Instruction Manual

DENALI

Automotive Wiring Harness

DNL.WHS.12000

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Thank you for choosing DENALI

We know you would rather be riding your bike than wrenching on it, so we go the extra mile to make sure our instructions are clear and as easy to understand as possible. If you have any questions, comments, or suggestions don't hesitate to give our gear experts a call at 401.360.2550 or visit WWW.DENALIELECTRONICS.COM

Please Read Before Installing

DENALI products should always be installed by a qualified motorcycle technician. If you are unsure of your ability to properly install a product, please have the product installed by your local motorcycle dealer. DENALI takes no responsibility for damages caused by improper installation. **Caution:** When installing electronics it is extremely important to pay close attention to how wires are routed, especially when mounting products to the front fender, front forks, or fairing of your motorcycle. Always be sure to turn the handlebars fully left, fully right, and fully compress the suspension to ensure the wires will not bind and have enough slack for your motorcycle to operate properly.

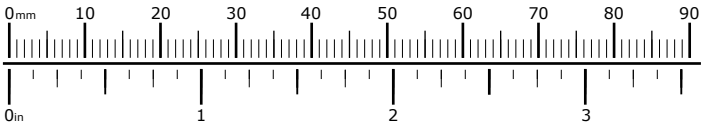
Installation Tips

We strongly recommend using medium strength liquid thread locker on all screws, nuts, and bolts. It is also important to ensure that all hardware is tightened to the proper torque specifications as listed in your owner's manual. For included accessory hardware please refer to the default torque specifications provided below. Inspect all hardware after the first 30 miles to ensure proper torque specifications are maintained.

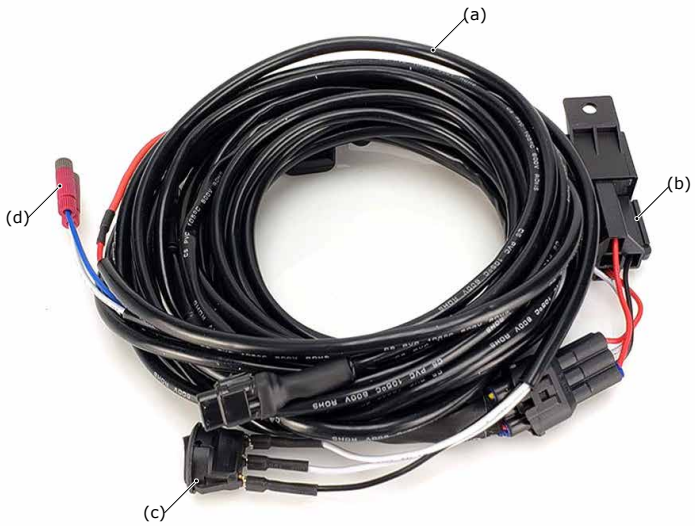
Bolt Size	in-lbs	ft-lbs	Nm
M3	10.0 in-lbs	-	1.0 Nm
M4	23.0 in-lbs	-	2.5 Nm
M5	44.5 in-lbs	3.5 ft-lbs	5.0 Nm
M6	78.0 in-lbs	6.5 ft-lbs	9.0 Nm
M8	-	13.5 ft-lbs	18.0 Nm
M10	-	30.0 ft-lbs	41.0 Nm
M12	-	52.0 ft-lbs	71.0 Nm

Hardware Sizing Guide

Not sure what size bolt you have? Use this ruler to measure screws, bolts, spacers, etc. Remember, the length of a screw or bolt is measured from the start of the "mounting surface" to the end of the screw, so only include the screw head when measuring countersunk screws.



What's In The Box?

