

Content

Content	1
1. Introduction.....	5
1.1. About This Manual	6
1.2. The Risk of Injury	6
1.3. Before You Begin.....	6
1.4. Related User Materials.....	7
1.5. Conventions	7
2. General Information.....	7
2.1. Product Dimensions	8
2.2. INMOTION SCV Serial Number.....	8
2.2.1. Specifications	9
2.3. How the INMOTION SCV Works	10
2.4. INMOTION SCV Components.....	11
2.5. Assembling the INMOTION SCV	12
2.5.1. Unpacking the box.....	13
2.5.2. Assembling the INMOTION SCV	13
2.6. SmartKey	15
2.6.1. SmartKey Buttons and Display	17
2.6.2. SmartKey Functions	20

2.7.	Info LED and Sound Prompt.....	23
2.7.1.	Info LED	23
2.7.2.	Sound Prompt.....	26
2.8.	Working Mode	26
2.8.1.	Introduction	26
2.8.2.	State Transition Diagram Among Working Modes	28
2.9.	The Front/Tail Light.....	29
2.10.	Communication and Charging Port	30
2.10.1.	Wi- Fi	30
2.11.	USB Charging Port	31
2.12.	Smartphone App*.....	31
3.	Riding Your INMOTION SCV	32
3.1.	Riding Guidelines	32
3.1.1.	Safety Cautions	32
3.1.2.	Prepare for Riding	33
3.1.3.	Powering On the INMOTION SCV	33
3.1.4.	Stepping On.....	34
3.1.5.	Moving Forward and Backward	35
3.1.6.	Stopping	36
3.1.7.	Turning the INMOTION SCV.....	37
3.1.8.	Stepping Off	38
3.1.9.	Securing Your INMOTION SCV	39

3.1.10.	Powering Off the INMOTION SCV	40
3.2.	Practice Riding	40
3.3.	Training Mode and Speed Mode	40
3.4.	Assist Mode	41
3.5.	Remote Control	42
3.6.	Self-check Mode	42
3.7.	Safety Alerts.....	43
3.7.1.	Speed Limiter	43
3.7.2.	Safe Stop	45
3.7.3.	Shaft Vibration Warning	45
3.8.	Environmental Factors Affecting the Vehicle's Performance	46
3.8.1.	Riding Distance	46
3.8.2.	Riding in High Temperatures.....	47
3.8.3.	Riding in Cold Temperatures.....	47
3.8.4.	Climbing.....	47
3.8.5.	Descending.....	48
4.	Using the Battery Pack.....	48
4.1.	Battery Safety.....	48
4.2.	Specifications for the Battery Pack	50
4.3.	Charging the INMOTION SCV	51
4.3.1.	Charging Procedures	51
4.3.2.	Charging Indicator.....	52

4.4.	Replacing the Battery Pack	52
4.5.	Transporting Battery Pack.....	53
5.	Safe Riding	54
5.1.	Rules That You Must Follow.....	54
5.2.	Actions You Must Avoid	55
5.3.	Safety Alerts.....	56
6.	Operating and Maintaining Your INMOTION SCV	58
6.1.	Lifting Your INMOTION SCV	58
6.1.1.	Lifting your INMOTION SCV by the Turning Shaft	58
6.1.2.	Lifting your INMOTION SCV by the Metal Grip.....	58
6.2.	Cleaning Your INMOTION SCV	59
6.3.	Storing Your INMOTION SCV.....	59
6.4.	Maintaining Your INMOTION SCV	60
7.	Troubleshooting the INMOTION SCV	60
7.1.	Common Faults	61
7.2.	The INMOTION SCV Cannot Power On	62
7.3.	The INMOTION SCV Cannot Enter Balance Mode	63
7.4.	The INMOTION SCV Is Shaking.....	63
7.5.	The Turning Shaft Slips or Is Off-Centered	64
7.6.	The INMOTION SCV Cannot Power Off.....	64
7.7.	The INMOTION SCV Cannot Be Added in the App	64
8.	Contact and Legal Information	65

8.1.	Report a Problem	65
8.2.	How to Reach Us	65
8.3.	Obey All Laws and Regulations	65
8.4.	Version	65

1. Introduction

1.1. About This Manual

This User Manual is intended to help you set up and use your **INMOTION SCV**. You need to read this Manual carefully, watch the Safety Videos and make sure that you follow the safety instructions when using your **INMOTION SCV**.

It is important that you adhere to all safety **Warnings** and **Cautions** that appear throughout this User Manual.

This User Manual is suitable for INMOTION R1XX series products. Certain functions are limited to specific models.

If you have questions or require more information beyond this User Manual, please contact an authorized INMOTION SCV distributor or dealer in your area.



WARNING!

- Whenever you ride the INMOTION SCV, you risk injury from loss of control, collisions, and falls. To reduce risk of injury, you must read and follow all instructions in this User Manual and watch the Safety Videos.

1.2. The Risk of Injury

The INMOTION SCV is a self-balancing Sensor Controlled Vehicle (SCV). Balancing technology cannot prevent injury if you do not ride the INMOTION SCV safely.

1.3. Before You Begin




Before you begin, it may be necessary to assemble your INMOTION SCV. The Battery Pack should be charged for at least 4 hours before the first use. To assemble the INMOTION SCV and charge the Battery Pack for the first time, please refer to Sections **2.5 Assembling the INMOTION SCV** and **4.3 Charging the INMOTION SCV** in this Manual.

1.4. Related User Materials

INMOTION provides an electronic copy of the User Manual, Safety Videos, and help documents for your convenience. You can download these electronic files as well as the INMOTIONS SCV Smartphone App from www.imscv.com.

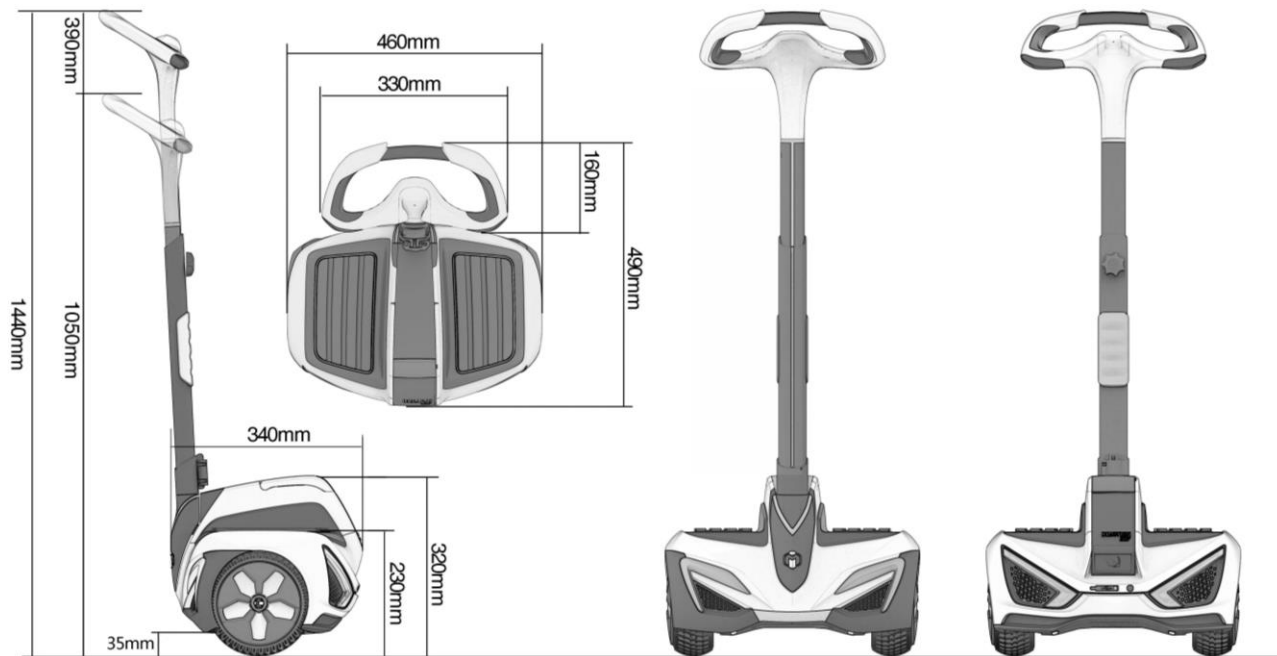
1.5. Conventions

The following conventions are used throughout this manual:

 WARNING!	Warns you about actions that may result in personal injury.
 CAUTION!	Cautions you about actions that may result in operational issues or physical damage to the INMOTION SCV.
 NOTE:	Identifies important points, helpful hints, special circumstances, or alternative methods.

2. General Information

2.1. Product Dimensions



The serial number is unique to your INMOTION SCV. Please write it down and store it in a safe place. The serial number is

a 16-digit number printed along with the barcode on your INMOTION SCV.

The serial number is required for after-sales service, warranty, insurance, or confirmation of loss claims.

Locations of the INMOTION SCV Serial Number:

- On the outside box packaging
- On the Warranty Card
- Battery Slot—remove the Battery Pack to reveal the serial number located inside the Battery Slot
-

2.2.1. Specifications

Item	Value	Note
Model	INMOTION R1EX	^① Max Speed can be adjusted through the application. You may get a higher instant speed but will stabilize at the set speed. ^② Distance per charge was calculated under the following test conditions: 25°C, 70 Kg payload and smooth terrain. The cruising distance varies under different riding conditions. Different SCV and battery models will cause a difference in cruising distance. ^③ The Machine Weight includes a 4 Ah Battery Pack. Different models weigh differently because of different materials used. The R1EX is about 16 Kg. ^④ Dimensions were measured with the Turning Shaft fully extended.
Max. Speed	15 Km/h ^①	
Distance per charge	16~30 Km ^②	
Max Climbing Angle	15 °	
Machine Weight	16 Kg ^③	
Load	25 ~ 100 Kg	
Turning Radius	0 m	
Dimensions (W * D * H)	460*490*1440 mm ^④	
Battery	72 V 4 Ah Lithium Ion (Li-ion) ^⑤	
Power Requirements	AC 110 ~ 240 V 50 ~ 60 Hz	

Full Charge Time	About 3.5 Hours ⑥	⑥4 Ah battery is the standard configuration. You can also choose a 6 Ah Battery Pack to get a longer cruising distance, but it will increase the total weight of the INMOTION SCV. ⑥Charging time for the SCV varies depending on environmental temperature and Battery Pack capacity.
Tire Type	Vacuum Tires	
Recommended Best Operating Temperature Range	15 ~ 30 °C	



NOTE:

- For additional information about Maximum Payload (Rider plus all cargo), turn to later chapters.
- For additional information about how to increase riding distance per charge, turn to Section 3.8, Environmental Factors Affecting the Vehicle's Performance.

