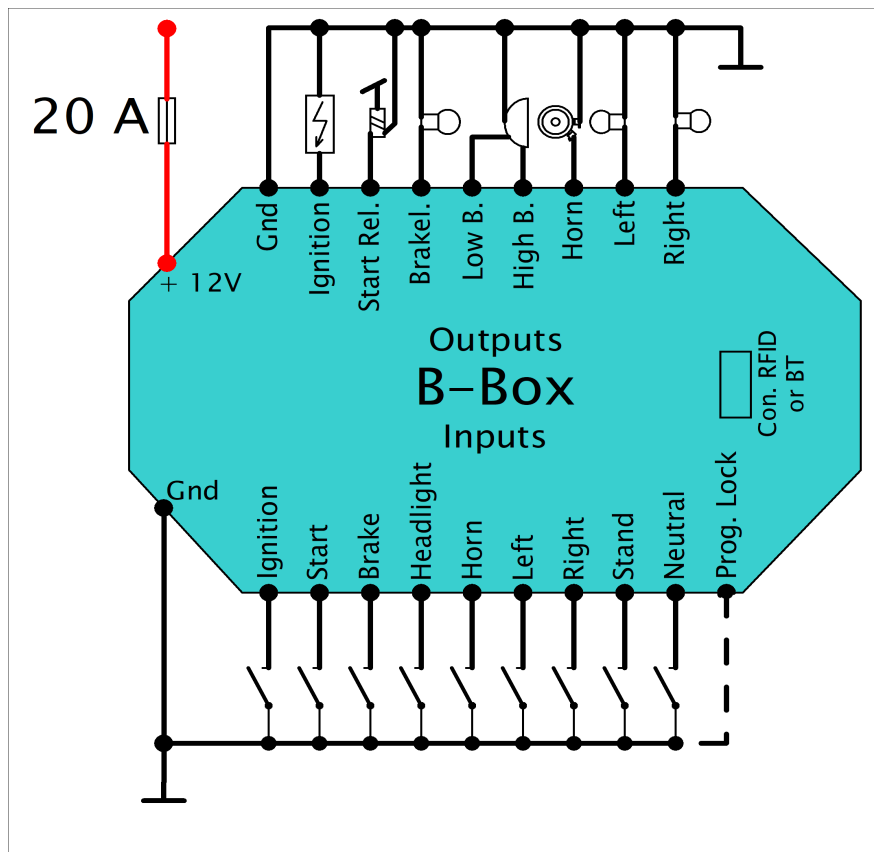


Installation manual Electronicbox Ver. B, 03.2020

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): This is the 12 Volt main line. It is wired **after the ignition key switch** if you don't use the optional available RFID antenna. It is wired **direct to the battery** if you use the RFID antenna as keyless go system.

Ground (Black): This cable is connected to battery minus / ground. By the way, it makes sense to connect the handle bar ground with the frame ground with a wire. The bearings to the fork have usually not a good connection to the frame what might result in „funny“ unwanted effects.

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

Button - or killswitch input Ignition: This input is wired to the ignition switch or to the engine stop switch. You switch on or off the ignition by a press on the button or by open the engine stop switch

Input brake switch: Just connect the brake switch(es) to this input. The brake light is activated by switching this input to ground. By the way, the B - Box can let the brake light glow with 40 % if no brake switch is closed (...see option 1 in the table). In this case you need only 1 cable to the rear light / brake light.

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 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 „Horn“ button and switch on the ignition. The box is in the „programming“ mode when you release the „Horn“ 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 box will store the settings after 8 presses on the direction buttons.** 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 flasher switches off after 50 times.
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	RFID antenna	installed	not installed	The ignition is controlled via traditional switch or RFID chip.
5 x	Brake light mode	Only brake light	Brake light and rear light combination	The brake light is complete off when not in use or dim to 40 %
6 x	Start / Ignition	One button	Two buttons	The starter and ignition is controlled by 1 or 2 buttons
7 x	Head light control	Switch	Push button	The head light is controlled by a switch or a button
8 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 8 presses on a direction button.

RFID Mode: You can use the optional available antenna when you connect the antenna to the 4 pin connector and activate the option 4 in the table. Then you just need to „teach“ the B -Box the unique code of the 2 electronic keys. The procedure is almost similar to the procedure of the other options: Just press the „Left“ or „Right“ button and switch on the ignition. The box „learn“ the code of the key when you hold it in front of the antenna. A flash of the direction indicators indicate that the box have learned the code. Now just feel free to repeat the procedure with the other key and the other direction button. By the way, don't install the antenna behind any metal. This will reduce the maximum distance to the key or it will not work correct.

Bluetooth Module: If you don't use the RFID socket you can connect an optional available Bluetooth module on the port. Just feel free to scan the QR code and download the Android app from our website:



Plug in the module to the 4 pin connector and switch on the ignition. Activate the Bluetooth option in your smart phone and connect it to B-Box Remote. Open the app, scan for Bluetooth devices and connect it with B-BoxRemote. That's it. Now you can control your bike via a touch on your smartphone. Please take care that the Bluetooth module is not covered with metal. This will reduce the maximum distance to your smartphone. Also take care that the neutral switch is connected to your B-Box. This will prevent you for unwanted funny effects when you try to start your bike and the gearbox is not in neutral position.

Installation:

Connect the red cable to plus 12 Volt and the black cable to the minus pole of the battery. **You can connect the plus cable direct to the battery if you use the RFID antenna. The red cable should be connected after the ignition switch if you don't use the RFID antenna.** 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 .

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