

# NEUBIE MANUAL


NEUBILITY.INC

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# Robot Specification



<b>Manufacture</b>	<b>NEUBILITY</b> 
<b>Size (LxWxH)</b>	704mm x 617mm x 1303mm (With Flag)
	704mm x 553mm x 693mm (With out Flag)
<b>Cargo box Size (LxWxH)</b>	380mm x 360mm x 360mm (Approx. 49L)
<b>Curb Weight</b>	60Kg
<b>Loading Weight</b>	20Kg
<b>Operating Temp.</b>	-20°C ~ 50°C
<b>Storage Temp.</b>	-40°C ~ 80°C
<b>Camera &amp; Sensor</b>	Multi Camera + Depth Camera Ultrasonic Sensor, GPS etc
<b>Functions</b>	Head Lamp Eye Ring, Dot Matrix, Belt LED Door & Door Locker



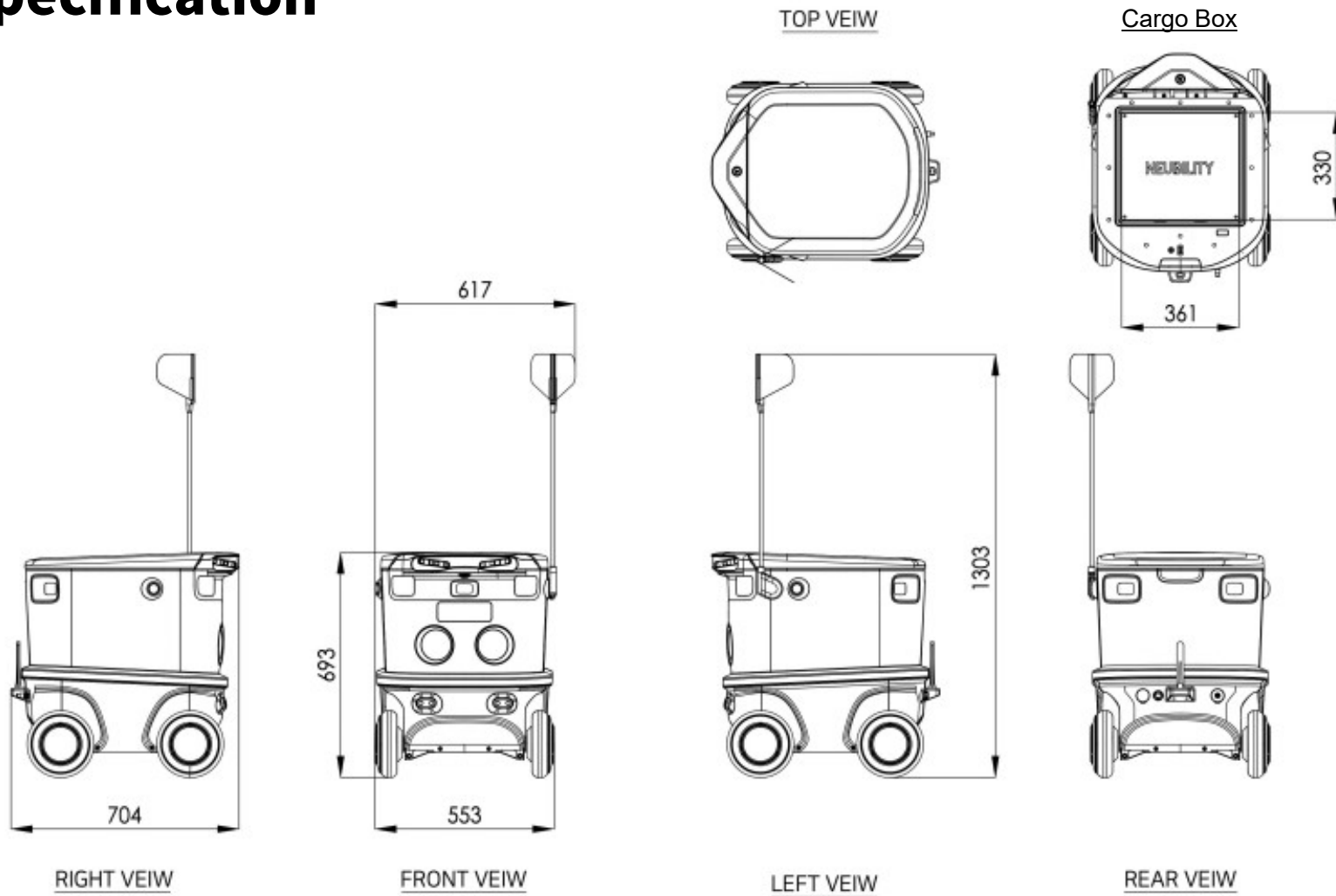
# Robot Specification



<b>Battery Spec.</b>	1500Wh, 25.9V, 60Ah
<b>Charger Spec.</b>	Input : AC 100-220V, 4.5A, 50/60Hz Output : DC 29.4V, 6A
<b>Power train</b>	4-Wheel Drive + Ind. Cotrol (In-Wheel Motor)
<b>Motor Spec.</b>	Wheel Size : $\Phi 206\text{mm}$ (8-inch) Rated Speed : 200rpm (max. 300rpm) Payload < 150Kg (each)
<b>Steering Type</b>	Skid Steering
<b>Suspension Type</b>	Double Wishbone Type (Front / Rear)
<b>Climbing Cap.</b>	Approx. 15° (27%)
<b>Communication Type</b>	LTE

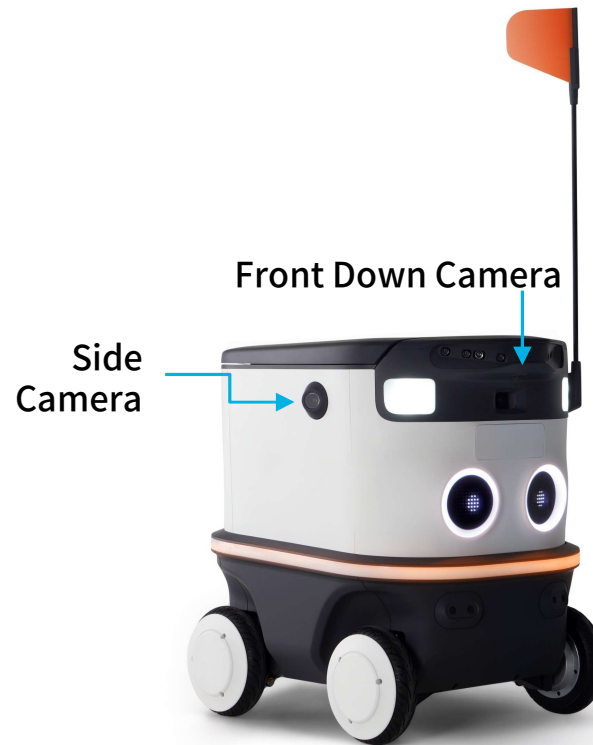
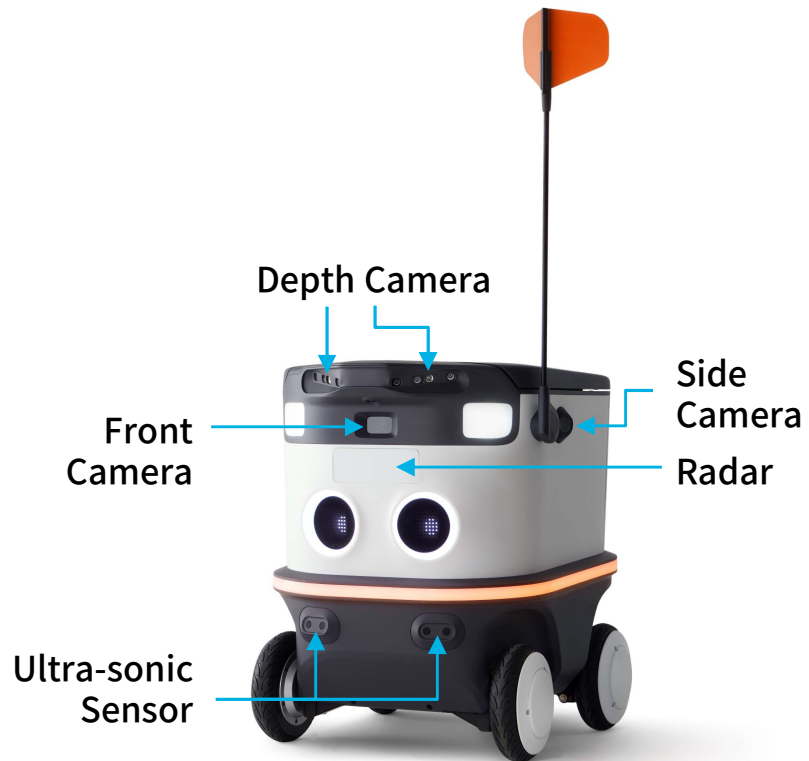


