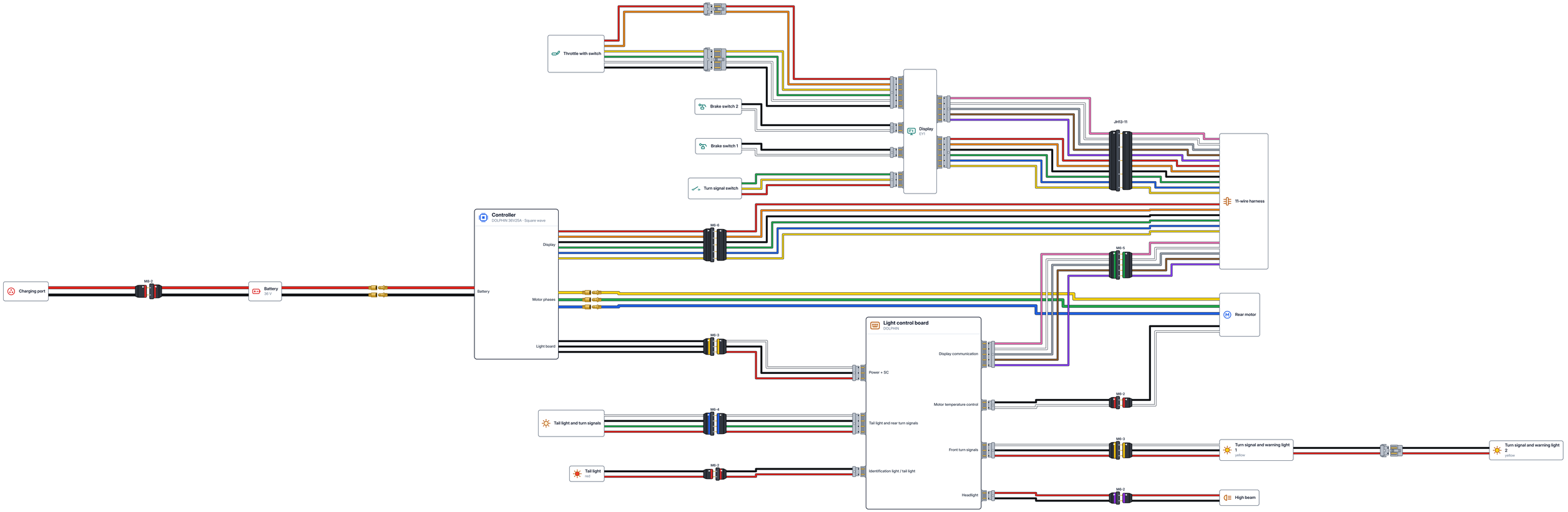
WIRING DIAGRAM

Dualtron Dolphin | 36 V

FOHZSHOP.FR



WIRE COLOURS

- Black BK
- Blue BU
- Brown BN
- 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.

- Bullet connectors
- Round waterproof plug
- Board header
- JST SM plug

NOTES

1. On the original, each waterproof plug is drawn as two rectangles, dark red for the male half and black for the female half, with its name and a colour: M8-2 red, M6-2 red or purple, M6-3 yellow, M6-4 blue, M6-5 green, M6-6 black, JH13-11 black. They are redrawn as round plugs with that colour as their mark. The housing colour is not given.
2. The display reaches the light board and the controller through an 11-wire cable (JH13-11 plug). It splits in an unnamed dark red block: 5 wires to the light board (M6-5 plug), 6 wires to the controller (M6-6 plug).
3. The pin 1 wire between the display and the light board is drawn light red, with no colour name. Other Minimotors diagrams name this light red "pink": it is shown pink here.
4. The three wires of the light board "power + SC" output leave it white, black and red. After the yellow M6-3 plug, they are all drawn black up to the controller.
5. The six throttle wires are marked BAT+ (red), ACC (orange), LIGHT (yellow), SD (green), 5V (white) and GND (black). Next to the throttle, the orange wire is also marked BAT+, and the yellow and green wires start from short violet (marked 5V) and yellow (marked light) leads.
6. The tail light and turn signal wires are marked R, G, L and 12V on the original, with no further explanation.
7. The first yellow light receives three wires from the light board (white, black, red). Only its + and – terminals are marked, and they feed the second light.
8. Both brake switches carry the same "left / right" label on the original, which does not say which one is on the left.

DOCUMENT

Based on the manufacturer diagram "Schéma électrique DUALTRON Dolphin" dated 17 December 2023.

Redrawn by FOHZSHOP on 1 November 2026.

Disconnect the battery before any work.

CONNECTOR PINOUT

Connector	To	Wire
Controller Motor phases	**Rear motor** Connectors: Bullet connectors	Yellow · Motor phase Green · Motor phase Blue · Motor phase
Controller Light board	**Light control board** Power + SC Connectors: Round waterproof plug M6-3 / Board header	→ 1 · Black, then white after the connector → 2 · Black → 3 · Black, then red after the connector
Light control board Front turn signals	**Turn signal and warning light 1** Connectors: Board header / Round waterproof plug M6-3	1 · White 2 · Black 3 · Red
Light control board Headlight	**High beam** Connectors: Board header / Round waterproof plug M6-2	2 · Red · LED + 1 · Black · LED –
Light control board Tail light and rear turn signals	**Tail light and turn signals** Connectors: Board header / Round waterproof plug M6-4	1 · White · R 2 · Black · L 3 · Green · G 4 · Red · +12 V
Light control board Identification light / tail light	**Tail light** Connectors: Board header / Round waterproof plug M6-2	1 · Black · LED – 2 · Red · LED +

Connector	To	Wire
Light control board Motor temperature control	**Rear motor** Sensor Connectors: Board header / Round waterproof plug M6-2	1 · Black 2 · White
Battery Output	**Controller** Battery Connectors: Bullet connectors	Red · Battery + Black · Battery –
Charging port	**Battery** Charge Connectors: Round waterproof plug M8-2	1 · Red · Charge + 3 · Black · Charge –
Display Light board	**JH13-11** Connectors: Board header	1 · Pink 2 · White 3 · Grey 4 · Brown 5 · Violet
Display Controller	**JH13-11** Connectors: Board header	1 · Red 2 · Orange 3 · Black 4 · Green 5 · Blue 6 · Yellow

Connector	To	Wire
Throttle with switch	**Display** Throttle Connectors: JST SM plug / Board header	→ 6 · Red · Battery + → 5 · Orange · ACC
Throttle with switch	**Display** Throttle Connectors: JST SM plug / Board header	→ 4 · Yellow · LIGHT → 2 · Green · SD → 3 · White · +5 V → 1 · Black · Ground
Turn signal switch	**Display** Turn signals Connectors: Board header	→ 1 · Green → 2 · Yellow → 3 · Red
Brake switch 1	**Display** Brakes 1 Connectors: Board header	→ 1 · Black → 2 · White
Brake switch 2	**Display** Brakes 2 Connectors: Board header	→ 1 · Black → 2 · White

Connector	To	Wire
JH13-11	**11-wire harness**	Pink White Grey Brown Violet Red Orange Black Green Blue Yellow
11-wire harness Branch 1	**Light control board** Display communication Connectors: Round waterproof plug M6-5 / Board header	→ 1 · Pink → 2 · White → 3 · Grey → 4 · Brown → 5 · Violet
11-wire harness Branch 2	**Controller** Display Connectors: Round waterproof plug M6-6	Red Orange Black Green Blue Yellow
Turn signal and warning light 1 Output	**Turn signal and warning light 2** Connectors: JST SM plug	Black · LED – Red · LED +