OCTOPUS
POULTRY ROBOTICS

T-MOOV

LE ROBOT AVICOLE QUI ROULE POUR VOTRE ÉLEVAGE



Before using this device, please read the instructions carefully.

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Société anonyme (SA) – capital de 2 027 467,50 € - SIRET: 34172701400043
NAF-APE: 4662Z – RCS Auray: B 341 727 014 - TVA: FR82341727014

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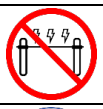
Safety instructions

Before using this product, please read the safety instructions and follow all indicated precautions.
Keep the user manual in a safe place for later use.

DANGER/WARNING SYMBOLS USED

 DANGER	Indicates danger of death or serious injury
 ATTENTION	Indicates risk of injury or material damage

OTHER SYMBOLS USED

	Do not clean the robot with a high-pressure cleaner
	Do not climb onto the robot
	Do not use a live electric fence on the floor where the robot operates. This may cause major damage.
	Cleaning and disinfecting necessary or mandatory

WHENEVER USING ELECTRICAL EQUIPMENT, BASIC PRECAUTIONS MUST BE TAKEN.

READ ALL INSTRUCTIONS BEFORE USING YOUR ROBOT.

Unplug the device from the outlet when not in use or before carrying out maintenance.

DANGER: To limit the risk of fire, electrocution, or injury:



GENERAL

- This device is intended for professionals. It must not be used by children or inexperienced persons, unless they have received the necessary instructions from a responsible person for the sake of their own safety.
- The robot may only be maintained, disassembled, or repaired by a technician approved by OCTOPUS BIOSAFETY.
- Use this device only as indicated in this manual.
- Do not operate the robot or its charger if it has been damaged in any way whatsoever.
- If the robot is running abnormally, or has been struck, damaged, left outside, or immersed in water, return it to the customer service center.
- Never handle the charger or charging robot with wet hands.
- Do not climb onto the robot.
- Do not sit on the robot.
- Do not put the robot on a surface that it could fall from (chair, table, etc.).
- Turn off the power switch when transporting the robot or when it is not in use for an extended period of time.
- This product is designed to be used indoors.
- The robot must be used at a temperature between 5° and 40°.
- The robot may be used at an altitude of up to 2000m.

ROBOT

- Use only original equipment and accessories. It is prohibited to modify the robot's original design. If any modifications are made outside of the normal use of the robot, OCTOPUS BIOSAFETY shall be released from all liability, and the warranty may be canceled in full.
- Do not cover up the robot.
- Do not carry loads on the robot.
- Do not block the shock absorbers with objects.
- Never grab or carry the robot when its motors are running.
- Keep all protective parts, shields, safety units, and sensors in place.
- In any parts or damage, they must be replaced at the customer service center.
- Before lifting the robot, make sure that it is turned off, and grab it by the handle located on the rear.

BATTERY

- Do not open up or damage the power unit.
- The battery unit contains electrolytes. If electrolytes leak, do as follows:
    - Contact with skin: Immediately clean those areas of the skin with water and soap.
    - Contact with eyes: Immediately clean the eyes with water for at least 15 minutes without rubbing.
    - Get medical care.
- Make sure that the batteries are charged using the manufacturer's recommended charger. Incorrect use may cause electrocution, overheating, or leakage of corrosive liquid from the battery.

BATTERY CHARGER

- Use only the charger provided with the robot.
- Unplug the charger from the outlet when not in use or before carrying out maintenance.
- Use only the charger provided by the manufacturer to recharge the device.
- Never use a damaged cord or outlet.
- Do not bend or pull on the power cord. Do not use it as a handle. Do not close a door on it. Keep it away from heated surfaces.
- Do not use an extension cord or wall outlets with an inappropriate current rating.
- Do not unplug the device by pulling on the cord. To unplug, hold the plug, not the cord.
- Do not open up the charger. Repairs must be made only by a qualified technician.
- Never exposed the charger to high temperatures, and avoid all contact with moisture.
- The charger must be removed from the power outlet before cleaning or maintaining the device or removing the battery.

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About the robot

Poultry robotics expert, OCTOPUS BIOSAFETY aims to automate certain painful and repetitive tasks in order to improve the working conditions of the poultry farmer while increasing the profitability of his breeding and animal welfare.

The T-Moov robot is a poultry-farming robot for professionals.

HOW IT MOVES:

The robot moves autonomously and randomly on the floor of a coop. It is equipped with sensors to detect and move around obstacles. A control interface is available to set its speed (6 speeds).

The robot has different ways to encourage the birds to move (visual, sound, and mechanical) in order to limit how accustomed they get to the robot's presence, without any harmful effects on their behavior.

Its four drive wheels allow the robot to move onto uneven bedding. Its compact shape enables it to pass under most feeding systems found in the coop.

READY TO USE:

The robot is entirely "ready-to-use" and can begin service as soon as it is delivered. No software or hardware installation is required in the chicken house. The robot is completely "ready to use", after selecting the speed of movement, directly accessible from the robot's control panel.

LONG BATTERY LIFE:

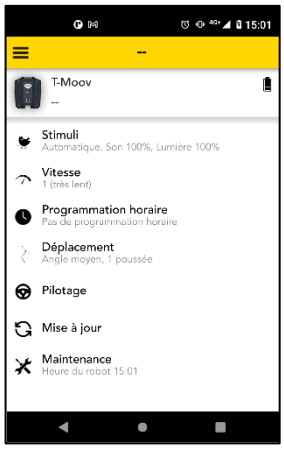
The battery built into the robot allows it to operate for 10 hours without needing to be recharged.

USER-FRIENDLY:

The robot's streamlined Interface makes it easy to use: Turn it on, press "Start", and the robot begins working.

Smartphone app:

The robot is controlled and/or configured via its dedicated smartphone App.



