



eBikeLing CONVERSION KITS  
USER MANUAL



[www.ebikeling.com](http://www.ebikeling.com)

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## PARTS INTRODUCTION

Open the carton, take out all the parts. Check every item you received in the box.

Each conversion kit includes:

Hub motor with cables attached and mounted on the wheel.

Brushless Motor Controller.

Thumb or twist throttle.

LED or LCD Display.

For SW900 instructions please visit our website: [www.ebikeling.com](http://www.ebikeling.com)

810 LED has on/off, 6 km cruise control, three power mode (similar to manual car gear shifts) buttons. LED does support PAS but doesn't control PAS sensitivity.

Two, right and left, brake levers. (Optional, kit operates without them).

PAS, Pedal Assist Sensor and magnetic disc (Optional, kit operates without them).

Freewheel if you got rear wheel.

Cable ties.

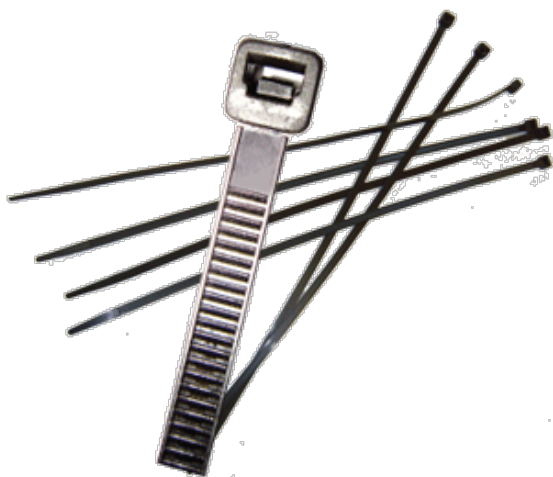


## Step One: Getting started

Be ready to spend up to an hour for this conversion. Prepare a spot where you can easily take your bikes current wheel and even chain off, so be ready to get your hands dirty. You may want to wear some latex gloves and keep floor covered with paper.

Also, prepare your tools. **You will need different size wrenches, philips and flat screw drivers, various size allen wrenches, pliers. You may need more or different tools as every bike is different and there are various ways to mount a certain item.**

You will also need an air pump as you will need to switch your current wheel on to the new wheel with electric hub.



## **Step Two: Prepare the bike.**

At this point we know we have everything needed to convert our bike. We start with taking the wheel off. It will take slightly longer to take the rear wheel off since we also need to move the chain, little more messy but an easy process. If you decide to use PAS, pedal assist system, you will also need to take your pedal arm. Please keep note that different cranks has different installation process. In general you need to install or even glue them in proper distance. (~10 mm is good range)



## **Step Two: Prepare the bike.**

Step Three: Install the tire.

Tire from the old wheel needs to be installed on the new wheel with electric hub. First let all the air out of the tire. Take the tire off the wheel and inner tube, be careful not to damage the valve as you may have to change inner tube all together. Now, install the inner tube on the new wheel then install tire and inflate.



### **Step Three: Install the tire.**

Tire from the old wheel needs to be installed on the new wheel with electric hub. First let all the air out of the tire. Take the tire off the wheel and inner tube, be careful not to damage the valve as you may have to change inner tube all together. Now, install the inner tube on the new wheel then install tire and inflate.



#### **Step Four: Install new wheel.**

Now that your tire is inflated and on the new wheel, it is time to put it on your bike. For rear wheel installations, mount gear cassette. For disc brake installations, mount the disc on new wheel hub. Make sure cables from electric hub stay on the left side, this is valid for rear wheel installations. For front wheel cables from electric hub should stay on the right side.

For rear wheels, make sure derailleur and chain are placed properly on the rear cassette. Turn the pedals by hand and shift gears to make sure there are no obstructions.





### **Step Five: Install controller**

Find a suitable place for controller. You may want to find a spot where all the cables from motor, display, brake levers, battery and PAS can reach. Cables lengths should not be an issue but it is better to measure them and decide where they are going to be routed before using cable straps.



