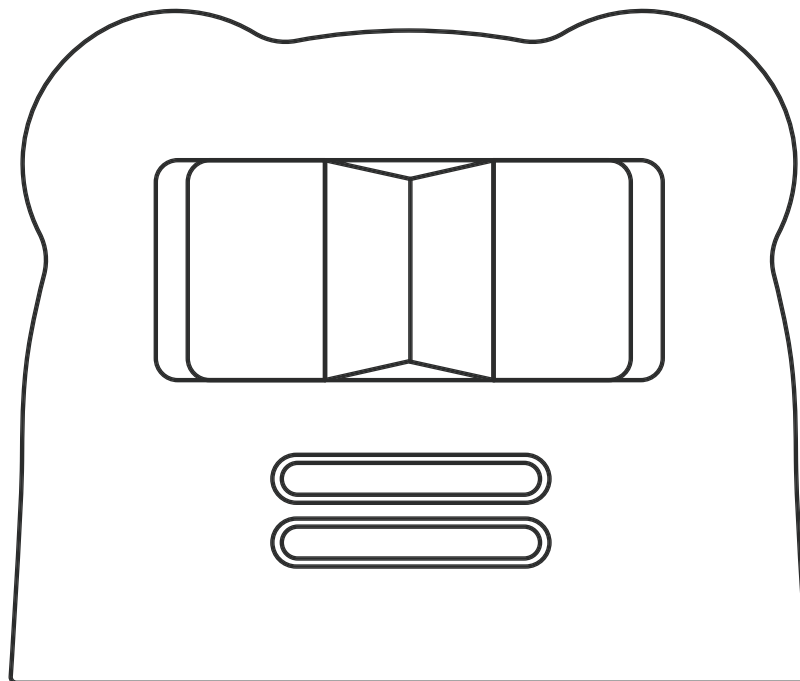


Bear Charging Station

*Subject to change at any time due to product changes and company circumstances.



 **BEARROBOTICS**

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Safety Precautions

Warning

Indicates when serious injury or death is likely to occur if instructions are not followed:

- If you swallow packaging materials (vinyl and styrofoam, etc.), there is a risk of suffocation. Please keep it out of the hands of children. This can cause choking hazards from packaging materials.
- Use only the power cable supplied with the charger. Non-original products can cause malfunctions and fires.
- When removing power from the outlet, do not pull the power cable, but hold the plug and unplug the cord. This can cause electric shock or malfunction.
- When using the charger, use the outlet only for the product. If the charger is used in parallel with a power strip or other devices and with an extended power cord, there is a risk of fire due to overheating.
- Do not damage or bend the power plug and power cable. Damage to the plug or cable can cause electric shock or fire.
- When handling the power plug, keep your hands dry. This can cause electric shock.
- Do not use the product with voltages or frequencies other than those indicated on the power specifications. This can cause electric shock, fire, or malfunction.
- Do not allow metals or flammable materials to enter the vents on the side of the charger. This can cause electric shock or fire.
- If you smell smoke or detect something unusual, stop using the charger and unplug it after turning off the power. If you have difficulty accessing the charger, turn off the power using a switchboard breaker. In case of an emergency, call 911. (our service center cannot assist you in case of an emergency.)
- The charger is for indoor only. Do not install it in an environment outside of a certain temperature range (50 - 95°F). This can cause electric shock or fire.
- Do not install, store, or use the charger in a place with high humidity or in direct sunlight. This can cause electric shock, fire, or malfunction.
- The charger is recommended to be installed in a safe place with low traffic and away from people, children, animals, etc. Could cause an accident.
- Do not place fire, explosives, flammable materials, etc. near the charger. This can cause fire, or malfunction.
- Do not disassemble or repair the charger by yourself. This can cause electric shock, fire, or malfunction.

- Please ensure that there are no reflective objects such as mirrors or glass walls along the robot's path. These can interfere with the robot's ability to recognize its surroundings, potentially leading to unexpected situations.
- Please do not use it in dusty environments.

