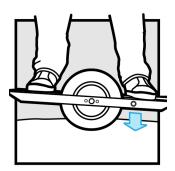


- Switch on Onewheel using power switch on the side
- Step fully and firmly on the blue rider detect area.



- Always wear a helmet
- Lean on a friend to get started
- Step firmly on the entire blue rider detect area
- Come up to balance slowly



- Use light, constant pressure
- Onewheel will engage when you reach a horizontal orientation.
- Lean forward to accelerate, back to slow down



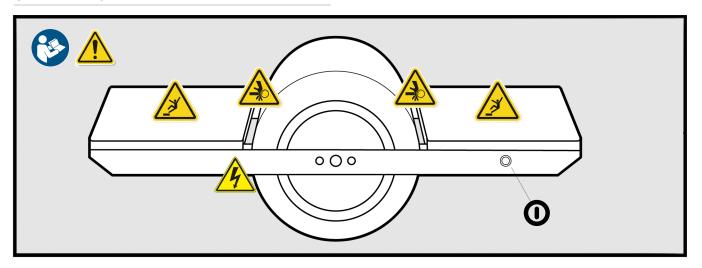
- Slow down then fully remove your foot from the rider detect area to stop.
- You can also jump off with both feet but never remove only one foot

# WELCOME TO THE REVOLUTION!

Now that you're a proud owner of your very own Onewheel, we want to keep you safe while you experience a whole new way of riding. We've created this owner's manual to share important safety, performance and service information with you. Please read it before you take your first ride and keep it for reference.

GETTING THERE IS WAY MORE THAN HALF THE FUN!

# SAFETY OVERVIEW





#### **RISK OF DEATH OR SERIOUS INJURY**

Whenever you ride Onewheel, you risk death or serious injury from loss of control, collisions, and falls. To ride safely, you must read and follow all instructions and warnings in the User Manual.

#### GENERAL WARNINGS

Like any sport, Onewheeling involves risk of injury. By choosing to ride a Onewheel, you assume the responsibility for that risk. It's important that you understand and practice the rules of safe and responsible riding and proper use and maintenance to reduce the risk of injury. This manual contains many "WARNINGS" and "CAUTIONS" concerning the consequences of failing to follow safe riding practices and properly maintain and inspect your Onewheel.

Because it's impossible to anticipate every situation or condition that can occur while riding your Onewheel, this manual makes no claim to represent the safe use of Onewheel under all conditions. There are risks associated with the use of any board sport that cannot be predicted or avoided, and that are the sole responsibility of the rider.

The word **MARNING** indicates a potentially hazardous situation, which, if not avoided, could result in serious injury or death.

The word **A CAUTION** indicates a potentially hazardous situation or unsafe practice, which, if not avoided, could result in minor or moderate injury, serious damage to your Onewheel and the voiding of your warranty.

The word  $\checkmark$  TIPS indicates suggestive information to help you throughout your Onewheel experience.

#### REGISTER YOUR ONEWHEEL

Register your Onewheel today!

Please visit rideonewheel.com/register

We cannot guarantee a warranty claim unless you do this! Congratulations on the purchase of your new Onewheel!

WE CANNOT GUARANTEE A WARRANTY CLAIM UNLESS YOU DO THIS!

GENERAL WARNINGS // 00-07



• MAXIMUM RIDER WEIGHT: 275 lb / 125kg

• DO NOT ALLOW CHILDREN UNDER THE AGE OF 13 TO USE THIS PRODUCT

• ADULT SUPERVISION IS REQUIRED

#### SPECIAL NOTE TO PARENTS AND GUARDIANS

As a parent or guardian, you are responsible for the activities and safety of your minor or child. **Onewheel is not recommended for children under the age of 13.** For children 13 years of age and older **adult supervision is required**, It is your responsibility to ensure their Onewheel is in good repair and safe operating condition and that your child understands its proper use. It is also important that you and your child have learned, understand and obey all applicable local motor vehicle and traffic laws and always wear proper protective equipment, including a helmet and wrist guards.