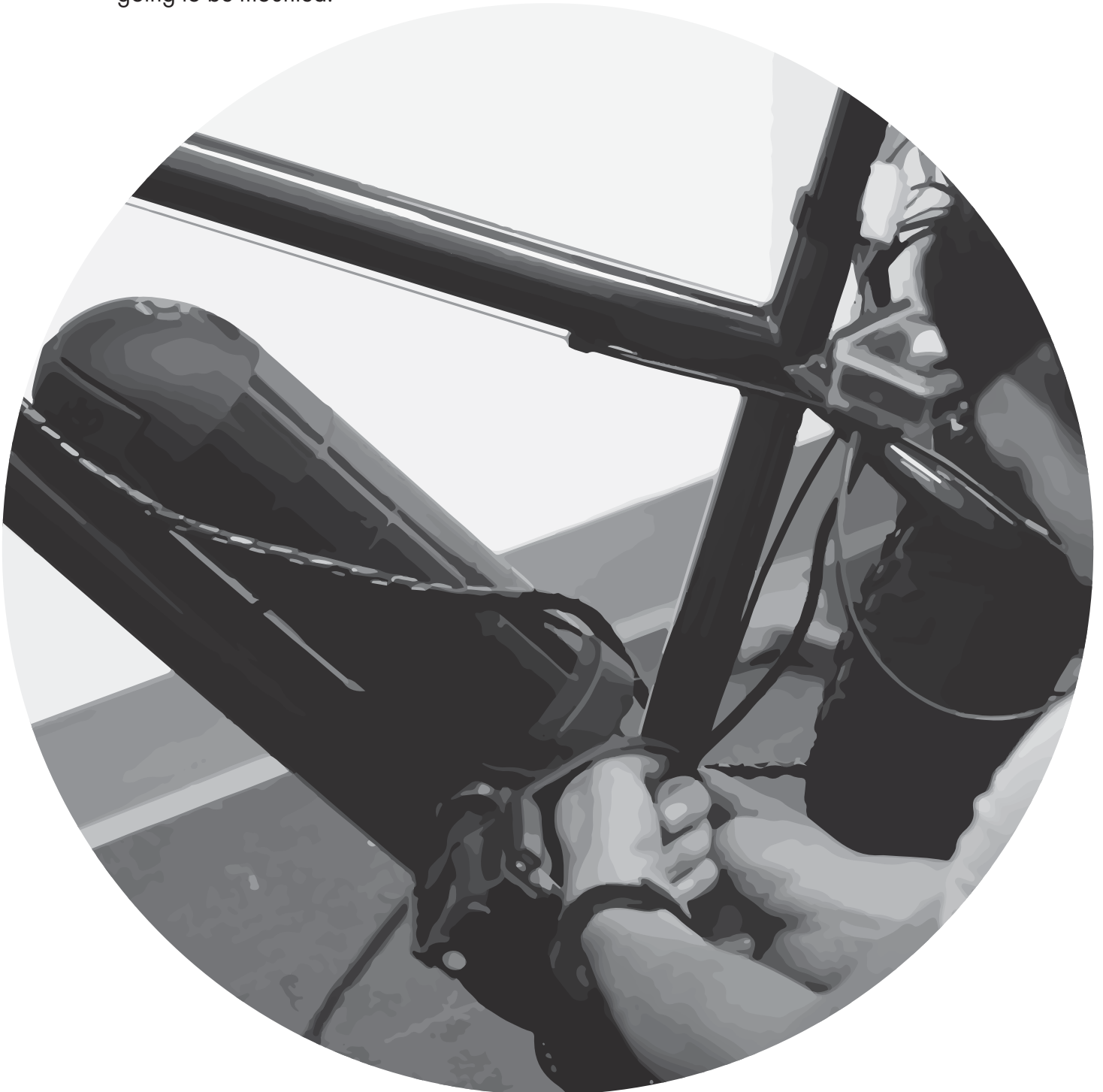
### Step Six: Pedal Assist System (PAS) (Optional)

Pedal assist system uses a magnetic sensor and a magnetic ring to sense how fast rider is pedaling. This information is then processed by the controller and depending on the chosen assist level, motor will apply additional power to wheel. Installation starts by taking left pedal off the hub. You should now see the lock ring holding pedal hub inside bicycles frame. Take this ring off, install the sensor then tighten ring back on the hub and on the sensor ring. Now magnetic ring is pushed on the hub paying attention to the arrows. Put the pedal back and tighten with a ratchet to specs. PAS wire must go the right!



### **Step Seven: Install Battery**

Battery does not have to be installed at this point but at least the mount should be, so you know where it will stay and where the cables will run from. If you are using a bottle type battery it will most likely go where bottle holder mount posts are. If it is a rack battery, you need to install the rack first which will hold the battery. It could be a custom battery pack with custom boxes or bags, in that case you need to find your own way to mount it. The whole idea of this step is to determine where the battery is going to be mounted.



### **Step Eight: Install brake levers and display**

Display will go on the handlebars first then the brake levers. Old brake levers will be taken off the bar, gear shifters if any will stay. While taking the brake levers off, tension on the steel brake line may have to be released from the brake mechanism in order to pull line ends of original brake levers. Once handle bar is clear of original levers, display, LED or LCD, will go on the bar first. Route cables to connector and connect. Now we slide electric Bike brake levers, one for each side, connect brake lines, route cables to the controller and connect to appropriate connector.

