



AMPERE

ELECTRIC BIKES

User Manual

Deluxe / Hilux / X-Trail



www.ampereelectric.co.uk

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This manual should be considered a permanent part of the electric bike and should be passed on to the next owner.

An online copy is available at www.ampereelectric.co.uk

Warranty terms

Our Ampere warranty is clear and simple:

Main parts have a warranty of one year. This covers mechanical and electrical parts: including frame, forks, seat, motor, controller, battery and charger.

The warranty is subject to proper care for and reasonable use of the e-bike. Components such as bulbs, brake pads, inner tubes, tyres, chain, cables, etc. are regarded as consumables. When replacements are required these can be purchased from enquiries@ampereelectric.co.uk or your local dealer.

Returns Policy (UK)

We hope you will be pleased with your purchase. Should you wish to return the product bought direct from us we will be happy to refund or exchange a product provided it is in perfect condition fully and with the original packaging. Ampere products purchased from a retailer should be returned to the retailer.

Returns should be made within a reasonable time (usually 14 days) and in original, undamaged packaging. If we find that the product has not been returned to us in fully resalable condition, we reserve the right to refuse a refund on the item, or deduct a reasonable amount of the original selling price from the refund.

Any refund will cover the cost of the goods, but will exclude the non-refundable delivery charge. The cost and risk of returning goods is the responsibility of the customer. The customer should arrange shipping back to Ampere and ensure that any parcel is adequately insured.

Faulty Goods

Faulty goods notified to us WITHIN 14 days of delivery will be collected, repaired or replaced, and delivered free of charge. Note: At our discretion we may decide to issue a full refund instead of providing a repair or replacement.

Faulty goods notified to us AFTER 14 days and within the warranty period are to be returned to Ampere at the expense and risk of the customer. The customer should arrange their own shipping back to Ampere and ensure that any parcel sent to us is adequately insured. Goods that are repaired or replaced under warranty will be re-delivered free of charge.

Note: At our discretion we may decide to issue a refund instead of providing a repair or replacement.

Terms and Conditions

Refunds are dependent on the condition of the goods received back. Damaged or incomplete goods will not be refunded in full. Goods damaged as a result of misuse will be subject to a repair and redelivery charge. The customer will be advised of all chargeable repairs before such work commences. Repairs or replacements will be made free of charge within the warranty period only where the fault is not caused by misuse of the product or through normal wear and tear.

Parts and Servicing

We provide one year's return to base warranty on all key electrical parts: motors, batteries and specialist components, subject to proper care, and reasonable use of the e-bikes. We also stock specialist spare parts and batteries so you will always be able to maintain your e-bike and keep it in tip-top condition.

Specialist parts can be ordered by contacting enquires@ampereelectric.co.uk. Other parts can be purchased at your local bike shop. For technical support please send details to this email address.

Included in the Box



- 1 Electric Bike**
- 2 Tool Kit**
- 3 Charger**
- 4 Manual**
- 5 Pedals**
- 6 Battery**
- 7 Keys**

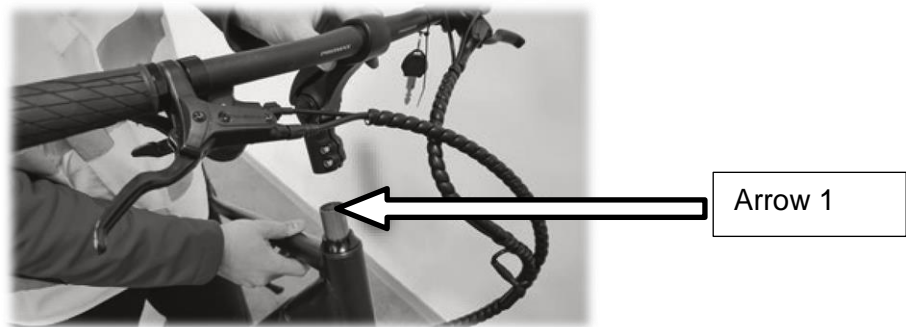
Assembly

Your e-bike comes 85% assembled. To complete the assembly the handlebars, front wheel, pedals, saddle and seat post will need to be attached. To do this, instructions with diagrams are set out in this section. If you are having difficulty assembling the e-bike, please call your retailer for assistance. Further help is available on our website where we publish FAQs or you can email us at enquiries@ampereelectric.co.uk.

Please note – the pictures may vary from the actual product however; the process of assembly is the same.

Assembling the Stem handlebars

1. First remove the bolt from inside the steerer tube labelled **ARROW 1** in the image below. Then place the stem onto the steerer tube, pushing down until it is flush against the spacer. Please note some models will already have the stem attached and this stage will not apply to them. However, you can still check the stem bolt is tight covered in point 2.

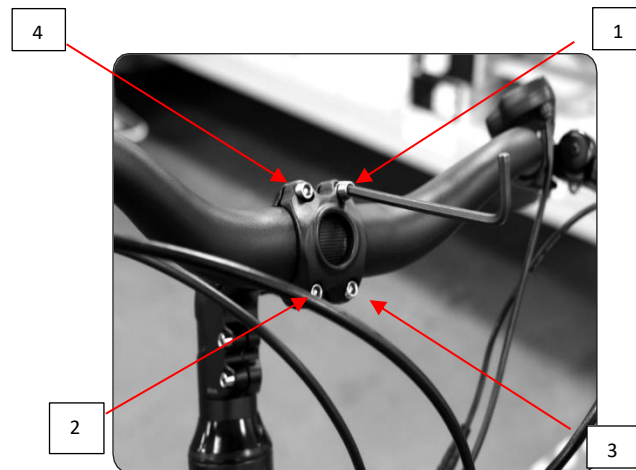


1. Once the stem is in the correct position, tighten the bolt going down through the stem with the 5mm Allen key provided. See Picture 1. **Please be careful not to overtighten the bolts.**
2. You then need to align the handlebars with the front wheel. Once you are happy with the handlebar position please tighten the 2 bolts using the 4mm Allen key provided. See Picture 2. **Please be careful not to overtighten the bolts.**



3. To complete, adjust the position of the handlebars and tighten the bolts in the order set out in the picture below.

Please note some models only have 2 bolts to tighten.

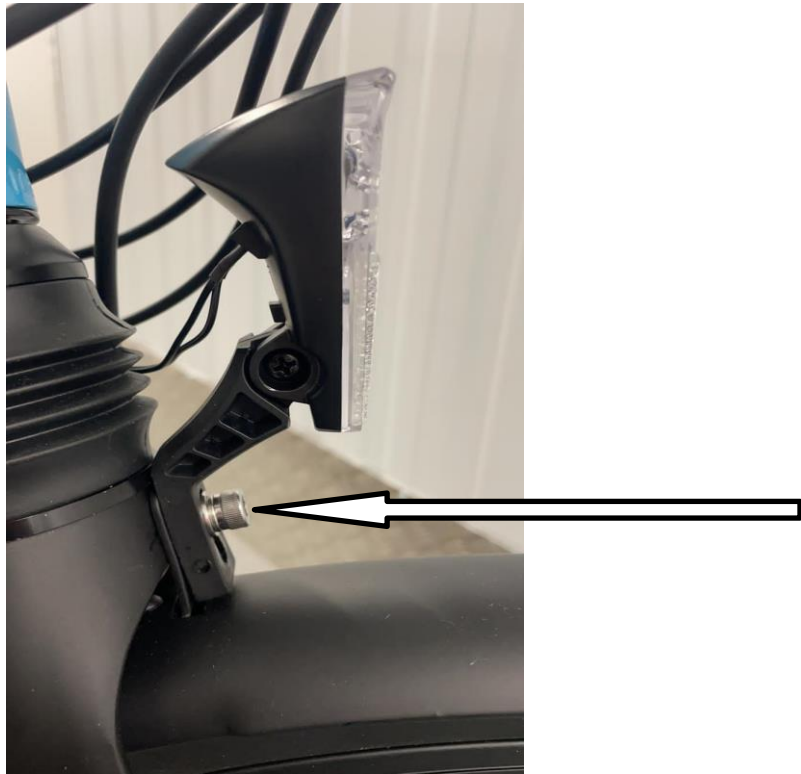


Connect the wires by colour. All the electronic wires should be connected already. If, however, they have become disconnected the wires should be reconnected according to colour. Use the arrows on each end to help make sure you line them up correctly. The spare yellow/orange wire is for a throttle should you choose to purchase one as an add on.



