

Installation Manual

CladLight Vest Kit

powered by [CladLight](#)

The following is contained in the CladLight Vest kit:-

- Indicator lights panel on a safety vest (further referred to as *receiver*)
- Motorcycle electronics component (further referred to as *sensor*)
- Two NiMH AAA size batteries

Contents:

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1. Specifications

Receiver:

Input Voltage: 2v – 3.3v (*reverse polarity protected*)

Standby Current: 2.5mA (*both when connected and disconnected from sensor*)

Input Current (highly dependent on input voltage): 100mA – 400mA

Sensor:

Input Voltage: 5v – 18v (*reverse polarity protected*)

Input Current: 10mA

Input Current at switching signals: 120nA at 12V

Connector: 4mm diameter bullet male/female

Table 1: Cable colors:

Color		Signal
Red		+12V
Black		Ground
Green		Left Indicator Positive
Grey		Right Indicator Positive
Blue		Brake light Positive

2. Installation

Receiver:

- Remove the battery cover from the receiver
- Insert the AAA batteries in to the battery clips
- Place the battery cover over the batteries

Sensor:

- Locate the brakes and indicator signal cables on the motorcycle. This is dependent on the motorcycle make and model. The common location is underneath the saddle.
- Determine the functionality of the different cables corresponding to signals as shown in Table 1.
- Cables using a 4mm diameter bullet type connector can be disconnected and the corresponding signal wire on the sensor placed in between the two connectors.
- Cables that do not have the above type of connector need to be patched. This can be done using the following steps:
 - Cut the signal cable on the motorbike at a convenient location.
 - Strip the sleeves of both sides of the cable for a length of 10mm.
 - Crimp a female bullet connector on one side of the wire.
 - Crimp a male bullet connector on the other side of the wire.
 - Place the corresponding sensor signal wire in between these two connectors.
- Fasten the sensor box and cables in a position where they cannot be damaged.
- Test the functionality (explained next)
- When the sensor is properly functioning, close the indicator cable compartment on the motorcycle.

3. Functionality

NB: On the receiver, there's a status led in the upper right side above the brake light. This LED displays the *connection* status as follows:

- Blinking – *indicates no connection with a sensor*
- Continuously on – *indicates a connection with a sensor*

Each sensor is configured to connect to the corresponding receiver(s) automatically. When both the sensor and the receiver are powered, a connection will be made automatically ready for operation.

Test the different combinations of the indicator lights and the brake lights to ensure proper functionality of the Smart Vest.