



**WHEELSWING**<sup>®</sup>  
Light & Smart Bike Generator



**WHEELSWING VOLT 1  
User Manual**





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Light & Smart Bike Generator



# WHEELSWING VOLT 1 User Manual

[ Please read before using the product! ]

- ❶ This manual has been produced as of the present, and there may be technical or editorial errors or omissions.
- ❷ For product performance improvement, product changes may be made without notice to the user.
- ❸ Electricity production may vary depending on the driving speed and driving conditions of the bike. Please note this.
- ❹ A **contactless rim dynamo** : it can be mounted on rim brake bikes, spin bikes, and stationary bikes.
- ❺ A **contact rim dynamo** : it can be mounted on all types of bikes, spin bikes, and stationary bikes.

# Important safety and product information

- ❗ To obtain information on installation and adjustment of products not included in the user manual, Please contact customer center. (Refer to Page 9 “Product specification and C/S”)
- ❗ For safety, please read the user manual carefully before using the product and follow it for correct use.
- ❗ Caution and Prohibition: Users of pacemakers and implantable cardiac defibrillators should not move or use this bicycle generator near the heart as the magnetic field of the bicycle generator can cause the failure of these medical devices.



## Warning

**Failure to pay attention to the following may result in unexpected damage due to incorrect usage.**

- Do not disassemble, modify, reassemble, break, or damage this product.
- Before boarding, make sure that the product is securely fixed to the side of the wheel and that the bolts are fully tightened. If the product becomes loose and the product is caught between the spokes or the frame and the wheels, serious injury may result.
- After reading the user manual, keep it in a safe place for future reference.
- Do not overtighten the screws during the installation process. The bracket or product connection may be damaged.
- This product is a 5V, 500mAh output product. Do not connect products with high voltage and current to the input or output USB ports. It may cause malfunction.



## Warning









**Failure to pay attention to the following may result in personal injury or property damage, or adversely affect the function of the device.**

- Be sure to read all instructions carefully before installing any part.
- Do not leave the product in a hot place, such as a heat source or a vehicle parked under direct sunlight. To avoid damage to the product, remove it from the vehicle or store it out of direct sunlight.
- Do not drop the product from high places. It may cause problems with product functionality.
- Before boarding, please check whether the alignment between the body and the wheels is correct. If the alignment is not correct, the amount of power generation may be small, or power generation may not be possible.
- We do not guarantee the loss of functionality due to normal wear and tear of the product over time and daily use.
- This product has waterproof function (IPx5), but damage caused by flooding is not guaranteed. Do not immerse the product in water or wash it with high pressure water.
- This product can be used even on rainy days but be careful not to get water into the USB terminal.
- If you have any problems with maintenance or use, please contact the customer center.

## WHEELSWING VOLT 1

### Key features



								
<b>NCB</b>	●	●	●	●	●	●	●	●
<b>NCD</b>	●		●	●	●	●	●	●
<b>CB</b>		●	●	▲	●	●		●
<b>CD</b>			●	▲	●	●		●

### Non-contact drive system

The world's first and the world's only bike generator powered by a magnetic field. (VOLT1-NCB / NCD)

### Self-generation

Charge with homemade electricity!  
You can continue to create and use electricity while riding.

### Built-in battery

Built-in 1A Li-ion battery allows you to charge with stored electricity even while your bike is at a standstill. (VOLT1-NCB / CB)

### USB charging method

You can easily and conveniently charge all devices connected by USB.

### Simple installation

Self-installation is possible without expert assistance.

### Universal bracket

It mitigates vibration in two steps and can be installed anywhere on the front/rear wheel.

### Hybrid method

By simply replacing the rubber ring, you can quickly change the driving method to a contact type. (VOLT1-NCB / NCD)  
The contact type is driven by mounting two types of self-developed rubber rings (booster rings).

### Light pedaling

Unlike ordinary bicycle generators, the pedaling is light and the driving feel is smooth.

### Reliability test

This product has undergone rigorous testing for safety.

### Waterproof design

IPX5 waterproof design makes life waterproof.

# ► Product composition

WHEELSWING VOLT1 consists of the generator body, bracket, crescent, rubber ring, rubber pad, bolt/nut, and installation guide.