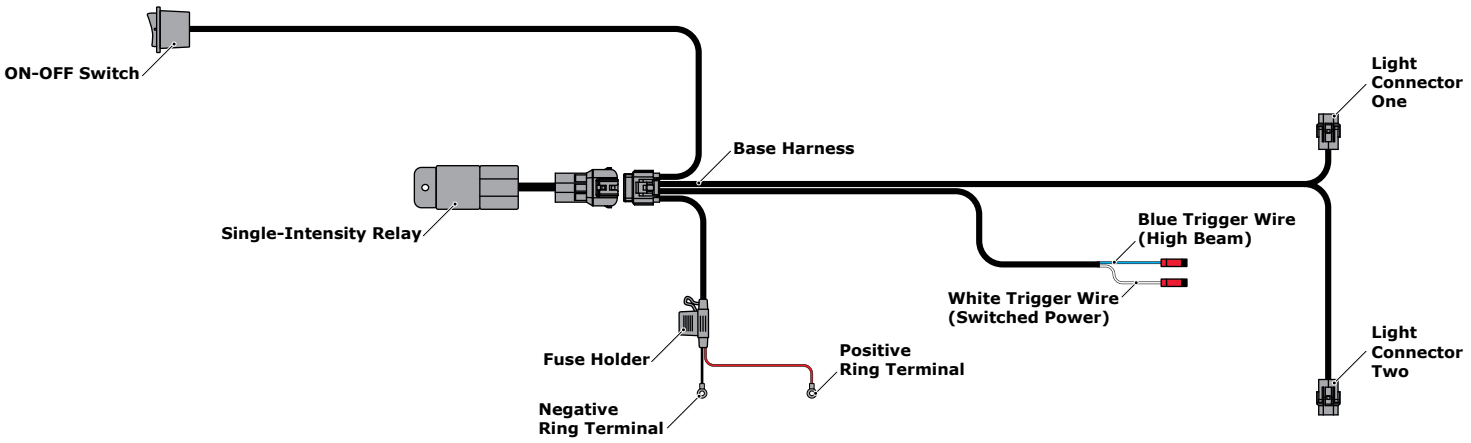


Kit Contents

(a) Automotive Wiring Harness.....Qty 1
(b) Single-Intensity Relay.....Qty 1
(c) ON-OFF Switch.....Qty 1
(d) Posi-Tap.....Qty 2

