**Warning!**

EACH USER OR PERSON MUST INTERVENE OR USE THIS KIT SHOULD READ AND FULLY ALL PAGES OF INSTRUCTIONS IN THIS MANUAL AND FOLLOW CAREFULLY BEFORE USING THIS PRODUCT LIFT-MTB!

OTHERWISE, YOU MAY RESULT TO SERIOUS DAMAGE AND / OR MAY UNDERMINE YOUR STATUTORY RIGHTS. SAVE THIS MANUAL AS THERE IMPORTANTESCONCERNANT INFORMATION SAFETY.

DO NOT ATTEMPT TO PERFORM THE OPERATIONS OF INSTALLATION AND REMOVAL OF THIS NEW PRODUCT LIFT-MTB ALONE IF YOU DO NOT COMPETENT LEGAL REQUISESENT!

Always seek the help of a specialized mechanic. If you do not follow these important safety instructions, scrupulously follow the installation instructions and removal in this manual and remember that you do so at your own risk and peril.

**Note:** AS EVERY INSTRUCTION MANUAL, THE LATTER SHALL BE SUBJECT TO CHANGE, TO INFORM, PERIODICALLY CONTACT YOUR DEALER, OR VISIT OUR WEBSITE (WWW.LIFT-MTB.COM) SO AS TO RECEIVE ADJOINMENTS.

This manual is a guide to guide you to the correct mounting kit and on your bicycle. Monitoring the various comments contained in this manual you will ensure the best performance, and reliability of your system, so you will avoid the most basic mistakes that are often cause of accidents during installation, use or handling LIFT-MTB engine kit.

“CAUTION” or “WARNING” informs you that failure to follow directions could cause damage both to the equipment, that user.

**SAFETY GENERAL INFOS :**

- The drive devices for the LIFT-MTB society have been designed exclusively for use on private road with two-wheeled vehicles moved by human power at the base. Any other application is a condition of danger to which the LIFT-MTB disclaims all responsibility.
- Assistive devices or engine-MTB LIFT products are high performance, offering a power greater than that of assistance and classic engine and requires some dexterity. Be very careful, because use is too high speed can cause a loss of vehicle control and possible injury to the user.
- The user has the responsibility to learn the correct use of kit; consult the Owner's Manual of the bicycle and a bicycle dealer if in doubt.
- Try the assistance system or motor on a flat, level surface and disengage before undertaking a more aggressive terrain.
- Always control your speed, make sure that you are able to stop, use the system only in a place clear, when you're on not to hit anything and has a reasonable rate .. The installation and inadequate use of LIFT-MTB system can lead to a loss of control or an accident, with unpredictable consequences and the possibility of serious injury.
- Do not put your hands inside moving parts or potentially, use sturdy gloves that do not reduce the sensitivity and making ability.
- Do not change system settings to get different benefits than those provided by the manufacturer. (Example + 36volt battery)
- Before attacking any look carefully at the work area mounting operation seeking to avoid potential hazardous conditions. Avoid working in dark conditions and can use accessory that will help you be efficient.
- Focus properly and take all precautions before using components that can produce damage.
- It is useful while using your bicycle to wear a helmet and to drive with caution and responsibility.
- All extraordinary maintenance operations must be performed only and exclusively by a qualified person authorized by the lift-mtb society.
- Make sure the power is off, disconnect battery before carrying out any work.
- A high load on the system (weighing over 100 kg and a slope greater than 15%) necessitates the respective speed reduction and regular breaks to avoid overheating the system.

**ENVIRONMENTAL NOTE:**

In order to protect the environment, you should recycle your battery through an institution specializing once it useless.

**CAUTION:**

The thread lock, which is a substance used in certain phases of assembly, is dangerous in case of contact with eyes or skin
Part 1: installation.

We have edited this manual for have a complete manual with all info for used you kit in good conditions.

During the first assembly on your bike you need make some spacer adjustment, you must adjust these spacer only for first time on each bike, so some stages are necessary only one time for the first adjustment, in this case the text will be gray and italic.

