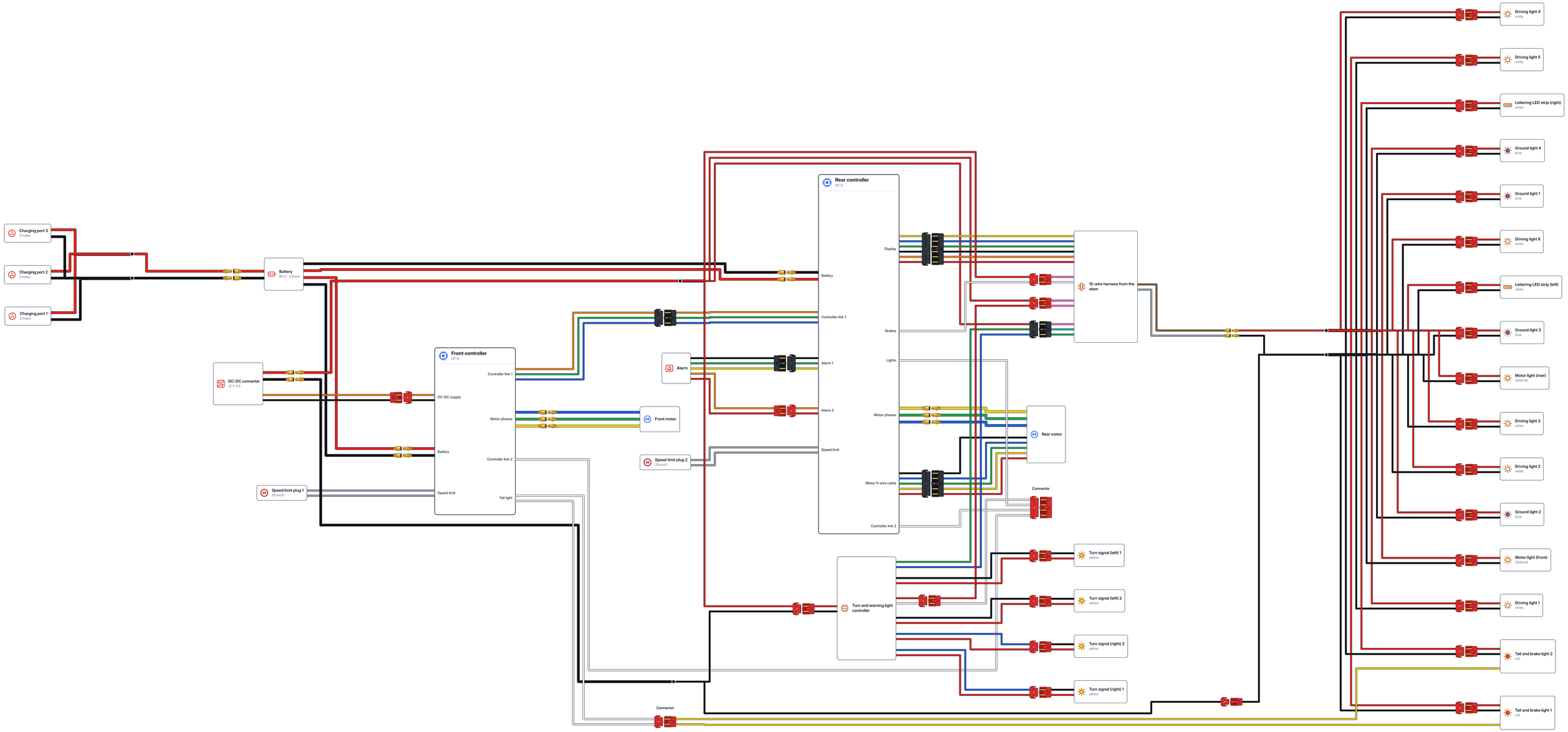
WIRING DIAGRAM

Dualtron X | 60 V

FOHZSHOP.FR



WIRE COLOURS

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

CONNECTORS

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

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

NOTES

1. The 15-wire harness comes from the stem and continues on the "DUALTRON X colonne" diagram, where its branches carry the same numbers. According to that diagram, the 6-wire cable of branch 4 goes to the display and the white wire of branch 5 to the brake switches.
2. The original names no wire colour. In the 15-wire harness, four wires are drawn in different pinks (magenta, mauve, salmon, light pink) and marked pink, a dark green wire is marked green and a dark red wire brown.
3. The + of all deck lights (ground lights, driving lights, motor lights, tail lights, lettering strips) are joined and go up the stem harness on the brown wire. Their – are joined, go up on the grey wire and also reach the DC-DC converter –.
4. Each tail and brake light has three wires: red +, black – and a second yellow +. The yellow one goes to the front controller and turns white after the connector.
5. The original does not say which of the two turn signals on each side is at the front. On the right they are wired to the RR and RF outputs of the turn signal controller, on the left to LF and LR. The controller's SC and JS inputs are not explained: SC takes a white wire from the rear controller, JS a wire from the stem harness.
6. Besides its three phases, the rear motor has a cable of five thin wires (black, blue, green, yellow, red) to the rear controller, with no stated role. The front motor is drawn with its three phases only.
7. Pin 2 of the 4-pin connector between the controllers and pin 2 of the connector between the lights and the DC-DC converter have no wire. The alarm has six wire positions, one of them empty.