2.3. How the INMOTION SCV Works

The INMOTION SCV works like the human body. When walking, if you lean forward, you take a step forward to keep your balance. If you lean back, you step back. On an INMOTION SCV when you lean forward or back the machine powers the Wheels in the direction that you lean.

The INMOTION SCV uses dynamic stabilization technology and applies a gyroscope, sensors, and a Permanent Magnet Synchronous Motor (PMSM) to maintain its balance and move forward or backward.

When you pivot the Turning Shaft to the left, the INMOTION SCV turns left. When you pivot the Turning Shaft to the right, the INMOTION SCV turns right. To turn the INMOTION SCV, point the Turning Shaft in the direction you want to go, keeping the Handlebar in line with your body. When the Turning Shaft is centered, the INMOTION SCV travels straight ahead.



2.4. INMOTION SCV Components



2.5. Assembling the INMOTION SCV

2.5.1. Unpacking the box

Any missing or visibly damaged parts should be reported to your dealer immediately.

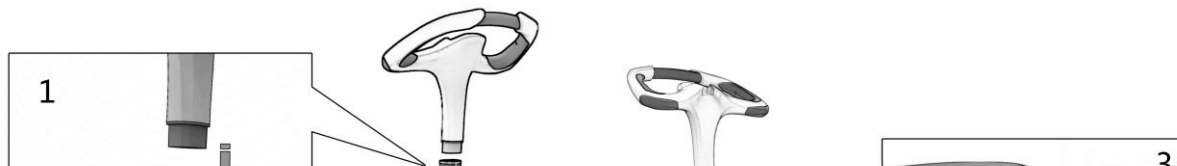
1. INMOTION SCV body	5. Installation Tool and a spare Screw
2. Handlebar (R1EX uses ABS materials, and Carbon Fiber Handlebar is optional.)	6. SmartKey and a Micro USB cable
3. Turning Shaft and a Screw	7. User Manual, Warranty Card, Product Certification and Useful Tips Manual
4. Charger Adapter	
8. 4 Ah Lithium Battery Pack (a Useful Tips Manual is included.)	



WARNING!

- All INMOTION SCV parts must be approved by INMOTION, and properly installed.
- Never attempt to stand on an INMOTION SCV without the Turning Shaft properly attached.
- Using your INMOTION SCV without all parts properly installed could damage your INMOTION SCV and result in serious injury from loss of control, collisions, and falls.
- Do not modify the INMOTION SCV. Modifications to the INMOTION SCV without the prior written approval of INMOTION could interfere with the operation of the INMOTION SCV, and result in serious injury or damage.

2.5.2. Assembling the INMOTION SCV



Assembling the INMOTION SCV:

1. Insert the Handlebar into the top of the Turning Shaft (the slimmer part), and tighten the Screw using the Installation Tool.

The Screw and Installation Tool are included in the box. Please pay attention to the front and back of the Handlebar.

2. Unlock the Quick Release Lock, insert the Turning Shaft into the Pivot Base Assembly until you feel resistance, and lock the Quick Release Lock. Please note, if the Turning Shaft is not completely inserted, the Quick Release Lock cannot be locked properly. Assembly of the Turning Shaft is now complete. When necessary, remove the Turning Shaft from the SCV by unlocking the Quick Release Lock.

3. Remove the Battery Pack from the battery package, lean the INMOTION SCV body forward, and hold it steady. Slide the Battery Pack into the Battery Slot. When you hear a click, gently try to pull the Battery Pack out. The Battery Pack is installed properly if it cannot be removed without releasing the latch.

4. Press the Reset Button on the back of the SCV, and power on the INMOTION SCV using the SmartKey.

NOTE:

- If necessary, especially when you need to put the INMOTION SCV in the trunk of your car, the Turning Shaft and the Handlebar can be quickly removed by unlocking the Quick Release Lock.

WARNING!

- Please confirm the Turning Shaft is installed properly. Try lifting the Turning Shaft with both hands to check if it is loose. If it is loose, tighten the Screw.
- If you need to remove the Turning Shaft, hold it tightly with one hand, unlock the Quick Release Lock, slightly shake it and then pull it out.

2.6. SmartKey

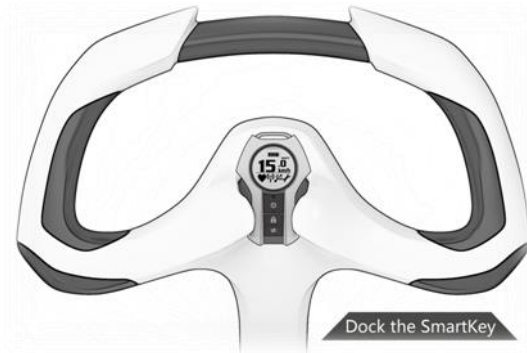
The SmartKey is a chargeable and upgradable device with information display and remote control function. The INMOTION

SCV can be operated or monitored by remote control.

The SmartKey has three buttons and a display in the center, and its effective communication range is 5~10m (depending on working environment and use methods).

Press the third button (Mode Shift Button) to activate the SmartKey and to start pairing it with the INMOTION SCV.

There is a micro USB port at the bottom of the SmartKey. Use this port to connect to your PC to see information about your SCV or to charge your SmartKey. The SmartKey can also be charged by connecting it to the USB port on your SCV.

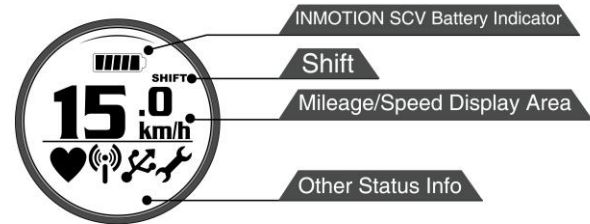


 **NOTE:**




- The SmartKey is small and portable. Dock it on the INMOTION SCV to view riding data during your journey.
- The SmartKey is paired with the INMOTION SCV when leaves the factory. If you lose your SmartKey please contact an authorized distributor or dealer to buy a new one and get instructions on how to pair it with your INMOTION SCV.

2.6.1. SmartKey Buttons and Display

The display area shows the operational state of the INMOTION SCV and information including your speed, distance, and battery state.




















SmartKey Button Functions:

Button	Description
	Power Button: Allows you to power the INMOTION SCV on and off.
	Lock/Unlock Button: Allows you to lock or unlock the INMOTION SCV.
	Shift Button: Allows you to shift among different modes.

SmartKey Icon Functions:

Icon	Description	Icon	Description
------	-------------	------	-------------

	Battery Icon: Shows remaining power in the INMOTION SCV Battery Pack. There are 5 bars when full.	2345⁰ km	Mileage Icon: Shows the mileage of the INMOTION SCV, to an accuracy of 0.1 Km.
SHIFT	Shift Icon: Indicates that the INMOTION SCV is in Shift Mode.	15⁰ km/h	Speedometer icon: Shows the speed of the INMOTION SCV, to an accuracy of 0.1 Km/h.
 UNPAIR	Unpair Icon: Indicates that the SmartKey is not paired with an INMOTION SCV.	 NO SIGNAL	No Signal Icon: Indicates that the SmartKey has no signal. Appears when the SmartKey cannot detect the INMOTION SCV.
 INMOTION	INMOTION Logo Icon: Appears when the SmartKey is being powered on or off using the SmartKey		
	Manned Speed Mode Icon: Indicates that the INMOTION SCV detects a rider, and is in Speed Mode.		Assist Mode Icon: Indicates that the INMOTION SCV is in Assist Mode.
	Manned Training Mode Icon: Indicates that the INMOTION SCV detects a rider, and is in Training Mode.		Remote Control Mode Icon: Indicates that the INMOTION SCV is in Remote Control Mode.

	USB icon: Indicates that the INMOTION SCV is plugged in to a USB port.		Speed Mode icon: Indicates that the INMOTION SCV is in Speed Mode.
	Wrench icon: Indicates a system fault on the INMOTION SCV that requires service.		Training Mode icon: Indicates that the INMOTION SCV is in Training Mode.
	SmartKey Link Signal icon: Indicates that the SmartKey has detected the INMOTION SCV.		Power Off icon: Indicates that the INMOTION SCV is powered off.
	SmartKey Unlink Signal icon: Indicates that the SmartKey has not detected or has lost its connection to the INMOTION SCV.		Security icon: Indicates that the security function is activated.
	Low Battery icon: Indicates that the SmartKey battery needs to be charged. Charging the SmartKey takes about 2 hours using the micro USB cable.		

2.6.2. SmartKey Functions

Power on the SmartKey by pressing Button C (Shift). The SmartKey will automatically pair with your INMOTION, as long as they are within the effective communication range.

The SmartKey has the following functions: power on/off the INMOTION SCV, lock/unlock the INMOTION SCV, power on/off the SmartKey, pair, enter/exit Shift Mode, and enable LED backlighting. Trigger these functions using the 3 SmartKey buttons. Key combinations are used to activate/deactivate different functions. Press, press and hold for 2 seconds, or combine pressing the keys to activate different functions. Shift Mode is designed to reduce the complexity of operating the SmartKey, and some less frequently used functions have been merged into Shift Mode. The same key combination will trigger a different function in Shift Mode.