When you kit will have the good setting spacers, you need only 7 stage for assembly and disassembly the kit. So only the stages 2 / 8 / 9 / 10 / 11 / 12 / 13 must be necessary.

---

1- mount the throttle and on / off contactor
(You must do This parts is only for the first assembly)*

- The throttle can be mounting on right side, or left side. for many people the best way is left side for use it with the index (Same as the photo under).

- disassembly your grip and adjust the throttel with the smal BTR bolt.

  Warning: Don't use carbon bar with our throttl e the bolt risk to damage the carbon fiber.

- Adjust the lever setting, for brakes and shifter.
- For your safety make sure so your throttle trigger don’t lock the brake lever or speed shifter.

Throttle interface.
– On our last version there is a Throttle aluminium interface part’s, this small part’s is built for to be fixxed on the classic throttel with 3 bolts, and use you left index phalange to have a best gestion.

For fixed it you must drill x3 small hole in 2mm of diametre on the plastique. But for the first test you can also fixe it with a simple bande of tape (like scotch).

1- Left hand thurmb throttle.

2- Left hand index throttle.
- **2- Disassemble your crank.**
  - Use the manual user of your crank and specific tools if necessary.
  - When you disassemble your crank please note all parts and spacers size place, to be sure to rebuild your crank correctly.
  (you can use the memo at the end of document.)

**For shima no hollowtech cranks:**
- Completely unscrew the 2 BTR screws, unlock and remove the axle screw (use the Shimano tool ref: TL-FC16) to remove the left arm, remove the chain, and then just pull the right crank or tap lightly with a mallet on axle to extract the right arm (photo below left).

**For race face CINCH, X TYPE et SRAM GXP, HXR cranks:**
Remove the chain, fully unscrew the smallest BTR bolt inside the right or lift arm to extract the arm, simply pull the left arm or lightly tap with mallet on the right axle to extract the left arm (photo below right).

**You have now your bike with the bottom bracket only (as the same as the picture)**

- **3- First adjustments (not definitive).**
  **(You must do This parts is only for the first assembly)**
  - The LIFT-MTB system is screwed with 3 BTR bolts on ISCG mount your frame (These ISCG mount are the base to receive a chain guide).
  - You go first, temporarily screw the system with the shorter 3 BTR bolt.
  - Place the system parallel to the ground, or lower as the same as the photo below.
  - This temporary position for have a better access to the engine, that’s will be easier to adjust and aligned the motor.

- **4- Adjustment for the spacer on the crank axle.**
  **(You must do This parts is only for the first assembly)**
  - Now the system is installed on ISCG tabs, you must set the size of spacer needed between the bottom bracket and the arms.
  - Assembler The right arm with the axle, and add spacers to obtain a minimum of 4mm initially (for axle version 30mm OD , 2mm can be enough).

**ATTENTION:** For the system to work well, you will necessarily have a minimum spacer size equal to 4mm between crankset and bottom bracket (as in the photo above cons) otherwise the arm will rub against your frame.
- Insert the right arm and the axle in the bottom bracket, and ensure the sufficient number of shims so that the crank does not come to touch any other parts that he will rotate, adjust best to the line chain as you can, and make sure so the axle is centered.

- Check that there is indeed a minimum space of 4 mm between the motor mounting plate and the plate (as pictured below), but also among all other rotating parts and fixed parts including 3 screws fixing system and all crank parts.

- If the space is not enough between the fixed and movable parts (or the axis is too off-center), add the shims required for proper operation (as in the photo-cons).

- To save time on your future interventions, be sure to note in the memo end of the document the number of calibrations of rings that you use with the crank and bike model.

**Note:** for some frames with low Q factor, it is possible to change the side of sprocket fixation (as shown on the photo fig2) for have a better center of the axle than frame.

---

**5- adjustment for the motor.**
*(You must do This parts is only for the first assembly)*

**ATTENTION:** It's the most important part for to be sure so your kit work good!

To avoid derailment that could damage your KIT, the engine cogs should be well in the same line of the chain tensioner roller stealth and the primary sprocket (the largest sprocket) see pictures below cons.
- Place the right arm and axle with spacers on your bottom bracket, and check the alignment to the cogs and the big sprocket.
- The 8T cogs on the motor can move from the right to left, for follow the chain, is it normal, you can place it at the middle for do the best adjustment.