Fitting the Mudguards and Front light

1. Remove the bolt from the front of the fork and place the mudguard and light in front of the fitting. Then reinsert the bolt and secure the mudguard and light in place.



2. Once the light and mudguard are both attached you will need to secure the mudguard support stays. To do this please remove the 2 silver bolts located at the bottom of the fork on both sides. Once removed hold the eye of the support stays in front of the fitting and gently screw the bolts back in. See photo below.



Attaching the front wheel

- ♦ Loosen the pin through the middle of the wheel to allow you to place the fork onto it. Make sure the brake disc is properly inserted into the brake calliper.



- ♦ Tighten the nut and hold the lever in an upright position as shown in the picture below. Once tight push the lever in to secure the wheel.



Assembling the pedals

- Each of the 2 pedals is marked on the inside to identify right (R) and left (L).



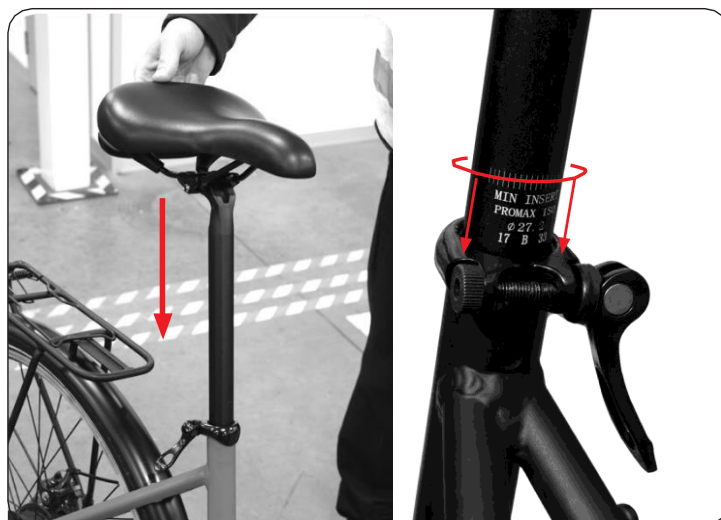
- ♦ To connect the pedals to the e-bike, place the left pedal into the left pedal arm and the right pedal into the right pedal arm (left and right directions are determined by sitting on the e-bike). Tighten by turning the pedals toward the front wheel using the a 15mm spanner provided in your tool kit.

- The right pedal is attached on the same side as the chain. Make sure you check the pedals are tight and secure before riding.



Attaching the seat

1. Screw the seat onto the seat post.
2. Slide the saddle post into the seat tube.
3. Align the seat with the frame to make sure it is straight.
4. The height of the seat should not be higher than the safety line marks on the seat post.
5. Tighten the seat clamping lever.



Regular checks

Please check that: -

- the quick release clamping lever on the seat post is secure.
- the brakes are working correctly.
- the tyre pressure is correct – If the tyres need pumping up, attach a bike pump to the valve (shown in the photo below) and inflate to 40 – 50 PSI.



Safe Riding

Before each ride, check that all bolts are tight, the battery has sufficient charge for your planned journey, the charging port is covered, your tyres are correctly inflated, both your brakes are working and your front and rear lights are working correctly.



Register your warranty

To register your warranty, go to www.amperelectric.co.uk/register-warranty/ or scan the QR code below.



To register your warranty, you will need to know your frame serial number and battery serial number. The frame serial number is located on the front of the frame behind your front light or on the seat tube, as shown in the picture below. The battery serial number is located on the side of the battery. This is found by removing the battery from the frame. The serial number will normally be 15 digits.



Extra 30 days free warranty when you complete a Trustpilot review.



We are offering all our customers an additional 30-day warranty if they leave us a review on Trustpilot. All you need to do is follow the simple steps below:



1. Click the leave a Trustpilot review button on the warranty registration page or scan the QR code above.
2. Leave your review on Trustpilot.
3. Click the box saying "I have left a trust pilot review".
4. Enter your username and the date you left the review.
5. Submit you warranty registration.

Once you have completed the review and submitted your warranty registration you will be sent an email to confirm you warranty is active.

Charging the battery

The e-bike is supplied with a removable, rechargeable lithium-ion battery. Only use the charger provided or an official charger supplied by Ampere.

The charging port is located on the bottom left side of the battery as it sits in the frame, next to the keyhole. See picture below,

Fully charge the battery before using the e-bike for the first time.

In order to prolong the life of the battery, we recommend that the battery is charged as often as possible.

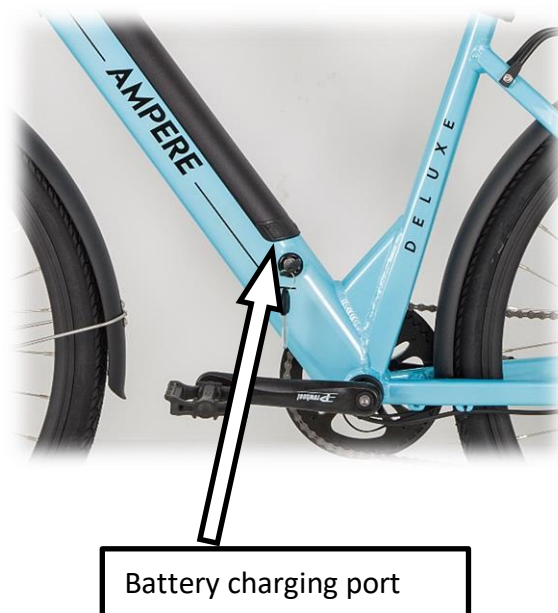
How to charge the battery

1. Plug the charger into a socket with the power switch turned off, then plug the opposite end into the battery charging port. Once connected correctly, turn the socket on and the light on the charger should appear red.
2. The light will turn green once the battery is fully charged.

Charger light Red – Battery is charging

Charger light Green – Charging is complete

3. **Do not switch the e-bike on when charging.**
4. Remember to cover the charge port after charging.
5. In the unlikely event that the battery overheats or emits strange odours, please contact your dealer as soon as possible.



