

# USER MANUAL

# B L U M I L *SPORT*



B L U M I L



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# INTRODUCTION

Congratulations! Welcome to the BLUMIL family!

BLUMIL SPORT is a unique solution, that allows you to transform your manual rigid frame wheelchair into an electric handcycle. You can do this just by pressing a button. BLUMIL SPORT makes it possible for millions of people around the world to enjoy a new sense of freedom.

Grab your helmet and let's go for a ride, you are about to experience TRUE FREEDOM with your BLUMIL SPORT!

## TECHNICAL SPECIFICATIONS

Max SPEED	25 km/h (Can be limited)
Range	Up to 70 km
Battery	672 - 696 Wh
Engine Power	500 W
Climbing angle	Up to 10 %
Wheel Diameter	12"
Max user weight	120 kg
Weight with battery	18 kg

## SAFETY WARNINGS

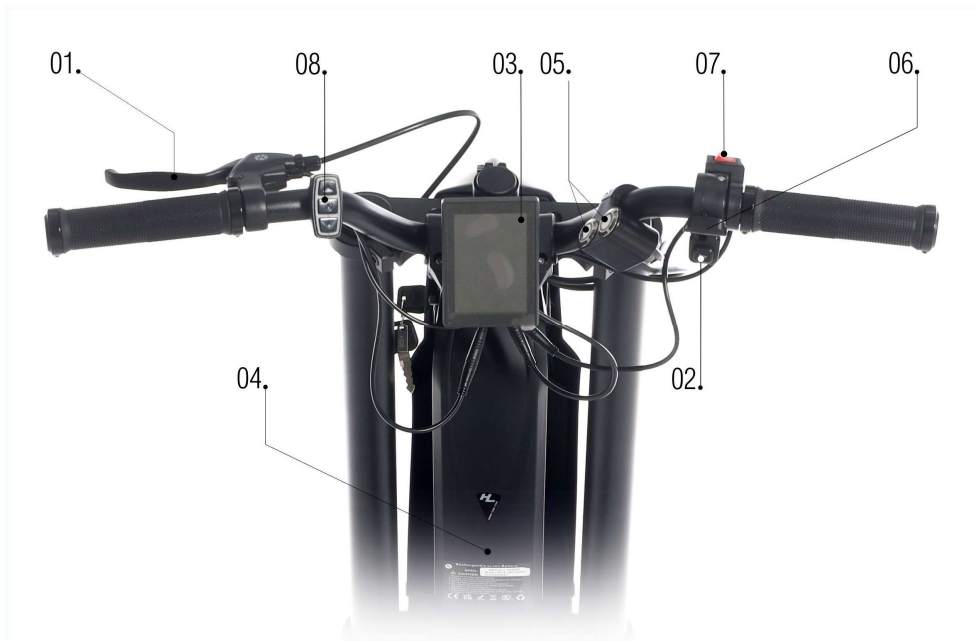
It is your responsibility to ensure that you read and meet all of the rider requirements listed below and are aware of all risks of riding as listed in this manual before attempting to ride with BLUMIL SPORT.

- Due to the possibility of reaching high speeds, it is recommended to wear a helmet.
- Do not ride over curbs higher than 5 cm.
- Do not ride over puddles or water. Avoid getting the wheelchair wet in any other way.
- The attachment should only be used to transport one person at a time. Any other use is not permitted.
- It is recommended that BLUMIL SPORT is only used by people who are able to physically and mentally meet the requirements of traffic on public roads.
- Please note that when driving on public roads, the handcycle is subject to all road traffic regulations.
- Beginners should be especially careful when driving.
- Familiarize yourself with the braking distance for different speeds.
- You should also familiarize yourself with the general traffic regulations.
- To be able to move steadily in a straight line, avoid sudden steering movements when driving at high speed or cornering.
- A three-wheeled vehicle is always less stable than a four-wheeled vehicle.
- When driving, braking and maneuvering, the handlebars must be held firmly with both hands. Otherwise, there is risk of an accident.
- The speed should be adapted to the technical capabilities of the handbike, the terrain characteristics and the operator's skills.
- Be careful when riding over curbs, bumps, etc., as the handbike may tip over.
- The driving style should be adapted to your skills.
- Be careful and drive slowly, especially when cornering.
- Before driving on hills, familiarize yourself with the product on a flat surface.