SmartKey Button Functions:

Non-Shift Mode				
Button \ State	Unpair	Power on	Power off	Standby
Press Power Button (A)	Pair	Power off	Power on	N/A
Press Lock/Unlock Button (B)	N/A	Lock/Unlock the SCV	Lock/Unlock the SCV	N/A
Press Shift button (C)	N/A	Switch between Training Mode, Speed Mode and Assist Mode; Switch between Training Mode and Speed Mode while riding the SCV.	Switch between Training Mode and Speed Mode (it won't take effect until the next time you power on the SCV.)	N/A
Press and hold Lock/Unlock Button for 2 seconds (B)	N/A	Shows total distance traveled of the SCV.	Switch voice languages between Chinese and English.	N/A

Press and hold Shift button for 2 seconds (C)	N/A	Enter Shift Mode	Enter Shift Mode	N/A
Press and hold Power/Stand by Button and Shift button together for 2 seconds (A/C)	N/A	Illuminate the Backlight	Illuminate the Backlight	N/A

Shift Mode				
Button \ State	Unpair	Power on	Power off	Standby
Press Power Button (A)	N/A	Check the SCV model and Serial Number	Check the SCV model and Serial Number	N/A
Press Lock/Unlock Button (B)	N/A	Self-check Mode	Check the firmware version and AP information	N/A
Press Shift button (C)	N/A	Illuminate/turn off Front Light	Illuminate/turn off Front Light	N/A
Press and hold Lock/Unlock Button for 2 seconds (B)	N/A	Power off the SmartKey	Power off the SmartKey	N/A
Press and hold Shift button for 2 seconds (C)	N/A	Exit Shift Mode	Exit Shift Mode	N/A
Press and hold Power Button and Shift button together for 2 seconds (A/C)	N/A	Shut down the SCV	Shut down the SCV	N/A

NOTES:

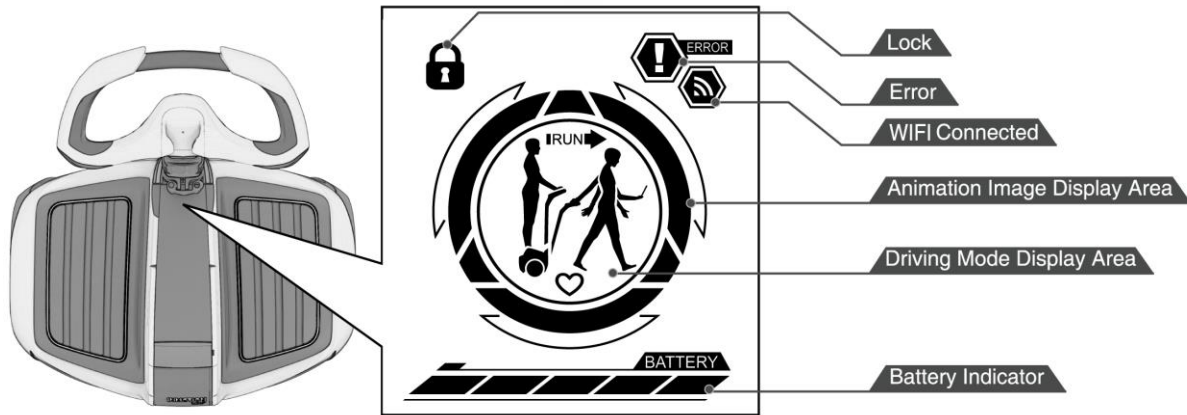
- “N/A” indicates no function will be triggered.
- The INMOTION SCV will only accept commands from the SmartKey when nobody is riding it. After 30 seconds of non-use, SmartKey, the SmartKey backlight will turn off.
- The SmartKey will power off after different periods of time under the below conditions:
- When the SmartKey is not paired with an INMOTION SCV: 1 minute
- When the SmartKey and the INMOTION SCV are paired, but the SmartKey cannot communicate with the INMOTION SCV, or nobody is riding it: 3 minutes
- When the SmartKey and the INMOTION SCV are paired, and can communicate with each other: 10 minutes.
- If the SmartKey is powered off, you can power it on by pressing the Shift Button (C).
- Trigger a horn honk by pressing the Power Button (A) when riding the SCV.

2.7. Info LED and Sound Prompt








2.7.1. Info LED

The Info LED display screen shows the running states of the INMOTION SCV.

Here below shows the Wi-Fi version.



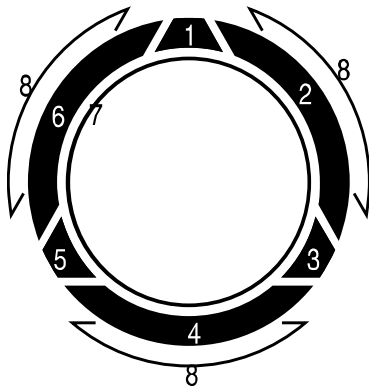
Icons and Descriptions:

Icon	Description	Icon	Description
	Manned Speed Mode icon: Indicates that the INMOTION SCV detects a rider, and is in Speed Mode		Assist Mode icon: Indicates that the INMOTION SCV is in Assist Mode.
	Manned Training Mode icon: Indicates that the INMOTION SCV detects a rider, and is in Training Mode.		Remote Control Mode icon: Indicates that the INMOTION SCV is in Remote Control Mode.
	Error icon: Indicates an INMOTION SCV system fault.		Lock Mode icon: Indicates that the INMOTION SCV is locked. When the Lock Mode icon is not displayed, the Lock Setting has been disabled.
	Wi-Fi Signal icon: <ul style="list-style-type: none"> • Red indicates that Wi-Fi is unable to be connected. • Blue indicates that the SCV has connected to Wi-Fi. • Off indicates that Wi-Fi is functioning well but is not connected. 		



Battery icon: Battery Gauge, 5 bars

- More than 3 bars: Green
- 2 bars and 3 bars: Yellow
- 0 bar and 1 bar: Red, the gauge flashes to warn low battery



Panel icon:

- Bar 1, 3 and 5 flash in blue when the INMOTION SCV is in Standby Mode.
- Under Balance Mode, Assist Mode or Remote Control Mode, the circle will rotate following the sequence $(6,1) \rightarrow (2,3) \rightarrow (4,5) \rightarrow (6,1)$, the faster you ride, the faster the circle rotates.
- Bar 1, 3 and 5 flash in red when the INMOTION SCV encounters a problem.

2.7.2. Sound Prompt

The built-in speaker on the INMOTION SCV will make different sounds to indicate running state and working mode. The Sound Prompt is on by default. You can turn off the tone or customize the sounds using the INMOTION Smartphone App. See Section 2.12, **Smart phone App**, for more information.

2.8. Working Mode

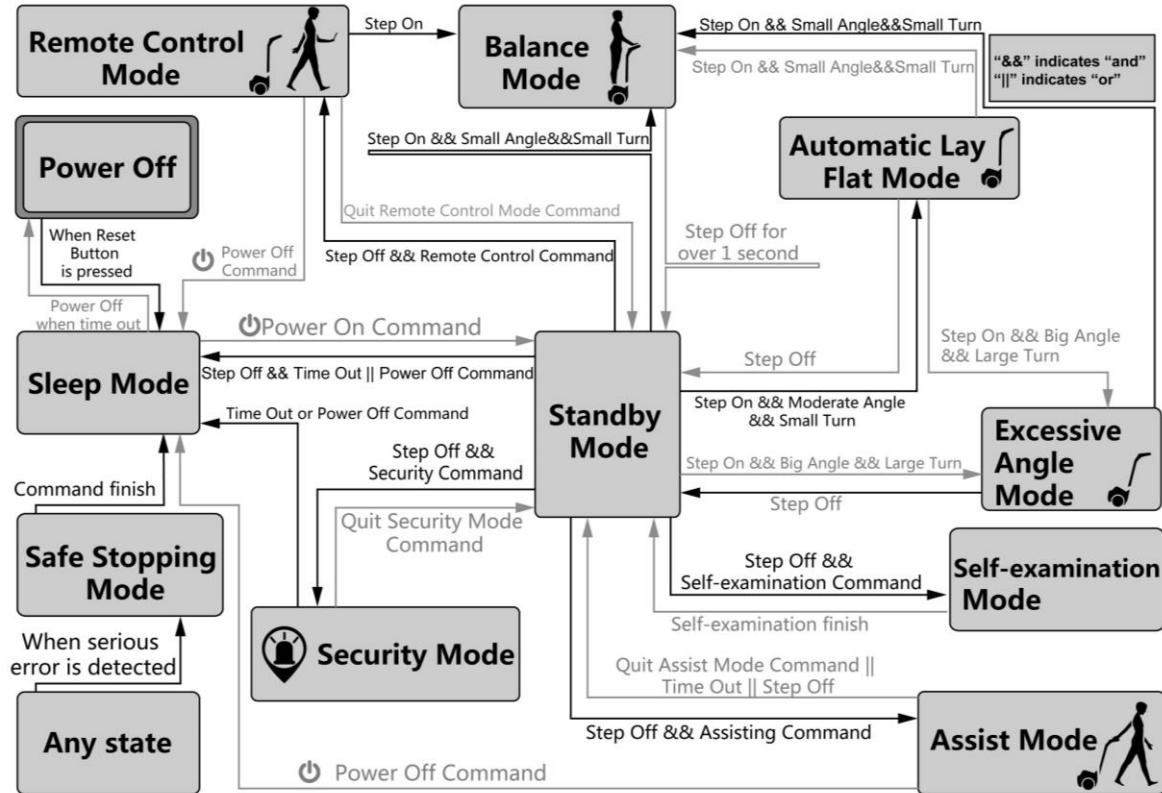
2.8.1. Introduction

Important Working Modes:

Working Mode	Description
Standby	The INMOTION SCV is in Standby Mode by default. Most of the other modes will be started from Standby Mode.
Balance	Indicates the INMOTION SCV has detected a rider and the footboard angle is moderate. Training Mode and Speed Mode can be activated from Balance Mode. Read Section 3 for more information.
Auto Balance	When a rider steps onto the INMOTION SCV and the footboard angle is moderate (between 2° and 15°), the system will start to level the footboard. In the meantime, the INMOTION SCV may travel a short distance either backward or forward in order to balance itself. An excessive or too small angle will trigger an error warning.
Excessive Angle	When a rider steps onto the INMOTION SCV and the footboard angle is too big, the INMOTION SCV will vibrate to warn the rider to slowly level the footboard.
Self-check	The INMOTION SCV will examine and calibrate itself in Self-check Mode. Read Section 3.6 for more information.

