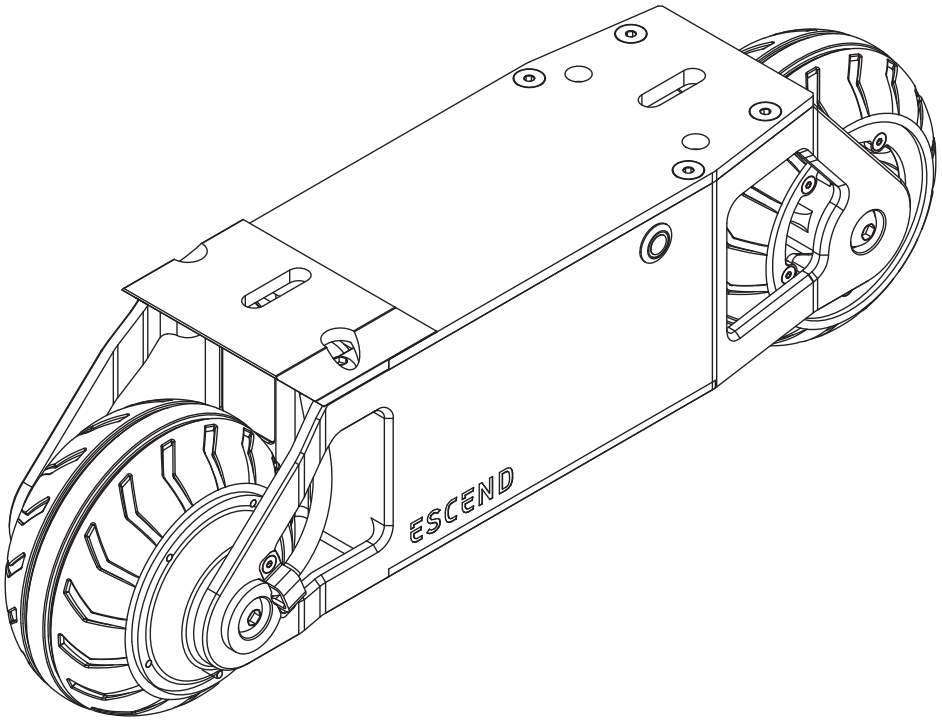


ESCEND

BLADES *ALPHA*



Operational Manual

Please read this manual before using the
electric skates

www.escendblades.com



SAFETY WARNINGS



This Manual contains important safety information and warnings. Please read them carefully, ensure that you are safe and get used to the skates slowly.

WARNING:

Whenever you ride any micro-mobility product you risk death or serious injury from loss of control, collisions and falls. To ride safely, you must read this instruction manual and start in the beginner mode even if you have experience in skating. Just like any other sport, there are inherent risks involved.

WARNING:

- ALWAYS wear a helmet and protection gear when riding.
- AVOID any wet, slippery and uneven surfaces.
- AVOID steep hills, traffic, large cracks, gravel, rocks or any obstacles that can cause a loss of traction.
- AVOID night riding and areas with poor visibility and constrained spaces.
- Do not ride on side hills or any inclines above 20% degrees (11.5 deg).
- Be wary of your skill level!
- Do not ride at speeds which you cannot safely control.
- In case of wireless error or battery issues you may have to rely on manual riding techniques like T-stops and conventional skating techniques.



WARNING - AVOID WATER:

The skates are not completely waterproof. While the skates can go through small puddles they should not be completely submerged in water. Water damage is not covered under the warranty.



WARNING - PINCH POINTS:

Keep fingers, hair and body parts away from the rotating wheels and small gaps in the skates.



WARNING - RISK OF ELECTRIC SHOCK:

Do not open the electronics compartment or tamper with the electronics. Only use ESCEND approved batteries. Tampering or using other batteries will invalidate the warranty.

DISCLAIMER

1. We are not responsible for any injuries that occur from using this product. Do not touch the motor or any parts of the skates while moving.
2. Do not tamper with the skates, open the electronics compartment, or make any non-approved modifications. This will immediately void the warranty and may cause the product to become illegal in your country.
3. The electric skates and remotes are completely splashproof but are not suitable for water submerging or riding through large puddles. Any failure resulting from water damage will not be covered under the warranty.
4. We are not responsible for the driving laws in your country, please read and understand any restrictions that may be applicable for this product in your country and abide by them. No refunds will be accepted based on inoperability of the product in a certain region.
5. Do not ride close to other riders and keep away from vehicles and pedestrians. We are not responsible for accidents resulting in collisions with other people or vehicles.
6. This product is not meant to be used by anyone under the age of 14 or anyone that does not have the ability to use the product safely, either physically or mentally.
7. Improper use of the skates might lead to failure and damage to the equipment. We strongly advise to read this manual carefully before using the skates and strictly follow the specified operating instructions. E-SK8 Ltd will bear no liability rising from improper use of this product.
8. E-SK8 Ltd will bear no liability arising from unauthorized modification of the product. E-SK8 Ltd has the right to change the product design, appearance, performance, outer package and operating requirements without prior notice.

CONTENTS

	SAFETY WARNING	2
	DISCLAIMER	3
1.	INTRODUCTION	5
1.1	FEATURES	5
2.	GETTING TO KNOW THE SKATES	6
2.1	PACKAGING LIST	6
2.2	SKATE GLOSSARY	6
2.3	REMOTE GLOSSARY	9
2.4	REMOTE OLED DISPLAY	10
3.	USER INSTRUCTIONS	11
3.1	CHARGING - SKATE	11
3.2	CHARGING - REMOTE	11
3.3	POWER ON/OFF	12
3.4	CONNECTING & BINDING	13
3.5	OPERATING ESCEND BLADES	14
3.6	STORAGE AND MAINTAINANCE	15
3.7	BATTERY SAFETY	16
4.	GETTING STARTED	17
4.1	RIDING OUTSIDE PRIVATE PROPERTY	17
4.2	TIPS FOR RIDING ESCEND BLADES	18
5.	MAINTENANCE INSTRUCTIONS	19
5.1	FRONT TYRE & BEARINGS A	19
5.2	MOTOR TYRE REPLACEMENT	19
5.3	BATTERY REPLACEMENT	20
5.4	VENT LABEL REPLACEMENT	22
6.	TECHINCAL PARAMETERS	23
7.	WARRANTY	25
7.1	STANDARD WARRANTY COVER	25
7.2	RETURNS PROCEDURE	26
8.	FCC REQUIREMENTS	27

1. INTRODUCTION

Thank you for purchasing ESCEND Blades - Alpha.

