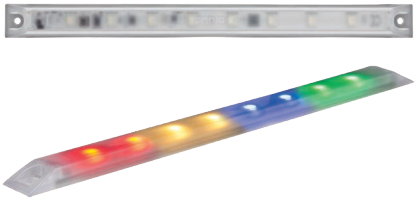
CAN Strip Light

Configuration Instructions

INT250CAN



Operational Voltage :	10–30V
Lens :	Polycarbonate
Body :	Polycarbonate
Weight :	0.05kg
Connector :	150mm Fly Lead
Light Source :	8 x RGB LEDs
Operating Temperature :	-20°C to 60°C

Power Up Mode

During power up, all LEDs on the Strip Light will flash, one colour at a time, to inform the user all LEDs are operating correctly.

No Message Mode

After five seconds of no messages being received, the top and bottom half of the LEDs flash red alternatively.

Wiring

Red:	Power
Black:	Ground
Green:	CAN Low
Yellow:	CAN High

CAN Strip Light Communication

Communication with the CAN Strip Light is detailed below.

Byte 00 – Pattern

Pattern 11 allows the user to control each individual LED and colour.

Byte 01 – Reserved

Reserved for future definition.

Byte 02 – Dimming

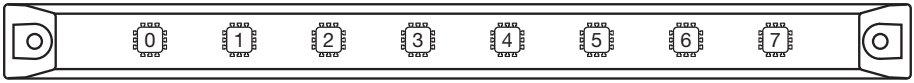
Adjusts the intensity of the LED output (0 to 100).
0 = zero light output, 100 = 100% light output.

Message Data	
ID	181h
Baud Rate	250K
DLC	8
Byte 00	Pattern (11)
Byte 01	Reserved (0)
Byte 02	Dimming % (0-100)
Byte 03	LED 0 and 1
Byte 04	LED 2 and 3
Byte 05	LED 4 and 5
Byte 06	LED 6 and 7
Byte 07	Reserved (0)
Cycle Time	100ms
Message Type	Standard

Bytes 03 to 06 – LED Colour Mapping

Each data byte (03, 04, 05, 06) contains two hex nibbles (MSB and LSB).
Each nibble corresponds to a single LED. See below for more detail.

LED Value Allocation



LED	0	1	2	3	4	5	6	7
Byte	03	03	04	04	05	05	06	06
Bit	4-7	0-3	4-7	0-3	4-7	0-3	4-7	0-3
Nibble	MSB	LSB	MSB	LSB	MSB	LSB	MSB	LSB

Nibble Value to Colour Designation

Value	0	2	4	6	8	A	C	E
Colour	None/Off	Red	Green	Amber	Blue	Magenta	Cyan	White

Example CAN Frame (100ms)

ID	Byte 00	Byte 01	Byte 02	Byte 03	Byte 04	Byte 05	Byte 06	Byte 07
181h	0Bh	00h	64h	2Ch	4Eh	A8h	64h	00h

For LEDs to change to the following colours:
Cyan, **Red**, **White**, **Green**, **Blue**, **Magenta**, **Green**, **Amber**;
Bytes **03**, **04**, **05**, **06** need to receive values of **2C**, **4E**, **A8**, **64** respectively.

Byte 07 – Reserved

Reserved for future definition.