



INSTALLATION GUIDE

MOTION-SENSOR CEILING LIGHTS

TWO LIGHT KIT: LK1-121-02
THREE LIGHT KIT: LK1-121-03
FOUR LIGHT KIT: LK1-121-04

THE UPFIT YOU DESERVE

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Tools Required:

- Electric Drill
- Philips driver bit
- Flathead screwdriver
- Cutting tool for ceiling holes (4.75" Hole Saw is recommended)
- Metric Ratchet Wrench Set
- Tape Measure
- Sharpie
- Masking Tape
- Electronic Multimeter
- Thin work gloves (these will protect your hands from the vehicle frame and ceiling panel, and make clipping the cables together easier)

Tools Required for Mercedes Sprinters:

- T25 Torx bit
- T30 Torx bit

Other Optional Tools

- Cutting pliers (these may be needed, depending on your preferred attachment method for the wires)

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Step 1: Install electrical feed loom cable.

For **Ford Transits**, refer to **step 2 (page 4)**.

For **Ram Promasters**, refer to **step 3 (page 6)**.

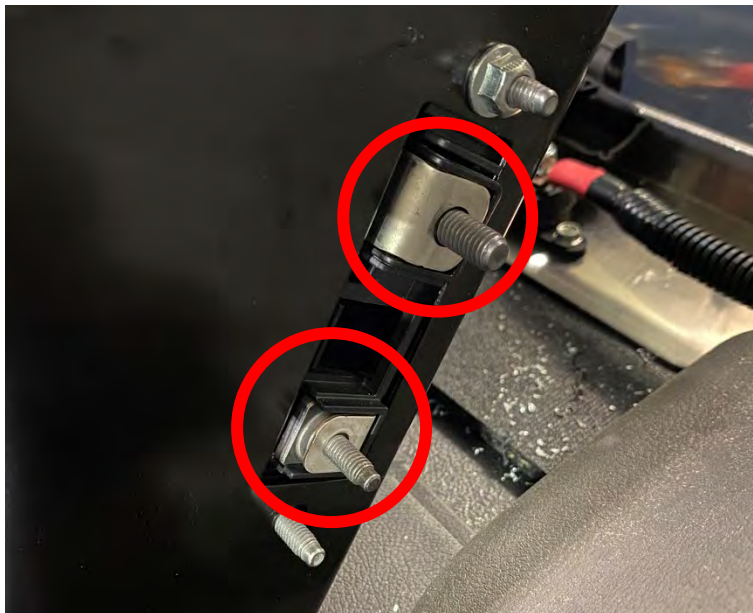
For **Mercedes Sprinters**, refer to **step 4 (page 8)**.

FORD TRANSIT FEED LOOM INSTALLATION:

Step 2a: Remove both plastic covers protecting the battery feeds. On the Ford Transit, this is found on the left-hand side of the driver's seat base.



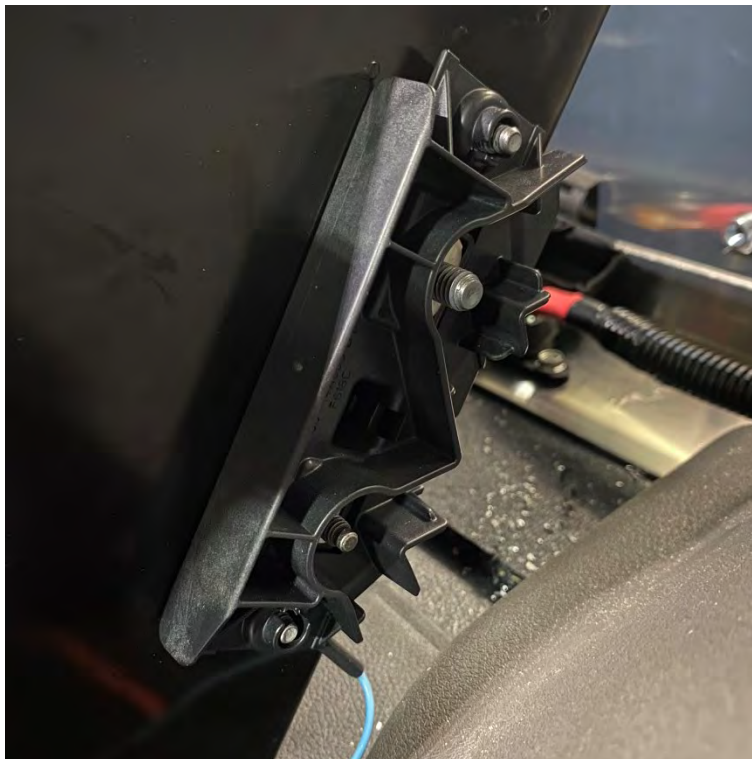
Step 2b: Locate the live 12V feed. This will be either of the middle pins, circled below. In most cases, it is the bottom pin. Verify with a multimeter.