It is a portable and eco-friendly personal mobility transport, which is incredibly fun to use. Its' compact dimensions and high manoeuvrability make it perfect for commute and recreational journeys.

The frames are also compatible with most skate boots so you can ride ESCEND Blades in the comfort of your own boots!

It allows you to travel up to 15km with a top speed of 25 km/h. It is equipped with advanced braking systems and engineered with reliability in mind.

Enjoy your ride and stay safe!

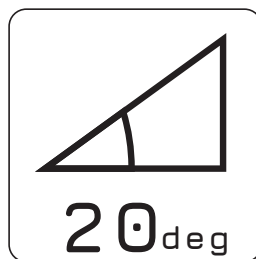
1.1 FEATURES



Top Speed



Full Charge Range



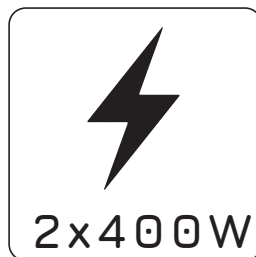
Max Gradient



0-80% Charge Time



105mm Tyres



Motor Power

2. GETTING TO KNOW THE SKATES

2.1 PACKAGING CONTENTS

PARTS:

- LEFT SKATE (x1)
- RIGHT SKATE (x1)
- REMOTE (x1)
- SKATE CHARGER (x1)
- REMOTE CHARGER (x1)
- BOOTS (OPTIONAL)
- EXTRAS (OPTIONAL)

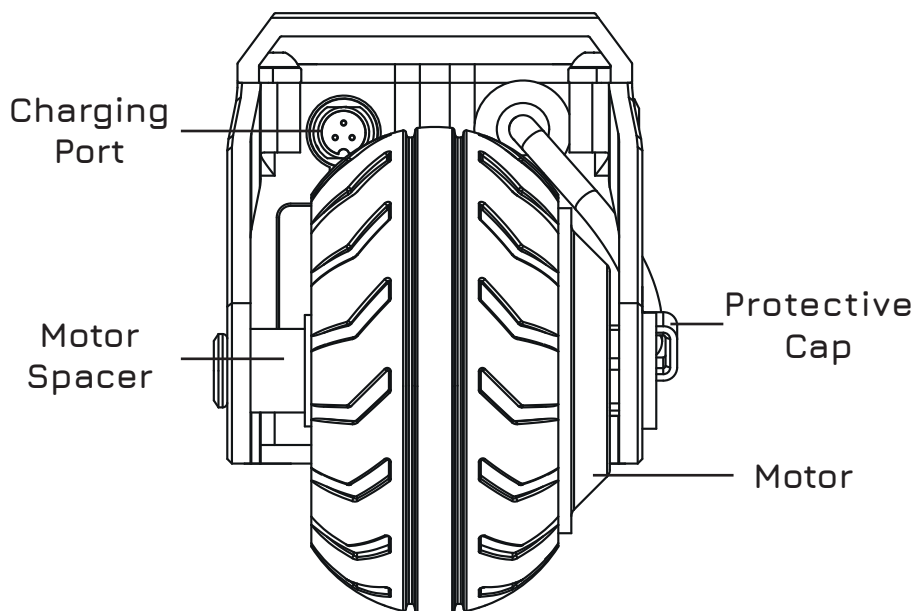
TOOLS:

- 5mm Hex Key (x1)
- 4mm Hex Key (x1)
- 3mm Hex Key (x1)
- 2.5mm Hex Key (x1)
- 2mm Hex Key (x1)