- Slow down reaching a curve and lean over to the inside of the bend.
- A set with the Blumil Go has a greater turning radius than the wheelchair itself, therefore it can sometimes be impossible to turn in tight places, such as corridors.
- On hills, the grip of the drive wheel is less than on flat roads, which means less braking power. The driving style and speed must always be adapted to the conditions so that the product can be stopped at any time without causing any hazard.
- In order to avoid falling over, obstacles such as curbs must always be crossed forward / perpendicular at low speed. The maximum height of obstacles is 50 mm, but it depends on the distance between the front wheels from the surface, and therefore on the settings of the attachment and connection with the Blumil SPORT.
- When moving on wet surfaces, the risk of slipping is increased due to the less grip of the tires. In this situation, the driving style should be adjusted accordingly.
- Riding the wheelchair with Blumil SPORT attached, risks serious injury or death from falls, loss of traction, loss of balance, collisions and other accidents.
- Do not ride with BLUMIL SPORT unless it has been properly adjusted to your individual needs.
- Do not attempt to ride when the battery indicator displays no bars (is empty).
- Keep obstructions such as straps, clothing, jewelry, and bags away from the wheels and other moving parts.
- Be aware of the foot rest at all times as it may catch on steep inclines, or other obstructions and cause instability with BLUMIL.
- Do not go onto surfaces steeper than 10%.
- Do not attempt to use any stairs to move between different levels, as it may result in an accident.
- Avoid surfaces covered in ice, oil or other slippery substances.

- While using and servicing the Blumil, some body parts may get caught in/squeezed in the elements of Blumil. You need to be very careful. After regulating the Blumil, always make sure that the bolts are screwed securely.
- Please keep away from children under the age of 5 (choking hazard).
- Protect from fire and flammables.

# PARTS



1. Brake lever

2. Horn

3. Display

4. Battery

5. Connect / disconnect button

6. Throttle

7. Reverse gear

8. Display

a. UP button (+)

b. Center button (SW)

c. DOWN button (-)





9. Tire

10. Brake disc

11. Lever lock

12. Steering wheel angle adjustment

13. Cover

14. Lock

15. USB socket

16. Center bracket



17. Charging port





18. Main switch

### Main On/Off Switch

In order to switch on the device you need to press the main switch into **ON** position. When you are not using the device make sure you put the main switch in the **OFF** position, otherwise the battery will drain and can cause a malfunction!

# DISPLAY AND BUTTONS

## Functions:

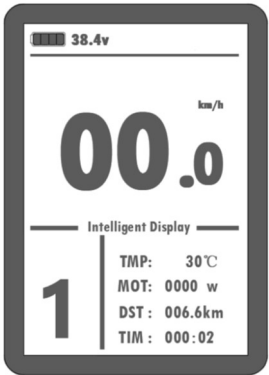
- ◇ Trip time display (with displays of a single trip time (TM) and total trip time (TTM));
- ◇ Trip speed display (with displays of real-time speed (KM/H) and a single maximum speed (MXS) and a single average speed (AVS));
- ◇ Trip distance display (with displays of a single trip distance (DST) and total trip distance (ODO));
- ◇ Display of turned on throttle (**THROTTLE**) ;
- ◇ Cruise function (  );
- ◇ Battery capacity indicator (  );
- ◇ Real-time battery voltage (VOL) display;
- ◇ Motor power (MOTOR W) display;
- ◇ Brake status display (  );
- ◇ Turn on backlighting and lights (  );
- ◇ Environment temperature (°C ) display;
- ◇ Fault code display;

### On/Off

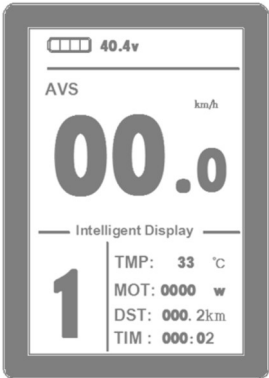
Hold button (SW) long, the meter is powered on and into normal operation, and it provides the controller with power supply. Under normal operating status, hold button (SW) long, the meter is powered off, meanwhile to shut down the power supply of controllers. When the vehicle is stopped and without any button operation on the meter for five minutes, the meter will automatically shut down, and the power supply of the electric vehicle will be powered off.

### Display Interface

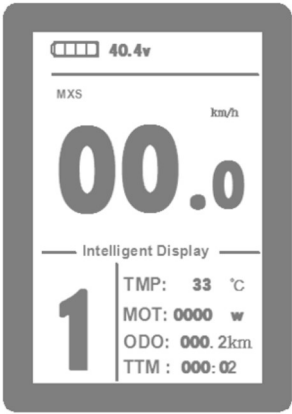
Hold button (SW) long, the meter is startup to enter display 1.



