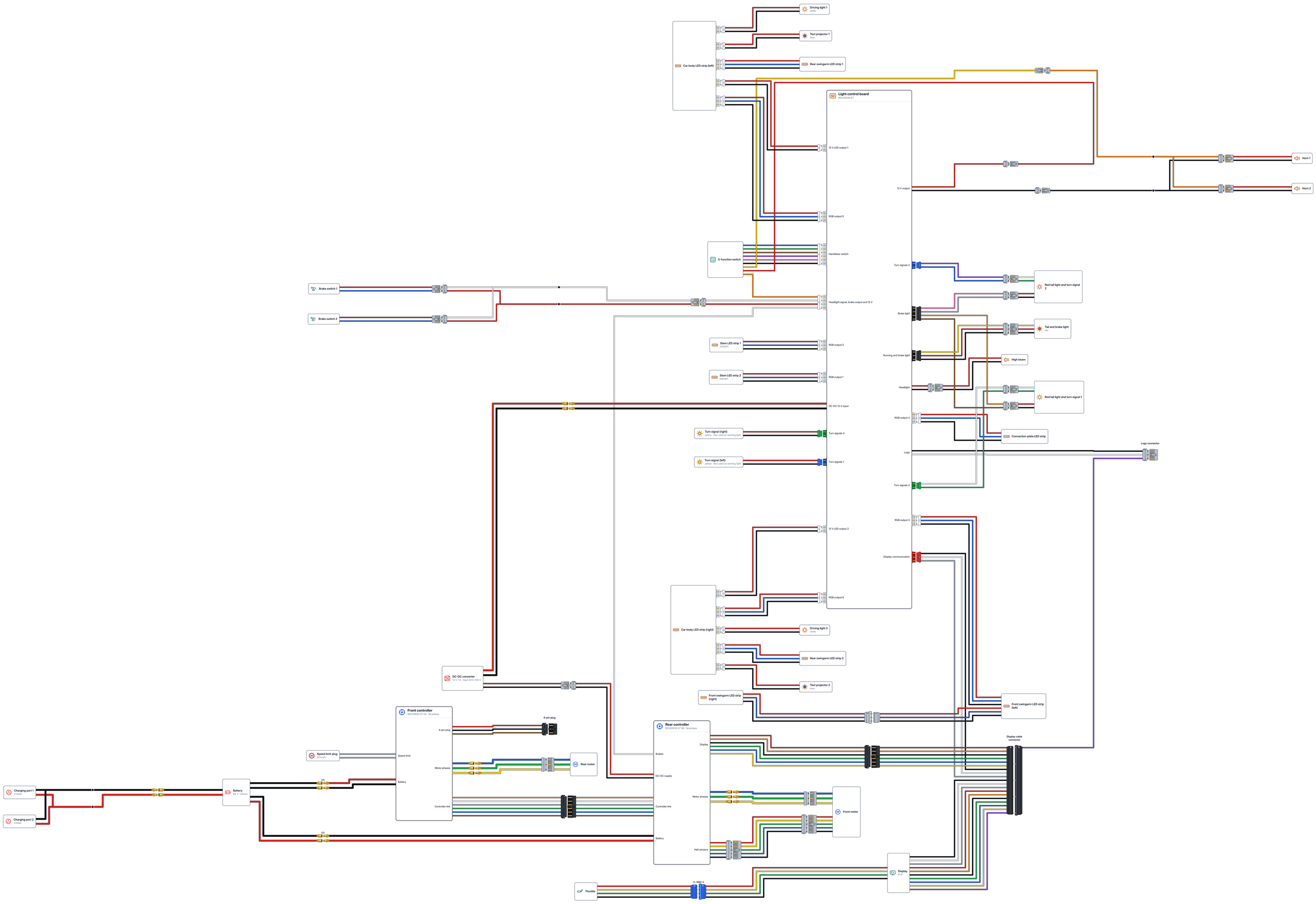
WIRING DIAGRAM

# Rovoron S7 | 84 V

FOHZSHOP.FR




## WIRE COLOURS

- Black BK
- Grey GY
- Violet VT
- Blue BU
- Orange OG
- White WH
- Brown BN
- Pink PK
- Yellow YE
- Green GN
- Red RD

## CONNECTORS

Gold pins: male side. Dark sockets: female side.

