velorian

E-BIKE BLINKERSET 2.0
Plug & Ride

Installation

General Safety Instructions

The velorian e-bike blinkerset 2.0 contains small parts that can be swallowed by little children. There is a risk of injury when handling the cables and tools.

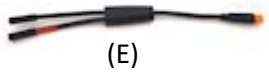
We recommend installation by a specialist workshop.

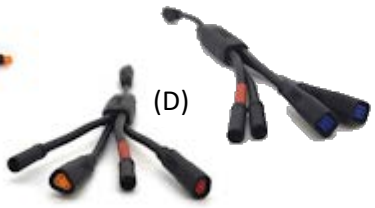
The electronics in the blinkerbox are reverse polarity protected. This means that swapping the connection cables (mixing up plus and minus) on indicators, switches or the power supply will not destroy the electronics or the connected components.

Scope of delivery

In addition to the individually packaged components, all cables and splitters are packaged together with the indicator box.
This includes the following cab:

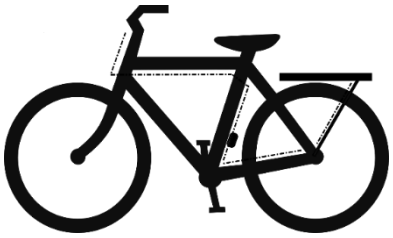
(A) 50 cm cable 6-pin (violet) to the front of the handlebars
(B) 50 Cable cm 3-pole (yellow) to the rear
(C) 10 cm cable 3-pin (yellow) extension to the rear
(D) a cable splitter for connecting the front indicators and switches or buttons
(E) one 3-pin to 2x2-pin cable splitter for the rear indicators

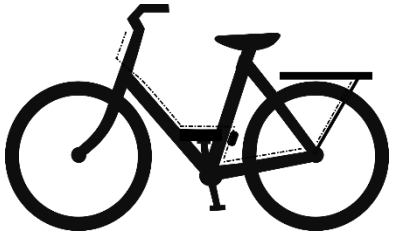

(E)


(D)

The extension cables are available in different lengths to adapt to the respective frame size.

The following illustration shows the imaginary cable route on the bike from the handlebars along the dash-dot line with the mounting position of the indicator box on the seat tube above the bottom bracket to the luggage rack.





Switch and indicator in front

First, mount the two universal brackets with the indicators and buttons or switches and status-LED on the handlebar. Connect all four elements to the splitter (D). The cable on the splitter for the right-hand side is either colour-coded or has a white dot just behind the plug.

Now connect the extension cable (A) to the splitter and run it along the frame to the mounting position of the blinkerbox.

Make sure that the plug and mating connector are correctly aligned before making the connection!

Blinkerbox

The indicator box should first be attached provisionally. Connect the cable (A) to the corresponding cable of the indicator box.

The blinkerbox is splash-proof. Nevertheless, the side with the two cables and the opening of the sounder should be attached in such a way that no water can collect on the sounder. This side should point downwards.

Now connect the longer 3-pole cable (B) to the indicator box and pull it along the frame to the mounting position of the rear indicators.

Rear indicator

Firstly, the indicator bracket for the rear indicators should be fitted to the bike and the indicators to the bracket.
When screwing in the indicators, the connection cable must be able to rotate so that the cable connection is not destroyed!

Connection of the power supply

Once all indicators and switches have been connected to the indicator box, an initial function test can be carried out.

To do this, the 2-core connection cable of the indicator box is connected directly to the e-bike battery or another source, such as the connection cable of the headlight. The brown cable is earth (-), the white cable is plus (+).
Alternatively, the test can be carried out using a 12 volt power supply unit.

For the connection, flat plug distributors can be included with which the current-supplying cable can be split. These flat plug distributors are plugged onto flat plugs, so flat plugs must be crimped onto the cable ends on both sides.

Montageabschluss

To complete the installation, check the position of the switches and indicators and tighten all screw connections.

Function and operating instructions

The function complies with the requirements of the StVZO (Germany) and UN ECE 50.

Operation with indicator switch (toggle switch)

When the toggle switch is mounted on an appropriately configured blinkerbox triggers flipping the toggle switch to the left the turn signals to flash on the left side. When the switch is returned to its original position the flashing stops.

Flipping the toggle switch to the right causes the indicators on the right to flash.

If the switch is not returned to the home position, **the flashing stops automatically after 4 minutes**. Returning the toggle switch to its original position and switching it on again will restart the flashing.

Triggering the hazard warning lights is not possible with the toggle switch.

Operation with buttons

When the push buttons are mounted on an appropriately configured blinkerbox triggers a short press on the left push-button flashing of the turn signals on the left side. If the left button is pressed again, the left turn signals stop flashing. Pressing the button on the right side causes the indicators on the right side to flash. If the right button is pressed again, the flashing stops. Switching the flashing from e.g. left to right can be achieved by pressing the other button in each case.

If the indicators are not switched off manually, **the flashing stops automatically after 4 minutes.**

The hazard warning lights are triggered by switching on the other side. Pressing and holding one button and pressing the other button starts the warning flashing. It can be stopped again by pressing one of the buttons.

The warning flashing stops automatically after 30 minutes.

Warning function in case of failure of one of the turn signals (only with configuration for 4 turn signals)

If, for example, one of the rear turn signals fails:

- The front indicator flashes twice as fast. If the front indicator fails, the rear indicator flashes twice as fast.
- The separate status LED (if installed) flashes twice as fast.
- The sound generator in the flasher unit (if active) ticks twice as fast.

Technical Data Blinkerbox alpha22

EMC approval	EN 55016-2-1; 2014-12, EN 55016-2-2; 2011-09 ISO 11451-1; 2015, ISO 11451-2; 2015, EN 15194
Operating voltage	6-48 Volt
Output voltage	12 Volt
Operating temperature	-20 to +85 °C
Flashing frequency	90 pulses ± 30 pulses per minute
Protection class	IP 54