Error	If the INMOTION SCV detects an error or a system fault during normal riding conditions it will automatically reduce the speed and slowly stop. The Tires will be locked if it needs extra assistance to solve the problem. Once the Tires are locked, please contact your local distributor for maintenance service.
Assist Mode	Under Assist Mode, the INMOTION SCV will provide a small amount of power to allow the SCV to be easily dragged. You can choose different reference points when entering Assist Mode. For more information about Assist Mode, please refer to Section 3.4 Assist Mode.
Remote Control	Remote Control Mode can be started from your Smartphone App. The INMOTION SCV can receive and execute simple orders under Remote Control Mode. Please read Section 3.5 for more information.
Sleep	In Sleep Mode, if there is no device connected to the SCV via Wi-Fi, the Wi-Fi module will become inactive in 1 hour and will be active when the SCV is powered on again. After 18 hours in Sleep Mode, the entire system will be shut down completely to protect the Battery. Press the Reset button on the back of the INMOTION SCV to turn the power on.

2.8.2. State Transition Diagram Among Working Modes



2.9. The Front/Tail Light

The Front Light of the INMOTION SCV is a pair of blue LED lights, and the Tail Light is a pair of red LED lights. They flash in different modes according to your operation. The following chart shows different modes of the Front and Tail Light:

Operation	Description
Power On	The Front Light and the Tail Light illuminate for 1 second
Switch On	The Front Light and the Tail Light flash
Standby	The Front Light and the Tail Light flash for 0.5 second every 3 seconds
Error	The Front Light and the Tail Light illuminate at the frequency of 1 Hz
Balancing	The Tail Light illuminates at half brightness
Slowing down	The Tail Light illuminates for 1 second, and then illuminates at half brightness
Turning	The Tail Light of the turning direction illuminates, and the Front Light flashes from both sides to the middle.



WARNING!

- The brightness of the lights on the INMOTION SCV is not sufficient to guide you when it is dark outside. In case of low light please ride slowly and be cautious, and use an external light source.

Turn the Front Light on or off by pressing the Shift Button (C) under Shift Mode, and turn off the Front Light and the Tail Light completely using the Smartphone App.

The Rider Detect Sensors detect the presence or absence of a rider while the INMOTION SCV is powered on. The Rider Detect Sensors work like a scale. They can detect the rider if he or she is standing with one foot on or both feet on.

2.10. Communication and Charging Port

Connect your smartphone with the INMOTION SCV by using the INMOTION App, (App is not considered part of the INMOTION SCV product.)

2.10.1. Wi- Fi

The INMOTION SCV can communicate with smartphones via Wi-Fi, and can work under both client and AP mode. When in client mode, the INMOTION SCV will work just like a network card on your computer or phone. If in AP mode, the INMOTION SCV will turn into a wireless AP and wait for a smartphone to connect to it.

A Wi-Fi AP list will be created and saved in the system— this list is empty when the INMOTION SCV leaves the factory.

When starting up, the INMOTION SCV will automatically search nearby APs and try to match with an entry in the AP list. If there is a match, the INMOTION SCV will connect to the recognized AP; if no match is found, the INMOTION SCV will switch to AP mode and wait for other devices to connect. For the first startup, the INMOTION SCV will only start in AP mode since the AP list is empty. The SSID of the INMOTION SCV under AP mode is INMOTION-XXXXXXX by default, the password is INMOTION123. XXXXXXX is a fixed serial number and both the SSID and password can be modified in the Smartphone App.

Wi-Fi will shut down after 10 minutes if there are no external devices connected to the INMOTION SCV when it is powered off. Wi-Fi will be operating again when the INMOTION SCV is powered on.

2.11. USB Charging Port

The USB Charging Port is located on the back of the INMOTION SCV body. The Port can be used to charge your mobile devices (including phones, tablets etc..) as well as the SmartKey. Output voltage of the USB Charging Port is 5 volts and the electrical current is 300 mA.



2.12. Smartphone App*

Download the INMOTION App from our website, Apple App Store for iOS devices, or Google Play for Android devices. (The INMOTION App may not be officially available when you purchase the product, it will come to you region soon).

Use the App to:

- Show the operational state of the INMOTION SCV, and information including speed, mileage, and battery life
- Set vehicle parameters including Wi-Fi, and Speed limit
- Query the Event Log
- Upgrade the INMOTION SCV firmware
- Customize Voice Prompts for the INMOTION SCV
- Receive and execute simple orders by remote control
- Request maintenance service and receive immediate response to your request*
- Read help documents on your App for more information on what the App can do*

**NOTE:**

- Certain functions are limited to specific models. For details, please refer to the App help document.
- Some functions may not be available in an early version of the INMOTION App.

3. Riding Your INMOTION SCV

3.1. Riding Guidelines

The INMOTION SCV is a high-tech sensor controlled vehicle. If you try to ride the INMOTION SCV without familiarizing yourself with the riding guidelines, you could cause damage to the device, or seriously injure yourself. This section describes how to ride the INMOTION SCV properly. It discusses riding for the first time and helpful hints for all riders.

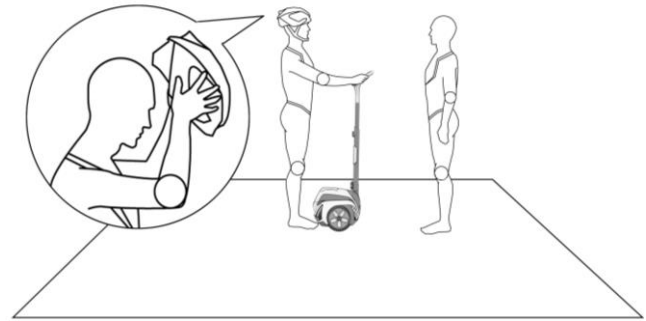
3.1.1. Safety Cautions

The following steps will help you to learn to ride your INMOTION SCV. It is important that you practice riding in a controlled, familiar environment until you are comfortable using your INMOTION SCV and SmartKey. Before riding, make sure your INMOTION SCV is properly assembled and fully charged. Inspect your INMOTION SCV before each use. Do not ride if any part is loose or damaged. Do not wear loose clothing or jewelry that could get caught in the INMOTION SCV.

3.1.2. Prepare for Riding

To prepare for your first ride:

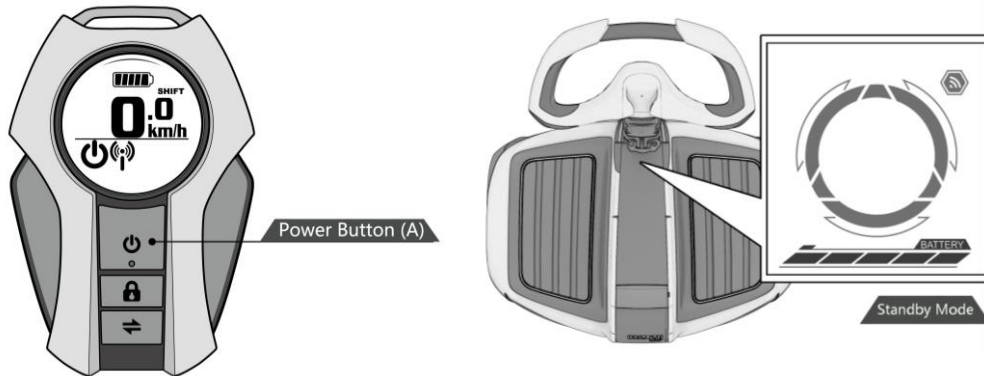
- Select an appropriate area for your first ride. The area may be indoors or outdoors and should measure at least 4 meters by 4 meters (12 feet by 12 feet). It must have a level, smooth riding surface with good traction, and the area should be free of obstructions and far from vehicles, bicycles, pets, small children, and other distractions.
- Do not select a slippery area for your first ride.
- Get a helper who is familiar with the INMOTION SCV and who has studied all the instructions and warnings in this manual.
- Wear a helmet.
- Move the INMOTION SCV to the center of the riding area.
- Adjust the Handlebar to suit your height.



3.1.3. Powering On the INMOTION SCV

- Power on your INMOTION SCV by pressing the Power Button (A) located at the top of the SmartKey.

- You will hear a Voice Prompt from the INMOTION SCV that indicates the INMOTION SCV is in Training Mode (please make sure the INMOTION SCV is in Training Mode for your first ride), and an icon will appear on the LED Screen to indicate that the power is ON and the INMOTION SCV is in Standby Mode.
- Do not step onto the INMOTION SCV yet! Your INMOTION SCV is powered on, but it is not balancing.



3.1.4. Stepping on

- Before you attempt to step on for the first time, have your helper stand facing you in front of the INMOTION SCV, holding the Handlebar securely with both hands. Your helper should be prepared to firmly hold the INMOTION SCV to keep it from moving. Make sure the Footboard Mat is level.
- Hold the Handlebar with both hands, and as you step up, look straight ahead and not down.
- Put one foot on the Footboard Mat.
- Slowly transfer your weight to the foot on the Footboard Mat.
- Once you hear a Voice Prompt from the INMOTION SCV, raise your back foot off the ground and slowly place it on the



Footboard Mat while avoiding moving the Handlebar. Stay calm and relaxed. Look forward. Some people rock back and forth involuntarily when they first step on. The helper should hold the Handlebar firmly.

- If you feel unstable, step off the INMOTION SCV one foot at a time, and pause before stepping back on. The helper should continue holding firmly the entire time, and be prepared to keep the INMOTION SCV from moving as you step on or off.



WARNING!

- If you are standing on the INMOTION SCV now, please keep the Footboard Mat horizontal and stand still. Do not move before you are familiar with it.

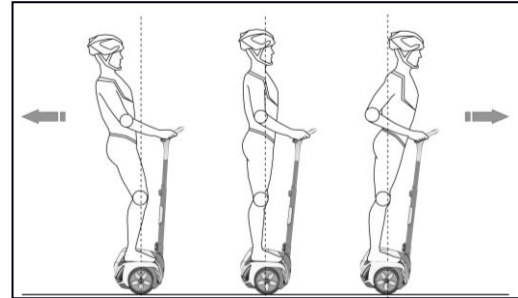
3.1.5. Moving Forward and Backward

The INMOTION SCV moves forward and backward in response to changes in your position. When standing on the Footboard Mat, to move forward or backward:

- With your helper available to assist you, slowly lean forward and feel the INMOTION SCV move forward. Then stop leaning forward and feel it slow down and stop. Do this a few times.

- Avoid rocking back and forth or shifting your weight abruptly, as this could result in a loss of traction and cause a fall.

- Look behind you and then slowly lean back and feel the INMOTION SCV move backward. Then stop leaning back and feel it slow down and stop. Do this a few times.



