

Models: Willow & Willow Pro **Instruction manual**



WARNING



Read Instruction Manual thoroughly before use and follow all safety precautions - improper use can cause serious or fatal injury.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance during mowing or while the mowing motor is activated.

THE EEVE-SIGNS NEEDS TO BE PROPERLY INSTALLED (see 4.6.2)



Content

4
5
7
8
88 9
11 13
13 14 15
18
18
22
22
23
24
24
25 26
26
26
27
27 27
27
27
28
28
28 28
32
32
32
32
32 33
34
34
34
34
35
35
35



11.1 Mowing time	35
11.2 ACTIVE SAFEGUARDING TIME	
12. DURING OPERATION	36
13. ADJUSTING THE MOWING HEIGHT	36
13.1 MANUAL HEIGHT ADJUSTMENT	
13.2 ELECTRONIC HEIGHT ADJUSTMENT - THE DA VINCI'S PENCIL	
14. TRANSPORTING YOUR PERSONAL ROBOT	
15. STORING THE PERSONAL ROBOT AND THE DOCKING STATION	39
16. CLEANING	40
17. INSPECTION AND MAINTENANCE	41
17.1 Inspection and maintenance intervals	
17.2 INSPECT THE MOWING BLADES.	
17.3 REPLACE THE MOWING BLADES	
18. TROUBLESHOOTING GUIDE	
18.1 Messages	
18.3 EYES	
19. SPECIFICATIONS	48
19.1 WILLOW	48
19.2 WILLOW PRO	
19.3 DOCKING STATION	
19.5 DECLARATION OF CONFORMITY	
20. REPLACEMENT PARTS AND EQUIPMENT	51
21. DISPOSAL	51
22. PRIVACY	52
22.1 Processing of camera data	52
22.2 PROCESSING OF MACHINE DATA	
22.3 REMOTE INTERVENTION	
23. LIMITED WARRANTY	
24. ADDRESSES	53



1. Introduction

Thank you for your purchase. The instructions provided in this manual are essential to harnessing the full potential of your EEVE personal robot, and to ensuring your safety during its operation. We strongly recommend adhering to these guidelines to prevent any risk of injury and to maximize the performance and satisfaction derived from your new personal robot.

IMPORTANT READ CAREFULLY BEFORE USE KEEP FOR FUTURE REFERENCE

Because one of the personal robot's task is to mow it can activate its high-speed cutting tool, designed for operation independent from the active control or supervision of an operator, special safety precautions must be observed to reduce the risk of personal injury.

Read this instruction manual thoroughly before setting up your personal robot and periodically thereafter. Follow all safety precautions. Careless or improper use of the personal robot can cause serious or fatal injury.

Discuss setup and operation of your personal robot with your authorized EEVE Partner. EEVE recommends having an authorized EEVE Partner set up your personal robot.

Do not lend or rent your personal robot without this instruction manual. Allow only persons who fully understand the information in this manual to set up, operate or maintain the personal robot. The operator must be familiar with the personal robot's controls before starting work. The operator is responsible for accidents or hazards occurring to other people or their property.

For further information, or if you do not understand any of the instructions in this manual, contact your authorized EEVE Partner.

This manual contains safety information that requires your special attention. Such information is introduced with the following symbols and signal words:



Indicates a hazardous situation that, if not avoided, will result in death or serious injury.



WARNING

Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

NOTICE

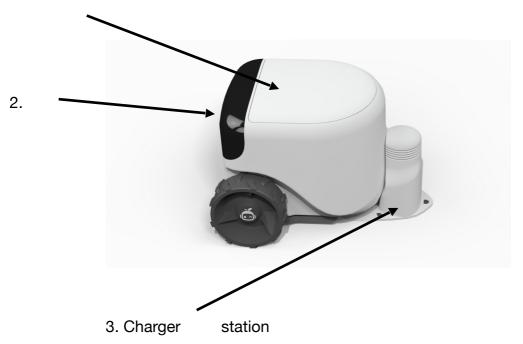
Indicates a risk of property damage, including damage to the machine or its individual components.



2. Main parts

The personal robot you have acquired has been engineered to perform a variety of tasks. At the point of purchase, the personal robot's primary functions include mowing and surveillance, referred to as "Current Functions". Please note, these Current Functions do not represent the complete potential of the personal robot. This robot has been designed with the capacity for future software and functionality enhancements, hereafter referred to as "Future Functions". The inclusion of Future Functions is contingent upon updates from the manufacturer and may broaden the scope of tasks the personal robot can perform. However, the availability, nature, and functionality of Future Functions are not guaranteed at the time of purchase and will be subject to separate terms and conditions.

1. Willow / Willow Pro personal robot



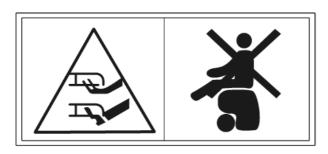
- 2. The front screen, containing:
 - The personal robot's eyes, one left and one right eye.
 - The stop button to disable the device. Located between the eyes, in the middle.
- 4. The mower disc & blades are located on the bottom:

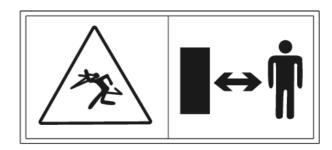


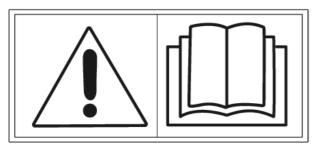


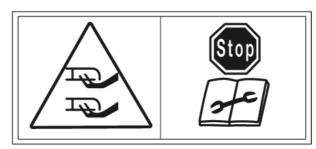
5. The EEVE-sign:











www.eeve.com

- 6. Installation material Docking station stakes, used to secure the docking station.
- 7. Rating Plate (installed on the bottom of the personal robot) Contains electrical information, product & manufacturer information.



EEVE products must not be disposed of in the household trash, but only in accordance with local, state and federal laws and regulations and as provided in this manual.



3. Safety symbols

The following safety symbols are found on the personal robot and on each EEVE-sign:



To reduce the risk of injury, follow the specified safety precautions.



Read and follow all safety precautions in the instruction manual. Improper use can lead to serious or fatal personal injury or property damage.



To reduce the risk of laceration injuries, keep hands, feet and other body parts away from the mowing blade. Never put hands or feet under the personal robot, particularly during operation. Never attempt to clear clippings or debris from the mowing blade or personal robot without first disabling it by laying your hand on the middle of the front screen (between the eyes of the robot) to stop it and repeat the handling a second time for 3 seconds.



The rotating cutting attachment may throw or fling foreign objects directly or by ricochet. To reduce the risk of personal injury from thrown objects, inspect the mowing area and remove stones, pieces of metal, glass, wire and other objects that could be thrown by the cutting attachment.



To reduce the risk of personal injury, keep other persons, especially children, and animals away from the personal robot during operation. Do not operate the mowing function of the personal robot when children or pets are or may be in the mowing area or vicinity.



Never stand on, sit on or attempt to ride the personal robot or allow others to do so. Serious personal injury and damage to the personal robot could result.



Always disable the personal robot by laying your hand on the middle of the front screen (between the eyes of the robot) to stop it before lifting, transporting, inspecting, cleaning or servicing.



This is a surveillance robot, inform any visitor that they can be recorded by the personal robot by displaying this symbol at each entrance of the area the personal robot is operating on.



4. Important safety instructions

4.1 Intended use



WARNING

- This personal robot is intended for autonomously performing work tasks: surveillance, monitoring, observing and mowing. Use for other purposes may increase the risk of personal injury and property damage.
- Both models are intended for performing surveillance when parked at the docking station, using infrared light to see 30 meter during the night.
- The model Willow is intended for cutting grass in yards up to approximately 0.39 acre (1.500 m2). The model Willow Pro is intended for cutting grass in yards up to approximately 0.9 acre (3.600 m2).
- The WCAWR docking station is designed for charging the integrated battery of the personal robot. Use of the WCAWR docking station for any purpose not authorized or intended may result in serious injury or death.
- Improper or unauthorized use of the personal robot, its integrated battery or the docking station could result in personal injury or property damage. Use the docking station, the personal robot and its integrated battery only as described in this manual.
- Do not store or use the personal robot indoors without shutting down the personal robot. The personal robot should be shutdown upfront before placing it indoors. The defect of batteries and electronics can create a fire and therefor your personal robot should be used or stored outdoors.