WELCOME

// WELCOME TO THE REVOLUTIONpgu
// SAFETY OVERVIEWpg0
// GENERAL WARNINGpg0
// REGISTER YOUR ONEWHEELpgC
// SPECIAL NOTE TO GUARDIANSpg0
<b>01</b> PUT SAFETY FIRSTpg1
02 RIDING YOUR ONEWHEELpg1

// ONEWHEEL

O3 MAINIAINING YOUR ONEWHEELpg16	<b>04</b> GETTING TO KNOW YOUR ONEWHEELpg28
End Blockspg17	Main Power Pushbutton Switchpg29
Footpadspg17	Status Indicatorpg30
Tirepg18	Decoding Your Onewheelpg31
Batterypg19	Push Backpg32
Battery Chargerpg20	
How to Charge your Batterypg20	<b>05</b> MORE WAYS TO RIDE SAFEpg34
Basic Balancepg22	Onewheel Specificationspg41
Direction and Speedpg24	Ultracharger Specificationspg41
Turningpg24	Warrantypg42
Regenerative Brakingpg25	Declaration of Conformitypg45
Understanding the Footpadpg25	
Ways to Dismountpg26	Contactpg46



# RIDE SAFE

Whether you're a pro or brand new to board sports, it's always important to ride safe. Here are a few tips to ensure you and your Onewheel stay in one piece.

#### HELMET

Always wear an approved helmet when riding your Onewheel. Be sure to attach the chinstrap and follow the helmet manufacturer's instructions for fit, use and general care.

#### OTHER SAFETY EQUIPMENT

It's a good idea to wear wrist guards, elbow pads and kneepads for extra protection.

#### SHOES

Always wear shoes that will stay on your feet and grip the board. Never ride barefoot or in flip-flops.

SEE SECTION 05 MORE WAYS TO RIDE SAFE FOR MORE SAFETY INFORMATION.

warning: Many local governments legislate "road worthy" laws and require specific safety equipment. It's your responsibility to familiarize yourself with the laws of the location where you ride and to comply with all applicable laws. This includes properly equipping yourself and your Onewheel as required by law.

PUT SAFETY FIRST // 01-13



#### AN INCREDIBLE RIDE

The most amazing thing about Onewheel is the experience of riding it. We combined the motion-sensing technology of a smartphone with the kind of motor and battery technology you'd find in a Tesla to create a new, self-balancing electric boardsport controlled simply by leaning your body.

Onewheel is designed to be intuitive. Anyone can learn the basics in just a few minutes. And once you start riding regularly, there's plenty of room to challenge yourself.

#### BEFORE YOU GET ON YOUR ONEWHEEL:

- Always do a safety check before each ride.
- Read all safety instructions.
- Wear a helmet and other protective gear.
- Choose a safe, controlled, calm environment away from cars, crowds, obstacles and other potential hazards.



# SAFETY CHECK

Doing regular safety checks will help prolong the life of your Onewheel. We recommend that you carefully inspect your Onewheel before every ride to make sure there are no loose, damaged or unusually worn parts. All nuts and bolts should be tight. Most Onewheel components were designed so they can be easily replaced if there is a problem.

CONTACT ONEWHEEL CUSTOMER SERVICE IF YOU HAVE QUESTIONS.

- ▲ WARNING: Before performing any minor work on your Onewheel, make sure the power switch is in the "OFF" position.
- ▲ WARNING: The footpads are an integral part of Onewheel's safety system. Never ride with damaged wood or grip tape and never attempt to replace grip tape. Replacement footpads are available at www. rideonewheel.com.
- ▲ CAUTION: Riding your Onewheel if it is damaged will void your warranty.

# END BLOCKS

End blocks are designed as wear components and must be replaced as the wear down. More details can be found at www.rideonewheel.com/support.

### FOOTPADS

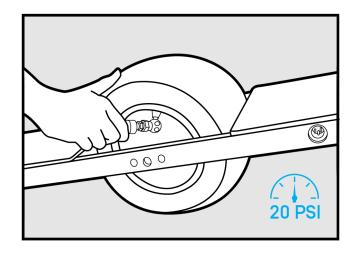
Inspect footpads for any cracks, punctures or tears in the grip tape, particularly in the rider detect area. If any damage is noted, contact support@rideonewheel.com for replacement parts.