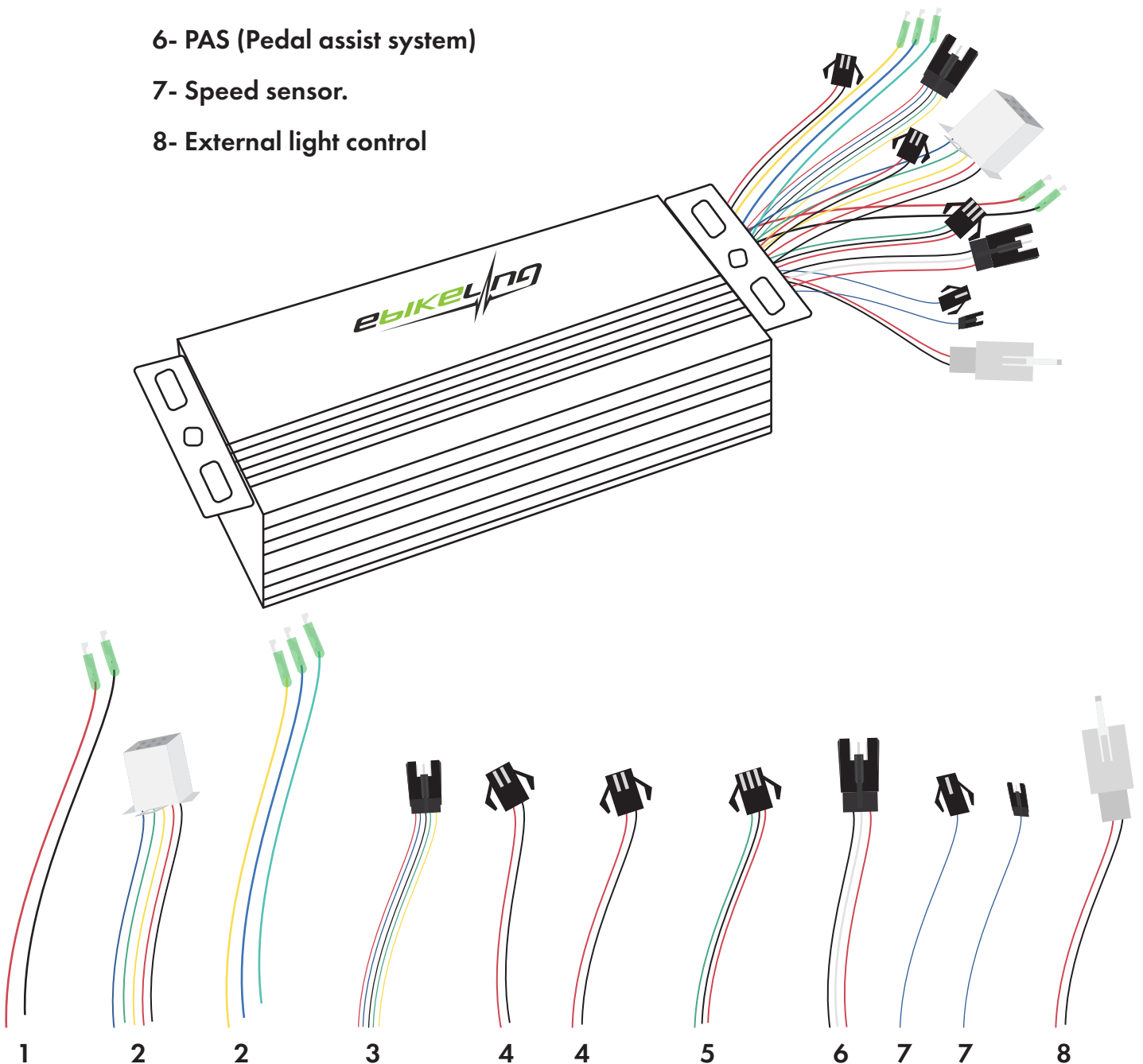


## Step Nine: Cable Connections

By referring to the controller pictures in the user manual, make all the connections between components and controller.

Following picture shows how to connect each parts to controller:

- 1- Battery connection (Red: positive, Black: negative)
- 2- Hub motor
- 3- LCD / LED Display connection
- 4- Brakes
- 5- Throttle
- 6- PAS (Pedal assist system)
- 7- Speed sensor.
- 8- External light control



## **Step Ten: Check, Test and Clean up**

### **Checking List Checking list: (Turn off the battery)**

- **Wheel is secured in place.**
- **Wheel has no loose parts.**
- **All components on the handlebar have been secured tightly.**
- **The position for throttles and brake levers etc. is comfortable.**
- **The steering bar can rotate freely.**
- **The brakes work properly.**
- **Make sure that the battery poles are correctly connected.**

**If there is no problem, turn the battery on and go for a test riding.**



**WARRANTY:**

**Hub motor: 90 Days**

**Controller: 90 Days**

**All other parts: 30 Days**

**Damages caused by user's fault are not covered.**





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