Tools Required: Test Light, Drill, 20.5mm or 51/64" Drill Bit

1. Harness Overview

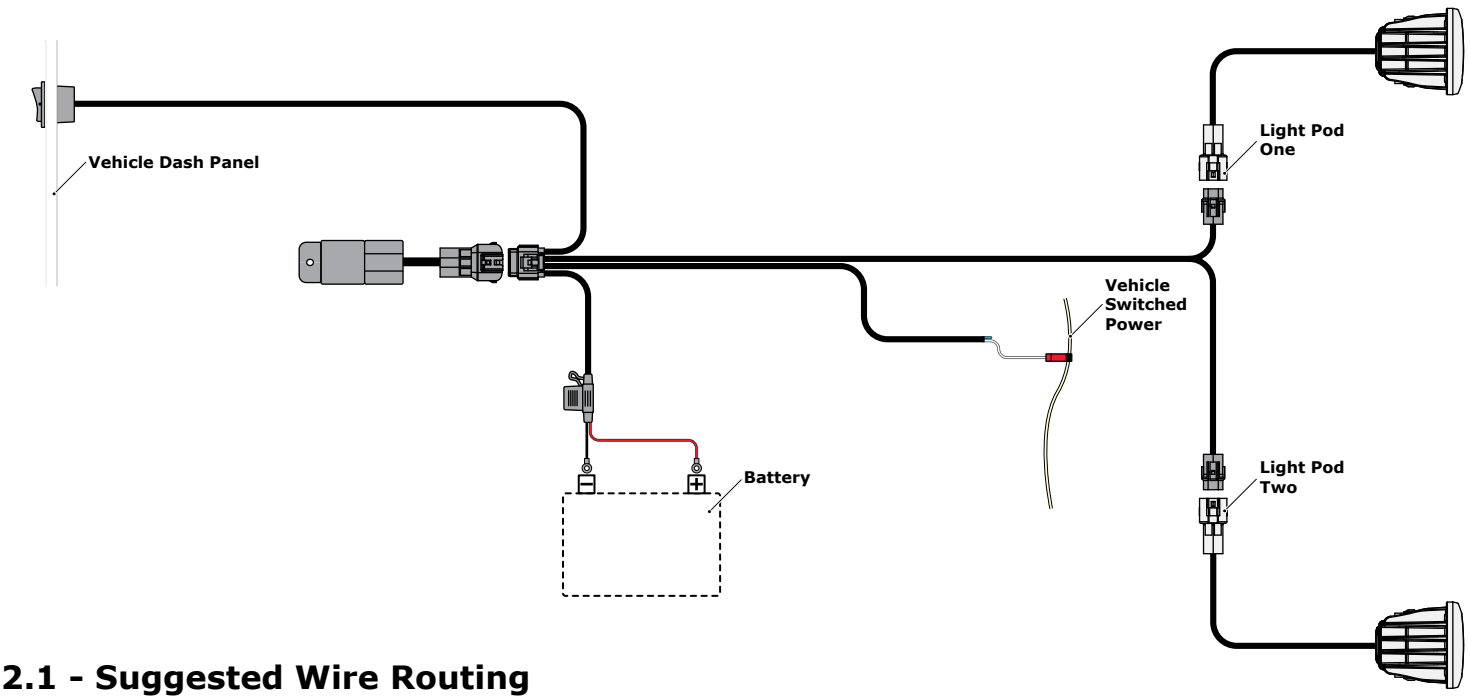


1.1 - Overview Of Wiring Harness

Our automotive wiring harness features high-quality waterproof components and a clever HotSwap™ design that enables an effortless swap from the standard Single-Intensity relay to our Dual-Intensity DataDim™ Controller (Sold Separately). If adding the DataDim™ Controller upgrade now, jump ahead and read *Section 5* before returning to *Section 2.* If not, continue to *Section 2* with peace of mind that you can always upgrade later, without having to rewire the lights.

Note: The DENALI harness with pods connected is 132 inches in length. DENALI Harness Extensions are available for purchase if extra length is required.

2. Routing The Harness



2.1 - Suggested Wire Routing

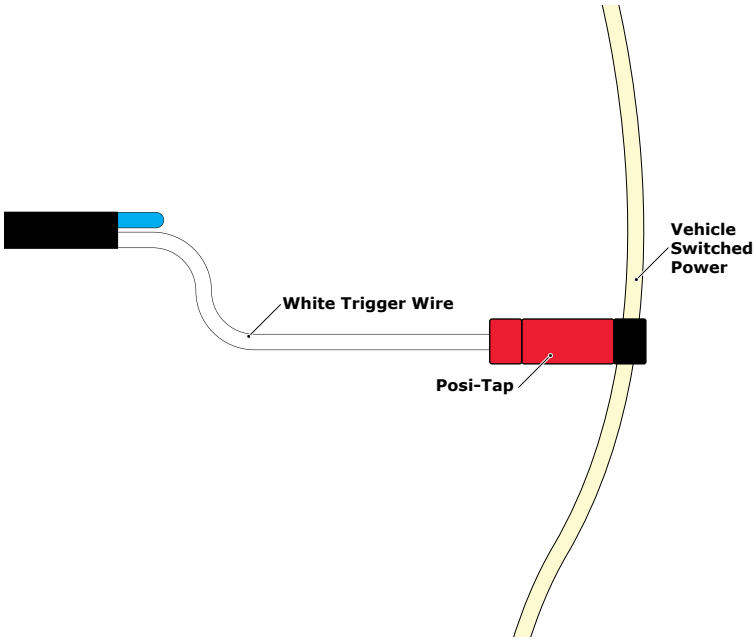
Step One: Start by positioning the Relay in the vehicle, it will need to be located in close proximity to the battery so that the final connection to power can be made at the end of the install. *(The battery terminal lead is 32 inches in length)*

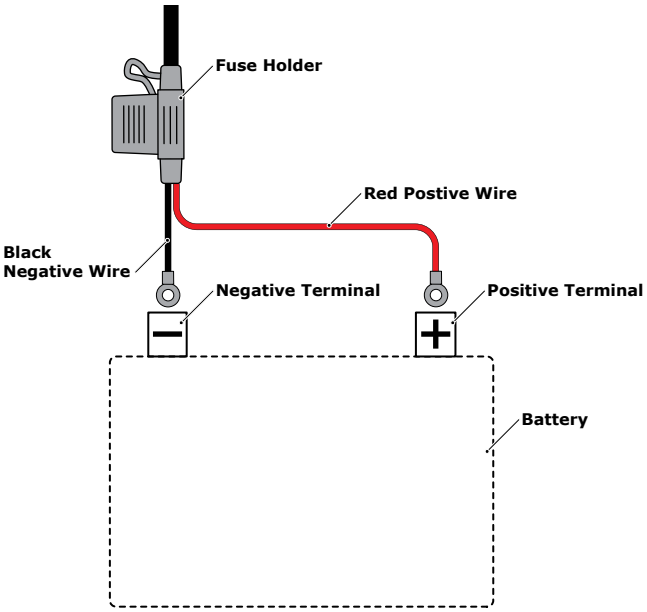
Note: Place the Relay Socket in an easily accessible location for convenient service in the event of a faulty relay.