**Warning:** The sprockets are never very right when you turn back the crank (around 3 to 5mm) that is normal, that due to freewheel adjustment.

- To get a good setting you must aligned the motor cogs and the chainring crank with the 3 engine bolt.
- You must tight the 8mm bolt on one side of the plate and on the other side to, for move the motor and to be sure to have a perfect alignment. (See photo-cons). Max torque at 3Nm.

You can also sometime add some spacer on the axle crank (see step 4).
- Check with a ruler the perfect alignment of the motor like the pictures below cons.
**WARNING:** Proper alignment of the cogs / sprocket and chain tensioner is essential to the proper functioning of the kit you must absolutely check it regularly.

*If the system is noisy at the chain check alignment.*

- To Save time on your future interventions, be sure to note in the memo end of the document the number of spacer that you use in the engine.

You can (according to versions) add a 4th fixing screw to fix the motor (screw N° 4 in red on the photo), this screw and nuts are included in the kit parts, before placing the screw, check that there is a minimum insertion in the thread of 8mm (maximum tightening torque 3Nm).

**6- Adjustment spacer for the chain tensioner.**
*(You must do This parts is only for the first assembly)*

- In the same way, the roller stealth on the chain tensioner must be in front of the engine cog and the big sprocket.

- To obtain proper alignment, place the spacer on one side or on the other side of the roller stealth (small arrows) and make the same for the chain tensioner (large arrows) see the photo-cons:
  - Ensure that the chain tensioner has good operating clearance, so it could play without excessive, and rotate freely than the axle.
  - To save time on your future interventions, be sure to note in the memo end of the document the number of spacer that you use at the chain tensioner and roller stealth.

**7- Adjustment for point of contact on the frame.**
*(You must do This parts is only for the first assembly)*

**A- adjustment for the foam on the frame:**
In most cases the engine touch the down tube frame. Before tightening the system you need (during first installation), place a self-adhesive foam pad provided in the kit, on the lower tube for avoid to damaged your frame.

- To adjust the sticker pad, remove the right arm and axle, then rotate the engine in the upper position as you can (as in the first photo below) so the motor will be touch the down tube (like as the 2nd photo).

- That is the point of contact between the frame and the motor; So it is at this point of contact between the two arrows on the photo above right that you'll stick the self-adhesive foam.
-B- Adjustment for the silent block on the frame:

- You must adjust and fix the 2 silent block on each side (photo-cons).
- These silent block are the second point of support to increase the torsional forces.
- This silent block are in contact of the right and left side of your down tube.
- The silent block are very long when is it brand new (see photo cons), that’s to fit all types of frames, it is generally necessary to cut it to the fit correctly with your frame.
- To determine the ideal length, you must position the engine tackle against the lower tube, as a previous step (7) and lock the 3 ISCG bolts.

-To Determine the ideal location for the silent block on the plate (you can move in multiple ways) you must be sure so the silent block will be flat as possible than the down tube frame.

-Finally, Measure like as the picture below, the size between the frame and the plate (for example 10mm).
- Then Using a knife or cutter, and cut the silent block has the same dimension and adding a margin of 3 mm (13mm has therefore cut if we keep the same example) see photo cons.

-Finally unscrew the 3 ISCG bolts, to have the place needed to place and tight the silent block on the perfect place on the plate. Place the motor on high position, the same as a previous step (7) and lock the 3 ISCG bolts.

-When you tighten the plate the silent block must honestly touch the down tube and must be slightly compressed (as in the photo-cons red arrow).

When silent block are adjusted you can tight the two bolts for softly pinch the left and right plate on the down tube frame

Finally, for security add two plastic collars, (serflex, rilsan) to tighten the plates around the down tube (as in the upper photo white and green arrow).

NOTE : The CNC main plate have always a flex when the motor work.

