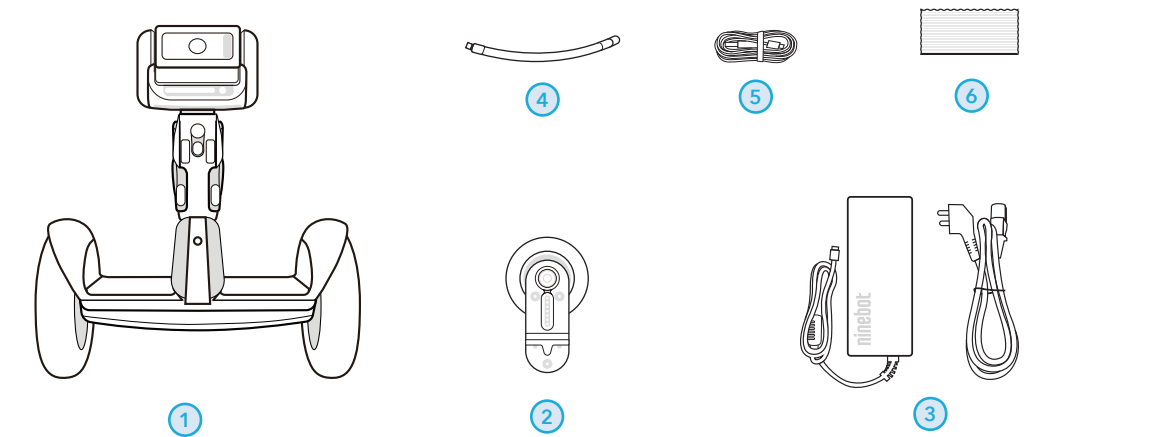


In the Box



- 1

Loomo: The Robot.
- 2

Extension bay converter: When attached, it provides direct access to USB 2.0 and 24V(1A limit) power supply.
- 3

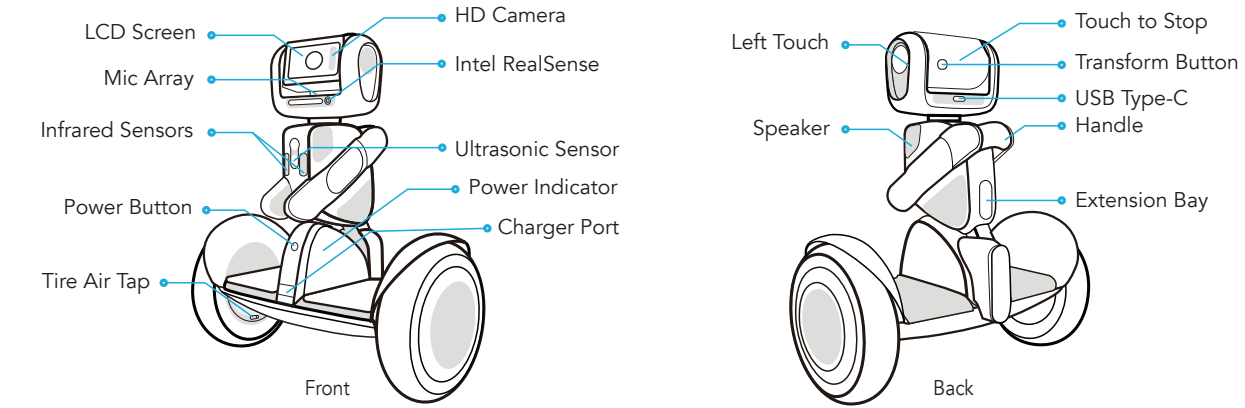
AC/DC adapter: International voltage.
- 4