LCD display – How to use your e-bike controls



1. SPEC

- ✧ 24V/36V/48V/60V/72V/UBE power supply
- ✧ Rated power 1W
- ✧ USB charge DC 5V 500mA
- ✧ Power off leak currant<1uA
- ✧ **Controller supply work currant** 100mA, peak lower than 300mA
- ✧ Operating temperature -20~70°C
- ✧ Storage temperature -30~80°C

2. Parameter and Material

ABS housing, the material for the transparent window is imported high hardness acrylic, the bracket is made of glass fibre and nylon.



3. Production Introduction

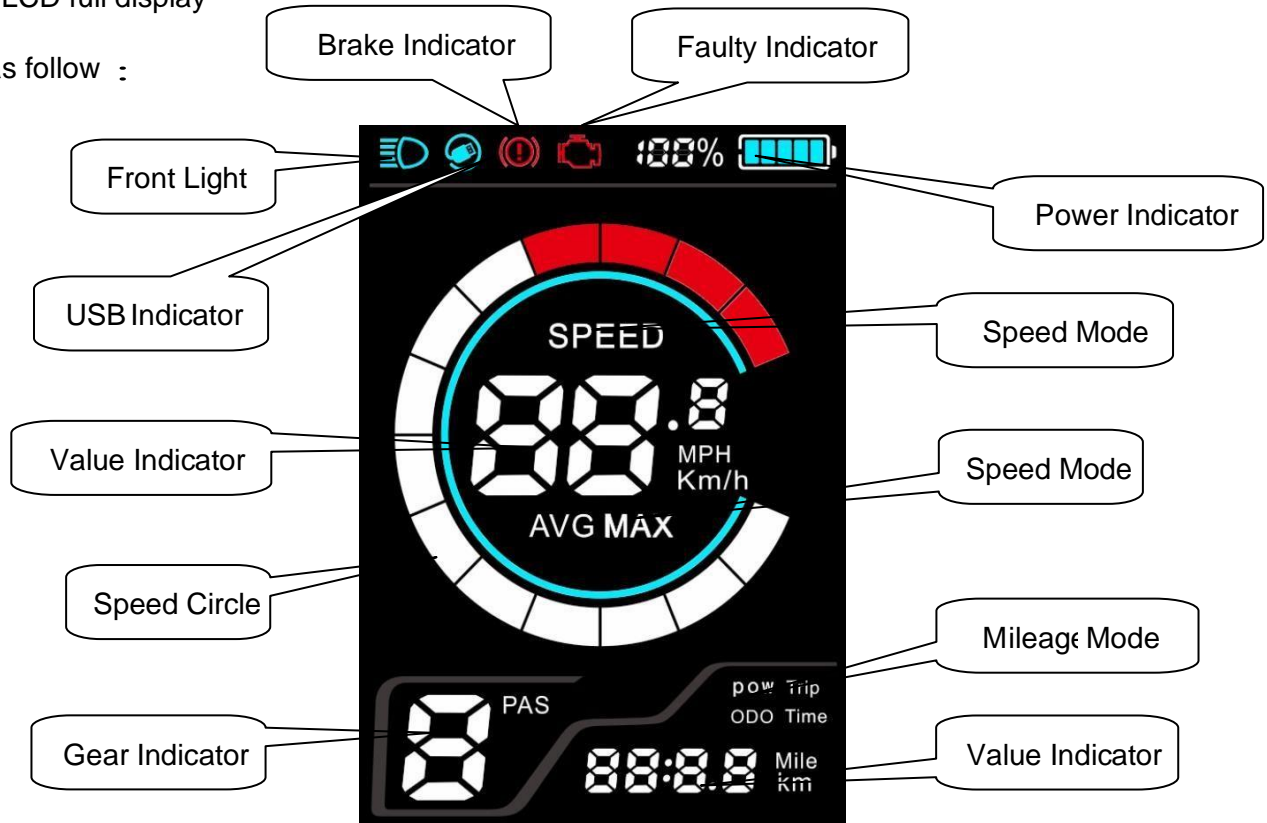
- ✧ **Speed display:** including real-time speed “RT SPEED”, “MAX SPEED”, average speed “AVG SPEED”
- ✧ **SETTING SPEED SCALE (mph/kph):** Km / mile display can be set according to customers preference
- ✧ **Intelligent battery indicator:** Provide stable battery reminder through optimization algorithm, power is not affected by motor start-stop fluctuations, if the system supports battery communication, it can display accurate percentage power
- ✧ **5 levels of backlight brightness:** Set the brightness of the backlight according to customer usage habits. Level 1 is the darkest and Level 5 is the brightest
- ✧ **Upto 9 levels of PAS :** Number of PAS levels can be set according to user needs, like 3/5/9




- ✧ **Mileage display:** Can display accumulated mileage “ODO”, single mileage “Trip”, riding time “Time”
- ✧ **Output power indication:** Real-time display of output power (battery output power)
- ✧ **Fault Diagnostics Display:** provide description for fault code
- ✧ **Walk assist function:** support 6km walk assist
- ✧ **Speed measuring magnets number adjustment:** numbers can be set according to the actual requirements of customers
- ✧ **PAS magnets number adjustment:** numbers can be set according to the actual requirements of customers
- ✧ **Endurance mileage indication (requires battery to support communication)**
- ✧ **Battery information display (requires battery to support communication)**
- ✧ **Program upgrade:** can be upgraded through serial port. For details, please refer to description documentation
- ✧ **Parameter settings:** parameters can be set by button, including gear, wheel diameter, voltage binning, limit speed, current limit, etc., please refer to the description of parameter setting


4. LCD Display Instructions

LCD full display

as follow :



- ✧ **Speed mode:** average speed (AVG SPEED), maximum speed (MAX SPEED), real-time speed (RT SPEED)
- ✧ **Speed display:** display speed value, Km / h kilometres per hour, MPH miles per hour
- ✧ **Power Indicator:** Provide stable battery reminder through optimization algorithm, power is not affected by motor start-stop fluctuations, if the system supports battery communication, it can display accurate percentage power
- ✧ **Headlight indication:** display  when the headlights are on
- ✧ **Brake Indicator:** display  when brake power off.
- ✧ **Gear indicator:** Display the current power-assisted gears 0-9, where 0 is neutral and no power, and 1-9 corresponds to power-assisted gears. Display P when in walk assist mode.
- ✧ **Faulty Indicator:** Display  when a fault is detected.

- ✧ **Mileage mode:** Divided into single mileage “TRIP”, accumulated mileage “ODO”, riding time “TIME”.
- ✧ **Mileage display:** Display mileage information or time information according to the set mode.
- ✧ **USB display:** the interface displays  when the USB charging function is turned on.

