# **USER'S MANUAL**

## **BATEC ELECTRIC - BATEC MANUAL - BATEC HIBRID**

**ENGLISH** 





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PATEC

WELCOME

Firstly, we would like to take this opportunity to congratulate you for having acquired

a BATEC, made by BATEC MOBILITY S.L.

All BATEC MOBILITY products follow EU Council Directive 93/42/EEC concerning

medical devices.

Every BATEC is assembled manually and individually, guaranteeing maximum quality.

The fact that the inventor, founder and current manager of BATEC MOBILITY, as well

as many of our employees, are BATEC users allows us to incorporate to our products

the experience gained over many years of use.

At BATEC MOBILITY we are committed to every new user benefiting from an optimum

use of their BATEC and thus achieving greater mobility and independence.

It is very important that you read this manual and the safety instructions carefully

before using your BATEC for the first time. This will allow you to understand how your

BATEC is manufactured and how you should use it to obtain maximum comfort and

safety.

On our part, we remain at your disposal for any query you may have or services you

may require.



## 1. SAFETY MEASURES AND GENERAL PRECAUTIONS

#### 1.1. BEFORE USING YOUR BATEC FOR THE FIRST TIME

- Before using your BATEC for this first time, please read this user manual carefully.
- You must not exceed the maximum weight of 110 kg. This includes the weight of the user plus any objects they are carrying.
- It is important that the first time you use your BATEC you start slowly, so that you get a feel for it and become familiar with it. Each new manoeuvre implies a potential risk. Please pay special attention to turns and to speed.
- Choose a quiet place to use your BATEC for the first time.
- Have someone with you to help you get the feel of your BATEC. Each
  new manoeuvre implies a potential risk of injury. Make sure you always
  have someone with you until you gain sufficient skill and confidence
  with your BATEC. It is important that anyone helping you reads the
  user manual before getting started too.
- Using the BATEC safely requires training and experience.
- Please make sure you are familiar with local traffic regulations.
- Check local laws regarding attachable handbikes and wheelchairs, as they may vary from place to place.
- Always give your BATEC a safety check before each use. This check should include:
  - Verifying that the fixed axles or removable axles of the rear wheels of your wheel chair are intact.
  - The velcro of the seat and back of your wheel chair.

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- The pressure of the tyres of your wheel chair. If it is very low, there
  is a greater risk of overturning and of wearing (the pressure
  recommended for the wheel chair is indicated on the side of the
  tire).
- The pressure of the BATEC tyre (recommended pressure: 3 bar).
- That the chassis of the BATEC is intact.
- That the chain is tense, in the case of the BATEC MANUAL.
- That all components, especially screws, are properly tightened.
- That the brakes are operating correctly.
- In the case of the BATEC ELECTRIC and the BATEC HIBRID, check that the electrical connectors are in good condition and are properly connected.
- In the case of the BATEC ELECTRIC and the BATEC HIBRID, that the battery is connected.
- That the BATEC attaches and detaches properly from the wheel chair.

#### 1.2. DURING USE:

- The BATEC should be used to transport strictly one person at a time.
- The use of the BATEC is recommended only for those people who are in an adequate physical and psychological state to move in traffic.
- Avoid unnecessary risks such as high speeds, quick turns and side inclinations. Also avoid moving on objects that can cause you to brake suddenly or that may cause you to overturn.
- The safest way of driving the BATEC is on level and obstacle free ground. Use a ramp whenever possible. Always be as cautious as possible when crossing roads.

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- Always have reflectant signs on the BATEC and on the chair or clothes in order to ensure you are visible for other drivers. When visibility gets poor, always use lights.
- There is a risk of slipping on wet surfaces, ground with gravel and uneven ground. Moderate your speed and behaviour. Do not use the BATEC on mud or ice.
- Check that your feet are well positioned on the footrest of the chair and that the tape is correctly adjusted.
- Always use your protection helmet.
- When you are moving with your BATEC, control your speed and adapt it
  to the type of ground you are moving on. Keeping your BATEC at a
  prudential speed will prevent unnecessary risks. Do not circulate with
  the BATEC at a greater speed than you would with the wheelchair
  alone.
- Maximum speeds allowed are:
  - 6 km/h in the street, on pavements and pedestrian areas.
  - o 12 km/h on bike lanes.
  - o 15 km/h on private grounds.
- When you need to turn, take into account that you must reduce your speed before and be as cautious as possible. If you turn at an inadequate speed you may lose control of your BATEC, running the risk of overturning or collision. Lean your body towards the inside of the curve in order to improve stability and reduce the risk of overturning.
- During driving and braking, hold the handles firmly with both hands.
   Otherwise you could cause an accident due to an error in direction.
- It is not advisable to go up or down kerbs, as there is a risk of overturning. When it is not possible to avoid a kerb, we advise that:
  - wherever possible, you obtain the help of an assistant.



- you approach the kerb perpendicularly, so that the wheels of your chair go up or down at the same time. Approaching a kerb in any other way significantly increases the risk of overturning,
- avoid strong impacts when coming down from or going up onto a kerb. A strong impact may have a negative impact on your BATEC and your chair.
- the BATEC and your chair must go down gently from the kerb, with all the wheels rolling.
- never try to go up or go down kerbs higher than 10 cm.
- When moving downhill or uphill, we recommend that:
  - wherever possible, you use the help of aother person while moving up or downhill.
  - you keep a straight path
  - in the case of a steep ascent, lean forward to load more weight on the front wheel and improve traction.
  - avoid unnecessary turns and never turn sharply, to avoid risk of overturning,
  - avoid stopping: it can cause you to lose control of the BATEC.
  - when going down, keep a slow and controlled speed, braking constantly while avoiding sudden brakes.
  - do not use your wheelchair brakes. This can lead to them blocking and you losing control.
- When covering long distances, we recommend that you keep a spare battery with you.
- In the case of the BATEC MANUAL and the BATEC HIBRID, do not place
  your hands in the area of the chainset. With all moveable parts there is
  always a risk of getting your fingers caught.
- Please check that the tread of the tyres is deep enough.
- Get familiar with the braking distances at different speeds.
- Use only BATEC MOBILITY approved accessories.

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- NEVER use your BATEC with a child on your knees. There is a high risk
  of fingers getting caught in the chainset (in the case of the BATEC
  MANUAL and the BATEC HIBRID) as well overturning, due to sharp
  changes of direction (in all cases).
- The following manoeuvres are not allowed:
  - Circulating up or down several steps or stairs
  - Circulating at an angle on the pavement
  - 180° direction changes on steep slopes
  - Sharp movements
  - Abrupt braking on curved

#### 1.3. GENERAL PRECAUTIONS

- Send your BATEC to a BATEC MOBILITY authorised distributor or authorised technical service regularly for general servicing.
- Avoid contact and proximity to fire and flames, especially to lit cigarettes.
- If the BATEC is subjected to a direct source of sunlight or to low temperatures for a long period of time, the BATEC parts could overheat (>41°C) or overcool (<0°).</li>
- The BATEC is not recommended for use in the rain or on surfaces covered with snow, or slippery or unsafe surfaces. In addition, avoid circulating in dangerous areas.
- Use only our charger to charge the battery.
- If you do not use your BATEC for a long period of time, keep the battery fully charged and charge it every 2 months to avoid it damaging due to "deep discharge".
- Keep the BATEC away from the reach of children unless they are supervised by an adult.

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- No manipulation in the interior of the battery is allowed, due to risk of explosion and/or fire.
- Remove the battery when transporting the BATEC in any means of transportation (car, bus, train, plane...).
- The BATEC has not been designed to be used as a means of transport inside a vehicle.



