

GS-Phantas S1

MAINTENANCE GUIDE



TABLE OF CONTENTS

TABLE OF CONTENTS	2
INTRODUCTION	3
DISCLAIMER & RESPONSIBILITY.....	3
1. MAINTENANCE INSTRUCTIONS	4
1.1. Cleaning the Exterior	4
1.2. Cleaning Dust Tank	6
1.3. Cleaning Wastewater	8
1.4. Cleaning/Replacing Air Filter	10
1.5. Cleaning/Replacing Side Brush	11
1.6. Cleaning/Replacing Roller Brush Assembly.....	12
1.7. Cleaning/Replacing Dust Collector	13
1.8. Cleaning Squeegee	14
1.9. Cleaning/Replacing Rubber Strips	15
2. APPENDIX A: TECHNICAL SPECIFICATION.....	18

INTRODUCTION

The Cleaning Robot Phantas S1 by Gausium (alias "Gaussian Robotics"), Singapore, is a commercial floor cleaning robot that boldly integrates 4-floor cleaning modes, which grants it unrivaled versatility and usability for cleaning spaces with diverse types of flooring, both hard and soft.

DISCLAIMER & RESPONSIBILITY

Any reproduction, copying, publication, as well as further distribution, or public display of materials contained in the present document (whether in full or in part), shall not be allowed until appropriate permission of the Copyright owner is obtained. Any unauthorized usage of materials contained herein may lead to civil liability and criminal prosecution under applicable laws.

The product specifications and information mentioned herein are for reference only and are subject to changes without prior notice. Unless otherwise specified, this document is only employed as guidance for operation.

To the maximum extent permitted by applicable law, the product described (including its hardware, software, firmware, etc.) in this document is provided **AS IS**, which may have flaws, errors, or faults.

AROS makes no warranties of any kind, express or implied, including but not limited to, merchantability, the satisfaction of quality, fitness for a particular purpose, and non-infringement of third-party rights. In no event will AROS be liable for any special, incidental, consequential, or indirect damages resulting from the use of our products and documents.

Before using this product, please thoroughly read and understand the contents of this document and related technical documents that are published online, to ensure that the robot is used on the premise of fully understanding the robot and related knowledge. Please use this document with technical guidance from professionals. Even if following this document or any other related instructions, damages or losses will be happening in the using process, AROS shall not be considered as a guarantee regarding all security information contained in this document. The user has the responsibility to make sure to follow the relevant practical laws and regulations of the country so that there is no significant danger in the use of the robot.

In the event of any questions, please refer to ASBIS Robotic Solutions' Tech Support Department.

Copyright © 2023 ASBIS Robotic Solutions (AROS). All rights reserved.

1. MAINTENANCE INSTRUCTIONS

1.1. Cleaning the Exterior

Switch to Manual Mode

1. Click **Manual mode**.
2. Click **Push**.
3. Click **Confirm the switch**.



4. Push it manually to the maintenance area.



5. Press **OPEN** to open the top lid.



6. Use a dry and lint-free wipe to smoothly clean lidar, cameras, and sensors.



7. Clean the lens of the laser on the anti-collision shell and PSD-side tracking sensor.



8. Wipe the screen and top lid.



1.2. Cleaning Dust Tank

Switch to Manual Mode

1. Click **Manual mode**.
2. Click **Push**.
3. Click **Confirm the switch**.



4. Push it manually to the maintenance area.



5. Press **OPEN** to open the top lid.



Take out the dust tank

1. Remove all assemblies from the dust tank.



2. Remove the top cover of the dust tank and take out the dust bag.



NOTE:

Lift the white sheet to seal the dust bag to prevent dust from spraying out.



3. Pull the sealing strip out and empty the trash.



1.3. Cleaning Wastewater

Switch to Manual Mode

1. Click **Manual mode**.
2. Click **Push**.
3. Click **Confirm the switch**.



1. Push it manually to the maintenance area.



2. Press **OPEN** to open the top lid.



Remove the wastewater tank

1. Remove all assemblies from the wastewater tank.



Clean the filter

- Open the cover of the wastewater tank, remove the filter from it, and dump the garbage into the waste basket.



