



Italiano

Manuale installazione, uso e manutenzione

Ombrellone a vela motorizzato – mod.
Elicro

ATTENZIONE

Al ricevimento dell'ombrellone a vela, prima di eseguire qualsiasi operazione di utilizzo, leggere attentamente tutte le indicazioni riportate all'interno del presente manuale

Deutsch

Handbuch für Installation, Gebrauch und Wartung

Motorisierter Segelsonnenschirm – Modell
Elicro

ACHTUNG

Lesen Sie nach Erhalt des Segelsonnenschirms vor der ersten Inbetriebnahme alle Anweisungen in dieser Bedienungsanleitung sorgfältig durch.

Français

Manuel d'installation, d'utilisation et d'entretien

Parasol à voile motorisé – modèle Elicro

ATTENTION

À la réception du parasol à voile, avant toute utilisation, veuillez lire attentivement toutes les instructions figurant dans le présent manuel

English

Installation, use and maintenance manual

Motorized sail umbrella – Elicro model

ATTENTION

On receiving the sail umbrella, before carrying out any operation, read carefully all the instructions in this manual.

Italiano

Tel: +39 - 0444 1497208
Sito: www.maanta.it
Mail: info@maanta.it

Bega S.r.l. Società Benefit
Sede: Strada Statale, 11, km 331 – 36053 – Gambellara (VI) - Italia

Deutsch

Tel: +49 800 800 90 30 (kostenlos aus Deutschland)
+39 0444 1270008 (deutschsprachiger Kundendienst, italienische Festnetznummer)
Website: www.maanta.de
Mail: info@maanta.de

Français

Tel: +33 800 900 396 (appel gratuit depuis la France)
+39 0444 1270008 (service client en français, numéro fixe italien)
Site: www.maanta.fr
Mail: info@maanta.fr

English

Tel:
US: +1 888 269 9779 Toll Free Number
UK: +44 330 808 8140
UK: +39 0444 1270008 (international customer service)
Site:
US: www.maantaoutdoor.com
UK: www.maantaoutdoor.co.uk
Mail:
US: info@maantaoutdoor.com
UK: info@maantaoutdoor.co.uk

Contents

Section 1

MANUFACTURER'S DETAILS

ABOUT THIS MANUAL

- Structure and use of the manual
- Transfer to third parties
- Limitations and liability
- Intellectual property
- Compliance and retention
- Graphic warning conventions
- Pictograms

Section 2

GENERAL PRODUCT DESCRIPTION AND TECHNICAL DATA

- General description
- Technical data

INTENDED USE AND NON-INTENDED USE

- Introduction
- Intended use
- Non-intended use

INSTALLED SAFETY DEVICES

WARRANTY

GENERAL SAFETY WARNINGS

Section 3

INTRODUCTION

- Personal protective equipment (PPE)

HANDLING

- Manual handling

INSTALLATION

- Installation area
- Other requirements
- Installation procedure

TROUBLESHOOTING

MAINTENANCE

- Warnings
- Routine maintenance
- Extraordinary maintenance

Section 4

DECOMMISSIONING

- Deactivating the sail umbrella
- Deactivation procedure

DISPOSAL

Section 1

Manufacturer's details

About this manual

Manufacturer's details

About this manual

Structure and use of the manual

This manual is organized into sections, chapters and paragraphs, with a general table of contents and progressive page numbering. It is intended for the personnel responsible for handling, installing, using and maintaining the sail umbrella throughout its life cycle.

Transfer to third parties

If the product is later transferred to a third party on any basis (sale, loan for use, or any other reason), the sail umbrella must be handed over complete with all its documentation.

Limitations and liability

The information in this manual is not intended to, and cannot, replace the knowledge and experience of the operators/users who will use it (in any form), who in any case remain solely responsible for the use for which the sail umbrella was designed.

Before beginning any operation on any unit of the sail umbrella, you must have at least read the entire manual and then studied in detail the topic relating to the operations you intend to carry out.

Intellectual property

This manual contains confidential, proprietary information and may not be supplied to third parties, even in part, for any use or in any form, without the prior written consent of Bega S.r.l. Società Benefit.

Compliance and retention

Bega S.r.l. Società Benefit certifies that this information complies with the product's technical and safety specifications. A copy is kept in the company's technical file for the period required by law, during which it remains available to the supervisory authorities. Bega does not recognize documentation it has not produced or directly authorized.

After the legal period has elapsed, it is the responsibility of the product's keeper to verify that the product and its documentation comply with the regulations in force.

Graphic warning conventions

To make the topics covered easier to understand, specific graphic and typographic conventions have been adopted in this manual and are described below.



CAUTION

Caution notices contain important information, highlighted outside the text they refer to. They indicate procedures whose full or partial non-observance may cause damage to the sail umbrella and its components and may expose an operator/user to minor and moderate hazards.



WARNING

Hazard notices indicate procedures that require particular care to perform and whose full or partial non-observance may cause serious harm or injury to the health of the operator/user or of other people nearby. Serious damage to the sail umbrella.



PROHIBITION

Prohibition notices indicate all those actions that must never be performed, given the high level of risk to property and people.

Pictograms

The following pictograms appear on the sail umbrella:

Prohibitions



Do not cut the cables

Hazard



INGESTION HAZARD.
This product contains a
button or coin cell battery



General hazard

PROHIBITION



Pictograms that serve a safety function must not be removed, covered or damaged. They must be kept clean and replaced whenever they are removed or become damaged.

Section 2

General product description and technical data

Intended and non-intended use

Safety devices

Warranty

Warnings

General product description and technical data

General description

Elicro is a sail umbrella with automated opening and closing through the rotation of an aluminum profile that winds and unwinds the fabrics around it. The winder is rotated by a 12V DC battery motor that recharges via a solar panel and/or a USB-C power cable: no mains wiring, no electrician. The cover is tensioned by means of balancing springs housed inside the arms. The sail umbrella is available in different configurations and sizes according to the customer's needs. You can find all the information on our website maanta.it on the page of the product you purchased.

Technical data

The data below covers all available variants combined.

Mechanical data		
Available configurations	m (ft)	3.6×3.6 / 4.0×4.0×3.65×3.65 / 4.0×4.0 m (11.8×11.8 / 13.1×13.1×12.0×12.0 / 13.1×13.1 ft)
Shaded area	sq m (sq ft)	13 to 16 (140 to 172)
Sail diagonal	cm (ft in)	500 to 570 (16 ft 5 in to 18 ft 8 in)
Height (floor anchoring)	cm (ft in)	240 (7 ft 10 in)
Height (ballasted base)	cm (ft in)	249 (8 ft 2 in)
Structure weight (without ballast)	kg (lbs)	~120 (~265)
Total weight with ballasted base	kg (lbs)	~200 (~441)
Electrical data		
Motor power supply	V	12V DC
Motor rated power	W	140
Motor torque	Nm	50
Rotation speed	r/min	12
Current	A	11.6
Battery		Lithium 5.2Ah 12V (62.4 Wh)
Solar panel		5W 18V
Alternative charging		USB-C
Other data		
IP rating		IP55
Operating temperature	°C	-10 to +50
Full opening time	sec	~60
Full closing time	sec	~60
Battery life	cycles	~10–12 full cycles
Fabric composition		
Purishade fabric		100% Polypropylene
Available colors		Colors: Ivory, Cloud, White, Beige, Graphite
Fabric certification		Oeko-Tex Standard 100 certification
For all detailed technical characteristics, refer to the product data sheet.		
Product performance		
Essential characteristics	Performance	Technical specification
Total solar energy transmittance gtot	Ivory – Class 2 Cloud – Class 2 White – Class 2 Beige – Class 3	EN 14501:2021

Intended and non-intended use

Introduction



CAUTION

Since it would be impossible to describe all the operations that must not or cannot be performed, consider that all operations (other than the normal ones) not explicitly described in the sail umbrella's documentation are to be regarded as not feasible.

The feasible operations are those indicated in this manual in the INTENDED USE section.

Anything that is not feasible, as well as partial or total non-observance of the procedures described in the manuals, can be the cause not only of errors during work, but also of accidents that cause serious harm to people and/or property.

Intended use

The Elicro sail umbrella is intended to be used as an automated shading system for outdoor environments, i.e. a product intended to shade residential and commercial outdoor spaces and improve outdoor comfort.

Non-intended use

No use other than those described in the INTENDED USE paragraph is allowed.



CAUTION

The manufacturer cannot in any case be held liable for accidents or damage resulting from non-intended uses of the sail umbrella.

In particular, the sail umbrella is NOT: a permanent rain-protection system; a cover for extreme weather events; a waterproof canopy; a device usable in all conditions. Do not use it to: bear loads, anchor objects, dry laundry, support climbing, or for any purpose other than shading.

Installed safety devices

The following safety devices are present on the motorized sail umbrella:

Safety anemometer: measures wind speed and triggers automatic closing of the sail when the preset threshold is reached (15 km/h / 9 mph – actual value about 20-25 km/h / 12-16 mph, given the sensor's sheltered position). Adjustable across 3 sensitivity levels.

Mechanical motor limit stops: prevent opening and closing beyond the set limits, protecting the structure and the fabric.

Motor thermal protection: the motor has built-in thermal protection that stops it from operating in case of overheating.

Rotation locking pin: locks manual and/or accidental rotation of the structure in one of the 12 available positions.

Fixed guards: cover and make inaccessible the moving mechanical components of the shade, such as the motor, winder roller and drive elements. These fixed parts can be removed only with specific tools.



WARNING

The automatic anemometer is a safety aid; it does NOT replace the user's responsibility to monitor the weather and close the umbrella manually in case of adverse forecasts.

The anemometer must be set to 15 km/h (9 mph) as the mandatory safety threshold for automatic closing.



WARNING

If problems arise from a possible motor fault, stop the movement using the remote control and contact technical support.



WARNING

Access to the enclosed, protected or internal parts of the sail umbrella must be made only for routine maintenance operations and only after first reading this documentation.



WARNING

The efficiency of the control devices and their safety systems is guaranteed only if the sun shade is used properly, as described in this manual.



PROHIBITION

Operating the sail umbrella with fixed guards removed from their housing is prohibited.



PROHIBITION

Modifying the control system and its safety systems is prohibited. The manufacturer accepts no liability arising from improper, unauthorized use of the sail umbrella following tampering and negligence by the user.

Warranty

Through this warranty we undertake to guarantee that newly manufactured products (sails, sail umbrellas, poles, posts and wall brackets) have, at the time of delivery, the properties listed in the product description on our website.

WARRANTY TERMS

All products sold are covered by a 2-year warranty. The right to enforce remedies expires 26 months from the delivery date, in accordance with the applicable legal terms. However, it is important to note that some products may benefit from an extended commercial warranty of up to 4 years. Where provided, the additional commercial warranty of up to 4 years is non-transferable and applies only to the first purchaser. Our liability under the commercial warranty ceases as soon as the first purchaser transfers ownership of the product to another user. The commercial warranty neither replaces nor reduces the statutory warranty.

The specific warranty period for each product is stated in the relevant product data sheet on our website.

The warranty covers original conformity defects, i.e. defects existing at the time of delivery, that appear within 2 years. Defects that appear within 1 year of the delivery date are presumed to have already been present at delivery, unless the seller proves otherwise; after 1 year from the delivery date, in order to handle the case as effectively as possible, we may ask the consumer to send us, through the dedicated channels on our website, the order number, the delivery date, a detailed description, and photos and videos of the defect the product shows; without this documentation we may not be able to accurately assess remotely the type of assistance the consumer needs. In some cases it may be necessary to send the product, or parts of it, for technical inspection.

We undertake to repair or replace free of charge any defective item reported within this period, where the defect appears:

- at delivery
- during assembly

A defect is present only if the value or usability of this product is significantly reduced.