## 2. MODELS: CHARACTERISTICS AND PARTS

#### Information!

The BATECS shown and described in this manual may not be exactly the same as your model. However, all the instructions provided herein are applicable. The manufacturer hereby reserves the right to modify, without prior notice, the weights, measurements and other technical data described in this manual. All figures, measurements and capacities shown here are approximate and do not constitute specifications. The manufacturer reserves the right to modify, without prior notice, this manual. The updated manual shall always be available on the website: <a href="http://batec-mobility.com/es/soporte">http://batec-mobility.com/es/soporte</a>



There are three BATEC models: BATEC ELECTRIC, BATEC MANUAL and BATEC HIBRID. All the BATEC models have the same chassis and the same structure, only the transmission system varying in each model:

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- BATEC ELECTRIC: electric motor installed in the wheel.
- BATEC MANUAL: chainset with internal shifter in the wheel hub and manual pedals.
- BATEC HIBRID: combined transmission with chainset with shifter and manual pedals and electric motor in wheel.

In their standard configuration, the 3 BATEC models are designed for users with full functionality in their hands. For users without full functionality of their hands, we have a specially adapted control set, which we sell under the name 4QUADS. Currently we only have the 4QUADS control set for the BATEC ELECTRIC. We shall soon be launching versions for the BATEC MANUAL and the BATEC HIBRID.

## Information!

NECESSARY SKILLS FOR USING A BATEC: BATECS are recommended only for people who are in an adequate physical and psychological condition to move in traffic. In order to use the standard versions of the BATEC (BATEC ELECTRIC, BATEC MANUAL, BATEC HIBRID) it is necessary to have full functionality in hands and arms. To use versions equipped with 4 QUADS controls it is necessary to have good functionality in arms and partial functionality in hands, sufficient to accelerate, brake and turn without risks. For this reason, at BATEC MOBILITY we always offer the possibility of trying out the product beforehand.

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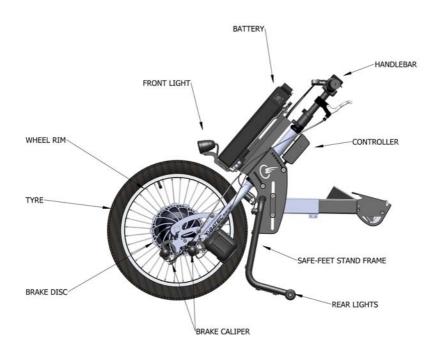
#### 2.1. BATEC ELECTRIC

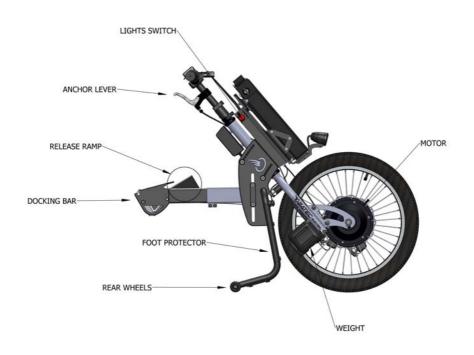
#### 2.1.1. BATEC ELECTRIC characteristics

- Material: Aluminium 7005
- Motor: Brushless 400 W and 36 V
- Battery: LIFEP04, 9 Ah Lithium, without memory effect (25-30 km)
   with wireless automatic connection system
- Double USB port for charging a Smartphone or Tablet
- Ultraquick charger (4 hours)
- Tyre: 20" Maxxis ultra-gripping (54-406)
- Wheel rims: 20" double wall aluminium
- Brakes: Double Shimano 203 mm mechanical disc brake with Shimano
   Deore levers
- Headset: FSA Orbit MX
- Handlebar: FSA V-Drive Lowriser
- BATEC EASY-FIT regulation system (Pat. Pend.)
- BATEC EASY-FIX anchor system (Pat. Pend.)
- BATEC SAFE-FEET stand frame (Pat. Pend.)
- Front light LED with 900 lumen, connected to main battery
- Double rear LED light on the stand frame
- Control panel with battery indicator and power regulator
- Cycle Computer with LCD screen and 4 functions
- Removable QR counterbalance weights for improved traction
- Weight: 14.9 kg (+4 Kg battery + 5 kg weights)



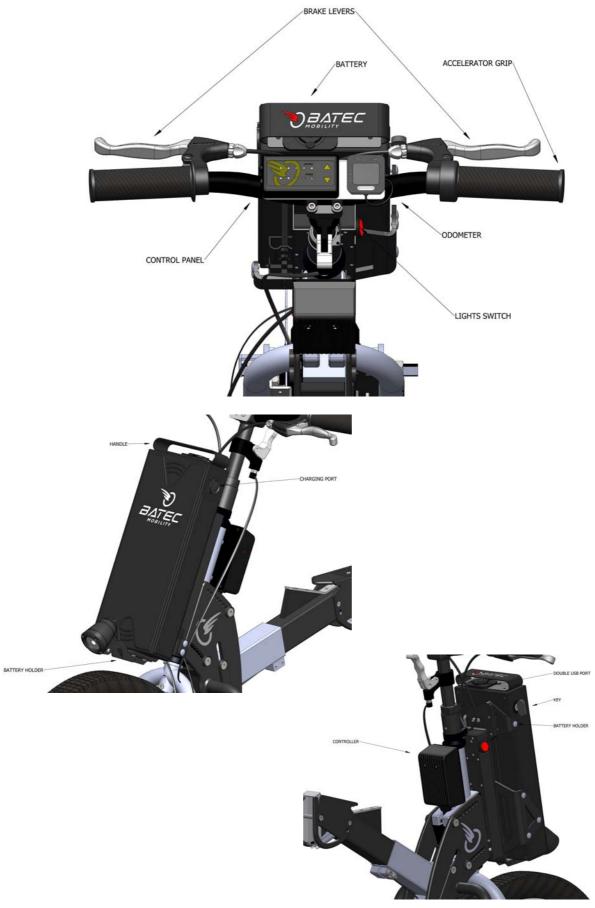
## 2.1.2. Parts of the BATEC ELECTRIC





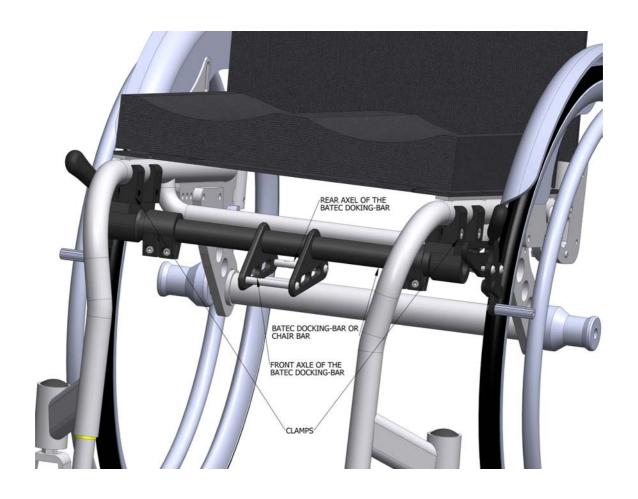
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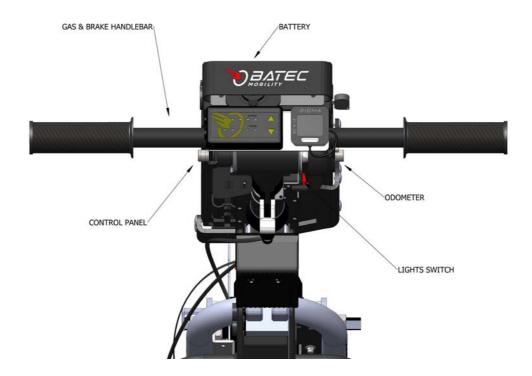




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## 2.1.3. Parts of 4 QUADS controls for BATEC ELECTRIC



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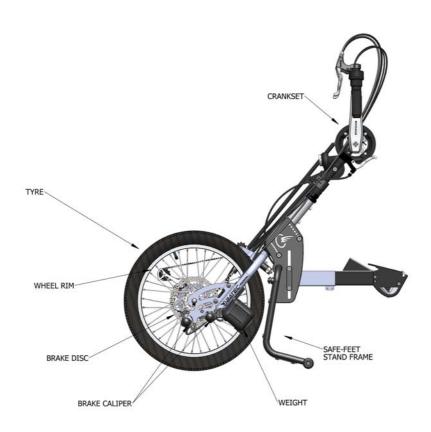
### 2.2. BATEC MANUAL