Step Two: Begin routing the harness towards the mounted light pods. Secure the harness to the vehicle's frame along the way with zip ties. Be sure to avoid any moving components such as fan blades or suspension. Plug the light pods into the base harness.

Step Three: Route the switch wire to the location where the switch will be mounted and secure it to the vehicle using zip ties. See *Section 4* for switch installation.

3. Connecting The Harness





3.1 - Tapping Switched Power

Step One: Two examples of possible switched power sources are the low beam and tail light, however there are many other possible sources in most vehicles. The simplest way to identify switched power is to use a test light to probe connectors/wires while cycling the ignition. A clean switched power source will only be live when the ignition is cycled "ON", it should lose power when the ignition is cycled "OFF".

Step Two: Once a proper switched power source has been identified use the included Posi-Tap to tap the white trigger wire into the identified switched power source.

3.2 - Connecting To The Battery

Step One: Remove the fuse from the fuse holder.

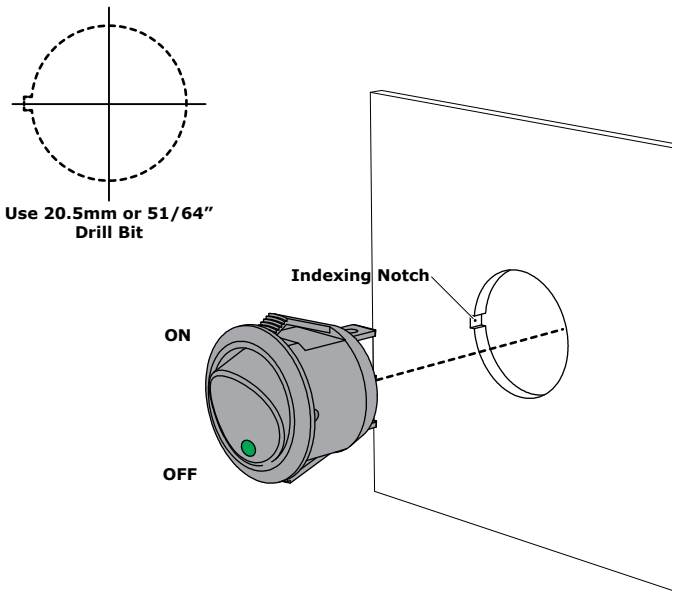
Step Two: Access the vehicle's battery and disconnect the negative (-) and positive (+) terminals.

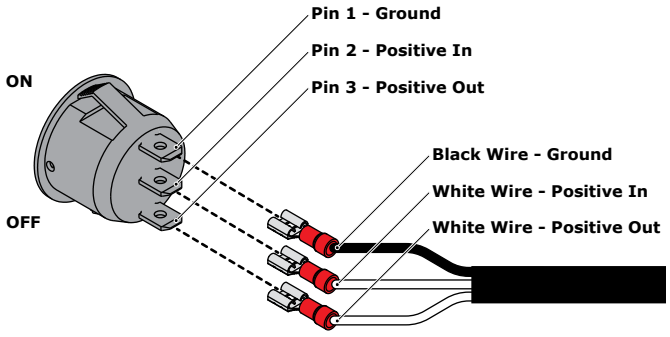
Step Three: Connect the DENALI wiring harness to the battery via the ring terminals, be sure the red wire lead with the fuse holder in-line goes to the positive (+) terminal of the battery.

Step Four: Re-install the fuse into the fuse holder.

Note: When possible, place the fuse holder in an easily accessible location for convenient service in the event of a blown fuse.

4. Installing The Switch





4.1 - Drilling The Dash Panel

Step One: Choose a suitable mounting location for the ON-OFF Switch. Be sure there are no wires, brackets or any other objects behind the panel that will prevent drilling of the mounting hole.

