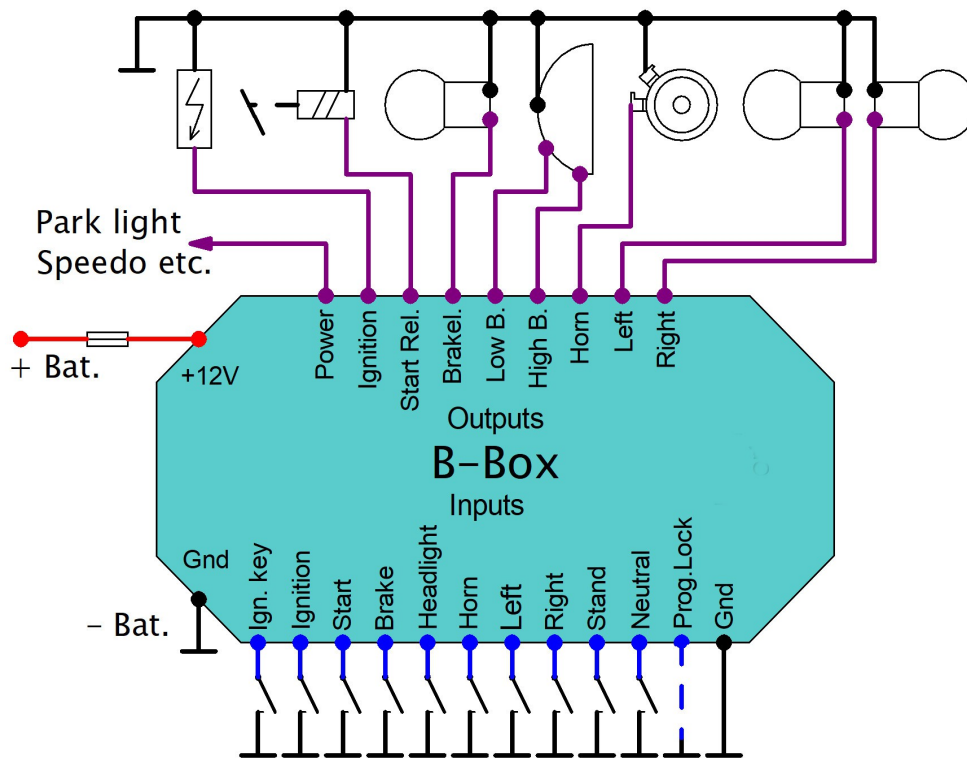


# Installation manual Electronicbox Ver. B from 1.2024

No time for manuals? No problem, it will take only 2 minutes of your time to read it and you will have more fun while the installation of your new B - Box.



**+ 12 Volt main (Red):** It is wired **direct to the battery**.

**Ground (Black):** This cable is connected to battery minus / ground. Please take care for a good connection to the minus pole.

**Input Key switch:** This input is wired to the key switch. The other end of the switch is wired to ground. The power output (Park light / Speedo / Rear light etc.) is active when this contact is closed to ground.

**Button - or killswitch input Ignition:** This input is wired to the ignition switch or to the engine stop switch. Pls. take care that the other end of the switch or button is **wired to ground**. You switch on or off the ignition by a press on the button or by open the engine stop switch

**Button input start:** This input is wired to the start button.

**Input brake switch:** Just connect the brake switch(es) to this input. The brake light is activated by switching this input to ground.

**Button or switch input for the headlight:** This is the connector for the head light switch. The head light changes when this input is connected to ground. In the button mode you can switch off the head light by pressing and hold the button for 2 seconds.

**Button input horn:** The horn output is activated when this input is switched to ground.

**Button or switch input left indicators:** The left flashers are activated when this input is switched to ground

**Button or switch input right indicators:** The right flashers are activated when this input is switched to ground.

By the way, you can activate an emergency flasher function by a press on both buttons at the same time if the „Button mode“ is chosen.

**Input side stand switch:** This input can be connected to the side stand. The ignition will switch off in the case if the option 1 in the table is activated and the gear box of your bike is not in the neutral position.

**Input neutral switch:** If you have option 1 of the table activated you can only start your bike if the ignition switch is closed to ground.

**Input program lock:** The adjusted settings in the B - Box can not be changed if this cable is connected to ground. You should connect it to ground if all settings are ready made. However, you can change it at any time if you open this connection.