# Robot Specification



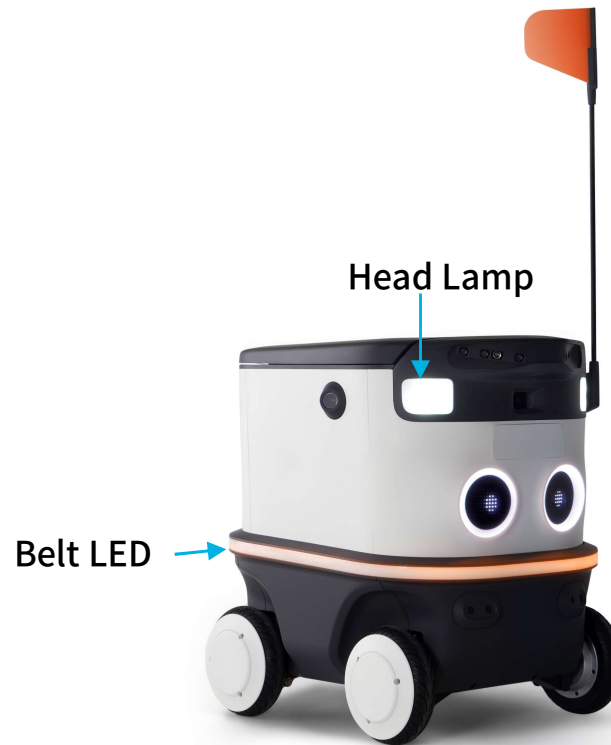
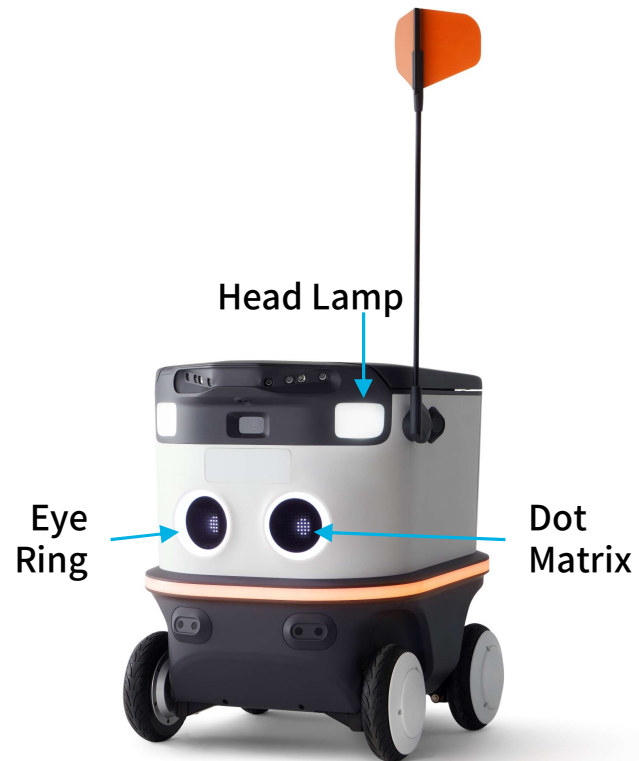