4.2 Personal protective equipment



WARNING

- To reduce the risk of personal injury, always wear proper clothing and protective apparel when:
 - installing the docking station and setting up the personal robot for operation;
 - entering the mowing area or approaching the personal robot while in operation;
 - replacing the mowing blade;
 - inspecting or cleaning the personal robot;



- To reduce the risk of eye injury:
 - Wear goggles or close-fitting protective glasses with adequate side protection that are impact-rated and marked as complying with ANSI Z87 "+" when setting up the docking station and personal robot, inspecting or cleaning the mower, replacing the mowing blade and any time you are in the mowing area during operation.
- Good footing is very important. To help maintain a secure footing and reduce the risk of injury. Always wear substantial footwear with non-slip soles. Do not wear sandals, flipflops, open-toed or similar footwear.
- To improve your grip and help protect your hands: Always wear heavy-duty, non-slip work gloves made of leather or another wear resistant material when setting up the docking station and personal robot, inspecting or cleaning the mower, replacing the mowing blade and any other time you are handling the personal robot.
- To reduce the risk of personal injury:
 - Wear overalls or long pants when approaching the personal robot while in operation.
 Do not wear shorts.
 - Secure hair above shoulder level before performing any installation, setup, inspection, service, maintenance or cleaning activities, and before approaching the personal robot while in operation.

4.3 Personal operator



WARNING

 According to EEVE's current information, the electric motor of this personal robot should not interfere with a pacemaker. However, persons with a pacemaker or other implanted medical device should consult their physician and device manufacturer before operating this personal robot.

4.4 Personal Robot



WARNING

If the moving mowing blade contacts you, it will result in serious laceration injuries. To reduce the risk of such injuries:

- Keep hands, feet and other parts of your body away from the mowing blade.
- Never touch the moving mowing blade with your hand or any other part of your body.



-> To reduce the risk of personal injury to the operator and bystanders:



- Always activate the disabling device. Important! Please carefully read the section 8.2 of this instruction manual, titled "8.2 Disabling Device," for detailed instructions on how to disable the device.

- Never lift the personal robot or reach under the hood to clear clippings or debris, or for any other reason, without first activating the disabling device and confirming that the mowing blade has come to a complete stop.
- Although certain unauthorized attachments may fit EEVE personal robots, their use may be extremely dangerous. Only attachments supplied by EEVE or expressly approved by EEVE for use with the specific Willow model are recommended.
 - Use only attachments supplied or expressly approved by EEVE.
 - Never modify this personal robot or its software in any way.
- Never attempt to modify or override the personal robot's controls or safety devices in any way.
- Never use a personal robot that has been modified or altered from its original design.

If the personal robot is dropped or subjected to similar heavy impacts:

- Check that it is undamaged, in good condition and functioning properly before continuing work.
 - Check that the controls and safety devices are working properly.
 - Check the mobile application for error messages.
 - Never work with a damaged or malfunctioning personal robot.
- Never use or charge a personal robot if the housing is cracked, deformed or excessively hot or if battery fluid is leaking from the personal robot. A damaged battery increases the risk of personal injury and property damage from short circuit, fire or



explosion. In case of doubt, have the personal robot checked by your authorized EEVE Partner before using it.

If the personal robot is damaged, not working properly or has been immersed in water or other liquids, its components, including its integrated battery, may no longer function properly and safety devices may be inoperative. To reduce the risk of personal injury and property damage: Take the personal robot to your authorized EEVE Partner to be checked before further use.

Genuine EEVE replacement parts are specifically designed to match your personal robot and meet safety and performance requirements. Use of parts that are not authorized or approved by EEVE may cause serious or fatal injury or property damage. EEVE recommends that only identical Willow replacement parts be used.

4.5 Integrated Battery



WARNING

Use of an unauthorized charging device can damage the battery inside the personal robot and result in fire, explosion and personal injury and property damage.

Charge the personal robot only with a genuine WCAWR docking station. The personal robot integrated battery contains safety features and devices which, if damaged, may allow it to generate heat, rupture, leak, ignite or explode.

Be alert for signs that the battery may be damaged: never use or charge a personal robot if the housing is cracked, deformed or excessively hot, if battery fluid is leaking from the personal robot, or if the personal robot is otherwise damaged. A damaged battery increases the risk of personal injury and property damage from short circuit, fire or explosion.

The battery is integrated into the personal robot and should not be removed by the operator. Have the integrated battery removed by a EEVE Partner when the battery is depleted or the personal robot reaches the end of its useful life. Never attempt to remove the battery or open or disassemble the personal robot for any reason.

Never subject the personal robot to heavy impacts or attempt to crush, drop or otherwise damage it.



Never heat the personal robot above 150 °F (66 °C) or place it on or near fires, stoves or other high-temperature locations.

Never expose the personal robot to microwaves or high pressures.

Never insert foreign objects into the personal robot's openings.



High temperatures may cause the personal robot's integrated battery to generate heat, rupture, leak, ignite or explode, resulting in severe or fatal personal injury and property damage. Exposure to temperatures outside the recommended temperature range may also damage the battery and reduce its useful life.

Use the personal robot only within an ambient temperature range of 26.6°F to 113°F (-3°C to 45°C).



Store the personal robot only within an ambient temperature range of 32°F to 122°F (0°C to 50°C).

Never store the personal robot inside a vehicle in hot weather.

Never store the personal robot indoors without activating the disabling device.

Never charge the personal robot indoors.

To reduce the risk of personal injury and property damage in the event the personal robot emits smoke, an unusual smell or feels unusually hot while using, charging or storing: – Immediately discontinue using or charging the personal robot and prepare to contact the authorities in the event of fire or explosion.





- Never immerse the personal robot in water or other liquids.
- Do not attempt to repair, open or disassemble the personal robot. There are no user-serviceable parts inside.

If the integrated battery is damaged, battery fluid can leak from the personal robot. Leaking battery fluid can cause skin and eye irritation or chemical burns.

- Avoid contact with skin and eyes.
- Use an inert absorbent such as sand on spilled fluids or liquids.
- In the event of accidental contact with battery fluids or liquids, immediately rinse the contact area thoroughly with mild soap and water.
- If battery fluids or liquids get into your eye(s): Do not rub. Rinse water over the open eye(s) for at least 15 minutes and seek medical attention.

A battery fire can be dangerous. To reduce the risk of severe personal injury and property damage in the event of fire:



- Evacuate the area. Fire can spread rapidly. Stay clear of any vapors generated and maintain a safe distance.
- · Contact the fire department.
- Although water can be used to put out a battery fire, use of a multi-purpose, dry chemical fire extinguisher is preferable.
- Consult the fire department regarding proper disposal of the burned battery.
- Never charge the personal robot indoors.
- Never store or use the personal robot indoors.

4.6 Using the personal robot

4.6.1 Before operation



WARNING

Misuse or unauthorized use may result in personal injury and property damage.

- Use the personal robot only as described in this instruction manual.

Using a personal robot that is damaged, improperly adjusted or maintained, or not completely and securely assembled can lead to a malfunction and increase the risk of serious personal injury or death.

- Never operate a personal robot that is damaged, improperly maintained or not completely and properly assembled.
- Always check your personal robot for proper condition and operation before starting work.
 - Never attempt to modify or override the controls or safety devices in any way.
- If your personal robot or any part is damaged or does not function properly, take it to your authorized EEVE Partner. Do not use the personal robot until the problem has been corrected.

To help reduce the risk of serious personal injury or death from unintentional starting:



– Always activate the disabling device. Important! Please carefully read the section 8.2 of this instruction manual, titled "8.2 Disabling Device," for detailed instructions on how to disable the device.



4.6.2 Working environment - install the EEVE-sign



WARNING

Do not allow anyone near the personal robot during operation who didn't read and understood this instruction manual.

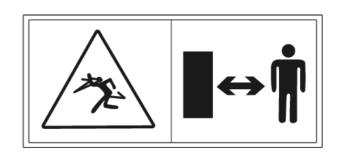
The personal robot has markings and signs on the robot itself to warn anyone from touching the rotating blade and to prevent anyone from getting hurt. However, it is even more important to inform anyone about the operations of the personal robot before they approach the personal robot. As well as it is important to inform any visitor to your property about Willow, especially if they are in company of persons who cannot understand the markings on the robot itself (ex.: kids, persons with reduced physical, sensory or mental capabilities, ...). By informing any visitor you can make sure they take appropriate measurements to protect their company.

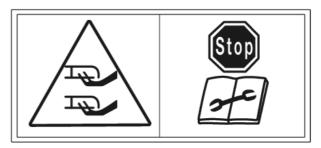
The EEVE-sign has a second functionality, namely to inform visitors that they can be recorded by the security functionality of Willow. Visitors have the right to be informed before they approach the security camera (in this case, the personal robot).













Install at least one EEVE-sign at each entrance to the area where the personal robot is active. In case of an open area, place at least a sign at every 6 meter distance along the border of the open area.

There is one EEVE-sign included in the standard package of your personal robot. This in the form of an outdoor sticker. In case you need one or more EEVE-sign plates or you need more EEVE-sign stickers you can order them via our website shop at www.eeve.com or via our support team by sending a mail to support@eeve.com.

