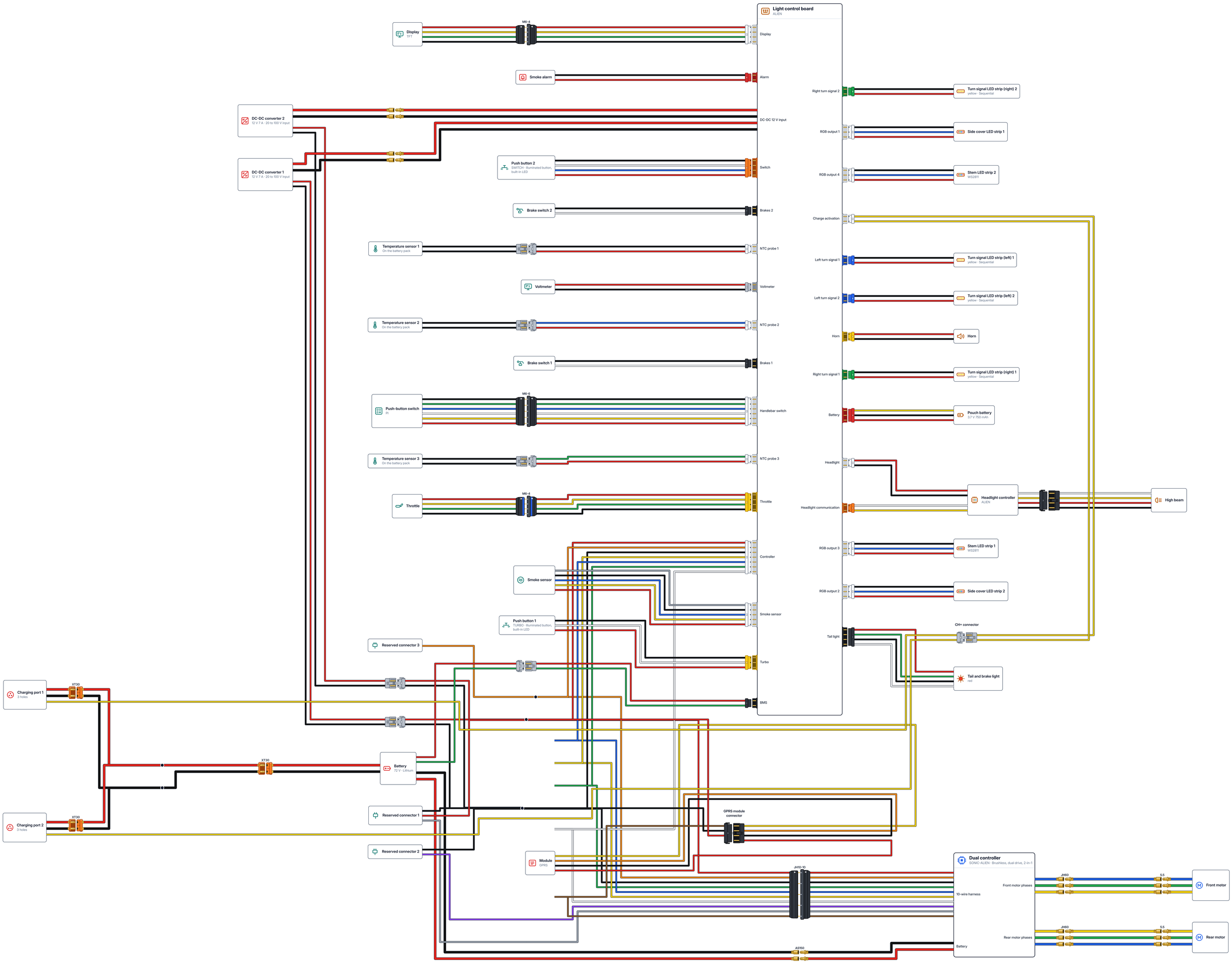
WIRING DIAGRAM

Dualtron Sonic Alien | 72 V

FOHZSHOP.FR



WIRE COLOURS

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

CONNECTORS

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

- XT30
- Bullet connectors
- Round waterproof plug
- JST SM plug
- Board header
- Splice: wires are joined at this point