- ▲ CAUTION: Never attempt to remove/replace grip tape with aftermarket grip tape.
- ▲ CAUTION: Riding with a damaged footpad is extremely dangerous. Replace immediately.

#### TIRE

Check your Onewheel tire for any cuts in the tread and sidewall and be sure it is sufficiently inflated, but below 20 PSI. The best way to check and inflate your Onewheel tire is with a quality digital gage and compressor at your local gas station. If your tire is damaged or has a hole, please visit our website for more information: www.rideonewheel.com/support.

- ▲ WARNING: Exceeding the recommended maximum pressure of 20 PSI (1.4 bar) could damage your Onewheel and result in injury. It will also void your warranty.
- **WARNING:** Riding Onewheel with a flat or under-inflated tire will void your warranty.
- ▲ CAUTION: Pencil-type automotive tire gauge can be inaccurate. Always use a quality digital gauge.



#### BATTERIES

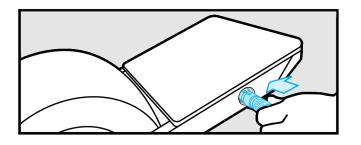
The Onewheel battery should be able to travel approximately five miles on a single charge. Be careful not to overcharge, undercharge or damage the battery. The battery should be charged at least once every two months. Failure to do so may void your warranty. **NOTE:** Must Dispose Lithium Batteries according to local laws and regulations.

- ▲ WARNING: If the battery pack appears to be damaged or is not holding a charge, please don't use it. For further assistance, contact Onewheel customer support at 1-800-283-7943 or send an email to support@rideonewheel.com.
- ▲ CAUTION: Do not expose battery to extreme high or low temperatures as these may degrade or damage the battery back.

#### BATTERY CHARGER

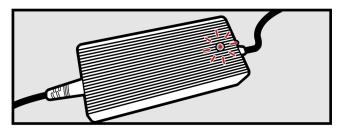
Use only the provided Ultracharger [model FY5803500], to charge your Onewheel. Charging time may take up to 1 hour.

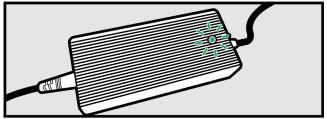
**NOTE:** The FY5803500 charger can operate on 110V-240V and has a power of 58.4V 3.5A. Depending on your



#### HOW TO CHARGE YOUR BATTERY

- **01** Connect the charger to an "AC" supply and then to the Onewheel charging port. The charger will display a red light.
- **02** A green light will appear when the battery pack is fully charged and the charger will automatically stop charging.
- **03** Disconnect the charger by pressing the release button on the charging plug and pulling firmly.
- ✓ TIP: Periodically leave the charger attached to your Onewheel overnight to allow the battery pack to thoroughly balance.





MAINTAINING YOUR ONEWHEEL

- ▲ WARNING: Only use the FY5803500 charger to charge your Onewheel. Use of any other charger will void your warranty and may damage your Onewheel.
- ▲ WARNING: All electronic and drive components may only be repaired by Onewheel or a Onewheel authorized service center. Any other adjustments will void your warranty.
- ▲ WARNING: Don't begin any repairs or adjustments on your Onewheel until you properly understand how complete them. An improper adjustment or repair may result in damage to your Onewheel or potentially serious injury. A qualified Onewheel mechanic should perform complex services, maintenance and repairs in a properly equipped facility.

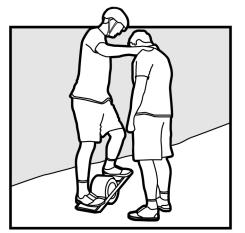
# BASIC BALANCE

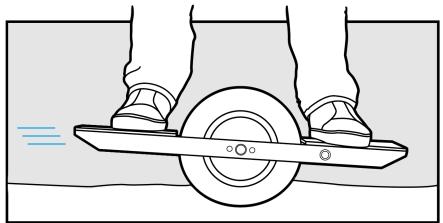
Remember, Onewheel is self-balancing, so there's no need to muscle your way on the board. Instead, use slow, small movements.

When Onewheel is on the ground, you'll notice a lower side and a higher side. Always step onto the lower side first. Then place your other foot onto the middle rectangle on the front of the board. Keep your legs straight (like you are standing on the ground) with only a very slight bend in your knees.