In display 1, hold button (SW) shortly to enter display 2.




In the riding mode within 5 seconds, display 2 automatically jump to display 1




In display 2 , hold button (SW) shortly again to enter display 3, and so on.

In each display interface, if you hold button (SW) long, the meter will be powered-off and cut off the power of the controller.

**Cruise Function**

Hold button (DOWN) long to enter the cruise status when the vehicle moves with the speed more than 7 km/h, and the cruise function logo lights (  ). Brake or press any button to revoke cruise function.

**Headlights**

Hold button (UP) long, the meter turns on the headlights, meter backlighting and vehicle lights power logo (  ) light, hold button (UP) long again to turn off backlights and vehicle headlights.

### Battery Capacity Indicator

When the battery capacity is over 70%, the four power displays of the meter are lit, when the battery capacities drop, the four power displays are off in order, when the power capacity is less than 15%, the four power displays are totally turned off.

When the controller is power off due to voltage shortage, the power display frame flashes, indicating the vehicle has been in voltage shortage and waiting for shutdown currently.



Please make sure to charge the battery fully, before the first use.

## INSTALLING/REMOVING THE BATTERY

1. Turn off the battery
2. Unlock the battery with the key
3. Slide the battery up and pull it towards you.
4. During installation, gently insert the battery vertically and lock it with the key



## CHARGING

1. Turn off the power
2. Open the plastic charging port plug
3. Connect the charging cable
4. When finished, close the plastic plug

## CONNECTING BLUMIL SPORT TO A WHEELCHAIR

To start connecting BLUMIL SPORT to the wheelchair determine the length of the center bracket.

In order to connect BLUMIL SPORT, it is necessary to drive the wheelchair to the front of the bumper [1]. The center bracket hook [2] should be above the rear bar of the wheelchair. (in some wheelchair models the access to this bar is blocked by a different construction bar of the wheelchair – especially Panthera models. In this case the hook can be attached to that bar.) If, during approaching, the central bracket gets caught, it must be raised or lowered using the **Disconnect** and **Connect** buttons [3]. If the front of the footrest is in contact with the bumper, you can press the **Connect** button. The front of the wheelchair will start to raise. Keep the button pressed until the clamp rests on the footrest of the wheelchair. After connecting, make sure that the system is firmly connected by moving the steering handle from side to side so that there is no movement.

If the front wheels of the wheelchair do not rise to a height of at least 2 cm, a different position of the footrest in relation to the bumper should be set. To do this, you have to extend the hook of the central bracket by a few centimeters and drive the wheelchair again to connect it to Blumil SPORT - this time further away from the bumper and repeat the connection procedure.