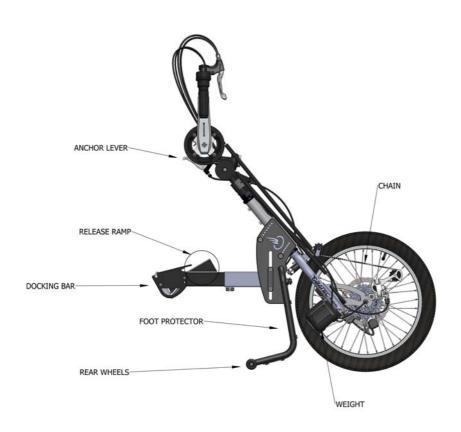
### 2.2.1. BATEC MANUAL characteristics

- MATERIAL: Aluminium 7005
- TYRE: 20"Maxxis ultra-gripping (54-406)
- WHEEL RIMS: 20" double wall aluminium
- SHIFTER: Sram Dual Drive with 24 speeds (3 speed internal hub + 8 gears)
- BRAKES: Double brake with 180 mm Shimano mechanical disk brake with Shimano Deore levers
- HEADSET: FSA Orbit MX
- CRANKSET: 170 mm Shimano, aluminium
- Ultraquick BATEC EASY-FIX anchor system (patented)
- STAND FRAME with wheels and feet protection plaque (patented)
- 7-LED FRONT LIGHT with 4 functions
- 2-LED REAR LIGHT with 2 functions
- CYCLE COMPUTER with LCD screen and 8 functions
- REMOVABLE QR COUNTERBALANCE WEIGHTS for improved traction
- WEIGHT: 11.5 Kg (+ 5 Kg weights)



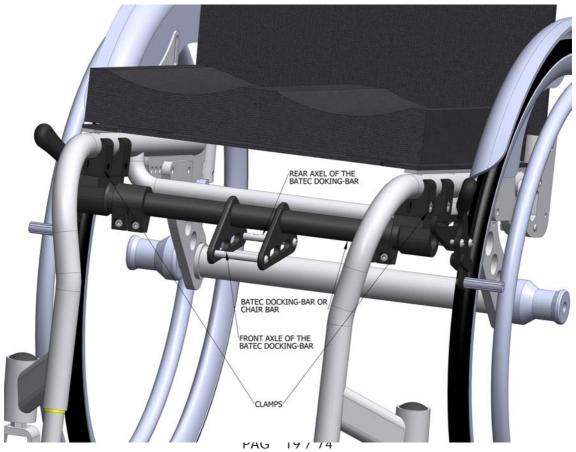
## 2.2.2. Parts of the BATEC MANUAL













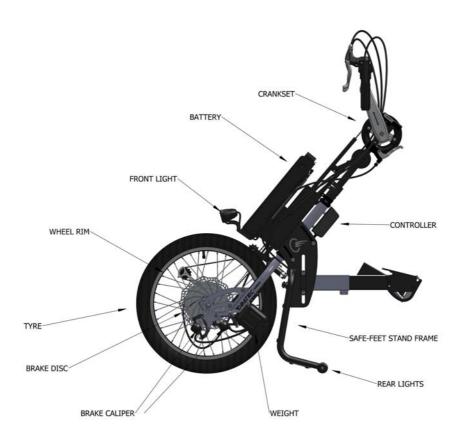
### 2.3. BATEC HIBRID

#### 2.3.1. BATEC HIBRID characteristics

- MATERIAL: 7005 Aluminium
- MOTOR: Brushless 500 W and 36V
- BATTERY: LIFEPO4, 9 Ah Lithium battery, without memory effect (25-30 km) with wireless automatic connection system
- Ultraquick CHARGER (4 hours)
- TYRE: 20" Maxxis ultra-gripping (54-406)
- WHEEL RIMS: 20" double wall, aluminium
- SHIFTER: Shimano Alivio 8 speed
- BRAKES: Double Shimano 203 mechanical disc brake with Shimano
   Deore levers
- CRANKSET: Shimano 170 mm aluminium
- Ultraquick BATEC EASY-FIX anchor system (patented)
- STAND FRAME with wheels and feet protection plaque (patented)
- FRONT LIGHT LED with 900 lumens connected to main battery
- DOUBLE REAR LED light on the stand frame
- CONTROL PANEL with battery indicator and power regulator
- CYCLE COMPUTER with LCD screen and 8 functions
- DOUBLE USB PORT for charging a smartphone or Tablet
- REMOVABLE QR COUNTERBALANCE WEIGHTS for improved traction
- WEIGHT: XX kg (+4 Kg battery + 5 kg weights)

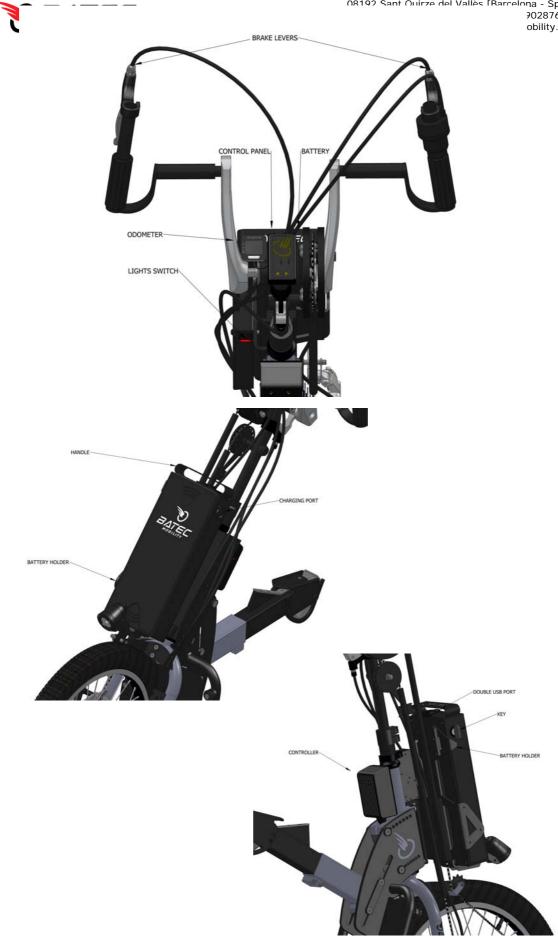


## 2.3.2. Parts of the BATEC HIBRID

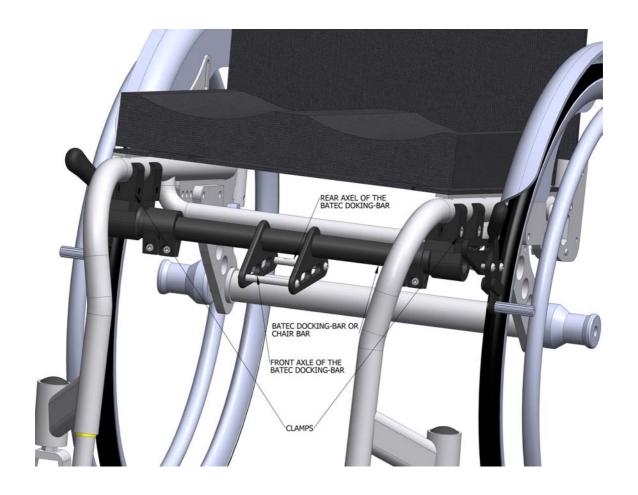




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## 3. OPERATION / USER MANUAL

## 3.1. DELIVERY

Your new BATEC is delivered fully packaged in a cardboard box. In order to prevent breakage during transport, loose parts to be installed later, such as the battery, are packed separately in the cardboard box.