5. Function Description

Button description as follow:



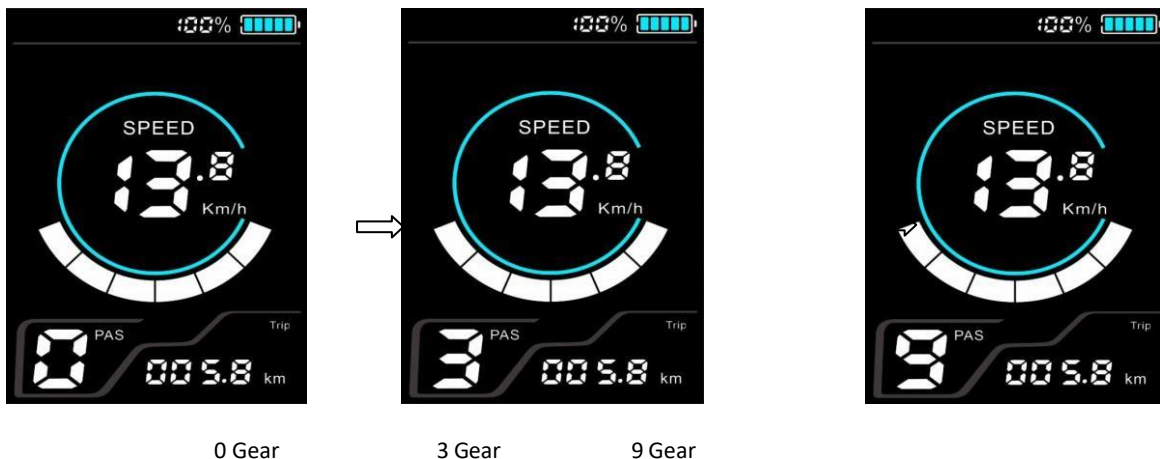
a. Power On/Off

Long press(1 second) **POWER BUTTON** when the display is off, display, the display is fully displayed and starts to work, the power of the controller is turned on; Long press **POWER BUTTON** (1 Second) when the display is on, display power off, the power of the controller is turned off. If you ride for 5 minutes

b. PAS level

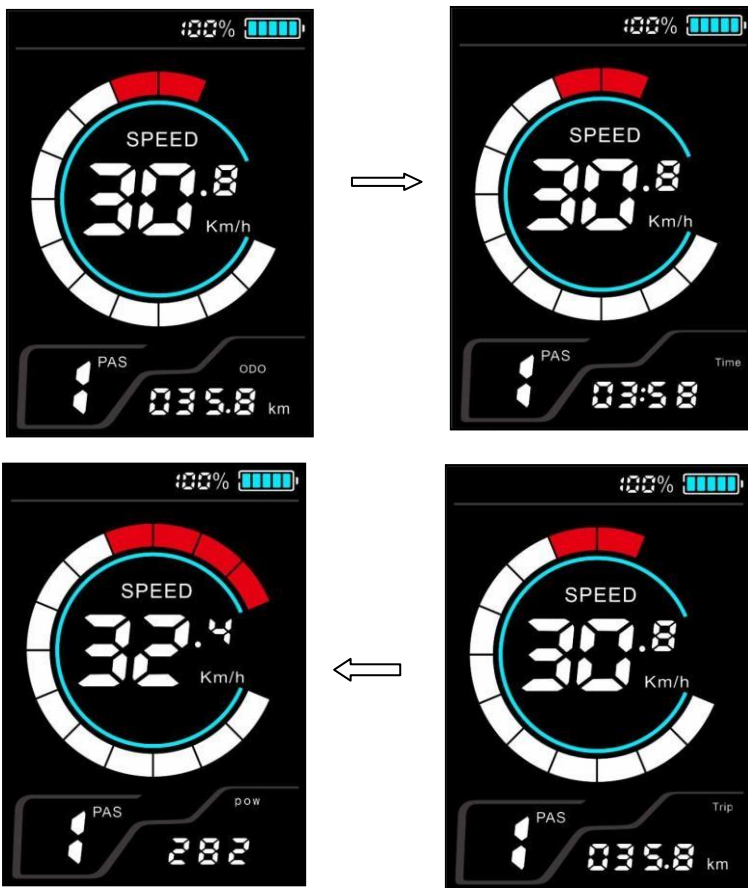
In the manual shift mode, short press + **BUTTON** or - **BUTTON** to change the assist ratio, the lowest 1st, the highest 9th.

0 is no motor assistance assist.



c. Mileage Mode Switch

When power on, short-press **POWER BUTTON** to switch the mileage display mode, and the following information is displayed cyclically: riding time (Time) → accumulated mileage (ODO) → power information (Pow) → single mileage (Trip).

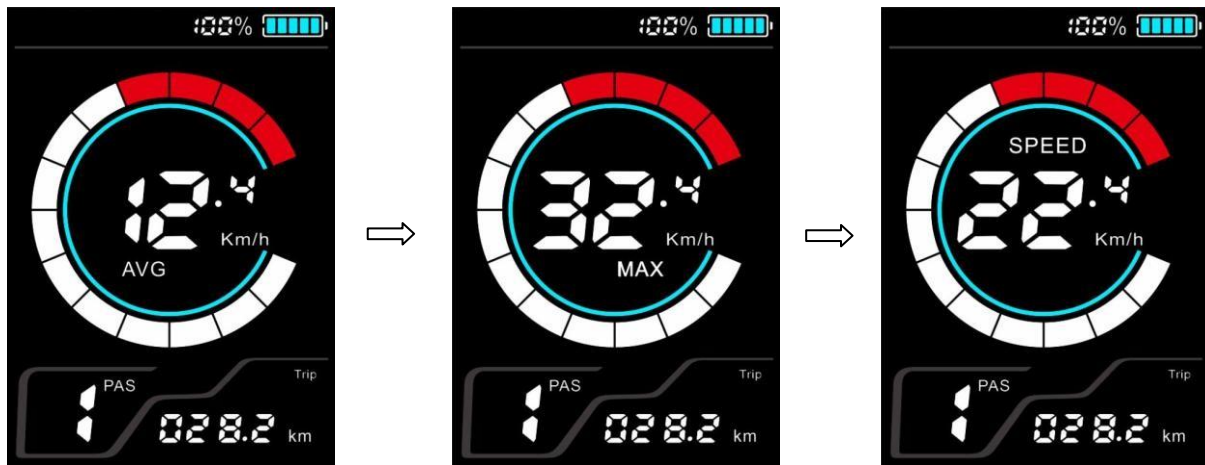


*If there is no key operation for 5 seconds, the meter will automatically return to the single mileage display state.

Speed Mode Switch

When power on, short press the **MODE BUTTON** to switch the speed display mode, and the following

information is displayed one after the other by pressing the mode button to move to the next statistic: real time speed (RT SPEED) → average speed (AVG SPEED) → maximum speed (MAX SPEED).



Average Speed (AVG)

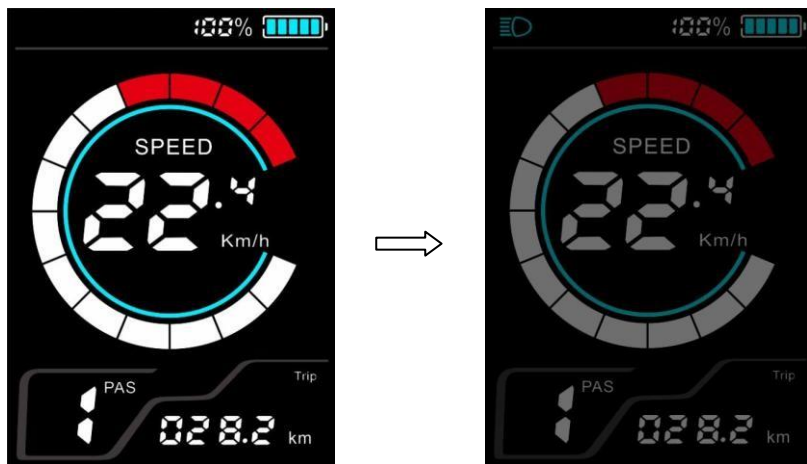
Max Speed (MAX)

Real time speed (SPEED)

*If there is no key operation for 5 seconds, the meter will automatically return to the real-time speed display state.

d. Headlight / Backlight Switch

Press and hold + **BUTTON** (1 second), the brightness of the meter's backlight decreases, and the lights are turned on. Press and hold + **BUTTON** again (1 second), the display backlight will return to its original brightness, and the lights will be turned off at the same time.