Step Two: Use a 20.5mm or 51/64" drill bit to drill the mounting hole into the panel.

Step Three: The switch features an indexing keyway to prevent rotation. Use a razor blade or file to cut a small notch in the edge of the hole at the 9 O'clock position to orient the switch in the vertical position.

4.2 - Connecting The Switch

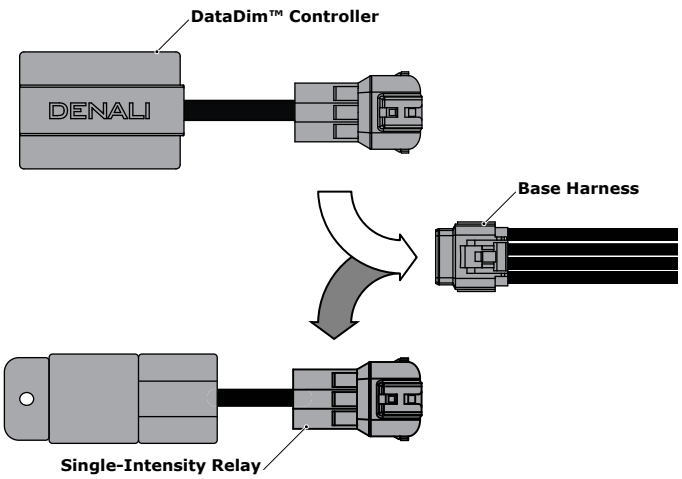
Note: The supplied switch can be replaced by other styles of ON-OFF switches that utilize spade terminal style connections.

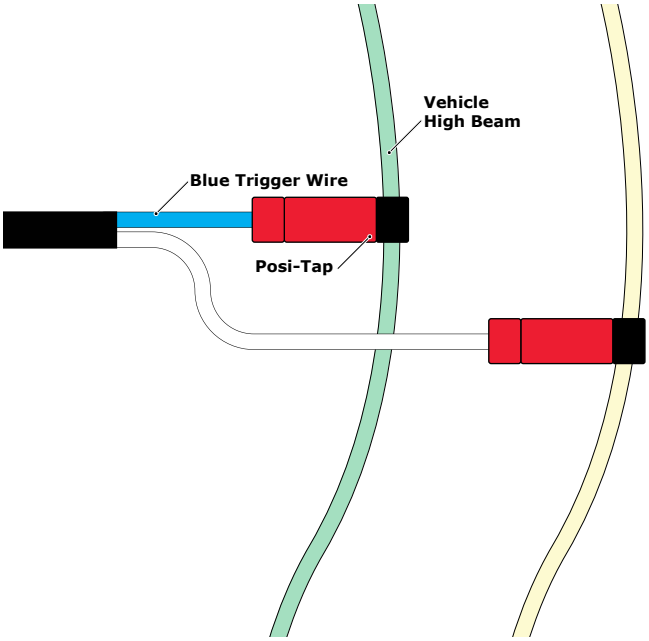
Step One: Connect the Black Ground Wire to Pin 1 on the Switch.

Step Two: Connect one of the White Positive Wires to Pin 2 on the Switch.

Step Three: Connect the remaining White Positive Wire to Pin 3 on the Switch.

5. DataDim™ Controller Upgrade





5.1 - DataDim™ Controller Overview

DENALI 2.0 Light pods are equipped with a dedicated 3rd-wire dimming circuit so we can use an external signal to reliably control the intensity of the LED chip at the source. Plug in our Dual-Intensity DataDim™ Controller to enable the DENALI lights to switch between half and full intensity with your vehicle's original high beam switch.

Step One: Unplug the Single-Intensity Relay from the Base Harness.

Step Two: Plug the Dual-Intensity DataDim™ Controller into the Base Harness.

5.2 - Tapping The High Beam

The Blue Trigger Wire is sleeved along with the White Trigger Wire.

Step One: Use a test light while toggling the vehicles high beam switch to identify the wire which receives power upon high beam activation.

Step Two: Once the high beam trigger has been identified, use the included Posi-Tap to tap into the wire.

Note: Some vehicles are equipped with LED headlights or other lighting systems that do not provide a clean 12v high beam trigger signal. In this situation you will need to run the Blue Trigger Wire to a switch for indenpendant controller of the high beam.