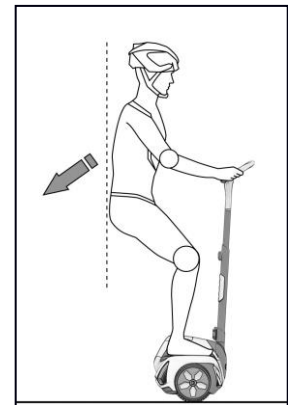
WARNING!

- You should not ride backward as part of your normal riding process. Because of the lack of a rear view and direction changes of the turning centrifugal force, riding backward could cause unpredictable falls. Instead, turn and ride forward.
- With your helper standing close by, practice going forward and backward a short distance in each direction. Be careful not to run the Wheels into any objects or go too fast. This could cause you to fall.

3.1.6. Stopping

Stop the INMOTION SCV by shifting your weight away from the direction you are moving. To stop the INMOTION SCV:

- When you are moving forward, gently shift your hips back (as if you are preparing to sit down) to bring the INMOTION SCV to a stop.
- Once stopped, center your weight over the Footboard Mat to remain stationary. If you continue to lean back, you will move backward.



- Practice choosing a spot on the ground, and coming to a smooth controlled stop at that spot. Then remain stationary.
- Avoid abrupt stops and slippery surfaces. Stopping abruptly, especially on slippery surfaces, can cause the INMOTION SCV's tires to lose traction, and you could fall.



WARNING!

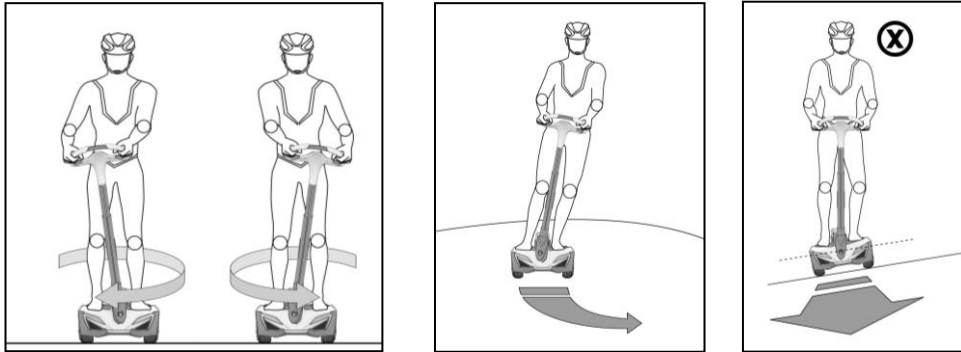
- Please avoid abrupt stops. Always perform a controlled stop by gently shifting your weight away from the direction of movement.
- Avoid slippery surfaces. The INMOTION SCV's Tires could lose traction causing you to fall.

3.1.7. Turning the INMOTION SCV

The INMOTION SCV turns in the direction that you lean the Handlebar. You turn the INMOTION SCV by leaning the Handlebar left or right.

- First, practice turning in place. To turn in place, slowly pivot the Handlebar in the direction that you want to turn. The INMOTION SCV will rotate so that you turn in place.
- After you are comfortable going forward and backward and turning in place, try slowly riding forward and turning at the same time. Keep your body leaning in the direction of the turn, and in coordination with the angle of the Turning Shaft while turning.

- Because abrupt turns can be dangerous, always lean into turns slowly and smoothly.



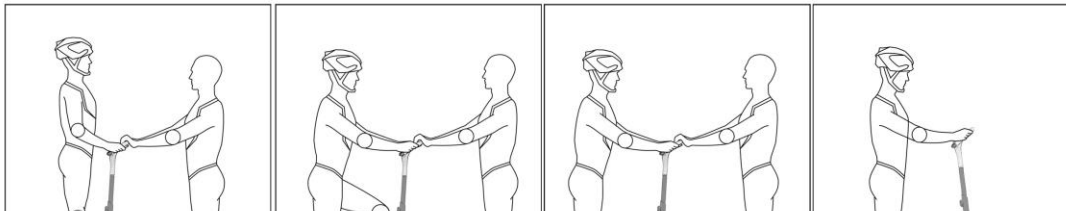
WARNING!

- Do not ride crosswise or turn on a slope, or it will cause balance angle shifting and thus be dangerous.

3.1.8. Stepping Off

When you are ready to step off the INMOTION SCV for the first time, your helper should hold the Handlebar. To step off the INMOTION SCV:

- Remain stationary by keeping your weight centered over the Wheels and Footboard Mat and keep the Handlebar vertical.
- Step off the INMOTION SCV slowly, one foot at a time.
- After you have stepped off, continue to hold the Handlebar for about a second. You can lean the INMOTION SCV backward and park it when you hear a tone.





WARNING!

- Do not pull the Turning Shaft backward when stepping off. It may make the SCV move backward, causing unpredictable damage. While getting off, do not lean the Handlebar forward or it will move forward if you haven't completely moved your weight off.
- Practice stepping off for the first time with your helper standing close by.

3.1.9. Securing Your INMOTION SCV

The INMOTION SCV provides you with a Lock Mode in case you need to leave your INMOTION SCV unattended. When the INMOTION SCV is in Lock Mode:

- If anyone tries to move or shake the INMOTION SCV, it will trigger the warning alert and SCV body vibration.
- The Tires will be locked to make it difficult to move your INMOTION SCV.
- The system will exit Lock Mode and shut off after four hours to save energy.
-
- Lock Mode is intended for use when you remain in close proximity to the INMOTION SCV, and are able to respond to

an alarm. The best way to discourage tampering with your INMOTION SCV is to keep it in a secure indoor location with the SmartKey stored separately.

3.1.10. Powering Off the INMOTION SCV

- Power off the INMOTION SCV by pressing the Power Button (A) on the SmartKey.
- The display on the SmartKey will show an icon and shut off.

3.2. Practice Riding

You will need to become very familiar with your INMOTION SCV before you attempt to ride outside of your controlled practice environment. The more you practice, the safer you will be when you move into new places. Remember the following as you practice:

- Use Training Mode and ride in areas free of obstacles and distractions until you are comfortable on your INMOTION SCV. Practice at the Training level until you can step on, ride forward and backward, turn, stop, and step off with the same precision and confidence as you walk.
- With practice, you should be able to ride in narrow areas. Make sure you leave enough wheel clearance.
- Until you can ride with this precision, do not attempt to ride outdoors.
- Use caution when riding in new environments.
- Be careful when riding through doorways.
- Watch out for terrain transitions such as pavement to grass.

3.3. Training Mode and Speed Mode

Training Mode is used by new riders to learn how to control the INMOTION SCV better and more safely; Speed Mode is designed to create a better riding experience for skillful riders. The following chart shows the differences between Training Mode and Speed Mode:

Item	Training Mode	Speed Mode
General	Slower and stable	Quicker and more deft
Speed Limit	≤10Km/h	≤15Km/h
Sensitivity	Low	High
Turning (stepping on)	Will turn only with both feet on	Will turn with one foot or both feet on
Turning (stepping off)	Will not turn when single a single foot falls to the ground	Will turn when a single foot falls to the ground
Exit Balance Mode	Exits Balance Mode when a single foot falls to the ground	Exits Balance Mode when both feet fall to the ground

3.4. Assist Mode

In Assist Mode, the system will provide appropriate power to help the rider drag the INMOTION SCV when unwilling or unable to ride the SCV. Assisting Function works as below:

- Assist Mode is activated at any angle, and the INMOTION SCV is able to turn around in a complete circle on the ground.
- The INMOTION SCV shifts to Speed Mode when either side of the Footboard Mat is stepped on.
- Assist Mode is disabled and Sleep Mode is activated when the rider is leaning or shaking the Turning Shaft forward and backward at high frequency.

- Assist Mode is disabled and Sleep Mode is activated after 2 minutes of taking no action.

See Section **2.6 SmartKey** for more information on how to activate Assist Mode.

3.5. Remote Control

The INMOTION SCV is just like a robot in Remote Control Mode. It can go forward, backward, turn, and stop with orders from the INMOTION App with Auto Walk function.

The INMOTION SCV will stand up automatically (get itself into a balance status when it is laid back) under Manual Control Mode when the INMOTION SCV and your App are linked. Now you can easily control your INMOTION SCV by toggling the buttons in the directions you want the SCV to go.

WARNING!

- Avoid using the Remote Control Mode on slippery and wet surfaces. It may result in your Wheels slipping and could cause serious injury or damage.
- Activate the Remote Control Mode in an open area.
- Be careful and avoid pedestrians and obstacles.

3.6. Self-check Mode

Self-check Mode allows you to run a thorough examination of your INMOTION SCV to see if any parameters have shifted after a period of operation. The INMOTION SCV will run tests under Self-check Mode and store the resulting data. Refer to Section **2.7 Info LED and Voice Prompt** for more information. The following chart shows which items are detected in Self-check Mode:

Item	Description
Steer Balance	Run the Steer Balance calibration if you detect that your INMOTION SCV leans in an incorrect

	direction when it stands in balance.
Footboard Mat Sensor	Calibrate the Footboard Mat sensors to level up the sensitivity.

CAUTION!

- Activate Self-check Mode in an open area.
- Park the INMOTION SCV on the ground and keep one meter distance from other objects.
- Make sure the Handlebar is vertical. Do not pull the Turning Shaft or hold the Handlebar.
- Do not place anything on the Footboard Mat, including your feet.
- Doing so could interfere with the result of Self-check, causing injury or damage.



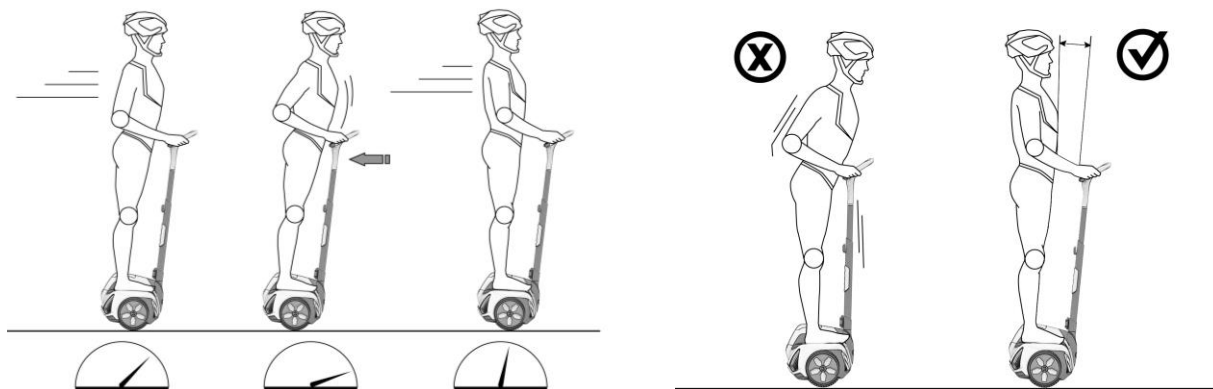
3.7. Safety Alerts

The INMOTION SCV is equipped with multiple safety alerts. It is important to understand these alerts before you attempt to ride your INMOTION SCV.

