PERSONAL WIRING REFERENCE

How to Wire a Lightbar Via an Auxbeam Controller

Setup: the lightbar comes on only when the Auxbeam controller is armed AND the high beam is lit. If either one is off, the lightbar stays off.

How it works

The Auxbeam controller's switched +12V output feeds Pin 30 of the relay. No Auxbeam = no power at the relay, nothing happens.

The high beam signal feeds Pin 86 (coil+). Pin 85 goes to chassis ground. No high beam = the coil stays open.

Both inputs active = the coil pulls in, Auxbeam +12V passes from Pin 30 to Pin 87, and Pin 87 feeds the lightbar loom's trigger wire.

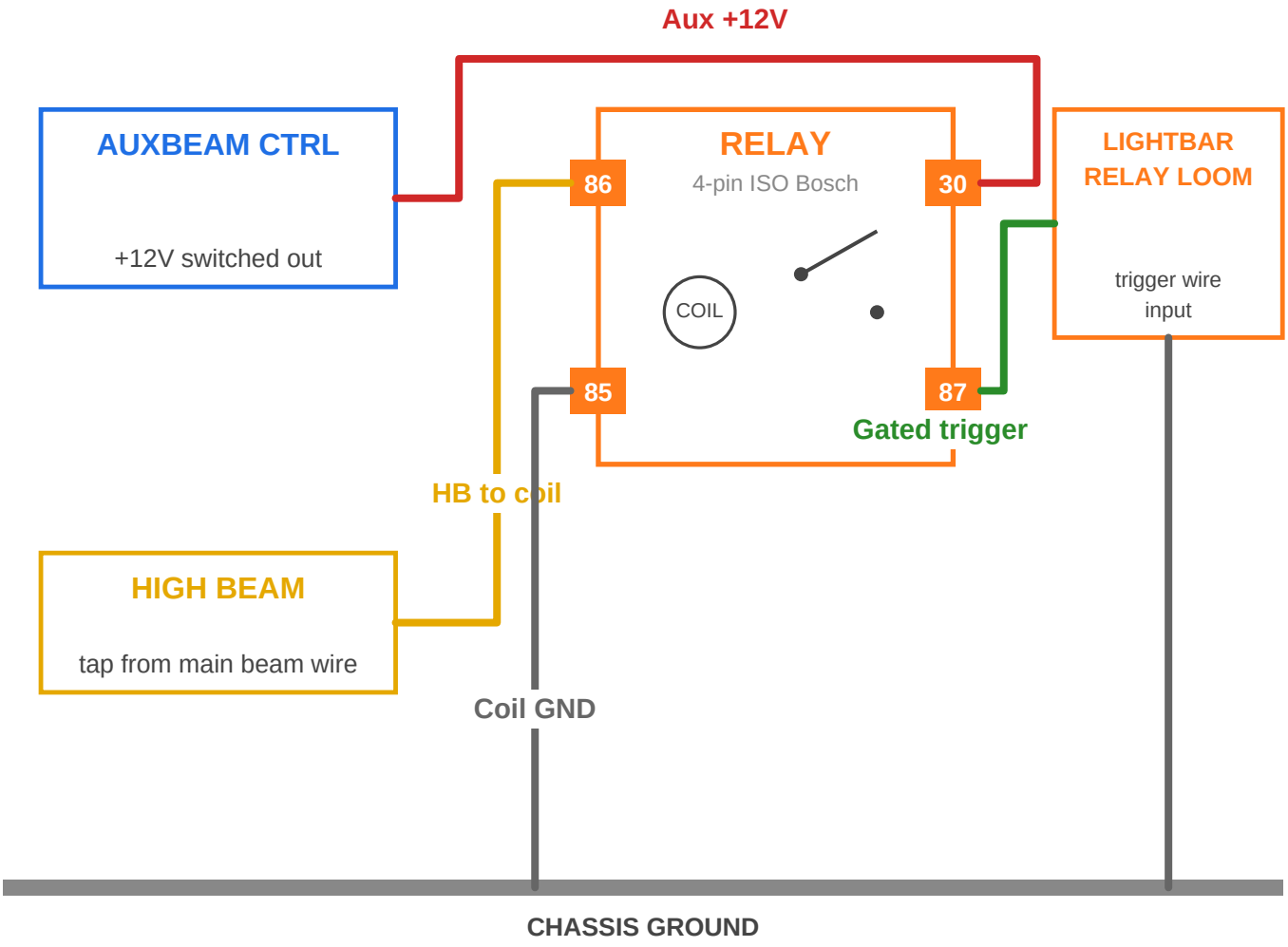
The lightbar loom keeps its own battery feed and ground. The relay only gates the trigger.