4.6.3 Working Conditions



Sparks generated from operation of the personal robot may be capable of igniting combustible gases, liquids, vapors, dusts or other combustible materials and substances. To reduce the risk of fire and explosion:

- Never operate the personal robot in a location where combustible gases, liquids, vapors, dusts or other combustible materials and substances are present.
- Read and follow recommendations issued by government authorities for identifying and avoiding the hazards of combustible gases, liquids, vapors, dusts or other combustible materials and substances.

If a rotating metal blade strikes a rock or other hard object, sparks may be created, which can ignite flammable materials under certain circumstances. Flammable materials can include dry vegetation and brush, particularly when weather conditions are hot and dry.

- When there is a risk of fire or wildfire, do not use the personal robot around flammable materials or around dry vegetation or brush.
- Contact your local fire authorities if you have any question about whether vegetation and weather conditions are suitable for the use of a metal blade.

Use of this personal robot can generate dust and other substances containing chemicals known to cause respiratory problems, cancer, birth defects and other reproductive harm.

 Consult governmental agencies and other authoritative sources on hazardous materials if you are unfamiliar with the risks associated with the particular substances you are cutting or with which you are working.



Inhalation of certain dusts, especially organic dusts such as mold or pollen, can cause susceptible persons to have an allergic or asthmatic reaction. Substantial or repeated inhalation of dust or other airborne contaminants, especially those with a smaller particle size, may cause respiratory or other illnesses.

- Control dust at the source where possible.
- To the extent possible, operate the personal robot so that the wind or operating process directs any dust, mist or other particulate matter raised by the personal robot away from the operator.
- When respirable dust or other particulate matter cannot be kept at or near background levels, always wear a respirator that is approved by NIOSH and rated for worksite-specific conditions. Follow the recommendations of governmental authorities and occupational and trade associations.

If the vegetation being cut or the surrounding ground is coated with a chemical substance, such as a pesticide, fertilizer or herbicide: Read and follow the instructions and warnings that accompanied the substance coating the vegetation or surrounding ground.

4.6.4 Operating Instructions



WARNING

In the event of an emergency, activate the disabling device to stop the personal robot and its cutting attachment.

The mowing blade continues to rotate for a short period after the motor is switched off. This is known as the "flywheel effect." To reduce the risk of serious personal injury from contact with the cutting attachment: Activate the disabling device and wait for the mowing blade to stop before lifting or carrying the personal robot. Never attempt to lift or tilt the personal robot while it is running.

The rotating mowing blade may throw or fling foreign objects directly or by ricochet. Objects that are thrown or flung, including broken mowing blades, may result in serious or fatal injury to the operator or bystanders. To reduce the risk of severe personal injury:



- Inspect the mowing area. Remove stones, pieces of metal, glass, broken mowing blades, wire or other objects that could be thrown or flung by the cutting attachment, damage the cutting attachment or cause damage to property (e.g., parked vehicles, windows).
- Remove objects from the mowing area such as toys, balls, lawn furniture, landscape ornaments, flower pots, garden hoses, lawn equipment and anything



else that could impede the proper operation of the personal robot or become entangled in its mowing blade.

– Keep bystanders, especially children, and animals away from the mowing area during the personal robot's active mowing times and any other time the personal robot is in operation. Any person who enters the mowing area during operation of the personal robot must wear proper eye protection and proper protective equipment as specified in this instruction manual.

Never allow children or anyone else to ride on, approach or play with the personal robot. Keep children and other bystanders out of the working area while the personal robot is in operation.

Never allow the personal robot to operate if you know that animals or persons are or may be in the mowing area.

Use the Disabling Device to disable the device before assembling, transporting, adjusting, inspecting, cleaning, servicing, maintaining or storing the personal robot. Important! Please carefully read the section 8.2 of this instruction manual, titled "8.2 Disabling Device," for detailed instructions on how to disable the device.

To reduce the risk of injury from contact with the mowing blade, always activate the emergency stop:

- Before adjusting the cutting height, in case you have a model with a manual mowing height system.
 - Before cleaning the blades.

Lay your hand on the middle of the front screen (between the eyes of the robot) for 3 seconds, after you activated the emergency stop, to activate the disabling device:

- Before lifting, carrying or transporting the personal robot.
- Before removing blockages or objects near the mower deck or mowing blade.
- Before mounting, removing, inspecting or cleaning the mowing blade.
- Before reaching under the mower for any reason.
- · Before checking or cleaning the personal robot.
- Before storing the personal robot.

Stop and inspect the personal robot for damage if it hits a foreign object or exhibits unusual operating behavior, such as abnormal vibration or when making an abnormal sound. After disabling the personal robot, inspect the cutting assembly (mowing blade, blade shaft and blade mount). If the unit continues to function abnormally, take it to an authorized EEVE Partner for service before restarting and allowing the personal robot to operate.

To reduce the risk of severe personal injuries from unintentional starting:

– Never touch the mowing blade with your hands, feet or any other part of your body without first de-activating the machine. Lay your hand on the middle of the front screen (between the eyes of the robot) for 3 seconds, after activating the emergency stop, and confirm that the mowing blade has stopped.



A damaged or loose mowing blade may vibrate, crack, break or come off the personal robot, which may result in serious or fatal injury.

- Make sure the mowing blades are undamaged and properly tightened before starting work.
- If a mowing blade loosens after being properly tightened, stop work immediately and have the personal robot repaired by your authorized EEVE Partner.
 - Never use a personal robot with a loose or damaged mowing blade.

5. Docking Station

5.1 Introduction

This section contains the general safety warnings and instructions prescribed for the docking station and power supply. Additional important warnings and instructions are provided in subsequent sections of this manual.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS.



WARNING

When using the docking station and power supply, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury and property damage, including the following:

- 1) READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
- 2) Read and follow all instructions that are on the docking station and power supply or provided with the docking station or power supply.
- 3) Do not use an extension cord.
- 4) Reference the National Electrical Code, specifically for the installation of wiring and clearances from power and lighting conductors.
- 5) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- 6) Do not install or use within 19.5 feet (6 meter) of a swimming pool.
- 7) Do not use in a bathroom.
- 8) WARNING: Risk of Electric Shock. When used outdoors (the only usage allowed), install only to a covered Class A GFCI protected receptacle that is weatherproof with the power supply connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power supply and cord do not interfere with completely closing the receptacle cover.



- 9) WARNING: Risk of Electric Shock. Do not use metal objects near the docking station, at least not in the range of 6 cm near the docking station.
- 10) WARNING: Risk of Fire. Installation involves special wiring methods to run wiring through a building structure. Consult a qualified electrician.
- 12) WARNING: Not for use with receptacles that are weatherproof only when the receptacle is covered (attachment plug cap not inserted and receptacle cover closed).

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for the WCAWR Docking Station.

5.2 Warnings and Instructions



WARNING

To reduce the risk of fire, electric shock and other personal injury or property damage:

- Read and follow all cautionary markings on the docking station and personal robot and all instructions in this manual before using the docking station.
- Use the docking station only for charging the EEVE personal robot. Using the docking station for other purposes is prohibited and may lead to fire, explosion or electric shock, resulting in serious or fatal personal injury and property damage.
- Never use a damaged or improperly functioning docking station.
- Never use or charge a personal robot if the housing is cracked, deformed or excessively hot, if battery fluid is leaking from the personal robot, or if the battery is otherwise damaged. A damaged battery increases the risk of personal injury and property damage from short circuit, fire or explosion.
- Connect the power supply cord only to a properly covered Class A Ground Fault Circuit Interrupter (GFCI) receptacle that has an enclosure that is weatherproof with an attachment plug cap inserted or removed. Do not use with receptacles that are weatherproof only when the receptacle is covered (attachment plug cap not inserted and receptacle cover closed).
- Never plug the docking station into a power strip or an extension cord.
- Never use metal objects near 6 cm to the docking station.
- Do not operate a docking station or power supply that has received a sharp or heavy blow, has been dropped or is otherwise damaged or not functioning properly in any way.



 Do not attempt to repair, open or disassemble the docking station. There are no userserviceable parts inside.

The docking station and power supply heat up during the charging process. To reduce the risk of fire:

- Use the docking station only within an ambient temperature range of 26 °F to 110 °F (-3 °C to 45 °C).
- Do not operate the docking station on a combustible surface (e.g., paper, cardboard, textiles) or in a combustible environment.
- Allow the docking station and power supply to cool down normally. Do not cover them.

The docking station can produce sparks which may ignite combustible gases, liquids, vapors, dusts or other combustible materials. To reduce the risk of fire and explosion:

- Do not operate in a location where combustible gases, liquids, vapors, dusts or other combustible materials are present.
 - Do not operate in an indoor location.

