

A-Sonne

Harness the sun



Operation Manual

Model: AS1-304

a-sonne.com

Read this manual before using the device!

Dear customer, **thank you for choosing A-Sonne**. We recommend that you read this manual and other accompanying documents carefully before using the product. Keep them for future reference. If you sell the product or give it away, please don't forget to include this manual.

Pay close attention to all the **instructions** and **safety warnings** provided, and follow the guidelines accordingly. This manual applies specifically to the model listed on the cover.

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Introduction

This device, A-sonne is a Portable **Heliostat** (“**Helios**” meaning, **SUN** and “**Stat**” meaning **STAY/STATIC**). This innovative device is **designed to reflect and redirect sunlight** to optimize solar energy collection or **provide natural light to a static point throughout the day** regardless of the sun's position in the sky for various applications. A-sonne automatically tracks the sun throughout the day and reflects the sunlight to the same spot, ensuring maximum light exposure and efficiency.

Package contents:

- A. Mirror holder with main body
- B. Foot
- C. USB-C cable

Safety Instructions

This section should clearly outline safety precautions and warnings that users should follow. Since this is an electronic product and dealing with Sunlight, reading safety instructions are essential.

Please read all instructions before setting up the device.

1. **Do Not Look at Reflected Sunlight:** Avoid looking directly at the reflected sunlight to prevent eye damage. Never look into the reflected sunbeam from the mirror, this can cause eye injury and blindness.
2. **Position the reflected light** to direct onto the **roof or ceiling of the room**, ensuring that it is out of people's direct line of sight. This **minimizes the risk of accidental exposure** to intense sunlight reflections.
3. **Avoid Water Exposure:** Keep the heliostat away from direct water and rain. Never immerse the device in water or any other liquid.
4. **Use on Stable Surfaces:** Place the heliostat on a stable surface to avoid tipping.
5. **Children and pets Supervision:** Keep children and pets away from the heliostat when it is operating, **especially where the reflection is directed**. This appliance may only be used by children or persons with disabilities that prevent safe use under supervision.

Note: Your device is intended exclusively for the redirection of sunlight, for private use and for use in enclosed spaces and in the immediate vicinity of the house. This includes installation in a balcony flower box or on a window sill.

6. **Handle the device with care:** As it contains fragile mirror. **Do not drop the device**. Otherwise, the warranty will be void.
7. **Improper handling may void the warranty:** Do not use your device **if it is not working properly**, if it has been damaged or if cables, motors, covers or mechanical parts are damaged.
8. For your own safety, **do not open the device**. Otherwise, the warranty will be void.
9. **Avoid Fire and Heat Hazards:** Do not reflect sunlight on Anything that will melt or catch fire. These include **straw, certain cleaning agents, alcohols and other flammable liquids**.
10. If you are using **more than one product**, make sure that the reflection point is always different. Never direct the reflected sunbeams at the same point - **risk of fire**.
11. **Avoid moving the mirror by hands**. You can damage the motors and electronics.



Key Features

1. **Green Machine:** Made out of naturally occurring PLA (Poly-lactic acid) Plastic. Has low carbon footprint and Biodegradable than traditional plastic.
2. **Automatic Solar Tracking:** Automatically follows the sun throughout the day for optimized reflection.
3. **Energy-Efficient Design:** Operating under 1W of power, it saves more energy but providing natural sunlight inside your workspace/living area.
4. **Durable and Weather-Resistant:** Built with high-quality materials to withstand outdoor conditions.
5. **Easy Setup:** Simple installation process with adjustable settings for different locations.
6. **Manual Override:** Allows users to manually adjust the mirror position via joystick.

Product Specifications

- **Dimensions:** 31 cm x 31 cm x 16 cm
- **Weight:** 3 kg
- **Power Source:** 5V DC, 1W
- **Mirror Size:** 30 cm diameter
- **Material:** PLA (Poly-lactic acid), reflective mirror
- **Tracking Range:** 180° horizontal, 90° vertical
- **Operating Temperature:** -10°C to 50°C