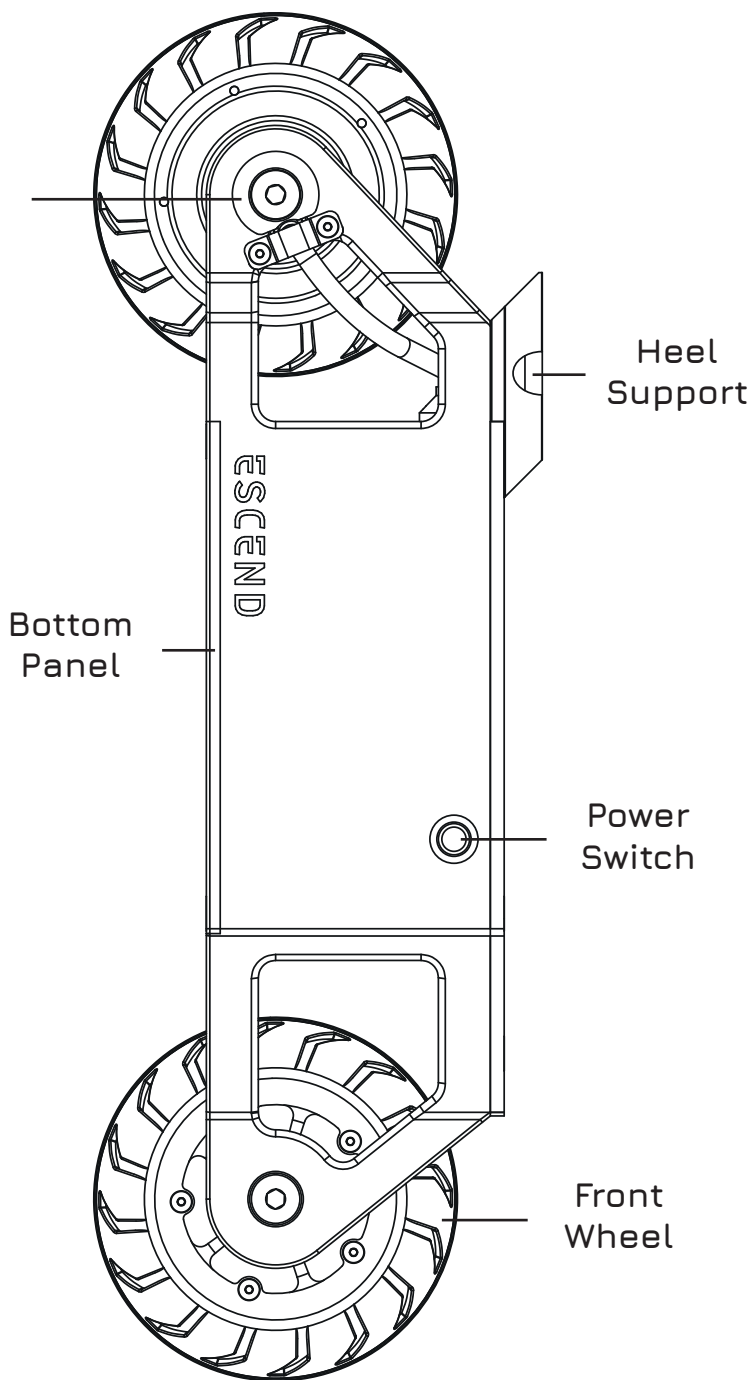
SPARE PARTS

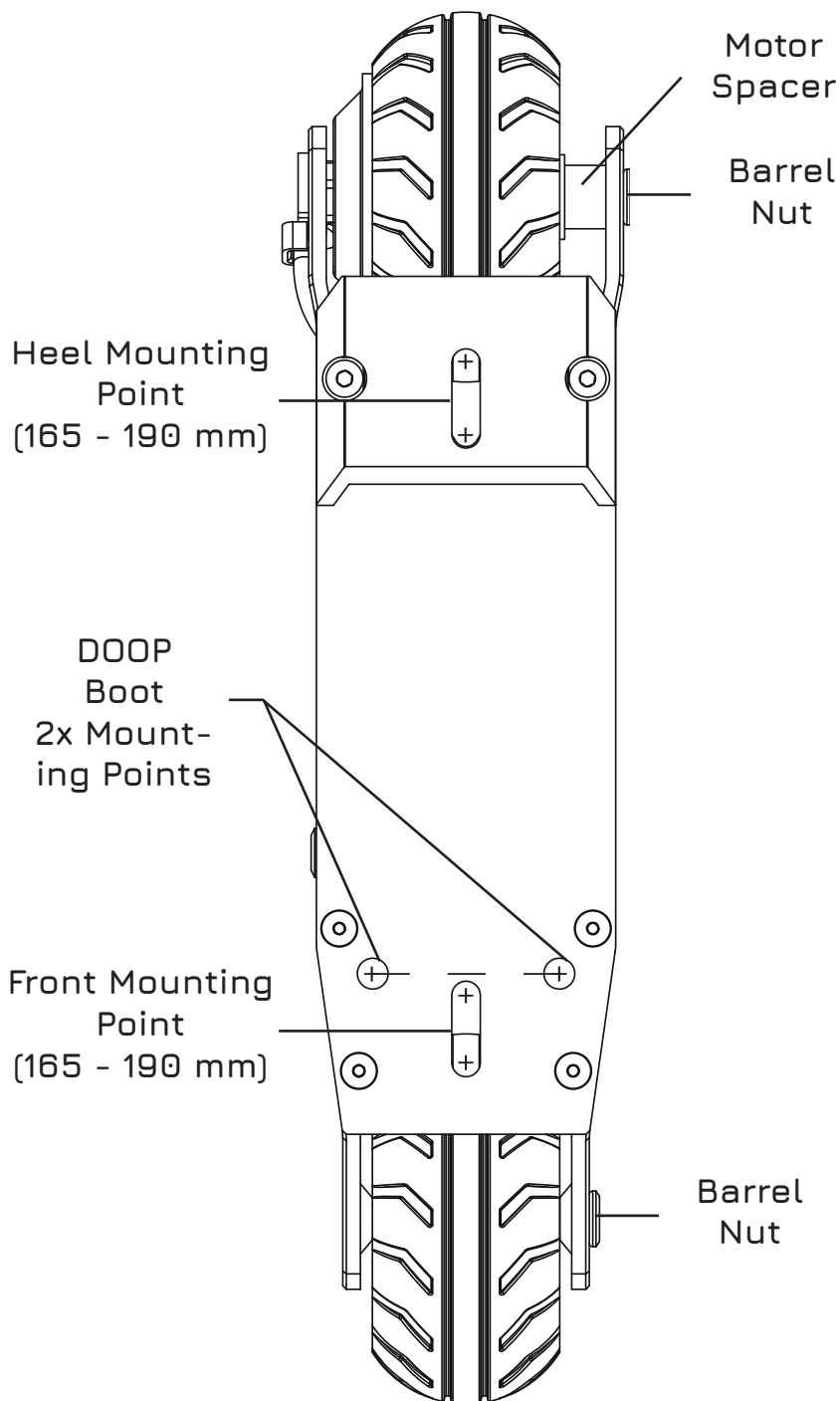
- Vent Label (x2)