We will remedy manufacturing defects in the product free of charge within a reasonable period from notification of the defect or, where this is not possible, we will provide a replacement.

The costs necessary for this purpose, in particular transport costs, are borne by us.

If repair or replacement is not possible, or cannot be carried out properly or within a reasonable time, the consumer may request a price reduction or termination of the contract in accordance with the legal conditions.

With the exception of routine maintenance, any repair or modification made to the product by the user or by unauthorized companies voids the warranty.

The warranty does not extend to damage caused by lack of skill or negligence in using the product, or by poor or omitted maintenance, or by failure to observe the instructions for use.

The warranty is valid only if the user does not change the prescribed tensioning systems and the system parts.

THE WARRANTY INCLUDES

- conformity defects existing at the time of delivery, i.e. original defects of the product.

THE WARRANTY DOES NOT INCLUDE

- sails/sail umbrellas damaged by wind / hail / snow
- sails/sail umbrellas burned by sparks and/or proximity to heat sources of any kind
- waterproof sails/sail umbrellas deformed by water pooling because they were not tilted/closed properly
- poles damaged because they were not installed correctly
- poles damaged due to incorrectly installed sails
- damage resulting from extreme weather conditions such as wind, snow, hail, storms, etc.
- damage and defects resulting from improper use
- damage and defects resulting from failure to follow the installation instructions and the instructions for use
- damage and defects resulting from using the products in conflict with the purpose for which they were made
- damage and defects resulting from accidents
- poles/sail umbrellas scratched or with surface corrosion and normal wear, unless the product is structurally weakened
- normal wear of the product resulting from exposure to the sun and/or weather
- products on which the consumer has already attempted a repair, or that have been modified, or that are no longer in the original condition in which they were sold
- incorrect installation
- poor maintenance

Please note! The following are not covered by the warranty and are not to be considered defects, as they are characteristics of a handcrafted product:

- ripples near the seams
- ripples on the edges of the fabric
- ripples in the center of the fabric
- compression and winding creases
- micro-holes
- "chalk-effect" marks

Please note that the colors of the sail/sail umbrella images may vary from monitor to monitor.

Due to the manufacturing process, sails may deviate by up to 8% from the specified dimensions. Sails are measured from sail eyelet to sail eyelet and, unless otherwise ordered, are concave, curving inward.

Depending on the chosen fabric, visible heat seals may be present on the edges of the panels that make up the sail; these are needed to ensure greater fabric strength.



GENERAL SAFETY WARNINGS

- Anchors must be selected carefully according to the type of surface they will be installed on, and fixed precisely and securely. If in doubt, consult a qualified installer.
- Sails/sail umbrellas must not hang loosely, as this can damage the fabric.
- Sails/sail umbrellas must not be stepped on, used as a hammock or trampoline, or in any way other than that for which they were designed.
- Sails/sail umbrellas serve exclusively as protection from the sun or light rain.
- Sails/sail umbrellas must always be taken down/closed if they cannot be monitored in the event of sudden storms.
- Because wind speed is not constant and gusts can reach very high forces, we recommend always taking down/closing the sail/sail umbrella.
- Sails/sail umbrellas and their supporting structures must be installed in a stable, secure manner, with the fabric kept under good, even tension to reduce flapping in the wind.
- The fabric must be taut and have no slack areas. Soft/untensioned fabric causes malfunctions that are the basis of future failures/breakages.
- If the fabric is loose and slack it will cause premature damage due to mechanical failure. Such damage is clearly not attributable to UV rays and is not covered by the warranty.
- The sail/sail umbrella will require periodic maintenance to ensure correct long-term operation.
- Before installing sails/sail umbrellas on roof slabs and terraces, carefully check their load-bearing capacity.
- Before installing your sail/sail umbrella or your supporting structure, check the planning rules and restrictions of your municipality.



GENERAL PROHIBITIONS

- Do not install near heat sources > 60 °C (140 °F).
- Do not install near fireplaces, barbecues, sparks, or very hot surfaces.
- Do not leave the sail/sail umbrella open in strong wind or storms.
- Do not leave the sail/sail umbrella open during hail.
- Do not leave the sail/sail umbrella open during snow.
- Do not leave the sail/sail umbrella open in below-freezing temperatures.
- Do not handle the sail/sail umbrella in below-freezing temperatures.
- Do not hang objects from the sail/sail umbrella or the poles, tie up animals, or use the structure as a support for climbing.
- Do not install the sail umbrella in pedestrian walkways/play areas, as the ballasted base can create a trip hazard.
- Do not use the product improperly.
- Do not use the product for purposes other than those intended.
- Do not replace parts and components of the product with any not recognized by Maanta by Bega.
- Do not tamper with/modify the product.
- Do not use the sail/sail umbrella in environments subject to voltage surges and frequent power outages.
- Do not use the sail/sail umbrella with irregular power supplies that could stop it during use.
- Do not wet the electrical connections and the control device with water or other liquids.
- Secure any loose cords by fastening them at a height above 1.60 m (5.2 ft).
- Use by persons (including children) with reduced physical, sensory or mental capabilities, or with insufficient experience and knowledge, is prohibited.
- This product is not a toy; keep out of the reach of children.
- This product may contain small parts; keep out of the reach of children. Risk of ingestion and choking.
- Keep any plastic bags in the packaging out of the reach of children. Choking hazard.

Section 3

Handling

Installation

Maintenance

Introduction

If any part of the documentation is missing or illegible, even in part, consult the manufacturer before carrying out any further operation on the sail umbrella.

Read this document carefully before handling, installing, using or maintaining the sail umbrella. Pay particular attention to the safety rules and the operating instructions described below.

For any handling, installation, maintenance, set-up, disassembly and reassembly operation, etc., the indications in this manual supplement, but do not replace, the general workplace safety rules in force at the place where these operations are carried out. In the event of a conflict between the instructions given here and local or sector regulations, the latter will always take priority. Every handling, installation, maintenance, set-up, disassembly and reassembly operation, etc. must be carried out with a lighting system (natural and/or artificial) providing a minimum illuminance of 200 lux.

Keep this manual in a safe, accessible place. If it is lost or damaged, you can request a copy from Bega S.r.l. Società Benefit.

CAUTION



The manufacturer accepts no liability for accidents or damage resulting from improper use of the umbrella, from inadequately trained personnel, or from failure to observe the instructions in this document. Violation of these instructions also voids the warranty.

WARNING



In the event of malfunctions or abnormal situations not described in this manual, contact technical support before taking action. Do not carry out operations other than those indicated without first consulting customer service.

Personal protective equipment (PPE)

During handling, installation and maintenance, use the following PPE according to the risks present:

PPE	Description	When to use it
	Gloves (CE-marked)	When working in areas with loads, mechanical parts and parts that can reach high temperatures, you must use CE-marked gloves as PPE to protect against all the risks just described.
	Safety glasses	Required for all work where there is a risk of potentially hazardous material being projected into the eyes.
	Helmet	Required for all work where the head must be protected from hazardous material that may fall from above or be projected. Required to protect the head from falling objects.
	Protective clothing	Compliant with the essential safety requirements in force in the working environment where it will be used, able to protect the body from minor mechanical risks.
	Safety footwear	Required for all work where there is a risk of a generic, potentially hazardous unit falling.
	Safety harness	Required for all work carried out at dangerous heights (above 3 m / 10 ft).

Handling

Keep firmly in mind that, although carefully protected and packaged, the sail umbrella must be regarded and handled with care and attention.

Always check the integrity of the sail umbrella and its parts before handling it. If you find any damage, missing parts, deformation or signs of impact, notify the authorized service center before proceeding with subsequent operations.

The sail umbrella must be handled one unit at a time.

WARNING



Follow the safety instructions during sail umbrella handling operations.

Manual handling

The assembled sail umbrella weighs approximately 120 kg (265 lb) (without ballast). Given its weight and size, the sail umbrella REQUIRES at least 2 people for handling. In any case, we recommend carrying out the operation with the minimum number of people that allows safe handling, as indicated in the following table:

Indicative values for the maximum weight (in kg), frequent or occasional handling.				
	Men		Women	
age	occasional	Frequent	occasional	Frequent
16 - 18	19	14	12	9
18 - 20	23	17	14	10
20 - 35	25	19	15	11
35 - 50	21	16	13	10
over 50	16	12	10	7
Pregnant women				
First six months of pregnancy			10	5
From the 7th month			0	0

Weight lifted by each operator = component weight of the product / number of operators.

To perform the manual moving of a unit it is enough that:

- Each operator grips it firmly and securely.
- Each operator lifts it taking particular care not to bend the back (see the following image for the correct posture).



Installation

Before installing the sail umbrella, completely remove any protective covers and all packaging material. The sail umbrella comes complete with all the components needed for use.

Keep children and animals away from the work area during installation.

The umbrella must be installed with enough free space to allow the structure to fully extend and a working clearance of at least 1 m (3.3 ft) around it.

Installation area

Characteristics of the surface it can be installed on

The sail umbrella can be installed on flat, stable, load-bearing surfaces. For floor anchoring: concrete/screed (ideal), tiles on screed (check thickness). For the ballasted base: any flat, stable surface.

The umbrella has been designed solely as sun protection for use in civil, residential, commercial and community building contexts.

Other requirements

The area where the sail umbrella is placed must meet the following requirements:

The chosen position must allow the solar panel to be connected to sunlight or access to the USB-C port for alternative charging. The sail umbrella's position must be chosen so that it cannot be hit by jets of steam, pressurized water or other hazardous liquids.

The umbrella must be installed with enough free space for 360° rotation and full extension of the arms.

Temperature

In operation: -10 °C to +50 °C (14 °F to 122 °F).

In storage: -10 °C to 55 °C (14 °F to 131 °F).

Relative humidity

Compatible with marine environments and coastal areas, as the materials are fully galvanized and coated, providing full protection against corrosion.

Before you start

Estimated time ~ 4 hours

People required: 2 (mandatory)

Tools required

Basic (always):

metric hex (Allen) key set (2–8 mm)

open-end wrenches (6, 8, 10, 13, 17 mm)

Phillips screwdriver, tape measure (≥ 3 m / 10 ft), spirit level, pencil

Floor anchoring (if applicable):

hammer drill, masonry bits $\varnothing$ 8–10 mm (0.31–0.39 in)

anchors and chemical fixing (supplied), vacuum cleaner

Support:

2 stable ladders (≥ 2 m / 6.6 ft), protective sheets, containers for the fasteners

grease cartridge (supplied)

Component checklist

Check that all components are present before assembly. If parts are missing or damaged, contact customer service before proceeding.

