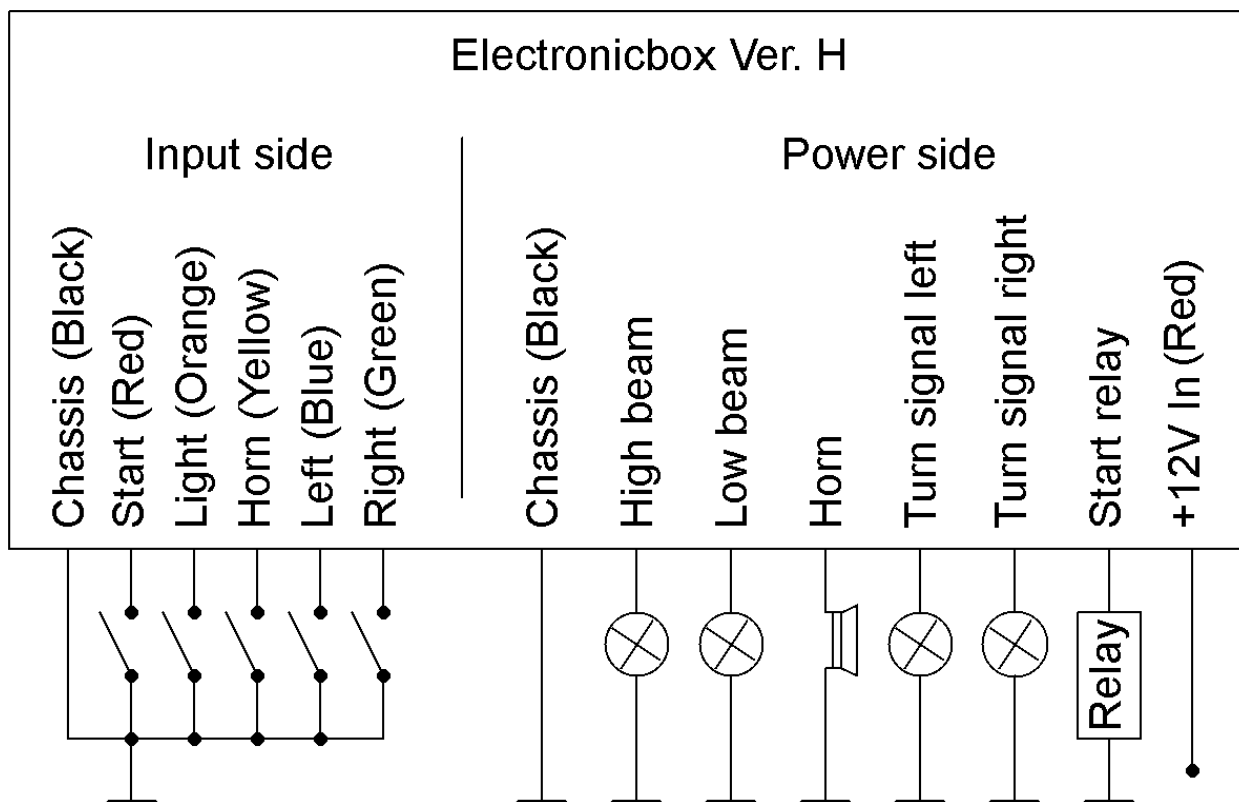


# Installation manual for the Elektronikbox, version H, 01.2019



**Push button or switch input for the left flashers (blue):** You can use this input for a push button or a switch what will connect the input to ground / chassis when pressed. An close contact will start the flasher left.

**Push button or switch input for the right flashers (green):** You can use this input for a push button or a switch what will connect the input to ground / chassis when pressed. An close contact will start the flasher output right.

**An emergency flasher function** is active by pressing both direction buttons. This function is only enabled in the "button mode" for the flasher section.

**Push button for the horn function (yellow):** The horn will work when the button is pressed and the input cable is connected to ground.

**Button or Switch input for the head light (orange):** The headlight will toggle between high - and low beam when the button is pressed and the input cable is connected to ground. A press of 2 seconds on the button switch off the head light if this input is in button mode.

**Button input for the start relay (thin red cable):** The relay output will switch the 12 volt for the starter relay when the button is pressed and the input cable is connected to ground. The starter relay output can handle up to 3 Ampere.