- If you use, good gear ratio, big cogs on the rear cassette, like to the photo on right. The flex will be OK, and the motor will be used on good ratio range, so it will be good for the motor and battery consumption.

- But if you use bad gear ratio (to small cogs on rear wheel k7) the flex will be more important. And that will be bad for the motor and battery consumption.
-7.2- Adjustment for carter:

Adjust the engine carter, change is position so that it is flat against the frame and it offers maximum clearance with the ground.

**Warning:** There are 3 bolts, x2 bolts on the motor on left side, and x1 bolt on the right side.

For inside mount version there is sometime no more space for controller, with linkage or shox.

For this case, you must change the fixation of controller on the motor and fixed it on the frame as you can than you frame version.

Show the photo for example of controller fixed on the down tube.

---

-8- final tight.

If you be sure so everything is perfectly aligned, it then remains is to finally tighten the system.

You have in the box different BTR bolt length of, long and short. We advise if possible to the longest and add locknuts as pictured below cons. If one or more screws that are too long do not ride like that, You must use shorter screws. In this case it is advisable to mount these with LOCTIC medium screws brake. Finaly place the motor on the upper position as seen above, tighten the 3 BTR bolt, and place if possible the locknuts as the photo-cons, or add LOCTITE.

**CAUTION:** Make sure the bolts are not too short, and you use enough thread surface. Make sure the screw is not too long and does not touch other parts could be moving later ( rear shox, swing ar ...). Check your suspensions front and rear run on all travel without their interaction with the system.

---

-9- Crank final adjustment :

-9.1- If you have a classic frame thread _type BSA 68/73 or BB92 / PF30/ BB30..._
- A- tighten the screws of the right arm on the axle.
on the axle between the arm and bottom bracket (see step 4).
- C- insert the axle in the bottom bracket.
on the left side on the axle. push the collar against the bearing bottom bracket, and tighten the collar (Warning: maximum torque for this bolt is 5 Nm)
- B- Insert the spacers
- D- Position the clamp
- E- place and tighten the left arm (with grease on the axle )

Your crank must be rotate freely and without play!

- If there is the play make sure the clamp is correctly pushed against the bottom bracket bearings.
- If your crank does not rotate freely make sure that the collar does not compress too much the bottom bracket bearings.

- Warning: Check each output has your crank has no play, if necessary re check the assembly.

- Note: Generally the sprocket on the crank don’t turn really straight, but is it normal, the chain tensioner will be compensated that.

-9.2- If you have a large frame (downhill type) size 83mm / bb 107mm or HXR version:

- A- If this is not done, tightens the right arm on the axle.
- B- Insert spacers between the arm and bottom bracket on the axle (see step 4).
- C- Insert the axle and right arm in the bottom bracket.
- D- In most cases it will not be possible to put the clamp on left side (if possible follow the instructions in step 1 above).
Otherwise you will have to add a compression O-ring washers and others spacers packaging delivered with the kit.
Push the right arm firmly against the bottom bracket, and add the soft rubber seal o-ring on the axle, and add the spacers to have only 16mm from the axle outside.
- E- Place and tighten the left arm (lightly tap on the cranks to crank up in order)

You crank must not have play, and must be free in rotation!

- If there is the play make sure the clamp is correctly pushed against the bottom bracket bearings.
- If your crank does not rotate freely make sure that the collar does not compress too much the bottom bracket bearings.
- On the HXR version, check to don’t have any play on the sprocket, if you have play you must add some spacer on the axle.
- Warning: Check each output has your crank has no play, if necessary re check the assembly.

Warning! The left and right axle screws require a very long break-in time période and must be checked really often.

During the first assembly, once the crankset is assembled and tightened, it is necessary to:
- Ride a hundred meters pedaling, then tighten the screws axle on left and right side. You must repeat this as many times as necessary (usually 5 to 6 times, until the axle screws do not move at all).
- Don’t forget to loosen the clamp that comes around the bottom bracket axle before tightening the axle screw. You can only use the LOCTITE blue threadlock only if this break-in period is correcte.

-10- Instalation for the primary chaine.