Come up to level very slowly and Onewheel will engage.

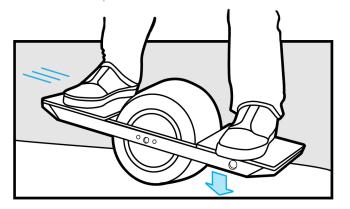
- ✓ TIP: Have a friend's shoulders handy to help you the first few times you get on your Onewheel. After practicing a few times, we promise you'll be a pro.
- ✓ TIP: Gaze out at the horizon in the direction you want to go (not down at the ground).
- ✓ TIP: Use light, constant pressure to control your Onewheel.





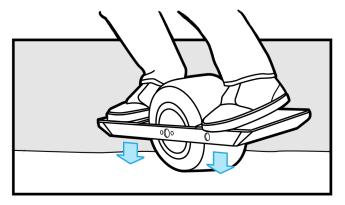
#### DIRECTION AND SPEED

Lean forward to move forward and back to slow down or move backwards. The more you lean, the faster you'll go. The maximum speed for the Onewheel is 12 MPH.



#### TURNING

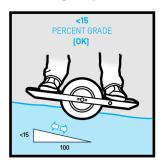
Use subtle heel-toe pressure for turning left or right. You will begin to turn in the direction you lean. The more you lean the sharper the turn.

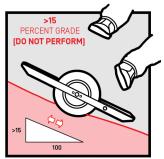


#### REGENERATIVE BRAKING

Decelerating while going downhill actually recharges Onewheel's battery.

▲ WARNING: Riding hills exceeding 15% is extremely dangerous and may result in loss of control or damage to your Onewheel.

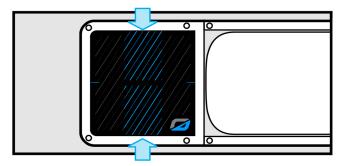




### UNDERSTANDING THE FOOTPAD

Both zones must be pressed to begin riding. To stop, slow to a standstill and then remove your foot from one or both zones.

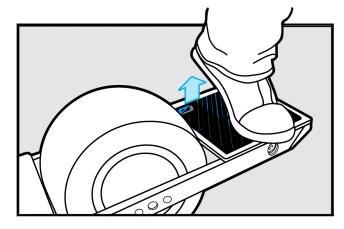
✓ TIP: Avoid repositioning your foot while riding.



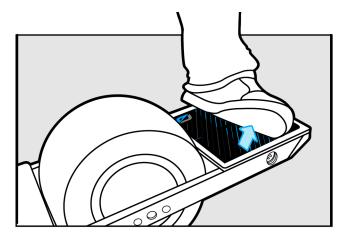
#### WAYS TO DISMOUNT

When you're done riding, slow down to a standstill by leaning backward to decelerate. Then use one of the following ways to dismount.

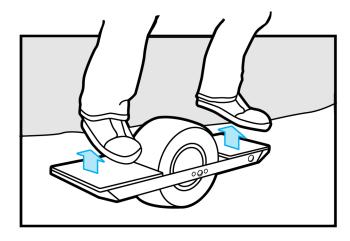
- ✓ TIP: Both rider detect areas must be pressed to start riding. If you slow to a low speed and remove your foot from only one area the Onewheel will disengage.
- **WARNING:** Never step off with your back foot first (the foot not on the rider detect area). This increases risk of a fall and possible injury.



01 Lift your heel while maintaining balance.



**02** Roll or slide your foot off the entire rider detect area.



03 Jump off with both feet.



#### UNDERSTANDING THE AWESOME

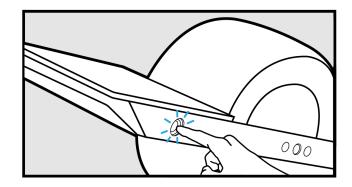
You already know Onewheel is super fun, but it's also important to your safety, performance and enjoyment to understand how Onewheel works. If after reading this manual you still have questions, please contact Onewheel customer support at 1-800-283-7943 or send an email to support@rideonewheel.com.

#### MAIN POWER PUSHBUTTON SWITCH

Onewheel is powered ON and OFF by the pushbutton switch on the side of the Onewheel. Always make sure your Onewheel is on the ground in the ready-to-ride position before switching it "ON." Always turn your Onewheel "OFF" when charging, storing or carrying it.