#### 3.2. REMOVING THE PACKAGING

- Verify that the cardboard box does not have any surface damages that may have been caused during transportation.
- Remove all packaging material.
- Remove the parts of the BATEC (including the battery and the charger)
   from the cardboard box and check that everything is there.
- Check that no parts have any damages, scratches, lines, knocks, deformations or other defects.
- If you discover a problem or a missing part, please report this to the authorised distributor immediately.

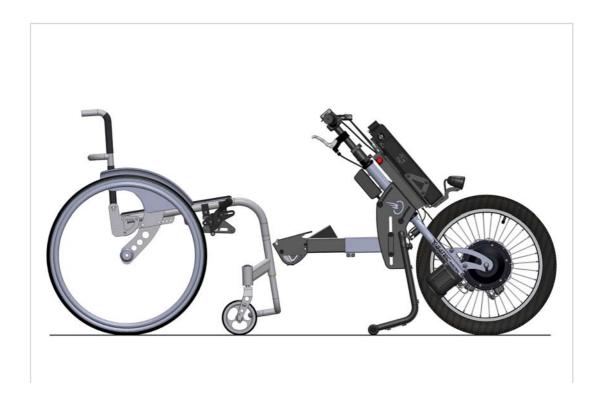
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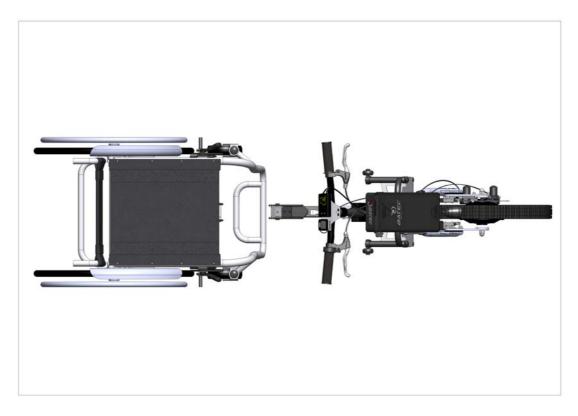
USER MANUAL



## 3.3. ATTACHING THE BATEC

• Step 1: Place yourself in front of the BATEC with the handlebar in the centre, in front of the chair, with the chair's brakes on.

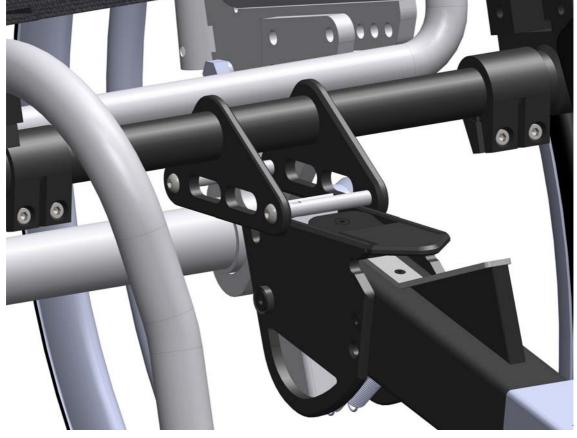






 Step 2: Hold the handlebar of the BATEC and bring it towards you, rolling the stand frame until the anchoring ramp of the docking-bar is touching the front axle of the wheelchair bar.

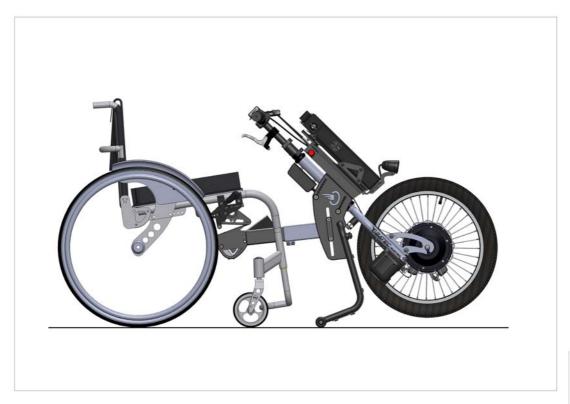




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Step 3: Lean the handlebar towards you, lifting the front wheel, as you
bring the Batec closer to you. When the anchoring ramp has gone past
the front axle of the wheelchair bar, let go of the handlebar and let the
front wheel rest again.

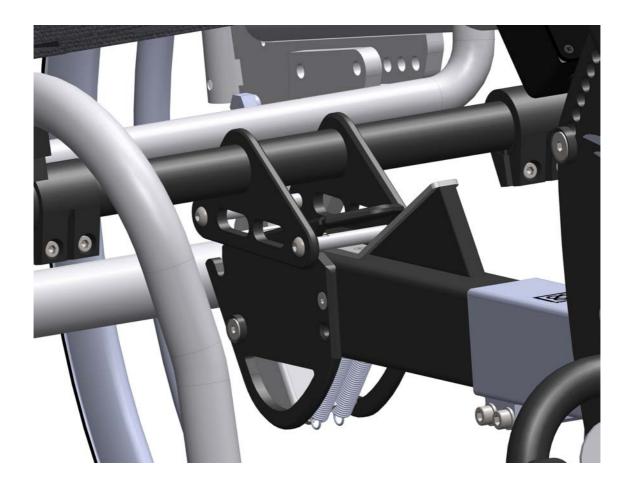




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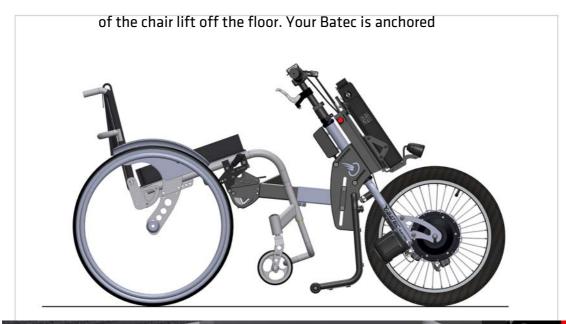


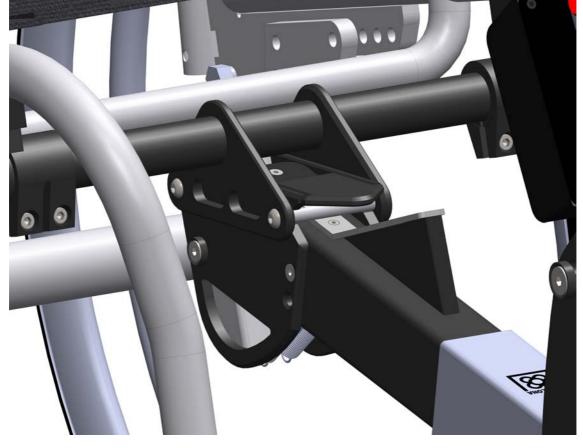
 Step 4: Take off the wheelchair brakes and push the handlebar of the BATEC gently to ensure that the front axle has fitted properly into its place.





 Step 5: Push the handlebar hard until you can push no more, so that both the wheels of the stand frame of the Batec and the front wheels





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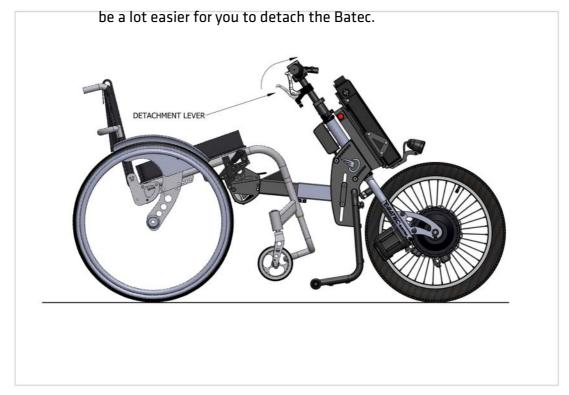


## 3.4. DETACHING THE BATEC

 Step 1: In the case of the BATEC ELECTRIC and the BATEC HIBRID, ensure that the BATEC is switched off.