You must to be sure in first to check a proper alignment of the plate, motor, tensioner and a cogs with a big sproket (see step 5) to avoid any incident that could damage the system. Therefore place the primary transmission chain on the pinion gently pull the tensioner so as to come to position the chain on the board and made rotates the turntable slowly.

CAUTION: Never handle the chain or the pedal when the system is on.
-11- Installation for the chain guard.

Once you are sure that everything is perfectly aligned, you can mount the chain guard cover the two hex screws, as in the photo below cons.
You can try to ride with care without the chain guard on the first test that will be easier to remove the chain if the alignment is not correct.

**WARNING:** According to chain cover models you may have to remove the primary channel (step 10) to the cache.

-11- Plug the ON / OFF contactor and the throttle.

Notice that the command has a waterproof plug, allowing you to leave the throttle control in place and only remove the engine of the bike, which facilitates the handling and saves you time if you change configuration regularly.

Lock the throttle cable with two plastic collard (see the green arrow on photo) for avoid to bend the cable at the junction when you turn the handlebar of the bike.

**CAUTION:** Always align the arrows of the two connectors may damage the connector, and to be sure to that’s pushed on the bottom that’s sometime hard to push due to the seal.

-12- Finish your installation:

You must get the battery power cable along the lower tube until the head tube. It remains for you to finalize the installation if needed putting some plastic collars to secure the cables. A small aluminum plate is provided in the kit, you can fix it under or upper the stem for fixed the Anderson connector.

**CAUTION:** It is imperative to check that your suspension works properly without interaction with the motor system to do this, deflate your suspension and made them work to see if it works on all their race without the wheel or other part from hitting or interfere with the conventional operation of your bike.
If you have any doubt do not use your bike, and ask advises a competent person.

**About connector:**

We use Anderson connector, if you notice a power failure, check this connection is well clipped. Sometimes the slat spring that locks the plug is not clipped properly, causing a bad contact. This case is extremely rare, if it happens to you, simply push the plug so that the slat comes properly clipped the plug, you find a set of free connector in the spare parts of your kit, which will allow you to replace it if for any reason this is necessary.

-13- For disassembly the kit:

To remove your kit and look for classic bike: Remove the plug from the manual control, remove the transmission chain, remove your arm with isis tool crank like (see photo cons), -Note the size and position of spacers lockups that you remove, the memo at end of document (feel free to make a simple diagram if necessary).
- Unlock 3 ISCG bolt fixing the plate, Break off the drive system, move your original crank handing spacer required on each side that you took care to note in the memo on the last page of this document...
- For HXR version, fully unscrew the smallest BTR bolt inside the left arm to extract the
Service on the kit:

Unlike some major brands that lock access to the mechanical part, we want users to be independent and can easily repair their kit themselves, that's why most of the parts we use are parts of large series so that you can do maintenance yourself at a lower cost.

Usually an user do x2 ride session per week for 25 kilometers on around 50 weeks per year, so that is around 2500km.

We therefore recommend that you lubricate and check the condition of the bearings reductor every year or every 2500 km.

A repair kit exists it is composed of two bearings: x1 bearing ref 6902-2 RS, and x1 bearing ref 608-2 RS.

The procedure is very simple it takes about ten minutes and there are only 4 screws to remove to disassemble the reducer. See the explanatory picture.

Part 2: Warning:

1. First test:

- Here the system is installed, to test, leave the bike in the workshop foot wheel in the air away from any objects that may fall into contact with the bike or wheel. Connect the battery (a small electric arc can occur on the card this is normal), press the on / off button switch, a light indicates that the system is on. gently press the accelerator to see if everything works.

2. Contact with the water:

- The LIFT-MTB system is impervious to occasional screenings, you can ride safely on a damp ground or under a little rain a few minutes but avoid to the maximum all the water splashes on the system.
- If you ride in the mud, do not wash your bike with a water jet or high-pressure cleaner, wash it with a cloth moistened.
- If you need to clean with a water jet or karcher the rest of the bike, isolate the motor section, the accelerator and the connection with a plastic bag, for example, or disassemble the system.
- After washing dry at best any parts that may have been in contact with water.
  – the battery and the screen control is absolutely not waterproof please to be sure to have not any contact with water.
  - If your system is accidentally exposed to water immediately unplug the battery and do not use it before having dried at best, it may be necessary to let dry the length in a dry and hot so that the moisture that may be present escapes before being switched, if in doubt please contact us.

