Sure Grip RGB LED modules are updated through the CANbus J1939 messaging protocol. This documentation provides the applicable PGN, SPNs and values for configuring the LEDs. The faceplate position of LED 1 through to LED 8 varies with application and is identified on the CANbus messaging sheet included with the purchase.

PGN 61184 **Proprietary A** **- RGB1**

Used to control up to 8 RGB LEDs.

Start Position	Length	Parameter Name	SPN
1.1	1	SG ID	SG1
2.1	1	LED 1	SG2
2.2	1	LED 2	SG2
2.3	1	LED 3	SG2
2.4	1	LED 4	SG2
2.5	1	LED 5	SG2
2.6	1	LED 6	SG2
2.7	1	LED 7	SG2
2.8	1	LED 8	SG2
3.1	8	Red intensity	SG3
4.1	8	Green intensity	SG4
5.1	8	Blue intensity	SG5

SPN SG1 **SG ID**

This is the Sure Grip identifier message. 154 decimal is the only valid value for this SPN.

Data length:	1 byte
Resolution:	256 values
Data range:	154 ONLY
Operational range:	0 to 255
Type:	Signal
PGN:	61184

SPN SG2 **LED Position**

Each LED is selected by an individual bit in this SPN. Multiple LEDs can be selected by combining the position value bits.

Data length:	8 bits
Resolution:	1 bit per LED
Data range:	0 to 255, with each bit in the byte targeting a specific LED
PGN	61184

Bit	**LED Position**
1	LED1
2	LED2
3	LED3
4	LED4
5	LED5
6	LED6
7	LED7
8	LED8

SPN SG3 **Red Intensity**

Data length:	1 byte
Resolution:	256 values
Data range:	0 to 255: 0 is off, 255 is max brightness.
Operational range:	Same as Data Range
Type:	Intensity
PGN:	61184

SPN SG4 **Green Intensity**

Data length:	1 byte
Resolution:	256 values
Data range:	0 to 255: 0 is off, 255 is max brightness.
Operational range:	Same as Data Range
Type:	Intensity
PGN	61184

SPN SG5 **Blue Intensity**

Data length:	1 byte
Resolution:	256 values
Data range:	0 to 255: 0 is off, 255 is max brightness.
Operational Range:	Same as Data Range
Type:	Intensity
PGN	61184