Caution

Indicates when violation of instructions is likely to occur if instructions are not followed:

- Do not bring metal magnets, etc. within 30cm of the charger. This can cause the charger to malfunction.
- Do not put any hand or any object between the charger and the robot. This can cause the charger to malfunction.
- If more than one charger is used in the same room, make sure that each charger is at least 1 meter away from the other. If the chargers are installed at a distance of less than 1 meter, the charger can malfunction. The distance is measured between the closest points on the outer edges of each charger.
- Do not place objects on the floor within 1.5 meters of the charger as they may interfere with the robot's charging path. This can cause errors related to the robot's navigation and docking, which may lead to accidents.
- Do not unplug the charger while it is in the process of charging. Move the robot and then unplug it. This can cause the charger to malfunction.
- If the position of the charger has changed by more than 5 cm horizontally or 3 cm vertically, or if you want to change it to a new position, please contact the service center. If the service center does not have someone on site to reposition the charger, the robot may encounter difficulty locating and charging on the charger.
- The VL marker on the front of the charger (approximately 13 cm high) is used by the lidar to detect the charger. Therefore, ensure that no objects are placed on the concave section or that no foreign substances accumulate there. If the VL marker is damaged, please contact the service center. The robot may not recognize the charger properly and may be unable to charge automatically.
- Install the charger on a flat surface. If the robot is tilted significantly, the lidar may not detect the VL marker, or the docking motion may become unstable.
- If the robot is completely discharged, charging will not be possible. Open the cover on the bottom of the robot and use wired charging. After wired charging, once the robot powers on, you can remove the wired charger and use the charger.

- Do not look directly at the robot's lidar for extended periods. Looking directly for more than 100 seconds can be harmful to your eyes and skin. Also, do not open the lidar cover.
- Maintain the original angle facing the front when initially installing the charger. Changing the angle may cause errors during the robot's movement and docking process, potentially leading to accidents.

Adapter Safety Guidelines

- The charger must be installed in a dry and well ventilated area. It should not be exposed to rain or snow.
- All failures should be examined by the qualified technician.
- If the voltage drop in the battery is too large, the charging time will be longer.
- Make sure the charging voltage and current meet the battery's specification.
- This equipment is not suitable for use in locations where children are likely to be present.
- The protective earthing is used as a safeguard, the instructions shall require connection of the equipment protective earthing conductor to the installation protective earthing. (For example, connecting the power cord to the socket outlet to ground).
- For indoor use only.

Product care precautions

- If the surface of the product becomes dirty or stained, gently wipe it with a dry, soft cloth.
- Do not spray or apply any liquid substances onto the surface of the product. Liquids can seep into the ventilation openings, potentially causing the product to malfunction.
- Avoid using volatile liquids, alcohol, benzene, or strong chemical products on the surface of the product, as they may cause damage or discoloration.

Charger specifications

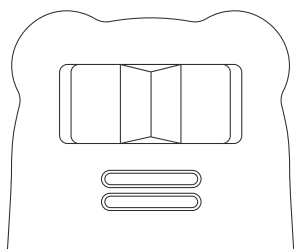
Product Dimensions	17.7 × 15 × 6 in (450 × 380 × 155 mm)
Weight (Adapter included)	Approximately 8.8 lbs (4 kg)
DC input/output voltage, current	29.15 VDC, (0 - 12) A
Operating temperature range	50 °F~95 °F (10 °C ~ 35 °C)

Adapter specifications

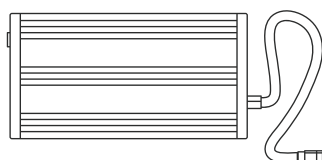
Product Dimensions	3.7 × 1.9 x 7.2 in (96 × 49 x 182.7 mm)
Weight	Approximately 2.86 lbs (1.3 kg)
AC input/output voltage, current	(100 - 240) VAC, 4.5 A
AC input frequency	50/60 Hz
Output voltage, current	29.15 VDC, (0 - 12) A
Operating temperature range	50 °F~95 °F (10 °C ~ 35 °C)
Maximum Output	Up to 349.8 W

