

Autonomous Robot Charging Dock

Installation, Operation & Maintenance Manual



Conductive charging station for compatible autonomous floor-cleaning robots

Dual charging contacts | Guided docking platform | Integrated AC power cord

Read this manual before installation or operation. Electrical ratings and robot compatibility must be verified against the label and documentation of the final production unit.

1. Product Overview

The Autonomous Robot Charging Dock provides a fixed charging location for compatible robotic cleaning equipment. A robot approaches the low-profile base, aligns with the docking housing, and establishes conductive charging through the two raised metal contacts. The integrated power cable connects the station to AC mains power.

Part	Function
Dual charging contacts	Raised conductive terminals provide the electrical interface to the robot.
Guided docking base	Contoured floor platform helps position the robot during final approach.
Docking housing	Provides the rear alignment surface and contains the station electronics.
Top docking feature	Upper assembly supports the station's robot-location/docking interface; exact sensing method is model dependent.
Integrated AC cable	Provides mains power to the charging station.



2. Installation

Step 1 - Choose the location. Install the dock indoors on a hard, dry, flat and level floor. A stable wall-side location is recommended so the station cannot shift during docking.

Step 2 - Clear the docking zone. Keep the area directly in front of the dock free of cables, rugs, furniture and other obstacles. Provide sufficient open space for the robot to approach and correct its alignment.

Step 3 - Connect AC power. Connect the station only to a supply matching the rating label on the actual product. Keep the cord routed away from the robot's travel path.

Step 4 - Inspect the contacts. Verify that both metal charging contacts are clean, dry and unobstructed.

Step 5 - Confirm stability. The dock must remain stationary when the robot enters the charging position.



Installation Warning

Do not use the charging dock outdoors, on a wet floor, in standing water, near excessive heat, or where conductive debris can bridge the charging contacts.

3. Operation

Automatic return to charge: Power the dock and use the compatible robot's normal recharge command or automatic low-battery return function. The robot should locate the station, approach the base and align its charging terminals with the two dock contacts.

Charging confirmation: Confirm charging from the robot's status indicator, display or application. If charging does not begin, check contact cleanliness, alignment and station power before retrying.

Manual placement: If the robot manufacturer permits manual docking, position the robot gently so its charging terminals make full contact. Do not force the robot against the station.

4. Cleaning and Maintenance

Disconnect AC power before cleaning. Wipe the housing and base with a soft dry or slightly damp cloth. Clean the charging contacts with a dry, lint-free cloth. Do not use metal tools, abrasive pads or aggressive solvents on the contacts. Periodically inspect the power cord, housing, docking surface and charging terminals for damage, looseness or contamination.

5. Troubleshooting

Condition	Check / corrective action
Robot cannot locate the station	Confirm AC power; remove obstacles; keep the dock in a stable, consistent location; clean exposed docking surfaces.
Robot reaches dock but does not charge	Check alignment; clean robot and dock charging terminals; confirm station power.
Robot repeatedly approaches and backs away	Check that the dock is level and cannot slide; clear the approach area; inspect contacts and docking surfaces.
Charging starts and stops	Clean contacts; inspect for damaged or loose terminals; verify that the robot is fully seated.
Abnormal heat, odor, noise or visible damage	Disconnect power immediately and discontinue use until the unit is inspected or replaced.

6. Safety Information

Use the charging dock only with electrically and mechanically compatible robotic equipment. Do not disassemble or modify the station while connected to power. Never intentionally short the charging contacts or touch them with conductive tools. Keep liquids away from the dock. Disconnect power before cleaning, service or long-term storage. Stop using the product if the cable, enclosure, connector or charging contacts are damaged.

7. Storage

For extended storage, disconnect the dock from AC power, clean and dry the unit, and store it indoors in a clean environment away from moisture, corrosive materials, direct heat and heavy objects that could deform the housing or contacts.

8. Technical Information

Item	Information
Charging method	Conductive contact charging
Dock interface	Two raised metal charging contacts
Power connection	Integrated AC mains cable
Installation	Indoor floor / wall-side docking location
Compatible robot	Model-specific - verify mechanical interface and electrical ratings before use
Electrical ratings	Refer to the rating label on the final production unit



Document status: English user manual prepared from supplied product imagery. Exact input/output ratings, sensing protocol, regulatory approvals and environmental ratings require confirmation from the controlled production specification.