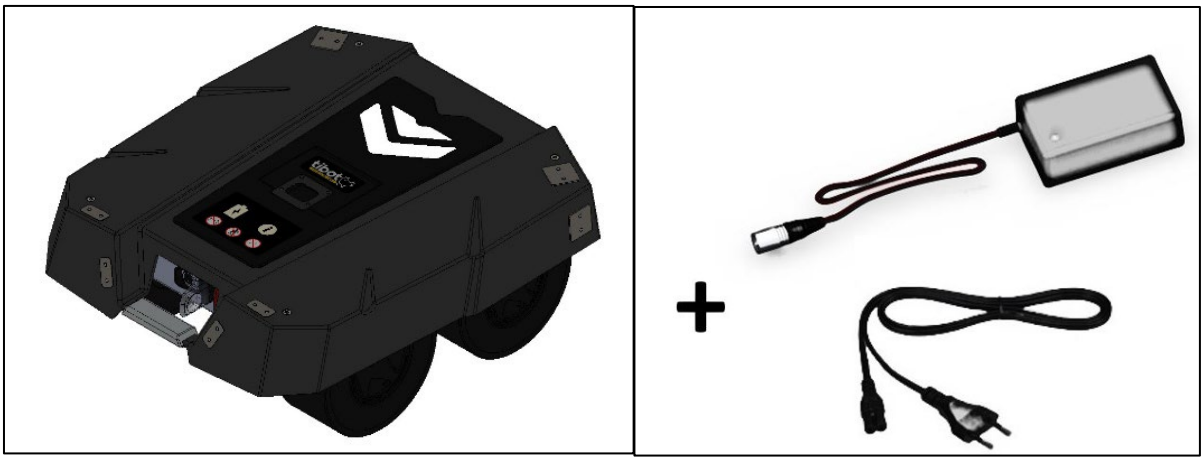
Downloadable on the Play Store

GET IT ON Google Play

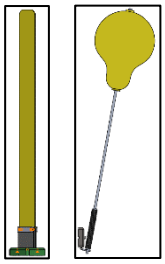
Components of the robot

Robot and accessories

- T-Moov robot (with its charger and power cord)



- Flag kit (standard or accessory):

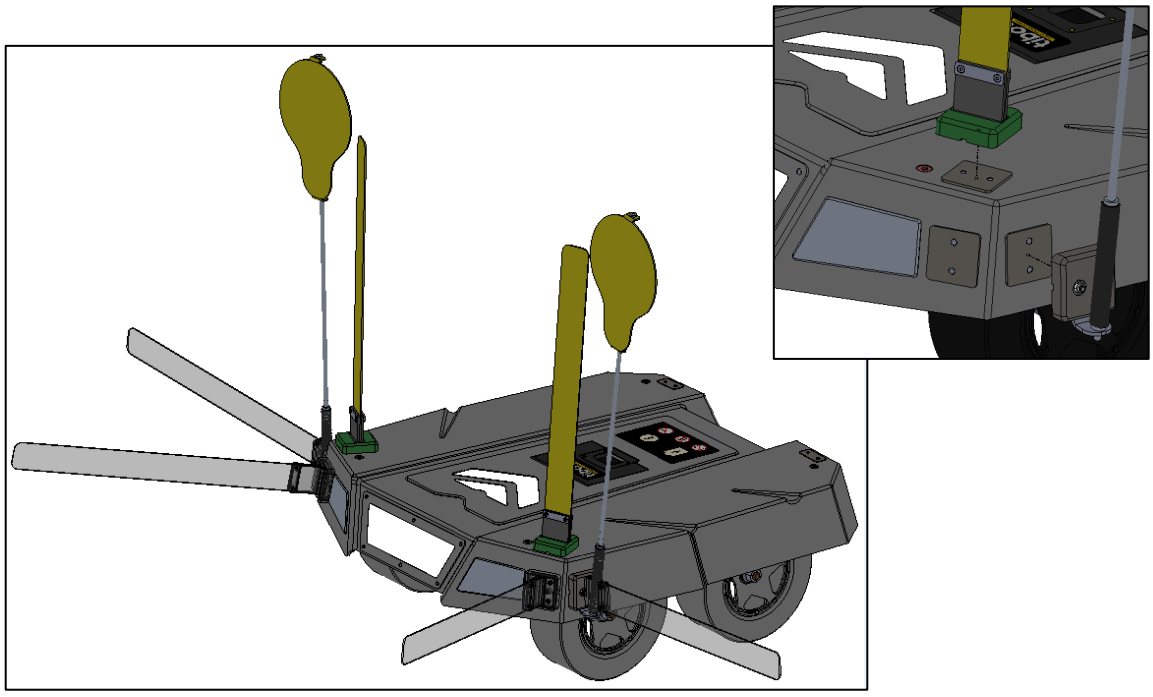


One or more flag kits, in different shapes and colors, can be added to the T-Moov.

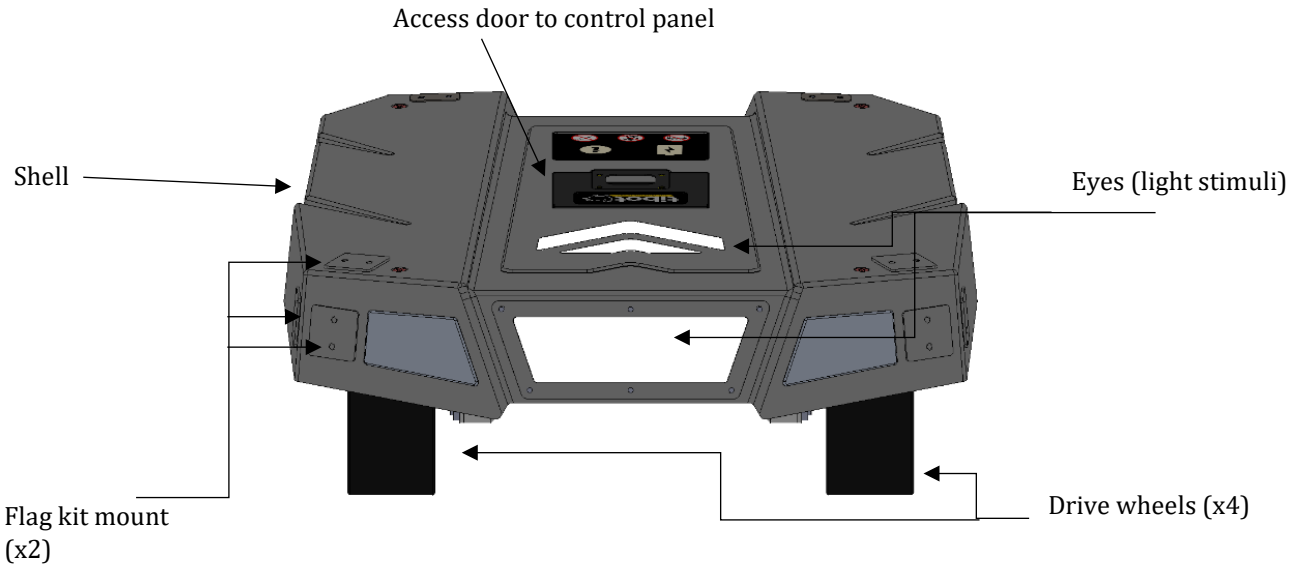
With magnetic fasteners, these flags are extremely simple to use and easily interchangeable, while being hard to tear off.