Product components

Charger



Charger



Adapter



Power cable



Floor sticker



Adapter bracket X4



M4 Screw X4

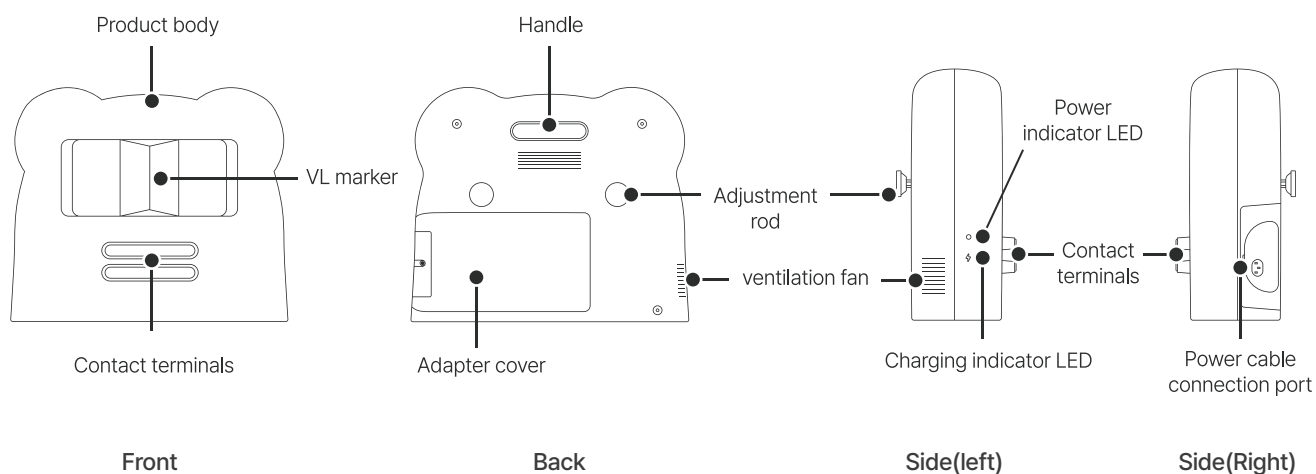


M3 Screw X4

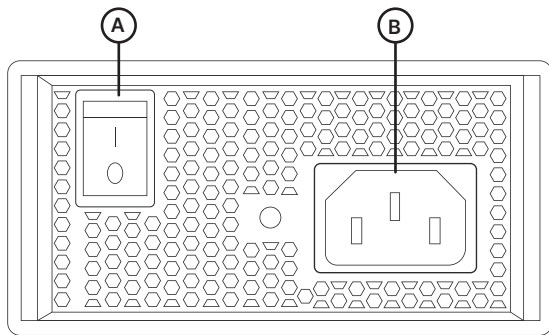


Adjustment rod X2

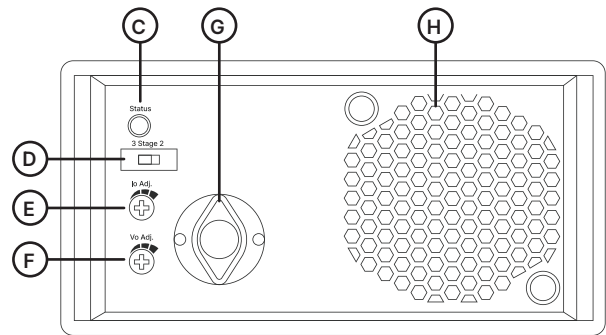
Part names and descriptions



Names and Descriptions of Adapter Parts



Front panel



Back panel

⚠ Caution

Do not alter sections C~H:

The change of setting will cause the malfunction or failure.