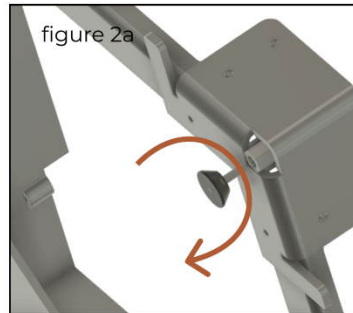
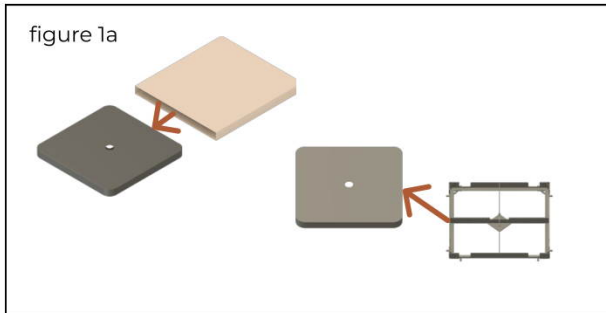
Structure	Vertical structure · upper motor unit with solar panel · pre-assembled joint
Winding	Main winder (with spool) · secondary winder · plastic cable cover · aluminum trim cover
Arms and fabrics	2 arms (in 2 halves each) · 2 triangular fabrics · steel tie rods · tensioning cords · stops
Control and safety	Anemometer with bracket · remote control · magnets built into the covers
Ballast	4 × 50×50 cm (20×20 in) (mandatory, NOT supplied) · 4 × 40×40 cm (16×16 in) (optional)
Accessories	Locking pin · floor anchors (if anchoring is used) · grease cartridge

Assembly warnings

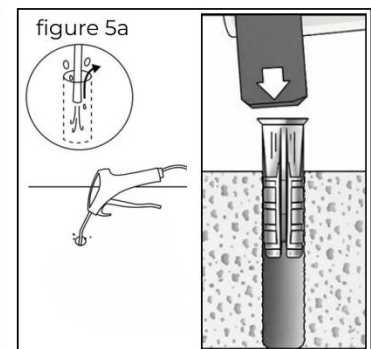
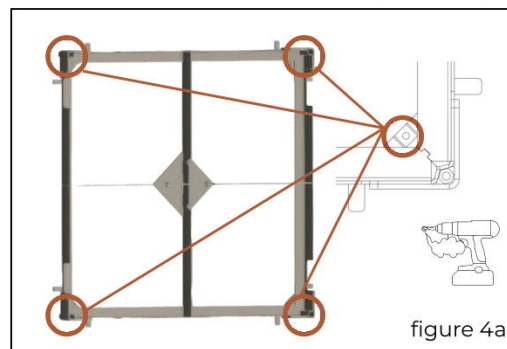
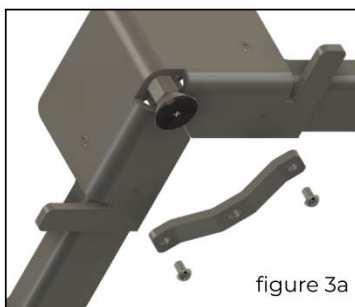
-  **Weather: do not assemble with strong wind, rain or storms approaching.**
-  **Weight: the base, pre-assembled joint, vertical structure and assembled winder require 2 people. Do not lift on your own.**
-  **Cords under tension: while tensioning the fabrics/tie rods, keep hands and face away from the path of travel. Wear safety glasses.**
-  **Working at height: use stable ladders, do not lean out, have someone assist you.**
-  **Work area: clear, flat, load-bearing. Keep children and animals away. Fasteners and small parts can be swallowed.**

1A) Installation procedure with ballastable base (for direct ground fixing, go to point 1b)

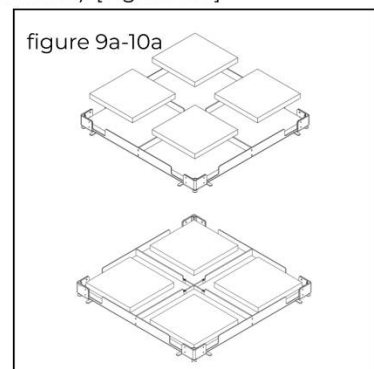
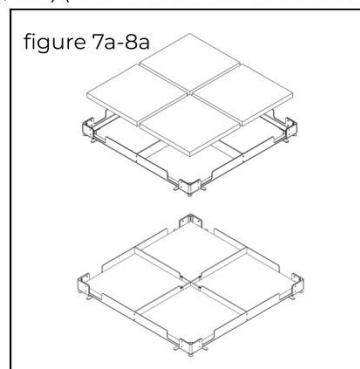
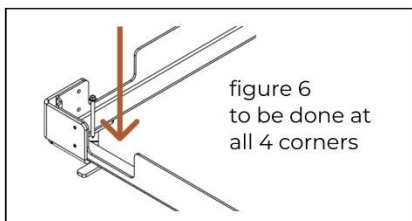
1. Prepare the base. Open the box of the ballasted base and lift the cover. [Fig. 1a] Install the 4 adjustable feet by screwing them in clockwise. [Fig. 2a]



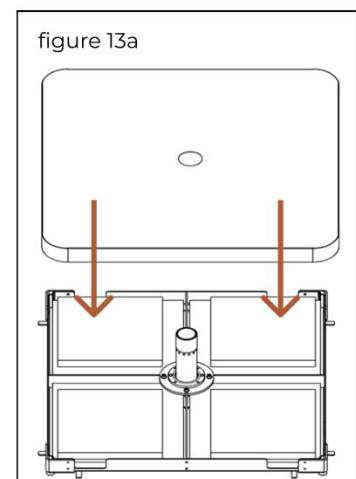
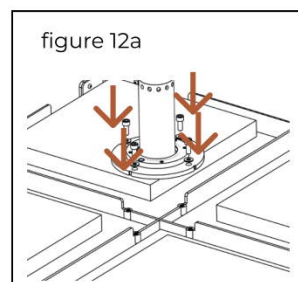
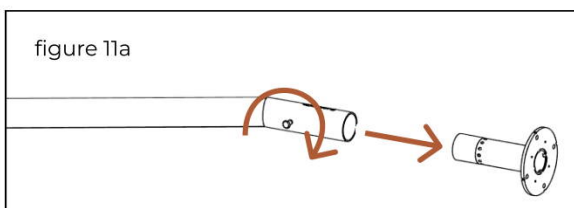
2. Install the 4 floor anchor plates with 8× TBEI M6×10 (2 per plate). [Fig. 3a]
3. Position the base and mark the 4 holes. Drill Ø 10 mm, minimum depth 90 mm (3 1/2 in). [Fig. 4a] Remove dust, insert the anchors (use a hammer if necessary). [Fig. 5a]



4. Tighten the 4 screws (13 mm wrench) to secure the base to the floor (warning: these are safety screws in case of strong wind). [Fig. 6a]
5. Insert the ballast weights. 4× ballast weights 50×50 cm (19 5/8 × 19 5/8 in) mandatory (always, including on slabs and terraces). [Fig. 7a-8a] Optionally 4× ballast weights 40×40 cm (15 3/4 × 15 3/4 in) (not recommended on slabs/terraces). [Fig. 9a-10a]



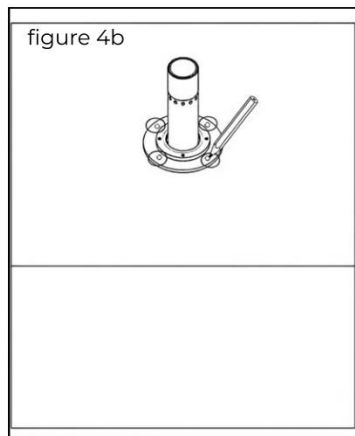
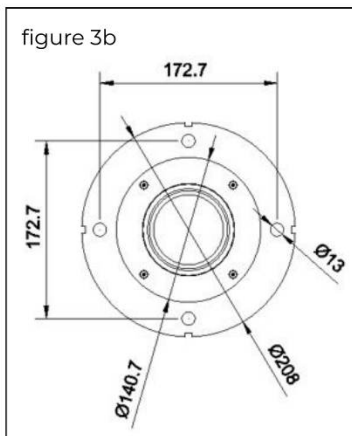
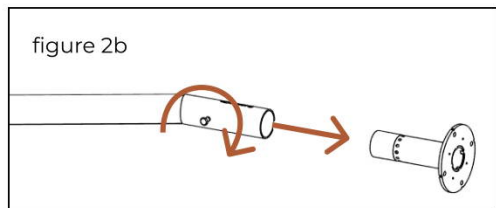
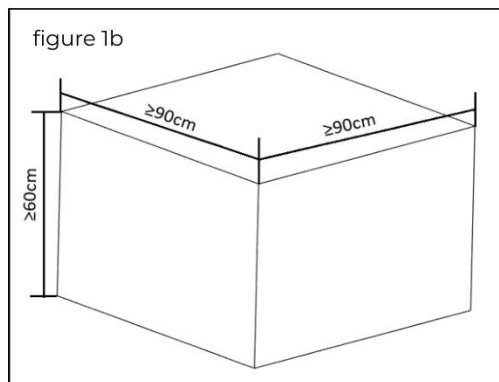
6. Remove the vertical structure. [Fig. 11] Pull out the rotation base by pulling and turning the locking-pin knob 90° (open position). Mind the rotation bushing on the rotation base.
7. Fix the rotation base to the ballasted base with 4× TCEI M10×25 + 4 M10 washers. [Fig. 12] Install the LID cover onto the structure (2-person job). [Fig. 13]



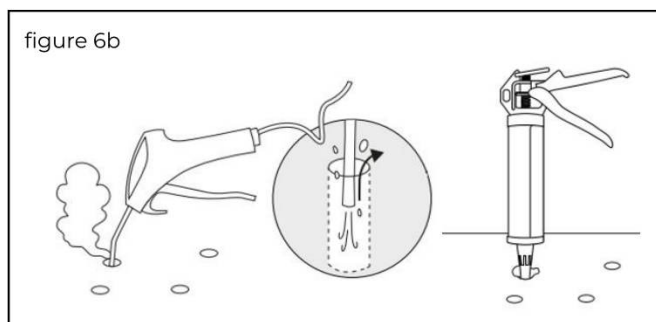
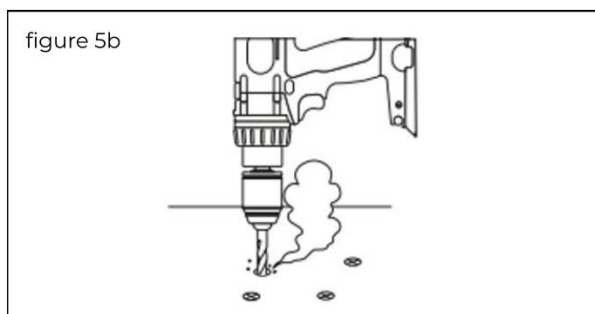
Once the base is assembled, go to point 8.

1B) Installation procedure with ground fixing

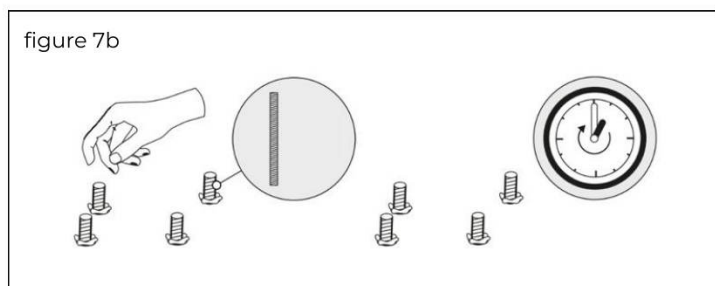
1. For ground fixing, provide a concrete footing with minimum dimensions of 90×90×60 cm (35 3/8 × 35 3/8 × 23 5/8 in). [Fig. 1b]
2. Remove the vertical structure. [Fig. 2b] Pull out the rotation base by pulling and turning the locking-pin knob 90° (open position). Mind the rotation bushing on the rotation base. Use the removed plate as a guide to mark the ground anchor holes. Use a pencil to mark the holes on the footing. [Fig. 3b-4b]



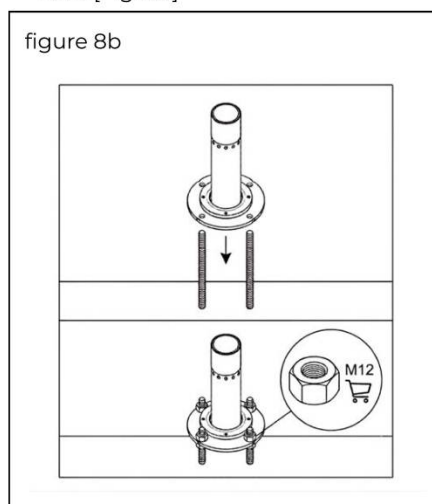
3. Drill the 4 holes with a 14 mm diameter bit to a depth of at least 220 mm (8 5/8 in). [Fig. 5b]
4. Clean dust and debris from the holes and apply the injection mortar. [Fig. 6b]
WARNING: cleaning is essential for good grip of the mortar.