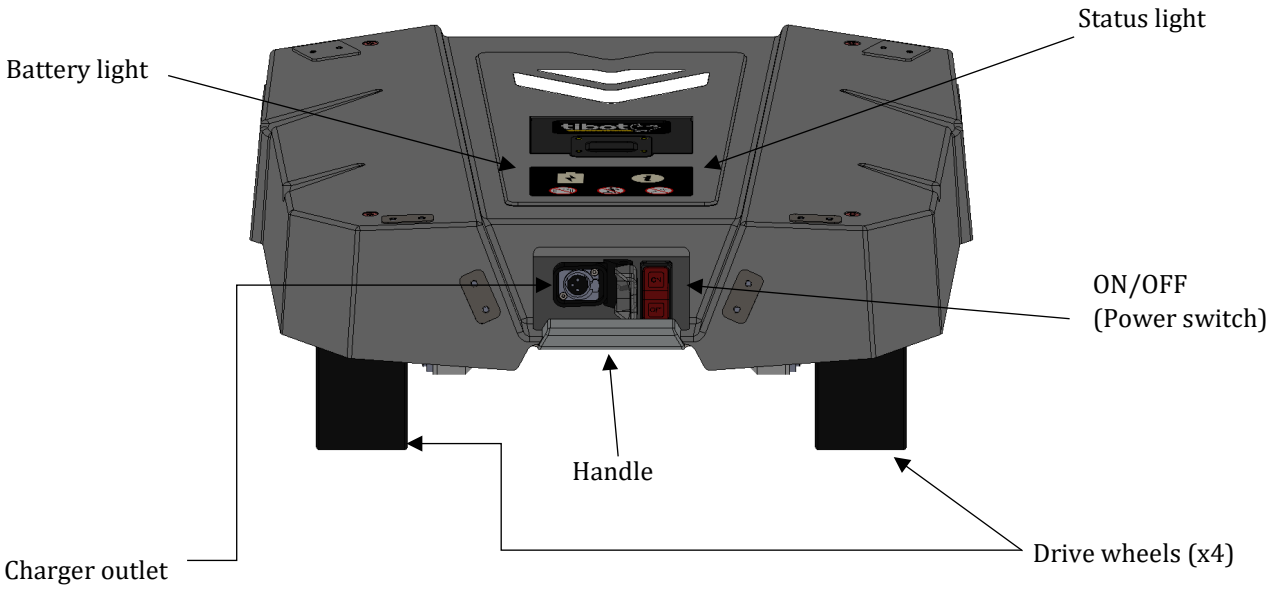
The T-Moov has 6 different attachment points.

No adjustment is necessary



Main view of robot





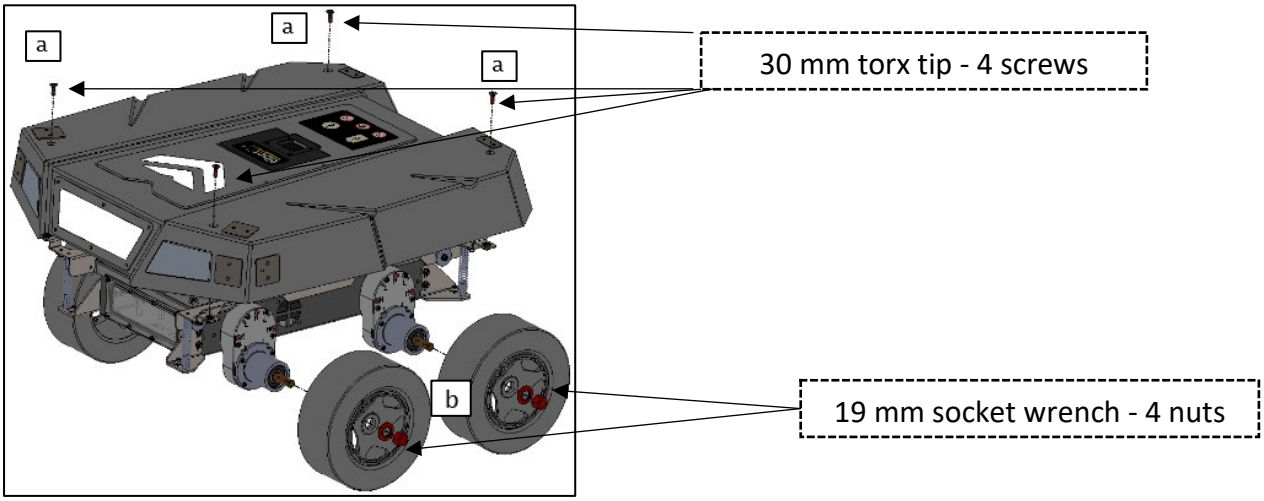
Procedure for adjusting the ground clearance of the T-MOOV robot

The T-Moov has two ground clearance heights: A high and a low position. With the high position, the robot is better able to travel over uneven litter, or other bumpy surfaces. The low position is preferable for passing under fixed obstacles such as feed chains on legs.