A. Power switch : The charger will turn on if the power switch is in ON position.
And It will turn off if it's in OFF position.

B. AC input

C. LED indicator : To show the status of the unit.

D. DIP switch : It is used for charging curve selection.

E. Io ADJ : For output current setting.

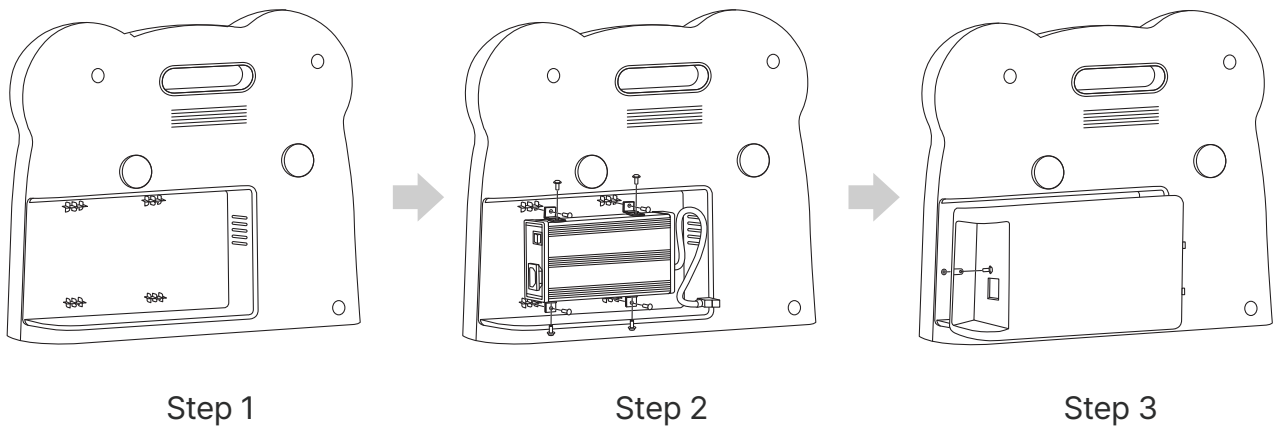
F. Vo ADJ : For output voltage setting.

G. DC output

H. Ventilations slits : These ventilation slits achieve well ventilation to ensure the durability of the unit.

Adapter Installation Instructions

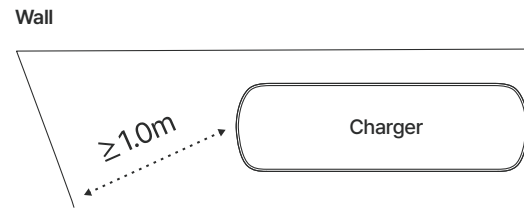
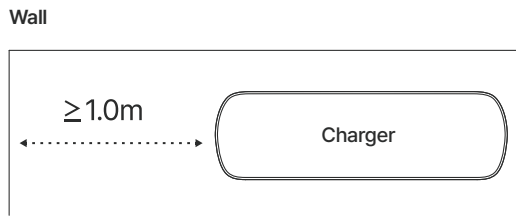
1. You can open the adapter cover of the empty main body to install the adapter.
2. Fit the connector bracket into the slot on the body and secure the adapter body with M3 and M4 screws.
3. Close the cover and fix it with the M4 screws.