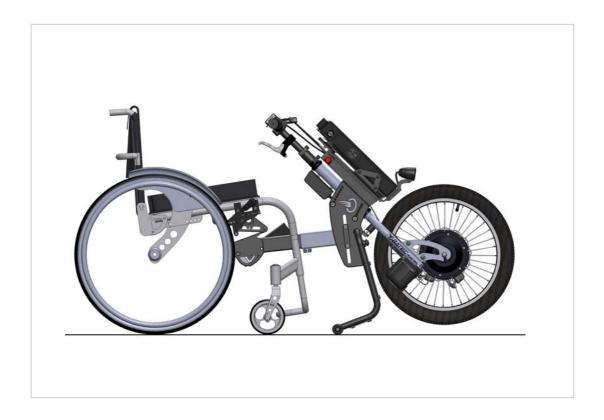
 Step 2: Press down hard on the detachment lever forwards with the palm of your hand until you notice the anchor has released. Keep your hand on the lever and move with the Batec until it is leaning on the floor. Tip: lean your trunk backward to free weight from the lever. It will



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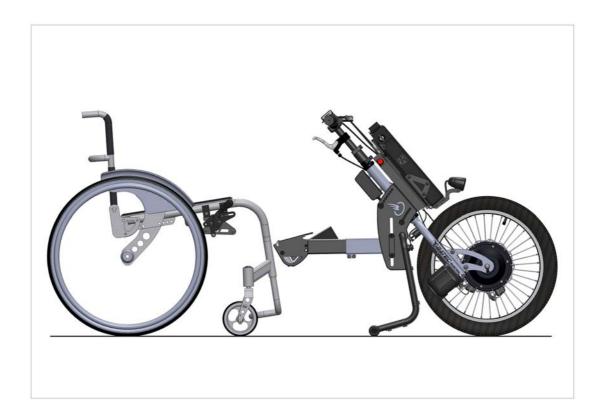
• Step 3: : Lean the handlebar, lifting the front wheel, as you move the Batec away from you.



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Step 4: When the anchoring ramp has gone past the front axle of the wheelchair bar, let go of the handlebar and let the front wheel rest again. Your Batec is detached.



Tip!

Patiently practice attaching and detaching the BATEC and you will see that after just a few weeks' use, it will be an operation you will do automatically.



### 3.5. OPERATION OF THE BATEC ELECTRIC CONTROLS

- Switching on: Turn clockwise the key located on the right side of the battery and leave it on position ON. The system will run a check: do not start to use our Batec until the check has finished running and all the lights have stopped blinking.
- Switching off: Turn the key of the battery anticlockwise and leave it in position OFF. If you leave it in the position LOCKED the Batec will also be off and the battery locked for removal.



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Accelerating: The accelerator is in the right grip of the handlebar. It
works like the accelerator of a motorbike, that is, turning the handle to
regulate power.



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 Braking: The Batec has two brake levers in the handlebar that act on the same brake disc. Press down the lever to brake. Tip: Use one hand to accelerate and the other hand to brake. Tip: Always keep two fingers on the brake lever so that you can react quickly.



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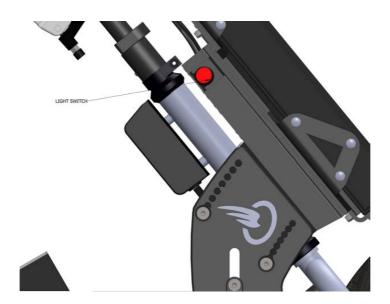
 Limiting speed: The Batec has five speed levels. Use the buttons on the control panel to limit maximum speed.

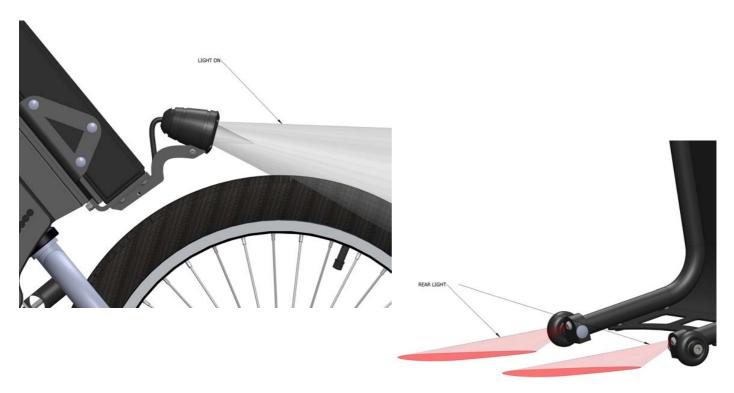


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• Lights: On the right side of the Batec there is a switch that connects the front and rear lights. When you light the switch, it should light up in red. The front light is located under the battery and the two rear lights at the end of the stand frame.





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### 3.6. OPERATION OF THE BATEC ELECTRIC 4 QUADS CONTROLS

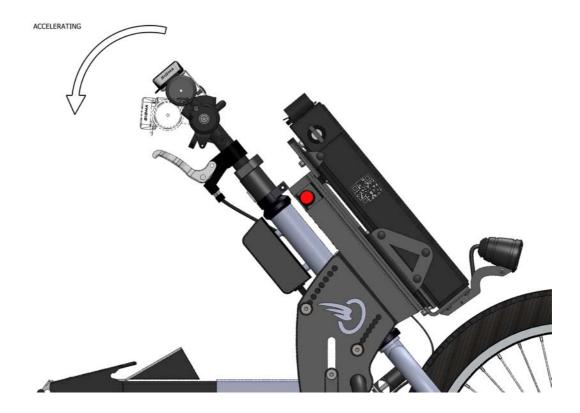
- Switching on: Turn clockwise the key located on the right side of the battery and leave it on position ON. The system will run a check: do not start to use our Batec until the check has finished running and all the lights have stopped blinking.
- Switching off: Turn the key of the battery anticlockwise and leave it in position OFF. If you leave it in the position LOCKED the Batec will also be off and the battery locked for removal.



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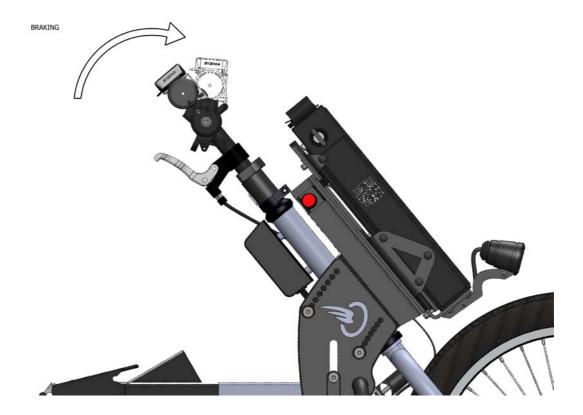
 Accelerating: Press the BATEC 4 QUADS handlebar towards you to regulate the accelerator.



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 Braking: Press the BATEC 4 QUADS handlebar forwards to regulate brakes.





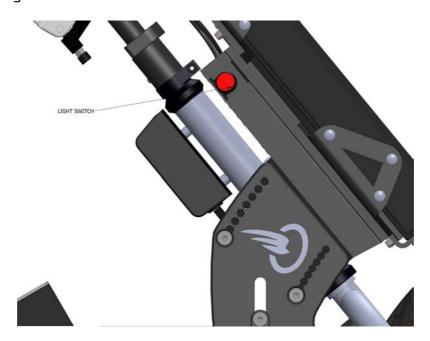
• Limiting speed: The Batec has five speed levels. Use the buttons on the control panel.