Wire colours

Red	Auxbeam +12V switched output
Yellow	High beam tap to coil
Grey	Chassis ground
Green	Gated trigger out to lightbar loom

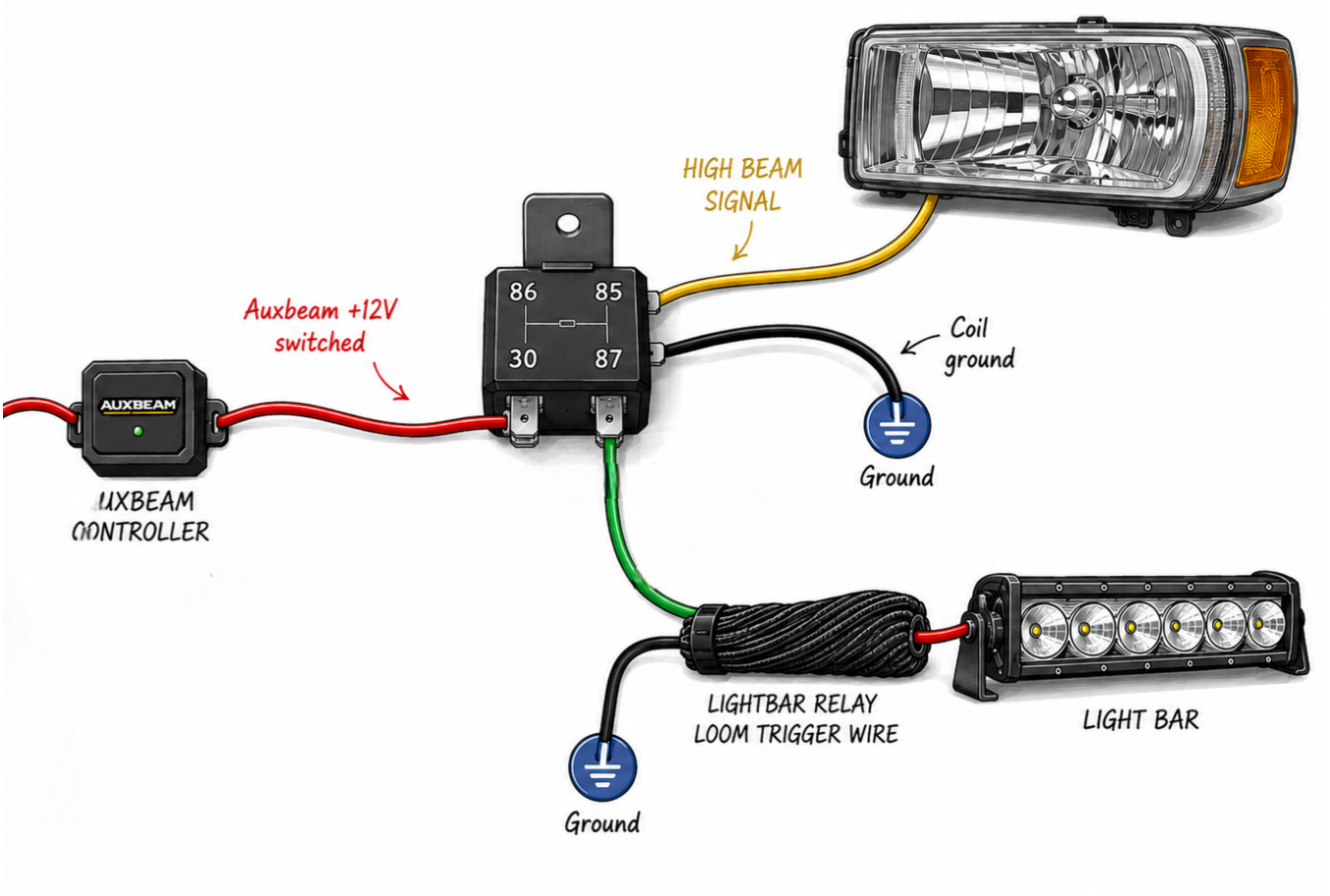
Schematic Diagram

Technical view with pin numbers.



Physical Wiring Layout

Same circuit shown as the real components.



Pin connections at a glance

- **Pin 30** Aux +12V switched supply (red)
- **Pin 86** High beam signal — coil + (yellow)
- **Pin 85** Chassis ground — coil - (grey)
- **Pin 87** Gated output to lightbar loom (green)

Notes and Install Steps

Wiring notes

1. The Auxbeam controller is already fused internally so no extra inline fuse is needed between it and Pin 30.
2. Tap the high beam wire on the bulb side of the switch so the coil only sees +12V when the main beam is actually lit.
3. Pin 87 connects in-line with the lightbar loom's high beam trigger wire. Pin 87 becomes the new HB signal the loom sees.
4. Bond Pin 85 to a clean chassis point with paint scraped back. Don't share this ground with high-current loads.
5. Bench-test before fitting. Pin 87 should only go live when both inputs are present.

Parts you need

- 12V automotive relay, 4-pin Bosch style
- Relay socket / pigtail harness
- Posi-Tap or solder splice for high beam wire
- Ring terminal for chassis ground
- Heat shrink + cable ties

Install order

1. Wire the Auxbeam controller per its own instructions.
2. Bench-test the relay before fitting.
3. Auxbeam +12V output → Pin 30.
4. Tap high beam wire → Pin 86.
5. Pin 85 → clean chassis ground.
6. Cut the lightbar loom's HB trigger wire and put Pin 87 in line.
7. Test: only the Auxbeam armed and high beam lit together should turn the lights on.