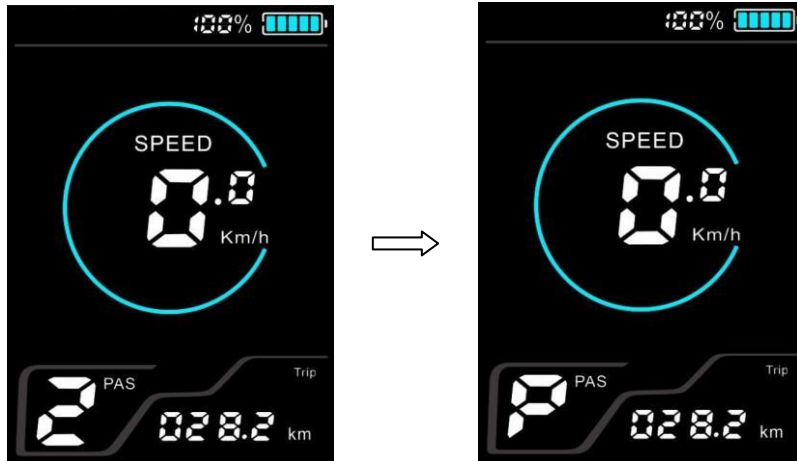
Headlight off

Headlight on

* Backlight brightness can be adjusted in 5 levels. Users can set it according to their needs.

e. Walking Mode (6km walk assist)

Press and hold **MINUS BUTTON** (1 second), the electric bike enters the boosting state, the speed displays the real-time speed, and the gear position displays “P”. Release **MINUS BUTTON** to exit the walking mode.



Walking Mode Off

Walking Mode On

f. USB Function

Long press **MODE BUTTON** (1 second), the USB function is turned on, the user can use the USB function, and long press **MODE BUTTON** for more than 1 second, the display will close the USB function, and the charging parameter is DC 5V 500mA.



USB ON

USB OFF

g. Clear Data

Press + **BUTTON** and – **BUTTON** together for 1 second to clear the temporary data. The cleared data includes the maximum speed (MAX SPEED), average speed (AVG SPEED), single mileage (TRIP), and riding time (TIME).

*The above data will not be cleared when the display is turned off or the electric bike is turned off.

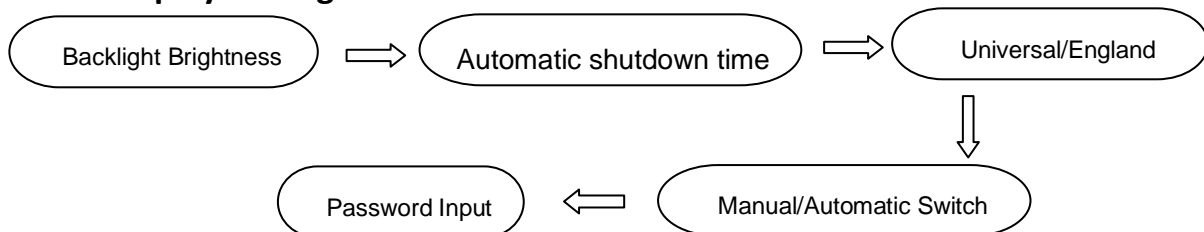
6. MENU Parameter Setting

When power on, press **MODE BUTTON** twice (<0.3 seconds between presses), the system enters the parameter setting state. In this state, the meter parameters can be set. Press **MODE BUTTON** twice again to exit the setting state. (<0.3 seconds between presses).

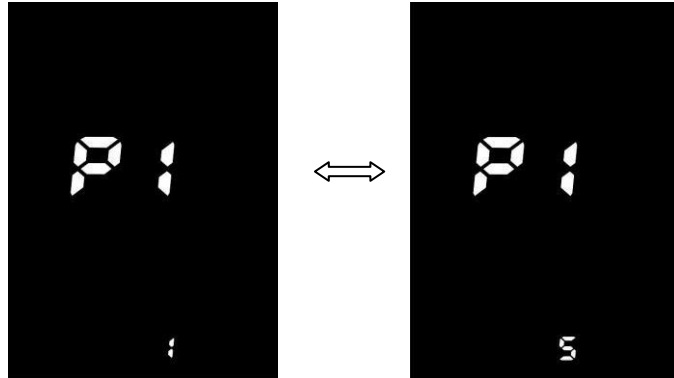
When in setting state, press **MODE BUTTON** to select the desired adjustment item, when the parameter flashes, press + **AND – BUTTON** to adjust to a different parameter setting, press the **POWER BUTTON** to save and switch, and press the **MODE BUTTON** twice to exit the setting state (<0.3 seconds between presses).

*In the parameter setting state, if no key operation is performed for 30 seconds, the meter automatically exits the setting state. In the riding state (the speed indication is not 0), you cannot enter the setting interface. If you start cycling in the setting interface (the speed indicator is not 0), you will automatically exit the setting.

a. The display setting items are as follows :

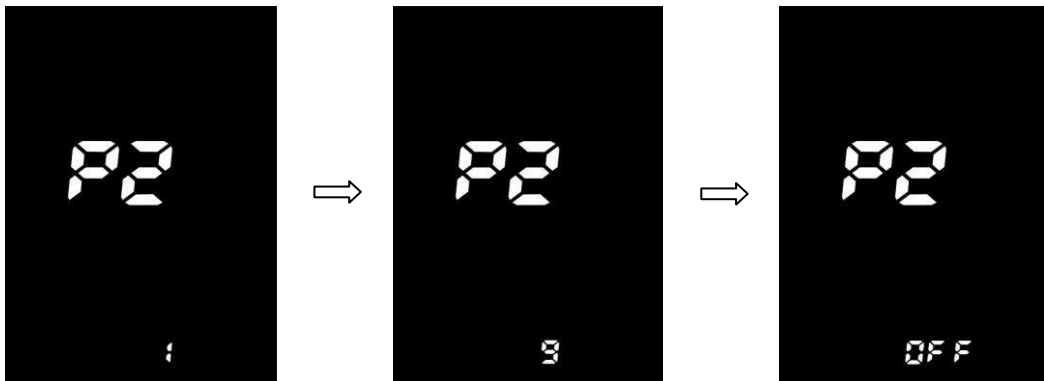


- ✧ **Backlight Brightness:** For item P1, press + **Button** and - **BUTTON** to select the display 1 ~ 5, “1” is the darkest backlight and “5” is the brightest.



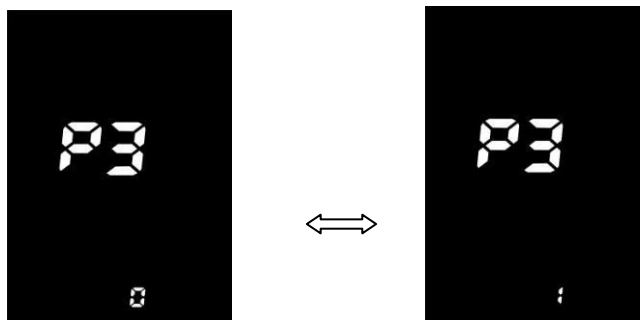
Backlight Brightness adjust interface

- ✧ **Automatic shutdown time:** for item P2, press + **BUTTON** and - **BUTTON** to adjust the position, 1 ~ 9 minutes represents the automatic shutdown time, OFF means cancel the automatic shutdown function.