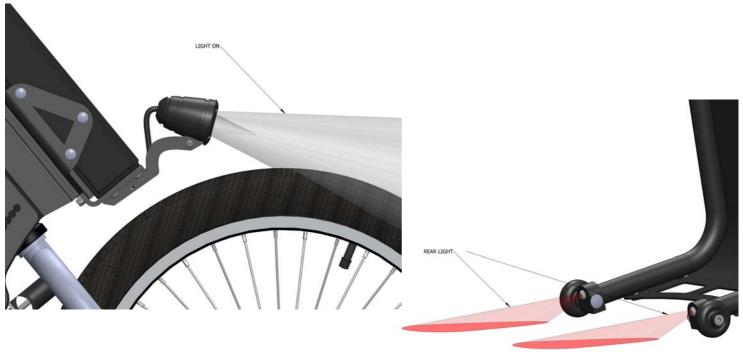


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Lights: On the right side of the Batec there is a switch that connects
the front and rear lights. When you light the switch, it should light up
in red. The front light is located under the battery and the two rear
lights at the end of the stand frame.





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# 3.7. OPERATION OF THE BATEC MANUAL CONTROLS

 Propulsion: Hold the handles firmly and turn the crankset of the BATEC forwards always keeping the wires upwards.



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• Braking: The Batec has two brake levers in the pedals that act on the same brake disc. Press down the lever to brake.



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Lights: On the shank near the pedals axle is the front light. Use the
button to switch on and regulate intensity. Your BATEC MANUAL also
comes with a rear light. Place it in a visible place on the rear part of your
wheelchair. Use the button to switch on and regulate intensity.







#### 3.8. OPERATION OF THE BATEC HIBRID CONTROLS

- Switching on: Turn clockwise the key located on the right side of the battery and leave it on position ON. The system will run a check: do not start to use our Batec until the check has finished running and all the lights have stopped blinking.
- Switching off: Turn the key of the battery anticlockwise and leave it in position OFF. If you leave it in the position LOCKED the Batec will also be off and the battery locked for removal.



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NUMBER/VERSION: MU-001/4.0



Propulsion: Hold the handles firmly and turn the crankset of the BATEC forwards always keeping the wires upwards. As soon as you turn the pedals approximately ¼ of a full turn the sensor in their axle will activate the electric motor. Use the control panel to select the level of intensity from the five levels available.



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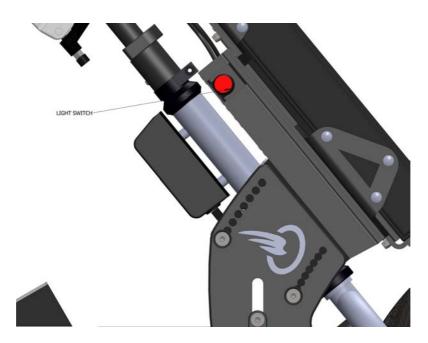
• Brake: The Batec has two brake levers in the pedals that act on the same brake disc. Press down the lever to brake.

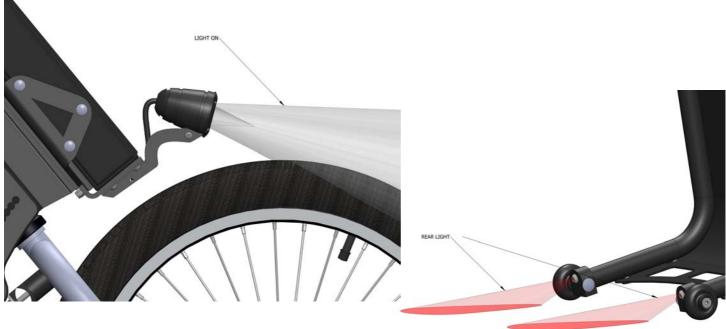


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Lights: On the right side of the Batec there is a switch that connects
the front and rear lights. When you turn on the switch, it should light
up in red. The front light is located under the battery and the two rear
lights at the end of the stand frame.





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#### **3.9. BATTERY**

The BATEC battery is a 36V and 9Ah lithium battery without memory effect and with a wireless automatic connection system.



The BATEC battery has an autonomy of between 25 and 35 km (depending on speed, weight of user, type of terrain and atmospheric conditions).

Lithium batteries have great advantages comapred to batteries that use other technologies, due to their flexibility. It is not necessary to charge them every time you use them, nor is it necessary to use them continuously or discharge them fully every time.



BATEC MOBILITY only uses the safest battery technologies and with all the safety systems necessary, which includes an intelligent Battery Management System -BMS-.

#### **3.9.1 BASIC USE**

# Insert and remove the battery from the BATEC

To insert and remove the battery from the BATEC it is not necessary to handle any connectors as it connects and disconnects automatically.



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To disconnect it: Turn the key and leave it in the OFF position. Take
the battery by the handle and pull it gently upwards until the
battery comes out completely from its guide.



 To connect it: Take the battery by the handle. Lean the lower right corner of the battery on the side support tab until it enters the guide. Let the battery slip down slowly along the guide until the lower part is resting fully on the support.

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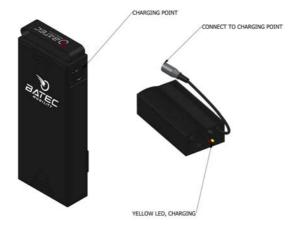
Note: If you leave it in LOCKED position, you shall not be able to extract the battery.



# Discharging the battery:

To discharge the BATEC battery, simply turn the key to ON position and use the BATEC normally.

The battery discharging process is protected by the smart battery management system, which cuts off the current in the event of any excess current and if any of the battery cells is too discharged.



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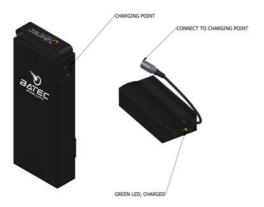
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ATTENTION: Under no circumstances should you use the battery discharging port to charge it or supply it energy in any way, whether with an enery source or a regenerative braking system.

## Charging the battery:

- The BATEC battery is charged through the XLR 3 pin port located on the side of the battery.
- Only charge the battery with its original BATEC MOBILITY charger provided to you with your BATEC.



ATTENTION: Under no circumstance should you use chargers from other manufacturers. Do not use chargers of other BATECS either, as the specifications for each series of BATECS are different.

- The recharging time for the BATEC MOBILITY battery is 3 hours. Both the smart charger and the smart battery management system cut off the current when the battery is charged.
- Charging the battery: To charge the battery the BATEC must always be switched off. You can charge the battery both with the battery in the BATEC and outside the BATEC. Turn the lid that protects the charging port, connect the charger to the port and to a power socket and switch on the charger.

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 Meaning of the lights of the charger: When the charger is connected to the power a red light switches on, always fixed. While it is charging another orange light goes on and when it has finished

charging this same light goes green.

Storing the battery

Lithium batteries have an almost nil self-discharge level when in storage. Despite

this, the smart battery management system contains circuits that constantly

consume a small amount of energy to monitor the battery at all times. This

consumption is very low, but if the battery is stored fully discharged, the BMS can run

out of power in just a few weeks. If this were to happen, the battery cannot be used

ever again. Therefore, we recommend you follow these indications carefully:

Charge the battery fully before storing it.

• Always store the battery with the key in the OFF position.

At least every 3 months charge the battery fully again.

If after a period of storage the battery does not work, for safety

reasons, the battery should be discarded.

3.9.2. SAFETY INFORMATION

The danger of lithium batteries has been widely discussed and there are good reasons

for it. Vehicle batteries, as are BATEC batteries, have sufficient energy and potential

hazardous material stored to generate a significant incident in the event of misuse or

negligence.

BATEC MOBILITY only uses technologies of lithium batteries considered to be stable

and safe. All BATEC MOBILITY batteries incorporate safety systems, among which

there is a smart battery management system that monitors the battery at all times.



In addition to all the safety systems installed, to minimise risks if a problem arises in external elements of the battery, as for instance a malfunction of the electrical installation of the room where it is or a malfunction of the general network, we recommend following the following indications:

- Only charge the battery under supervision.
- Do not charge the battery at night while asleep.
- Charge the battery away from any flammable object.
- Never use the discarge port to charge the battery and viceversa,
   never use the charging port to discharge it.
- Only use the BATEC MOBILITY charger that was delivered to you with your BATEC to charge the battery.
- Never leave or charge the battery near a source of heat.
- Never charge the battery at temperatures below 0°C.
- Always store the battery charged.