3.7.1. Speed Limiter

When you approach the maximum allowed speed for a given situation, the INMOTION SCV will push the handlebar back to slow you down. The following figure shows the process of speed limiter.

When the INMOTION SCV pushes the handlebar back, stop leaning forward and slow down. Always leave a gap between yourself and the handlebar to ensure safety and a smoothly ride. When you slow down, INMOTION SCV will balance itself according to your body movements.



⚠ WARNING!

- Continuing to accelerate and ride against the Handlebar could cause injury or damage from loss of control, collisions, and falls.
- The speed at which the handlebar pushes back depends on a variety of factors including set-up speed limiter, terrain, payload, and battery condition. The below list shows conditions that will trigger the speed limiter.

Continuous climbing	Motor temperature
Riding on bumpy roads	High Circuit temperature

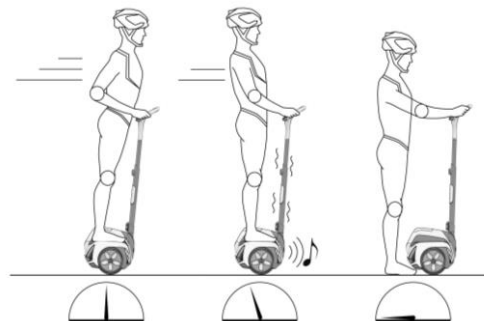
The moment it powers on	Battery temperature too high or too low
Low battery	Continuous descending

3.7.2. Safe Stop

If the INMOTION SCV detects severe faults or restrictions (such as being outside the specified riding range), it performs a Safety Shutdown.

When a Safety Shutdown occurs, the INMOTION SCV automatically reduces its speed, gives the Shaft Shake Warning (shakes the handlebar and makes growling noises), and emits a warning tone.

You have approximately 14 seconds from the start of a Safety Shutdown to come to a controlled stop and step off. After 14 seconds, the INMOTION SCV will immediately shut down when the Wheels reach zero speed.



WARNING!

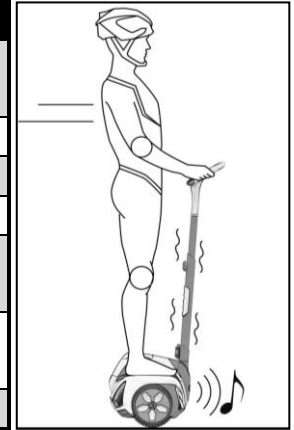
- Never restart and ride your INMOTION SCV after it has indicated an empty Battery or performed a Safety Shutdown due to low Battery. The INMOTION SCV may not have enough power to keep you balanced, especially if you accelerate, which requires more power.
- If you restart and continue riding after a Safety Shutdown due to low Battery, you risk falling. Also, you risk damaging your Battery Pack, resulting in reduced Battery life and capacity.

3.7.3. Shaft Vibration Warning

One of the ways that the INMOTION SCV notifies you when you are at risk of falling is by vibrating and releasing a warning sound.

The following chart shows situations that trigger a Shaft Shake Warning, and recommended actions:

Possible Causes	Recommended Action
Riding aggressively, accelerating or stopping abruptly.	Ride smoothly.
Riding against the Handlebar to speed up.	Leave a gap between yourself and the handlebar.
Riding on rough terrain or steep slopes.	Ride on smoother and flatter terrain.
Riding backwards too quickly.	Stop, turn in place, and proceed forward.
Safe Stop has been triggered.	Come to a controlled stop and safely step off the Powerbase within 10 seconds.
Pulling the INMOTION SCV too fast in the Assist Mode.	Ride smoothly.
Trying to get on when the angle is too great.	Lay the Footboard at a moderate angle first.



3.8. Environmental Factors Affecting the Vehicle's Performance

3.8.1. Riding Distance

Riding distance per charge is greatly influenced by riding habits and environmental factors. The following chart shows factors that have great influence:

Factors	Possible Causes
Road Condition	Riding the INMOTION SCV on flat roads will increase riding distance per charge. On the contrary, riding on hillsides or steep slopes will decrease riding distance.
Speed and Riding Habits	Riding the INMOTION SCV with constant speed will increase riding distance per charge. Stepping on and off and speeding up and slowing down frequently will decrease riding distance.

Load	Riding the INMOTION SCV with a light cargo load will increase riding distance per charge.
Temperature	Riding the INMOTION SCV in cold weather will decrease riding distance per charge. The INMOTION SCV performs most efficiently when it is close to the center of the recommended riding temperature range.
Battery Condition	Keeping the Battery in a good condition will increase riding distance per charge. Using an old, overloaded or poorly maintained Battery Pack will significantly decrease riding distance.
Wind Direction	Riding with the wind behind you will increase riding distance per charge.

3.8.2. Riding in High Temperatures

The temperature of the components (including the Motor, Battery Pack, Riding System, etc.) is raised when riding the INMOTION SCV in warm weather. This could affect the INMOTION SCV's service life. If the components get excessively hot ($\geq 50^{\circ}\text{C}$) while riding the INMOTION SCV will slow down automatically. The hotter the components are, the lower the speed will be. If the components get very hot ($\geq 80^{\circ}\text{C}$) while riding, the INMOTION SCV may activate a safety alert. You should stop riding immediately and wait until the components cool off before you continue your ride.

3.8.3. Riding in Cold Temperatures

Too low temperatures will deteriorate component lubrication and increase resistance. Also the battery discharge capability and capacity will decrease dramatically in a low temperature environment. Avoid applying drastic actions with your INMOTION SCV in cold temperatures ($\leq -5^{\circ}\text{C}$), or you could cause the INMOTION SCV to lose control, and you could fall.

3.8.4. Climbing

When the INMOTION SCV is climbing, the inner temperature will increase, especially during long periods of continuous

climbing. Even though the system will slow your speed while climbing, we still suggest you avoid long periods of continuous climbing.

3.8.5. Descending

The INMOTION SCV will collect energy while descending, and the motor will work as a power generator and store electricity in the Battery Pack. Thus continuous descents will allow you to travel longer distances on one charge.

When the battery is full, charging the battery this way could cause damage to the battery, therefore the system will automatically lower the max speed to reduce the possibility of excessive charging.

4. Using the Battery Pack

This chapter describes how to charge and maintain your INMOTION SCV Battery Pack.

4.1. Battery Safety

For your safety and the safety of others, and to maximize Battery Pack life and performance, follow the instructions in this Manual.

CAUTION!

- Do not use the Battery Pack if the casing is broken, emits an unusual odor or is excessively warm or leaks any substance.
- Follow the instructions for charging and storage, otherwise the Battery Pack could fully discharge over time, causing

permanent damage.

- Charging time for the INMOTION SCV is about 3.5 hours. The charger will power off automatically after the Battery Pack is fully charged.
- Battery Packs can be charged about 500 times. The battery life is drastically reduced after this period and over extended periods of time.
- The INMOTION SCV Battery Pack should be charged for at least 4 hours before the first use.
- The Battery charges most efficiently when it is close to the center of the recommended charging temperature range of +10°C ~+30°C (50 °to 86 °F).
- It is normal for the Battery Pack to become hot after long periods of use.
- Riding in cold temperatures will reduce battery life.
- Comply with all local, federal and individual country laws when disposing of and transporting the INMOTION SCV Battery Pack.



WARNING!

- Avoid contact with any substance seeping from the Battery Pack.
- For the best performance, please charge the Battery Pack in an environment temperature of +10 °C ~ +30 °C (50 °to 86 °F)
- Keep Battery Pack out of reach of children and pets. Exposure to Battery voltage could result in injury.
- The cells within the Battery Pack contain toxic substances. Do not attempt to open Battery Pack. Do not insert any object into the Battery Pack or use any device to pry at the Battery Pack casing. If you insert an object into any of the Battery Pack ports or openings you could suffer electric shock, injury, burns, or cause a fire.
- Only charge the Battery Pack using approved charging adapters.

- Use a grounded AC outlet and a charging cord that is in compliance with local standards.
- Keep the Charger, Charge Port, Power Cord and AC outlet clean and dry.
- Do not insert the plug if the Charge Port, Power Cord or AC Power outlet is wet.
- Do not heat up the Battery Pack or throw it into a fire. Do not use the Battery Pack in high temperatures.
- Keep the Battery Pack in a cool, dry place when storing.
- Do not put any conductive object into the Charge Port. It may damage electronic devices inside the INMOTION SCV.
- Do not attempt to open the Battery Pack. There are no user serviceable parts inside.

4.2. Specifications for the Battery Pack

The following chart lists the specifications for the Battery Pack.

Specifications	Item	Note
Battery type	Lithium-ion Battery	①③④ These data are measured with a battery capacity of 4 Ah. ② The voltage here refers to lithium battery voltage when the capacity is moderate. ⑤ The Battery may not be charged when the temperature is below 0 °.
Charging Time	3.5 Hours ①	
Voltage	72 V ②	
Capacity	4 Ah ③	
Battery Pack Weight	2.5 ±0.1 Kg ④	
Dimensions (W * D * H)	225*147*82 mm	

Operating Temperature Range	-10 °C ~ 50 °C	
Charging Temperature Range	5 °C ~ 45 °C ^⑤	
Storage Temperature Range	-20 °C ~ 50 °C	

4.3. Charging the INMOTION SCV

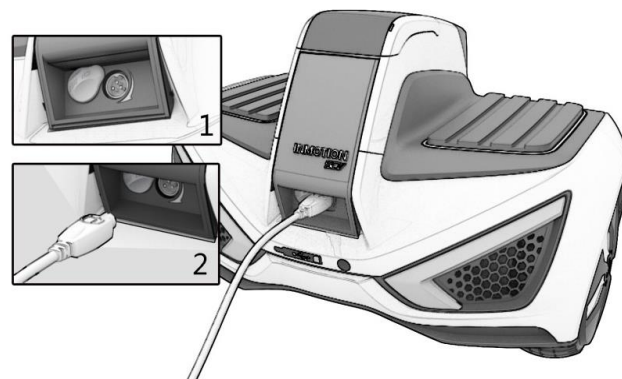
To maximize the performance of your INMOTION SCV Battery Pack, fully charge your Battery Pack for 3.5 hours, and charge it once a month or every 2 days after riding. Charge the Battery Pack only when it is within the specified charging temperature range.