Pour out wastewater

- Dump the wastewater into the sewer or cleaning pool, rinse the wastewater tank with clean water (you can clean the dirt inside the tank via a fur brush), and place the tank into the robot.



1.4. Cleaning/Replacing Air Filter

1. Open the lid to find the air filter.



2. Press the button from left to right to open the filter shell.



3. Take out the filter, clean it, or replace it with a new one.



1.5. Cleaning/Replacing Side Brush

1. Open the side window.



- Grab the rubber boot and pull down to remove the side brush. **Do not hold the bristles!**



- Clean the side brush with wipes or replace it.
- Align the magnetic catch and push the side brush up to install it.



1.6. Cleaning/Replacing Roller Brush Assembly

- Open the side window.



2. Press the button and take the roller brush assembly out.



3. Take the front and rear brushes off the assembly and clean them with a steel wire bristle brush or replace them.



1.7. Cleaning/Replacing Dust Collector

1. Open the side window.



2. Press the button and take the dust collector out.



3. Empty and clean or replace it.



1.8. Cleaning Squeegee

1. Use wet wipes to clean the surface of the inner and outer strips.



2. Clean the gap between the inner and outer strips.



3. Use wet wipes to clean the exterior.



1.9. Cleaning/Replacing Rubber Strips

Switch to Manual Mode

1. Click **Manual mode**.
2. Click **Push**.
3. Click **Confirm the switch**.



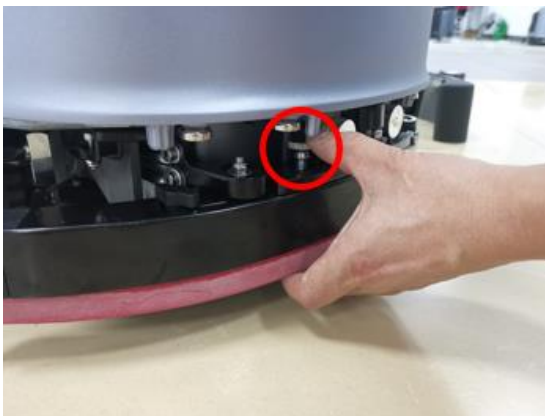
4. Push it manually to the maintenance area.



5. Open the side protection skirt first, press down, and remove the shell of the squeegee, then move the lid to the left side to take it off.



6. Press the silver button on the squeegee to pull the 2 rubber strips out.
7. Clean and wipe them.



8. For installation, insert the inner strip (the shorter one) first.
9. Press and hold the silver button and insert the strip into the slot.
10. Confirm it is well-locked.

11. Install the outer strip in the same way.



12. Install the shell back.

13. Push the shell upward and cover the side strip.



2. APPENDIX A: TECHNICAL SPECIFICATION

Parameter Type	Parameter	Value
DIMENSIONS	Length	540mm 21.3 in
	Width	440mm 17.3 in
	Height	617mm 24.3 in
	Net Weight	46kg 101 lb
	Vacuuming/Sweeping Width	410mm 16.2 in
	Scrubbing Width	330mm 13 in
CLEANING	Cleaning Efficiency	400 - 700m ² /h 4,305 - 7,534 ft ² /h
	Water Tank Capacity	Coverage > 1000 m ² > 10,763 ft ²
	Dust Bag	8 L 2.1 gal
	Trash Can	0.7 L 0.2 gal
MOVEMENT	Gradeability	8°
	Max. Cleaning Speed	0.8 m/s 1.8 mph
	Min. Passable Width	520mm 20.5 in
	Min. Passable Height	650 mm 25.6 in
	Min. Turn-around Width	620 mm 24.4 in
	Min. Height of Detected Obstacles	10 mm 0.39 in
	Edge Cleaning Capability	0 mm
ELECTRICAL	Runtime	Scrubbing 5h, Vacuuming 5h Sweeping 18h, Dust Mopping 10h
	Charging Time	2 hours
	Sound	< 65dB
SENSING	Standard	LiDARs, 3D Depth Cameras, RGB Camera Anti-drop Sensor, Anti-collision sensor
ACCESSORIES	Optional	Charging Dock, Water Tank Trolley