Any return of a failed system following the contact with water will not be taken under warranty.

Use infos:

- You will notice that both the motor mount if you turn the driving wheel of the bicycle back, there is a very strong resistance, it is quite normal, you do not advise to operate the system that Sens.
- Make sure not to force the system by using it as a moped, in addition to increasing your consumption exponentially, it could reduce some parts of life.
- For the engine is running in the correct speed range using the short gear ratios hold has Unlike a combustion engine car, plus an electric motor taking turns less it will consume and the less it will heat. For the life of your engine it is very important to respect this rule.
- CAUTION: check each output has the tightening of the different elements composing the system including screws 4 plate, the screws GSCI, motor mounting screws, fixings of cable ties, clamps the shaft / crank. Use the brake average net if you notice a recurring loosening.
- Clean And regularly grease the chains transissions, regularly check the wear on your transmission parts (the pedal to the rear wheel) as derailleur, chain, cassette sprocket, trays, using the engine increases the stresses on these parts.
- To Preserve the transmission of your bike, it is IMPORTANT to not spend the power shift, that is to say, to change gear you absolutely must let go of the accelerator pedal one can go to the report then recélez. Check That the cables do not exceed, are not too exposed or are not pinching or fraying.
- Disconnect The battery and store the cable in the bag during descents or delicate passages.
- Use Only the kit on a private
land use on public roads is prohibited, always wear suitable protective equipment, helmet, gloves, knee, elbow and back protection.
- We remind you that according to the law: Bicycles for which the main power source is not muscle (operated without pedaling support and / or continuing beyond 25km / h) are to assimilate either mopeds (if they are intended for use on public roads, they have to be subject to the same approval requirements as mopeds) or mini-bikes (requirements of Directive "machine" (2006/45 / EC) and legislation 2008-491 of 26 May 2008 (code L321-1 and following the road)). Consequently, the bikes with engine kits are considered as non-approved motorized vehicles and reserved for exclusive use on approved circuit or "land suitable" within the meaning of Decree No. 2009-719 of 17/06/2009. use of these devices Restrictions: - only to non-roads open to public traffic - to minors under 14 Decree No. 2008-1455 of 30/12/2008 specifies that it is mandatory to declare the vehicle, with the Office of Security and Road Rules of the Ministry of interior, overseas and territorial communities. Users who circulate on public roads are likely to be punished (Articles L 321-1 and following of the code of the road). These vehicles may be seized and confiscated by the police.

**Battery charge.**

Use only the original charger that came with your battery, plug the charging plug the charger to the battery according to color code. 
A red light indicates that it is not full; A green light will indicate the end of charging. The battery takes place in your backpack, thanks to a cable with quick connector of about 1.30 meters. It is connected to a generally placed near the head tube connector. Remove the battery bag for charging, never leave a charging battery unattended, load in a ventilated area with no flammable things nearby. The charger can be equipped with a fan, it is possible that noise is loud enough while charging, note that the fan this end of charge cut. Batteries are shipped from the factory with charge control and discharge system (called BMS). If it drops too low discharge or the battery is overloaded, there will be permanent damage. The BMS thus control the overload and underload system. Our system provides dual discharge protection (there are two BMS) and the charger will regulate the load so that you have no more worries to load and unload your battery as your phone or laptop using the same technology. -The storage of your battery: ambient humidity, storage temperature too low or too high are all factors that affect the life of the latter, for long-term storage the ideal is: store the battery from 30% to 60% of its maximum charge, in a dry place with temperatures between 5 and 25 degrees.

**Memo**

**Bike 1 (model) :**

Crank spacer right side side (mm) with original crank : ____________ with LIFT-MTB crank : ____________.

Crank spacer left side side (mm) with original crank : ____________ with LIFT-MTB crank : ____________.