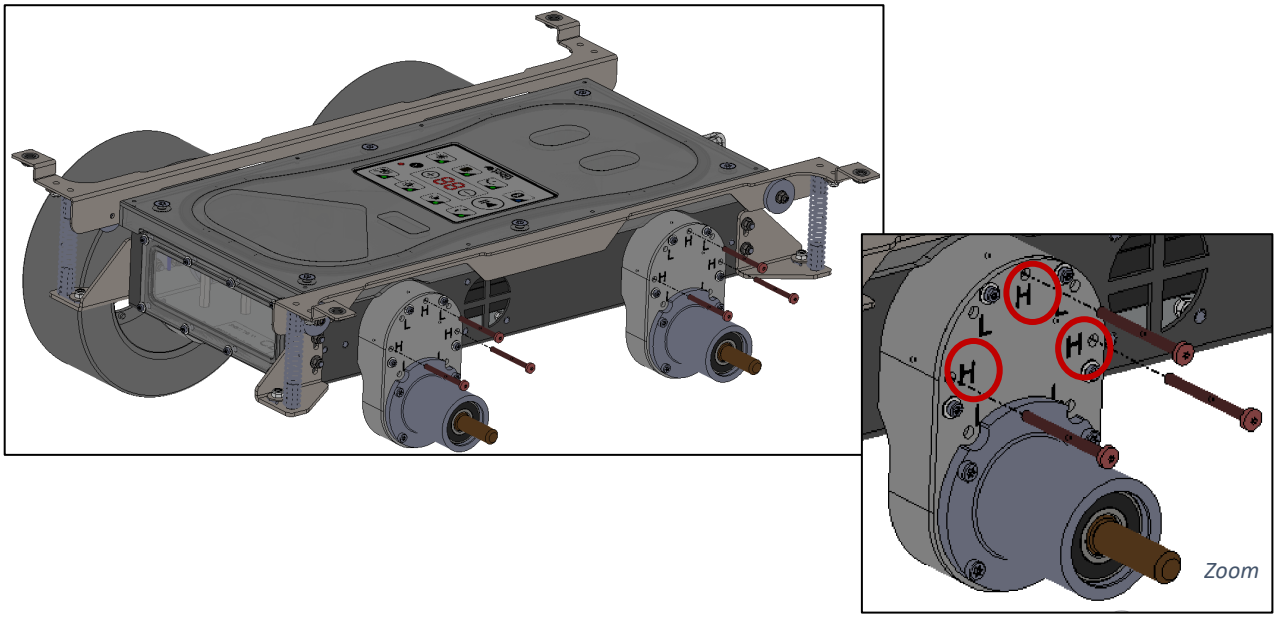
The adjustment is done with only three tools:

- a 19mm socket wrench for the wheels
- a 30 mm torx wrench for the shell
- a 20 mm torx wrench for the hubs

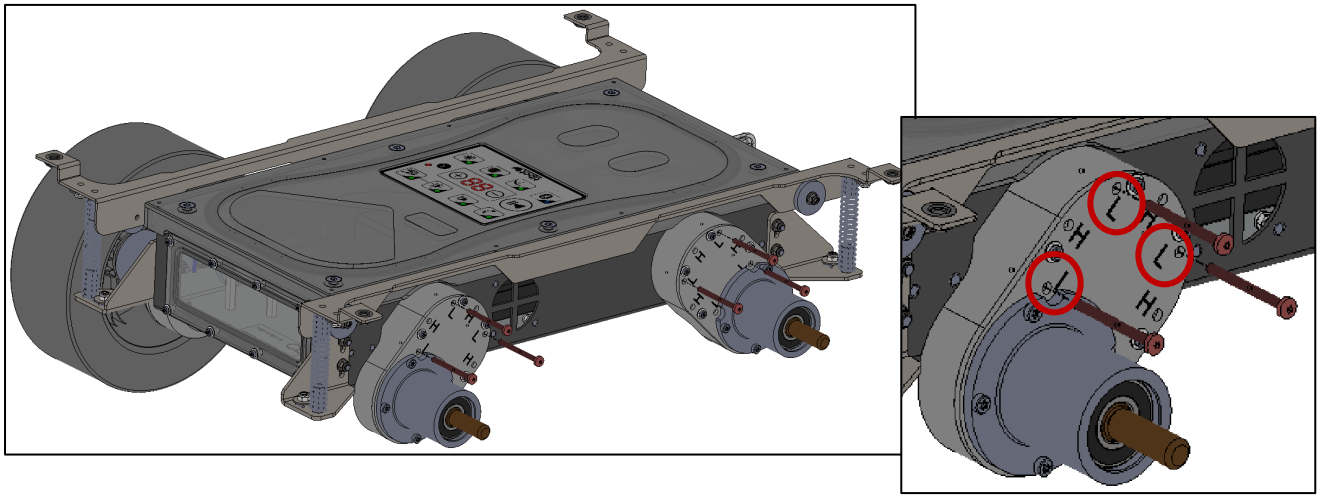
1) Removing the shell and wheels
    a. First, remove the four screws that hold the shell in place (**a**)
    b. Then remove the four nuts that hold the wheels (**b**)



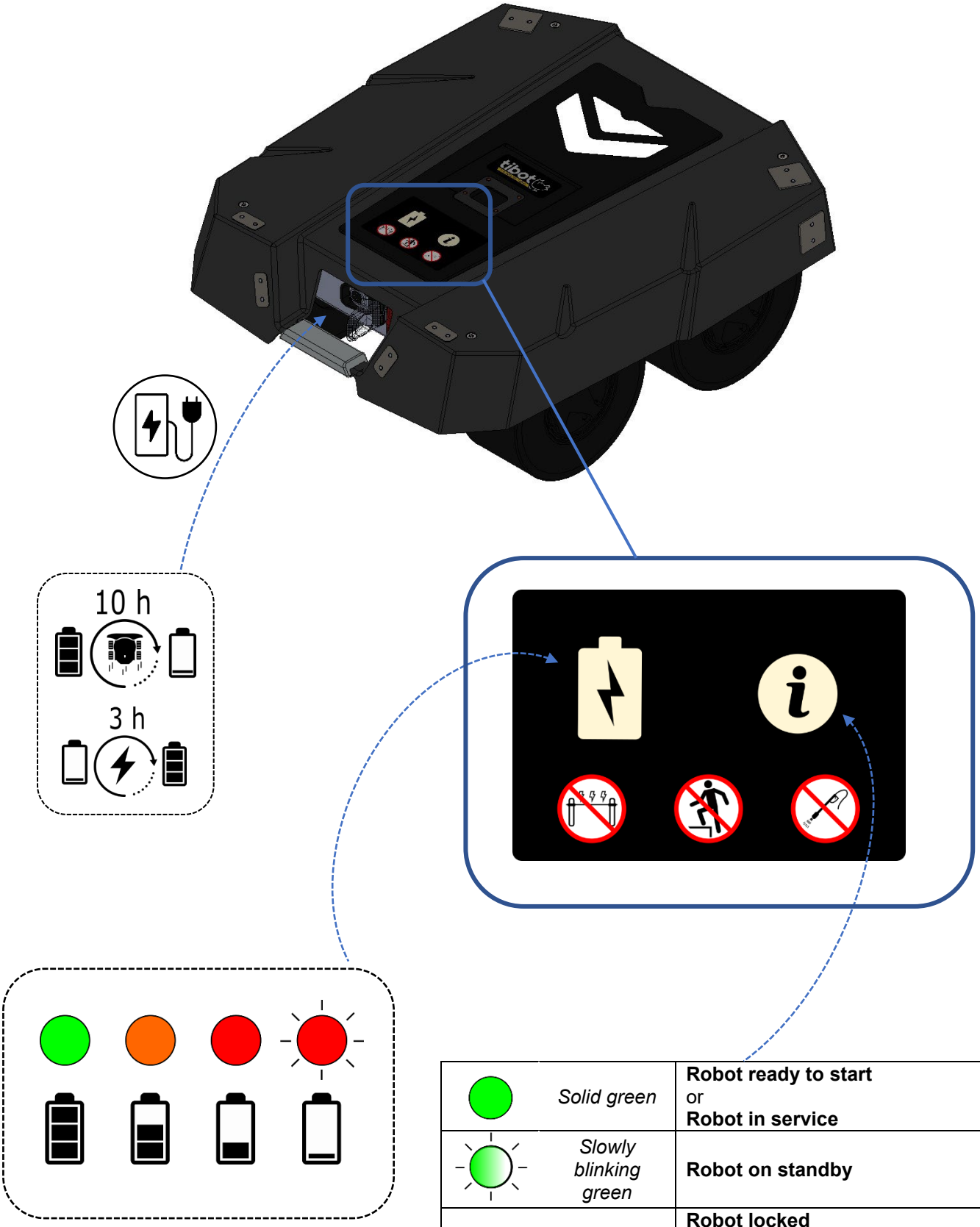
2) Adjust the height of the four hubs to the desired working height.
    a. Highest ground clearance height (H)