- Board header
- Round waterproof plug
- Connector (type not shown)
- JST SM plug
- Bullet connectors
- Splice: wires are joined at this point

## NOTES

1. The controllers are titled "Front motor controller (A)" and "rear motor controller (B)", but the original wires the motor marked rear to controller A and the motor marked front to controller B. Kept as drawn.
2. The rear motor only has its three phases on the original: the 5-wire Hall sensor cable, drawn at the front motor, is missing there.
3. On the original, one of the two black wires from the battery to controller A turns red after the 5.5 plug. The battery has only one red wire, to controller B. Kept as drawn.
4. At each brake switch connector, the red on pin 2 turns white and the blue on pin 1 turns red. At the horns, the red turns orange, then yellow towards the switch.
5. The original does not say which of the two stem strips or of the two rear swingarm strips is on the left, nor on which side each brake switch is. They are numbered 1 and 2.
6. The two red tail lights with turn signal are not marked left or right. The turn signal of no. 1 goes to a green board socket like the R turn light, that of no. 2 to a blue socket like the L turn light. Their red part is wired to the board brake light output.
7. Each car body strip takes 12 V from a board 12 V LED output and passes it on to a driving light and a text light. One 2-pin socket on each strip stays free.
8. The text light wires run through an unnamed dark grey block, drawn like a sleeve.
9. The 12 V to the switch runs through a 2-pin plug with only pin 2 wired. At the logo output, the black on pin 1 stops at the connector, only the white goes on, as violet, in the display cable.
10. A black 4-pin plug leaves controller A red on 4, black on 3, brown on 1, pin 2 without wire. The original neither names it nor connects it.
11. The 3-hole charging ports only use pins 1 (red) and 3 (black).
12. At each brake switch, both wires leave black and then turn one red, the other blue, without a connector. They are redrawn with the cable colour.

## DOCUMENT

Based on the manufacturer diagram "ROVORON S7 Schéma électrique".

Redrawn by FOHZShop on 1 November 2026.

**Disconnect the battery before any work.**

## CONNECTOR PINOUT

| Connector | To | Wire |
|---|---|---|
| **Light control board**<br>Logo | **Logo connector** | → 1 · Black<br>→ 2 · White |
| **Light control board**<br>12 V output | **5-function switch**<br>Connectors: JST SM plug | 2 → 2 · Red · +12 V |
| **Light control board**<br>Headlight signal, brake output and 12 V | **Rear controller**<br>Brakes<br>Connectors: Board header | 3 · White |
| **Light control board**<br>Headlight | **High beam**<br>Connectors: JST SM plug | 2 → 2 · Red · LED +<br>1 → 1 · Black · LED − |
| **Light control board**<br>12 V LED output 1 | **Car body LED strip (left)**<br>12 V input<br>Connectors: Board header / Board header | 1 → 1 · Red<br>2 → 2 · Black |
| **Light control board**<br>RGB output 5 | **Car body LED strip (left)**<br>Input<br>Connectors: Board header / Board header | Red · LED +<br>Blue · LED data<br>Black · LED − |
| **Light control board**<br>12 V LED output 2 | **Car body LED strip (right)**<br>12 V input<br>Connectors: Board header / Board header | 1 → 1 · Red<br>2 → 2 · Black |
| **Light control board**<br>RGB output 6 | **Car body LED strip (right)**<br>Input<br>Connectors: Board header / Board header | Red · LED +<br>Blue · LED data<br>Black · LED − |
| **Front controller**<br>Controller link | **Rear controller**<br>Controller link<br>Connectors: JST SM plug | 1 → 1 · Orange<br>2 → 2 · White<br>3 → 3 · Grey<br>4 → 4 · Green<br>5 → 5 · Blue<br>6 → 6 · Brown |
| **Front controller**<br>Motor phases | **Rear motor**<br>Connectors: Bullet connectors / Connector (type not shown) | → A1 · Blue · Motor phase<br>→ A2 · Green · Motor phase<br>→ A3 · Yellow · Motor phase |