NOTES

1. On the original, each waterproof plug is drawn as two rectangles marked "waterproof male" (dark red) and "waterproof female" (black), with its name and a colour: M6-6 black (handlebar switch), M6-4 black (display), M6-4 blue (throttle), JH10-10 black (controller). They are redrawn as round plugs with that colour as their mark. The housing colour is not given.
2. The wires of the board's "controller" plug, of both DC-DC inputs, of the GPRS module and of the three spare plugs enter sleeves that meet in a block marked OD18. Ten wires leave it for the controller's JH10-10 plug. The original does not draw the joints: wires of the same colour are redrawn joined in this block.
3. On the board, the "reserved serial port" plug (RX, TX) and the "NFC antenna" plug (NFC_TX, GND, NFC_RX) connect to nothing. On the BMS plug, the CH+ pin has no wire.
4. On the GPRS module plug, the pin 1 yellow wire continues brown, and pin 2 (orange wire on the module side) has no wire on the harness side. The third spare plug has a single wire, orange, on pin 2.
5. The outputs of both DC-DCs reach the board near the "converter input 12 V" label: those of the second through two heavy wires under the label, those of the first at the left edge of the board. No plug is drawn on the board for these wires.
6. The three NTC probes are drawn as small circles on the battery pack, each at the end of two black wires.
7. The pin numbers 1 and 2 of the temperature probe, BMS and DC-DC input wires are those of the grey in-line plugs, printed on the original. On the board's BMS plug, the red wire (CAN+) is the middle pin, between CH+ and CAN_.
8. On the original, the high beam has only two pins, + (red wire) and – (black wire), hidden under the sleeve. Where the white and yellow wires from the headlight controller end is not drawn.
9. An unnamed block is drawn across the three phases of each motor, between the 5.5 and JH60 plugs, and another across the charging wires, before they join. They are not redrawn.
10. The two brake switches, the two side cover strips and the two pole strips each carry the same "left / right" label, without saying which one is on the left. They are numbered 1 and 2.
11. The button switch is called "PI" above its drawing and "PI" on the board plug.
12. On the tail light side, the red and green wires are marked + and the black and white wires –. The SC+, D+, GND and D– marks are the board's.
13. The green wire marked YM on the board's "throttle" and "display" plugs is not explained on the original.

DOCUMENT

Based on the manufacturer diagram "Schéma électrique Dualtron Alien" dated 16 October 2025.

Redrawn by FõhzShop on 1 November 2026.

Disconnect the battery before any work.

CONNECTOR PINOUT

Connector	To	Wire
Dual controller Front motor phases	**Front motor** Connectors: Bullet connectors JH60 / Bullet connectors 5.5	Blue · Motor phase Green · Motor phase Yellow · Motor phase
Dual controller Rear motor phases	**Rear motor** Connectors: Bullet connectors JH60 / Bullet connectors 5.5	Yellow · Motor phase Green · Motor phase Blue · Motor phase
Light control board Controller	**OD18 junction** Connectors: Board header	Red · 72 V Orange · VDD Black · Ground Yellow · CAN H Blue · CAN L Green · SD White · SC
Light control board Left turn signal 1	**Turn signal LED strip (left) 1** Connectors: Board header	Black · LED – Red · LED +
Light control board Left turn signal 2	**Turn signal LED strip (left) 2** Connectors: Board header	Black · LED – Red · LED +
Light control board Right turn signal 1	**Turn signal LED strip (right) 1** Connectors: Board header	Black · LED – Red · LED +
Light control board Right turn signal 2	**Turn signal LED strip (right) 2** Connectors: Board header	Black · LED – Red · LED +
Light control board RGB output 1	**Side cover LED strip 1** Connectors: Board header	Black · Ground Blue · LED data Red · Supply +
Light control board RGB output 2	**Side cover LED strip 2** Connectors: Board header	Black · Ground Blue · LED data Red · Supply +
Light control board RGB output 3	**Stem LED strip 1** Connectors: Board header	Black · Ground Blue · LED data Red · +12 V
Light control board RGB output 4	**Stem LED strip 2** Connectors: Board header	Black · Ground Blue · LED data Red · +12 V
Light control board Tail light	**Tail and brake light** Connectors: Board header	Red · SC+ Green · D+ Black · Ground White · D–