# Robot Overview





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# Robot Overview

User Button



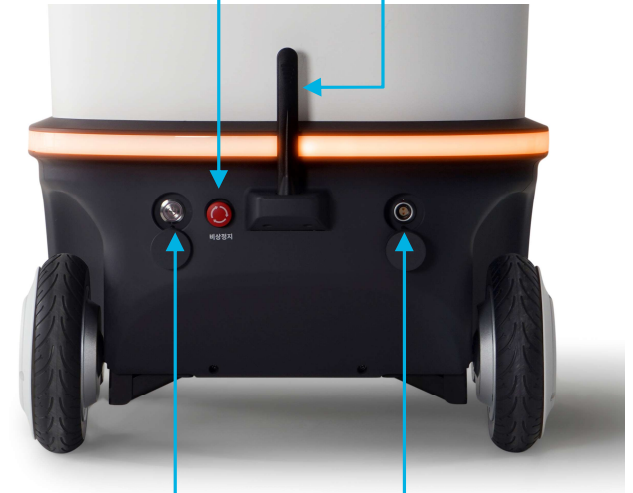
Door Locker



Barcode Scanner

Emergency Stop Button

LTE Antenna



Power Switch

Charging Port





# Operation Instructions

Emergency Stop Button



Power Switch

## Robot Power ON/OFF

1. Open the Cover of Poser Switch and Press the button for 3seconds to robot ON/OFF
2. Belt LED flicker when the power is turn on.

## Emergency Stop Button (E-Stop)

1. If an emergency situation occurs while operating, press the Emergency Stop Button to stop the robot.
2. Whe the button is pressed, the Belt LED color changes to red, blink and beeping
3. Pull the Emergency Stop Button clockwise to release the E-Stop mode





# Operation Instructions



## Plugging In

1. Match the red dots on the Charging Port and Connector.
2. Hold the body of Connector and push it.

## Unplugging

1. When charging is complete, the light turn green.
2. Hold the body of Connector and pull it

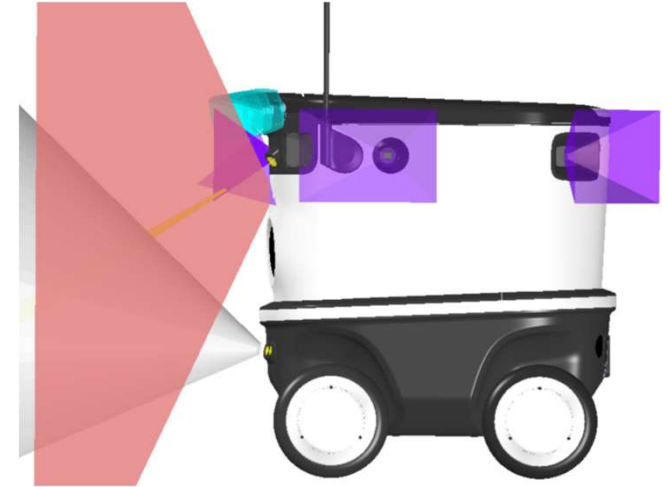
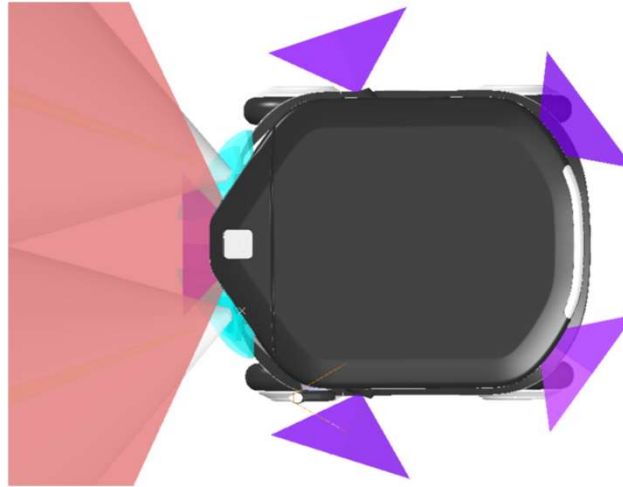
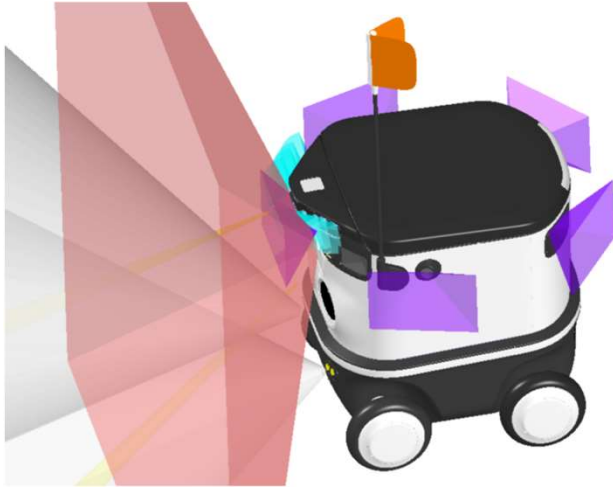