Generator body



Bracket



Crescent P



Crescent R

## Contactless



Bumper ring



Booster ring N



Filler gauge

## Contact



Booster ring W



Booster ring N



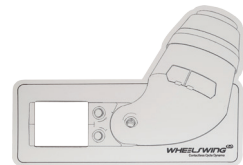
Rubber pad S



Rubber pad R



Bolt/Nut



Installation

01

## Contactless generator (NCB/NCD)

Equipped with thin bumper ring



02

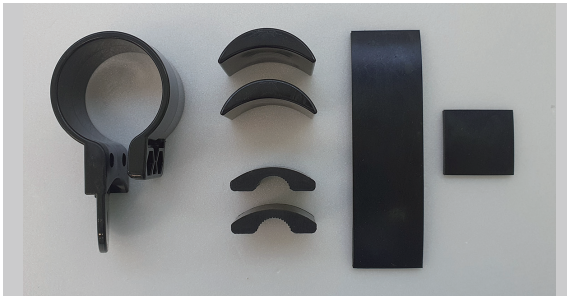
## Contact generator (CB/CD)

Equipped with thick booster ring



# Installation of a contactless/contact rim dynamo

## ● How to assemble the bracket (for both a contactless/contact rim dynamo)



1 What you will need is the bracket, crescents, and rubber pads



2 Assemble the bracket by combining rubber pads and crescents according to how thick forks and seat stays are

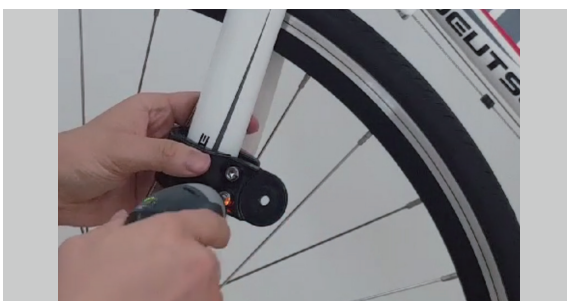
## ● How to secure the bracket and generator body (for both a contactless/contact rim dynamo)



1 What you will need is the assembled bracket, generator body, bolts, and nuts



2 Using an installation guide, check whether the end of the generator's head sits near the rim's end side



3 Insert the bracket into either forks or seat stay, and secure it with bolts and nuts (Don't secure it tight; you will need to adjust the position later)



4 Insert the generator body to the bracket, and secure it with bolts and nuts

# Installation of a contactless/contact rim dynamo

## ● Installation of a contactless rim dynamo



- 1 Insert the gauge into the gap of the rim  
Move the tire forward so that the gauge is placed between the head of the generator body and the tire



- 2 Slightly adjust the bracket and generator body left/right or up/down so that there is no empty space between the gauge and the body  
Make sure that the marked point on the picture has no crack or gap between the gauge and the body



- 3 Firmly tighten the bracket and bracket-generator body fixing bolts and nuts  
Installation finished

## ● Installation of a contact rim dynamo



- 1 Slightly adjust the bracket and generator body left/right or up/down so that the booster ring touches the rim



- 2 Firmly tighten the bracket and bracket-generator body fixing bolts and nuts  
Installation finished

## ► How to use properly

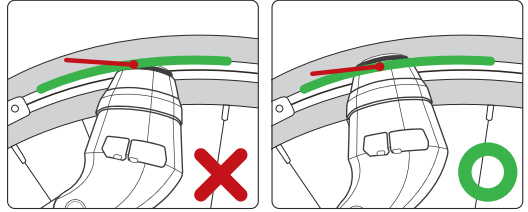
### ● How to use a contactless rim dynamo

\*What you need to check before every ride

#### 1 Check the angle of the generator body

When installed incorrectly, it can cause vibration and noise. It might fail to generate an adequate amount of electricity or do not work at all.

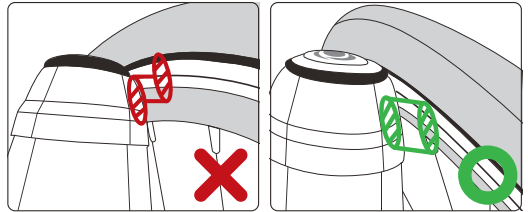
- ❗ Place the bumper ring on the border of the rim.



#### 2 Check the surface area where the rim and generator head faces

When the surface area is small, the dynamo might produce a different amount of electricity or do not work at all.

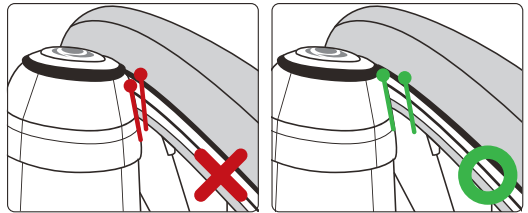
- ❗ It is important for the magnet inside the generator head and the rim to work properly. Therefore, the larger the surface area is, the more electricity the dynamo would generate.



#### 3 Check the distance between the rim and the generator head

If they are too far or too close, the dynamo might produce a different amount of electricity or do not work at all.