Extended air tap: For tire inflation.
- 5

USB 3.0 Type-C cable: (Compatible with USB 2.0).
- 6

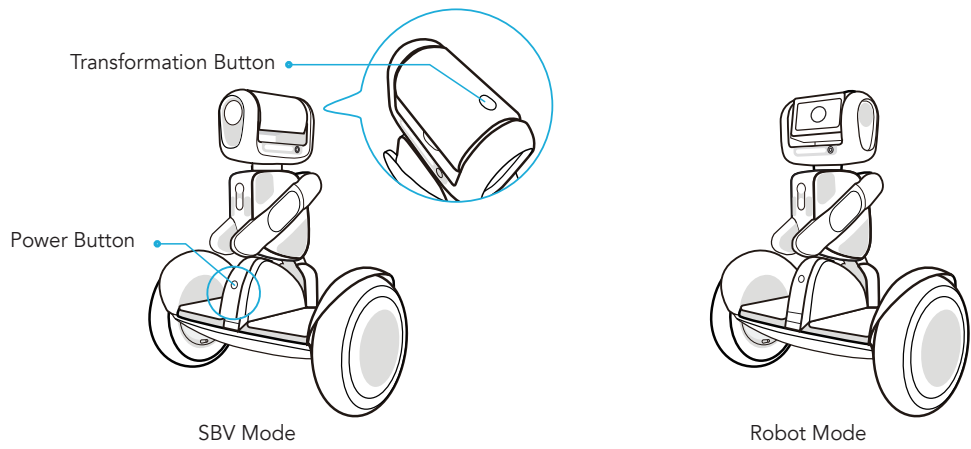
Cleaning cloth: For LCD screen.

Hardware Overview



Hardware Specs	Descriptions
Dimensions	Height*Length*Width: 650x310x570mm
Net Weight	~19 kg (~42 lbs)
Battery Capacity	329 Wh
Speed Limit	8 km/h (4.3 mph) in robot mode, 18 km/h (11 mph) in SBV mode
Head Rotation Range	Yaw ±150 degrees, pitch -90~180 degrees. Origin is upon transformation
LCD Screen	4.3 inch, 480x800 pixels
Operating Temperature	0 ~ 35°C (32 ~ 95°F)
Payload	25 ~ 100 kg (55 ~ 220 lbs)

Usage Guide



Power on/off | SBV ↔ Robot transformation

- Press the power button to turn on the robot. It is in the Self-Balancing Vehicle (SBV) mode upon booting. Please read “Riding Instructions” before riding Loomo.
- If you want to use Loomo as a robot, press the transformation button at the top and Loomo will show its face. Press the button again when you want to switch Loomo back to the SBV mode.
- Loomo can be safely turned off in the SBV mode. Nothing will happen if you press the power button when Loomo is in the robot mode.

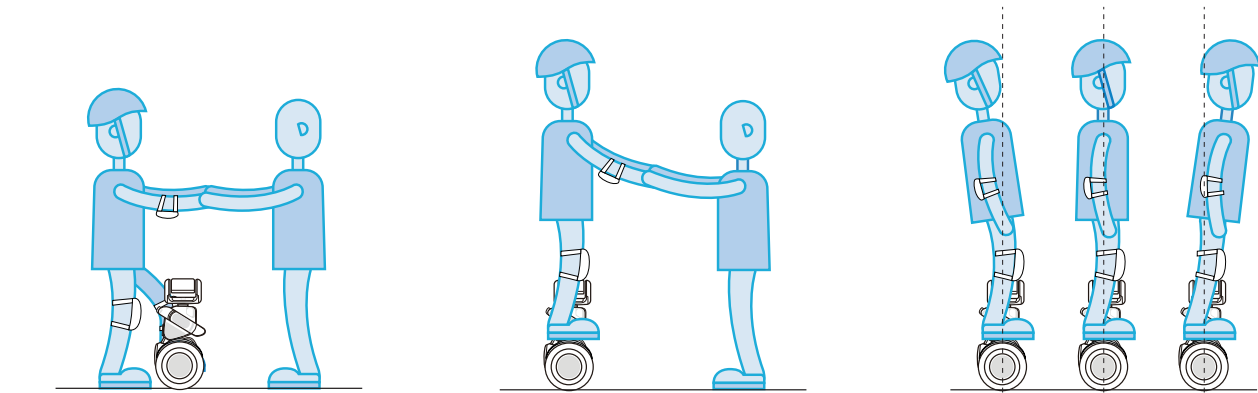
Programming (For developer)

- Programming is only applicable to the Robot mode.
- Programming guide is on our developer website.
Use your account to access: <http://www.segwayrobotics.com/developer>
- Register and participate discassions at forums.segwayrobotics.com