WARNING!

- Failure to charge the Battery Pack properly could result in permanent damage. If the Battery Pack is excessively discharged, it could also cause serious damage.
- Be sure to use the original charger for INMOTION charging.
- Please carefully read the Safety Notes before you use the Battery Pack.

4.3.1. Charging Procedures

To charge the Battery Pack:



1. Open the Charge Port of your INMOTION SCV. Verify that the Charge Port is dry.
2. Plug one end of the Power Cord into the Charge Port of your INMOTION SCV with the INMOTION LOGO on the charger facing up. Plug the other end of the Power Cord into an AC outlet (100 V~ 240 V; 50 Hz or 60 Hz).
3. Verify that the Charge Indicator lights are red, which indicates the INMOTION SCV is charging. When charging completes (indicator lights turn green), unplug the charger from the electrical outlet.

4.3.2. Charging Indicator

The Info LED shows the current Battery life. The Battery gauge blinks to indicate the Battery Pack is charging (for example, the fourth bar is flashing when the current Battery amount is at 3 bars.).

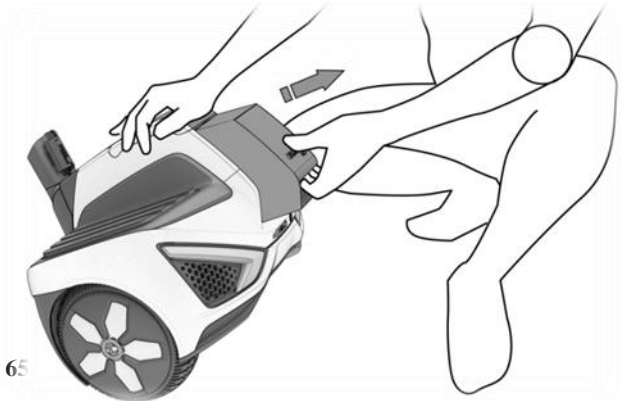
4.4. Replacing the Battery Pack

The INMOTION SCV Battery Pack can be used about 500 times, depending on which type of Battery Pack you use. After subsequently, the Battery capacity will reduce to 80%. Replace the Battery Pack to ensure the best performance of the INMOTION SCV. Back-up Battery Packs can be purchased from Authorized INMOTION Dealers and Distributors.

The Battery Pack is designed to be replaced easily, and can be charged separately.

To replace the Battery Pack:

1. Make sure the INMOTION SCV is unplugged and powered off.
2. Lean the INMOTION SCV body forward and hold it steady with one hand, while pulling the Battery Pack out from the Battery Slot with the other hand. Do not pull too hard in case the Battery Pack falls on the ground.
3. Keep your Battery Pack in a dry place and out of the



reach of children. You can still charge the Battery Pack after removing it from the Battery Slot.

4. Insert the Battery Pack into the Battery Slot until you hear a click. Pull gently to see if it is loose. When the Battery Pack is seated properly, press the Reset Button to power on the INMOTION SCV.

4.5. Transporting Battery Pack

When transporting your INMOTION SCV, protect the Battery Pack to avoid damage during shipment. Do not expose the Battery Pack to direct heat or moisture, and avoid heavy vibration during transportation.



WARNING!

- Do not use or transport a Battery Pack if the casing has broken open.
- Lithium-ion Battery Packs are considered Hazardous Materials under shipping regulations. Comply with all local, federal and individual country laws when transporting the INMOTION SCV Battery Pack.

The shipping methods for Lithium-ion Battery Packs are as follows:

Ground		Sea	Air
Battery Pack Installed	Allowed	Allowed	Certificates Needed*
Battery Pack Not Installed	Certificates Needed*		
* If you need certificates for transportation, please contact INMOTION at info@imscv.com.			

5. Safe Riding

INMOTION SCV is not only an intelligent and convenient vehicle, but also entertaining. Ride safely to enjoy the convenience and pleasure of the INMOTION SCV.

Reminder—even if you follow the instructions in this User Manual strictly, once the INMOTION SCV is on public roads or property, you may still risk injury from other people's bad riding behaviors. Be careful when riding the INMOTION on public property.

5.1. Rules That You Must Follow

- Read the User Manual and watch the Safety Videos carefully (you can download them from our website). Be familiar with the contents and follow the safety instructions.
- Be familiar with and obey all local laws and regulations, and only ride your INMOTION SCV in places that riding SCV's is allowed.
- Do not use the INMOTION SCV if you are under the influence of alcohol, banned substances or prescription medications.
- Wear a helmet, and elbow and knee pads when riding your INMOTION SCV.

- Wear proper clothing. Do not wear sharp jewelry or high heels to avoid damage or injury.
- The INMOTION SCV's payload range is between 25 Kg and 100 Kg. Do not attempt to ride if you are beyond this weight range.
- Always make sure the battery is fully charged before riding. If not, do not ride it further than 5 Km (3 miles).
- Make sure the Quick Release Lock is locked, the Turning Shaft and the Handlebar are installed properly, and the screws are properly tight before riding.
- Make sure the INMOTION SCV body is solid and intact before riding, and that there are no abnormal noises while riding.
- Adjust the Turning Shaft to an appropriate height.
- Be aware of the traffic or objects ahead of you, and keep a clear view.
- Wear glasses or contact lens if needed for driving.
- Stay alert while riding and keep a safe distance from other people and transportation vehicles.

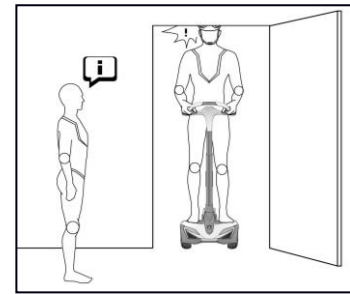
5.2. Actions You Must Avoid

- Do not use the INMOTION SCV in areas that are forbidden, according to local laws or regulations.
- Do not ride the INMOTION SCV on roads. Some government authorities forbid use of Sensor Controlled Vehicles on public roads and sidewalks. Consult local authorities to become familiar with applicable laws and regulations before riding.
- Do not modify the components of the INMOTION SCV or ride a modified SCV. Modifying an INMOTION will affect its performance and can cause damage.
- Do not ride the INMOTION SCV on slippery roads or in bad weather conditions, such as heavy rain, heavy snow, or ice.
- Do not ride the INMOTION SCV on uneven roads that are full of sticks, trash or stones.
- Do not ride the INMOTION SCV in dangerous environment, such as road with pits and cracks, steep slopes that are steeper than 15 °, water deeper than 3 cm and so on.

- Do not ride the INMOTION SCV in unsafe places where flammable gas, steam, liquid or dust may cause fire or explosion.
- The INMOTION SCV cannot be ridden by two or more people at the same time.
- Do not ride the INMOTION SCV on roads unless you are familiar with the operations.
- Children under 14 should not ride the INMOTION SCV alone.
- Pregnant women, heavy drinkers, medicating patients, cardiac patients, the children who are under 6, the disables and elders who are over 60 should not ride the INMOTION SCV.
- Do not ride the INMOTION SCV with both hands off the Turning Shaft. Do not press your body on the Handlebar.
- Do not move your foot off the Footboard Mat while riding the INMOTION SCV. If the rider gets off the vehicle improperly, the wheels will spin for about 2 seconds, which is not a failure but a protection.
- Do not force restart the INMOTION SCV when it shuts off automatically or when the battery ran out, or it will cause falls because of losing balance.
- Do not ride backwards either slow or fast for a long distance. Do not turn when you ride backwards. Do not go down or upstairs or spring off the ground with the INMOTION SCV.
- Do not ride crosswise on steep slopes.
- Do not make or answer phone calls, listen to music, eat or drink while riding. Even checking battery information on the SmartKey or Info LED may distract you.
- Do not break any other rules in the User Manual. Pay special attention to the content in the WARNING or NOTE column.

5.3. Safety Alerts

- Before letting others ride your INMOTION SCV make sure that they have watched the Safety Videos and read this User Manual carefully.



- When riding the INMOTION SCV, please wear a good quality, well-fitting helmet. Wear protective gear, such as wrist and knee guards, and waist and eye protection, if riding conditions are dangerous.
- Always ride the INMOTION SCV in a well-lit area. Be cautious and ride slowly if the lighting is not sufficient. Mount an external LED light, if necessary.
- You are 23 cm (9 inches) taller when riding the INMOTION SCV. Be careful with obstacles above you, such as door frames, branches, and signs.
- Be observant of your surroundings. Slow down when you are near other people, especially children, and let them pass first.
- Keep a safe distance from other SCV riders. Ride inline rather than side by side.
- Control your riding speed and make sure that you are able to stop at any time.
- Remain relaxed, with slightly bent elbows and knees, and look straight forward while riding.
- Do not ride the INMOTION SCV backward unless you are trying to avoid obstacles in front of you.
- Do not strongly pull the Handlebar forward and backward, or change your body position drastically. This can cause injury or damage.
- Always leave a small gap between yourself and the Handlebar. Do not lean against the Handlebar or the Turning Shaft as this may cause you to fall.
- Please step off of the INMOTION SCV and charge the Battery Pack when the INMOTION SCV has a low battery.
- Do not park the INMOTION SCV in places where traffic will be blocked.
- Do not rest anything on the Footboard Mat while riding the INMOTION.
- Stay where you are and call for the police if you are in a traffic accident.
- If you need to carry something on your ride, use the INMOTION Front Bag as a backpack. If attached to the Handlebar, the total load cannot be over 5 Kg (11 lbs).