5. Insert the 4 M12 threaded rods and wait at least 1 hour for the injection mortar to fully cure. [Fig. 7b]
WARNING: the threaded rods must be at least 250 mm long.



6. Insert the rotation base and fix it with 4 M12 nuts. [Fig. 8b]



Once ground anchoring is complete, go to point 8.

Resume here:

8. Insert the vertical structure onto the rotation stub until it seats fully (locking pin in open position). [Fig. 14] Lock by turning the pin 90°: check that it clicks into place. [Fig. 15]

figure 14

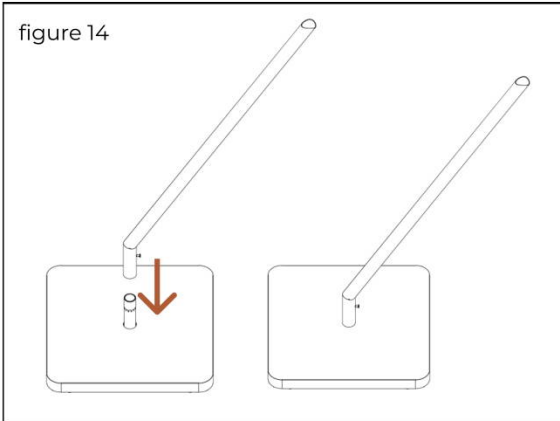
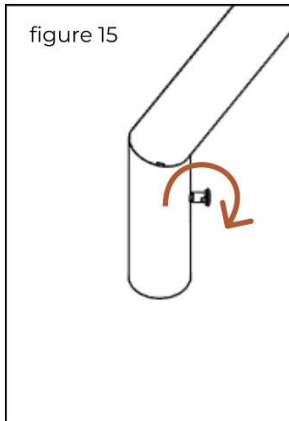
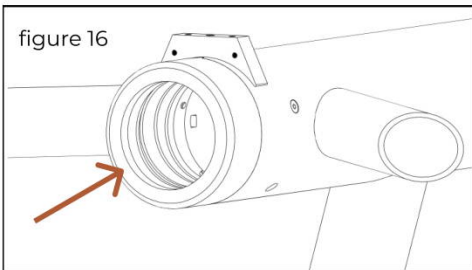


figure 15



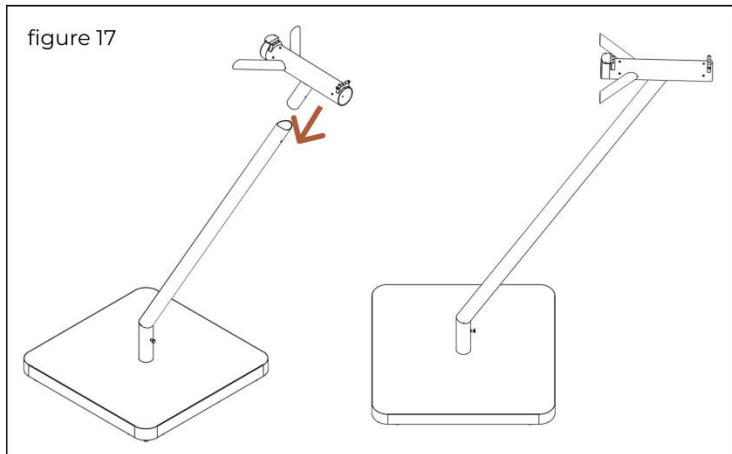
9. Prepare and engage the motor unit.
Remove the upper motor unit. [Fig. 16]
Grease the bushing with half of the supplied grease tube, spreading it over the entire surface with the wooden stick.

figure 16



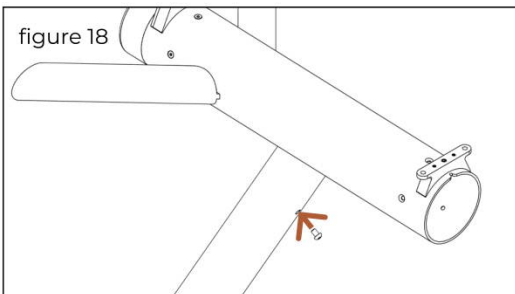
10. Insert the motor tube unit onto the vertical support structure until it seats fully, taking care to align the locking hole. [Fig. 17]

figure 17



11. Fix with 1× TBEI M8×12. [Fig. 18]

figure 18



- BEFORE PROCEEDING**
The solar panel is connected to the component.
Handle with care to avoid damaging it.

12. Insert the pre-assembled coupling. Remove the coupling with the solar panel already connected (mind the cable). [Fig. 19] Insert it into the main motor tube – 2 people, heavy component. [Fig. 20]
WARNING: both the coupling and the motor tube have an alignment mark to make fitting easier. [Fig. 20b]

figure 19



figure 20

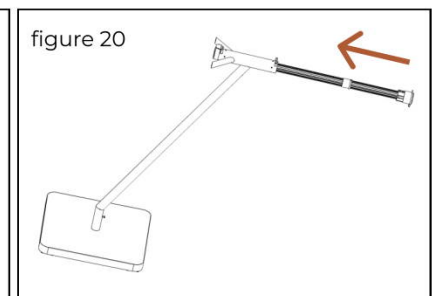
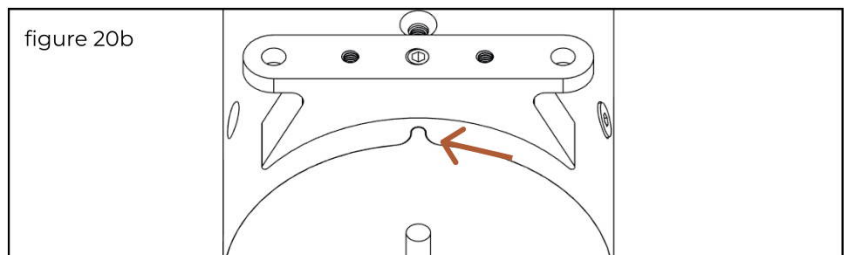


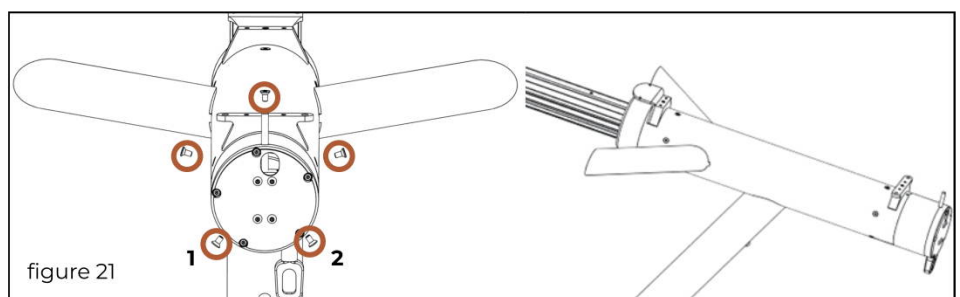
figure 20b



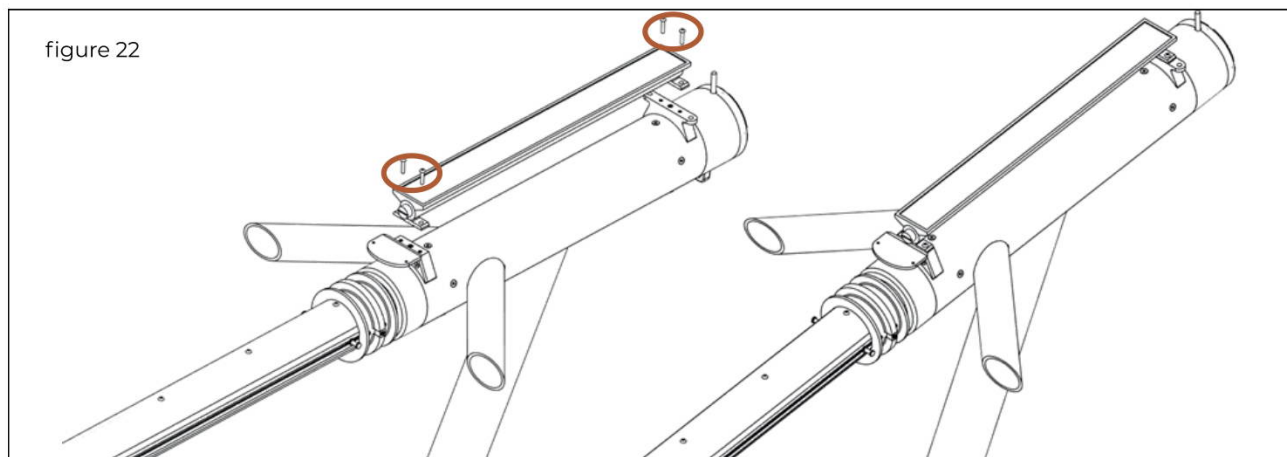
- BEFORE PROCEEDING**
Tighten the two lower screws first (1-2 in [Fig. 21]), then the others.

13. Fix with 5× TSPEI M6×12. [Fig. 21]

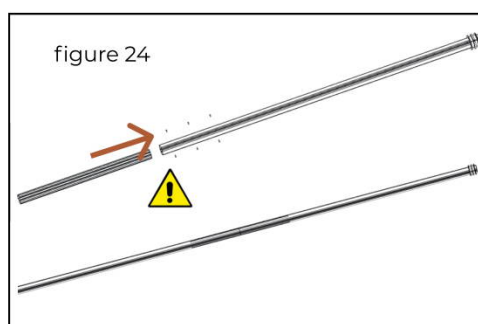
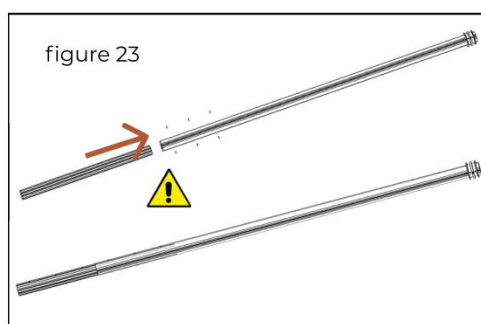
figure 21



14. Secure the solar panel with the 4× TBEI M6×12 mm screws. [Fig. 22]

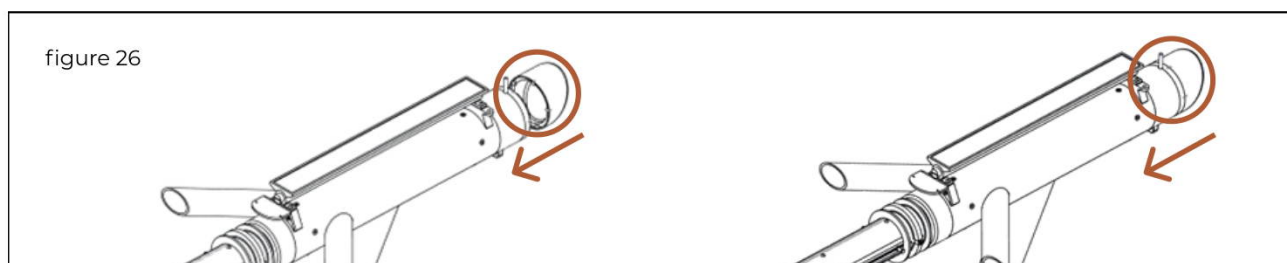
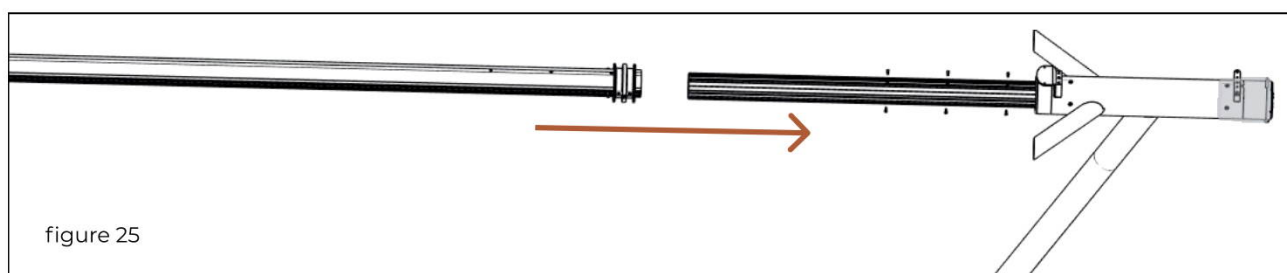


15. Assemble the complete winder. Couple the main winder (with spool) to the central joint with 6× TBEI M5×20. [Fig. 23]
Install the secondary winder on the central joint with 6× TBEI M5×20. [Fig. 24]

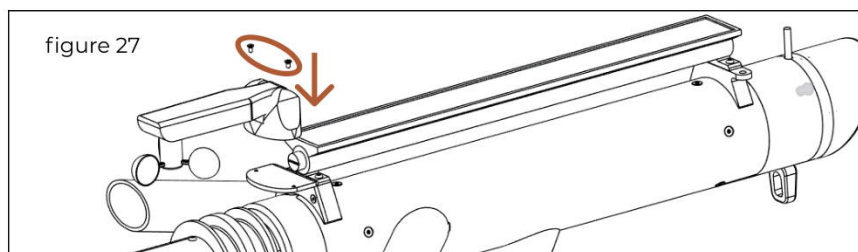


BEFORE PROCEEDING
Pay attention to the slots: they must be perfectly aligned with each other.