b. Lowest ground clearance height (L)



How the robot works



Solid green	**Robot ready to start** or **Robot in service**
Slowly blinking green	**Robot on standby**
Red	**Robot locked** **(in standby mode* or on timer)** *the robot automatically switches to STANDBY 30 seconds after being switched on.

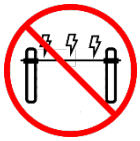
Installing the robot

No installation is needed to start the robot.

Using the robot

ATTENTION

Do not use a live electric fence on the floor where the robot operates. This may cause major damage.



The T-Moov robot moves autonomously at random. In order to start the robot, put it into the chosen coop and turn it on.

POWER ON/OFF



To turn the robot on, press the ON/OFF switch located on its rear. If a light does not turn on, the robot's battery isn't charged. If it's not, plug the included charger into the robot (see section: "Recharging the Robot")

STARTING AND PAUSING THE ROBOT



After turning on the robot, press the FORWARD/STOP button located under the shell cover to start the robot, which will then move at the selected speed and settings.

ATTENTION

When the robot is first placed among the poultry, it is highly recommended to select speed 1 (see section: Using the Control Panel).

STOPPING THE ROBOT

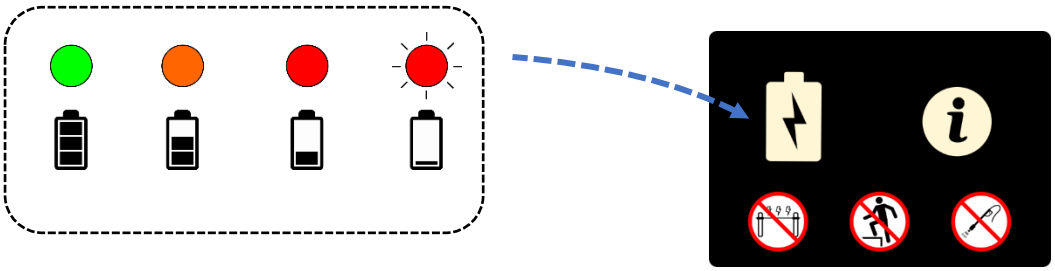
To stop the robot, press the START button located under the shell cover, or shut off the power supply by pressing the ON/OFF switch.

ATTENTION

When you remove the robot from the coop, remember to turn it OFF before carrying it.

ROBOT BATTERY LEVEL INDICATOR

When the robot is powered on, the battery light indicates its charge level:



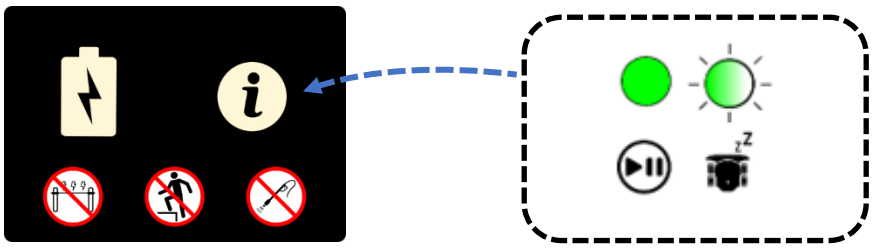
When the robot is 100% charged, it will be able to operate for 10 to 12 hours depending on its conditions of use.

ATTENTION

When the battery has reached critical, the robot stops. The battery must be recharged in order to restart it. To recharge the robot, see section "Recharging the Robot".

ROBOT STATUS INDICATOR

When the robot is on, the status light indicates what operating mode the robot is in.



Definitions of different statuses:

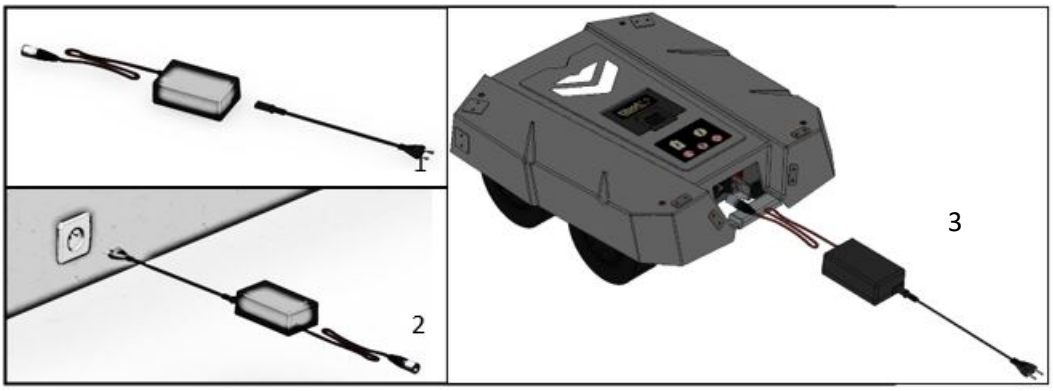
	Solid green	**Robot ready to start or Robot in service**
	Slowly blinking green	**Robot on standby**
	Red	**Robot locked (in standby mode* or on timer)** *the robot automatically switches to STANDBY 30 seconds after being switched on.

