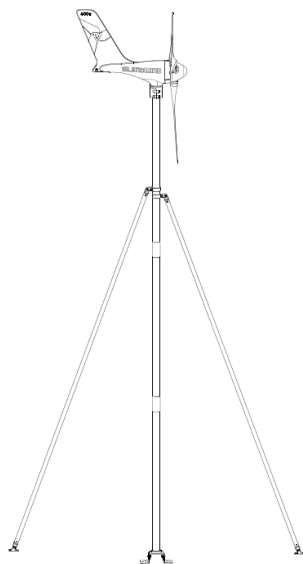




Mast – Mounting – Kit

OWNER'S MANUAL



Congratulations on your purchase of the mast-mounting kit!

This mast mounting kit is designed for poles with 48mm outside diameter and is suitable for the installation of wind generators, radar-units, satellite antennas or any other technical equipment. It can be used on sailboats and for land use. The mast foot is made swiveling and can thus be mounted on horizontal and inclined surfaces. The mast foot and the mast clamps are mounted in rubber elements, in order to prevent vibration- and noise transmission the best possible way. The rubber-damping part of the mast base can be adapted to different inner mast tube diameters. A cable guide is integrated in the mast foot. The cables must not be leaded to the outside of the mast and therefore the wires are not visible and perfectly protected. During the development care was taken to a simple installation and maintenance.

Delivery:

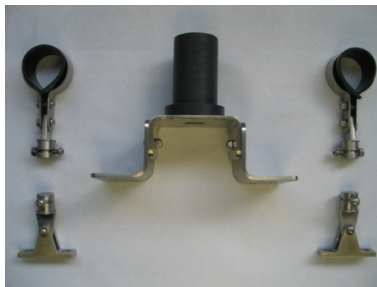
The mast-mounting kit includes:

Mast foot premounted	1 pc.
- Middle section with cable guide, polished stainless steel	1 pc.
- Mounting bracket polished stainless steel	2 pcs.
- Rubber mast support	1 pc.
- Mast washer polished stainless steel	1 pc.
- Mounting accessories, stainless steel	
Mast clamps assembled	2 pcs.
- Mast clamp polished stainless steel	2 pcs.
- Rubber profile	2 pcs.
- Strut ending, polished stainless steel	2 pcs.
- Mounting accessories, stainless steel	
Lower strut ending with mounting plate, polished stainless steel	2 pcs.
Rubber adapter sleeve for mast foot	1 pc.

The scope of delivery you can see in the picture 1!

The mast and the stays are not included. The necessary tubes have standard sizes and can be purchased anywhere in the world easily. Or you can order a suitable stackable mast from **SILENTWIND**.

Because of the various applications the fixation screws are not included in the delivery.



pic. 1

Product characteristics:

- Suitable for a mast with 48 mm outside diameter (1½" – tube)
- Rubber adapter sleeve enables the use of tubes with different wall thicknesses
- Made of polished stainless steel
- 180° Swiveling and adjustable mast foot suitable for the mounting on horizontal and inclined undergrounds
- adjustable mast stays
- at all mounting points rubber elements are included, in order to avoid noise- and vibration transmission
- Integrated cable guide
- Quick and easy installation
- Easy maintenance by swiveling mast

Safety instructions

Wind generators can be risky, due to the high speed of the rotating blades. So please pay attention to the professional installation of the mast system.

The following points must be observed:

- Adequate installation height of the wind generator to avoid contact with the rotating blades.
- Mounting of the lateral stays is absolutely necessary for safe mast fixation.
- When selecting the mounting location be careful of an adequate distance to nearby objects and obstacles.
- All bolts must be tightened and be checked regularly for tightness!

Before starting work, please read the assembly instructions carefully.

Mounting instructions

1. Site evaluation
2. Mast foot installation
 - 2.1. Assembly
 - 2.2. Mounting
3. Stay installation
4. wiring
5. Wind turbine installation

1. Site evaluation

When selecting the mounting location be careful that the wind generator can be streamed as undisturbed by the wind and doesn't touch any objects in his swing and rotor circuit.

The lower stay ends must be between 1,2m – 2,0m away from the mast foot and should be mounted under a spread angle of 90 degrees. See figure 2 and 3.

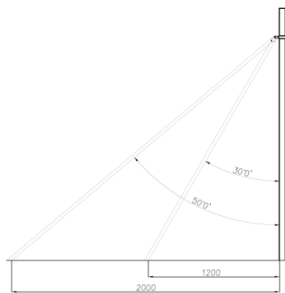


fig. 2

The surface of the mounting location must have a sufficient strength to absorb the dynamic forces.