Step 2c: Attach the ground (BLUE) cable as shown below, with one of the included M6x1 Nyloc nuts.



Step 2d: Re-attach the plastic cover bracket, as shown.



Step 2e: Attach the live (ORANGE) cable to the live 12V pin identified in step 2b, with one of the included M6x1 Nyloc nuts, as shown below.



Step 2f: Re-attach the plastic cover. **PROCEED TO STEP 5 (PAGE 10).**

RAM PROMASTER FEED LOOM INSTALLATION:

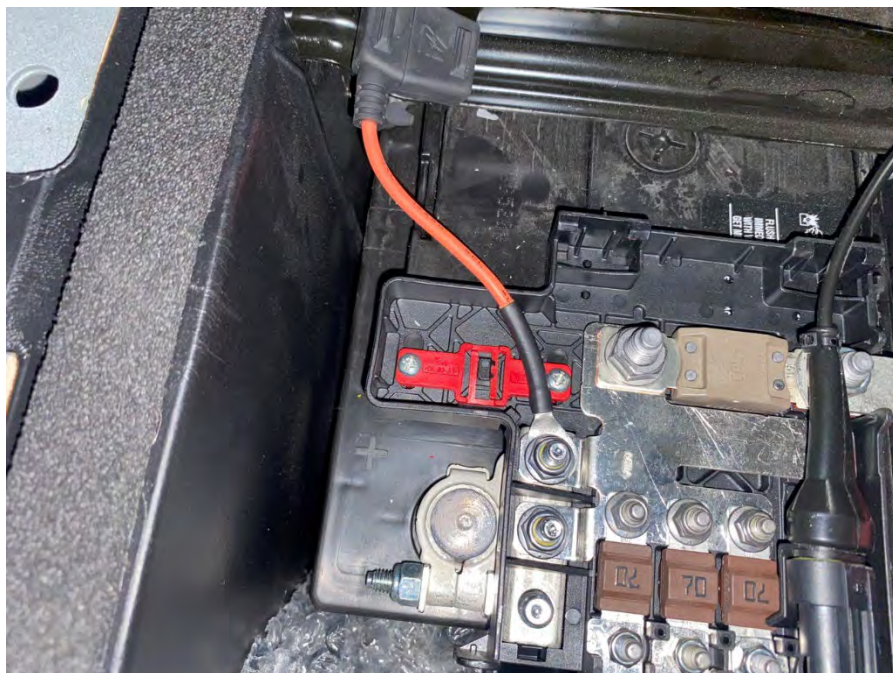
Step 3a: Remove the plastic cover protecting the battery. On the Ram Promaster, this is found underneath the driver's floor mat, as shown below.



Step 3b: Attach the ground (BLUE) cable to the battery ground terminal as shown below; use the existing nut.



Step 3c: Attach the live (ORANGE) cable to the live terminal as shown below; use the existing nut.



Step 3d: Route the end of the feed loom under the driver seat.



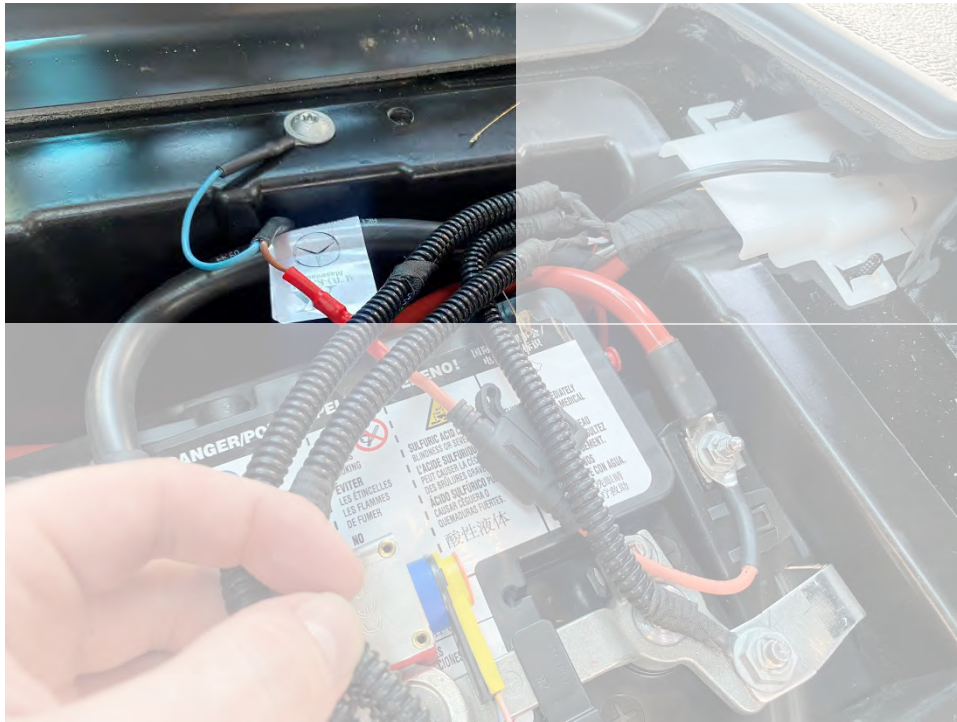
Step 3e: Replace battery covers. **PROCEED TO STEP 5 (PAGE 10).**