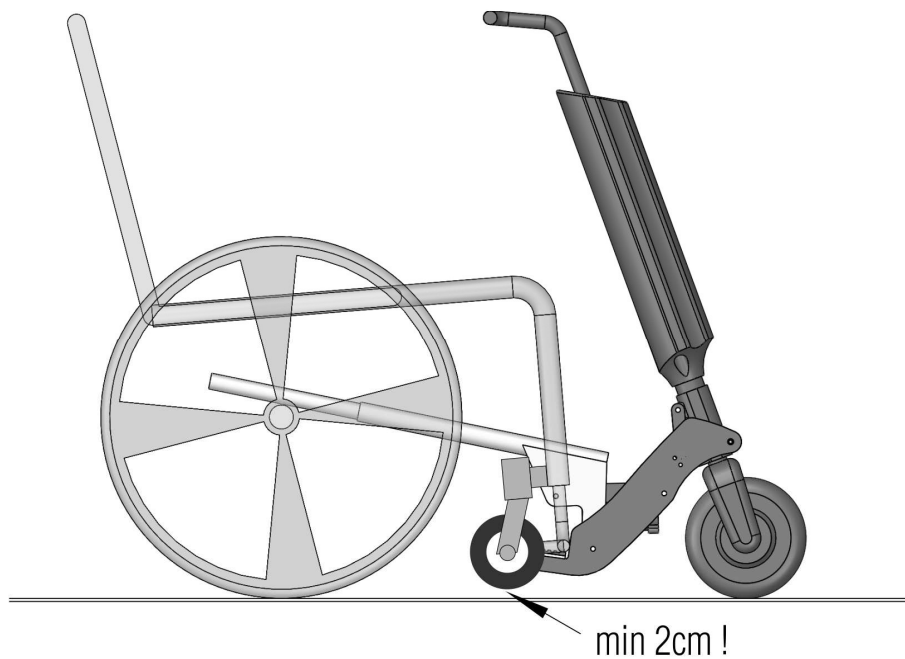
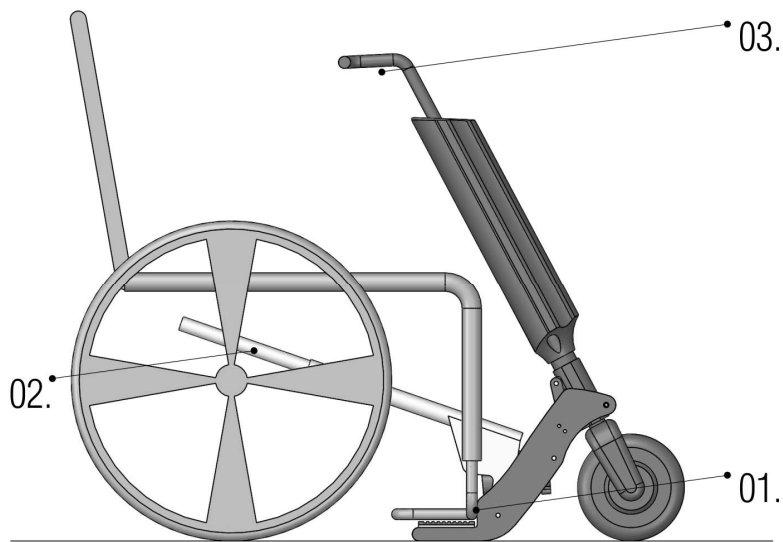
**WARNING:** *Pressing the Connect button for too long after connecting the system may damage the wheelchair frame or the BLUMIL SPORT.*

To disconnect the system, press the Disconnect button and keep it pressed until the front wheels of the wheelchair are lowered and the central bracket rises above the rear bar of the wheelchair. You can then freely move out with the wheelchair.

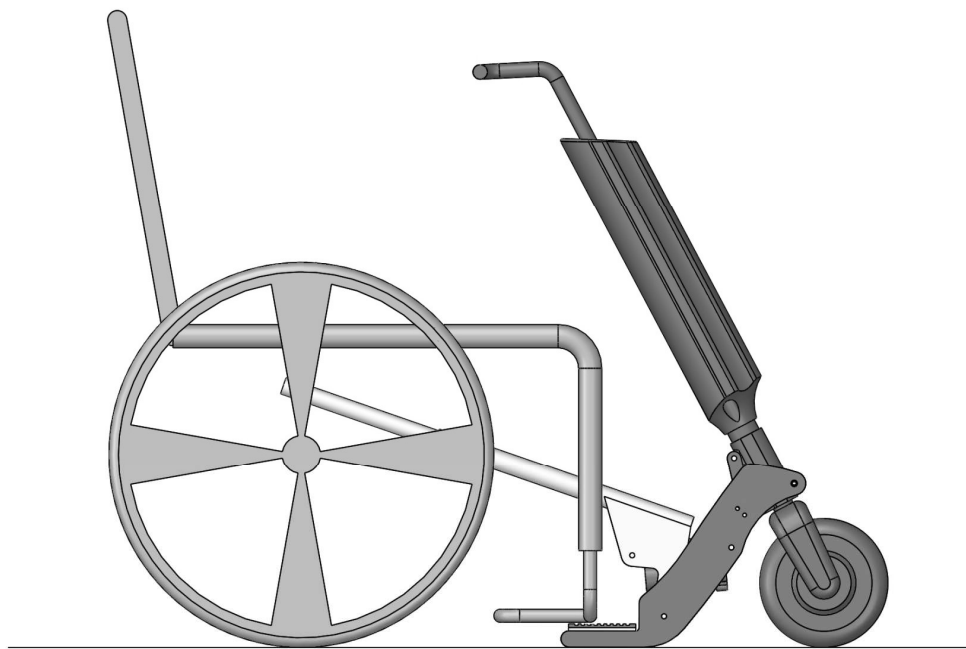
If while pressing the button, the hook stops working, please turn the device off and then back on again.