Using a damaged power supply cord or plug may result in fire, electric shock and other serious personal injury or property damage. To reduce these risks:

- Check the power supply cord and plug before use and regularly thereafter for damage. If damaged, immediately disconnect from the electrical outlet.
- Unplug the power supply from the electrical outlet when the docking station is not in use.
- Never jerk the power supply cord to disconnect it from the electrical outlet. To unplug, grasp the plug, not the power supply cord.
- Do not use the power supply cord for any other purpose, e.g., for carrying or hanging up the power supply.
- Make sure the power supply cord is located or marked so that it will not be stepped on, tripped over, come in contact with sharp objects or moving parts, or otherwise be subjected to damage or stress.

In case of fire, or if the docking station or power supply emits smoke, an unusual smell, feels hot or appears abnormal in any other way:

- Immediately disconnect the power supply from the outlet and prepare to contact the authorities in the event of fire or explosion.



 Have the docking station and power supply inspected and repaired by an authorized EEVE Partner before use.



WARNING

To reduce the risk of fire, electric shock and other personal injury or property damage:

- Insert the power supply only into a covered Class A GFCI receptacle that has an
 enclosure that is weatherproof with an attachment plug cap inserted or removed. Do not
 use with receptacles that are weatherproof only when the receptacle is covered
 (attachment plug cap not inserted and receptacle cover closed.)
 - Never plug the power supply into a power strip or extension cord.
 - Never use the charging station indoors.

To reduce the risk of personal injury or property damage:

 Return the personal robot to the docking station and disconnect the power supply from the power receptacle if there is a threat of lightning strikes in the vicinity.



DANGER

Using a damaged power supply cord or plug may result in fire, electric shock and other personal injury or property damage. To reduce the risk of electrocution:



- Check the power supply cord and plug regularly for damage. If they become damaged, immediately disconnect from the electrical outlet. Never use a damaged power supply cord or plug.
- Do not abrade, crush, jerk, or otherwise abuse or misuse the power supply cord or plug. Protect it from heat, oil and sharp edges.
 - If the power supply cord or plug becomes damaged, replace the power supply.
 - Unplug the power supply cord when the docking station is not in use.
- Never yank or jerk the power supply cord to disconnect. To unplug, grasp the plug, not the power supply cord.
- Make sure the power supply cord is positioned and secured or marked so that it will not be stepped on, tripped over, come in contact with sharp objects, moving parts, or otherwise be subjected to damage or stress.



6. Maintenance, Repair, Self-repair and Storage

6.1 Warnings and instructions



WARNING

To reduce the risk of fire, electric shock or other personal injury and property damage:

- Users may carry out only the cleaning and maintenance operations described in this manual. Users must not attempt any other cleaning, maintenance or repair.
- Strictly follow the cleaning and maintenance instructions in the appropriate sections of this instruction manual.
 - EEVE recommends that all repair work be performed by authorized EEVE Partner.
 - Maintain and replace warning and instruction labels as necessary.
- EEVE provides technical documentation pertaining to various components of the personal robot. Users may utilize this information to perform self-repairs on their robots. However, such actions are undertaken entirely at the user's own risk. Please be aware that any self-repairs conducted on the robot will invalidate the warranty provided by EEVE. As such, EEVE expressly disclaims any liability for damages, losses, or claims arising from self-repairs. By opting to carry out repairs independently, the user assumes all responsibility for any resulting implications, including the loss of warranty coverage.

Unintentional starting may result in personal injury or property damage. To reduce the risk of personal injury and property damage from unintentional starting:

- Always activate the disabling device before assembling, transporting, adjusting, inspecting, cleaning, servicing, maintaining or storing the personal robot.

The mowing blade is the only user-serviceable part on the personal robot.

- Wear heavy-duty, non-slip work gloves made of leather or another wear resistant material when handling the mowing blade.
 - Replace the mowing blades when it becomes worn or damaged.
 - Tighten all nuts, bolts and screws after replacing the mowing blades.

Use of parts that are not authorized or approved by EEVE may cause serious or fatal injury or property damage.

- EEVE recommends that only authorized EEVE replacement parts be used for repair or maintenance.



To reduce the risk of electric shock:

- Unplug the power supply from the electrical outlet before inspecting the docking station.
- Regularly check the docking station and ensure that the insulation of the power supply cord and plug are in good condition and show no signs of aging (brittleness), wear or damage.
 - Replace the charging station if its power supply cord or plug is damaged.

Improper storage can result in unauthorized use, damage to the personal robot, its integrated battery and docking station, and an increased risk of fire, electric shock and other personal injury or property damage.

- Activate the disabling device.
- Allow the personal robot to cool down for approximately 1 hour before storing.
- Before storing, always unplug the docking station from the electrical outlet.
- Store the personal robot and docking station indoors in a dry, secure place that cannot be accessed by children or other unauthorized users. Only store the personal robot after the disabling device has been activated. Never charge the personal robot indoors.
- Store the personal robot only within an ambient temperature range of 32 $^{\circ}$ F to 122 $^{\circ}$ F (0 $^{\circ}$ C to 50 $^{\circ}$ C).

SAVE THESE INSTRUCTIONS

7. Operating principal

Willow and Willow Pro are personal robots, designed for autonomously performing work tasks. More specifically tasks such as guarding (a property, a yard), observing (flowers, birds...), seeking, analyzing, mowing. New work tasks can be provided via a software update or a hardware accessoires.

In order to localise itself on the map you need to show your environment to your personal robot by walking around your yard while your personal robot is following you or by driving around with your personal robot (see installation instructions).



Your personal robot will either use the visual borders (fence, soil, stone floor, pool, ...) use the grass border as the perimeter. On grass where there is no visual border it is possible to configure a digital perimeter by drawing the perimeter on the Satellite map (see installation instructions) or to use StarLight Beacons to create a digital perimeter.

8. Safety Features



WARNING

The personal robot is equipped with several devices to help reduce the risk of personal injury or property damage during use. If a safety device has a malfunction, do not operate the personal robot and take it to an authorized EEVE Partner to be repaired.

8.1. Emergency stop button

The emergency stop button is located in the middle of the screen, on the front. Between the two eyes (displays) of Willow.



To activate the emergency stop button, lay your hand on the front of the screen, between the eyes, the personal robot and its mowing blade (if active) will stop and the eyes will show 'sad eyes', as well as you will receive a message in the EEVE app in case your personal robot has internet access. The personal robot cannot be operated while the sad eyes are displayed.

To continue automatic operation:

Press the emergency button in the EEVE app.

Or place your personal robot on the charger station. When placed correctly on the



charger station your personal robot will release the emergency stop and resume automatic operation.



Please have a look at following video to see how you can activate the Emergency stop button: https://www.youtube.com/watch?v=hWfAT2U6IFA

As well as following video on how to deactivate the emergency stop button: https://www.youtube.com/watch?v=YlrXu-mcPzk

You have the option to purchase an emergency button marker, designed to highlight the emergency button on the personal robot for increased visibility to both you and any visitors.

If you anticipate other individuals coming near the robot, we highly recommend you install an emergency button marker. This accessory enhances safety by ensuring guick and easy access to the emergency stop function. To order an emergency button marker, please visit our online shop via eeve.com and browse our accessories section, or you can directly reach out to our support team at support@eeve.com.

There are two available options:

1. Emergency stop marker.



2. Golden button marker.

Visit our shop at <u>eeve.com</u> to order the markers or contact our support team via support@eeve.com.

8.2. Disabling device

To activate the disabling device, activate the Emergency stop button by placing your hand on the Emergency stop button. Remove your hand from the Emergency stop button until





at least 12 inches (30cm) away from the emergency button and lay your hand a second time on the button (front of the screen, between the eyes), for 3 seconds. The personal robot will now display 'OFF' on the eyes for several seconds.

Or, open the remote control web interface, open the Controls section and tap on 'shutdown'.

To deactivate the disabling device:

Place your personal robot on the charger station. When done correctly your personal robot will deactivate the disabling device and resume automatic operation. The personal robot will show 'happy eyes'.

8.3. Autopilot advanced safety

To prevent the personal robot from hitting or driving over objects / persons / animals the autopilot detects objects / humans / animals in front of the personal robot and safely navigates away from them. Nevertheless, do not attempt to place objects, persons or animals in front of the personal robot during operation.

8.4. Artificial Intelligence safety

Your personal robot only activates the mower above grass. To prevent the personal robot from mowing on non-grass surfaces or objects your personal robot detects and recognizes grass by using its Artificial Intelligence technology. The mower motor is only active when the personal robot is driving on grass.

8.5. Lifting protection



If you attempt to lift the personal robot during operation, its lift detection software will be activated and will stop the mowing blade if active, within a short period. Nevertheless, do not attempt to lift or reach under the personal robot for any reason without first activating the disabling device and ensuring that the mowing blade has stopped.

8.6. Tilt sensor

If the personal robot exceeds an incline of more than 24,23° (45 %), the personal robot will turn and continue mowing in a different direction. Exclude such inclines from the mowing area and trim the excluded area with a suitable line trimmer or other tool. In the event of a rollover, the wheel drive stops and the mowing blade will stop within a short period.

