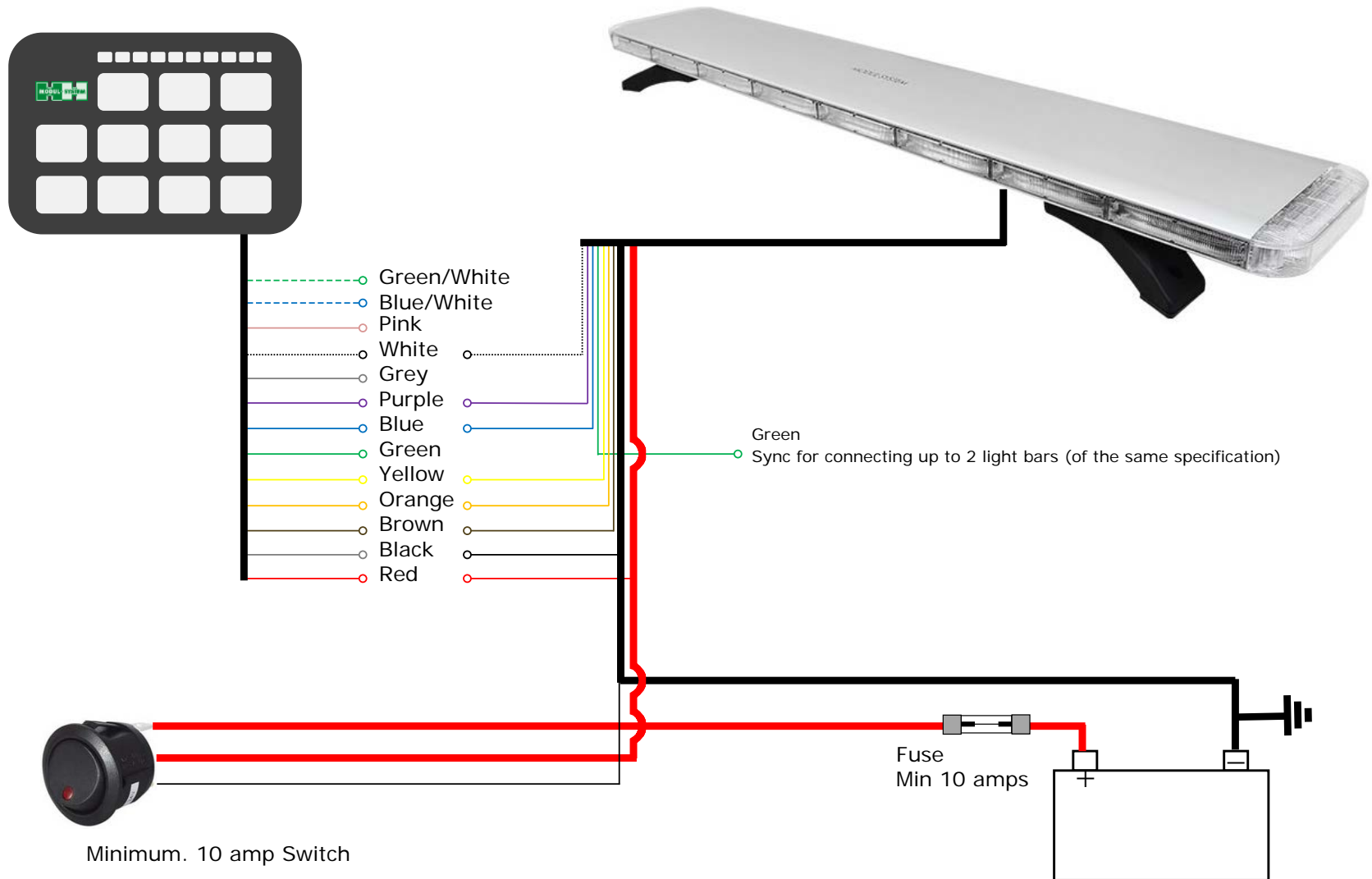
* Traffic Advisor (R to L) and (L to R) can be turned on together to give Traffic Advisor 'go round me' ←→ (Centre out)

The switching on the control panel should be set up in the following way to activate the available functions of the Modul-System light bars.