16. Install the winder on the structure. Slide the complete winder onto the joint until the pre-made holes line up, then fix with 6× TBEI M5×20. [Fig. 25] Gather the excess power cable into the plastic cover and attach it using the magnets. [Fig. 26]

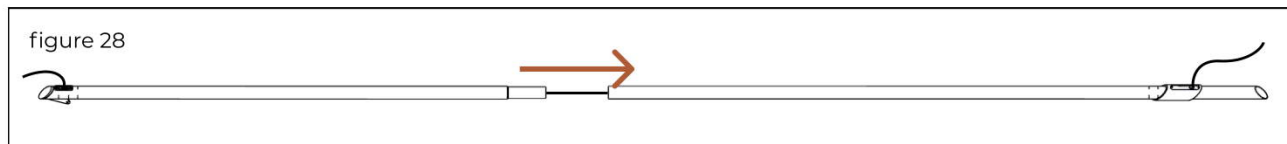


17. Install the anemometer on the bracket with 2× TSPEI M4. [Fig. 27]

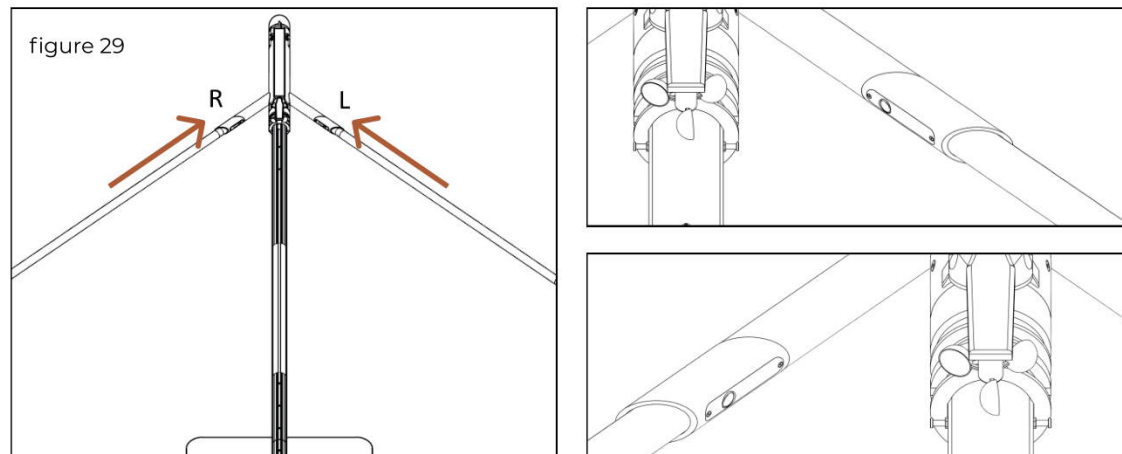


The anemometer's fixing holes are under the covers. Simply slide them upward to expose the screw holes.

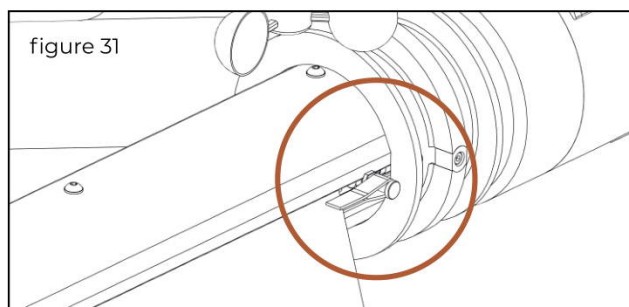
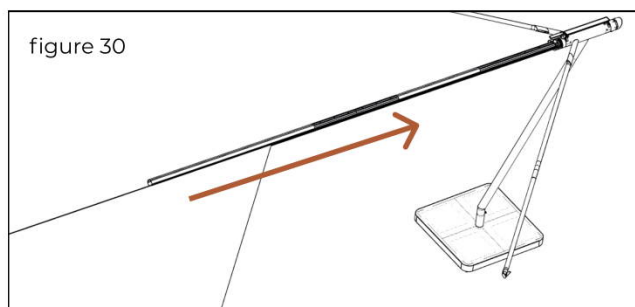
18. Join the 2 halves of each arm by sliding them together all the way. (Adjust them so that the 2 opposite pockets are each horizontal.) [Fig. 28]



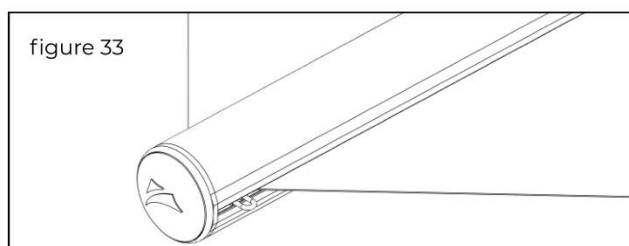
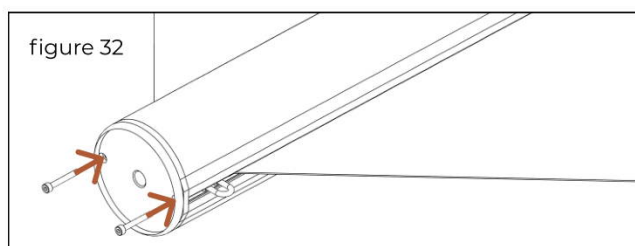
19. Fit the arms into the motor-tube sockets all the way down, observing right/left. [Fig. 29] Leave the cords hanging loose.



20. Slide the 2 fabrics into the channels until they hook onto the pins on the spool side. The shackles must be slid into the winder slots on the cap side. Orientation: Velcro facing down, the word "motore" facing the spool, shackles toward the opposite side. [Fig. 30-31]

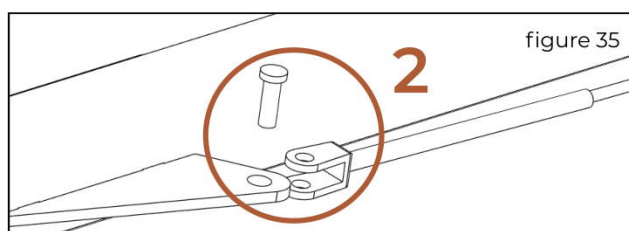
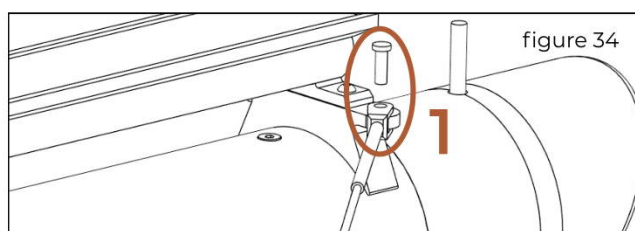


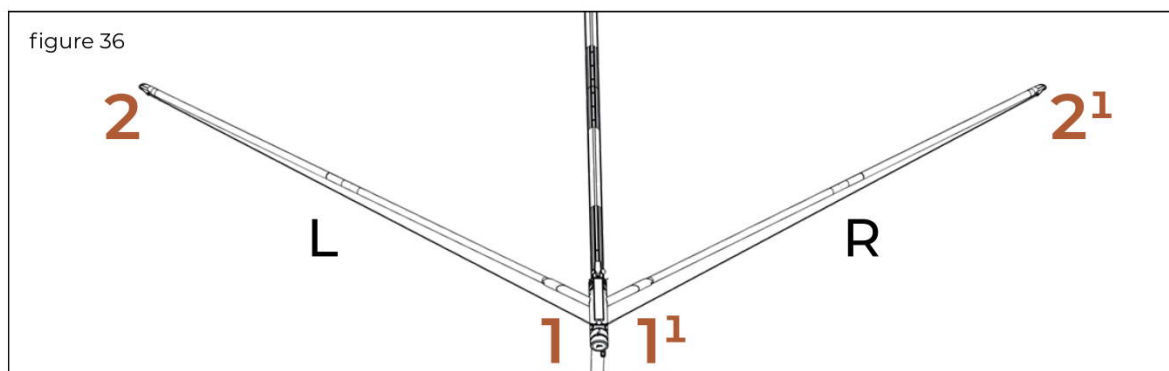
21. Unscrew the 2× TCEI M4×30 from the shackles and use them to fix the winder cap (they tension the fabrics along the axis). [Fig. 32] Fit the aluminum trim cover: it is held in place by the internal magnets. [Fig. 33] Note: the fabric must be pulled toward the winder cap in order to reach and fasten the screws.



22. Hook up the windbracing tie rods. Note: 2 people required. Hook the free ends of the windbracing tie rods onto the dedicated bracket near the solar panel and onto the ends of the arms using the pin provided. (At the ends of the tie rods there are two cord loops with a carabiner; at this stage take care that it stays in position during the operation.) [Fig. 34-35-36]

Tip: if hooking the pins is difficult, we recommend flexing the arms slightly outward to bring the fixing point closer.