8.7. Anti-theft alarm

The anti-theft alarm is activated when the personal robot is removed from your yard.

- An alarm signal sounds (Optional for Willow's with serial number below 900).
- A message is sent to your smartphone, including a picture, in case your personal robot has internet access.
- Every second the position of the personal robot is send to your app in case the personal robot has internet access. For example, when you have a 3G/4G data subscription plan in place. You can view the location via the StarLight map.
- Contact <u>support@eeve.com</u> if you require more information about the 3G/4G option or about the alarm sound option.

If you replace the docking station or personal robot after completing the initial setup, you will need to inform your personal robot about it via the EEVE app on your smartphone before your personal robot will operate again.

8.8. Safety guards

There is a safety guard installed on the bottom side of the personal robot to prevent reaching under the personal robot. Do not remove the safety guard for any reason. The safety guard is installed to ensure your safety. Nevertheless, do not attempt to lift or reach under the personal robot for any reason without first activating the disabling device and ensuring that the mowing blade has stopped.

8.9 Mows only while driving forward

The personal robot safety measurements are at its best when driving forward (due to the camera position), for this, the personal robot only activates the mowing motor when driving forward.

8.10 Safety sign



The best way to prevent accidents is informing upfront anyone who approaches the personal robot. EEVE informs the person who buys Willow by clearly marking the safety icons on the bottom of Willow, highly visible when unboxing and installing Willow. Inform any visitor to the operating area of the personal robot by clearly mounting the EEVEsigns.

9. Installing the personal robot

EEVE recommends having an authorized EEVE Partner set up your personal robot.

9.1 Prepare the yard

1. Install a EEVE-sign at each entrance to the yard. By default, your EEVE box contains one EEVE-sign. In case you have more than one entrance to the yard buy extra EEVEsigns via <u>www.eeve.com</u> or contact support@eeve.com.

In case your yard is an open area, or part of it is an open area, place one EEVE-sign each 6 meter at the border of your yard, of the open area.

The EEVE-sign informs visitors that they can be recorded by the security camera, as well as it informs them that they should read this instruction manual before they approach the personal robot.

2. Before using your personal robot for the first time, mow the lawn using a conventional lawn mower. An ideal grass height to start with your personal robot is 1.6 in. (4 cm).

9.2 Installing the EEVE app on your smartphone

Download and install the app via the app store on your smartphone.





9.3 Installing the Docking Station





To reduce the risk of injury during installation and operation, read and follow the docking station safety precautions and instructions in this manual. To reduce the risk of eye injury, always wear close-fitting protective eyewear when installing the docking station.



WARNING

To reduce the risk of fire and electric shock, install the docking station's power cord in a waterproof power socket and ensure that there is no risk that it may be immersed in water or other liquids. Always install the docking station outdoors, on a stable, water-level surface.



WARNING

Do not operate the docking station on a combustible surface or in a location where combustible gases, liquids, vapors, dusts or other materials and substances are present.



WARNING

To reduce the risk of fire and electric shock, connect the docking station only to a covered Class A GFCI receptacle that has an enclosure that is weatherproof with an attachment plug cap inserted or removed. Do not use with receptacles that are weatherproof only when the receptacle is covered (attachment plug cap not inserted and receptacle cover closed). Ensure that the docking station is located in sufficient proximity to reach a covered Class A GFCI receptacle with the power supply cord. Do not use an extension cord. Use of extension cords are not authorized and increase the risk of electric shock and fire. Always ensure that the power supply cord is out of the cutting path of the personal robot.

There are 2 options to install the docking station:

- 1) Install the docking station on your terrace or non-grass, hard and flat surface (preferred installation method):
 - Place the docking station on the terrace or non-grass, hard and flat (water-level) surface.
 - Make sure there is a half-circle with 12 feet or 3 meter radius of clearance in front of the docking station.
 - Plugin the charger station power cord.

We recommend you to install the docking station on your terrace.



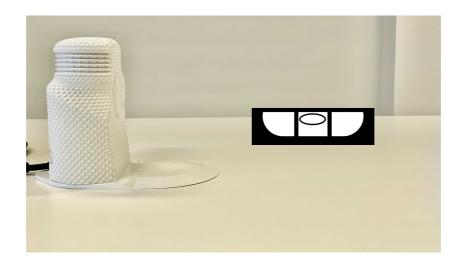
2) Install the docking station on the grass, in your mowing area:

- Place the docking station on the grass, at the edge of the grass.
- Make sure there is a half-circle with 12 feet or 3 meter radius of clearance in front of the docking station.
- Secure the docking station by inserting the 3 pins.
- Plugin the charger station power cord.

We strongly recommend purchasing the EEVE charging station base plate when setting up the docking station for your personal robot. This accessory ensures a secure and stable connection, promoting optimal charging performance. The base plate can be acquired via our accessories shop at eeve.com or by reaching out to our support team at support@eeve.com.

For any of the chosen installation option, make sure:

 The docking station is installed on a flat surface, with minimum 11 square feet or one square meter of flat area in front of the docking station. The flat surface needs to be 0° horizontal flat, water-level.



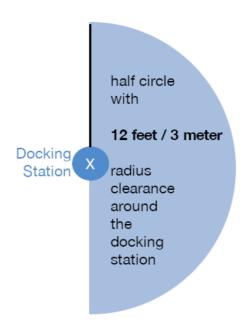


minimum 11 square feet or 1 square meter of flat area in front of the docking station.





• That there is a half-circle with 12 feet or 3 meter radius of clearance in front & sides of the docking station, at all times during operation. As shown in following illustration:



- Make sure there is always a free path (no obstacles) to the grass in front of the docking station.
- For longer service life, EEVE recommends installing the docking station in a protected, shady location.



 For ease of working and to receive the software updates at all times, EEVE recommends installing the docking station in a location with a strong WiFi reception.

To charge the personal robot:

- Lift the personal robot and place it 30 cm before the charger, with its back towards the charger.
- Push the personal robot backwards, into the docking station. The eyes of your personal robot light up after docking.



Please see following video on how to charge the personal robot: https://www.youtube.com/watch?v=YlrXu-mcPzk



9.4 Setup your Personal Robot - the onboarding procedure.

Open the app and follow the procedure in the app:

- Enter your email-address (= your unique ID for your personal robot).
- Verify your email-address by activation the verification email.
- · Enter your WiFi network information.

9.4.1 auto-docking test

During the onboarding process you need to run the auto-docking test to assure that your docking station is properly installed. Place your personal robot on the docking station and start the auto-docking test.

During the auto-docking test procedure your personal robot will drive 1,5 meter in front of the charging station, rotate 180° and dock. Your personal robot can do this up to 3 times if needed during an auto-docking test.

9.4.2 StarLight

StarLight offers you the tools to configure zones for your robot. You can configure zones such as grass, stone floor, narrow passages, digital perimeter, stepping stones, water zones, safe border mowing zones...

9.4.3 Map

Make a map to scan your garden environment.

9.5 Setup the work area for your Personal Robot

Your personal robot uses a digital perimeter to define her working area.

Your personal robot uses a map to navigate in your yard. On that map your personal robot uses a digital perimeter to understand where the perimeter of her work area is.

When she arrives at your home your personal robot doesn't has a map.

To create a map you need to show your personal robot her working area. You will do that during the last step of the onboarding process by following the procedure in the app.

After installing the docking station, and at the end of the onboarding procedure, you will be able to show your personal robot the way around your yard.

You can walk around your yard while your personal robot follows you or you can use the remote control joystick to drive around with your robot if you have a proper WiFi or 4G connection in your yard.



In case you prefer to walk with Willow, stay at a distance of 3 to 6 meter in front of your personal robot.

Walk around your yard as per the instructions in the EEVE app, stay at least 3 meters away from borders. Your personal robot will automatically detect the borders afterwards.

Since you control your personal robot (she follows you or you drive with her), make sure there are never obstacles or steps higher than 2 cm between you and your personal robot. Avoid driving over loose ground such as gravel or sand.



WARNING

Your personal robot will always drive in a straight line towards you when you walk with her and will not stop for obstacles. Be sure there are no obstacles, water, loose ground, pits or steps higher than 2 cm between you and Willow.

Once you completed a tour around your yard, walk or drive back to your charging station.

It is recommended that you walk or drive towards the docking station, in front of the docking station, in a straight line for at least 3 meter in front of the station. Walk or drive in a straight line towards the station.

Your personal robot will automatically dock on the station when you tap finish in the app. Once your personal robot starts to dock you can move away from the station.

Once your personal robot is docked, she will automatically create her map, this may take up to several hours or days, depending on the complexity of your yard.

In case your personal robot encounters an error during the process, your personal robot will stop and show 'sad eyes'. You need to restart the procedure when this happens. You can restart your personal robot by placing your personal robot on the docking station.