Sensor Specs	Descriptions
RealSense ZR300	Real-time 30Hz RGB-Depth image streaming (indoor & outdoor)
HD Camera	1080p 30Hz streaming with 104 degrees FOV
Mic Array	5 microphones enabling beamforming and voice localization
Ultrasonic Sensor	Frontal obstacle distance measurement
Infrared Sensors	Ground cliff detection
Touch Sensors	Three touch sensors located at robot head left, right & back
Wheel Odometry	About 4 degrees precision
Encoders	Hall & magnetic encoders to measure each joint angle
IMU	Enables camera stabilization & provides pose feedback

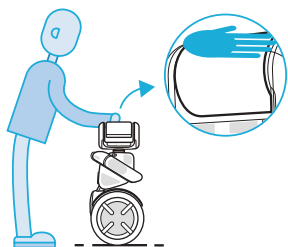
Platform Specs	Descriptions
Processor	Intel Atom Z8750, 4 cores 2.4GHz, x86-64
Operating System	Customized system based on Android 5.1
Memory	4 GB
Storage	64 GB
USB ports	USB 3.0 Type-C
Extension Bay	USB 2.0 and 24V power supply (max. 1A)

Riding Instructions



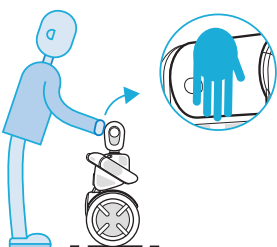
- Riding is only applicable in the SBV mode. DO NOT try to ride Loomo in its robot mode.
- Please step on with another individual’s assistance on an open area for your first ride. YOU NEED TO STEP ON FROM THE BACK.
- Step on to the foot mat with one foot standing firm, avoid touching the robot body with your shank or knees, which would accidently active steering.
- Slowly transfer your weight to your foot which is placed on the mat, and step up onto the other mat.
- Step on foot mat with both feet and relax, looking straight ahead, avoid severe wiggling.
- Step on to the foot mat with both feet and slowly lean your body forward or backward to control your movement.

Push & Move



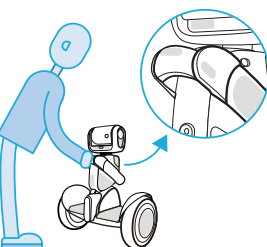
Touch the top to push the robot in SBV mode, otherwise it will experience resistance.

Robot Emergency Stop



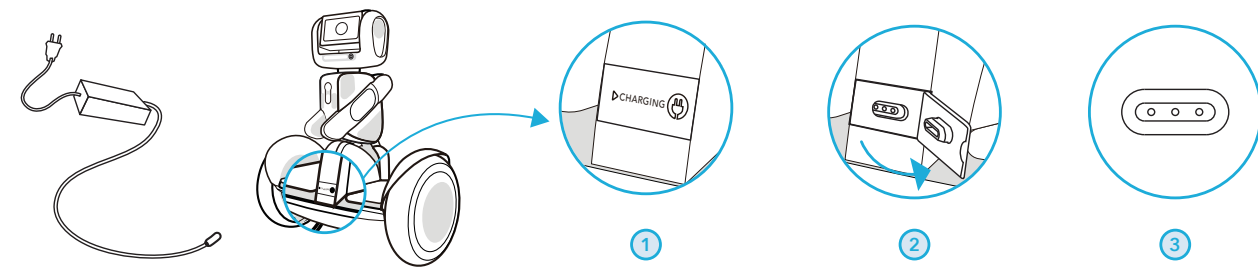
Touch the back of the robot’s head back, the robot should immediately stop.

Carrying the Robot



DO use the handle to lift the robot.

Charging



- 1

Locate the charging port.
- 2

Open the cap.
- 3

Open the rubber cap.
- 4

Insert the plug into the socket.

IC Radiation Exposure Statement for Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie 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'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (identifier le dispositif par son numéro de certification ou son numéro de modèle s'il fait partie du matériel de catégorie I) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with "Industry Canada RSS-102 for radiation exposure limits set forth for an uncontrolled environment".

Déclaration d'exposition aux radiations: Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé.

Industry Canada – Emissions compliance statement

This Class B digital apparatus complies with Canadian ICES-003. Avis de Conformité à la Réglementation d' Industrie Canada. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Federal Communications Commission (FCC) Interference 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 generate, 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 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.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

RF exposure warning

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