Recharging the robot

To recharge the robot, install the charger. The battery may be uncharged when the robot is received. Charge it fully before using it.

To charge the robot.

1) Plug the charger into a wall outlet.
2) Connect the charger to the robot.



Charging the battery

Whenever the robot is charging, an ORANGE indicator light appears on the charger. Whenever the battery reaches a charge level of 90 to 95% of its total capacity, the indicator turns YELLOW, the battery is almost full, and the robot can be used. Whenever the charger's indicator light is GREEN, the battery is fully charged.

About the battery

The T-Moov robot is powered by a rechargeable Li-ION battery.

The battery's warranty period is 12 months from the date of purchase.

This battery is intended only for robots from OCTOPUS BIOSAFETY. It is strictly prohibited to use it with other devices or for other purposes.

- Do not disassemble and/or modify the battery.
- Never put the battery near a source of heat.
- Do not connect any metal objects to the terminals (+) or (-) of the robot's connector (or battery)
- If the battery is no longer working, do not disassemble the robot. Call the customer service center at +33 (0)2 90 38 01 83.
- If the battery is taking longer to charge and draining faster, this means that it is reaching its end of life. Contact the customer service center.
- The rechargeable battery built into the product cannot be replaced by the user. Contact the customer service center to have it replaced.
- Follow local regulations for recycling used batteries.

CONNECTING YOUR PHONE TO THE ROBOT



Bluetooth connection:

The T-Moov robot can also be set up via a mobile app.

When you first connect:

- Open the "TIBOT" mobile app downloadable from the Play Store
- Press the Bluetooth button on the robot's control panel
    - The blue light flashes to indicate that a pairing search is in progress
- In the app, click on the "Settings" icon
- Click on "Add a robot"
- When a connection is established between the robot and app, the blue light of the Bluetooth button on the robot will remain on

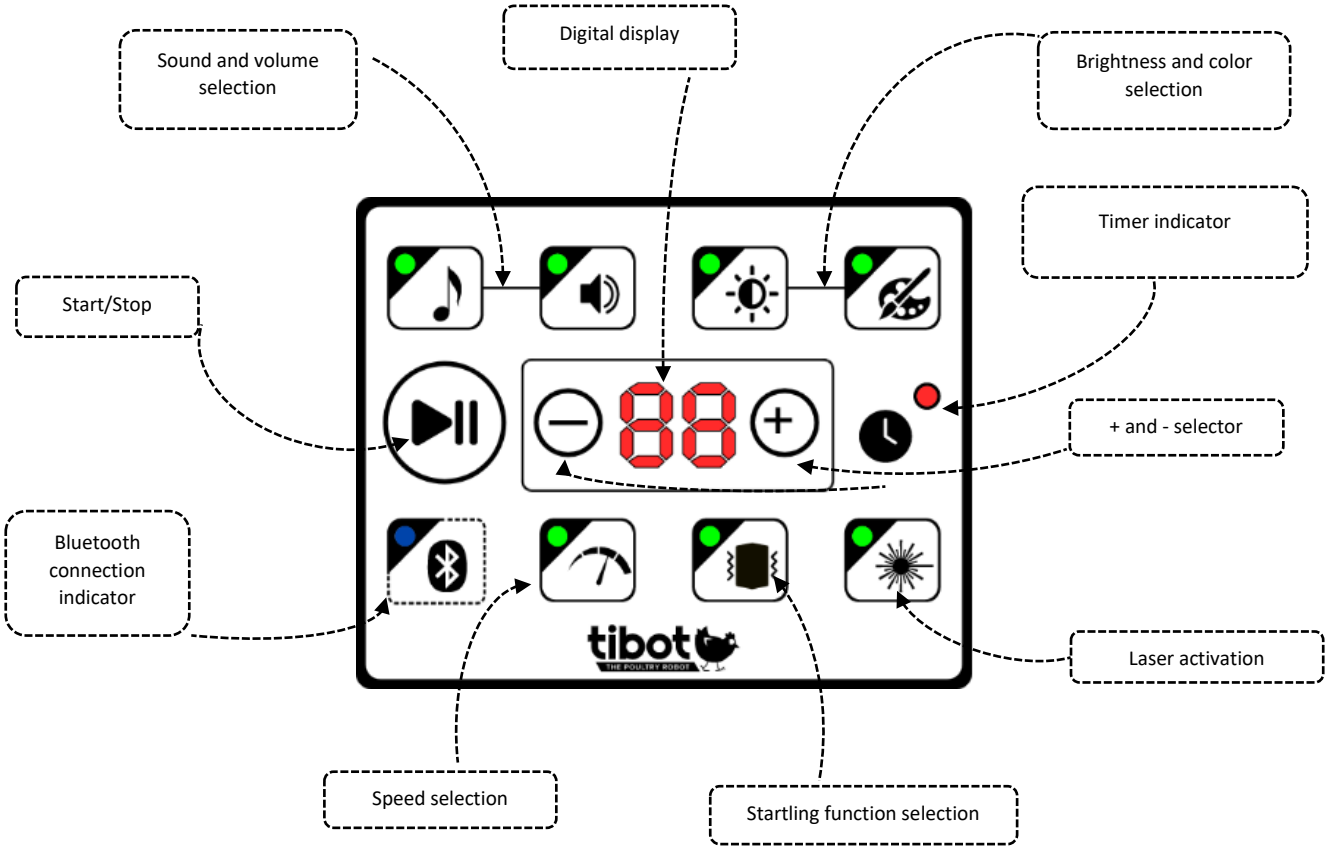
The robot will then automatically connect to the phone if the app is open and in range.



For data security reasons, the robot manages only one device at a time.

Using the Control Panel

ICON DESCRIPTIONS



Icon: Sound and volume selection.

