

GUDCRAFT®

Wind Turbine Generator



Model
WG700
WG700A

User's Manual

CONTENT

1. Description of system function	2
2. Packing list	2
3. Technical parameters	2
4. Installation instruction	3
5. Daily maintenance	5
6. Safety precautions	5

Dear Owner:

Congratulations! You have just purchased the most technologically advanced small-sized wind turbine system.

We appreciate your purchase, and are proud to provide this excellent product to you.

In order to easily install the wind turbine by yourself please read the owner's manual first.

We have made great efforts to satisfy your requirements in the aspects of design, manufacture, operation, application, etc.

Please keep the manual for further reference.

If you have any questions or please let us know.

We hope you enjoy the convenience that Wind Power brings to you.

1. Description of system function

500W wind generator is directly driven by rotor blades without other powered equipment. The high efficiency wind turbine is settled behind rotor blades, which can help to radiate heat.

The whole wind turbine system consists of a generator body (including rotor blades), yaw shaft, tower, inverter control system, energy storage system (not standard allocation)(battery for off-grid system, state grid for on-grid system).

2. Packing list

No.	Component	Quantity	Note
1.	Turbine	1 set	Turbine & yaw shaft & tail
2.	Flange	1 pcs	
3.	Blade	3 pcs	
4.	Nose cone	1 pcs	
5.	Tail	1 pcs	Tail pole, tail plane
6.	Controller	1 pcs	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.	Bolt M8 * 30	9 set	Flat washer, spring washer,
	Flange bolt	1 set	Flat washer, spring washer, nut
	Bolt M8 * 40	1 pcs	
	Bolt M6 * 16	2 set	Flat washer, spring washer
	Bolt M8 * 20	4 set	Nut
8.	User's manual	1 pcs	
9.	Controller specification	1 pcs	<input type="checkbox"/> Yes <input type="checkbox"/> No

3. Technical parameters

Rated output power(W)	500
Max output power(W)	700
Start-up wind speed (m/s)	2.0
Rated wind speed (m/s)	10
Rated rotating speed (rpm)	700
Charging voltage (V)	WG700 DC12V WG700A DC24V
The weight of generator (Kg)	9
The diameter of blade(m)	1.7

The quantity of blades	3
The material of blade	FRP
The weight of blade (Kg)	2.5

4. Installation instruction

Step one: blade assembly



Figure 1

First, please find the flange and the 9 set M3 x 30 bolts. (Figure 1)

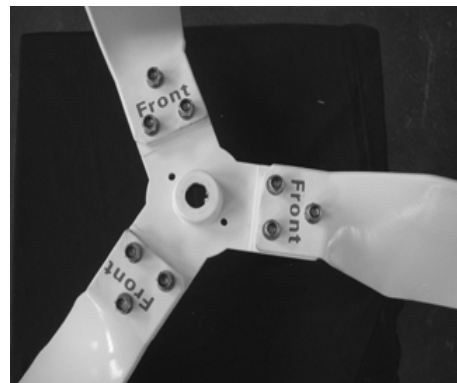


Figure 2

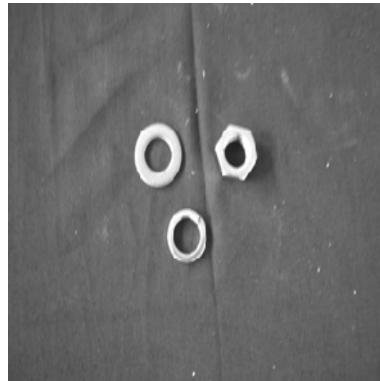
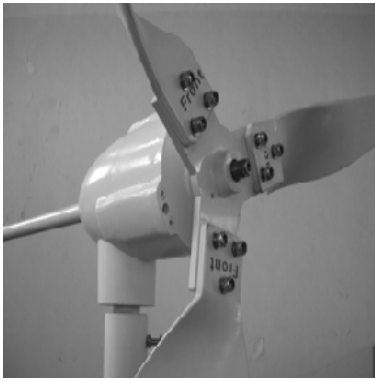
Second, fix the blades onto the flange with the 9 set bolts. Please note the side marked FRONT should be windward. (Figure 2.)

Attention:

The blades of every set have been professionally balanced.....so they should not be mixed with other sets. Please don't confuse the blades, otherwise it will cause serious shaking, damage or failure.

Step two: connection of blades and generator.

Insert the flange on the shaft with flange bolt, the sequence is spring washer, flat washer and nut.



Step three: put the cone nose on the generator, fix it with the M8 x 40mm bolt.



Step four: connect the tail to the generator with the 2 set M6 x 16 bolts.
The sequence is spring washer, flat washer and nut.



Step four: insert the generator into the pole, fix them with the 4 set M8 x 20 bolts. **Don't forget the nut.**



5. Daily maintenance

The wind turbine is highly reliable and does not need regular maintenance. However, the overall wind turbine system must be inspected and maintained regularly to ensure normal operation.