Spacer size for the motor (mm) ____________.

Spacer size for the chain tensioner (mm) ____________.

Spacer size for the roll stealth to chain tensioner (mm) ____________.

_LIFT-MTB is patended brand_ l'INPI, number 4204659, SIREN number : 812 512 424
For more info please contact use, www.lift-mtb.com or liftmtb@yahoo.com
Control screen manual:

The screen control is an option it is not included on the kit, but that’s an very good stuff for to be sure to use the kit in good condition and optimize the performances and consumptions, you can buy it on our web site www.lift-mtb.com

1/ Installation: The control panel has a support provided to be set at the level of your stem, the support just this set between the top cap of headsets and stem, it can in some cases require the use of one or more of heat set spacers and a clamping screw cap longer.

Note that you can also deport the screen into a backpack or any place on the bike.

CAUTION: Do not handle the parts of steering your bike as if you are on you a bad reassembly could cause a fall or lose control of your bike.

2/ For plug: You must connect the screen in a particular direction, the file (source) that is set to the direction of caps going to the battery, the other line (load) just connect it to the engine output queue. Check that your handlebars turn freely without the queues are too tight or risk it unplugged.

WARNING: Carefully follow the direction connecting any pole shift or failure to follow the direction of classical damaged definitively your monitor.

3/ Info and analyses: The key data that is on the top, while on the base part you will find other data that will indicate other additional information very useful also to best optimize the management of your consumption.

Top left: This is the instantaneous consumption that is to say your consumption in real time, so you can see in real time what are the situations that generates large consumption (gear ratio too high, engine use for start).

<table>
<thead>
<tr>
<th>Consommation AH</th>
<th>Infos about consomation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 8Ah</td>
<td>Low consumption (perfect)</td>
</tr>
<tr>
<td>8 to 14 Ah</td>
<td>Midel consumption (good)</td>
</tr>
<tr>
<td>14 to 18Ah</td>
<td>Hight Consommation (hard)</td>
</tr>
<tr>
<td>18 to 23Ah</td>
<td>Extreme Consommation (So hard)</td>
</tr>
</tbody>
</table>

The higher the number is raising more you consume, the ideal is to try to have the figure as low as possible, for it always use suitable gears.

Above a table of typical values of instant consumption.

Note that you must separate the peak consumption (maximum peak consumption seconds) and the continuous consumption (consumption over a longer period).

-You must use biggest cogs as possible on the rear cassette for to be sure so the motor work on good conditions. (Like to the drawing)

Is it very important to avoid over heat and over consumption!
- For Sure you understand this principle when using the LIFT-MTB engine too long phases of extreme consumption, it would come back for example to use the motor of a car has a maximum speed in first gear on the highway ...
- These phases high consumption can be used without problems a few seconds, but should not be too long to avoid excessive overheating and premature wear of certain parts. In sum this area of use is a bit like the red zone tachometer of your car can go without abusing.

**Top right:** This is the value of the intensity in volts remaining in the battery. With this indication you can have the battery you have left of value more accurately than this display as standard on the throttle lever LIFT system. Battery charging thoroughly the display shows approximately 41 volts, the system is expected to cut to the low value of 31 volts. (For the most accurate reading you must wait a few seconds after using the engine so that the data it stabilizes.) the against a chart to help you to read these indications, we find that:

When the voltage down to 1 volt, the % off battery down to 10%

**Other info on the down of the screen:**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>% of battery</th>
<th>Voltage</th>
<th>% of battery</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>100%</td>
<td>36</td>
<td>50%</td>
</tr>
<tr>
<td>40</td>
<td>90%</td>
<td>35</td>
<td>40%</td>
</tr>
<tr>
<td>39</td>
<td>80%</td>
<td>34</td>
<td>30%</td>
</tr>
<tr>
<td>38</td>
<td>70%</td>
<td>33</td>
<td>20%</td>
</tr>
<tr>
<td>37</td>
<td>60%</td>
<td>32</td>
<td>10%</td>
</tr>
</tbody>
</table>

**The others info on the down left side are:**

<table>
<thead>
<tr>
<th>Time, Hr/ Min/ Sec</th>
<th>Ap</th>
<th>maximal consumption Ampère.</th>
<th>Vm</th>
<th>Voltage minimal</th>
<th>Wp</th>
<th>Maximal Consummation Watt</th>
<th>Ah</th>
<th>Overall Consommation - Ampère hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 : 00 : 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

-Ah data is very interesting, if for example, if your battery has a capacity of 10 A / h and that your power meter screen indicates that you have consumed 1 A / h, you can deduce that you still 9 A / h, so you still have 90% of energy.

