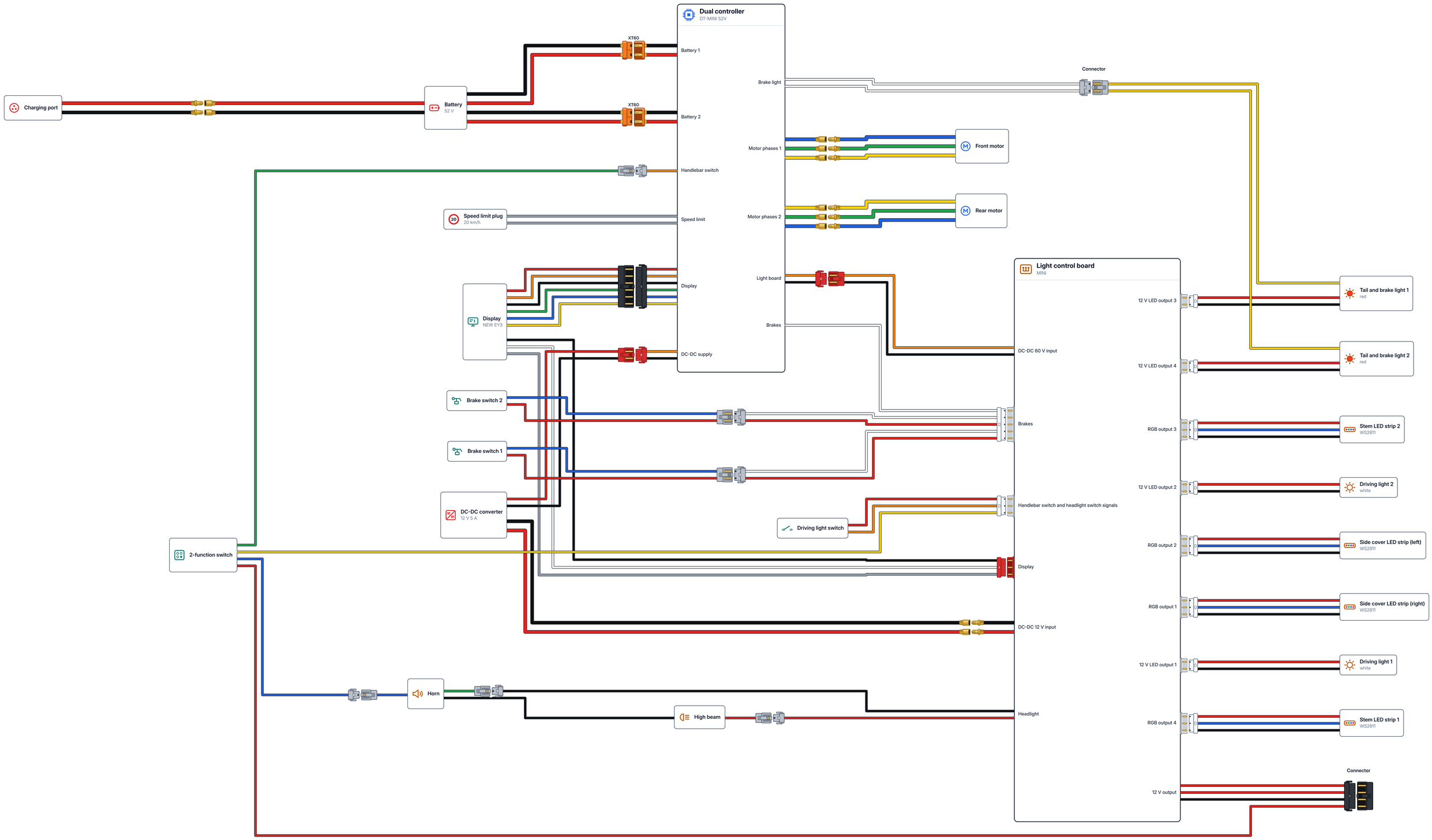
WIRING DIAGRAM

Dualtron Mini | 52 V

FOHZSHOP.FR



WIRE COLOURS

Black BK	Blue BU	Green GN	Grey GY
Orange OG	Red RD	White WH	Yellow YE

CONNECTORS

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



XT60

Bullet connectors



JST SM plug

Board header

NOTES

1. Both pole strips are labelled "left" on the original, none is marked "right".
2. Both brake switches carry the same "left / right" label on the original, which does not say which one is on the left.
3. The headlight and the horn are drawn in one housing. Their – terminals are joined by a thin wire, then reach the light board headlight output through the green wire, black after the connector.
4. The 2-function switch leads leave it red, orange, brown and black, then continue red, yellow, blue and green, with no connector drawn in between.
5. On the 12 V output connector, only pin 3 (red wire) continues to the 2-function switch. Pins 2 and 1 have no wire on the other side on the original.
6. The four turn signal connectors of the light board are not connected to anything on the original.
7. The original diagram shows no throttle.

DOCUMENT

Based on the manufacturer diagram "Schéma électrique DUALTRON Mini long body" dated 26 April 2023.

Redrawn by FõhzShop on 1 November 2026.

Disconnect the battery before any work.

CONNECTOR PINOUT

Connector	To	Wire
Dual controller Motor phases 1	**Front motor** Connectors: Bullet connectors	Blue · Motor phase Green · Motor phase Yellow · Motor phase
Dual controller Motor phases 2	**Rear motor** Connectors: Bullet connectors	Yellow · Motor phase Green · Motor phase Blue · Motor phase
Light control board DC-DC 60 V input	**Dual controller** Light board Connectors: JST SM plug	Orange Black
Light control board Brakes	**Dual controller** Brakes Connectors: Board header	White · Brake signal
Light control board 12 V output	**Connector**	Red · +12 V Red · +12 V Black · Ground
Light control board Headlight	**High beam** Connectors: JST SM plug	Red · LED +
Light control board Headlight	**Horn** Connectors: JST SM plug	Black, then green after the connector · LED –
Light control board 12 V LED output 1	**Driving light 1** Connectors: Board header	Red Black
Light control board 12 V LED output 2	**Driving light 2** Connectors: Board header	Red Black
Light control board 12 V LED output 3	**Tail and brake light 1** Connectors: Board header	Red Black