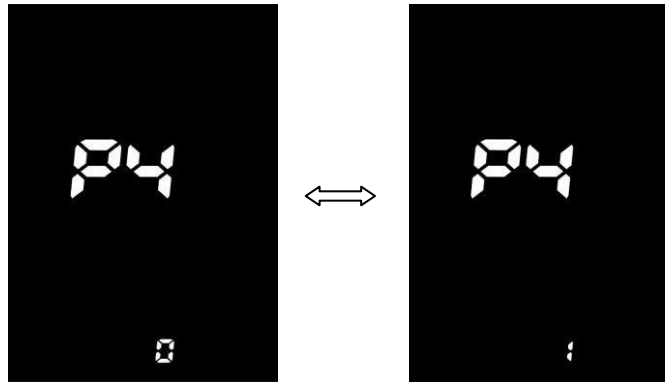
Automatic Shutdown time Adjust Interface

- ✧ **Universal/ England:** for item P3, press + **BUTTON** and - **BUTTON** to switch km / h or MPH display, set Universal/ England: 0 stands for universal (km/h) and 1 stand for England (MPH).



Universal/ England SPEED (km/H OR MPH) Interface

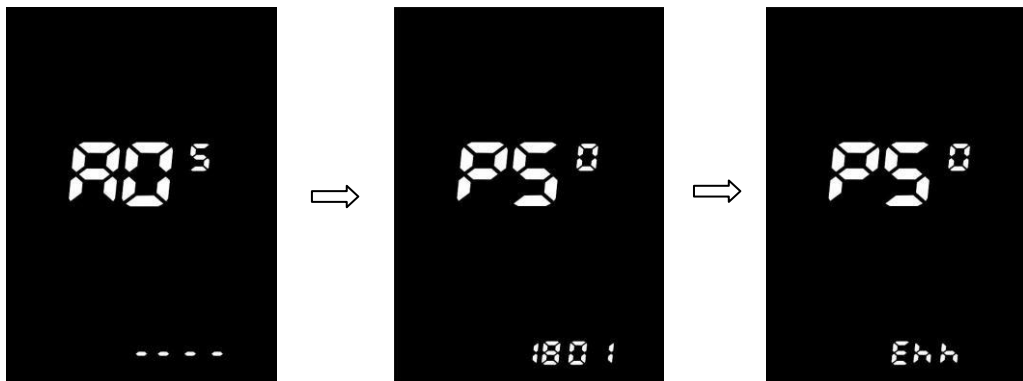
- ✧ **Manual / Automatic Switching:** for P4 item, press + **BUTTON** and - **BUTTON** to select manual / automatic switching. 0 means manual gear, 1 means automatic gear.



Manual / Automatic Switch interface

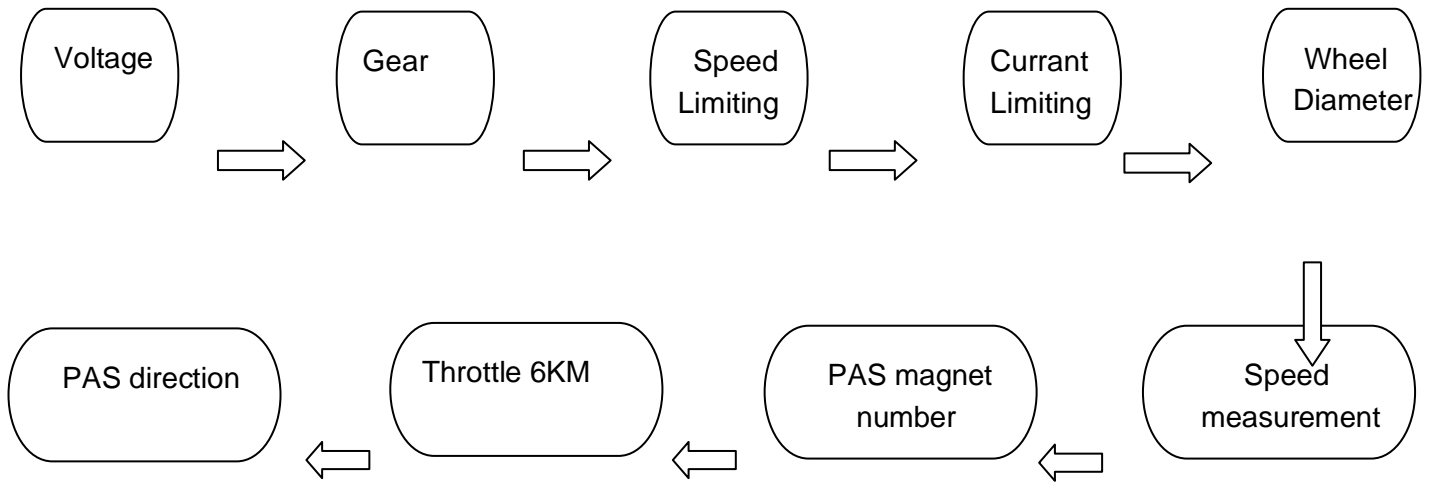
- ✧ **Password input:** enter ADS advanced setting items, the speed position of the display shows “ADS”, indicating that entering the password can enter advanced setting items. Short press **MODE BUTTON** to enter the password input state, the speed position of the display will show “PSD” at this point input the password 1801 by pressing + **BUTTON** and – **BUTTON** and the **MODE BUTTON** to confirm each digit. If the password is entered incorrectly , “Err” will be displayed, and the display will automatically return to the real-time speed /single mileage display state. If the password is correct, enter the advanced settings menu.

PLEASE NOTE THIS SHOULD ONLY BE ADJUSTED BY YOUR DEALER OR AMPERE. CHANGING THESE SETTING YOURSELF WILL VOID THE WARRANTY.