#### 3.9.3. ADDITIONAL INFORMATION

#### Use of the battery in low temperatures

The performance of lithium batteries diminishes, both in terms of power and duration, at low temperatures (under 0°C). It is not a hazardous situation, but rather bothersome; which is why we recommend keeping the battery indoors in these circumstances. Never charge the battery at temperatures below 0°C.

### Use of the battery in high humidity conditions

The casing of the BATEC MOBILITY battery offers good protection to the batteries and circuits inside against humidity and rain. This protection is sufficient to withstand these circumsnutances occasionally, but a constant and prolonged exposure to high humidity and rain can cause malfunctions in the battery. Therefore, we recommend

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**VALUE** 

avoiding these circumstances and minimising as much as possible the time of use of

the BATEC under rain or snow.

Useful life of the battery

All batteries have a useful life, as over time they go deteriorating. The speed they

deteriorate at depends on various factors, among which temperature, regularity of use

or specificities of use (weight of user, type of driving, orography of land and climate).

Depending on these factors and many others, the useful life of a battery can be

between 200 and 500 loading cycles and 1 to 3 years.

To maximise the useful life of your battery we recommennd:

Drive gently and at moderate speed.

Avoid exposing the battery to high temperatures.

Avoid leaving the battery unused for long periods of time.

The life of the battery does not end suddenly, but rather the performance of the

battery goes gradually diminishing. If your battery stops working suddenly it tends to

be because of a technical problem and not because the useful life is over.

BATEC MOBILITY offers a one year warranty on the battery, as it is a consumable. In

the event of replacing the battery in warranty, the new battery will have a warranty

equivalent to the remaining warranty period of the original battery of the BATEC.

Disposal of battery

As with any battery, BATEC MOBILITY batteries must be disposed of adequately.

Please check with a waste management centre. Contact BATEC MOBILITY if you have

any queries.



### 3.9.4. SPECIFICATIONS

• Measurements: 348 x 141 x 59mm

• Weight: 3.85 kgs

· Capacity: 9Ah

• Voltage: 36V (fully charged battery: 42,5V)

• Maximum discharge current: 29A

Maximum charge current: 5A

Internal resistance: 200 m0hm

BMS Consumption: < 200uA in operation < 20uA switched off

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#### **3.10. COUNTERBALANCE WEIGHTS**

All BATECS are equipped by default with two counterbalance weights for improved traction. The ballasts are located on the stand frame, one at each side. They weigh 2.5 kg each. To facilitate transporation of the BATEC, the weights are removeable.

- To remove the weights:
  - 1) Hold the weight firmly with one hand, press the red button, lean it so that the lower part moves away from the BATEC.



2) Remove the weight entirely.



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- To install the weights:
  - 1) Take the weight firmly with one hand. Lean it slightly and insert the two tabs in the slot of the weight support.



2) Bring the lower part of the weight nearer until you hear 'click'.



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# 4. INSTALLATION AND ADJUSTMENT

#### 4.1. INSTALLATION OF THE BATEC ON THE WHEELCHAIR

To attach a BATEC to a wheelchair you will need to add to the wheelchair the BATEC DOCKING BAR (pat. pending). The BATEC DOCKING BAR can be installed on most wheelchars on the market, both those with a rigid frame and a folding frame. The updated list of compatible chairs is included in the support section of the BATEC MOBILITY website.

The installation of the BATEC on the user's wheelchair must be carried out by a BATEC MOBILITY authorised and duly trained installer. Please contact BATEC MOBILITY for details of the authorised installer nearest to you.

### **4.2. USER ADJUSTMENTS**

Once a BATEC is correctly installed on a wheelchair, there is a series of adjustments you can make to acommodate the BATEC to the user's preferences, level of mobility, type of disability and size.

The adjustments can be made easily using the tools and instructions provided with the BATEC and with some basic mechanical knowledge.

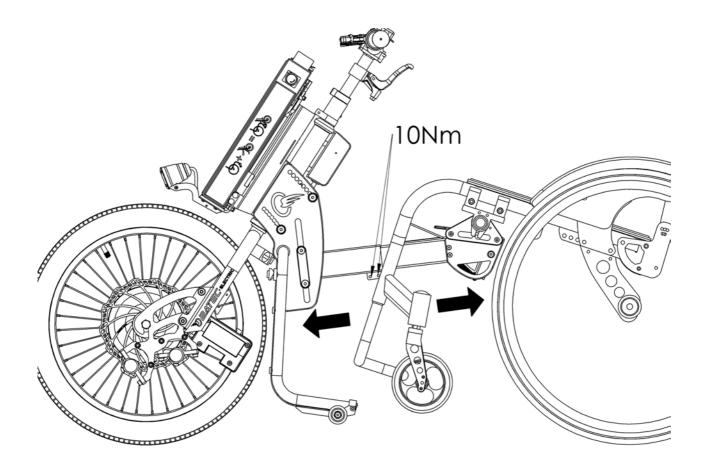
The following adjustments are available:

- Adjusting the distance between the BATEC and the CHAIR
- Adjusting the inclination of the shank of the BATEC
- Adjusting the height of the BATEC handlebar.



#### 4.2.1. ADJUSTING THE DISTANCE BETWEEN THE BATEC AND THE CHAIR

With the BATEC attached, adjust the distance between the BATEC and the CHAIR according to the space the user needs on the footrest of the chair, by means of the telescoping bar of the docking bar and the screws indicated. If the user has no preferences or limitations, we recommend a distance of 8 cms.

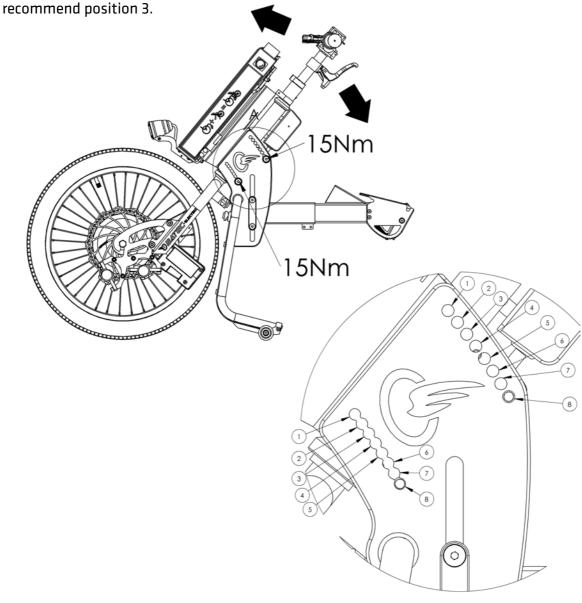


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#### 4.2.2. ADJUSTING THE INCLINATION OF THE SHANK

With the BATEC attached, adjust the leaning angle of the shank of the BATEC with the indicated screws. It is essential that the upper screw and the lower screw are always in the same position. If the user has no preferences or limitations, we

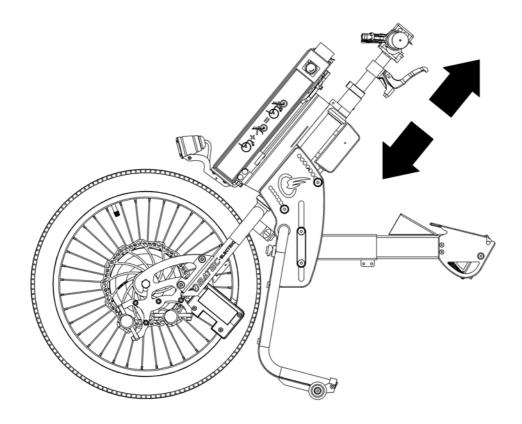


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### **4.2.3. ADJUSTING THE HEIGHT OF THE SHANK**

With the BATEC attached, adjust the height of the shank of the BATEC with the Quick release lever indicated.