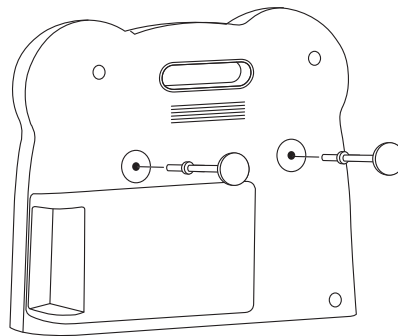
Charger Installation Instructions

1. Set the Installation Location:

- It is recommended to install the charger in a location with low foot traffic to avoid interference during installation and use and to ensure safety from accidental collisions.
- The charger should only be used indoors and should not be installed in environments outside the specified temperature range (50 - 95 °F).
- Avoid installing the charger in areas with high humidity or direct sunlight.
- If the wall behind the charger is made of materials such as glass, mirrors, metal plates, or black paint, it may cause the robot's sensors to malfunction, potentially reducing the docking success rate when the robot attempts to dock with the charger.
- When installing the charger near a side wall, ensure there is a minimum distance of 1.0 meter between the side wall and the charger. This distance is measured as the minimum straight-line distance between the charger and the side wall.
- Please install the charger on a flat surface without any steps or unevenness. If the charger is tilted, the height between the robot and the charger's electrodes may become misaligned, leading to reduced charging performance or malfunction.



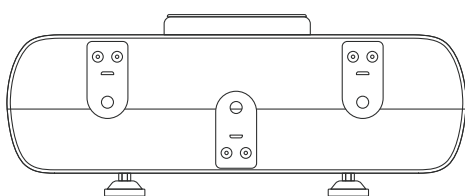
- To avoid obstructing the robot's charging path, do not place any objects on the floor within 1.5 meters of the charger. This could cause errors related to the robot's movement and docking, potentially leading to accidents.
- Do not place items or printed materials that can be recognised as QR Codes in the space within 1.5 metres around the charger. The robot may recognise the QR Code and perform an unintended action.
- When using more than one charger in the same area, ensure that each charger is installed with a distance of at least 1 meter apart. If chargers are installed within 1 meter of each other, it may cause malfunctions.
- The distance is measured between the closest points on the outer edges of each charger.
- Adjust the length of the adjustment rod at the rear to support the charger against the wall.



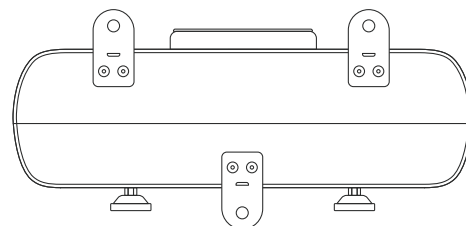
When securing the charger to the floor

You'll find components on the bottom of the charger that are designed for floor mounting. Please rotate these components outward.

The charger can be secured to the floor using anchor bolts and set anchors.



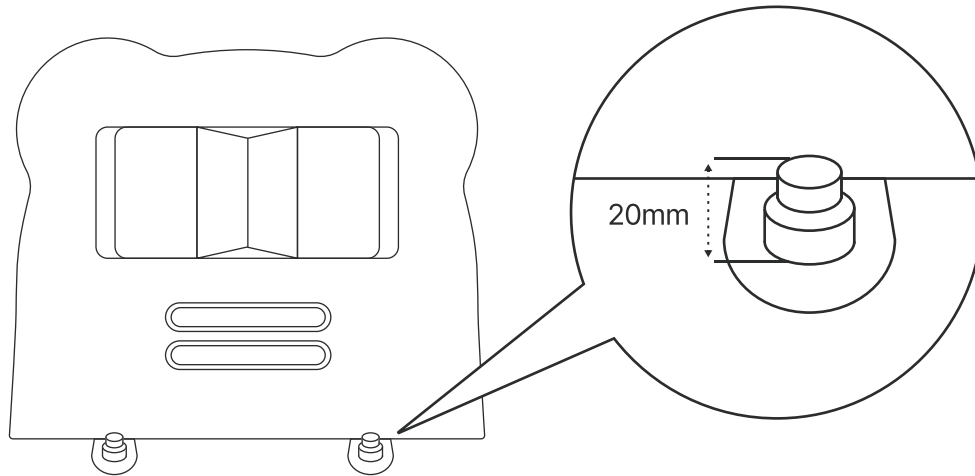
Floor(in)



Floor(out)

When using anchor bolts or set anchors for installation, ensure that they are fixed at a height no more than 20 mm above the ground.