The usual mounting on sailboats is aft to starboard or port side.

If a standard installation on level ground is not possible, we ask you to assemble as close as possible to the guidelines.

Also for installation in difficult conditions (no horizontal surface), the installation has to be carried out according the safety instructions.

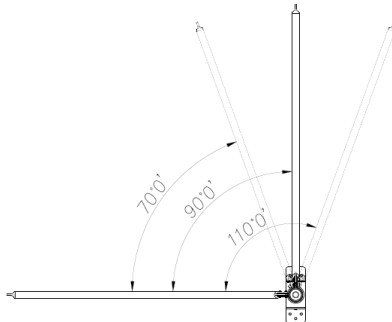


fig. 3

2. Mast foot – assembly

2.1. Assembly

Assemble the mast foot according to figure 4. When using a stainless steel mast with a diameter of 48 mm, insert the rubber adapter sleeve over the rubber element. When using an aluminium mast there is no adapter sleeve needed, due to the thicker mast wall.

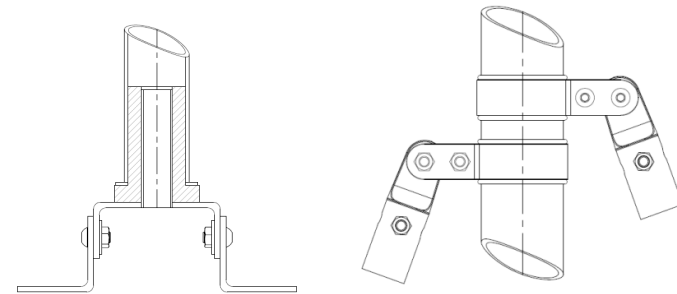


fig. 4

2.2. Mounting

Mount the mast foot on previously evaluated site.

Use appropriate screws for the mounting surface.

Secure the mast foot with at least 2 screws per side.

While defining the orientation of the mast foot, make sure that the mast can be swiveled, if required.

3. Stay assembly

Slide the mast clamp before mounting the mast from top over the mast, or if the mast is already mounted, loosen the clamp bolts and bend out the mast clamp to the extent that you can put it over the mast.

Fasten the clamps with the upper stay ends just over one another in the upper third of the mast, but at least as far below the mast end as the wing length of your wind generator. In the case of our turbine SILENTWIND it has to be fixed at least 55 cm below the mast end.

Do not fully tighten the screws yet in order to adapt the position of the upper stay ends according to the lower stay ends.

Install the lower stay ends on the previous evaluated position. Align the swiveling lower stay ends in direction to the center of the mast foot. Use suitable screws according to the underground.

If you want to draw in a cable into the mast in order to connect a wind generator it's now a good opportunity, as the mast is not mounted yet.

Insert the mast to the mast foot over the rubber element. If necessary, use soapy water to make the rubber moving.

Align the mast vertical.

Measure now the required length of the stay tube. You need a tube with 19mm internal diameter with the appropriate length.

Drill at a distance of 11mm from the tube end a hole with 6 – 6.5mm diameter exactly in the middle of the stay tube. Drill the hole at both ends of the stay in the same direction.

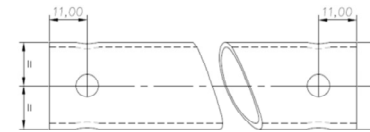


fig. 5

Put the stay tubes on the stay ends and assemble the screws on the tube ends.

Tighten all the screws after mounting.

4. wiring

Swivel the mast as far as possible and draw in the cable into the cable guide tube of the mast foot. Push the cable into the mast until the end comes out of the other mast end. Protect the cable from slipping back.

5. Wind turbine installation

Mount your wind turbine according to the instructions of your manual. Check that the blades of your turbine neither can affect the stays, nor other neighboring objects.

Maintenance

Check periodically that all existing screws are tight.

We hope you have fun during the assembly

NOTES:



Rulis Electrica, Lda.
Loteamento Industrial de Linhares, Lote 19
PT-4805-486 Santo Estevão de Briteiros / Guimarães
Portugal

VAT/Contribuinte / EORI-N. PT 502 995 530
Tel. 00351-253-572763

Fax 00351-253-572764

Tm/Handy 00351 96 790 79 33

e-mail: info@silentwindgenerator.com

site: www.silentwindgenerator.com