2.2 SKATES GLOSSARY

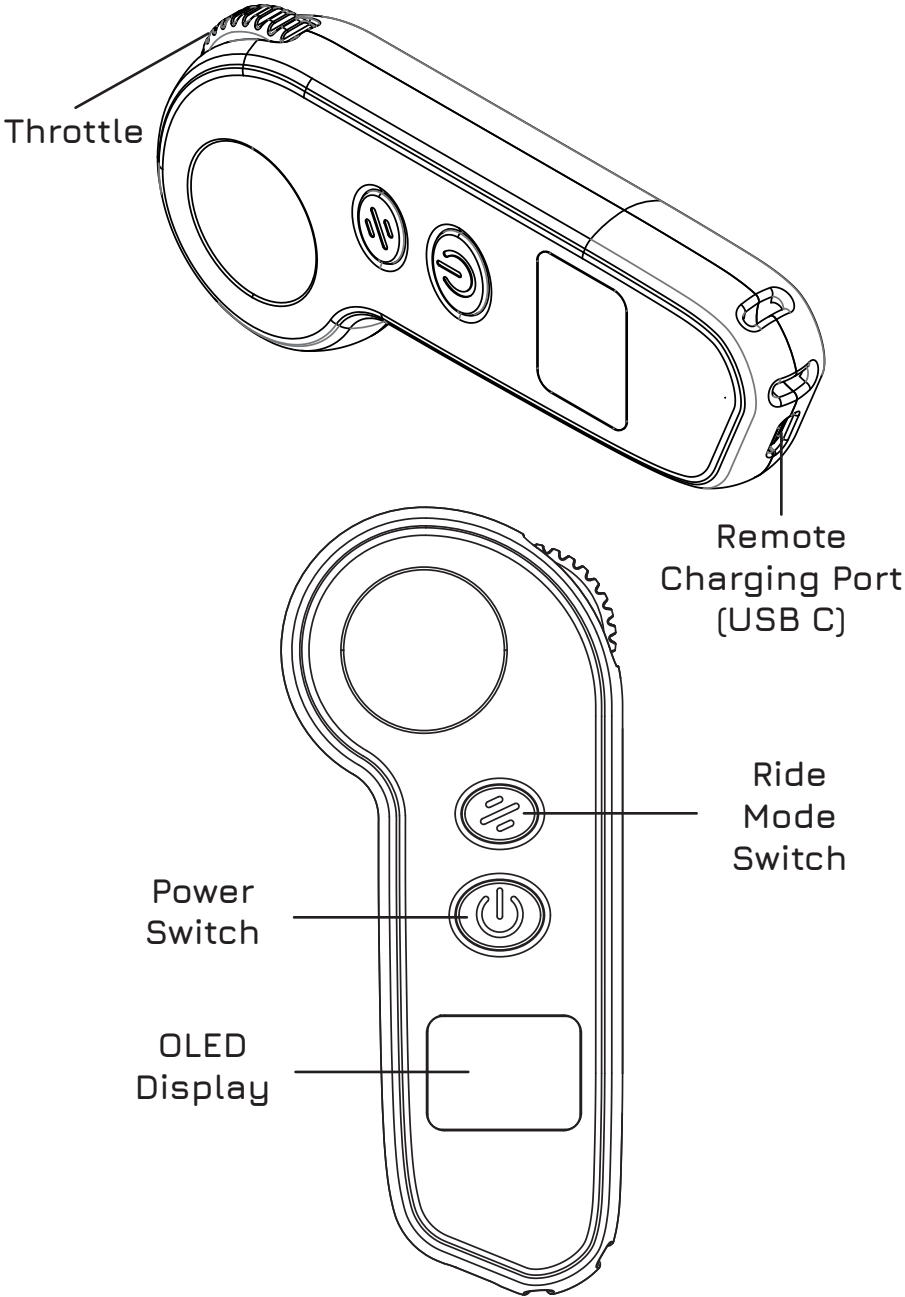


Motor
Mount

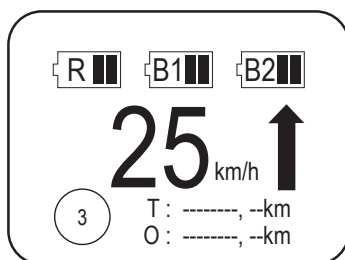
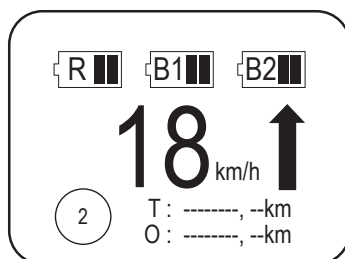
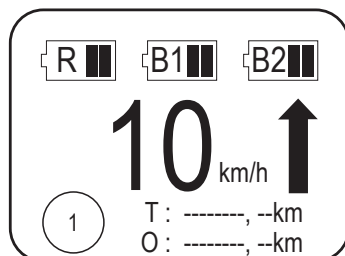
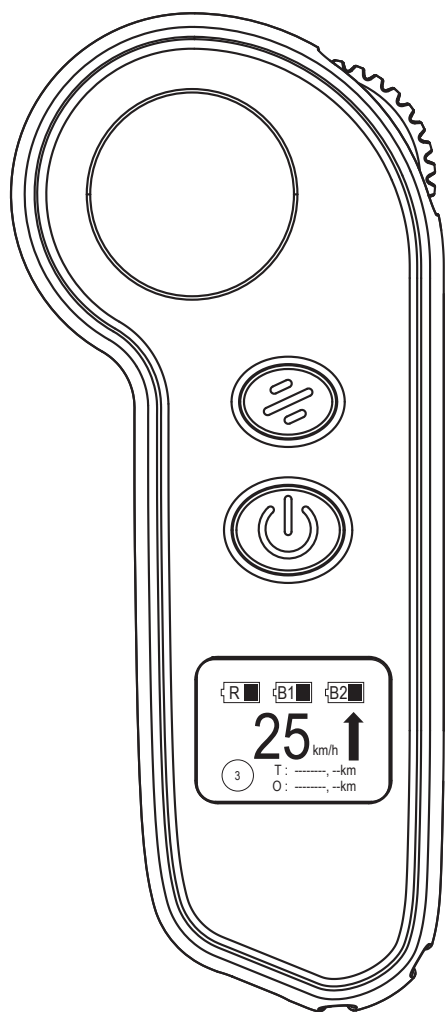




2.3 REMOTE GLOSSARY



2.4 REMOTE OLED DISPLAY



 Remaining capacity of the remote battery

① ECO

↑ FORWARD

 Remaining capacity of skate 1 battery

② TURBO

↓ REVERSE

 Remaining capacity of skate 2 battery

③ COMMUTE

T: TRIP DISTANCE

O: ODOMETER

3. USER INSTRUCTIONS

3.1 CHARGING - SKATE

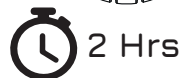
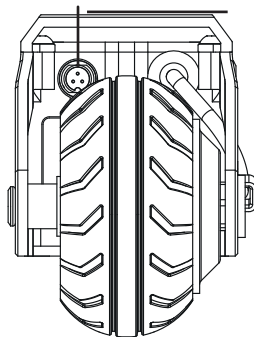
1. Remove the rubber cover on charging port
2. Ensure the orientation of charger groove is the same as on charging port and plug in the charger

Notes:

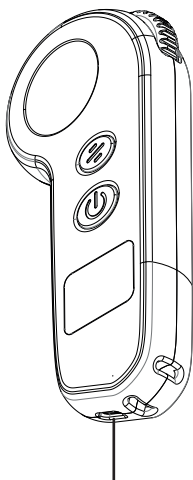
- The indicator on charger turns green when skates are fully charged or when the charger is disconnected from skates
- The indicator on charger turns red during charge
- Charging Time is approximately 2 hours

WARNING: Never leave the skates unattended when charging.