MERCEDES SPRINTER FEED LOOM INSTALLATION:

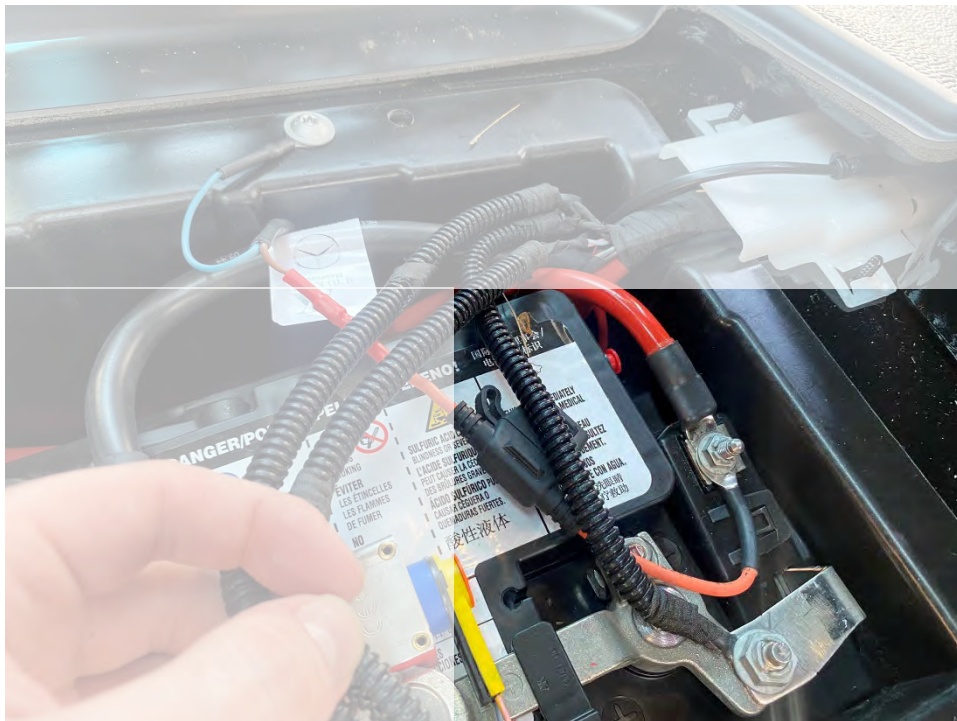
Step 4a: Locate the battery. In the Mercedes Sprinter this is under the driver side floor pan. Using Torx T25 and T30 bits, remove the floor pan and battery cover.



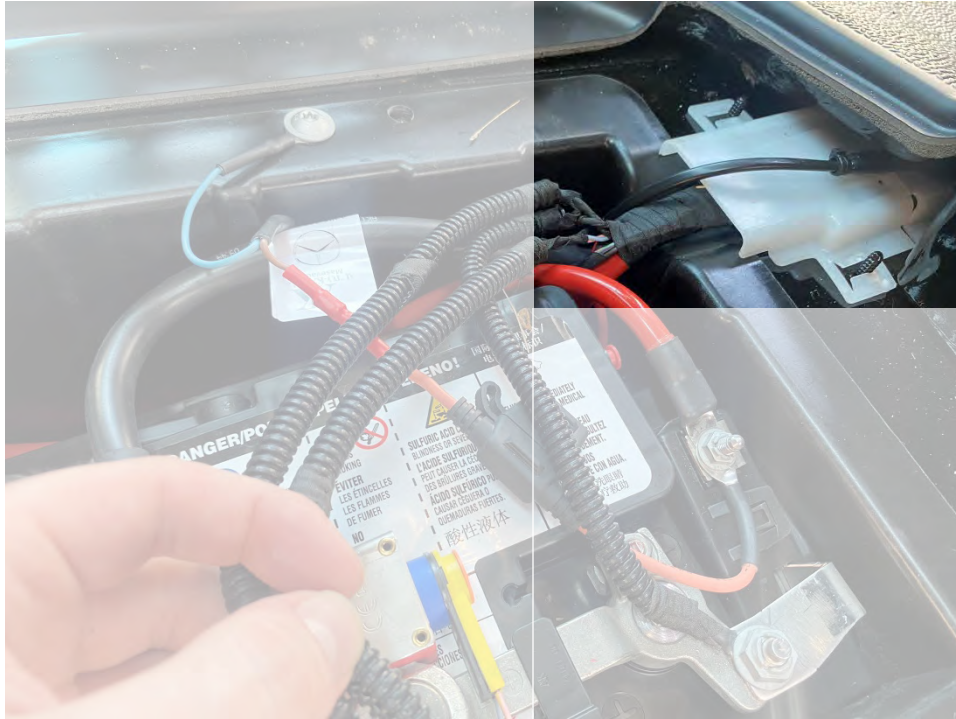
Step 4b: Attach the ground (BLUE) cable to the battery holding case as shown below. Using the existing Torx bolt.