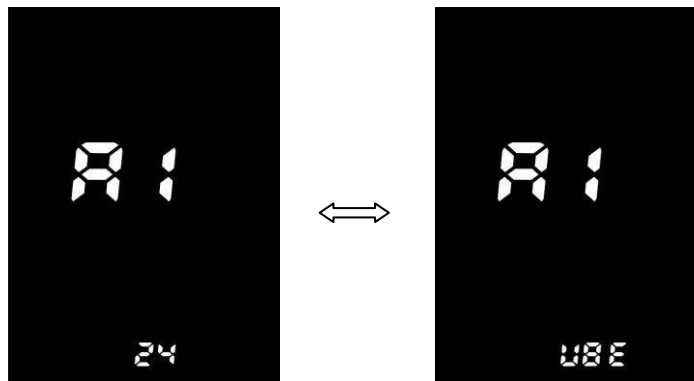


Password Input Surface

8.2 The advanced setting items are as follows



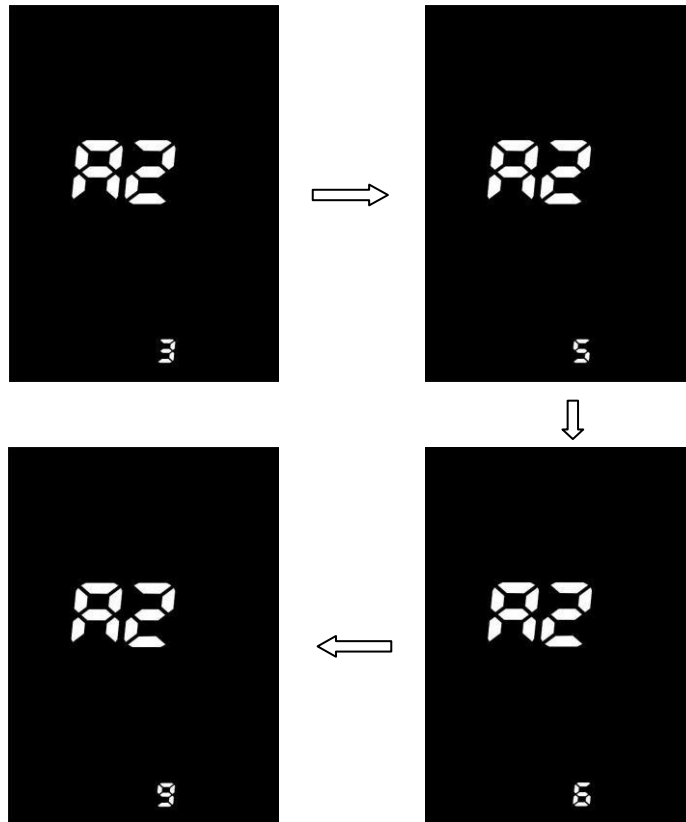
- ✧ **Voltage Choices** : A1item, Press The + BUTTON or – BUTTON to switch between 24V / 36V / 48V / 60V / 72V / UBE. UBE stands for user-defined voltage. **AMPERE BIKES SHOULD ALWAYS BE 36VOLTS**



Voltage Choices Interface

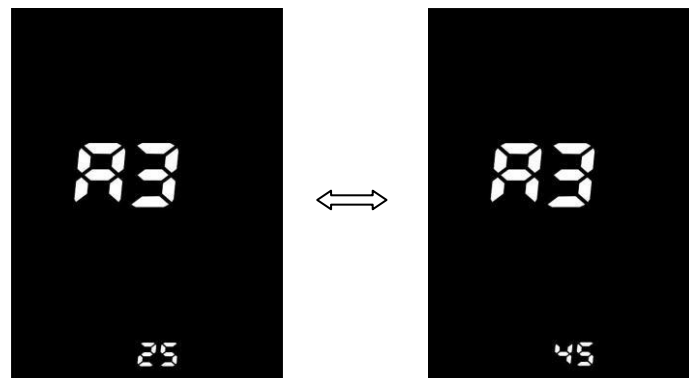
- ✧ **PAS LEVELS:** A2 is adjust the levels of assistance, you can change the levels of assistance to 3/5/6/9 levels. To do this press the **+ BUTTON** or **- BUTTON** to adjust then **POWER BUTTON** to confirm and exist.

1 means 3-speed system, 2 means 5-speed system 3, means 6-speed system and 4 means 9-speed system.



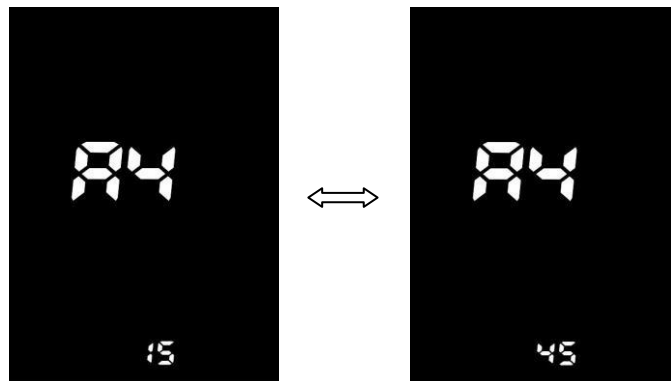
- ✧ **Speed Limiting Adjustment:** item A3, Press **+ BUTTON** and **- BUTTON** to adjust the speed limit value. The default is 25km/h. Users can set the speed limit value according to their needs. After the adjustment is completed, press **POWER BUTTON** to confirm and exit. Please note that derestricting the bike will cause the battery to drain substantially quicker.

Speed Limiting Adjustment



Interface

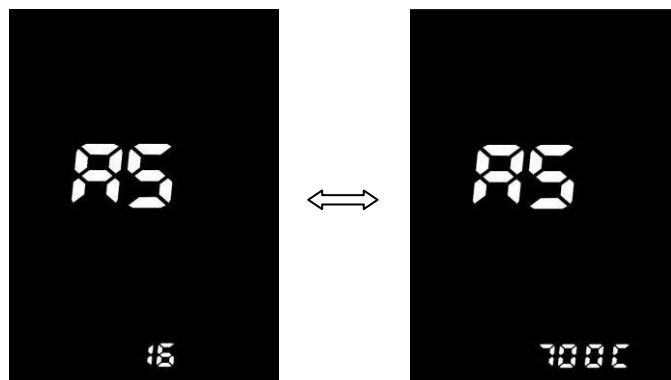
Current Limiting Adjustment: item A4, Press + **BUTTON** and - **BUTTON** to adjust the current limit value. The default is 15A. Users can set the current limit value according to their needs. After the adjustment is completed, press **POWER BUTTON** to confirm and exit. **DO NOT ADJUST THIS SETTING AS IT WILL VOID THE WARRANTY.**



Current Limiting Adjusting Interface

*Speed and current are restricted by the motor and controller at the same time and may not be able to reach the set value.

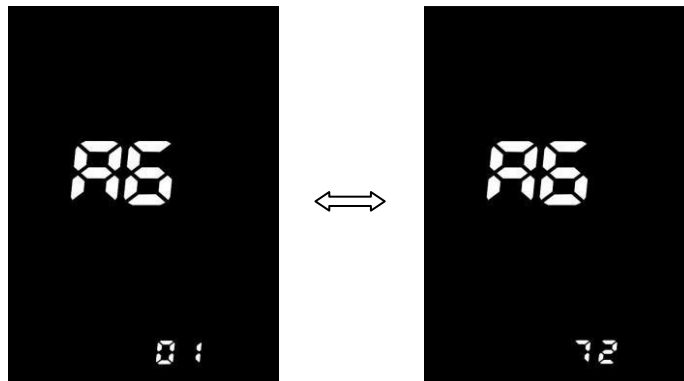
- ✧ **Wheel Diameter Selection:** item A5, press + **BUTTON** and - **BUTTON** to switch the display 16/18/20/22/24/26/27 / 700C / 28/29/30/31/32, select the corresponding wheel diameter, the unit is inch. Incorrect selection of wheel diameter will cause abnormal speed.



