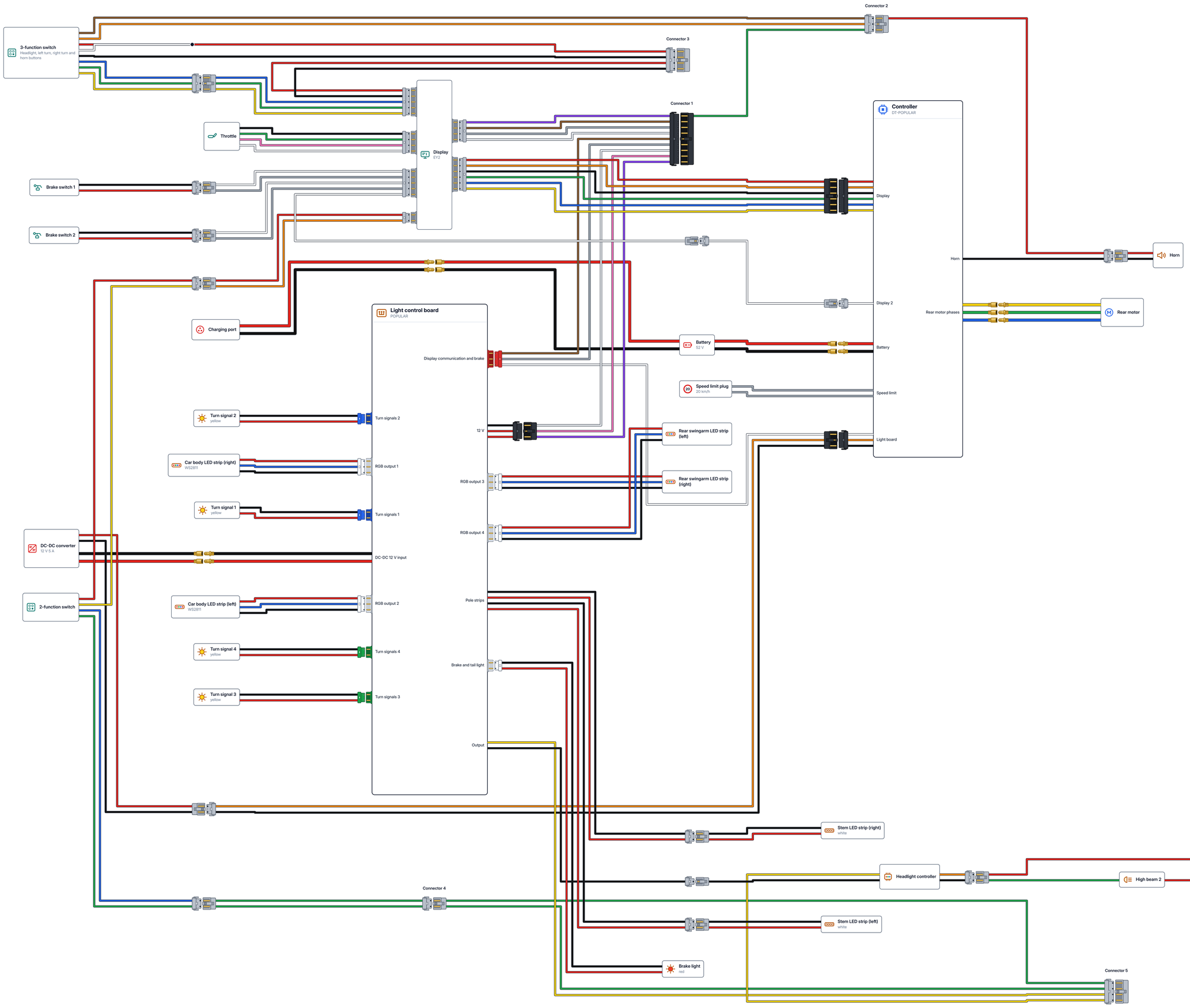
WIRING DIAGRAM

# Dualtron Pop | 52 V

FOHZSHOP.FR




## WIRE COLOURS

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

## CONNECTORS

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

- JST SM plug
- Board header
- Bullet connectors
- Splice: wires are joined at this point