Step 4c: Attach the live (ORANGE) cable to the live terminal as shown below. Use the existing nut.



Step 4d: Route the feed end under the matting on the right-hand side of the driver's seat.



Step 4d: Replace battery cover and floor. **PROCEED TO STEP 5 BELOW.**

Step 5: Proceed to light system installation instructions.

For 2 Light Kits (LK1-121-02) turn to page 11.

For 3 Light Kits (LK1-121-03) turn to page 18.

For 4 Light Kits (LK1-121-04) turn to page 26.

Motion Sensor Lighting Install Guide:

LK1-121-02 - Two Fixtures








Recommended for: Ford Transit 130LR and 130MR

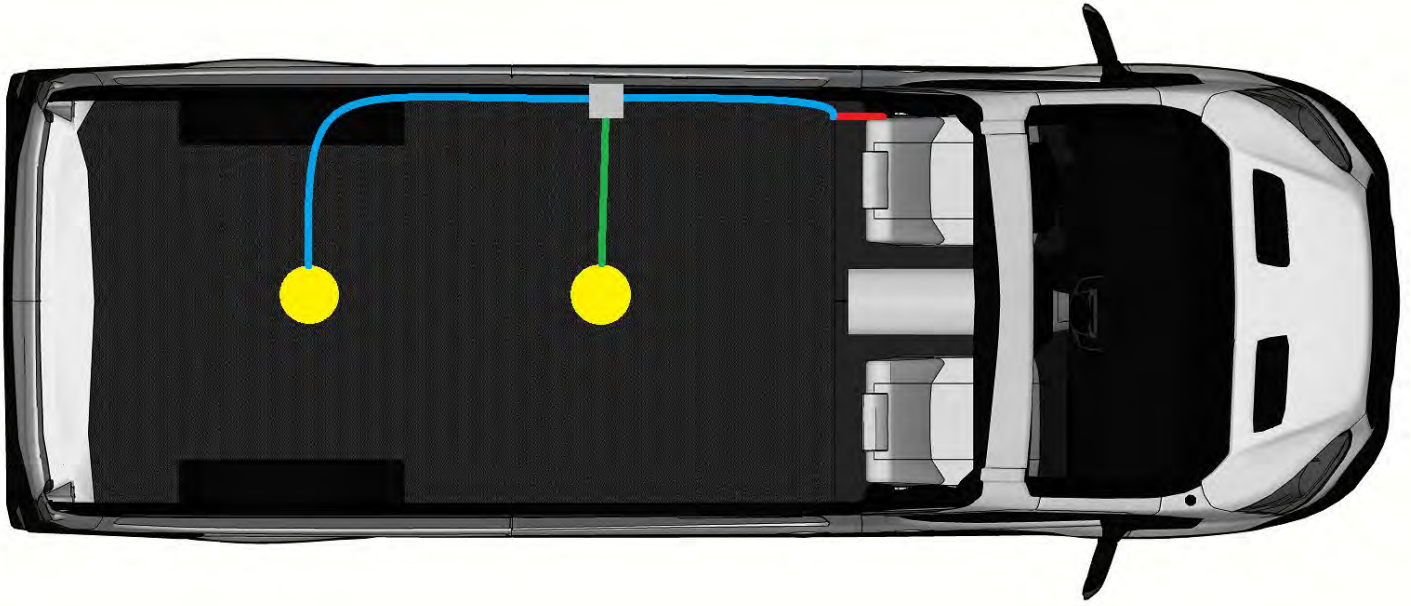
Ram Promaster 118

Materials Needed:

1x Electrical Feed Loom with bolt-on ring connectors (AN-0001)	 A black electrical feed loom with a red and black wire bundle, a black connector, and a bolt-on ring connector.
2x Motion Sensor Activated Dome Lights (AU.25.4P.M.VG.S)	 A white, circular motion sensor activated dome light in its original clear plastic packaging.
2x 1.5-meter Rappid Cable (SSC1.5MF) NOTE: The installation should only require 1 of these; an extra cable has been included as a spare.	 A black cable with a blue connector at one end and a black connector at the other.
2x 3-meter Rappid Cable (SSC3MF)	 A black cable with a blue connector at one end and a black connector at the other.
1x T-Connector (SSMFT)	 A black T-connector with two blue connectors on the side.
1x Hole Template	 A white, square-shaped hole template with a circular cutout in the center.
2x M6x1 Nyloc Nuts	 Two silver-colored M6x1 Nyloc nuts.