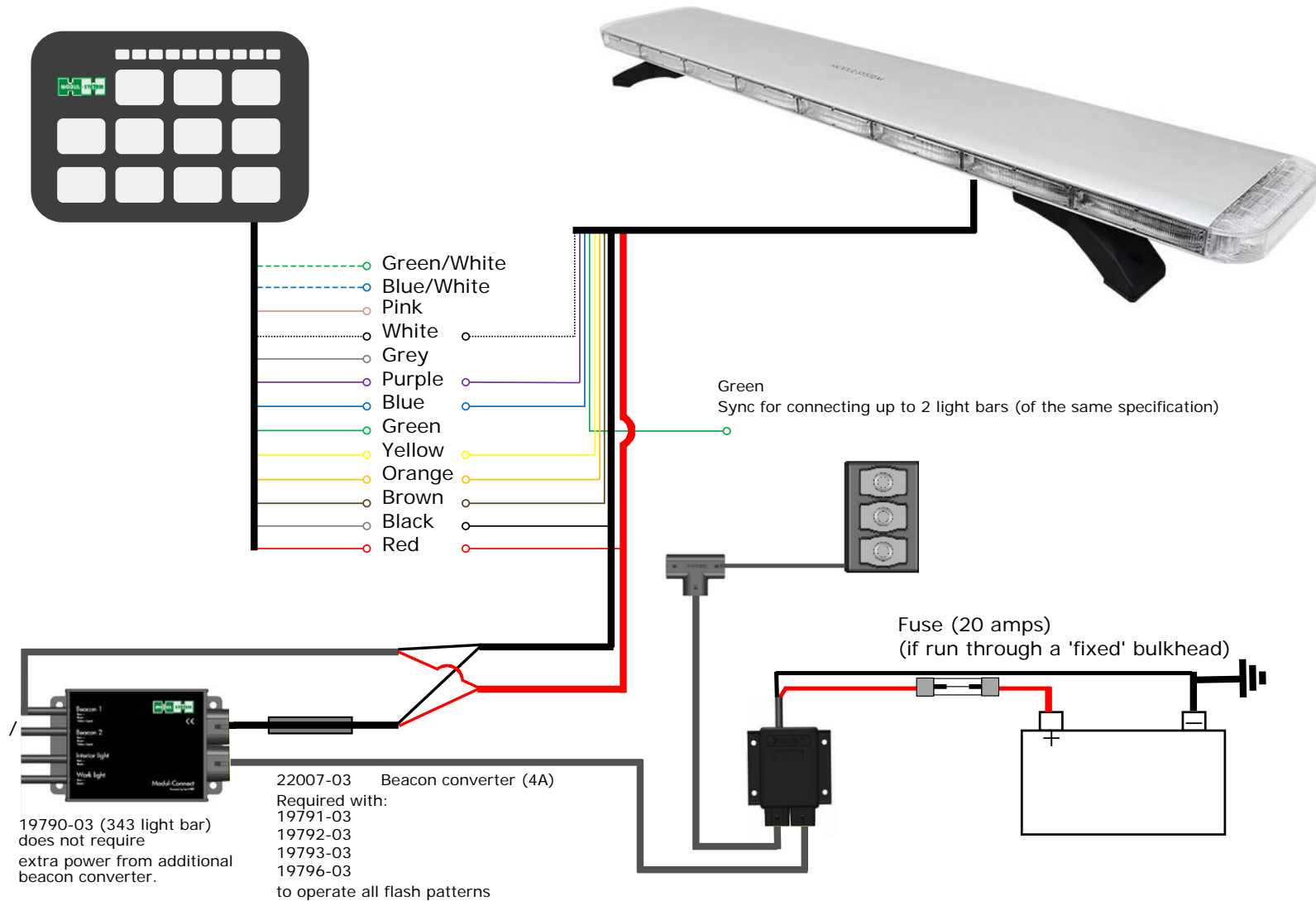


Button	Signal wire output colour	Latched or Momentary	Function
1	Brown	-	Unused (Optional Bar Lighting)
2	Orange	Latched	(+12v) Right to Left Traffic Advisor
3	Yellow	Latched	(+12v) Left to Right Traffic Advisor
4	Green	-	Unused (Optional Bar Lighting)
5	Blue	Momentary	(+12v) Change Flash Pattern
6	Purple	-	Unused (Optional Bar Lighting)
7	Grey	-	Unused (Optional Bar Lighting)
8	White	Latched	(+12v) DIM light (50% reduced brightness)
9	Pink	-	Unused (Optional Bar Lighting)
10	Blue/White	-	Unused (Optional Bar Lighting)
11	Green/White	-	Unused (Optional Bar Lighting)

WIRING SCHEMATIC – CONTROL & SWITCH



WIRING SCHEMATIC – MODUL-CONNECT



INPUTS / OUTPUTS

Wiring pin	Wire colour	Function VI (Voltage in) VO (Voltage out)	Switch position VO (Voltage output)	Wire colour from Modul-System light bar 1979X-03	Light bar wire number (refer to light bar manual)	Light bar function
1	Red	VI (+12v) Power input	-	Red	2	(+12v) Separately switched
2	Black	VI (-12v) Chassis Earth	-	Black	1	(-12v) Chassis Earth
3	Brown	+12v milliamp VO	1	Brown	8	Unused (Optional Bar Lighting)
4	Orange	+12v milliamp VO	2	Orange	6	(+12v) Right to Left Traffic Advisor
5	Yellow	+12v milliamp VO	3	Yellow	5	(+12v) Left to Right Traffic Advisor
6	Green	+12v milliamp VO	4	Green	4	Sync up to two light bars (of the same specification)
7	Blue	+12v milliamp VO	5	Blue	3	(+12v) Change Flash Pattern
8	Purple	+12v milliamp VO	6	-	9	Unused (Optional Bar Lighting)
9	Grey	+12v milliamp VO	7	-	-	-
10	White	+12v milliamp VO	8	White	7	(+12v) DIM light 50% (reduced brightness from original)
11	Pink	+12v milliamp VO	9	-	-	-
12	Blue/White	+12v milliamp VO	10	-	-	-
13	Green/White	+12v milliamp VO	11	-	-	-

SPECIFICATION

DC Input Voltage range	10-30 Vdc
Output	(+) Vdc Signal
Dimensions	0.2 kg
Weight	100 x 61 x 16 mm

Note: Specifications are subject to change without notices

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 at info@modul-system.com or +46 31 746 87 00 for general information if applicable.