Once the map is created you have to define the work area of your personal robot.

The perimeter can be defined in 3 ways:

9.5.1 grass border

By default, your personal robot will search automatically for the grass border. The grass border will be the final perimeter for your personal robot unless you install a gateway to go to another zone. Your personal robot will automatically adjust her map when the grass border changes.

In case you have visual borders (non-grass) around your work area you can use the default perimeter. The default perimeter based on the grass border is always active, automatically.



9.5.2 fixed digital perimeter

You can set a fixed digital perimeter, via the map, to become the final perimeter for your personal robot. When you set the digital perimeter as the final perimeter your personal robot will not cross that digital perimeter.

Set the fixed digital perimeter during the onboarding process. Or set the digital perimeter afterwards by using the StarLight tool, either manually or by the StarLight Configurator.



WARNING

When using a fixed digital perimeter please take into account that the fixed digital perimeter has an accuracy of 300 cm. Your personal robot will only go over the fixed digital perimeter with maximum 300 cm, nevertheless, to reduce the risk of your personal robot mowing out of the fixed digital perimeter we advise you strongly to take 450 cm safety margin into account when using the fixed digital perimeter function.

9.5.3. StarLight Beacon perimeter

In case you need to achieve centimeters precision perimeter to determine your work area you can place StarLight Beacons at every 2 meter on the location where you want to achieve a centimeter precision perimeter.

You can buy StarLight Beacons via our accessoires shop at eeve.com or by contacting our support team via support@eeve.com.



10. Charge the personal robot

Read and follow the personal robot and docking station safety precautions and instructions in this manual. Be alert for signs that the integrated battery may be damaged. To reduce the risk of personal injury from short circuit, fire and explosion, never use or charge a personal robot if the hood or housing is cracked, deformed or excessively hot, if battery fluid is leaking from the battery compartment, or if the battery is otherwise damaged.



WARNING

To reduce the risk of electric shock, charge the personal robot only in the docking



station. Do no remove the battery or attempt to charge it using an external power supply.

10.1 Automatic charging

The personal robot will begin charging automatically when it docks at the charging station at the end of the mowing operation and its energy level is below a certain value.

10.2 Starting charging manually

- Lift the personal robot and place it 30 cm before the charger, with its back towards the charger.
- Push the personal robot backwards, into the docking station.
 The eyes of the personal robot light up after docking.



Please see following video on how to charge the personal robot manually: https://www.youtube.com/watch?v=YlrXu-mcPzk

During charging the personal robot will show the battery status via eye animations or you can view the precise percentage via the remote control web interface.

Charging time depends on a number of factors, including battery condition and the ambient temperature. Exposure to direct sunlight can lead to increased temperatures inside the machine and battery compartment, which can increase battery charging times.

11. Active working time

11.1 Mowing time

After initial setup your personal robot automatically calculates the needed mowing time. This depends on the size of the mowing area. Your personal robot will only mow the required work hours to maintain your lawn.

Your personal robot will not mow when it is raining because that will damage your grass. Your personal robot automatically takes rain hours into her calculation and updates her mowing schedule automatically.

Via the settings you can change the mowing frequency to none, less, more or continous in case the mowing time doesn't match the speed of which your grass grows in normal mode.

11.2 Active safeguarding time



Your personal robot safeguards your yard when she is at the docking station. Your personal robot is deactivated by default, you need to set the safeguard time via your personal robot settings menu.

During the safeguard time your personal robot will activate her infrared vision and search for people. When she detects a person during that timeframe, she will capture a photo and send it to the EEVE application on your smartphone.

The EEVE application will receive an alert message and ring a notification to you. You will be able to see the picture via your EEVE application.

12. During operation



WARNING

Keep bystanders away from the mowing area during active times. Never allow children to approach or play with the personal robot during active mowing times. Keep children out of the mowing area while the mower is in operation. Never allow the personal robot to mow if you know that animals or persons are or may be in the mowing area or vicinity.

The personal robot independently leaves the docking station and mows the lawn during the active mowing times. The mowing plan is determined based on the size of the mowing area calculated during installation or during the creation of a new mowing plan.

When the battery is discharged, the personal robot automatically returns to the docking station.

13. Adjusting the mowing height

There are two different Willow and Willow Pro versions, one with a manual mowing height adjusting system and one with an electronic mowing height adjusting system, called the Da Vinci's Pencil. Willow's from serial number 700 onwards have the Da Vinci's Pencil.

13.1 manual height adjustment

To adjust the mowing height, you need to replace the mowing disc. There are following disc available:

- For a mowing cutting height of 1.53 inch or 3,9 cm.
- For a moving cutting height of 1.77 inch or 4,5 cm (installed by default).
- For a mowing cutting height of 1.97 inch or 5,4 cm.





WARNING

To reduce the risk of serious personal injury or death, always disable the device before adjusting the cutting height of the mowing blade.

NOTICE

To avoid overloading the motor, avoid setting the cutting height too low in tall grass. If the motor speed begins to slow, raise the cutting height.



WARNING

Always wear heavy-duty, non-slip work gloves made of leather or another wear resistant material when adjusting the mowing height.

How To?

- 1. Hold the mowing disc with one hand (! Always wait heavy-duty gloves) and unscrew the nut in the center of the mowing disc with your other hand.
- 2. Remove the nut and the mowing disc. Make sure the pin stays inside the mowing motor shaft.
- 3. Place the new disc and align the pin so that the pin goes inside the mowing disc.
- 4. Hold the mowing disc with one hand (! Always wait heavy-duty gloves) and screw the nut in the middle of the mowing disc with your other hand.



13.2 electronic height adjustment - the Da Vinci's Pencil

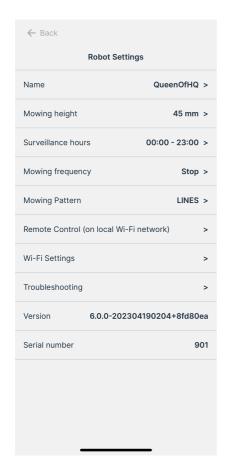
In case you have a robot serial number higher then 700 you can use the electronic height system to adjust the height.

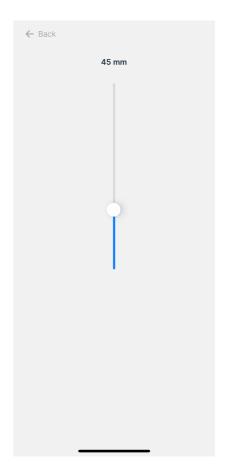
You can adjust the height via the robot settings in the EEVE app.

Open the settings and tap on Mowing height.

Adjust the height.







14. Transporting your personal robot

When transporting the personal robot:

- Always activate the disabling device. Important! Please carefully read the section 8.2 of this instruction manual, titled "8.2 Disabling Device," for detailed instructions on how to disable the device.
- When transporting the personal robot by hand, hold it side handles (above the wheels) with the mowing blade pointing away from you.
- When transporting the personal robot in a vehicle, position and secure the personal robot to prevent turnover, impact and damage. Fasten the machine using suitable fastening materials (straps, ropes).
- Secure components being transported (e.g., docking station, small components) to prevent turnover, impact and damage.
- Always use the original packaging to transport your personal robot.

A Note on Battery Transport



The battery inside this personal robot complies with the requirements set forth in UN-Manual ST/SG/AC.10/11/ Rev.5/Part III, Subsection 38.3.

Commercial air, vessel and ground transportation of lithium-ion cells and batteries contained in equipment is regulated. The battery inside this personal robot is classified as a UN 3481, Class 9, packaging group II product. Shipping it requires compliance with all applicable shipping regulations. Check with the ground, vessel, air cargo or passenger airline to determine if transport is prohibited or subject to restrictions or exemptions prior to shipping or travel.

Normally, no further conditions have to be met by the user in order to transport this personal robot by road to the operating site. Check and comply with any special regulations that may apply to your situation.

15. Storing the personal robot and the docking station

Both the personal robot and the docking station are designed to stay out all-yearlong while the personal robot is in operation. The personal robot is not a seasonal machine as conventional lawn mowers / robotic mowers for example, because the personal robot performs more functions than moving alone. For example safeguarding.



WARNING

Any time the personal robot is not available for operations, store the personal robot indoors in a dry, secure place that is inaccessible to children and other unauthorized users. Improper storage can result in unauthorized use and damage to the personal robot. Never place or store objects on the personal robot. Only store the personal robot after activating the disabling device. Never charge the robot indoors.



WARNING

High temperatures may cause the integrated battery to generate heat, rupture, leak, ignite or explode, resulting in severe or fatal personal injury or property damage. Use and store the personal robot only within an ambient temperature range of 32 °F to 122 °F (0 °C to 50 °C). Never store the personal robot inside a vehicle in hot weather.

When storing the personal robot for three months or longer:

- Charge the battery fully.
- Activate the disabling device.
- Clean the personal robot.