- ❗ Put the head as close to the rim as possible without touching the rim. (Keep a distance of 1-2mm between the head and the rim)

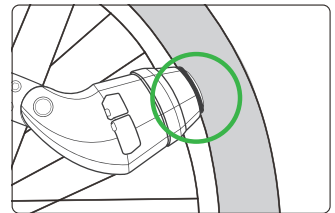


### ● How to use a contact rim dynamo

\*What you need to check before every ride

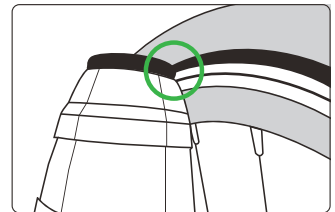
#### 1 Replace rubber rings

Use a tweezer to slightly lift the rubber ring and remove it, when it is difficult to replace it using hands.



#### 2 Contact of the rubber rings

Be sure to install the booster ring sitting near the bicycle tire, but not touching it. It can cause extra wear on tires.





# Product specification and C/S

## ● [Contactless] Product specifications

Product Name	Contactless battery built-in type bike generator	Contactless direct charging type bike generator
Model Name	WHEELSWING VOLT1-NCB	WHEELSWING VOLT1-NCD
Size	148X134X67.5mm (5.8X5.2X2.6X in)	148X134X67.5mm (5.8X5.2X2.6X in)
Weight	390g (0.85lb)	365g (0.8lb)
Material	PC, rubber, silicone, etc.	PC, rubber, silicone, etc.
Capacity	USB2.0 (5V,500mAh output)	USB2.0 (5V,500mAh output)
Battery	Li-ion battery 1,000mAh	-

## ● [Contact] Product specifications

Product Name	Contact battery built-in type bike generator	Contact direct charging type bike generator
Model Name	WHEELSWING VOLT1-CB	WHEELSWING VOLT1-CD
Size	148X134X67.5mm (5.8X5.2X2.6X in)	148X134X67.5mm (5.8X5.2X2.6X in)
Weight	345g (0.76lb)	320g (0.7lb)
Material	PC, rubber, silicone, etc.	PC, rubber, silicone, etc.
Capacity	USB2.0 (5V,500mAh output)	USB2.0 (5V,500mAh output)
Battery	Li-ion battery 1,000mAh	-

## ● Common

Manufacturer	WITHUS & EARTH Co., Ltd.	Warranty period	within 1 year after purchase
Country of Origin	Republic of Korea	Customer Center	Tel : +82-53-213-8802
Manufacturing date	Separately indicated		E-mail : service@wus.co.kr

## ● C/S regulation

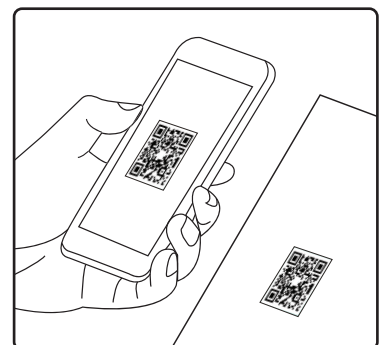
- 1 Failure occurred within the warranty period under normal use according to the precautions in the user manual.  
In this case, you can get free repair.
- 2 Even within the warranty period, repair fees are incurred in the following cases.
  - 1) Breakdown and damage due to misuse or improper repair, disassembly, or modification
  - 2) Failure or damage due to transportation or dropping after purchase
  - 3) Failure and damage due to natural disasters such as fire, earthquake, flood, lightning, and pollution
  - 4) Damage caused by external factors when used in a manner not described in the user manual
  - 5) Breakdown and damage caused when used for purposes other than general bike generators
- 3 If you would like to make a request for repair, please contact the customer center.
- 4 This warranty is only valid in the country and region of purchase.

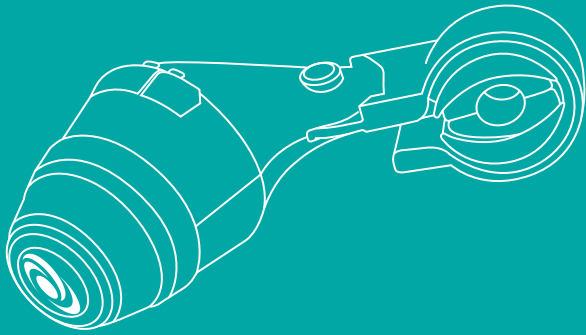
# Product Registration

Within two weeks after purchasing the product, scan the QR code on the customer center in the manual, add KakaoTalk Plus Friend [WHEELSWING] as a friend, and then register the product. Please take a picture of the [Quality assurance certificate] in the black and white manual enclosed with the product and send it to us.

### Customer benefits upon product registration

- Free C/S for 1 year after purchase
- Notify when new information is updated
- Provide customer convenience service





# WHEELSWING VOLT 1 User Manual

For users



**The Generator for all bike in the world**

For more details and installation method, you can check the website and YouTube video.

Website



YouTube



Customer Center