## Charging state and Caution

1. Charging : Red LED / Stand-by : Green LED
2. After connecting the Charger, If it doesn't turn green, check the connection again.
3. If rain falls during charging, do not allow rain water to run along the length of charge cable, causing the Connector or Charging Port to become wet.
4. Do not plug the Connector into a Charging Port that is submerged in water or covered in snow. If, in this situation, the Connector is already plugged in and needs to be unplugged, turn off the breaker before unplugging the Connector.
5. Do not touch the Connector and Charging Port's end terminals with sharp metallic objects, such as wire, tools or needles. Do not forcefully fold any part of the Connector or damage it with sharp objects. Do not insert foreign objects into any part of the Connector.



## Sensor Specification



Color	Sensor	FOV
	Camera	Vertical : 70deg / Horizontal : 94deg
	Depth Camera	Vertical : 56deg / Horizontal : 88deg(each)
	Radar	T.B.D
	Ultra-sonic	±60deg / 3~450cm



## Components Specification

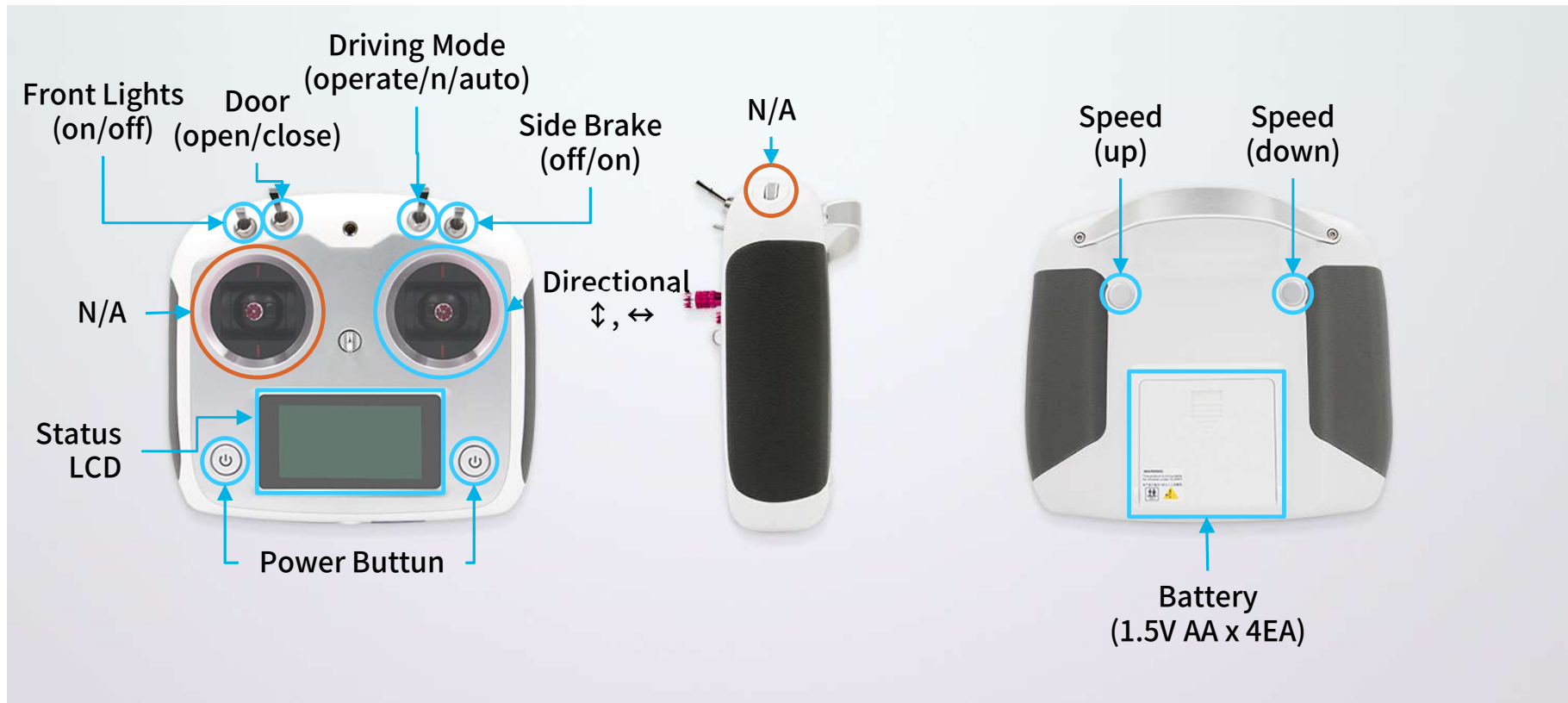
No.	Name	Manufaturer	Model Name	Usg	Certi.	Remark
1	Camera	CMT	CMT-5MP-IMX335-USB3.0	5EA		
			CMT-1MP-H62-C039-2	1EA		FD CAM Only
2	Depth Camera	Intel	Realsense D455	2EA		
3	Radar	T.B.D	T.B.D	1EA		Not Used
4	Ultra-sonic Sensor	DYP	DYP-A02YYTW-V2.0	2EA		
5	GPS Module	FST	UEF9P	1EA		
6	LTE Router	Teltonika	RUT-241	1EA	FCC	
7	Battery	CTNS	7S12P60Ah	1EA		
8	In-Wheel Motor	ZL-TECH	ZLLG80ASM250-4096	4EA		
9	Controller Receiver	Flysky	FS-A8S	1EA		
10	Controller	Flysky	FS-i6S	1EA	CE, FCC	