 Store the personal robot and docking station indoors in a dry and secure location, out of the reach of children and other unauthorized persons.

NOTICE

Charging the battery fully before storage will help prevent damage and prolong its useful life.

16. Cleaning



WARNING

To reduce the risk of personal injury from unintended activation, activate the disabling device. Disconnect the power supply from the electrical outlet before carrying out any cleaning work. Users of this personal robot should carry out only the cleaning described in this manual. To help prevent injuries, always wear heavy-duty work gloves when handling the mowing blade.

To clean the personal robot and the docking station:

- · Activate the disabling device.
- Place the personal robot on a firm, level and flat surface for cleaning the upper side of the personal robot. Protect the personal robot by using a protection means by laying cardboard or fabric on the flat surface.
- To clean the underside of the machine (mowing blade, mowing deck), tilt the personal robot onto its front screen. Make sure the screen rests on fabric or cardboard to avoid scratches on the screen. Scratches on the screen may hamper the working of the device.
- Remove accumulated clipping deposits in the housing and in the mowing deck.
- Clean off dirt with a brush or a cloth. Do not use detergents or harsh solvents, which may damage or weaken polymer components.
- Clean the docking station with a brush, a slightly dampened cloth or resin solvent. Do not use detergents.
- Remove grass residues.
- Never use a hose or a pressure washer to clean the personal robot or docking station or spray them with water or other liquids.

NOTICE

Never use a hose or a pressure washer to clean the personal robot or docking station. Spraying the mower or docking station with water or other liquids could lead to permanent damage.



17. Inspection and maintenance



WARNING

Never use a dull or damaged mowing blade. Working with a dull blade leads to increased vibration, unsatisfactory cutting results and increased wear, in particular if you use the personal robot on sandy ground or use it frequently under dry conditions. A damaged mowing blade may vibrate, crack, break or come off the personal robot, which may result in serious or fatal injury or property damage. Make sure the mowing blade is sharp and in good condition before starting work.



WARNING

Never attempt to sharpen the mowing blade. The mowing blade must be replaced when it becomes dull, or every 200 operating hours, whichever occurs first. EEVE recommends having your Willow's mowing blade replaced by an authorized EEVE Partner to reduce the risk of severe or fatal injury from an improperly mounted mowing blade.



WARNING

Always wear heavy-duty, non-slip work gloves made of leather or another wear resistant material.

17.1 Inspection and maintenance intervals

The following maintenance intervals are examples and apply in standard operating conditions. Actual use and your experience will determine the frequency of inspection and maintenance.

On days with active times:

- Visually inspect the general condition of the machine and the docking station.
- Inspect the mowing area. Remove stones, pieces of metal, glass, wire or other objects that could be thrown or flung by the cutting attachment or interfere with the operation of the mower. Examples of common objects that could interfere with mowing or damage the mowing blade include garden furniture, balls, garden hoses, landscape ornaments, flower pots, toys and other lawn equipment. Objects hidden or buried in the turf (e.g., sprinkler heads, water valves, electrical wires) must be avoided. Ensure that these objects are not in the mower's path before starting operation of the personal robot.
- Check that the battery is charged.

Weekly:



- Clean the personal robot and the docking station.
- Visually inspect the mowing blades, blade fastening and mowing deck for damage (notches, cracks, fractures, etc.) and wear.

Every 200 hours:

Replace the moving blade.

Annually:

 Have the personal robot and the docking station inspected and maintained by an authorized EEVE Partner after the mowing season ends.

17.2 Inspect the moving blades.



WARNING

The mowing blade has sharp edges. If it contacts your flesh, it will cut you, even if it is not moving. Always wear heavy- duty work gloves when mounting or otherwise handling the mowing blade.

To inspect the mowing blades (always use heavy-duty gloves):

- Activate the disabling device.
- Place the personal robot on a firm, level and flat surface for cleaning the upper side of the personal robot. Protect the personal robot by using a protection means by laying cardboard or fabric on the flat surface.
- Tilt the personal robot onto its front screen. Make sure the screen rests on fabric or cardboard to avoid scratches on the screen. Scratches on the screen may hamper the working of the device.
- Carefully clean the mowing deck and mowing blade (always use heavy-duty gloves).
- Take a regular A4-paper and slide it along each blade and see if the blade cuts through the paper or not.
- Replace the blade if it doesn't cut through the paper.



17.3 Replace the moving blades.



WARNING

A cracked, damaged or worn-out mowing blade may shatter at high speeds and cause serious or fatal injury. To reduce risk of injury from broken parts, check condition of each mowing blades before mounting at regular short intervals thereafter. Do not mount a worn, broken or damaged mowing blade.



WARNING

Each mowing blade has sharp edges. If it contacts your flesh, it will cut you, even if it is not moving. Always wear heavy- duty work gloves when mounting or otherwise handling the mowing blade.

To replace one of the mowing blades (always use heavy-duty gloves):

- Activate the disabling device. Important! Please carefully read the section 8.2 of this instruction manual, titled "8.2 Disabling Device," for detailed instructions on how to disable the device.
- Place the personal robot on a firm, level and flat surface for cleaning the upper side of the personal robot. Protect the personal robot by using a protection means by laying cardboard or fabric on the flat surface.
- Tilt the personal robot onto its front screen. Make sure the screen rests on fabric or cardboard to avoid scratches on the screen. Scratches on the screen may hamper the working of the device.
- Hold the mowing disc with one hand (always use heavy-duty gloves).
- Remove the fastening screw of a blade with your other hand.
- Remove the blade, including the fastening screw.
- Mount the new blade.
- Use a new fastening screw to fixate the blade. Turn the fastening screw until it is fixated and you cannot turn it anymore with normal force.



Blade

Blade



18. Troubleshooting Guide

18.1 Messages

Messages provide information on active errors, faults and recommendations. They are displayed in the application on your smartphone.

You will receive a notification for each message. You can view the message on the message wall of your EEVE application.

Message	Possible cause	Remedy
Please place your personal robot in the range of your WiFi.	Your personal robot needs to update its software.	Place your personal robot in the range of your WiFi. Or install a 'More Connectivity' package, contact support@eeve.com for more information.
Your personal robot has been updated.	Your personal robot installed a software update.	Read more about the software update in the message.
Emergency stop.	The emergency button was used to disable the device.	Open the message and tap 'continue' in the message. OR Manually place your personal robot on the Docking station.
Battery too low.	Your personal robot didn't reach the docking station on time.	Place your personal robot manually on the Docking station.
Temperature to high.	The temperature in your personal robot is too high.	Allow your personal robot to cool down. Place your personal robot on the docking station or place your personal robot in the shadow to cool down.
Temperature to low.	The temperature in your personal robot is too low.	Let your personal robot warm up at ambient temperature.
Camera blocked.	There is dirt on the screen of the camera.	Clean the screen.
Stuck.	Your personal robot has become stuck.	Level out any uneven areas (holes, depressions) in the mowing area. Clean the personal robot. Open the message and tap 'continue' in the message. OR Manually place your personal robot on the Docking station.

Message	Possible cause	Remedy
Lift detection.	your personal robot has been lifted.	Place the personal robot on the ground. Open the message and tap 'continue' in the message. OR Manually place your personal robot on the Docking station.
Rollover.	A rollover has been detected.	Place the personal robot on the ground. Open the message and tap 'continue' in the message. OR Manually place your personal robot on the Docking station.
Rain detected.	Rain has been detected.	No action needed; your personal robot will return to the charging station if not yet docked.
Heavy rain detected.	Heavy rain has been detected.	No action needed, your personal robot will stop the operation and wait until the rain stops to return back to the docking station. Alternatively you can manually place your robot on the charging

18.2 Personal robot

Always activate the disabling device before carrying out any inspection, cleaning or maintenance.

Condition	Possible cause	Remedy
The personal robot doesn't connect to the WiFi during the initial	Wrong WiFi network name (SSID) or wrong password.	Start over, enter the correct WiFi settings. Be aware that WiFi settings are case sensitive.
The personal robot drives into my flower bed or gets stuck in the border.	your personal robot doesn't recognize the flower bed or grass border.	Clean weeds and grass out of the border. Contact support@eeve.com to capture images from your flowerbed and have Willow trained to recognize the flowerbed.
The personal robot drives over obstacles.	your personal robot doesn't recognize the obstacle.	Contact support@eeve.com to capture images from the obstacle and have Willow trained to recognize the flowerbed.



Condition	Possible cause	Remedy
The personal robot doesn't return to the docking station.	your personal robot has wrong data in its map, or the charging station has been moved.	Reset the map via the app and create a new map. Or contact support@eeve.com for help.