Charging Port



3.2 CHARGING - REMOTE



Charging Port



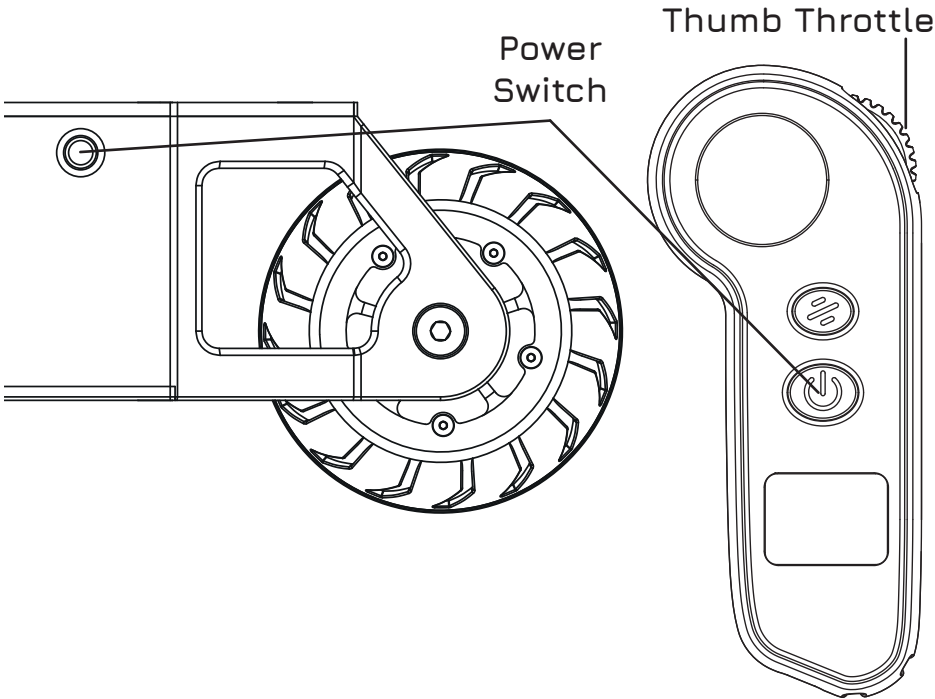
30 min

1. Plug in the charger into the remote charging port (USB - C)
2. Once it starts charging, a notification will be shown on OLED display

Notes:

- Remote charge time is approx. 30mins
- Remote will show fully charged when complete

3.3 POWER ON/OFF



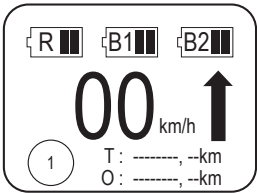
1. Power on the skates and remote by holding the Power Switch for 2 seconds, until the light/indicator turns on.

2. Repeat the same steps for powering off the devices

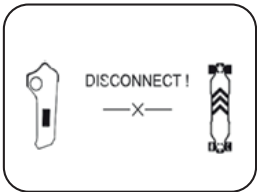
Note: You can power on the devices in any sequence

3. Once all of the devices are powered on, the remote should be connected to both skates and show its “DEFAULT SCREEN” state (speed, battery charges, driving direction and etc.)

If the display screen shows “DISCONNECT” error, proceed to “3.4 CONNECTING & BINDING” instruction



DEFAULT SCREEN



DISCONNECT SCREEN

3.4 CONNECTING & BINDING

Connecting & Binding operation should be used for pairing the remote to skates, changing the remote units, changing the level of regenerative braking and adjusting drivetrain system for a different wheel size

- Prior to doing this procedure, ensure that both skates and remote are switched off

- Use the “Thumb Throttle” to switch between units by pushing it forward or backwards

- Use the “Power Switch” button to confirm the selected unit

STEP 1: Press and hold the **Power Button** on Remote until it asks you to select “2WD” or “4WD”. Select and confirm “4WD” mode

STEP 2: The remote will ask for connection to “ESC1”. Press and hold the **Power Button** of the right-side skate until it starts rapidly flashing

STEP 3: The remote will ask for connection to “ESC2”. Press and hold the **Power Button** of the right-side skate until it start rapidly flashing

STEP 4: Select and confirm the desired speed/ distance unit “MPH” or “KM/H”

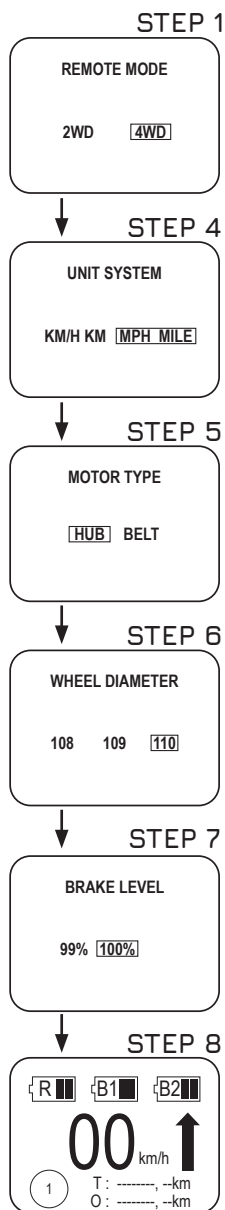
STEP 5: Toggle and select “Hub Motor” on the next screen

STEP 6: Toggle and select “105 mm” for the wheel diameter. If you are using different wheel size, select the diameter accordingly

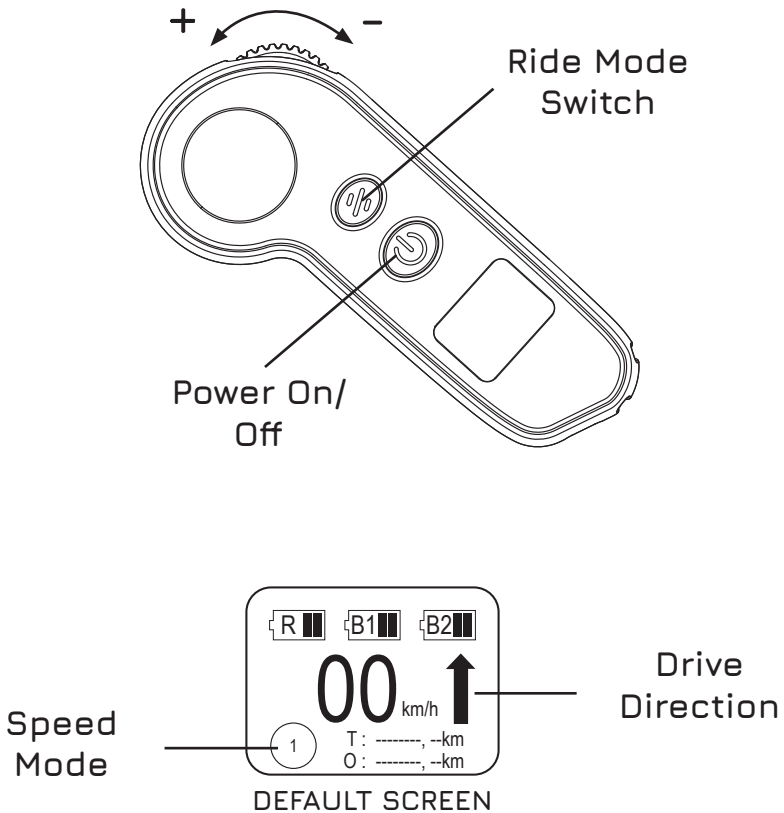
STEP 7: Toggle and select for the Brake Level to be “100%”

STEP 8: When display goes to normal operational display the pairing is successful

Note: If after pairing procedure the motors go in reverse when the direction on remote is indicating forward, repeat the pairing procedure, ensuring you pair a different skate first during STEP 2



3.5 OPERATING ESCEND BLADES



Accelerating & Braking:

- Push the thumb throttle forward to accelerate
- Push the thumb throttle backwards to brake