This robot has been installed with a certified WIFI router.

Complying with FCC rf exposure requirements, this device must be used with at least 20 cm from users to ensure compliance with RF exposure requirements.



# Control guide





# How to use

## 1. Power ON/OFF

- Turn the power of the robot on by pressing the two power buttons simultaneously.  
At this time, all four switches at the top of the controller must be raised up.

## 2. Control/Auto Mode

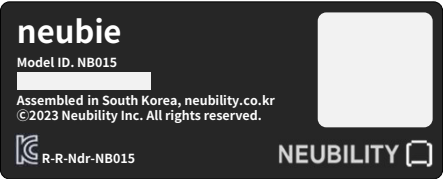
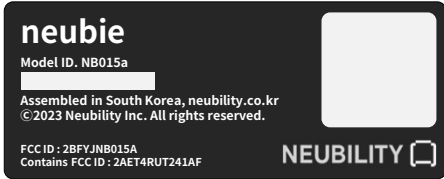
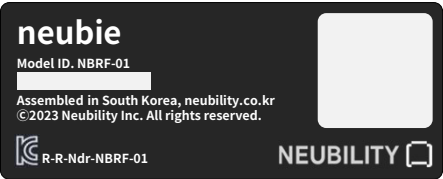
- Move the drive mode switch up/down to set it to manual/auto drive mode.
- Move the side brake switch down to release the side brake.
- Control the robot with the control stick.
- Press the button at the bottom of the controller to set the robot's speed.  
The robot speed in manual mode is 6 steps

## 3. Door Open/Close

- Move the door switch up/down to set it to open/close.



# Certification

KC	FCC	
		
KC		
		

This robot can be controlled by a FCC certified wireless control under FCC ID: N4ZFLYSKYI6S.

## FCC

This device complies with Part 15 of the FCC Rules.

*This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.*

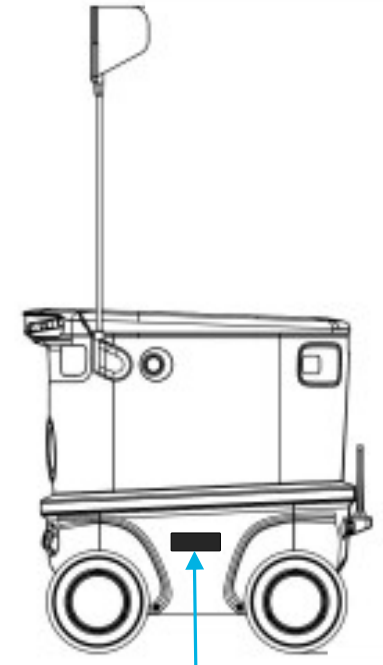
*These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.*