Recommended Specifications for Anchor Bolts / Set Anchors Size : M10



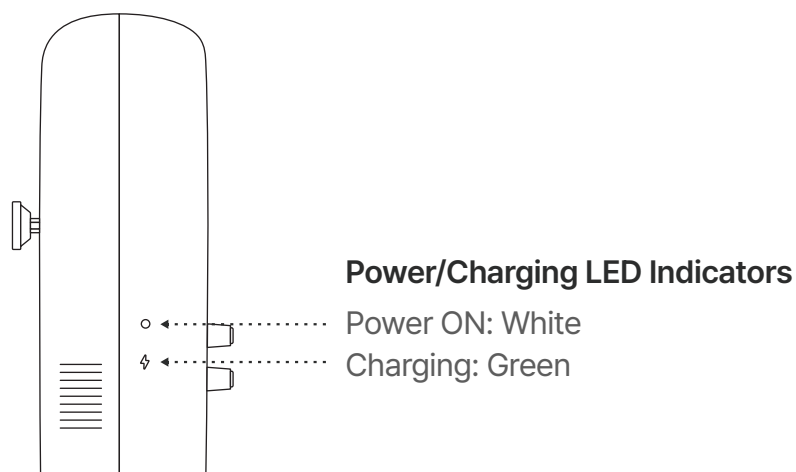
Turning the Power On & Off

To Turn On

Open the cover of the body and turn on the power of the adapter. Close the cover, then connect the power cable and plug it into the wall outlet to power on.

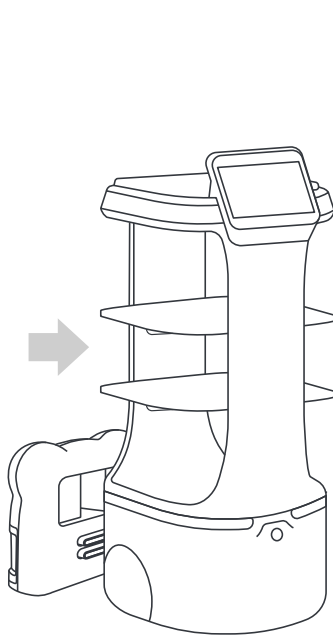
To Turn Off

Ensure that the robot is not charging, then unplug the charger's plug.

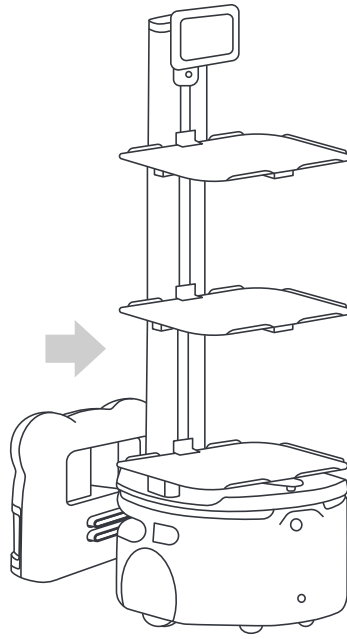


Precautions during charging

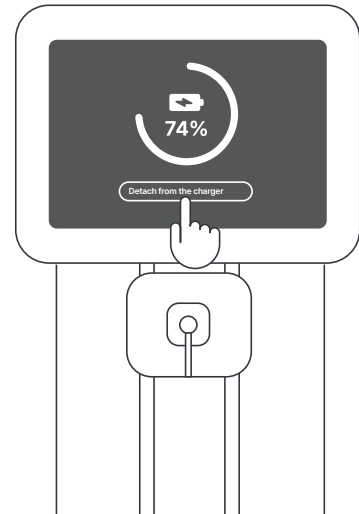
Do not manually move the robot or charger while the robot is charging.
Be sure to discharge the robot via the touch screen before manually moving it.



Servi Plus



Carti 100



Touch screen

When using a charger, do not use a wired charger at the same time.