DOCUMENT

Based on the manufacturer diagram "Schéma électrique DUALTRON X" dated 28 May 2019.

Redrawn by FõhzShop on 1 November 2026.

Disconnect the battery before any work.

CONNECTOR PINOUT

Connector	To	Wire
Front controller Motor phases	**Front motor** Connectors: Bullet connectors	Blue · Motor phase Green · Motor phase Yellow · Motor phase
Front controller Controller link 1	**Rear controller** Controller link 1 Connectors: JST SM plug	1 · Orange 3 · Green 4 · Blue
Front controller Controller link 2	**Connector**	→ 2 · White
Rear controller Motor phases	**Rear motor** Connectors: Bullet connectors	Yellow · Motor phase Green · Motor phase Blue · Motor phase
Battery Output	**Front controller** Battery Connectors: Bullet connectors	Red · Battery + Black · Battery –
Battery Output	**Rear controller** Battery Connectors: Bullet connectors	Black · Battery – Red · Battery +
Charging port 1	**Splice**	1 · Red · Charge + 2 · Black · Charge –
Charging port 2	**Splice**	1 · Red · Charge + 3 · Black · Charge –
Charging port 3	**Splice**	1 · Red · Charge + 3 · Black · Charge –
Splice	**Battery** Charge Connectors: Bullet connectors	Red · Charge + Black · Charge –
Rear motor 5-wire cable	**Rear controller** Motor 5-wire cable Connectors: JST SM plug	→ 5 · Black → 4 · Blue → 3 · Green → 2 · Yellow → 1 · Red
Speed limit plug 1	**Front controller** Speed limit	Grey Grey

Connector	To	Wire
Speed limit plug 2	**Rear controller** Speed limit	Grey Grey
Alarm	**Rear controller** Alarm 1 Connectors: JST SM plug	→ 1 · Black → 2 · Green → 3 · Yellow
Alarm	**Rear controller** Alarm 2 Connectors: JST SM plug	→ 2 · Orange → 1 · Red
DC-DC converter Input	**Front controller** DC-DC supply Connectors: JST SM plug	→ 2 · Orange · IN+ → 1 · Black · IN–
DC-DC converter Output	**Splice** Connectors: Bullet connectors	Red · +12 V Black · Ground
Splice	**Turn and warning light controller** Power Connectors: JST SM plug	→ 2 · Red · Supply + → 1 · Black · Supply –
Splice	**15-wire harness from the stem** Branch 2 Connectors: JST SM plug	→ 2 · Red, then pink after the connector
15-wire harness from the stem Branch 3	**Turn and warning light controller** SC / JS Connectors: JST SM plug / JST SM plug	1 → 1 · Pink, then red after the connector · JS
15-wire harness from the stem Branch 3	**Splice** Connectors: JST SM plug	2 · Pink, then red after the connector
15-wire harness from the stem Branch 4	**Rear controller** Display Connectors: JST SM plug	→ 6 · Yellow → 5 · Blue → 4 · Green → 3 · Black → 2 · Orange → 1 · Red
15-wire harness from the stem Branch 5	**Rear controller** Brakes Connectors: JST SM plug	1 · White

Connector	To	Wire
15-wire harness from the stem Branch 5	**Splice** Connectors: JST SM plug	2 · Pink, then red after the connector
Turn and warning light controller SC / JS	**Connector** Connectors: JST SM plug	2 → 1 · White · SC
Turn and warning light controller Turn signals	**15-wire harness from the stem** Branch 2 Connectors: JST SM plug	→ 1 · Green, then turquoise after the connector · R → 3 · Blue, then green after the connector · L
Turn and warning light controller RR	**Turn signal (right) 1** Connectors: JST SM plug	Blue, then black after the connector · LED – Red · LED +
Turn and warning light controller RF	**Turn signal (right) 2** Connectors: JST SM plug	Blue, then black after the connector · LED – Red · LED +
Turn and warning light controller LF	**Turn signal (left) 1** Connectors: JST SM plug	Black · LED – Red · LED +
Turn and warning light controller LR	**Turn signal (left) 2** Connectors: JST SM plug	Black · LED – Red · LED +
Connector	**Rear controller** Lights	1 · White
Connector	**Rear controller** Controller link 2	2 · White
Splice	**Splice** Connectors: JST SM plug	1 · Black
Splice	**15-wire harness from the stem** Branch 1 Connectors: Bullet connectors	Red, then brown after the connector Black, then grey after the connector
Ground light 1	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Ground light 2	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Ground light 3	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –

Connector	To	Wire
Ground light 4	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Driving light 1	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Driving light 2	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Driving light 3	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Driving light 4	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Driving light 5	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Driving light 6	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Motor light (front)	**Splice** Connectors: JST SM plug	Red Black
Motor light (rear)	**Splice** Connectors: JST SM plug	Red Black
Tail and brake light 1 Input 1	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Tail and brake light 1 Input 2	**Connector**	→ 1 · Yellow · LED +
Tail and brake light 2 Input 1	**Splice** Connectors: JST SM plug	Red · LED + Black · LED –
Tail and brake light 2 Input 2	**Connector**	→ 2 · Yellow · LED +
Connector	**Front controller** Tail light	1 · White 2 · White
Lettering LED strip (right)	**Splice** Connectors: JST SM plug	Red · +12 V Black · Ground
Lettering LED strip (left)	**Splice** Connectors: JST SM plug	Red · +12 V Black · Ground