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# 5. MAINTENANCE AND REPAIRS

Your BATEC has been carefully designed to acheive optimum performance, but it is very important that you carry out a series of preventive maintenance tasks according to the use of your BATEC. This will significantly reduce the possibility of problems arising, and you will extend its useful life.

In order to minimise the risk of accidents and/or damaging your BATEC; it is very important for you to visit a BATEC MOBILITY authorised distributor for all repairs.

Remember that the first source of information and help is the distributor that delivered your BATEC, as well as answering any questions regarding adjustments, maintenance and the warranty.

You are part of the "BATEC MOBILITY Family" and we encourage you to hold an active relationship with your BATEC representative in order to optimise the performance of your product.

We propose the following model of preventive maintenance:



Task	Weekly	Month! y	Quarter Iy	Annuall y	require d
Checking the tyre air pressure	•				
Cleaning the BATEC		•			
Cleaning of front and rear wheels		•			
Checking screw tightness torque		•			
Checking brakes		•			
Lubrication of wires and chainset		•			
Lubrication of transmission and connection mechanism				•	
Servicing of the BATEC by an official service				•	
Replacement of tyres and rubbers					•



### Checking the tyre pressure

Guarantee that the tyre pressure is between 2.5 and 3 BAR and no irregularities on the surface can be seen.

# Cleaning the BATEC:

Clean the chassis components with hot water and soap, car soap or a gentle nonabrasive cleaner. Dry off any excess water.

Important!

Sand and sea water can damage certain parts of the BATEC if they remain in contact for an extended period of time. Clean it after using it.

### Cleaning of front and rear wheels:

Ensure that the front wheel and the small rear wheels can turn freely and remove any dirt.

# Checking screw tightness torque:

Check that the screws and connections are tight. The recommended tightening torque for the screws is:

• M5 screws: 7 Nm

M6 screws: 10 Nm

M8 screws: 15 Nm

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Checking brakes:

Check that when the brakes are activated, both press the disc enough to achieve

efficient braking.

Lubrication of wires and chainset:

Apply a drop of lubricant or lightly spray with teflon the wires that are in contact with

levers and the chainset. Clean off any remains of previous oil beforehand. Once you

have applied the oil, remove any excess.

Lubrication of transmission and connection mechanism:

Apply a drop of lubricant or lightly spray with Teflon the transmission and connection

mechanisms. Clean off any remains of previous oil beforehand. Once you have applied

the oil, remove any excess.

Servicing of the BATEC by an official service:

It is advisable to ensure your BATEC is in good conditon by taking it for full servicing

by trained staff.

Replacement of tyres and rubbers:

Before installing a new tube: Check that the base of the wheel rim and the internal

wall of the tyre have any external bodies and, if necessary, clean thoroughly. Check

the state of the rim tape; in particular the hole of the valve. Only a strong and properly

placed rim tape offers longstanding protection against damages in the tube caused by

burrs and pointy spoke heads.

Before inflating the tube, check the length of the contour of both sides to ensure that

the tube is not trapped between the tire bead and the wheel rim. Move away the valve

gently and remove it again, so that it is installed optimally.



CAUTION! After the installation, control the tire pressure. It is essential that the pressure is within the specifications and that the tyres are in perfect state in order to guarantee your personal safety and preserve the proper operation of your BATEC.

Information!	Given that the necessary maintenance for each user will
	vary, check with your BATEC representative to establish a
	maintenance program for your specific use.

Important!	You should always give your BATEC a safety check before		
	each use. Inadequate maintenance may lead to the		
	cancellation of the warranty.		



# 6. LABEL

All BATECS have the following label:

) BAT	EC C
MOBILITY	(
BATEC MOBILITY, S.L.	
C/ R. Carrasco i Formi 08192 Sant Quirze del	guera, 3 Vallès, Barcelona - Spain
T +34 935442003 - F +3	34 902876503
	om - info@batec-mobility.com
MODEL:	
S / N:	
DATE:	

The label is located in the lower part of the docking bar.

The label contains the following data:

MODEL

**SERIAL NUMBER** 

DATE OF MANUFACTURE

CONTACT DETAILS OF BATEC MOBILITY

**EC MARKING** 

When requesting spare parts or in the event of claims, please provide the details on the label.



# 7. WARRANTY

### 7.1. TERMS OF WARRANTY

BATEC MOBILITY guarantees all the rigid and structural components for a **period of two (2) years** from the day of delivery, from material and labour defects for the original registered owner.

BATEC MOBILITY guarantees the BATTERY for **a period of one (1) year** from the day of delivery, from material and labour defects for the original registered owner. The BATTERY is deemed a consumable.

#### 7.2. CONDITIONS OF WARRANTY

- Consumables (except the BATTERY, which has a 1 year warranty) are
  excluded from the warranty, except in the case of early wearing of said
  parts caused by an original manufacture fault. These elements include
  the tyres, tube, grips, brake wires, shifter and anchor, stand frame
  wheels and similar parts.
- In the event that a warranty issue arises, BATEC MOBILITY recommends contacting your BATEC MOBILITY authorised distributor for them to provide you with the available solutions to your problem.
- BATEC MOBILITY shall not be liable in the event that there is a fault in a product as a result of inadequate storage or misuse. If in the opinion of BATEC MOBILITY, some component has been installed incorrectly, used incorrectly or stored incorrectly, the warranty shall not apply.
   Below we provide some examples:
  - The product or part has not undergone maintanence as stipulated in the manufacturer's recommendations, as shown in the user instructions and in the maintenance instructions.
  - Accessories not specified as original have been used.

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- The BATEC or its parts have been damaged as a result of negligence, accident or inadequate use.
- Alterations have been made to the BATEC or to the parts, that do not respect the manufacturer's specifications or repairs have been carried out without informing the authorised distributor or technical service.
- BATEC MOBILITY shall have the right, in all claims, to request that all
  the components be sent, with courier services prepaid to BATEC
  MOBILITY by the claimant, for their replacement or repair. In the event
  that the parts are found to be faulty, BATEC MOBILITY will determine if
  the components shall be replaced, repaired or kept.
- This warranty does not include transportation costs, dispatch or labour to remove or reinstall. BATEC MOBILITY shall invoice any expenses caused if it is determined that the component or components are not faulty or in any case are not faulty under the terms of this warranty.
- Repair or replacement of a faulty part shall be made only by BATEC MOBILITY or by an official BATEC MOBILITY official service, duly trained.
- BATEC MOBILITY does not guarantee the tradeability or suitability for any purpose in particular of its components and makes no guarantees, whether explicit or implicit, other than the limited warranty attached.
- As to the spare parts installed after the start of the original warranty,
  we grant two (2) years of warranty. In the case of the BATTERY, given
  that it is deemed a consumable, the replacement unit will have a
  warranty equivalent to the remaining term of warranty until reaching
  one (1) year from the date of delivery of the BATEC:
- This warranty is non-transferrable: This warranty is valid only for the original user registered, who may provide accreditation by showing the receipt of purchase of the product.

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- BATEC MOBILITY shall not be held liable for products not bought at the RRP.
- Except where prohibited by law, this limited warranty represents the entire agreement between you and BATEC MOBLITY for any liability that may arise from a component of BATEC products.

#### 7.2. WARRANTY CARD

Together with the documentation of your BATEC, you will find a Warranty Card that contains all the details of your BATEC. You can use this card to provide all the details of your BATEC in the event that a warranty issue arises.

To receive information relevant to owners of a BATEC, as well as general information and news on BATEC MOBILITY, we recommend you join CLUB BATEC and register your BATEC.

#### Information!

Becoming a member of CLUB BATEC gives you several advantages: 15% lifetime discount rate on all COOL BATEC ACCESSORIES when you join, access to promotions and exclusive one-off offers, first-hand information on new products. Simply go the CLUB BATEC registration form on our website (<a href="https://www.batec-mobility.com">www.batec-mobility.com</a>) and register your BATEC.

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