Pressing the button selects the type of sound.
Choose a sound (6 available) with the +/- buttons on the display.

Pressing the button adjusts the sound level.
Choose a volume (from 0 to 7) with the +/- keys on the display.

Icon: Brightness and color selection.

Pressing the button selects the brightness.
Choose a brightness level (10 available) with the +/- buttons on the display.

Pressing the button selects the color of the LEDs.
Choose a color (5 available) with the +/- buttons on the display.

Icon: Start/Stop.

Pressing the button starts or stops the robot movement, depending on the saved settings.

Icon: Digital display.

The display shows the selected value depending on the stimulus.
The +/- buttons are used to change the stimuli choices and speed.

Icon: Timer indicator.

Displays whether or not a programmed timer is active.
The time ranges are programmed using the smartphone app available on the Play Store.

GET IT ON Google Play

Timer active

No timer

ATTENTION

The robot must not be charging when a time range begins.

Icon: Bluetooth connection indicator.

Displays whether a Bluetooth connection is active.
For the first connection between the robot and the phone, see section: "Connection" on page 14.

Connection active

No connection

Icon: Speed selection.

Pressing the button allows you to select the speed of the robot.
Choose a speed (6 available) with the +/- buttons on the display.

The minimum speed is 0.1 m/s and the maximum speed is 0.7 m/s.
Speed 1 is recommended for the first use of the robot with a new group.

Icon: Startling function selection 

Pressing this button activates or stops the startling function.

The startling function causes the robot to perform a jerky motion (acceleration and rotation), encouraging the birds to move.

Avoid using it early on, in order to retain its effectiveness over the course of the poultry group.

Icon: Laser 

Pressing the  button switches the laser beam side-sweep on or off.

 Laser on  Laser off

The laser is a system that produces a two pivoting red beams of light that on the front of the robot.



Avoid using it early on, in order to retain its effectiveness over the course of the poultry group.

Maintenance

Maintenance should be carried out within 12 months after the robot first enters service.

For the robot's annual maintenance, call your customer service center at **+33 (0)2 90 38 01 83**.

The robot's maintenance must be conducted only by a OCTOPUS BIOSAFETY technician or an approved distributor. During maintenance, the robot's parts, notably its safety features, are checked to see if they are in good working order.

The robot may only be maintained, disassembled, or repaired by a technician approved by OCTOPUS BIOSAFETY.

If anyone else attempts to do so, OCTOPUS BIOSAFETY shall be released from all liability, and the warranty may be canceled in full.



How to disinfect the robot before returning it to the maintenance center



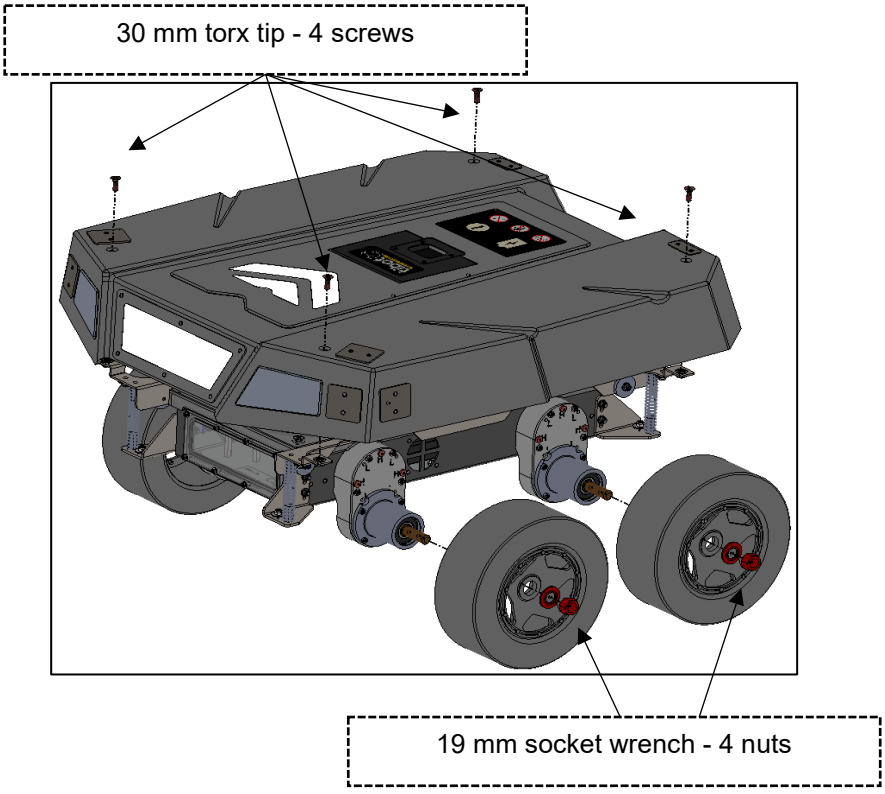
- Remove the shell (4 screws with a 30 mm Torx bit).
- Remove the wheels (4 nuts with a 19 mm socket wrench).
- The wheels and shell can be washed with water.
- Clean and disinfect the robot with a cloth or sponge using your regular sanitary procedure for equipment coming in or out.
- Put the robot back into the transport crate provided to you at the time of purchase.

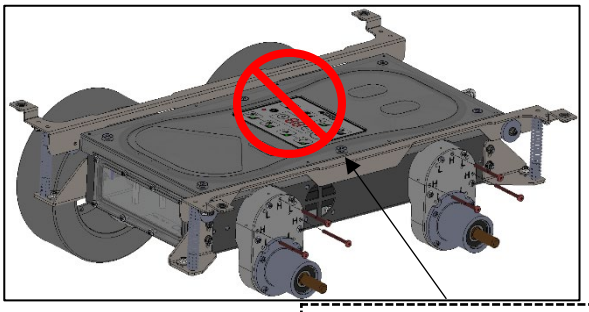


The technical cover may only be removed by a technician authorized by OCTOPUS BIOSAFETY.

The body of the robot should be cleaned with a cloth or sponge and water.

Do not use a high-pressure jet directly on the robot.