- ▲ WARNING: Never pick up your Onewheel when the switch is in the "ON" position since the wheel may spin causing a safety hazard.
- ▲ CAUTION: Do not press the rider detect section of the footpad while powering on your Onewheel or it will not operate.

✓ TIP: Turning on your Onewheel while it is not on the ground will cause an error.



#### STATUS INDICATOR

#### LED STATUS RING INDICATOR

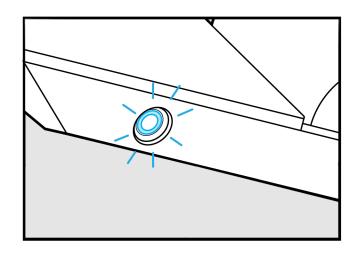
The LED ring on the pushbutton switch is the only status indicator for Onewheel. The LED will indicate battery status and error codes for Onewheel.

#### NORMAL OPERATION

The LED Status Indicator will pulse slowly in normal operating conditions.

#### BATTERY STATUS

As the battery capacity diminishes during your ride, the LED Status Indicator will change its rate of pulsing so the LED Status Ring indicator will remain off longer than it is on. This ratio of ON:OFF time indicates Onewheel's current battery status.



### DECODING YOUR ONEWHEEL

Several blink codes, differentiated by the number of blinks in a row, may indicate an issue with your Onewheel.

Always count the blink code if one occurs. Sometimes you can solve the issue by charging the battery or by switching your Onewheel OFF and then ON again. If you are still experiencing problems, please contact Onewheel customer support at 1-800- 283-7943 or send an email to support@rideonewheel.com.

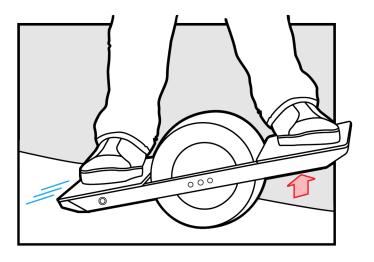
OF BLINKS	DESCRIPTION
01	BMS indicating low battery
02	Voltage too low
03	Voltage too high
04	Invalid power-up orientation
05	Pick up detected
06	Over-current detected
07	Over-temperature
08	Bad gyro
09	Bad accelerometer
10	Bad current sensor
11	Bad hall sensors
12	Bad motor
13	Over-current detected
14	Over-current detected
15	Rider detect error

#

#### PUSH BACK

Like everything in life, Onewheel has its limits. If at any time you attempt to go too fast, ascend a very steep hill or ride with a low battery your Onewheel will "push back." Heed this caution by riding less aggressively, changing your ascent angle or charging the battery.

▲ WARNING: Ignoring safety warnings, including push-back, may result in loss of control, serious injury or death.



#### FULL-BATTERY PUSH BACK

When the battery is fully charged and you continue to charge it through regenerative braking (e.g. traveling downhill), you may experience "Full-Battery Push Back." This is to prevent overcharging the battery cells. If this happens, simply switch your Onewheel OFF and ON again and travel up the hill for a few moments to expend some of the charge. You will now be able to continue riding downhill.

▲ CAUTION: Never attempt to ride down a long or steep hill with a freshly charged Onewheel. Loss of control or damage to your Onewheel may occur.

#### DEAD-BATTERY PUSH BACK

When your Onewheel battery is extremely low, it will perform a much more aggressive push back and will become inoperative. This means a full battery charge is needed.

▲ CAUTION: Continuing to ride when low-battery push back occurs may result in sudden shutdown or damage to your Onewheel.



# NEVER MODIFY YOUR ONEWHEEL

Lucky for you, your Onewheel is pretty much perfect as is. So there's no need to add any extra bells and whistles. Modifying or changing the appearance or performance of your Onewheel is not advised and could potentially increase your risk of injury. If you have specific questions, please contact Onewheel customer support 1-800-283-7943 or send an email to support@rideonewheel.com.

- ▲ WARNING: Failure to confirm compatibility, properly install, operate or maintain any component or accessory on your Onewheel can result in serious injury or death and will void your warranty.
- ▲ CAUTION: Changing or modifying any Onewheel factory component will void your warranty.