COMPONENT OVERVIEW:

	Standard Feed	(AN0001)
	LED Dome Light	(AU.25.4P.M.VG.S)
	T Connector	(SSMFT)
	1,5m Cable	(SSC1.5MF)
	3m Cable	(SSC3MF)



BEFORE STARTING:

- Measure out and cut two 4.75” holes in the desired locations. A hole template has been included in the kit. If lighting the entire van, it is recommended to space the holes evenly; simply divide the length of the ceiling liner by 3. (If the ceiling liner is 120” long, the lights should be spaced 40” apart.)
- If no ceiling liner is being installed, you will need the Legend standalone brackets. These are attached to the ceiling supports with self-tapping screws, which are included in the standalone kits.
- There are two lengths of cable in the kit. It is advisable to unfurl each wire and sort them by length, as they do not come labelled. One is half the length of the other, so it should be easy to tell them apart.

OTHER INSTALLATION NOTES:

- It is advisable to mark out where the light locations will be on the roof of the vehicle to make routing the wires to the correct locations easier.
- Wherever possible, use the existing cable trays or gaps in the vehicle frame to route wires. To avoid damage to cabling from ongoing use of the vehicle, ensure that the cables are secured to the vehicle body using tuck tape or similar (not included).

IMPORTANT: Review the entire guide before starting installation. Pictures of all components and steps are supplied to ensure correct installation. Ensure that each connection is securely fastened and that all wires are secured using the provided clips.

Legend Global Inc. will not accept responsibility for any damages caused by improper installation.

Step 1: Connect a 3-meter Rappid cable to the feed loom. Ensure that the housings have clicked together.



Note: if the single 3m cable is not long enough to reach the first light, use the included extra 1.5m cable.

Step 2: Plug in the T-Connector to the end of the 3-meter cable. Ensure that the housings have clicked together.



Step 3: Connect the 1.5-meter Rappid cable to the T-Connector. Ensure that the housings have clicked together. This cable will connect to a light, so ensure that it can reach the corresponding light location and is on the correct side of the nearest ceiling joist.



Step 4: Connect a 3-meter Rappid cable to the T-Connector and run it to the next light location.



Step 5: Ensure that the cables can reach the desired light locations, then secure them to the vehicle side frame and ceiling cross beams using your preferred method. Legend recommends tuck tape or similar.

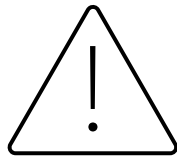
Step 6: Install ceiling liner, if applicable.

Step 7: Unplug the feed loom from the rest of the circuit. This will make sure the lights stay off while you are installing them, which will be easier on your eyes.

Step 8: Connect the Dome Lights to the Rappid cables. Ensure that the housings have clicked together.



Step 9: Re-attach the feed loom to the circuit. The lights should power on. If they do not, check that the fuse has been inserted into the feed loom; if fuse is properly installed, refer to the troubleshooting guide on page 36.



WARNING: The lights are very bright and may cause temporary blindness if looked at directly for short durations. **When plugged in, the light will turn on and remain lit for 3 seconds, then turn off.**

Step 10: Secure the lights to the ceiling. If ceiling liner is installed, use the screws included with the lights. If installing on the standalone brackets, use the self tappers included in the bracket package.

THIS COMPLETES THE INSTALLATION.

Motion Sensor Lighting Install Guide:



LK1-121-03 - Three Fixtures

Recommended for: Ford Transit 148 LR/MR/HR






Ram Promaster 136 LR/HR, 159 HR

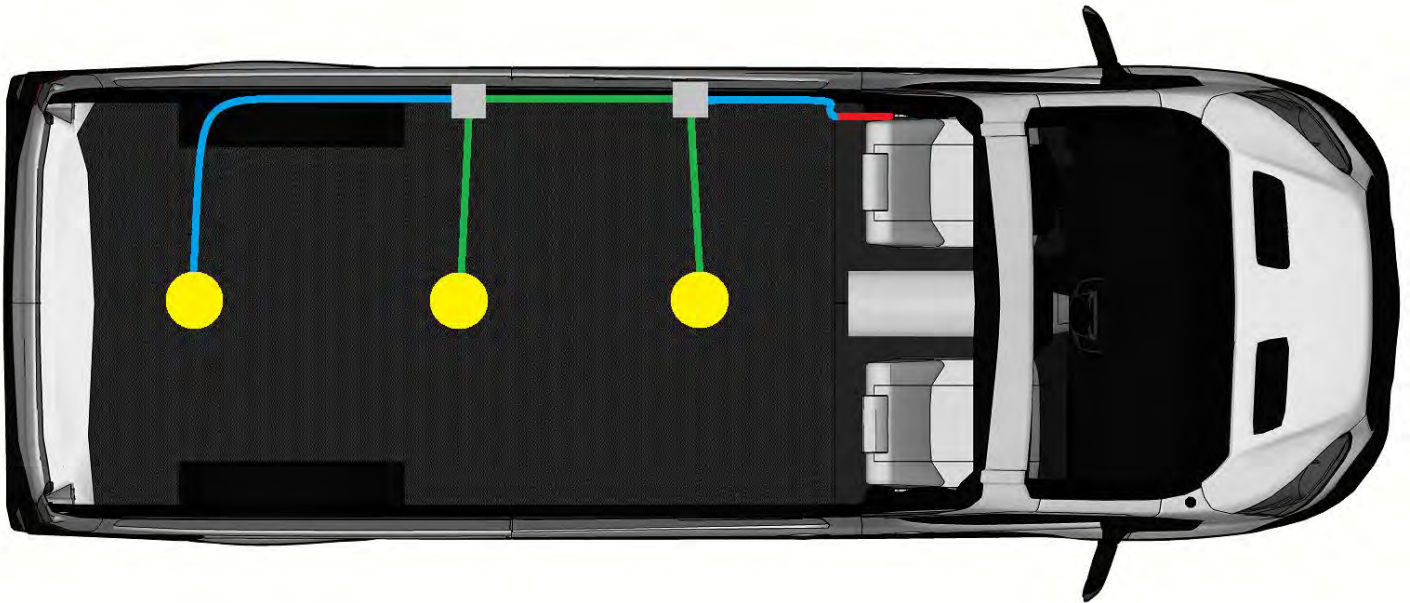
Mercedes Sprinter 144 LR/HR

Materials Needed:

1x Electrical Feed Loom with bolt-on ring connectors (AN-0001)	
3x Motion Sensor Activated Dome Lights (AU.25.4P.M.VG.S)	
4x 1.5-meter Rappid Cable (SSC1.5MF) NOTE: The installation should only require 3 of these; an extra cable has been included as a spare.	
2x 3-meter Rappid Cable (SSC3MF)	
2x T-Connector (SSMFT)	
1x Hole Template	
2x M6x1 Nyloc Nuts	

COMPONENT OVERVIEW:

	Standard Feed	(AN0001)
	LED Dome Light	(AU.25.4P.M.VG.S)
	T Connector	(SSMFT)
	1,5m Cable	(SSC1.5MF)
	3m Cable	(SSC3MF)



BEFORE STARTING:

- Measure out and cut three 4.75" holes in the desired locations. A hole template has been included in the kit. If lighting the entire van, it is recommended to space the holes evenly. To do this:
 - o Divide the length of the van by 6.
 - o Space the first light location using the result.
 - o Space each subsequent light using 2x the result.
 - o For example: if installing in a 120" long ceiling, $120"/6 = 20"$. Space the first light 20" from the end, then each subsequent light 40" apart. This usually gives the best light coverage.
- If no ceiling liner is being installed, you will need the Legend standalone brackets. These are attached to the ceiling supports with self-tapping screws, which are included in the standalone kits.
- There are two lengths of cable in the kit. It is advisable to unfurl each wire and sort them by length, as they do not come labelled. One is half the length of the other, so it should be easy to tell them apart.

OTHER INSTALLATION NOTES:

- It is advisable to mark out where the light locations will be on the roof of the vehicle to make routing the wires to the correct locations easier.
- Wherever possible, use the existing cable trays or gaps in the vehicle frame to route wires. To avoid damage to cabling from ongoing use of the vehicle, ensure that the cables are secured to the vehicle body using tuck tape or similar (not included).

IMPORTANT: Review the entire guide before starting installation. Pictures of all components and steps are supplied to ensure correct installation. Ensure that each connection is securely fastened and that all wires are secured using the provided clips.

Legend Global Inc. will not accept responsibility for any damages caused by improper installation.

Step 1: Connect a 3-meter Rappid cable to the feed loom. Ensure that the housings have clicked together.



Note: if the single 3m cable is not long enough to reach the first light, use the included extra 1.5m cable.

Step 2: Plug in the T-Connector to the end of the 3-meter cable. Ensure that the housings have clicked together.



Step 3: Connect the 1.5-meter Rappid cable to the T-Connector. Ensure that the housings have clicked together. This cable will connect to a light, so ensure that it can reach the corresponding light location and is on the correct side of the nearest ceiling joist.



Step 4: Connect a 1.5-meter Rappid cable to the T-Connector. Ensure that the housings have clicked together. This will run to the next T-Connector.



Step 5: Plug in the second T-Connector to the end of the 1.5-meter cable. Ensure that the housings have clicked together.



Step 6: Connect a 1.5-meter Rappid Cable to the T-Connector. Ensure that the housings have clicked together. This cable will connect to a light, so ensure that it can reach the corresponding light location and is on the correct side of the nearest ceiling joist.



Step 7: Connect a 3-meter Rappid cable to the T-Connector and run it to the next light location.



Step 8: Ensure that the cables can reach the desired light locations, then secure them to the vehicle side frame and ceiling cross beams using your preferred method. Legend recommends tuck tape or similar.

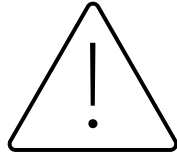
Step 9: Install ceiling liner, if applicable.