## NOTES

1. The original document holds two diagrams: the single motor version (page 2, given as the latest revision) and the dual motor version (pages 1 and 3, identical, dated 21 September 2023). This diagram shows the single motor version.
2. On the light board side, ten wires run in one sleeve, and thirteen on the display side. The original names them 10-core cable and 13-core cable. Both sleeves meet at connectors 1 and 4.
3. The transparent wires are drawn pale pink on the original, marked "transparent" in Chinese.
4. The violet wire of pin 5 of connector 1 reaches the display pink: the colour change is hidden under the sleeve, the original does not show where it happens.
5. On the original, the thick black wire leaves the OUT+ terminal of the DC-DC converter and the thick red wire the OUT− terminal.
6. On this version, the "headlight" connector of the light board is not connected to anything. A black and a yellow wire leave the bottom of the board, unlabelled: the black one goes to the headlight controller, the yellow one to connector 5.
7. The two wires of the 2-function switch that go through connector 4 reach connector 5 through both sleeves. The original does not show which one meets the yellow wire of the light board and which one the yellow wire of the headlight controller.
8. The + of headlight 2 reaches the − of headlight 1 through pin 1 of a two-pin connector whose pin 2 is not wired. The − terminals of both headlights leave black, then continue green, with no connector drawn in between.
9. Below the 2-function switch, the orange wire turns yellow, with no connector drawn in between. The blue and green wires carry a dot at the same place, with no other wire joined.
10. Below the 3-function switch, the light brown wire continues dark brown and the orange wire darker orange, with no connector drawn in between.
11. The dark green wires of the original are redrawn green: those of the 2-function switch after its connector, up to connector 5.
12. Both brake switches are labelled together "left / right" on the original, which does not say which one is on the left.
13. The four yellow lights are labelled "warning / turn light" on the original, which does not say which ones are on the left or on the right.
14. On the original, the Chinese label of the two swingarm strips says "rear left" and "rear right", but their English label says "Front_L_baibi_RGB LED" and "Front_R_baibi_RGB LED" (front). This diagram follows the Chinese label.

## DOCUMENT

Based on the manufacturer diagram "Schéma électrique DUALTRON Pop" dated 6 November 2023.

Redrawn by FöhzShop on 1 November 2026.

**Disconnect the battery before any work.**

## CONNECTOR PINOUT

| Connector | To | Wire |
|---|---|---|
| **Controller**<br>Rear motor phases | **Rear motor**<br>Connectors: Bullet connectors | Yellow · Motor phase<br>Green · Motor phase<br>Blue · Motor phase |
| **Light control board**<br>Display communication and brake | **Controller**<br>Light board<br>Connectors: Board header / JST SM plug | 1 → 3 · White |
| **Light control board**<br>Display communication and brake | **Connector 1**<br>Connectors: Board header | 2 → 4 · Brown<br>3 → 3 · Grey |
| **Light control board**<br>12 V | **Connector 1**<br>Connectors: JST SM plug | 1 → 1 · Black, then clear after the connector<br>2 → 2 · Red, then pink after the connector<br>3 → 5 · Red, then violet after the connector |
| **Light control board**<br>Output | **Connector 5** | → 1 · Yellow |
| **Light control board**<br>Output | **Headlight controller**<br>Input<br>Connectors: JST SM plug | 1 · Black |
| **Light control board**<br>RGB output 1 | **Car body LED strip (right)**<br>Connectors: Board header | Red · +12 V<br>Blue · LED data<br>Black · Ground |
| **Light control board**<br>RGB output 2 | **Car body LED strip (left)**<br>Connectors: Board header | Red · +12 V<br>Blue · LED data<br>Black · Ground |
| **Light control board**<br>RGB output 3 | **Rear swingarm LED strip (right)**<br>Connectors: Board header | Red<br>Blue<br>Black |
| **Light control board**<br>RGB output 4 | **Rear swingarm LED strip (left)**<br>Connectors: Board header | Red<br>Blue<br>Black |
| **Light control board**<br>Pole strips | **Stem LED strip (right)**<br>Connectors: JST SM plug | 1 · Black · Ground<br>2 · Red · +12 V |
| **Light control board**<br>Pole strips | **Stem LED strip (left)**<br>Connectors: JST SM plug | 1 · Black · Ground<br>2 · Red · +12 V |
| **Light control board**<br>Brake and tail light | **Brake light**<br>Connectors: Board header | Black · LED −<br>Red · LED + |
| **Light control board**<br>Turn signals 1 | **Turn signal 1**<br>Connectors: Board header | Black · LED −<br>Red · LED + |
| **Light control board**<br>Turn signals 2 | **Turn signal 2**<br>Connectors: Board header | Black · LED −<br>Red · LED + |