### MORE WAYS TO RIDE SAFE

Observe all local traffic laws and regulations regarding riding on sidewalks and trails. It's your responsibility to know and obey the laws in your riding area.

Share the road and respect the rights and safety of other motorists, pedestrians and cyclists.

Ride defensively. Always assume others do not see you.

- ▲ WARNING: Never ride your Onewheel on inclines or declines with grades steeper than 15%. This may cause the motor and battery to overheat and will also void your warranty.
- ▲ CAUTION: Jumping and stunt riding will void your warranty.

# LOOK AHEAD, AND BE READY TO AVOID OR YIELD TO:

- Vehicles slowing or turning, entering your lane ahead of you or coming up behind you
- Parked cars or opening car doors
- Pedestrians
- Children or pets
- Pot holes, sewer grating, railroad tracks, expansion joints, road or sidewalk construction, debris and other obstructions that could cause you to swerve into traffic, catch your wheel or fall.

#### ALWAYS WEAR:

- Shoes that stay on your feet and will grip the board.
   Never ride barefoot or while wearing sandals or flip-flops.
- Bright clothing that makes you clearly visible drivers, riders and pedestrians.
- Protective eyewear, to protect against the sun as well as airborne dirt, dust and, of course, bugs.
- **WARNING:** Failure to wear a helmet when riding may result in serious injury or death.

- Always wear a multi-sport helmet that meets the latest certification standards and follow the manufacturer's instructions for fit, use and care. Head injuries are some of the most serious and may be avoided with proper protection.
- Avoid sharp bumps, drainage grates, and sudden surface changes.
- Avoid streets and surfaces with water, sand, gravel, dirt, leaves and other debris. Wet weather impairs traction, braking and visibility.
- Never use near motor vehicles.

# MORE WAYS TO RIDE SAFE

- Always ride in designated lanes or paths or as close to the edge of the road as possible in the direction of traffic flow or as directed by local laws.
- Never weave through traffic.
- Never carry a passenger.
- Stop at stop signs and traffic lights; slow down and look both ways at street intersections. Be prepared to yield even if you have the right of way.
- Use approved hand signals for turning and stopping.

- Never carry anything that could obstruct your vision or that could cause you or your clothing to become entangled in the wheel.
- Never hitch a ride holding on to another moving vehicle or object.
- Never ride your Onewheel while under the influence of alcohol or drugs.
- Choose smooth stable paths made of concrete and asphalt. Off-roading is not advised.
- Observe and yield the right of way.

- Do not perform racing, stunt riding, or other maneuvers that may cause loss of control.
- Do not allow body parts, clothes, etc., to come into contact with moving parts, wheels, or drivetrain while the motor is running.
- Before each use, the operator shall perform preoperation checks as specified by the manufacturer.
- Owner shall allow use of unit after a demonstration that the operator can understand and operate all components of the unit

- Be thoroughly familiar with the way your Onewheel works (i.e. speed, direction, turning, etc.)
- Always keep body parts, clothing and other objects away from the wheel.
- Always do a mechanical safety check before getting on your Onewheel.
- When riding, be aware of your environment. Ride at a speed appropriate for your conditions. Increased speed equals higher risk.

#### MORE WAYS TO RIDE SAFE

- Do not ride at night or during times of low visibility (i.e fog, rain, dusk, dawn, etc.)
- Operators shall adhere to all manufacturer's recommendations and instructions, as well as comply with all laws and ordinances.
- Components shall be maintained and repaired in accordance with manufacturer's specifications using only authorized replacement parts and installation by dealers or other skilled persons.

 People with heart conditions, pregnant women, persons with head/back/neck ailments, persons with mental or physical conditions making them susceptible to injury or impaired capabilities shall be cautioned not to operate product.