**Ground (black):** Here are 2 cables available. Just connect the big cable direct to the chassis and the thin cable to the buttons of the handle bar. It is important that the handle bar have the same ground connection, Otherwise the box might make some "funny" mistakes due to a poor grounding of the handle bar when a button is pressed.

**+ 12 Volt input from ignition lock (big red cable):** This is the 12 volt power input for the box and the power outputs. The outputs of the box are self resettable in the case of a short circuit. However, **we recommend to wire a 15 Ampere fuse** in the line, cause the temperatures in the case of a short circuit will reach about 120 degree C what might result in small flaws in the plastic housing and a possible loose of the water protection.

**Flasher outputs left and right:** These are the power outputs for the flashers. The flasher frequency is independent of the load. So, problems with led flashers are a matter of the past.

**Output horn:** This is the 12 Volt output to the horn, what is active by a button press. **Be careful, this output can control modern horns with maximum 3 Ampere. Every current above this value might destroy this output.**

**Output low beam:** This is the 12 Volt output for the low beam headlight. However, the light can be switched off when pressing the "start" button in order to have enough energy for the starter (further infos at page 2, "setup").

**Output high beam:** This is the 12 Volt output for the high beam bulb.

**Output start relay:** This output is connected to the **start relay** and not direct to the starter. You know that the small H - Box can not handle direct 100 Ampere for the starter and will need a starter relay ;-).

**Flasher control:** Some new bikes need a flasher indicator lamp. Just take simple 2 diodes (1N4007 or similar) and connect the cathodes, (ring side) together and connect it to your indicator lamp. The other sides of the diodes can be connected to the flasher outputs. Thats it...

**Adjustment of the different functions:**

The H - Box can be use for the most circumstances without any modification on the box. However, you can easily change some functions in the box without to be a software specialist. Just press the "horn" button while switching on the ignition switch and you are in the "setup mode". An one time emergency flash will indicate the "Mode 1". This ist just a small show function. The flashers will flash 2 times when switching on the ignition switch. Just feel free to press the "right" button if you like to activate this function. Alternatively you can switch off this function by pressing the "left" button and you will come immediately to "Mode 2" what is indicated with 2 flashes of the direction lamps. Feel free to continue to make your personal settings for your bike. All settings are stored in the box after 9 times pressing the "left" or "right" button. Your done! ...it's that simple... The H - Box will keep your settings after a power off. However, you can change the settings at every time you want. The following options are possible:

Number of flashes	Mode	Left flasher button	Right flasher button	Description
1 x	Show flasher	Off	On	2 emergency flashes when power on the box
2 x	Flasher auto off	Off	On	The flasher is off after 30 or 60 times
3 x	Flasher auto off	30 flashes	60 flashes	Number of repeats if "Auto Off" is activated
4 x	Low light	On	Off	The flashers will glim with about 25 % when the flasher function is off
5 x	Light control by switch or push button	Light switch	Light button	The H - Box can be use with a light switch or a push button
6 x	Flasher control by switch or push button	Flasher switch	Flasher button	The H - Box can be use with a switch or a button for the flasher control
7 x	Startrelay Mode	All outputs are not affected	All other outputs are off when pressing the start button	All other outputs can switch off when starting the engine.
8 x	Head light is off if ignition on	The head light is off when switch on the ignition	The head light is on when switch on the ignition	The head light is on after a press on the "Light" button.

**Installation:**

The power outputs can handle 3 Ampere (starter relay, indicators, horn) and 6 Ampere (head light). The maximum current of the H - Box is 15 Ampere due to the small size of the box. So, please take care that the 12 Volt power to the box is protected with a 15 Ampere fuse. The cables to the buttons should be more than 10 cm away from the ignition and spark plug cables (if possible) in order to prevent the box against emv disturbances. Otherwise the H - Box might can do some "funny" unwanted functions like changing the light, switching on the flashers, etc. It's also a good idea to use shielded cables between push buttons and box if available.

The H - Box was developed for an implemenation in show bikes and racing bikes. It 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 H - 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 H - Box is conform to the CE and ROHS regulations for the European market.

We tried to keep the functions of the H - 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 H - Box in your bike and of course always a safely trip!**