24. Synchronize the remote control as follows:
25. Pair the remote control with the solar panel:
26. Press the button on the side of the solar panel (on the side where the cables come out) for 2 seconds.
27. The motor makes 2 movements.
28. Press the "stop" button on the remote control.
29. The motor makes 3 movements. Solar panel/motor/remote control successfully paired.
30. After pairing, the UP ARROW button will be the CLOSE button and the DOWN ARROW button will be the OPEN button. [Fig. 37]

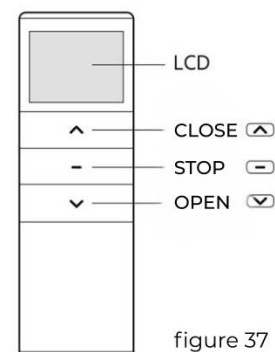
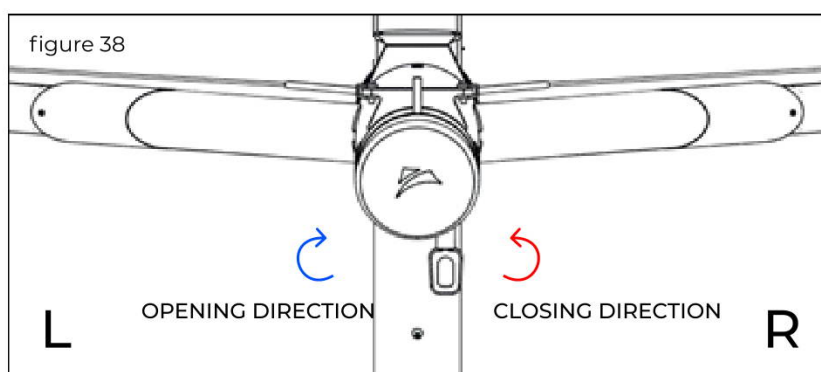


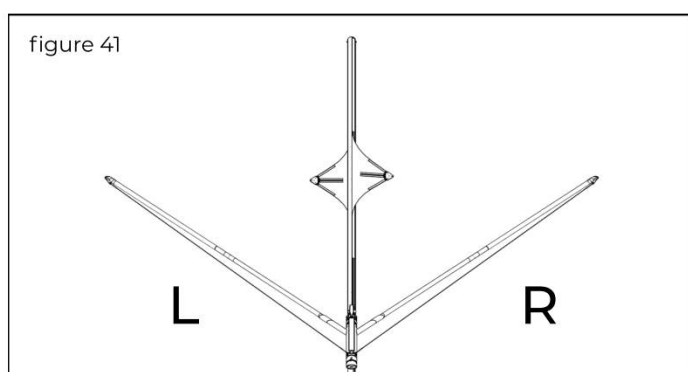
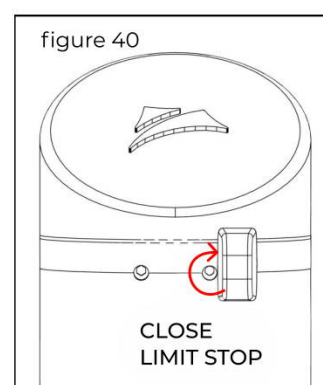
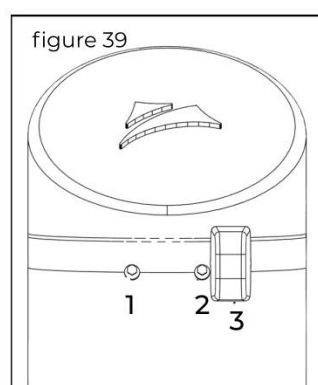
figure 37

25. Fully wind the fabric using the remote control. (Note: check that the winder roller rotates as shown in figure 38. When I press the close button, the roller must turn COUNTERCLOCKWISE; when I press the open button, the roller must turn CLOCKWISE.)



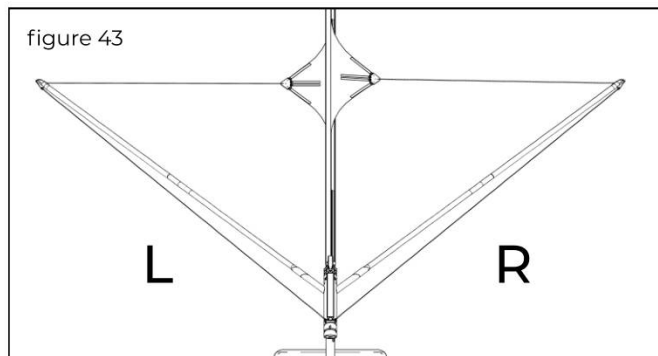
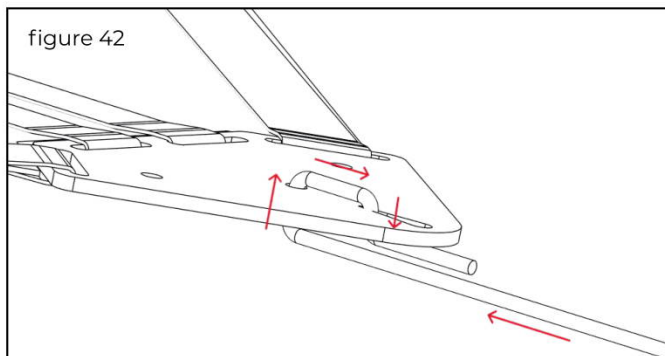
At this stage the motor is set to perform only half a turn, so you will need to adjust the close limit stop by turning it clockwise until the fabrics are fully wound.

- Locate the limit-stop adjustment points on the lower part of the motor unit (see [Fig. 39], the 2 holes [1 OPEN LIMIT STOP - 2 CLOSE LIMIT STOP] near the emergency rod [3]).
- Insert the hex adjustment rod into the hole on the right (the hole near the emergency rod) marked CLOSE LIMIT STOP in the image [Fig. 40].
- Press the button on the remote control; the motor will turn half a turn.
- Turn the adjustment rod clockwise until the shading fabrics are fully wound. [Fig. 41]



26. Now move on to the cords that come out of the farther holes of the arms.

27. Temporarily connect the other two cord ends to the corners of the sail, locking the cord in the dedicated "V"-shaped hole. [Fig. 42 - 42.2]



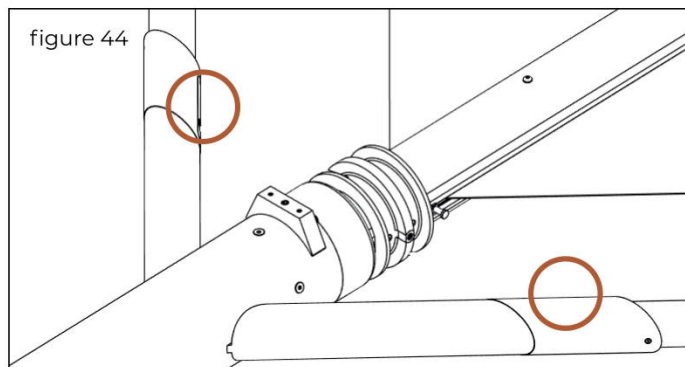
27. Now we need to wind the arm cords that come out of the holes located near the motor unit. [Fig. 44]

Follow these instructions for correct winding:

Wind the RIGHT arm cord (marked with the letter R) clockwise onto the spool, inside the slot facing the winder (it is important to make at least 2 turns).

CAUTION:

- ✓ The two cords must NOT cross - each stays in its own slot.
- ✓ Uniform direction - both turn clockwise, but start from opposite directions (above/below).
- ✓ At least 2 full turns - fewer turns could compromise stability in use.
- ✓ Neat turns - the coils must lie side by side, not chaotically overlapped.
- ✓ Constant tension - avoid slack sections that could tangle.



WHAT HAPPENS IF:

- ✗ The cords cross between the slots → Risk of tangling during operation - disassemble and repeat.
- ✗ The turns are overlapped in a disorderly way → Possible jamming during opening/closing - rewind neatly.
- ✗ Fewer than 2 full turns → The cord could slip under tension - add at least one more turn.

1. Initial positioning R

- Take the right arm cord.
- Locate the second slot (the one closest to the winder roller).

2. Insertion [Fig. 45]

- Pass the cord UNDER the spool.
- Insert it into the second slot (the one closest to the winder roller).

3. Winding

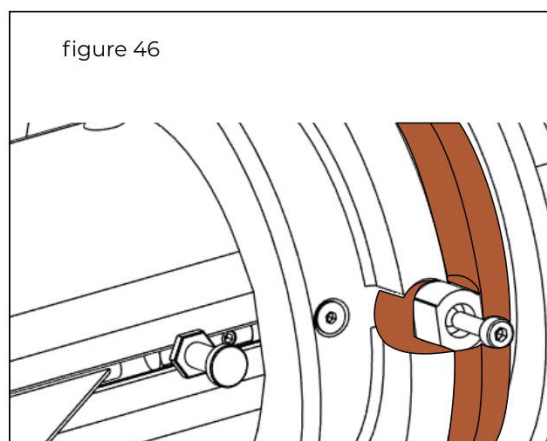
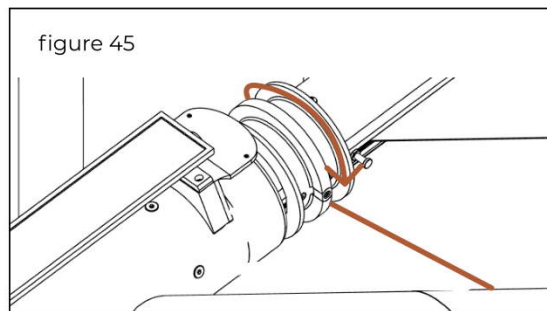
- Turn around the spool CLOCKWISE.
- Keep the cord well aligned in the second slot during winding.
- Complete AT LEAST 2 FULL TURNS around the spool.
- **Important: the turns must be NEAT and SIDE BY SIDE, not overlapped.**

4. Tensioning

- During winding keep the cord slightly taut.
- Do not leave slack sections between the turns.

5. Final fixing [Fig. 46]

- After at least 2 full turns, lock the cord with the dedicated stop by winding the cord around the screw.
- Cut off any excess length.



CAUTION:

✓ **Stops fully inserted** - check that they lock the cord. Do not overtighten, or you could compromise functionality.

Move on to the left arm.

1. Initial positioning L

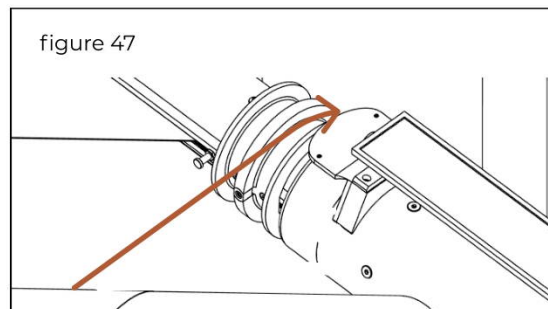
- Take the left arm cord.
- Locate the first slot (the one closest to the motor).+

2. Insertion [Fig. 47]

- Pass the cord **OVER** the spool.
- Insert it into the first slot (the one closest to the motor).

3. Winding

- Turn around the spool **CLOCKWISE**.
- Keep the cord well aligned in the slot during winding.
- Complete **AT LEAST 2 FULL TURNS** around the spool.
- **Important: the turns must be NEAT and SIDE BY SIDE, not overlapped.**


4. Tensioning

- During winding keep the cord slightly taut.
- Do not leave slack sections between the turns.

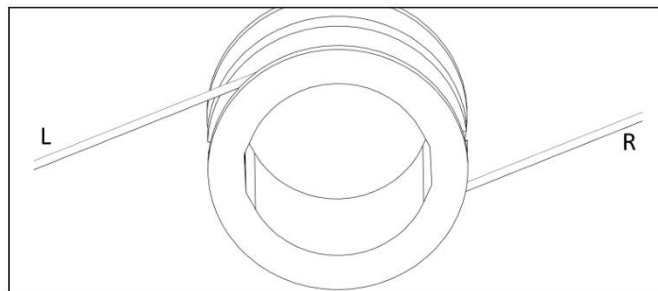
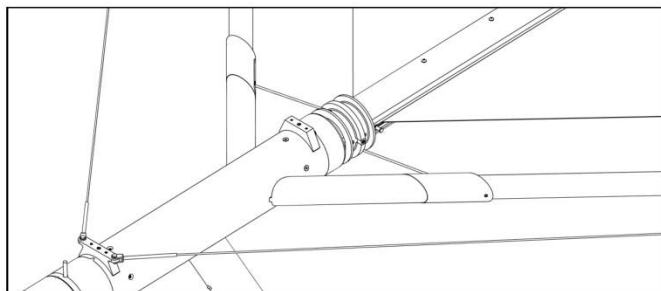
5. Final fixing

- After at least 2 full turns, lock the cord with the dedicated stop.
- Cut off any excess length.

CAUTION:

✓ **Stops fully inserted** - check that they firmly lock the cords.

The result at this stage must be the one shown in the two figures.



28. Perform a full opening, taking care to adjust the **OPEN LIMIT STOP**, until you reach the position where the slots holding the fabrics are not completely horizontal.