| Connector | To | Wire |
|---|---|---|
| **Front controller**<br>4-pin plug | **4-pin plug** | → 4 · Red<br>→ 3 · Black<br>→ 1 · Brown |
| **Rear controller**<br>DC-DC supply | **DC-DC converter**<br>Input<br>Connectors: JST SM plug | 2 → 2 · Red · IN+<br>1 → 1 · Black · IN− |
| **Rear controller**<br>Motor phases | **Front motor**<br>Connectors: Bullet connectors / Connector (type not shown) | → A1 · Blue · Motor phase<br>→ A2 · Green · Motor phase<br>→ A3 · Yellow · Motor phase |
| **Rear controller**<br>Hall sensors | **Front motor**<br>Hall sensors<br>Connectors: JST SM plug / JST SM plug | 1 → 1 · Red<br>2 → 2 · Yellow<br>3 → 3 · Green<br>4 → 4 · Blue<br>5 → 5 · Black |
| **Display** | **Display cable connector** | Black<br>White<br>Grey<br>Red<br>Orange<br>Black<br>Green<br>Blue<br>Yellow<br>Violet |
| **Display cable connector** | **Light control board**<br>Display communication<br>Connectors: Board header | → 3 · Black<br>→ 2 · White<br>→ 1 · Grey |
| **Display cable connector** | **Rear controller**<br>Display<br>Connectors: JST SM plug | 6 → 6 · Red<br>5 → 5 · Orange<br>4 → 4 · Black<br>3 → 3 · Green<br>2 → 2 · Blue<br>1 → 1 · Yellow |
| **Display cable connector** | **Logo connector** | → 2 · Violet |

| Connector | To | Wire |
|---|---|---|
| **Throttle** | **Display**<br>Throttle<br>Connectors: Round waterproof plug YL-(MG)-4 | Red<br>Yellow<br>Green<br>Black |
| **5-function switch** | **Light control board**<br>Handlebar switch<br>Connectors: Board header | → 1 · Blue<br>→ 2 · Green<br>→ 3 · Brown<br>→ 4 · Violet<br>→ 5 · Pink<br>→ 6 · Black |
| **5-function switch** | **Light control board**<br>Headlight signal, brake output and 12 V<br>Connectors: Board header | → 4 · Orange · Headlight control |
| **Brake switch 1** | **Splice**<br>Connectors: JST SM plug | 2 → 2 · Red, then white after the connector<br>1 → 1 · Blue, then red after the connector |
| **Brake switch 2** | **Splice**<br>Connectors: JST SM plug | 2 → 2 · Red, then white after the connector<br>1 → 1 · Blue, then red after the connector |
| **Splice** | **Light control board**<br>Headlight signal, brake output and 12 V<br>Connectors: JST SM plug / Board header | 2 → 2 · White<br>1 → 1 · Red |
| **Horn 1** | **Splice**<br>Connectors: JST SM plug | 2 → 2 · Red, then orange after the connector · +<br>1 → 1 · Black · − |
| **Horn 2** | **Splice**<br>Connectors: JST SM plug | 2 → 2 · Red, then orange after the connector · +<br>1 → 1 · Black · − |
| **Splice** | **5-function switch**<br>Connectors: JST SM plug | 2 → 2 · Orange, then yellow after the connector |
| **Splice** | **Light control board**<br>12 V output<br>Connectors: JST SM plug | 1 → 1 · Black |
| **Connection plate LED strip** | **Light control board**<br>RGB output 4<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · LED − |