Step 10: Unplug the feed loom from the rest of the circuit. This will make sure the lights stay off while you are installing them, which will be easier on your eyes.

Step 11: Connect the Dome Lights to the Rappid cables. Ensure that the housings have clicked together.



Step 12: Re-attach the feed loom to the circuit. The lights should power on. If they do not, check that the fuse has been inserted into the feed loom; if fuse is properly installed, refer to the troubleshooting guide on page 36.



WARNING: The lights are very bright and may cause temporary blindness if looked at directly for short durations. **When plugged in, the light will turn on and remain lit for 3 seconds, then turn off.**

Step 13: Secure the lights to the ceiling. If ceiling liner is installed, use the screws included with the lights. If installing on the standalone brackets, use the self tappers included in the bracket package.

THIS COMPLETES THE INSTALLATION.

Motion Sensor Lighting Install Guide:



LK1-121-04 - Four Fixtures

Recommended for: Ford Transit 148 HR Ext.






Ram Promaster 159 HR Ext.

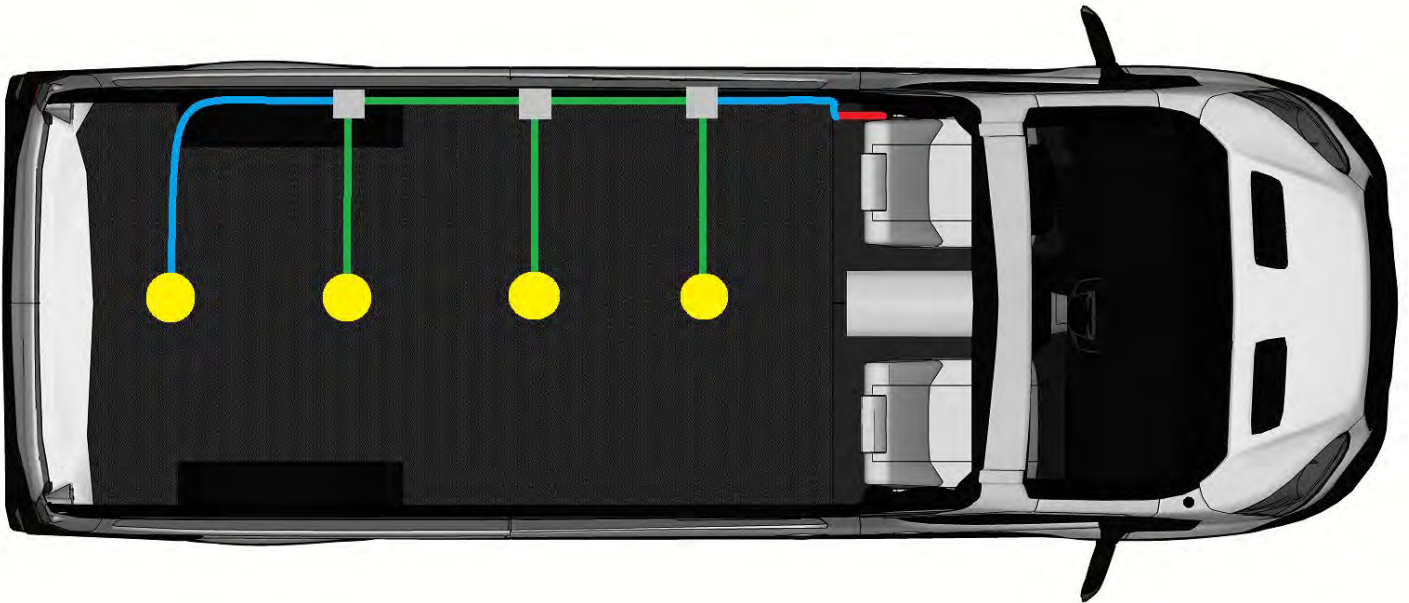
Mercedes Sprinter 170 HR/HR Ext.

Materials Needed:

1x Electrical Feed Loom with bolt-on ring connectors (AN-0001)	
4x Motion Sensor Activated Dome Lights (AU.25.4P.M.VG.S)	
6x 1.5-meter Rappid Cable (SSC1.5MF) NOTE: The installation should only require 5 of these; an extra cable has been included as a spare.	
2x 3-meter Rappid Cable (SSC3MF)	
3x T-Connector (SSMFT)	
1x Hole Template	
2x M6x1 Nyloc Nuts	

COMPONENT OVERVIEW:

	Standard Feed	(AN0001)
	LED Dome Light	(AU.25.4P.M.VG.S)
	T Connector	(SSMFT)
	1,5m Cable	(SSC1.5MF)
	3m Cable	(SSC3MF)



BEFORE STARTING:

- Measure out and cut four 4.75" holes in the desired locations. A hole template has been included in the kit. If lighting the entire van, it is recommended to space the holes evenly. To do this:
 - o Divide the length of the van by 8.
 - o Space the first light location using the result.
 - o Space each subsequent light using 2x the result.
 - o For example: if installing in a 160" long ceiling, $160"/8 = 20"$. Space the first light 20" from the end, then each subsequent light 40" apart. This usually gives the best light coverage.
- If no ceiling liner is being installed, you will need the Legend standalone brackets. These are attached to the ceiling supports with self-tapping screws, which are included in the standalone kits.
- There are two lengths of cable in the kit. It is advisable to unfurl each wire and sort them by length, as they do not come labelled. One is half the length of the other, so it should be easy to tell them apart.