Changing the ride mode:

- Single click the “Ride Mode Switch” button to switch between speeds modes 1, 2, 3
- Double click the “Ride Mode Switch” button to change between “Forward” and “Reverse” driving modes

3.6 STORAGE & MAINTENANCE

- Check all screws are tight before riding and do frequent in-depth maintenance checks
- Clean front wheel bearings regularly following industry standard guidelines
- Make sure the skates and remote are turned off when not in use
- Recharge the battery in a well-ventilated area and do not leave unattended
- Do not charge in a wet or damp area
- Only use the ESCEND charger supplied
- DO NOT use the battery to power any other equipment
- DO NOT take apart the electronics and tamper with cabling
- Check all wires for damage before every use

3.7 BATTERY SAFETY

Lithium-ion batteries are dangerous if not used correctly and cared for. They can explode and cause a fire. It is recommended that you read the following instructions very carefully:

- Each time you ride the skates check the screws on the bottom panels are tight and check the protective seals are not showing
- In case of any serious impact to the skates (drops, collisions), thoroughly inspect the skates' functionality (spinning wheels, frame integrity, electronics functionality)
- Never expose the battery to temperatures above 40 Degrees Celsius
- Only use the official ESCEND charger
- Never leave the skates unattended when charging
- Never run the skates while charging
- If you do not plan on using the skates for more than 2 months, then try to leave the battery around 50% charge (SOC)
- Before riding again fully charge the skates to rebalance the cells
- Do not let a fully charged battery stay in the charger for long periods of time
- If throwing away a battery find a dedicated battery disposal facility in your area



4. GETTING STARTED

Read “Safety warnings” and “Disclaimer” on pages 2-3 prior to getting started.

- ALWAYS WEAR A HELMET
- Wearing other protective gear is highly recommended: Knee pads, Elbow pads, Wrist pads, reflective clothes

Follow these tips to ensure a safe riding experience:

- Find an open, flat area with clean pavement for your first ride
- Move the throttle in small increments when accelerating and braking
- Keep legs wide apart when starting and one foot in front of the other
- Keep a low centre of gravity
- Lean forward when accelerating / Lean backwards when braking

4.1 RIDING OUTSIDE PRIVATE PROPERTY

- Abide by the laws and regulations of your country or state
- Respect other drivers and pedestrians on the road and pavements
- Avoid riding in busy traffic and crowded areas
- Cross the roads at designated crossings and signalled intersections
- Identify and keep a safe distance away from hazards and obstacles
- Do not ride the skates on any private property without permission
- Do not ride on roads without abiding by country-specific laws

4.2 TIPS FOR RIDING ESCEND BLADES

SPEED BUMPS

Take care when going over speed bumps, do not go over them at high speeds and keep your balance. Even though the skates can handle a level of abuse they are not designed for extreme jumps or tricks. Damage resulting from hard riding will not be covered under the warranty.

UNEVEN SURFACES

Be careful when riding on uneven and bumpy surfaces. This could throw you off-balance and cause a dangerous situation, especially for inexperienced riders. Avoid sharp manoeuvres and keep to a speed within your comfort level.

SIDEWALK / ROAD JUNCTION

Take care when stepping up or down any sidewalks, take them at a slow speed and lift one leg at a time onto the new level surface. If the surface is less than 3cm you can ride straight up it but take them at 45-degree angles and maintain your speed, while keeping your balance.

ZEBRA CROSSING AND ROAD MARKINGS

Please take care when going over slippery surfaces (e.g. painted road markings) when the road is wet. If you must go on them do not accelerate / brake fiercely, keep to a low speed and avoid sharp manoeuvres.

PARKED CARS, PARKING LOTS AND PEDESTRIANS

Take extra caution and slow down when riding around cars and pedestrians. They may not see you or may not be paying attention to their surroundings. Slow down around emerging or parking cars and ride as if they cannot see you!

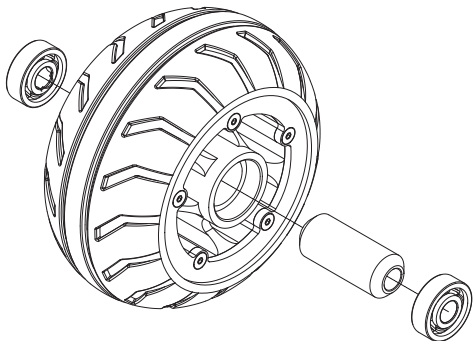
WATERLOGGED ROADS

This could be a hazard to your skates and is recommended you do not ride on waterlogged roads. Do not immerse the skates in water and avoid big puddles. Water damage is not covered in the warranty.

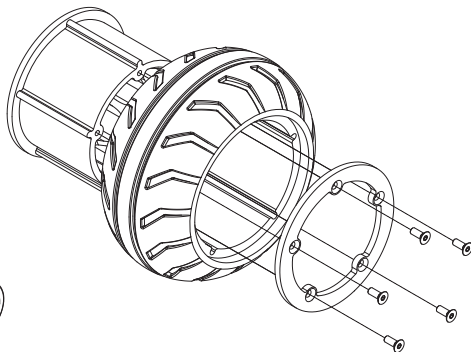
5. MAINTENANCE INSTRUCTIONS

5.1 FRONT TYRE & BEARINGS REPLACEMENT

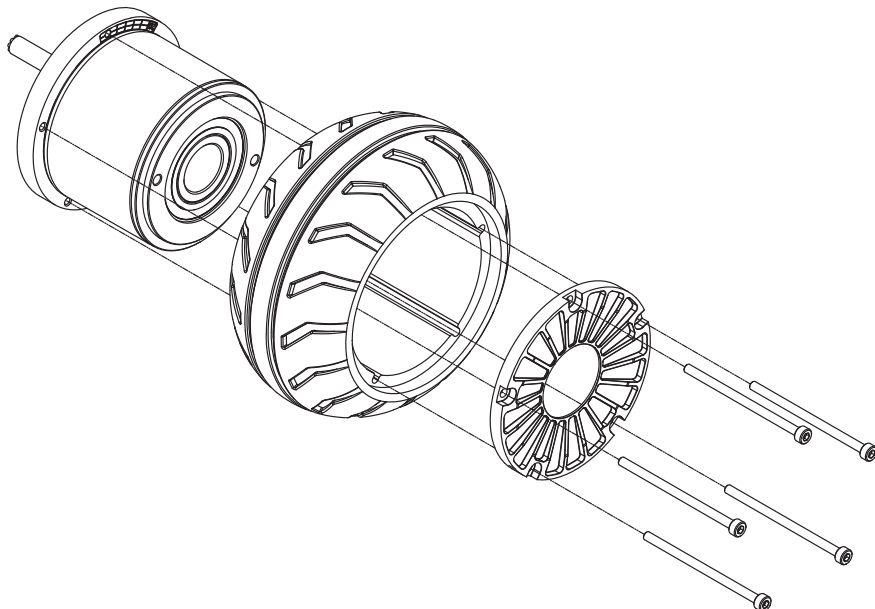
Changing the bearings:



Changing the tyre:

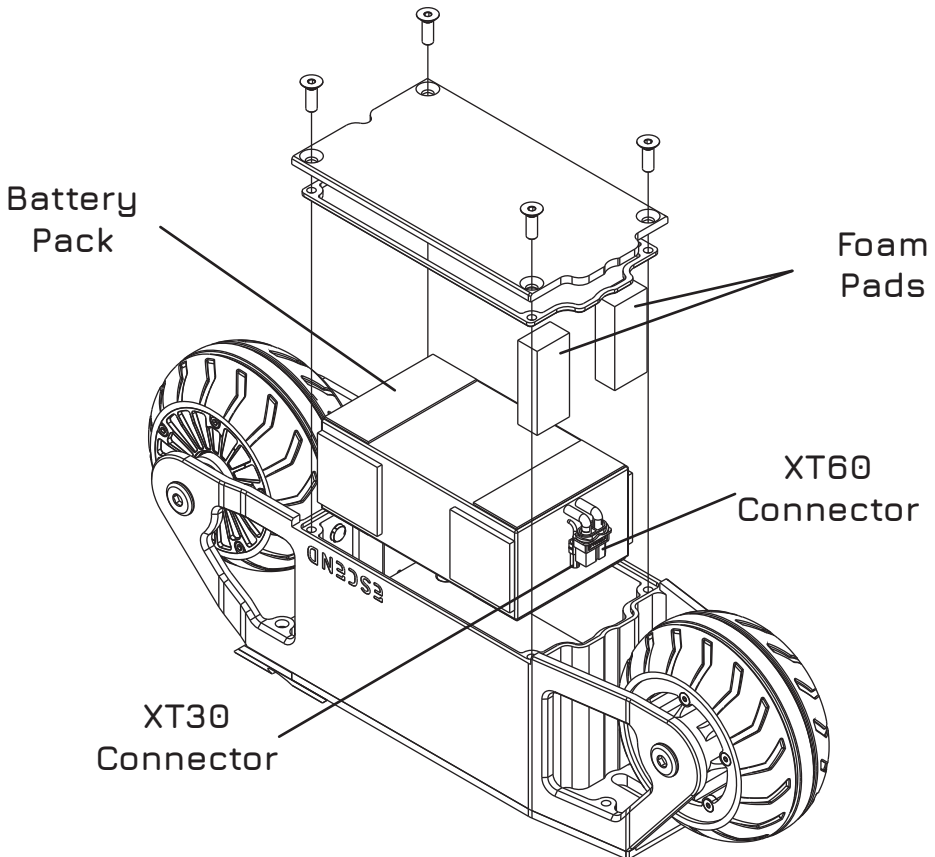


5.2 MOTOR TYRE REPLACEMENT



5.3 BATTERY REPLACEMENT

1. Remove the bottom panel by removing the four M5 screws
2. x2 Foam Pads should be removed from enclosure prior to removing battery pack
3. Battery pack should be taken out of the frame prior to disconnect procedure. Once there is sufficient space to reach the connectors (XT60, XT30 connectors), they should be disconnected
4. Install the new battery pack by connecting XT60, XT30 connectors to the wires protruding from the enclosure, tidying them away and slotting the battery pack into the frame enclosure
5. Insert and position x2 Foam Pads back to where they were prior to removing them

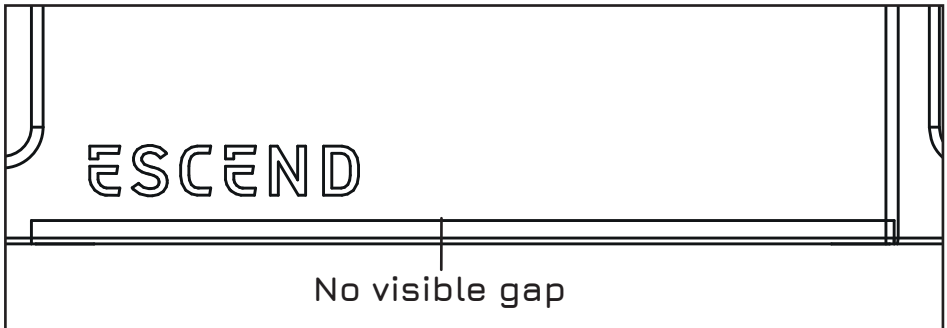
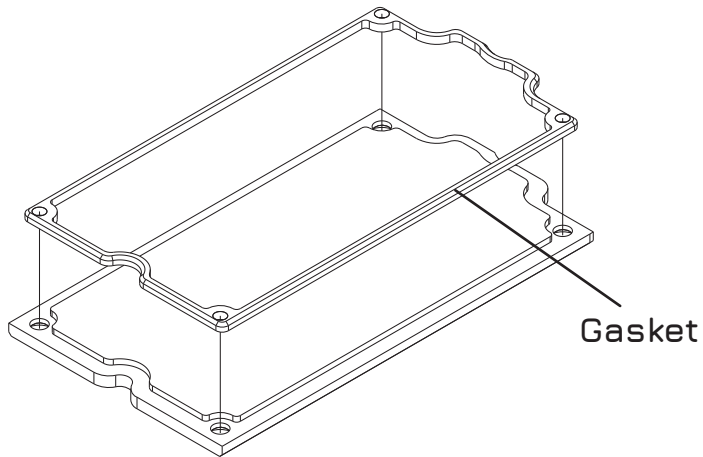


6. Prior to bottom plate installation, position the gasket on the bottom plate recess, ensuring the orientation is correct. Ensure the gasket chamfer is facing outwards

7. Replace the bottom panel and ensure the gasket is firmly in place. Secure the panel using the four M5 screws.

8. During the bottom plate installation, ensure that there are no visible gaps between the top plate and frame. This can occur if the gasket gets trapped.

NOTE: If there are any gaps large enough to fit your fingernail through, then the bottom panel should be re-assembled. The gasket should be re-aligned to make sure that it does not get trapped between the top plate and frame.