| Connector | To | Wire |
|---|---|---|
| **Front swingarm LED strip (right)** | **Front swingarm LED strip (left)**<br>Connectors: Round waterproof plug | Red · LED +<br>Blue · LED data<br>Black · LED − |
| **Front swingarm LED strip (left)** | **Light control board**<br>RGB output 6<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · LED − |
| **Stem LED strip 1** | **Light control board**<br>RGB output 2<br>Connectors: Board header | Red · +12 V<br>Blue · LED data<br>Black · Ground |
| **Stem LED strip 2** | **Light control board**<br>RGB output 1<br>Connectors: Board header | Red · +12 V<br>Blue · LED data<br>Black · Ground |
| **Car body LED strip (left)**<br>Output | **Rear swingarm LED strip 1**<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · Ground |
| **Car body LED strip (left)**<br>12 V LED output 1 | **Driving light 1**<br>Connectors: Board header | 1 · Red<br>2 · Black |
| **Car body LED strip (left)**<br>12 V LED output 2 | **Text projector 1**<br>Connectors: Board header | 1 · Red · LED +<br>2 · Black · LED − |
| **Car body LED strip (right)**<br>Output | **Rear swingarm LED strip 2**<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · Ground |
| **Car body LED strip (right)**<br>12 V LED output 1 | **Text projector 2**<br>Connectors: Board header | 1 · Red · LED +<br>2 · Black · LED − |
| **Car body LED strip (right)**<br>12 V LED output 2 | **Driving light 2**<br>Connectors: Board header | 1 · Red<br>2 · Black |
| **Turn signal (left)** | **Light control board**<br>Turn signals 1<br>Connectors: Board header | Red · LED +<br>Black · LED − |
| **Turn signal (right)** | **Light control board**<br>Turn signals 3<br>Connectors: Board header | Red · LED +<br>Black · LED − |

| Connector | To | Wire |
|---|---|---|
| **Red tail light and turn signal 1**<br>Turn signals | **Light control board**<br>Turn signals 4<br>Connectors: JST SM plug / Board header | 1 → 1 · White · LED +<br>2 → 2 · Green · LED − |
| **Red tail light and turn signal 1**<br>Brake light | **Light control board**<br>Brake light<br>Connectors: JST SM plug / Board header | 1 → 1 · Red, then orange after the connector · LED +<br>2 → 2 · Black, then brown after the connector · LED − |
| **Red tail light and turn signal 2**<br>Turn signals | **Light control board**<br>Turn signals 2<br>Connectors: JST SM plug / Board header | 1 → 1 · White, then violet after the connector · LED +<br>2 → 2 · Green, then blue after the connector · LED − |
| **Red tail light and turn signal 2**<br>Brake light | **Light control board**<br>Brake light<br>Connectors: JST SM plug / Board header | 1 → 1 · Red, then pink after the connector · LED +<br>2 → 2 · Black, then grey after the connector · LED − |
| **Tail and brake light** | **Light control board**<br>Running and brake light<br>Connectors: JST SM plug / Board header | 1 → 1 · Yellow · LED +<br>2 → 2 · Red · LED +<br>3 → 3 · Black · LED − |
| **Battery**<br>Output 1 | **Front controller**<br>Battery<br>Connectors: Bullet connectors 5.5 | Black, then red after the connector<br>Black |
| **Battery**<br>Output 2 | **Rear controller**<br>Battery<br>Connectors: Bullet connectors 5.5 | Black<br>Red |
| **Charging port 1** | **Splice** | 3 · Black<br>1 · Red |
| **Charging port 2** | **Splice** | 3 · Black<br>1 · Red |
| **Splice** | **Battery**<br>Charge<br>Connectors: Bullet connectors | Black<br>Red |
| **DC-DC converter**<br>Output | **Light control board**<br>DC-DC 12 V input<br>Connectors: Bullet connectors | Red · +12 V<br>Black · Ground |
| **Speed limit plug** | **Front controller**<br>Speed limit | Grey<br>Grey |