| Connector | To | Wire |
|---|---|---|
| **Light control board**<br>Turn signals 3 | **Turn signal 3**<br>Connectors: Board header | Black · LED −<br>Red · LED + |
| **Light control board**<br>Turn signals 4 | **Turn signal 4**<br>Connectors: Board header | Black · LED −<br>Red · LED + |
| **Battery**<br>Output | **Controller**<br>Battery<br>Connectors: Bullet connectors | Red · Battery +<br>Black · Battery − |
| **Charging port** | **Battery**<br>Charge<br>Connectors: Bullet connectors | 1 · Red · Charge +<br>3 · Black · Charge − |
| **Speed limit plug** | **Controller**<br>Speed limit | Grey<br>Grey |
| **DC-DC converter**<br>Output | **Light control board**<br>DC-DC 12 V input<br>Connectors: Bullet connectors | Black · OUT+<br>Red · OUT− |
| **DC-DC converter**<br>Input | **Controller**<br>Light board<br>Connectors: JST SM plug / JST SM plug | 2 → 2 · Red, then orange after the connector · IN+<br>1 → 1 · Black · IN− |
| **Display**<br>Brakes | **Controller**<br>Display 2<br>Connectors: Board header / JST SM plug / JST SM plug | → 2 · White |
| **Display**<br>Controller | **Controller**<br>Display<br>Connectors: Board header / JST SM plug | 1 · Red<br>2 · Orange<br>3 · Black<br>4 · Green<br>5 · Blue<br>6 · Yellow |
| **Throttle** | **Display**<br>Throttle<br>Connectors: Board header | → 1 · Black<br>→ 2 · Green<br>→ 3 · Pink<br>→ 4 · White |
| **2-function switch** | **Display**<br>Handlebar switch 2<br>Connectors: JST SM plug / Board header | 1 · Red<br>2 · Yellow, then orange after the connector |
| **2-function switch** | **Connector 4**<br>Connectors: JST SM plug | 1 · Blue, then green after the connector<br>2 · Green |
| **3-function switch** | **Connector 2** | → 1 · Brown<br>→ 2 · Orange |

| Connector | To | Wire |
|---|---|---|
| **3-function switch** | **Splice** | Red<br>White |
| **3-function switch** | **Connector 3** | → 1 · Black |
| **3-function switch** | **Display**<br>Handlebar switch 3<br>Connectors: JST SM plug / Board header | 3 → 3 · Blue<br>2 → 4 · Green<br>1 → 5 · Yellow |
| **Brake switch 1** | **Display**<br>Brakes<br>Connectors: JST SM plug / Board header | 1 · Black, then white after the connector<br>2 · Red, then grey after the connector |
| **Brake switch 2** | **Display**<br>Brakes<br>Connectors: JST SM plug / Board header | 1 · Black, then white after the connector<br>2 · Red, then grey after the connector |
| **Headlight controller**<br>Input | **Connector 5** | → 2 · Yellow |
| **Headlight controller**<br>Output | **High beam 1**<br>Connectors: JST SM plug | 2 · Orange, then red after the connector · LED + |
| **Headlight controller**<br>Output | **High beam 2**<br>Connectors: JST SM plug | 1 · Black, then green after the connector · LED − |
| **High beam 2** | **High beam 1**<br>Connectors: JST SM plug | 1 · Red, then green after the connector |
| **Horn** | **Controller**<br>Horn<br>Connectors: JST SM plug | 1 · Black · Supply − |
| **Connector 1** | **Display**<br>Light board<br>Connectors: Board header | 5 → 1 · Violet, then pink after the connector<br>4 → 2 · Brown<br>3 → 3 · Grey<br>1 → 4 · Clear |
| **Connector 1** | **Connector 2** | 2 → 2 · Green |
| **Connector 2** | **Horn**<br>Connectors: JST SM plug | 1 → 2 · Red · Supply + |
| **Connector 3** | **Display**<br>Handlebar switch 3<br>Connectors: Board header | 2 → 1 · Red<br>1 → 2 · Black |
| **Connector 4** | **Connector 5** | → 1 · Green<br>→ 2 · Green |
| **Splice** | **Connector 3** | → 2 · Red |