OTHER INSTALLATION NOTES:

- It is advisable to mark out where the light locations will be on the roof of the vehicle to make routing the wires to the correct locations easier.
- Wherever possible, use the existing cable trays or gaps in the vehicle frame to route wires. To avoid damage to cabling from ongoing use of the vehicle, ensure that the cables are secured to the vehicle body using tuck tape or similar (not included).

IMPORTANT: Review the entire guide before starting installation. Pictures of all components and steps are supplied to ensure correct installation. Ensure that each connection is securely fastened and that all wires are secured using the provided clips.

Legend Global Inc. will not accept responsibility for any damages caused by improper installation.

Step 1: Connect a 3-meter Rappid cable to the feed loom. Ensure that the housings have clicked together.



Note: if the single 3m cable is not long enough to reach the first light, use the included extra 1.5m cable.

Step 2: Plug in the T-Connector to the end of the 3-meter cable. Ensure that the housings have clicked together.



Step 3: Connect the 1.5-meter Rappid cable to the T-Connector. Ensure that the housings have clicked together. This cable will connect to a light, so ensure that it can reach the corresponding light location and is on the correct side of the nearest ceiling joist.



Step 4: Connect a 1.5-meter Rappid cable to the T-Connector. Ensure that the housings have clicked together. This will run to the next T-Connector.



Step 5: Plug in the second T-Connector to the end of the 1.5-meter cable. Ensure that the housings have clicked together.



Step 6: Connect a 1.5-meter Rappid Cable to the T-Connector. Ensure that the housings have clicked together. This cable will connect to a light, so ensure that it can reach the corresponding light location and is on the correct side of the nearest ceiling joist.



Step 7: Connect a 1.5-meter Rappid cable to the T-Connector. Ensure that the housings have clicked together. This will run to the next T-Connector.



Step 8: Plug in the third T-Connector to the end of the 1.5-meter cable. Ensure that the housings have clicked together.



Step 9: Connect a 1.5-meter Rappid Cable to the T-Connector. Ensure that the housings have clicked together. This cable will connect to a light, so ensure that it can reach the corresponding light location and is on the correct side of the nearest ceiling joist.



Step 10: Connect a 3-meter Rappid cable to the T-Connector and run it to the next light location.



Step 11: Ensure that the cables can reach the desired light locations, then secure them to the vehicle side frame and ceiling cross beams using your preferred method. Legend recommends tuck tape or similar.

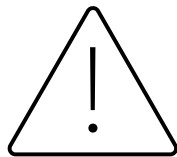
Step 12: Install ceiling liner, if applicable.

Step 13: Unplug the feed loom from the rest of the circuit. This will make sure the lights stay off while you are installing them, which will be easier on your eyes.

Step 14: Connect the Dome Lights to the Rappid cables. Ensure that the housings have clicked together.



Step 15: Re-attach the feed loom to the circuit. The lights should power on. If they do not, check that the fuse has been inserted into the feed loom; if fuse is properly installed, refer to the troubleshooting guide on page 36.



WARNING: The lights are very bright and may cause temporary blindness if looked at directly for short durations. **When plugged in, the light will turn on and remain lit for 3 seconds, then turn off.**

Step 16: Secure the lights to the ceiling. If ceiling liner is installed, use the screws included with the lights. If installing on the standalone brackets, use the self tappers included in the bracket package.

THIS COMPLETES THE INSTALLATION.

Troubleshooting Tips

If the lights do not turn on, follow the steps below:

1. Walk underneath the lights to activate the motion sensors.
2. Check the electrical connection to the battery.
3. Double-check all connections and ensure all are securely fastened together.
4. Inspect all cabling and components for any signs of damage.
5. Using an electrical multimeter on DC Voltage mode, check the battery connection pins on the seat. You should see a voltage of 12V. If you cannot see any voltage or the voltage is lower than expected, turn the vehicle on.
6. Re-check the battery after turning the vehicle on. If you continue to see low levels of voltage, the issue may be with the battery or the circuit connecting the battery to the vehicle alternator.
7. Using an electrical multimeter on continuity mode, check the fuse. If there is no continuity, the fuse is faulty/blown and should be replaced.
8. If none of these steps resolves the issue, contact Legend Fleet at 1-519-688-1043, and ask to speak with Warwick.
9. Alternatively, you can send an email to either info@legendfleet.com or Warwick.shaw@legendfleet.com.