**Output power:** This output is wired to the speedo / park light / plate light etc.

**Output ignition:** This output is wired to the 12 Volt input of the ignition.

**Output start relay:** This output is wired to the starter relay and can supply max. 10 Ampere to the starter relay. Don't wire the starter direct to this output!

**Output brake light:** This is the 12 Volt output to the brake light.

**Output low beam:** This output is wired to the low beam. The head light is switched off in the moment when you start your bike

**Output high beam:** This output is wired to the high beam part of the head light.

**Output horn:** This is the switched output to the horn. Please note that the B-Box can supply maximum 3 Ampere for this output. Some old horns have a higher current consumption what can destroy this output. A new horn usually need about 2,5 Ampere and cost below 10,-.

**Outputs for the flashers left and right:** These switched outputs are connected to the direction indicators. The flasher frequency is – of course constant, no matter if you use traditional bulbs or modern led lights.

#### Programming of the box:

You can change the functions of the box at any time if the „Program lock“ input is open. Press and hold the „Left“ button, press the brake switch and switch on the main power. The box is in the „programming“ mode when you release the button. The number of flashes of the direction indicators show you the row number in the table. The first row is the setting for the side stand and neutral switch. You can activate the switches by pressing the „Left“ button or disable the switches by pressing the „Right“ button. The box change to the next option after a press on a direction button. The following options are possible:

Number of flashes	Mode	Left flasher button	Right flasher button	Description
1 x	Neutral / sidestand switches enabled or disabled	Active	Disabled	Safety control of ignition and start function active or not.
2 x	Flasher auto off	Off	On	The direction indicators switch off after 50 flashes
3 x	Engine stop switch or pushbutton for ignition on	Engine stop switch	Push button	The ignition is on in switch mode if the contact is closed to ground or it switch on / off in button mode.
4 x	Harley Davidson TSM / TSSM module	installed	Not installed	The B-Box can control an installed .TSM / TSSM module of a Harley D.
5 x	Brake light flasher	On	Off	The brake light flashes for 3 times until it is continous on when brake.
6 x	2 Button function	2 buttons	5 or 6 buttons	The bike can be controlled via 2 buttons or via 5 – 6 buttons / switches.
7 x	Start / Ignition	One button	Two buttons	The starter and ignition is controlled by 1 or 2 buttons
8 x	Head light control	Switch	Push button	The head light is controlled by a8 switch or a button
9 x	Indicator control	switch	button	The direction indicators are controlled by a switch or 2 buttons.

The settings are stored in the B-Box after 6 or 9 presses on a direction button. [By the way, You'll need to set the option number 7 to „Two buttons“ if you have installed an engine stop switch what is wired to ground.](#)

For **Harley Davidson bikes** you can use the D-Box in combination with the TSM/TSSM module if you wire the left and right output of the D-Box to the button inputs of the TSM/TSSM module (Usually violet / white and brown / white) .

The **2 button function** is easy to use without the need to learn button combinations:

- One short press on the left button: Flasher left on or off.
- One short press on the right button: Flasher right on or off.
- One short press simultaneously on both buttons: Emergency flasher.
- Two short presses on the left button: Toggle between low and high beam.
- Two short presses on the right button: Toggle between Ignition on or off.
- One long press on the left button (> 0,3 sec): Horn
- One long press on the right button (> 0,3 sec): Starter

### **Installation:**

Connect the red cable to plus 12 Volt and the black cable to the minus pole of the battery. The wires from the handle bar switches to the B-Box can be as thin as possible. There is no significant current through these cables. The cables to the loads should have a minimum size of 0,75 qmm. Please take care that the wires to the handlebar switches are as far as possible away wired from the ignition cables. It is always a good idea to use a 6 wire shielded cable to the handlebar switches. These cables are available in every local computershop.

The B - Box should be installed by professional well trained engineers only. Please check your local regulations regarding the traffic light rules in your country before of the use of the B - Box in your bike. Please be aware that we are not responsible for any hazards, damages or disadvantages due to the use of the electronicbox. The electronicbox devices are registered under the number DE54933725 WEEE as B2C device. We also declare that the B - Box is conform to the CE and ROHS regulations for the European market.

We tried to keep the functions of the B - Box and this manual as simple as possible. If you have any questions while the installation please don't hesitate to contact us at [info@elektronikbox.de](mailto:info@elektronikbox.de) .

**We wish you to have a lot of fun with your new B - Box in your bike  
and of course always a safely trip!**