*This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.*

*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.*

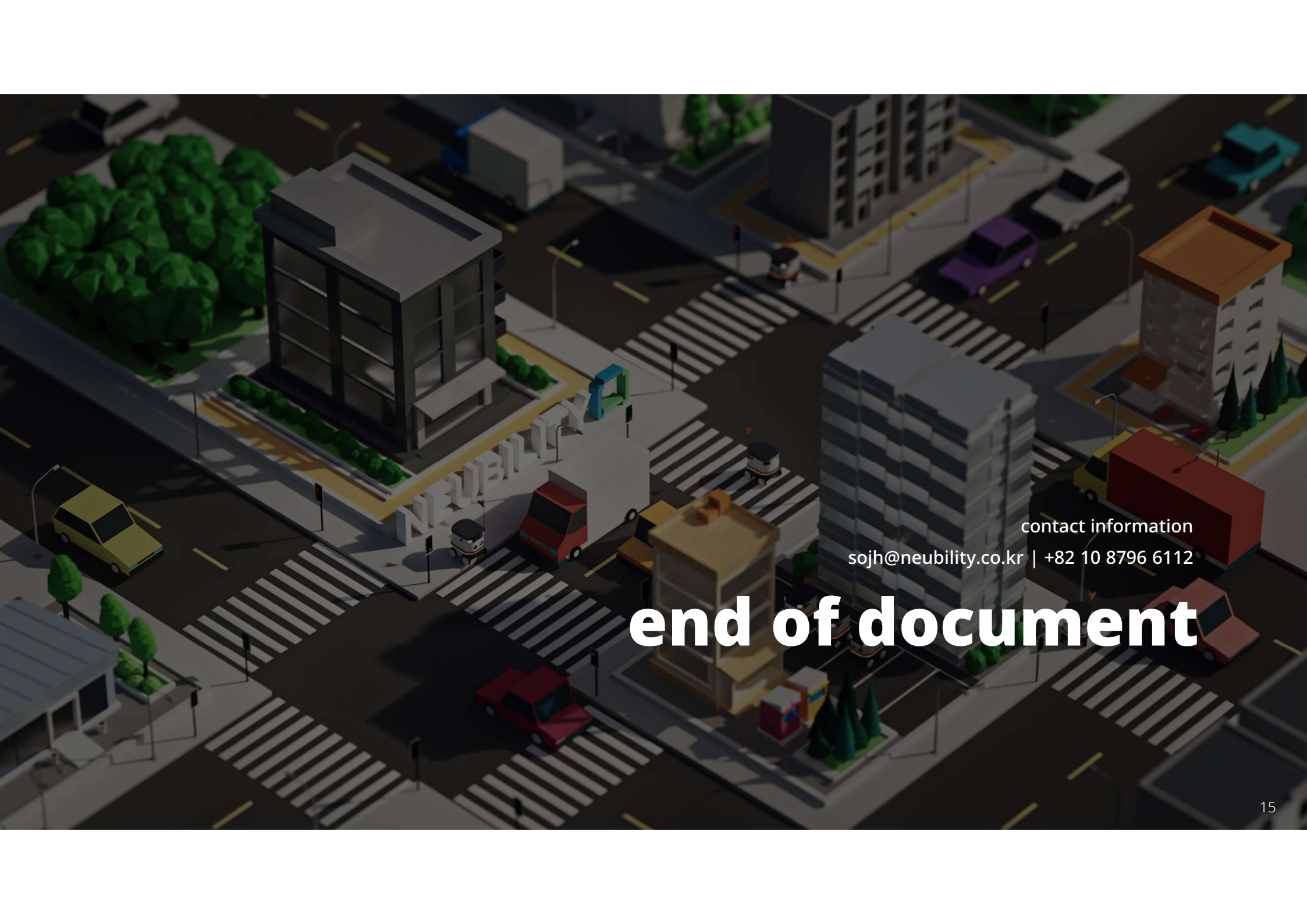
## FCC Caution

*Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.*



Label Position





contact information

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