Installation Instructions

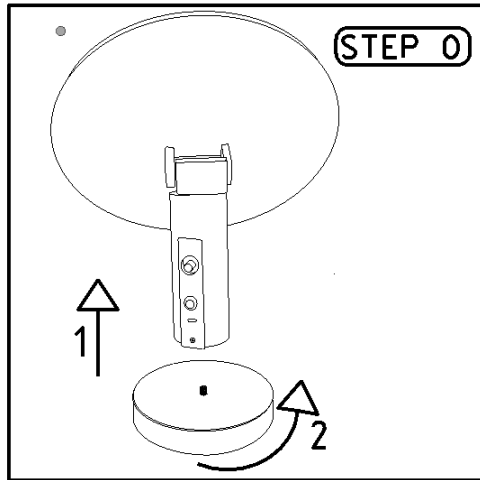


Figure 0:
Screw the base and main body

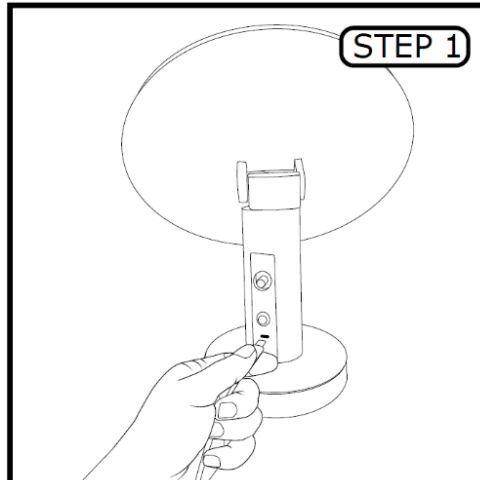


Figure 1:
Plug in the cable

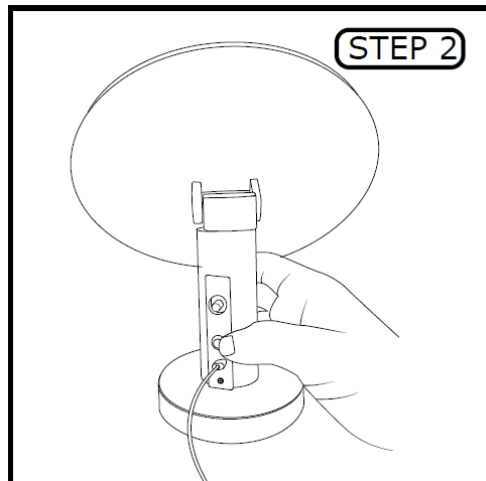


Figure 2:
Press start button & wait 5 seconds

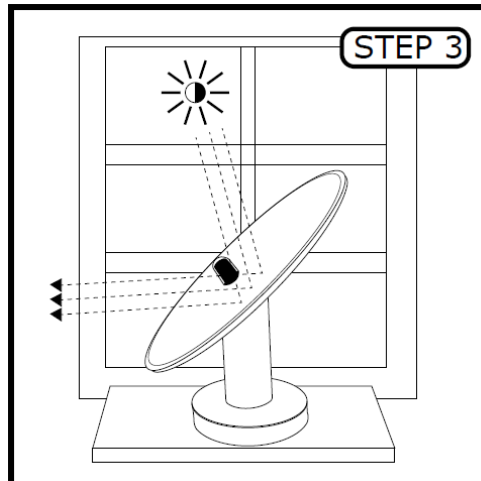
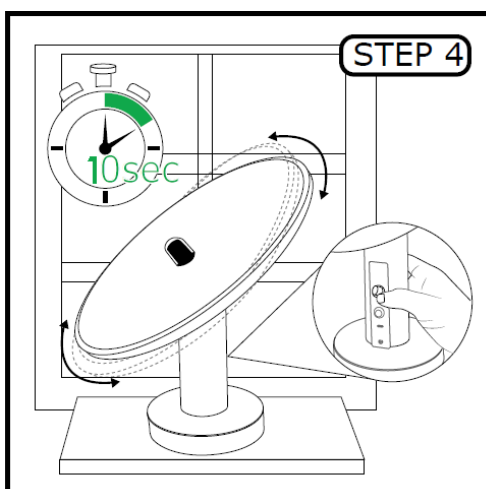


Figure 3:
A-Sonne will look for SUN (~5 sec)



- Figure 4:
1. Give A-sonne 10 seconds to stabilise,
 2. Then Adjust the redirected sunlight alignment with the joystick
 3. Press joystick button Inwards to save current position settings

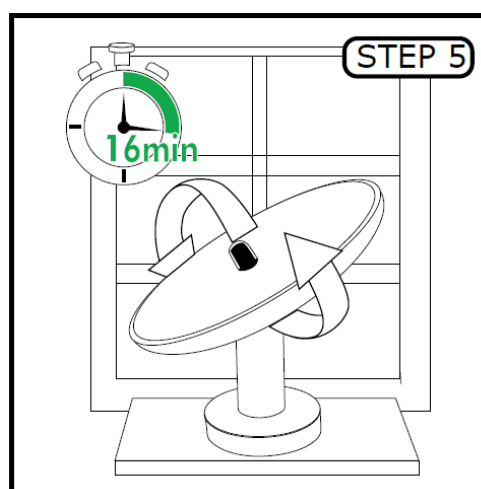


Figure 5:
Mirror recalibrates the sun position after every 15 minutes

Operation Instructions

- **Power On:** Press the power button to activate the heliostat, normal boot time is approx. 5 seconds.
- **Automatic Mode:** The heliostat will begin tracking the sun and adjusting the mirror automatically, as per previous saved settings, normal tracking and redirecting time is 10 seconds.
- **Manual Adjustment:** If desired, switch to manual mode to adjust the mirror using the Joystick, and adjust the position of redirected sunlight. Once you are satisfied with the redirected sunlight position, you can save the settings by pressing joystick inwards. (Saving is important, as for the next 15 min calibration cycle will use the new position for redirecting sunlight – if not saved, it will redirect back to the previous position.)
- **Energy-Saving Mode:** A-Sonne intelligently pauses operation during cloudy or low-light conditions. It will automatically stop functioning when the available sunlight is insufficient for optimal performance.