Connector	To	Wire
Light control board Horn	**Horn** Connectors: Board header	Red · Horn Black · Ground
Light control board Headlight	**Headlight controller** Power Connectors: Board header	Red · LED + Black · Ground
Light control board Headlight communication	**Headlight controller** Data Connectors: Board header	White · high Yellow · low
Light control board BMS	**Battery** CAN bus Connectors: Board header / JST SM plug	1 · Red · CAN H 2 · Green · CAN L
Light control board Charge activation	**CH+ connector** Input Connectors: Board header	→ 1 · Yellow · CH+ → 2 · Yellow · CH+
Battery Output	**Dual controller** Battery Connectors: Bullet connectors AS150	Black · Battery – Red · Battery +
Charging port 1	**Splice** Connectors: XT30	1 · Red · Charge + 3 · Black · Charge –
Charging port 2	**Splice** Connectors: XT30	1 · Red · Charge + 3 · Black · Charge –
Splice	**Battery** Charge Connectors: XT30	Red · Charge + Black · Charge –
CH+ connector Output	**Charging port 1**	1 → 2 · Yellow
CH+ connector Output	**Charging port 2**	2 → 2 · Yellow
OD18 junction	**Dual controller** 10-wire harness Connectors: Round waterproof plug JH10-10	Red Orange Black Green Blue Yellow White Violet Grey Brown

Connector	To	Wire
DC-DC converter 1 Input	**OD18 junction** Connectors: JST SM plug	2 · Red · IN+ 1 · Black · IN–
DC-DC converter 1 Output	**Light control board** DC-DC 12 V input Connectors: Bullet connectors	Red · +12 V Black · Ground
DC-DC converter 2 Input	**OD18 junction** Connectors: JST SM plug	2 · Red · IN+ 1 · Black · IN–
DC-DC converter 2 Output	**Light control board** DC-DC 12 V input Connectors: Bullet connectors	Red · +12 V Black · Ground
Module	**GPRS module connector** Input	→ 1 · Yellow → 2 · Orange → 3 · Black → 4 · Red
GPRS module connector Output	**OD18 junction**	1 · Brown 3 · Black 4 · Red
Reserved connector 1	**OD18 junction**	1 · Black 2 · Red 3 · Grey
Reserved connector 2	**OD18 junction**	1 · Black 2 · Violet
Reserved connector 3	**OD18 junction**	2 · Orange
Display	**Light control board** Display Connectors: Round waterproof plug M6-4 / Board header	Red · +12 V Yellow · CAN H Green · YM Black · Ground
Throttle	**Light control board** Throttle Connectors: Round waterproof plug M6-4 / Board header	Red · +12 V Yellow · +5 V Green · YM Black · Ground
Push-button switch	**Light control board** Handlebar switch Connectors: Round waterproof plug M6-6 / Board header	Black · Ground Green · Left turn signal Blue · Right turn signal White · Horn Yellow · POWER Red · +12 V

Connector	To	Wire
Brake switch 1	**Light control board** Brakes 1 Connectors: Board header	Black · SC_IN White · +12 V
Brake switch 2	**Light control board** Brakes 2 Connectors: Board header	Black · SC_IN White · +12 V
Push button 1	**Light control board** Turbo Connectors: Board header	Black · LED – White · TURBO Red · +12 V
Push button 2	**Light control board** Switch Connectors: Board header	Black · LED – White · Ground Blue · SW Red · LED +
Voltmeter	**Light control board** Voltmeter Connectors: Board header	Red · Supply + Black · Ground
Headlight controller Output	**High beam** Connectors: JST SM plug	4 · White 3 · Yellow 2 · Red 1 · Black
Smoke sensor	**Light control board** Smoke sensor Connectors: Board header	Grey · SIN Black · Ground Blue · Data RX Yellow · Data TX Red · +3.3 V
Smoke alarm	**Light control board** Alarm Connectors: Board header	Black · AL– Red · AL+
Temperature sensor 1	**Light control board** NTC probe 1 Connectors: JST SM plug / Board header	1 · Black 2 · Black, then red after the connector
Temperature sensor 2	**Light control board** NTC probe 2 Connectors: JST SM plug / Board header	1 · Black, then blue after the connector 2 · Black, then red after the connector
Temperature sensor 3	**Light control board** NTC probe 3 Connectors: JST SM plug / Board header	1 · Black, then green after the connector 2 · Black, then red after the connector
Pouch battery	**Light control board** Battery Connectors: Board header	Yellow · Temperature sensor Black · Ground Red · Battery +