Wheel Diameter Selection interface

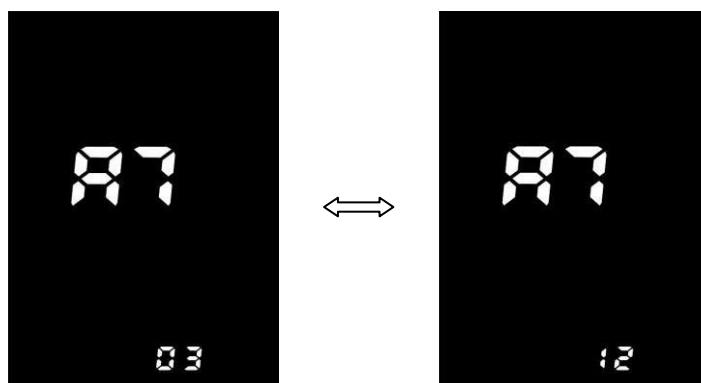
Number of speed measuring magnets: item A6,

Press the **+ BUTTON** and **- BUTTON** to adjust the number of speed measuring magnets 1 ~ 72. The user can set the number of speed measuring magnets according to the requirements. After the adjustment is completed, press the **POWER BUTTON** to confirm and exit. **DO NOT ADJUST THIS SETTING AS IT WILL VOID THE WARRANTY.**



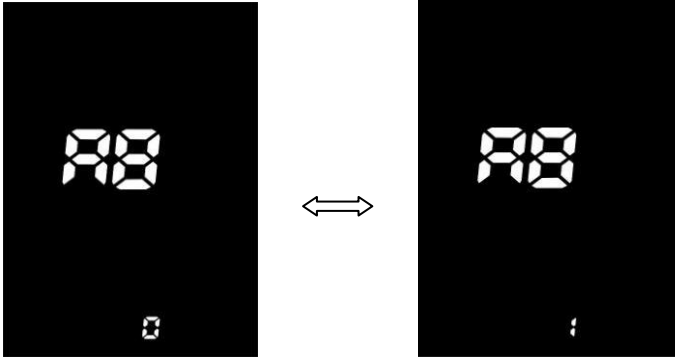
Number of speed measuring magnets Selection Interface

② **Number of PAS magnets:** item A7, press the **+ BUTTON** and **- BUTTON** to boost the number of booster magnets 3 ~ 15. The user can set the number of PAS magnets according to the needs. After the adjustment is completed, press **POWER BUTTON** to confirm and exit. **DO NOT ADJUST THIS SETTING AS IT WILL VOID THE WARRANTY.**



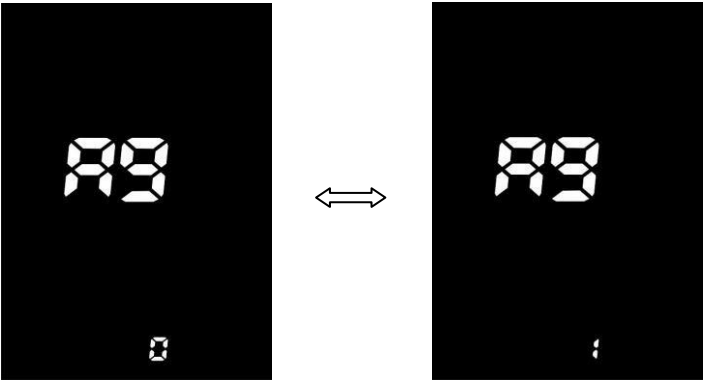
Number of PAS magnets Selection Interface

Throttle 6KM: item A8 项, press + and – **BUTTON** to select the 6km function switch. **DO NOT ADJUST THIS SETTING AS IT WILL VOID THE WARRANTY.**



Throttle 6KM Adjust Interface

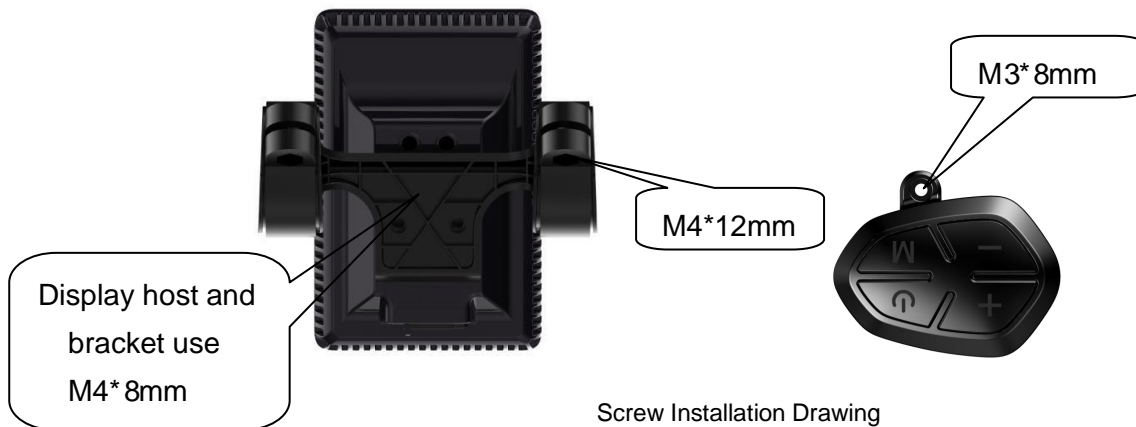
PAS orientation: item A9, Press + and - **BUTTON** to select the direction of the power sensor. **DO NOT ADJUST THIS SETTING AS IT WILL VOID THE WARRANTY.**



PAS orientation Adjustment Interface

6. Installation Instruction

10.1 Please refer to the following figure for the instrument screw assembly. Pay attention to the screw tightening torque. Instrument damage caused by excessive torque is not covered by the warranty.



10.2 Clips are suitable for three handlebar sizes, 31.8mm, 25.4mm, and 22.2mm. Customers can choose according to actual needs.

And 25.4mm and 22.2mm need to be matched with corresponding conversion.

Care and Maintenance

Servicing

1. Spokes – Spokes should be tensioned / adjusted every 300 miles, Failure to do so will result in broken spokes and potential damage to the wheel rim. Please contact your dealer to organise this.
2. Full Service – Your Ebike should be Serviced every 6 months. This is Even if the bike has not been used for long periods of time.

Cleaning your e-bike

To clean your e-bike either use a recommend e-bike cleaner or warm soapy water. Once you have finished washing your e-bike make sure you dry it with a dry, soft cloth. Try to keep the mechanical parts lubricated after every wash. Your e-bike will work more efficiently and make riding more enjoyable if the e-bike is cared for. Please visit your local bike shop for a suitable cleaning or maintenance products.

E-Bike storage

1. Avoid leaving your e-bike in the rain for long periods of time, or in damp conditions: always store in a dry place. If the e-bike does become wet always dry with a dry, soft cloth when you have finished using it.
2. Avoid leaving your e-bike in direct sunlight for long periods of time, this can cause the metal to get extremely hot and electrical components to overheat causing them to fail. Try to find shade or cover.
3. If you are storing the e-bike for long periods of time remove the battery and store it separately at temperatures between 15 °C (59 °F) and 25 °C (77 °F) in a dry area. A cupboard under the stairs is a good example.
4. Keep the battery fully charged when not in use, this will help increase the life of the battery.

Battery information

1. Do not charge at temperatures below 0 °C (32 °F)
2. Switch off battery before charging. (If the battery has a switch on it).
3. Batteries can be charged on or off the e-bike.
4. Charge your battery on a flat solid surface in an area that allows airflow.
5. Do not cover the battery or charger whilst charging.
6. Only use a charger supplied by Ampere.

Modifications

Do not attempt to modify, repair or replace any of the electrical parts on your e-bike. This will invalidate your warranty. Any repair work must be completed by an approved repair centre. Please visit your local dealer or contact enquiries@ampereelectric.co.uk to find your nearest repair centre.



AMPERE

ELECTRIC BIKES

User Manual

Deluxe / Hilux / X-Trail



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