- Make sure the INMOTION SCV is powered off before transporting it. Use auxiliary parts to transport your INMOTION if necessary. Do not lift the INMOTION SCV from the sides of the Tires to avoid fingers being stuck between the case and the Tires.
- Clean and perform routine maintenance on your INMOTION SCV regularly.

6. Operating and Maintaining Your INMOTION SCV

6.1. Lifting Your INMOTION SCV

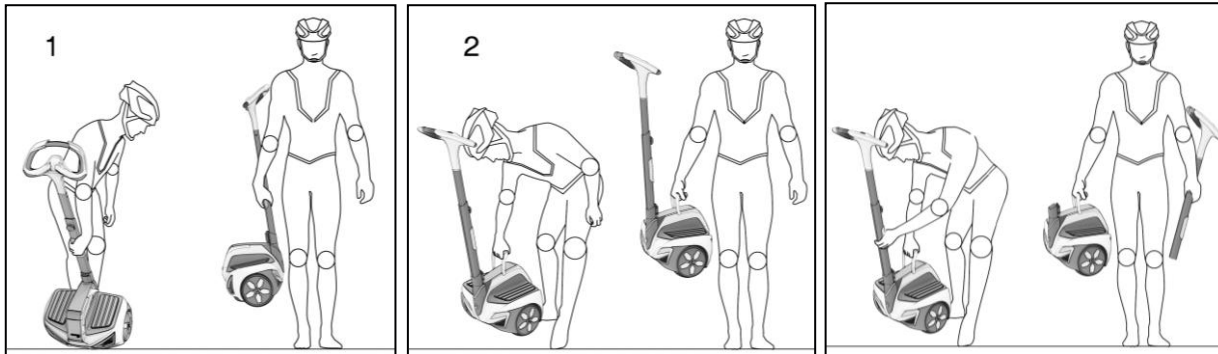
The INMOTION SCV is designed to be lifted easily. Lift it from the Turning Shaft or the Grip.

6.1.1. Lifting your INMOTION SCV by the Turning Shaft

Lift your INMOTION SCV using the Rubber Handle on the Turning Shaft.

6.1.2. Lifting your INMOTION SCV by the Metal Grip

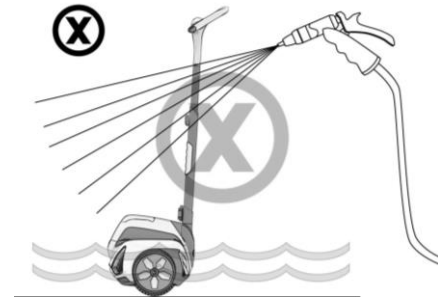
Lift your INMOTION SCV using the Metal Grip when you need to carry it for long distances, or are carrying it without the Turning Shaft attached.



6.2. Cleaning Your INMOTION SCV

Clean your INMOTION SCV:

- Make sure the INMOTION SCV is unplugged and powered off
- Make sure the Charging Port Cover is closed before cleaning
- Gently clean your INMOTION SCV with soap, water and a soft cloth
- Don't allow water to get into the Charging Port.



WARNING!

- The INMOTION SCV is rated IP55 and protects against dust. It is not waterproof, and should not be cleaned using a hose. Water may cause permanent damage to the INMOTION SCV.
- Do not use a power washer or high pressure hose to clean your INMOTION SCV.

6.3. Storing Your INMOTION SCV

Store your INMOTION SCV indoors, in a place that is free of moisture, humidity, and extreme temperatures. To maximize the performance of your INMOTION SCV Battery Pack, fully charge your Battery Pack before storage, and while in storage fully charge it every three months.

6.4. Maintaining Your INMOTION SCV

- Check the Tires and Wheels periodically to see if they have become loose. If the Tires are loose, check the sockets and tighten them. Check the bottom of the Tires to see if they are badly or unevenly worn. If they are, please contact us to replace them.
- Check the Handlebar periodically. Tilt the Handlebar fully left and then right. If it is loose, check the sockets and tighten them.
- Check the Quick Release Lock periodically. Tighten it if it is loose.
- Check that the ABS Shell is in good shape. Replace any part that is broken. Please contact Customer Care if you need further maintenance or replacements.



WARNING!

- Do not attempt to open the ABS Shell, circuit board or gear box. There are no user serviceable parts inside.
- Opening the ABS Shell could void the warranty, damage your INMOTION SCV and render it unsafe to use.

7. Troubleshooting the INMOTION SCV

You can troubleshoot certain problems with your INMOTION SCV before contacting an Authorized INMOTION Dealer or Distributor, or INMOTION Customer Care. This chapter provides lists of problems and recommended actions.

Some common problems:

- The INMOTION SCV will not power on

- The INMOTION SCV will not enter Balance Mode
- The INMOTION SCV is prone to shaking
- The Turning Shaft slips or is off-centered
- The INMOTION SCV will not power off
- The INMOTION SCV cannot link to your smartphone

If you're experiencing a problem with your INMOTION SCV, first check the error data on your smartphone App. Please refer to the help section on INMOTION applications and review the specific content for resolving your problem. If you are still unable to resolve the problem, please contact an Authorized INMOTION Dealer or Distributor, or INMOTION Customer Care at service@imscv.com or info@imscv.com.

7.1. Common Faults

This list describes some common faults, the possible reasons, and recommended solutions.

Code	Description	Possible Causes	Recommended Action
27	Age Error	The INMOTION SCV has reached its lifetime expectancy.	Stop using the INMOTION SCV
29	Wi-Fi Error	Wi-Fi is not set up properly or the INMOTION SCV cannot get an IP address.	Retry to connect after restarting the INMOTION SCV.
31	CAN Error	Electric Circuit Failure	Contact INMOTION Customer Care at service@imscv.com
32	Sensor Error	Sensor Failure	Contact INMOTION Customer Care at service@imscv.com

33	Excessive Angle	Excessive angle due to road conditions or other reasons when the INMOTION SCV is in Balance Mode	Ride the INMOTION SCV following instructions. See page 10 for Max Climbing Angle.
34	Excessive Speed	Excessive Speed when the INMOTION SCV exits Balance Mode	Reduce speed before stepping off
35	Locked and move	The angle or the position has changed while the INMOTION SCV is in Lock Mode	Move or use the INMOTION SCV only after it is unlocked
46	Battery Access Error	You are not using an INMOTION Battery Pack, or Battery failure	Use only the INMOTION Battery Pack. In case of Battery failure, contact INMOTION Customer Care at service@imscv.com
47	Battery Discharge Error	Battery Failure	Contact INMOTION Customer Care at service@imscv.com
49	Low Battery Voltage	Battery voltage is too low	Recharge the Battery Pack
62 63	Abnormal Motor Temperature	Motor temperature or environmental temperature is too high or too low	Stop using the INMOTION SCV and let it rest. Use the INMOTION SCV at the proper temperature. See page 11 for ideal Operating Temperature Range.
66 67	Large Motor Electric Current	Overload	Ride the INMOTION SCV following proper operating instructions and avoid steep or rugged surfaces.

7.2. The INMOTION SCV Cannot Power On

Recommended Action:

- Make sure your INMOTION SCV's Battery Pack is charged.
- Make sure your SmartKey is charged.
- Make sure you and your SmartKey are no further than 5m (15 ft) from your INMOTION SCV.
- Verify that the SmartKey and your INMOTION SCV are linked.
- Check the SmartKey to make sure the INMOTION SCV is not locked.
- If the INMOTION SCV can still not power on, remove the Battery Pack and then reinsert it.

7.3. The INMOTION SCV Cannot Enter Balance Mode

Recommended Action:

- Confirm the INMOTION SCV is powered on.
- Make sure the Turning Shaft is centered and the Footboard Mat is level.
- Confirm there is no weight on the Footboard Mat.
- Tap the left side of the Footboard Mat with your foot without stepping on, then tap the right side with your other foot.
- If the INMOTION SCV still cannot enter Balance Mode, check to see if there is an error icon on your SmartKey.
- If the INMOTION SCV still cannot power on, remove the Battery Pack and then reinsert it.

7.4. The INMOTION SCV Is Shaking

Recommended Action:

- Check the joints between the Handlebar and the Turning Shaft. If they are loose, tighten them.
- Check the joints between the Handlebar and the Quick Release Lock. If they are loose, tighten them.
- Check the joints between the Tires and the Wheels. If they are loose, tighten them.

7.5. The Turning Shaft Slips or Is Off-Centered

Recommended Action:

- Step on the Footboard Mat and stand still. If the INMOTION SCV turns to one side automatically, activate Self-check Mode.
- Check the Tires and make sure they are not worn. If the Tires appear to be in good condition, activate Self-check Mode.
- Use your INMOTION SCV Smartphone App to adjust steering sensitivity.

7.6. The INMOTION SCV Cannot Power Off

Recommended Action:

- Check the Footboard Mat to make sure there is nothing on it and that it is not stuck.
- If the INMOTION SCV still cannot power off, turn it upside down (the Handlebar should be pitched at an angle of 30°).

The Wheels will be rolling and you can now safely power it off.

- If the INMOTION SCV still cannot power off, remove the Battery Pack and then reinsert it.
- Press and hold the Power button on the SmartKey for two seconds to restart the INMOTION SCV.
-

7.7. The INMOTION SCV Cannot Be Added in the App

Recommended Action:

- Make sure the INMOTION SCV is not powered off. If it is powered off, restart it.
- Wi-Fi system needs 1~2 minutes to initialize.
- If the INMOTION SCV is set to use a Dynamic IP Address, please be aware that it may take 1~2 minutes to get the IP

address. (Make sure you are connected to a DHCP server that can effectively distribute IP addresses.)

- The INMOTION SCV will activate AP mode automatically if you have not set up a Wi-Fi AP list before. Manually search your INMOTION SCV SSID via the App and then connect.

8. Contact and Legal Information

8.1. Report a Problem

If you have any problems with your INMOTION SCV please contact INMOTION Customer Care at service@imscv.com.

For all other requests please contact us at info@imscv.com.

8.2. How to Reach Us

- INMOTION Technologies Co., Ltd.
- E-mail: info@imscv.com
- Website: www.imscv.com

8.3. Obey All Laws and Regulations

Before riding the INMOTION SCV on public roads and sidewalks please consult local authorities and become familiar with applicable laws and regulations.

8.4. Version

User Manual V1.4