Light control board 12 V LED output 4	**Tail and brake light 2** Connectors: Board header	Red Black
Light control board RGB output 1	**Side cover LED strip (right)** Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Light control board RGB output 2	**Side cover LED strip (left)** Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Light control board RGB output 3	**Stem LED strip 2** Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Light control board RGB output 4	**Stem LED strip 1** Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Battery Output	**Dual controller** Battery 1 Connectors: XT60	Black · Battery – Red · Battery +
Battery Output	**Dual controller** Battery 2 Connectors: XT60	Black · Battery – Red · Battery +
Charging port	**Battery** Charge Connectors: Bullet connectors	Red · Charge + Black · Charge –
Display Controller	**Dual controller** Display Connectors: JST SM plug	Red Orange Black Green Blue Yellow
Display Light board	**Light control board** Display Connectors: Board header	Black White Grey
DC-DC converter Input	**Dual controller** DC-DC supply Connectors: JST SM plug	Red, then orange after the connector · Battery + Black · Ground
DC-DC converter Output	**Light control board** DC-DC 12 V input Connectors: Bullet connectors	Black · Ground Red · +12 V
Connector	**2-function switch**	Red · +12 V
2-function switch	**Light control board** Handlebar switch and headlight switch signals Connectors: Board header	Yellow
2-function switch	**Horn** Connectors: JST SM plug	Blue · Horn
2-function switch	**Dual controller** Handlebar switch Connectors: JST SM plug	Green, then orange after the connector
Driving light switch	**Light control board** Handlebar switch and headlight switch signals Connectors: Board header	Red Orange
Brake switch 1	**Light control board** Brakes Connectors: JST SM plug / Board header	Blue, then white after the connector · Brake signal Red · +12 V
Brake switch 2	**Light control board** Brakes Connectors: JST SM plug / Board header	Blue, then white after the connector · Brake signal Red · +12 V
Speed limit plug	**Dual controller** Speed limit	Grey Grey
Horn	**High beam**	Black · LED –
Tail and brake light 1 Brake light	**Connector**	Yellow
Tail and brake light 2 Brake light	**Connector**	Yellow
Connector	**Dual controller** Brake light	White White