18.3 Eyes

By looking at your personal robot's eyes you can see following message:

Display - Eyes	Condition	Possible remedy
	Your personal robot is showing 'Sad Eyes'. This means that the previous process went wrong.	Verify your WiFi settings and retry. Be aware that WiFi settings are case sensitive.
	 A) In case this happens during initial setup it might mean: 1. That your personal robot couldn't connect to the WiFi. 2. That your personal robot couldn't follow you during the setup of the map. 	2. Manually place your personal robot on the docking station and retry.B) Manually place your personal robot on the docking station or tap 'continue' via the EEVE application on your smartphone.
	B) In case this happens during operations it means that your personal robot generated a safety stop.	
	Your personal robot is searching for: A) A QR code in case you are setting up your app / WiFi connection. B) You, or a human to follow around the yard to determine the map.	A) Show the QR code. B) Go stand in front-of Willow, at +-4 meter distance.
	Your personal robot has read the QR code and is now trying to connect to the WiFi.	Wait until your personal robot finish.
♠♠	Your personal robot is successfully connected to your WiFi. Your personal robot is now setting up the connection with the EEVE server.	Wait until your personal robot finish.



Display - Eyes	Condition	Possible remedy
&	Your personal robot is connected to the EEVE server.	Wait until your personal robot starts to scan the environment. Go stand in front of your personal robot.
)	Your personal robot is on the docking station and charging. Your personal robot is charged between 0% and 20% of the total battery capacity.	-
	Your personal robot is on the docking station and charging. Your personal robot is charged between 20% and 50% of the total battery capacity.	_
	Your personal robot is on the docking station and charging. Your personal robot is charged between 50% and 75% of the total battery capacity.	_
	Your personal robot is on the docking station and charging. Your personal robot is charged between 75% and 100% of the total battery capacity.	-
<u> </u>	These are Willow's Happy Eyes. This means all is well.	-
	In case your personal robot is on the docking station it means the battery is fully charged.	
	In case your personal robot is following you to make the digital perimeter it means all is well.	
	In case your personal robot is at work it means all operations are perfect.	



Display - Eyes		Condition	Possible remedy
OFF	OFF	When you activate the disabling device your personal robot will completely shut down. During shutdown you will see OFF in the eyes of Willow. Once the message has disappeared your personal robot is completely shut down.	Manually place your personal robot on the docking station to revive your personal robot.

19. Specifications

19.1 Willow

Maximum mowing area size: 0.39 acre (1500 m2)

Cutting width: 7.09 in. (18 cm)

Model with manual cutting height: 1.41 in. to 2.13 in. (36 mm to 54 mm)

Model with electric cutting height: 0.98 in. to 3.78 in. (25mm to 96 mm)

Speed of mowing blade: 4200 RPM

Weight: 28.66 lbs. (13 kg)

Insulation: Class III

 Protection rating: IPX4 (protected against spraying or splashing water from all directions)



- •Permissible ambient temperature range during use: 26.6°F to 113°F (-3°C to 45°C).
- •Permissible ambient temperature range during storage: 32°F to 122°F (0°C to 50°C).

19.2 Willow Pro

Maximum mowing area size: 0.9 acre (3.600 m2)

Cutting width: 7.09 in. (18 cm)

• Model with manual cutting height: 1.41 in. to 2.13 in. (36 mm to 54 mm)



Model with electric cutting height: 0.98 in. to 3.78 in. (25mm to 96 mm)

Speed of mowing blade: 4200 RPM

Weight: 30.86 lbs. (14 kg)

· Insulation: Class III

 Protection rating: IPX4 (protected against spraying or splashing water from all directions)

• Permissible ambient temperature range during use: 26.6°F to 113°F (-3°C to 45°C).

• Permissible ambient temperature range during storage: 32°F to 122°F (0°C to 50°C).

19.3 Docking station

Input Voltage (voltage range): 90 ~ 264VAC

Supply current:

0.95A/115VAC 0.5A/230VAC

• Frequency: 50/60 Hz

Insulation: Class II (Double Insulation)

Protection rating for power body: IP68

Permissible ambient temperature range during use: 26.6°F to 113°F (-3°C to 45°C).

• Permissible ambient temperature

Symbol	Explanation
V	Volt
Hz	Hertz
Α	Ampere
Ah	Ampere hour
W	Watt
Wh	Watt hour
AC	Alternating current
IP	Degree of electrical protection

range during storage: 32°F to 122°F (0°C to 50°C).



19.4 Symbols used on the personal robot and docking station



EEVE products must not be disposed of in the household trash, but only in accordance with local, state and federal laws and regulations and as provided in this manual.

19.5 Declaration of Conformity

Type / Model	Willow and Willow Pro
Brand	EEVE
Lot	Serial number from 2000 onwards

Complies with the following EU directives:

Directives number:	Description
2011/65/EU	RoHS directive
2014/53/EU	Radio equipment directive
2006/42/EU	Machine directive

and that the following harmonized standards and / or technical specifications have been applied:

ETSI EN 300 328 V2.2.2

ETSI EN 301 893 V2.1.1

ETSI EN 303 417 V1.1.1

ETSI EN 303 413 V1.2.0 (DRAFT)

ETSI EN 301 511 V12.5.1

ETSI EN 301 908-2 V13.1.1

ETSI EN 301 908-13 V13.1.1

ETSI EN 301 908-1 V13.1.1

ETSI EN 301 489-17 V3.2.4

ETSI EN 301 489-19 V 2.2.0 (DRAFT)

ETSI EN 301 489-52 V 1.1.2 (DRAFT)

ETSI EN 301 489-1 V2.2.3



20. Replacement parts and equipment

Consult an authorized EEVE Partner for help.

Do not change or modify this product in any way unless specifically allowed in this manual, since this could void your authority to operate it.

EEVE recommends the use of genuine Willow replacement parts. Genuine Willow parts can be identified by the Willow part number, the EEVE logo and, in some cases, by the Willow parts symbol.

Replacement parts:

- Mowing blades.
- Mowing disc: H36, H45 or H54.

Accessories:

- 'FindMyWillow': anti-theft search location option.
- 'More Connectivity': 4G mobile data connection.

21. Disposal



Disposal of the Personal robot and the Docking Station.



WARNING

Even if believed to be discharged, the lithium ion battery integrated into the personal robot may never totally discharge and still may deliver a dangerous short circuit current. Handle a discharged/depleted battery carefully. If damaged or exposed to high temperatures, it may leak, generate heat, catch fire or explode.

EEVE products must not be thrown in household trash or disposed of except as outlined in this manual.

 Take the Willow to an authorized EEVE Partner to have its integrated battery removed and recycled.



- Take the docking station, accessories and packaging to an approved disposal site for environmentally friendly recycling.
- Observe all federal, state and local disposal rules and regulations.
- Contact your authorized EEVE Partner for the latest information on disposal and recycling.

22. Privacy

Your personal robot uses a camera to navigate and understand its environment.

22.1 Processing of camera data

The video feed is processed on the personal robot itself. For the operation of your personal robot there is no video data transferred to any other device, not via internet, nor via a local network such as WiFi.

On specific events or occasions it is possible that your personal robot automatically collects video data. The video data can be used by EEVE to train the Artificial Intelligence system. In case there is a person seen on the video data, the personal robot will blur the person on the video data before sending it to EEVE. The automated collected video data can only be used for the Artificial Intelligence system or by the customer support team to research a specific situation upon your request, see 22.3 Remote intervention.

22.2 Processing of machine data

To monitor the state of your personal robot the personal robot captures machine information such as power usage, temperatures, humidity, CPU/memory usage, 2D-map information, uptime, machine states, performance of map localizations, motor information, grass coverage performance.

The machine data contains no personal information, except for the link with your Willow serial number.

The machine data is transferred to our cloud server over a secured internet connection.

The machine data is used to measure the performance of all the personal robots in order to improve the service level of all personal robots.

The machine data is used to generate preventive alerts on an individual base, in order to help you achieve the best performance with your personal robot.

22.3 Remote intervention

We will contact you and request your permission in case it is needed to perform a remote intervention whereby one of EEVE team members can take over your personal robot remotely.





Only when you give your permission, either via telephone or mail, one of our EEVE team members can remotely access your personal robot.

Allowing one of EEVE team members to take over your personal robot will allow EEVE team member to view through the camera of your personal robot and to navigate with it remotely. As well as to record video data to collect new data to train the Artificial Intelligence network to recognise new things.

This will only be allowed for a specific, short timeframe. The timeframe will depend on the needed investigation work.

EEVE team member will confirm when the connection is closed and the team member no longer has access to your personal robot. This by mail or by telephone.

Any remote connection that a EEVE team member makes to a personal robot is registered at our offices. The name of EEVE team member, the serial number of the personal robot, the date and time of the connection and the duration of the connection is logged.

23. Limited Warranty

This product is sold subject to EEVE warranty policy, available at https://www.eeve.com/en/general-terms/.

24. Addresses

EEVE BV Eugène Bekaertlaan 61 B-8790 Waregem Belgium