Troubleshooting

Checklist before calling the service center

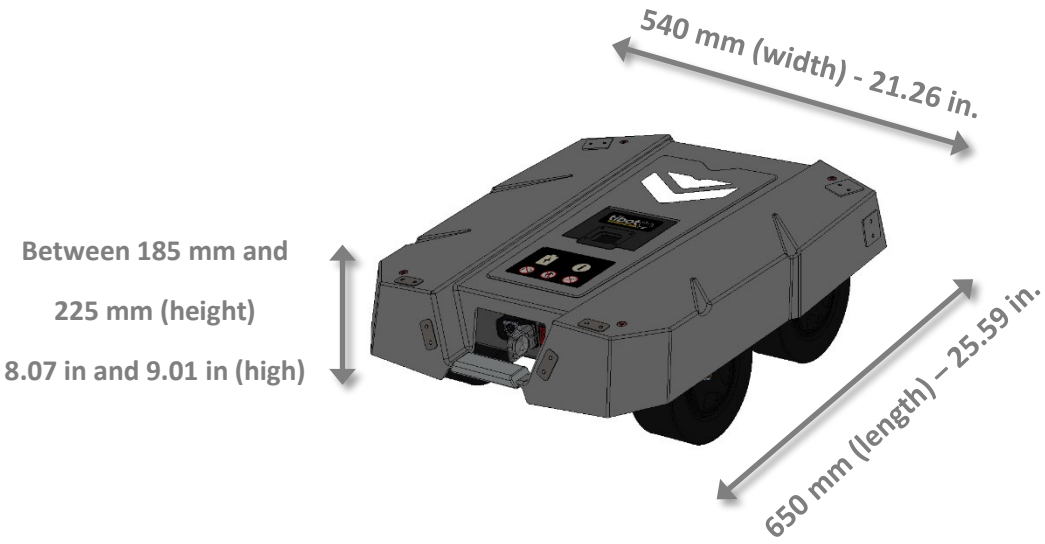
PROBLEM	CHECK	SOLUTION
The robot isn't working at all	Is the power button activated? Is the robot charged?	Set the power button to “ON”. Plug the charger into the robot and wait at least 1 hour before restarting.
The robot is powered on but not starting.	Check that the robot is not in STANDBY mode *(the status light turns red when the START button is pressed if the robot is locked).* Check that the robot is not outside the programmed time slots *(the status light turns red when the START button is pressed if the robot is locked).* Check the robot is not at critical battery level. *(Battery indicator blinking red)*	Turn the robot off and back on using the ON-OFF button, then press the START button before the robot goes into STANDBY (it will do so automatically 30 seconds after it is powered on). OR Start the robot using the smartphone app by going into the SPEED menu. Check the timer programming using the smartphone app (the robot cannot be started outside of the programmed time slots). OR Start the robot using the smartphone app by going into the SPEED menu. Plug the charger into the robot and wait at least 1 hour before restarting.
The robot stops while in service	Check the robot’s timer programming. Check the robot’s charge level.	Check the timer ranges using the smartphone app. If the battery is drained, plug the charger into the robot. The robot stops after 10 minutes if no contact is detected during that time.
The robot is not moving normally	Is something obstructing a wheel? Is something blocking the bumper?	Turn the robot off with the power button and remove the unwanted object. Turn the robot off with the power button and remove the unwanted object that is keeping the bumper from working.
The battery doesn't recharge	Is the charger plugged in to a wall outlet?	Plug the charger into a power outlet and check the charger’s indicator light.

Error codes: Troubleshooting

ERROR CODE	CAUSE	SOLUTION
The robot's status light turns red when the robot's START-PAUSE button is pressed.	The robot is on STANDBY and therefore locked (START button inactive). The robot cannot be started outside of the programmed time slots.	Turn the robot off and back on using the ON-OFF button, then press the START button before the robot goes into STANDBY (it will do so automatically 30 seconds after it is powered on). Check the timer ranges using the smartphone app.
The robot's eyes and all of the robot's status and battery lights are blinking red.	The robot is stuck on something.	Turn the robot off with the power button and move the robot.
	A wheel is blocked.	Turn the robot off with the power button and remove the unwanted object.
	Safety shutdown if overheating.	Turn the robot off for a few minutes with the power button.

Customer Service Number: +33 (0)2 90 38 01 83

Technical specifications



CLASSIFICATION	CHARACTERISTICS	DETAILS
Mechanical specifications	Width	650 mm – 25.59 in.
	Length	580 mm
	Height	Between 185 mm (8.07 in.) and 225 mm (9.01 in.)
	Weight	18 Kg
Charger specifications	Charger type:	MASCOT 3240Li 7 Cells
	Voltage: Power source fluctuations:	110-120VAC / 220-240 VAC 50-60Hz max 2.1A +/- 10%
	Output:	29.4 V - 3.5A
Battery Specifications	Battery type	Rechargeable Li-Ion
	Battery power	25.9V - 10.4 Ah
	Recharge time	3 hours (for a fully drained battery)
Environment	Ambient temperature	5°C to 40°C
	Humidity level	15 to 95% RH
	Max. altitude	2000 m
	Pollution degree	2
	Overvoltage category	II

Comment: Some specifications are subject to change without notice.

Declaration of conformity

T-Moov poultry-farming robot and accessories.

Manufacturer:

OCTOPUS BIOSAFETY, 9 rue du Danemark, 56400 Auray, FRANCE

Declares that the T-Moov poultry-farming robot with its battery charger conforms to the requirements of the following directives:

Low-voltage directive 2014/35/EU
EMC directive 2014/30/EU
RoHS directive 2011/65/EU

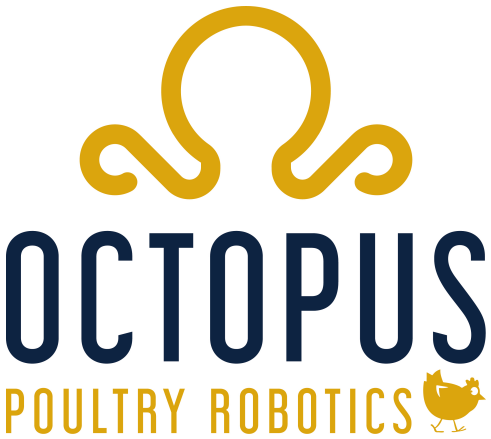
The technical brochures are made at **OCTOPUS BIOSAFETY, 9 rue du Danemark, 56400 Auray, FRANCE**

CE marking year: **2021**

NOTES

NOTES

NOTES



Version	Date	Written by	Nature of change
A	Nov. 2021	EVI	Document created