N.B. at this stage the fabrics will be soft and not tensioned.

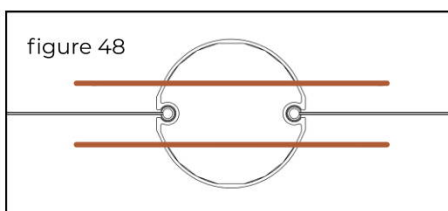
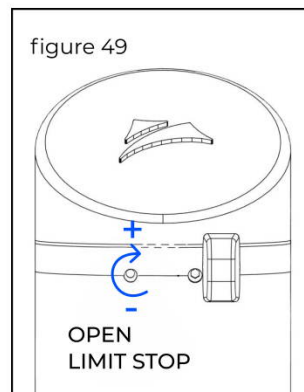


figure 48

figure 49



The "Open Limit Stop" is in the hole next to the close one and works the same way (turning clockwise increases the opening, turning counterclockwise decreases it). Manually pull the cord from the sail's corner plate to make it slightly taut.

29. Manually pull the cord from the sail's corner plate so that it becomes slightly taut.

30. Partially close the sail using the remote control, until you reach a position where the distance from the corner to the end of the arm is between 1 and 1.5 m (3.3 and 4.9 ft). [Fig. 50]

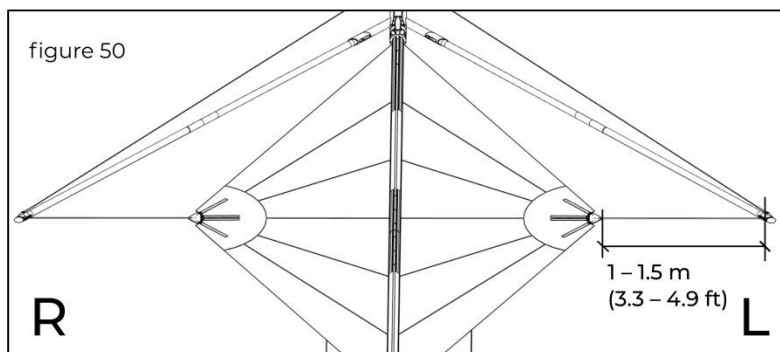
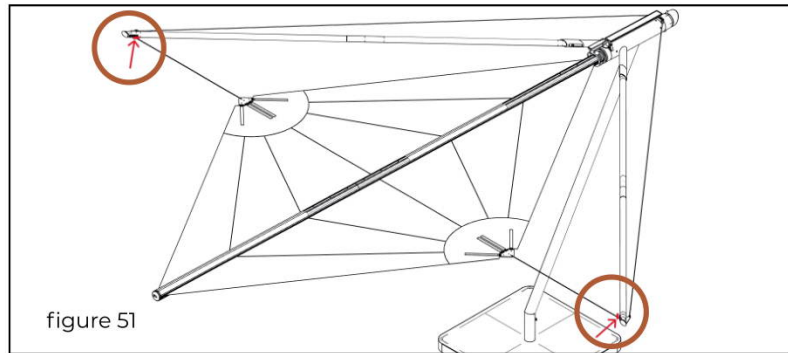
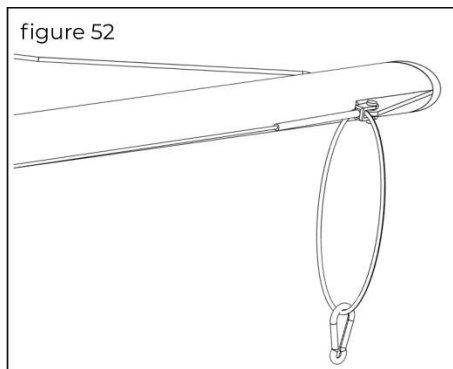


figure 50

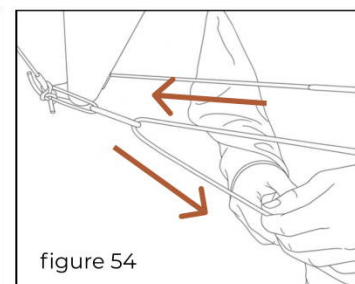
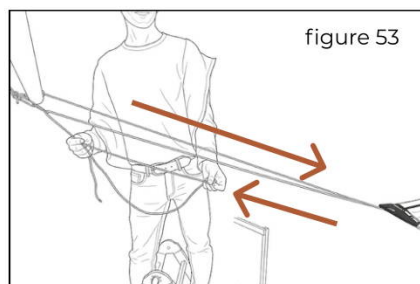
31. Mark the cord (electrical tape, masking tape, permanent marker, etc.) at the point where it comes out of the arm hole, as shown in the figure. [Fig. 51]



32. At this step, the cord loops on the sides of the tensioner must have stayed in the correct position as indicated earlier. If not, before proceeding, reinstall them at the ends of the arms. (Take care to tie a strong knot.) The final result is the one shown in the figure. [Fig. 52]



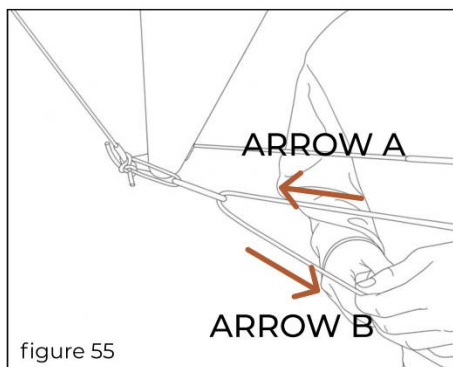
33. Release the section of cord currently inserted in the V slot at the corner of the sail. (Be careful not to release it from the central hole on the plate.) Pass this free cord over the carabiner as shown in the figure. [Fig. 53-54]



34. Pay attention to the next essential steps:

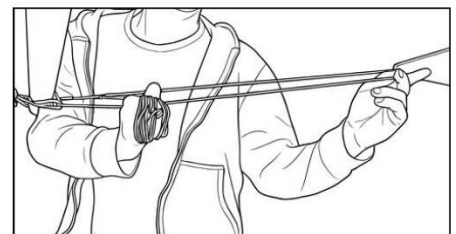
Guide (following the direction of "arrow A" in figure 55) the cord coming out of the sail plate toward the carabiner; at the same time pull (following the direction of "arrow B" in figure 55) the cord that passes through the carabiner.

N.B. The carabiner is in the middle, creating a pulley arrangement that makes it easier to tension the system. **At this stage you will need to use considerable force to activate the spring inside the arm.**

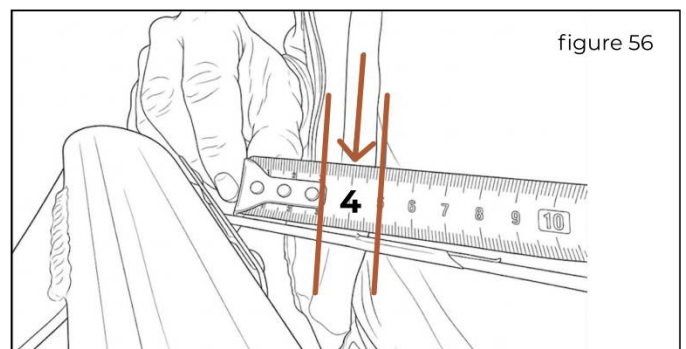


35. Continue until you ensure good tension at the corners of the sail. Lock the cord in the dedicated V slot of the corner plate, as done earlier.

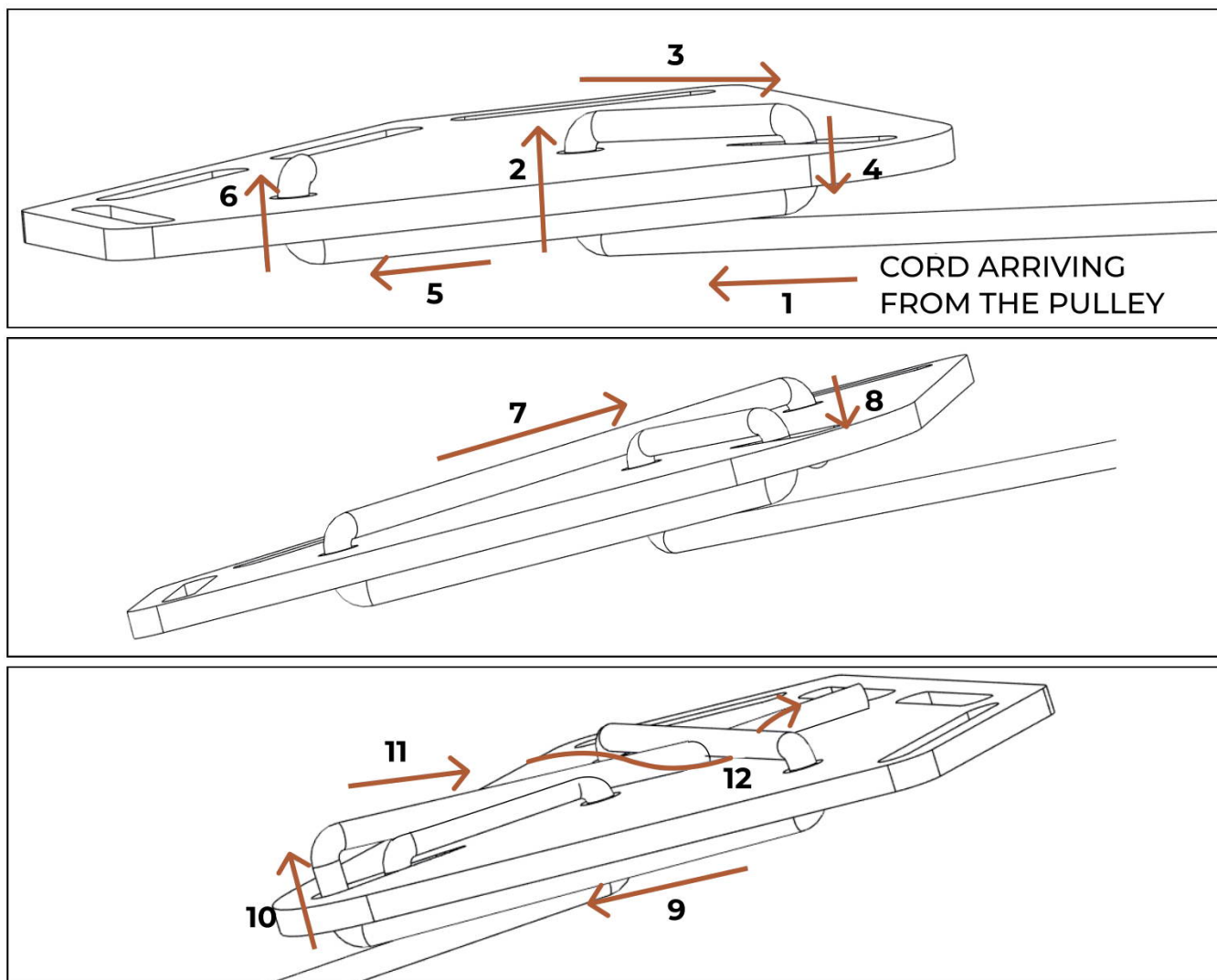
Tip: to make hooking easier, we recommend holding the 2 cord sections still at the carabiner with one hand and hooking the cord into the dedicated V slot of the plate with the other free hand.