- If during a climb you use 1 A / h on a battery 10 A / h, you can at the same rate 10 times this up.
- It is generally considered that 1A / h allows to climb 100 meters of elevation gain D +.

**Estimated table LIFT-MTB consumption**

<table>
<thead>
<tr>
<th>Under: my level usage</th>
<th>under: average consumption estimated in A / h</th>
<th>battery 5 A/H</th>
<th>battery 5 A/H</th>
<th>battery 8,7 A/H</th>
<th>battery 8,7 A/H</th>
<th>battery 11,6 A/H</th>
<th>battery 11,6 A/H</th>
<th>battery 14,5 A/H</th>
<th>battery 14,5 A/H</th>
<th>battery 17,4 A/H</th>
<th>battery 17,4 A/H</th>
</tr>
</thead>
<tbody>
<tr>
<td>i pedal lot</td>
<td>6</td>
<td>700</td>
<td>28</td>
<td>1218</td>
<td>48,72</td>
<td>1624</td>
<td>64,96</td>
<td>2030</td>
<td>81,2</td>
<td>2436</td>
<td>97,44</td>
</tr>
<tr>
<td>i pedal very well</td>
<td>8</td>
<td>600</td>
<td>24</td>
<td>1044</td>
<td>41,76</td>
<td>1392</td>
<td>55,68</td>
<td>1740</td>
<td>69,6</td>
<td>2088</td>
<td>83,52</td>
</tr>
<tr>
<td>i much pedal</td>
<td>10</td>
<td>550</td>
<td>20</td>
<td>957</td>
<td>34,8</td>
<td>1276</td>
<td>46,4</td>
<td>1595</td>
<td>58</td>
<td>1914</td>
<td>69,6</td>
</tr>
<tr>
<td>i’m in the middle</td>
<td>12</td>
<td>500</td>
<td>18</td>
<td>870</td>
<td>31,32</td>
<td>1160</td>
<td>41,76</td>
<td>1450</td>
<td>52,2</td>
<td>1740</td>
<td>62,64</td>
</tr>
<tr>
<td>i do not pedal hard</td>
<td>14</td>
<td>450</td>
<td>16</td>
<td>783</td>
<td>27,84</td>
<td>1044</td>
<td>37,12</td>
<td>1305</td>
<td>46,4</td>
<td>1566</td>
<td>55,68</td>
</tr>
<tr>
<td>i pedal very little</td>
<td>16</td>
<td>350</td>
<td>14</td>
<td>609</td>
<td>24,36</td>
<td>812</td>
<td>32,48</td>
<td>1015</td>
<td>40,6</td>
<td>1218</td>
<td>48,72</td>
</tr>
<tr>
<td>i pedal really very little</td>
<td>18</td>
<td>250</td>
<td>12</td>
<td>435</td>
<td>20,88</td>
<td>580</td>
<td>27,84</td>
<td>725</td>
<td>34,8</td>
<td>870</td>
<td>41,76</td>
</tr>
<tr>
<td>i don’t pedal</td>
<td>20</td>
<td>200</td>
<td>10</td>
<td>348</td>
<td>17,4</td>
<td>464</td>
<td>23,2</td>
<td>580</td>
<td>29</td>
<td>696</td>
<td>34,8</td>
</tr>
</tbody>
</table>

* No contractual table, given for average information.

**CAUTION:**

To avoid an accident, do not get distracted by reading your screen you focus primarily on driving. The control panel is not sealed, contact with water damage it permanently.