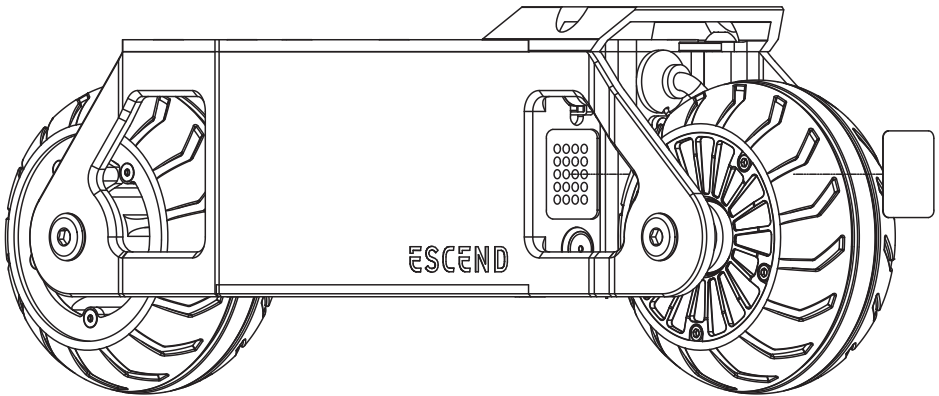


5.4 VENT LABEL REPLACEMENT

NOTE: Vent Label should be replaced if it gets pierced, damaged or it starts to peel off

1. Remove the old Vent Label
2. Clean the application area with IPA solution, ensuring that it is free from any sort of contamination. Make sure for IPA solution to dry out prior to applying the new label.
3. Position and stick the new label into recess and apply pressure to it for 40 seconds

NOTE: Applying pressure helps the label adhesive set



6. TECHNICAL PARAMETERS

SECTION	PARAMETERS	DETAILS
Product Specification	Dimensions	129.5 x 99.7 x 394.9mm (Per Skate Platform)
	Wheelbase	290 mm
	Total Weight	4 kg x 2
	Ground Clearance	32.5 mm
	Climbing Angle (Max)	10 Degrees (11.5% Incline)
	Frame Material & Thickness	Aluminium 6061 T6
Product Performance	Min Load	40 kg
	Max Load	100 kg
	User Age	14+ Years
	Speed	ECO: 8-12 km/h
		COMMUTE: 18 - 22 km/h
		TURBO: 22-25 km/h
	Range	12 - 15 km/h
Battery Parameters	Battery Type	Lithium-ion (Cylindrical Cells 18650)
	Voltage	18V(Min) / 21.6V (Nom) / 25.2 (Max)
	Capacity	5200 mAh
	Size	120x69x47 mm
	Configuration	6S2P
	Protection Measures	BMS: Overvoltage, Undervoltage, Overcurrent, Short Circuit, Overheating

SECTION	PARAMETERS	DETAILS
Motor Parameters	Motor Type	Permanent magnet BLDC Hub Motor - 90 x 64.3 mm
	Rated Output	400W x 2
	Torque	5 Nm
	Max Instant Power	600W x 2
	Rated Voltage	25.2V Max
Tyres & Bearings	Type	Silicone Rubber - Puncture Proof
	Specification	105 mm Dia - 70A Hardness
	Bearing	ABEC 9 - Wicked Chrom Steel
Charger Parameters	Input Voltage	110 - 230V AC
	Output Voltage	24.6 V
	Output Current	3A
	Charging Time	2-3 Hours
	Indicator	Red: Charging / Green Charged
Remote Parameters	Nominal Voltage	3.6V - Lithium Ion
	Capacity	300 mAh
	Charging Port	USB - C
	Charging Time	30 - 60 minutes
	Communication Method	2.4 GHz Radio
	Material	ABS Plastic

7. WARRANTY

7.1 STANDARD WARRANTY COVER

- The warranty covers all products sold by ESCEND through their official website or official channels.
- Please check the quality of the products upon arrival and contact us if anything is out of the ordinary. For items damaged upon arrival, you must contact us within 2 weeks of receiving the product. Any other defects that fall under warranty must be reported within 6 months.
- We offer a 6-month (180 days) Warranty on parts from the date of receiving the skates

If a defect arises during the Warranty Period, ESCEND will either:

- Send the new parts to replace the defective parts.
- Exchange the affected products with functionally equivalent products that are new or formed from new and/or previously used parts that are equivalent to new in performance and reliability.

What is not considered a defect?

- Minor Blemishes
- Damage resulting from abuse (drops)
- Accidents
- Neglect
- Severe water damage
- Installation failures (3rd party charging cable, wrong assembly, etc)
- Daily wear and tear
- Intentional modifications
- Items not sold by us or authorised resellers
- Items not manufactured by us
- Misuse, mishandling of item

This warranty excludes damage resulting from abuse, accident, modifications or unauthorized workmanship repairs, neglect, abuse, water damage, or other causes that are not defects in materials

This warranty excludes normal depletion of consumable parts such as:

- Wheels / Tyres
- Bearings
- Fasteners
- Other types of wear

Our Standard Warranty only applies exclusively to products bought on the official ESCEND website and re-sellers. ESCEND products purchased elsewhere such as an unauthorised re-seller, or second hand are NOT covered by ESCEND's Standard Warranty.

7.2 RETURNS PROCEDURE

Any warranty claims must go through the official channels by filling out a returns form and waiting for confirmation from ESCEND team. Any products that are received with no "Returns" documentation will be destroyed.

To obtain warranty service, you MUST provide:

- Detailed reason for return
- 2 x Photos of the product and proposed problem
- Order number
- A contact name with a phone number
- Pack the items in the original packaging
- Confirm shipping address
- Confirmation of warranty return acceptance from ESCEND

This warranty excludes gifts unless the product is returned by the original purchaser.

8. FCC REQUIREMENTS

Changes or modifications are strictly prohibited and if not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

PLACE LABEL
HERE

CAUTION:

- RIDE AT YOUR OWN RISK
- DO NOT TAMPER, DISASSEMBLE,
- DO NOT SHORT CIRCUIT THE BATTERY, EXPOSE TO FIRE OR WATER

FOR MORE INFORMATION VISIT: WWW.ESCENDBLADES.COM



UN38.3



FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party.

Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement.
The device can be used in portable exposure condition without restriction.

IC Warning

English: This device complies with Part 15 of the FCC Rules [and contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS standard(s)]. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

French: L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

L'appareil numérique du CIEM conforme canadien peut - 3 (b) / nmb - 3 (b).

This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 2.5 du CNR - 102 et conformité avec RSS 102 de l'exposition aux RF, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs RF et la conformité.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

RF Exposure Statement

The device has been evaluated to meet general RF exposure requirement.

The device can be used in portable exposure condition without restriction.

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux radiofréquences. L'appareil peut être utilisé en condition d'exposition portable sans restriction.