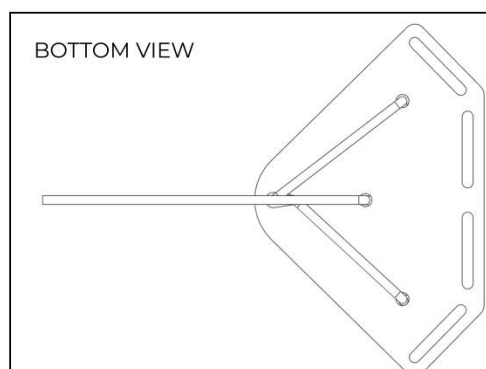
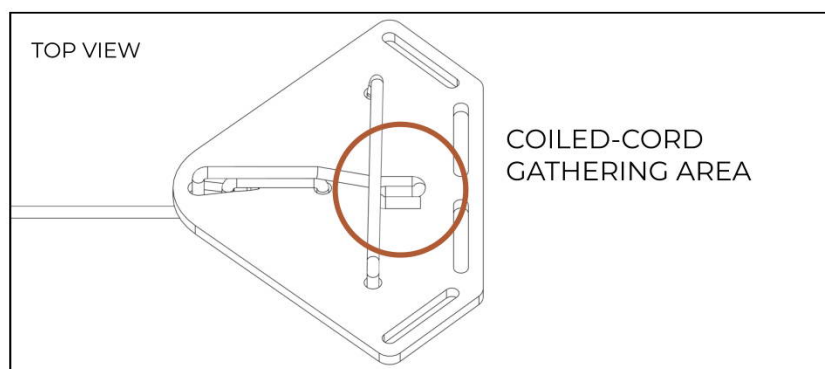
36. Check the correct tensioning of the system using a tape measure. The mark applied earlier near the pulley must move 4 cm (1.6 in) (with a maximum tolerance of ± 1 cm / 0.4 in) from the initial exit hole. [Fig. 56]
CAUTION: if the result is not within this range, re-tension by following the previous steps. Too little will not bring the system under tension, while too much could compromise and damage the product.



37. Once the **correct tension is reached**, fix the cords onto the corner plates as in the following figures. Following the instructions **you should already be at point 4** but, if not, fix the cord starting from point 1. The excess cord must be coiled and tucked under the cord that forms a bridge on the upper part of the plate (point 12).



The result must be this in the two views from above and below.



37. Repeat the tensioning operations just carried out on the other half of the sail as well.
38. Perform a full opening and closing to check correct operation and, if necessary, adjust the limit stops accordingly.



REMOTE CONTROL WARNINGS

Ingestion hazard: the product contains a button or coin cell battery; keep it out of the reach of children.

- Remove and immediately dispose of used batteries in accordance with local regulations, including those from equipment left unused for a long time; do not dispose of them in household waste or in an incinerator.
- Used batteries too can cause serious or fatal injuries; in case of ingestion, contact a poison control center immediately.
- Do not recharge non-rechargeable batteries.
- Do not force discharge, disassembly, heating above 40 °C (104 °F) or incineration: venting, leakage or explosion may occur, resulting in chemical burns.
- Install the batteries observing the correct polarity (+ and -).
- Do not mix old and new batteries, or different brands or types (alkaline, zinc-carbon, rechargeable).
- Always close the battery compartment properly; if it does not close properly, stop using the device, remove the batteries and keep them out of the reach of children.
- Do not expose the remote control to moisture or heavy impacts, so as not to shorten its life.
- If radio sensitivity or range decreases, check whether the battery needs replacing (low-voltage indication below 2.6 V).
- Holding a button down for more than 20 seconds (one-way mode) or 5 seconds (two-way mode) causes the remote control to stop sending the radio signal.



MOTOR WARNINGS

- Do not drop, knock, pierce or immerse the motor.
- Do not expose the motor to moisture or extreme temperatures.
- Do not cut the antenna; keep it away from metal objects.
- Make sure the power cable and any antenna are free and protected from moving parts.
- The motor must be mounted only in a horizontal position.
- Use only the correct crown and drive adapter for the installed motor model.
- If the power cable or connector is damaged, do not use it; the cable must be replaced by the manufacturer, the service center or qualified personnel.
- Before installation, remove any unnecessary cables and switch off equipment not needed for operation.
- Installation and programming must be carried out after carefully reading the supplied instructions; use or changes outside the instructions void the warranty.
- Do not operate the motor repeatedly beyond the recommended operating cycles, to avoid overheating.
- The motor may have an integrated lithium battery that is not user-replaceable. Before first use, fully charge the motor for at least 6 hours.
- Disconnect the drive from the power source during cleaning, maintenance and component replacement; disable automatic controls during operations nearby.
- Inspect the installation frequently for imbalance, wear or damage to cables and springs; do not use the device if repair or adjustment is needed.
- Watch the sun shade while it is moving and keep people away until it is fully closed or open.
- The mass and dimensions of the driven part must be compatible with the rated torque and the rated operating time.
- Do not allow children to play with the device, the fixed controls or the remote controls; keep the remote controls out of their reach.
- The device may be used by children aged 8 and over and by persons with reduced capabilities only if supervised or properly instructed about the risks.
- User cleaning and maintenance must not be carried out by children.

Problems, causes and solutions

Problem	Causes	Solutions
The remote control does not respond	The battery built into the solar panel is flat	Charge the battery built into the solar panel using the USB-C charger.
	No power supply or incorrect connection	Check the power connections and that the cables follow the instructions
	The remote control battery is flat	Replace the battery
	Radio interference	Check for sources of radio interference
	Out of communication range	Try using the remote control at close range (max range 20 m / 66 ft)
	Remote control pairing lost	Perform the pairing operations again
The remote control cannot control a single motor	Several motors are paired to the same channel	Correctly pair a single motor to the remote control
		Try using multi-channel transmitters to control projects with several motors, making sure that each channel controls a single motor
The motor does not work, starts too slowly or makes a loud noise	The connections are wrong	Check the connections
	The installation is incorrect or overloaded	Check the installation
The motor stops during opening or closing	The motor has reached the open or close limit	Set the new open and close limit
	Motor overload	Wait a few minutes and try the maneuver again
Squeaking while the product is moving	Presence of debris / obstructions in the moving parts	Clean and lubricate any moving parts
	Bushings need greasing	Grease the bushings (see maintenance)
	Worn tensioning cords	Check the condition of the cords and replace if necessary
The product opens jerkily, jams or moves noisily	Wiring error / faulty motor	Contact customer service
	Obstructions between the sail and the winder	Remove any obstructions
Very noisy motor	Wiring error / faulty motor	Contact customer service
During product closing the motor does not stop	Incorrect programming	Read the remote control operating instructions carefully and/or contact customer service
The product does not open or close completely	Incorrect programming	Read the remote control operating instructions carefully and/or contact customer service

Problem	Causes	Solutions
With the remote control, the product opens and closes by itself	Remote control battery flat	Replace the battery
The product does not move	Remote control battery flat	Replace the battery
	The battery built into the solar panel is flat	Charge the battery built into the solar panel using the USB-C charger.
	Motor failure	Contact customer service. Use the manual emergency rod
Abnormal vibrations during operation	Bushings worn or in need of greasing	Carry out greasing. If it persists, contact customer service for replacement
	Loose screws	Check and retighten all the fixing screws
Unstable / wobbling structure	Base not level	Adjust the feet. Check the supporting surface
	Insufficient ballast	Check that all 4 mandatory 50×50 cm (20×20 in) ballast weights are present
	Loose floor anchors	Check and restore the anchoring

Maintenance



WARNING

Make sure the sail umbrella is fully closed or fully open and that the power is disconnected before carrying out any cleaning or maintenance operation.



PROHIBITION

Work on the internal components of the sail umbrella must be carried out only by authorized personnel.

Use tools and equipment appropriate to the work you are about to perform.

When a job is finished, check that you have restored all connections, refitted guards and protections and properly tightened the screws.

Check that you have not left any object or tool inside the sail umbrella.

A greasy, wet or dirty floor can cause accidents.

When the maintenance work is finished, when starting up the sail umbrella make sure you have restored all the safety devices that were removed for the work.

Routine maintenance

The operations described below, if carried out according to the indicated timing, keep the purchased product in good condition.

CAUTION



Clean the fabric only with a damp cloth using lukewarm water.



Every 3 months (cleaning and basic checks)

Pulley check: verify smooth running and absence of squeaks. If they squeak: apply WD-40 or a specific lubricant.

Visual check of the tensioning cords: check for fraying, wear, loss of strength. Replace preventively if you have doubts about their integrity.

High-glide ring check: check for wear, gliding, integrity.

Winder screw tightness check: check the M5 joint-connection screws hold firm.

Motor-tube screw tightness check: check all the screw connections.

Steel tie-rod check: visual inspection for corrosion, broken strands, correct tension.

Twice a year (every 6 months)

Fabric cleaning: vacuum off the dust or use a sponge or damp cloth with lukewarm water. Let the fabric dry after cleaning. The aluminum parts can be cleaned with water and a neutral detergent.

Check the cleanliness of the metal parts.

Examine the installation and visually check for any signs of wear; if there are none, contact customer service.

The fabric must be visually checked for tears or broken seams.

Annually

Complete cleaning of the structure. Check the condition of the coating.

General operation check: test of full opening/closing cycles; check of the anemometer and sensors; test of the remote control and battery.

Installation stability check: floor anchoring (anchor check); ballasted base (check of level, feet, ballast).

Check that the moving parts perform their function correctly; if not, contact customer service.

Every 2 years (normal use) / 1 year (intensive use):

Greasing of the rotation bushings. Procedure:

1) Remove the solar panel using the 4× TBEI M6×12 mm screws.

2) Unscrew the M8×16 mm greasing set screws.

3) Inject grease through the holes with the supplied cartridge.

4) Refit the set screws and reinstall the panel.

Recommended grease: SKF LGMT 2.



WARNING

The operation requires a ladder and access to the motor unit.

Use the protective equipment as described in the dedicated table in Section 3.

Do not carry out this maintenance on your own, but with the support of at least one other person.

Signs requiring immediate action:

Metallic noises or persistent squeaks; slowing of opening/closing (the system must not take more than 65 seconds for the opening and closing phases respectively); abnormal vibrations; visibly worn cords; torn or damaged fabric; loss of anemometer function; difficulty rotating the structure on its axis.

Extraordinary maintenance

Extraordinary maintenance is required in cases of faults or breakages due to intensive use, unforeseeable accidents or improper use of the sail umbrella.

The situations that may arise from time to time are entirely unpredictable, so it is not possible to describe appropriate intervention procedures.

When needed, always consult technical service to receive the instructions appropriate to the situation.

Section 4

Decommissioning Disposal

DECOMMISSIONING

Deactivating the sail umbrella

This sail umbrella is manufactured and built according to criteria of robustness, durability and flexibility that allow it to be used for many years. Once it reaches the end of its technical and operational life, the sail umbrella must be deactivated, i.e. taken out of service and made unusable for the purposes for which it was originally designed and built, while still allowing the raw materials it is made of to be reused.



CAUTION

The manufacturer accepts no liability for harm to people or property resulting from reusing individual parts of the sail umbrella for functions or in assembly configurations different from the original ones. The manufacturer refuses any acknowledgment, implicit or explicit, of fitness for specific purposes of sail umbrella parts reused after the sail umbrella has been permanently deactivated with a view to its disposal.

Deactivation procedure

To permanently deactivate the sun shade, carry out the installation procedures in reverse.

DISPOSAL

The materials the sail umbrella is made of do not require special disposal procedures. Where applicable, refer to local regulations for disposing of its materials and components.

Contact specialized waste-collection centers for the correct disposal procedures for the sail umbrella and its components.

The possibility of reusing some parts of the sail umbrella, whether as mechanical units or as raw materials for other constructions, is subject to the full responsibility of the user.

The mark shown on the product or its documentation indicates that the product must not be disposed of with household waste at the end of its life cycle.

Battery and electrical components: do not dispose of in general waste. Recycle batteries and damaged electrical products appropriately at authorized collection centers.



CAUTION

The manufacturer is in no way liable for damage caused by the sail umbrella if it is not used in its complete version and for the uses and methods of use specified in this manual. The manufacturer is in no way liable for any harm to people or property resulting from the recovery of parts of the sail umbrella used after its disposal.