Maintenance & Care

Since the device is designed for continuous outdoor use near your home, it's recommended to follow the cleaning instructions either weekly or monthly, depending on your specific environment and needs.

- **Clean the Mirror:** Use a soft cloth to remove dirt and debris from the mirror regularly.
- **Check Motor Functionality:** Periodically test the motor to ensure smooth mirror movement.

Troubleshooting

Sr. #	Problem	Possible Cause	Solution
1	Mirror not tracking the sun	Low sunlight exposure	Move the heliostat to a sunnier location
2	Motor not functioning	Power not properly connected	Check / Reconnect the power cable
3	Poor reflection efficiency	Mirror is dirty	Clean the mirror
4	Reflection Not Hitting the Target	Incorrect alignment during installation.	Adjust the mirror alignment to ensure it reflects correctly onto the target. (Note 5-10% Tolerance in redirecting sunlight)
5	Device Stops Operating Midday	Insufficient sunlight due to clouds or shading.	Wait for sunlight to return or relocate the device to a sunnier location.
6	Heliostat Mirror Doesn't Move	Power issue	Check the power connections
7	Device Makes Unusual Noises	Loose parts or components.	Inspect the device for any loose screws or parts and tighten them.
		Debris trapped in moving parts.	Check for debris obstructing movement and remove any found.
		Motor issue.	If the noise persists, contact support for motor inspection.
8	Mirror Wobbles in Wind	Mirror or frame not tightly secured.	Ensure that all screws and mounting points are securely fastened.
		Extreme weather conditions affecting stability.	Relocate the heliostat to a more sheltered position

Warranty Information

Limited Warranty

Your **A-Sonne Portable Heliostat** is backed by a 2-year limited warranty from the date of purchase. This warranty covers any defects in material or workmanship under normal use and maintenance.

What is Covered?

- Defects in materials or craftsmanship.
- Faulty motor, sensors, or electronics.
- Malfunctions that occur under normal operating conditions.

What is Not Covered?

- Damage caused by misuse, improper installation, or accidental damage.
- Normal wear and tear of parts such as the mirror or mounting brackets.
- Issues resulting from unauthorized repairs or modifications.
- Damage caused by extreme weather conditions (e.g., rain, storms, floods, or lightning).

Warranty Claim Process

If your product is defective under the terms of this warranty, please contact our customer support team with proof of purchase and a description of the issue. Please record a video of the damage so our technical team can review and get back to you with possible solution.

If the claim is approved, we will **repair or replace** the product, or provide a **refund**, at our discretion.

How to Make a Warranty Claim

Contact our customer service team using the contact information below.

- Provide your **purchase receipt**, product **serial number**, and a **detailed description of the issue**.
- Ship the defective product to our **service center**, if requested (return shipping costs may apply).
- **Warranty Limitations:** This warranty gives you specific legal rights. You may also have other rights, which vary from country to country or state to state.

Contact Information

For any questions, troubleshooting, or warranty claims, please contact us at:

Website: www.a-sonne.com/support

Email: support@a-sonne.com

Phone: **+91-9915293629** (Monday - Friday, 9 AM - 5 PM IST)

Mailing Address:

A-SONNE

BUNGA COLONY, 201-A

144005, JALANDHAR, PUNJAB

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Proprietor: KARANVEER

Proper disposal

Protect the environment

To **minimize environmental impact** and comply with **local regulations**, proper disposal of your A-Sonne Portable Heliostat is essential.

Electronic Components:

This device contains electronic components that **should not be disposed of with regular household waste**. Please follow these guidelines to ensure responsible disposal:

- Do not discard the product in household waste bins. Your device contains valuable, recyclable raw materials.
- Take the device to a designated electronics recycling facility or contact your local waste management authority for proper disposal instructions.
- Many parts, such as the mirror, frame, electronics etc. can be recycled.
- As the A-Sonne Portable Heliostat is **designed to operate without batteries**, there are no harmful battery chemicals to dispose of.



However, all electronic components should be recycled responsibly.

Why Responsible Disposal Matters:

- **Environmental Protection:** Proper disposal helps prevent harmful materials from entering the environment and contaminating water sources.
- **Resource Conservation:** Recycling allows materials like glass, electronics, and plastic to be reused, reducing the need for new resources.

For more information on how to properly dispose of or recycle your device, please contact your local environmental agency or visit www.a-sonne.com/recycling.