5.1 Screw inspection

Check the screws on flange, yaw shaft and tower .Re-tighten them, at least one time every year.

5.2 The maintenance of battery

Maintenance should be conducted at regular intervals throughout the year to ensure proper charging and discharging of battery.. If there's no wind for a long time, you should replace the battery temporarily with state grid.

5.3 TIPS

Do not stand near the turbine during periods of high wind speeds. It is recommended that you lay down the tower or bind blades to the tower to prevent them from spinning in the event of approaching extremely rough weather to avoid accidents.

6. Safety precautions

The wind generator is designed under strict safety regulations. However, any electrical and/or mechanical equipment during installation or operation may cause potential inherent dangers if the proper safety precautions are not taken. Please read the following safety precautions thoroughly before choosing the turbine location install or operate the turbine.

6.1 Mechanical hazards

Rotating blades can move fast enough that the tip of a blade is almost invisible, which may cause serious injury or damage to anything it contacts. **Do not install the turbine anywhere someone can come in contact with the blades.**

6.2 Electrical hazards

- (1) This product is equipped with needed protection device to avoid electrical dangers. Don't forget that the potential dangers still exist in the turbine, so please be careful during the process of connecting wires and other electronic equipment.
- (2) Undersized wires or wrong connections may cause over-current electrical dangers and overheating in wiring systems that could cause fire or other dangers.
- (3) Fire will be initiated by the short circuit of batteries. In order to avoid this, you must make sure the fuse/fuses are in good condition.

6.3 Assembling hazards

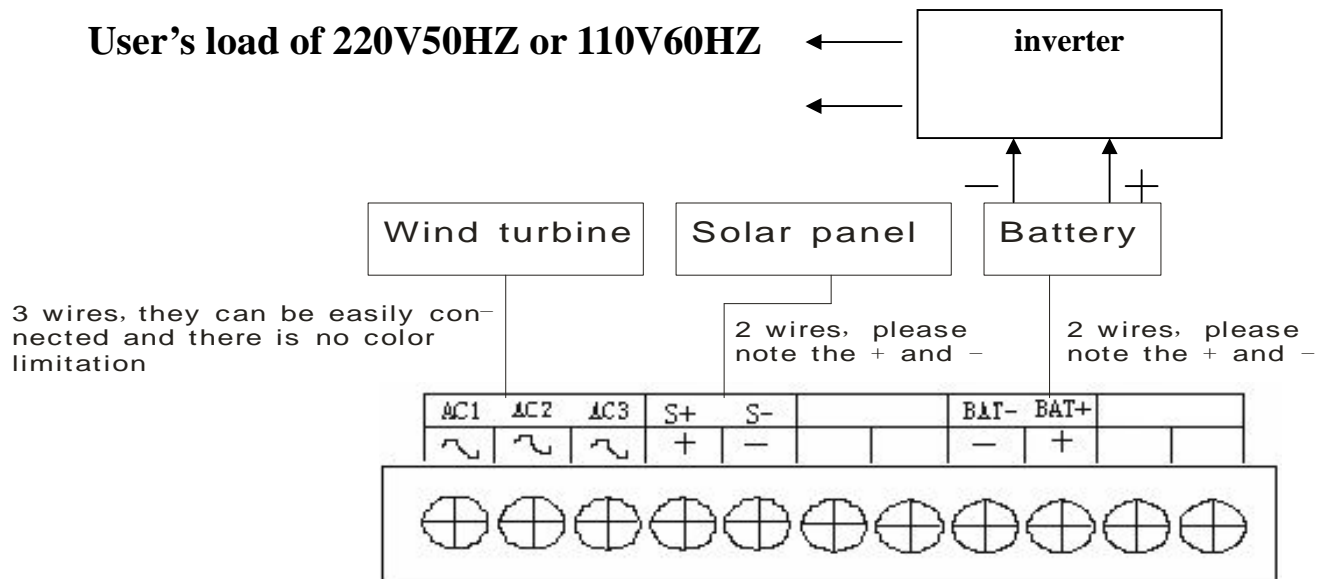
Please follow these basics during assembling:

- (1) Safety first.
- (2) Choose calm weather.
- (3) Stand on the earth when you install the system.
- (4) Have someone available to help.
- (5) Make sure that the rotor blades cannot rotate while linking the battery wires.
- (6) Rotor blades can't be fixed to the tower until after connecting generator and tower. Please lay the tower down on the ground before fixing blades.

6.4 Notices

This information is believed to be correct and reliable. The owner assumes full responsibility and risk due to improper usage, installation, or knowledge.

7. Wire connection



IMPORTANT

Please use the controller supplied for this wind turbine kit.

If you do not use the commended controller, please make sure the electric brake must be designed and included in your electric rectifier bridge circuit to prevent unexpected body injuries or property damage.

GudCraft CD2.5(WA70031)andCD7.0(WA7003)controllers supply wind generator with electric brake function and manual stop function, if ued together