## Footrest next to the bumper



**Footrest away from the bumper**



## ADJUSTING THE STEERING COLUMN ANGLE

To make the ride as comfortable as possible, the distance between the steering wheel and the user should be set accordingly. This can be done by adjusting the angle of the steering wheel. To move the steering column closer or further follow these steps:

1. Loosen the steering tilt screw (it comes not tightened as it requires tightening by the user in the later step)
2. Determine the correct angle by moving the steering wheel forwards or backwards
3. Tighten the steering wheel tilt screw very tightly

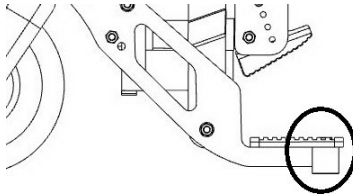
**NOTE:** *Adjusting the angle affects how high the front wheels of the wheelchair are raised from the ground.*



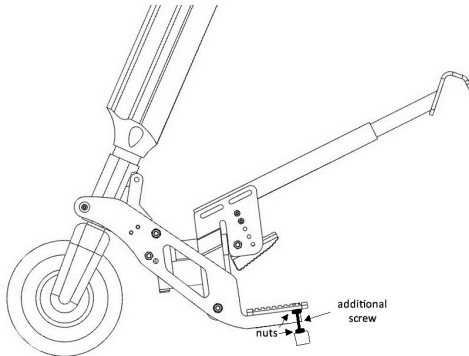
# WHEELCHAIRS WITH HIGH FOOTPLATES

As every wheelchair is a bit different and set up to the specific needs of the user, some additional adjustments might be necessary. If you are unable to approach with your wheelchair to the bumper, because of the clamp blocking the footplate it might be necessary to use the provided longer screws (M6x70). This can be done in a couple of steps:

1. Remove the rubber stands, by unscrewing the 4 M6x70 screws.



2. Please insert through the holes longer screws that are provided.
3. Screw in the additional nuts (1 on each side) firmly, so that the screws aren't moving.
4. Screw in the remaining 4 nuts (1 on each side) about half way – they will be needed for the next step.
5. Screw in the 4 rubbers stands as firmly as possible and block them with the nuts that you installed in the previous step.



## THE RIDE

Here are some basic rules to read before using the BLUMIL SPORT. It should be used cautiously. Pay special attention to warnings and instructions in this manual.

During the first ride on BLUMIL SPORT, start with a flat surface with good grip, free from obstacles.

**WARNING:** *Before driving, make sure that the adjustments according to the instructions have been made.*

**WARNING:** *Do not drive in difficult terrain until you have experience in driving.*

To accelerate, press the throttle.

To slow down or stop, press one of the brakes. To stop completely, it is necessary to press the lever brake.

When riding up too steep hills the Blumil SPORT might turn itself off to prevent overheating and damaging the motor.

## MAINTENANCE OF THE BATTERY PACK

The battery is the most important part of the drive. To maximize battery life, follow the steps below:

1. Carefully read the precautions on the battery label and follow the instructions
2. Please try to keep the battery at 0 °C - ~ 40 °C in a room temperature, which will improve the battery performance. Avoid temperatures below -20 degrees or above 50 degrees.
3. Please keep the battery in a cool, dry environment. In a closed, wet environment, the battery pack can be condensed and water can damage the battery.

4. During everyday use try to avoid the battery being completely discharged. Please charge as soon as possible when the LCD shows only 10% ~ 20%. Leaving the battery discharged may permanently damage the battery.

## **BLUMIL WARRANTY**

### **BLUMIL Limited Warranty**

BLUMIL is covered by a 1 year manufacturer's warranty against any defects in materials and workmanship (6 months for the battery), beginning on the date of purchase, and only for the original purchaser under non-commercial use. Any replacement part or product that has been installed in accordance with the seller's instructions assumes the remaining original warranty or a maximum of 90 days from the date of repair or replacement, whichever is longer.

### **Procedure for Warranty Service**

Prior to returning any part or product for warranty service, you must first contact the certified reseller from whom you purchased your BLUMIL product. If no such reseller exists, you must contact BLUMIL via email at [info@blumil.com](mailto:info@blumil.com). If the part or product in question is found to be defective and warrantable you will be responsible for shipping the part or product back to BLUMIL or the certified reseller from whom you purchased your BLUMIL product. BLUMIL or the certified reseller shall be responsible for return shipping to you. If product is not warrantable, you may purchase a replacement part and must pay for shipping.

### **Warranty Exclusions**

The BLUMIL warranty does not cover and shall be void for defects or damages resulting from casualty, accident, collision, inclement weather, water damage, misuse or abuse, neglect, alterations, improper installation, operation, or maintenance.





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