# ONEWHEEL SPECIFICATIONS

MOTOR : 500W transverse flux hub

**BATTERY** : Lithium Iron Phosphate (LiFePo4) 48V

**SENSORS** : Solid State MEMS 6-DOF

**TIRE** : 11.5×6.5-6 Vega

MAX LEAN ANGLE : >30 degrees

TOP SPEED : 12 MPH / 19 KM

TYPICAL RANGE : 4-6 MI / 6-10 KM

DIMENSIONS : 9×11.5×30 (IN) / 23×29.21×72.6 (CM)

WEIGHT : 25 LB / 11 KG

RECHARGE TIME : 20 mins (FY5803500 charger),

# ULTRACHARGER SPECIFICATIONS

INPUT : AC100-240V 50/60Hz 300VA

**OUTPUT** : +58VDC === 3.5A

MODEL # : FY5803500

**OPERATING** : 0C to 50C

TEMPERATURE

RANGE

OPERATING HUMIDITY RANGE

NGE (non-

[non-condensing]

: 0 to 100% RH

#### WARRANTY

This agreement outlines the WARRANTY coverage supplied by Future Motion Inc., hereinafter to be called the COMPANY to the USER which is defined as an individual who has purchased the Onewheel (hereinafter to be called the PRODUCT) in a retail establishment or via an online storefront as approved by the COMPANY or a COMPANY -authorized sales representative.

The COMPANY warrants that the PRODUCT will be free from defects in materials and workmanship for a period of 12 months. If the PRODUCT proves defective AND a claim is filed during the warranty period, the COMPANY, at its option, will:

- **01** Repair the **PRODUCT** by means of telephone support, email support, or by providing service at no charge for parts or labor,
- **02** Replace the **PRODUCT** with a comparable **PRODUCT** which may be new or refurbished,
- **03** Refund the original amount paid for the **PRODUCT**, less a reasonable allowance for usage, upon its return.

The COMPANY recommends the USER first utilize support materials shipped with the PRODUCT, PRODUCT diagnostics, information contained on the Internet, and email support. If unsuccessful, to obtain service under this WARRANTY the USER must notify the COMPANY or its authorized service.

Future Motion provides paid repairs for faulty products which are out of warranty.

If you wish to discard this product please contact your local authorities or dealer and ask for the correct method of disposal.

#### COMPONENT WARRANTY DURATION NOTES:

COMPONENTS	WARRANTY DURATION	NOTES
Onewheel	1 year	Parts that are not listed separately
Footpad, Tire, Battery Pack	6 months	

#### WARRANTY

# THE FOLLOWING SITUATIONS ARE BEYOND THE WARRANTY SCOPE

- Total mileage is over 2000 km
- Damage has been caused by modification or use outside those specified in the Users Manual
- The barcode or serial number of the product has been altered or removed
- The warranty registration is inconsistent with the product itself
- The product has been dismantled or repaired by an unauthorized third party

- Damage or fault has been caused by other issues (excluding the issues caused by product design, manufacture, quality, etc)
- Natural wear and tear that does not affect product function (including scratches, wear and tear on frame rails, footpad, tires)
- Damage has been caused by accidents or human errors, such has breakage caused by dropping or rusting in a very wet environment
- Damage caused by overloading the Onewheel
- Damage caused by acts-of-god such as fire, flood, earthquake, freezing, etc.

### DECLARATION OF CONFORMITY

#### ONEWHEEL: SELF-BALANCING ELECTRIC SKATEBOARD

**PRODUCT:** Onewheel: Self-Balancing Electric

Skateboard

TYPE MODEL: 0W1-00001-00

MANUFACTURER: Future Motion Inc.

MANUFACTURER ADDRESS:

2444 Old Middlefield Way, Unit N,

Mountain View. CA (USA)

The undersigned hereby declares, on behalf of Future Motion Inc of Mountain View, CA that the abovereferenced product, to which this declaration relates, is in conformity with the provisions of:

Council Directive 2014/30/EU on Electromagnetic Compatibility:

EN 55022 Class B Limits

EN 55024 FN 60204 EN ISO 12100

The Technical Construction File is maintained at the corporate headquarters at 2444 Old Middlefield Way, Mountain View, CA (USA).

Kyle Doerksen. Founder, CEO

20.11.2014

### SAY HI!

2444 Old Middlefield Way, Unit N Mountain View, California, USA 94043

Copyright © 2014 Future Motion Inc Onewheel ® is a trademark of Future Motion Inc.

US and world-wide patents pending.





#### ONEWHEEL OWNER'S MANUAL V1.0

Different language manuals are available at www.rideonewheel.com/support