



**INSTRUCTION MANUAL
FOR ELECTRIC SCOOTER**

C-PRO

Multi-language manual



Rider Safety Warnings

1. Before riding please read the manual carefully and check if each component is secure to ensure a safe ride. If there are any problems, please contact Arvala or your nearest dealer.
2. While riding on the road, abide by all local traffic laws. In wet conditions, ride at a slower speed than normal. Do not ride with more than one rider on the e-scooter.
3. Store your e-scooter in dry, ventilated areas and do not submerge in water. If the e-scooter is submerged deeper than the bottom of the frame, it can lead to internal circuit short-outs and damage the electrical system.
4. The battery used on this e-scooter is a safe power source. To avoid any risk of electrical shock to the rider, the anode and cathode of the battery cannot come into contact with wet hands and metal at the same time. This will generate a large circuit current causing injury to the user. Please exercise extreme caution around this.
5. Do not allow inexperienced riders to ride your e-bike to avoid damage to your bike or injury to the rider. Make sure they are confident riders, and you give them suitable instruction before riding.
6. Select the lowest level of speed on the display before you start riding the bike.
7. Make sure your tire pressure is in the normal PSI range (indicated on the tire sidewall) before riding.
8. Before riding, make sure that the brake function is in a normal state and check the disc is in the correct position.
9. Make sure the screws on each component are tight and secure before riding.
10. Turn off the power on the display when you finish your ride to avoid damaging the electrical system.
11. Turn off the power when you are walking the scooter to avoid accidentally pressing the handle throttle or pushing the cranks around. This will cause your scooter to start moving and can cause injury.
- 12. Do not toggle dual/single switch while riding scooter, this would cause the scooter malfunctional.**

SPECIAL DESIGN

Off-road Tire
10x3.0 | 255x80

Road Tire
10x3.0 | 80/65-6

widen & heavy
duty tire

Lithium Battery
52V/60V
customizable

ARVALA SCOOTER
C-PRO



DISPLAY

Apparent



Working voltage: DC24V, 36V, 48V, 60V
compatibility

Function description

Function

1. Display function

Speed display, battery indicator, fault prompt, total mileage, single mileage

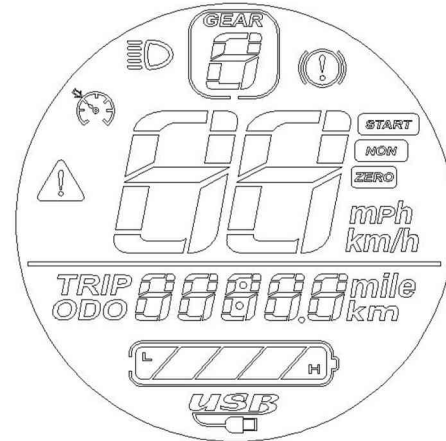
2. Control and set functions

Power switch control, wheel diameter setting, idle automatic sleep time setting,

Backlight brightness setting, start mode setting, drive mode setting, voltage level setting, controller current limit value setting, NFC swipe card start function, digital tube voltage display function.

3. Communication protocol:UART

All contents of the display (full display within 1S after startup)



Display Content Introduction

3.1

① Voltage state level POWER



② Digital tube voltage real-time display:
Stick digital tube picture

3.2 Multi-function display area



Total mileage ODO, single mileage TRIP
(unit: mile, km), digital voltage display VOL,
fault code ERR

Code status (decimal)	Status	Remark
0	Normal condition	
1	keep	
2	brake	
3	PAS error (Riding logo)	Not realize
4	6KM/H cruise	
5	Real-time cruise	
6	Battery low voltage	
7	Motor error	
8	Throttle error	
9	Controller error	
10	Communication reception error	
11	Communication transmission error	
12	BMS communication error	
13	Front light error	

3.3 Speed display area

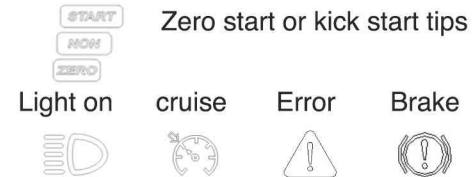
Unit Mp/h, km/h

Speed signal is taken from the Hall signal in the motor and sent to the meter by the controller. (Time of a single Hall cycle, unit: 1MS) out the real speed.



3.4 PAS level adjust, 0-9 level digital display and gear bar display


3.5 Status shows area





4. Menu set up introduction



- P01: Backlight intensity: Level 1 is darkest, level 3 is brightest
- P02: Unit of mileage, 0: KM; 1: the MILE;
- P03: Voltage level: 24V, 36V, 48V, 52V, 60V;
- P04: Sleep time: 0, no sleep; Other numbers are sleep time, range: 1-60; Unit: minutes;
- P05: Power gear: 0:3 gear mode;
- P06: Wheel diameter: unit, inch; Accuracy: 0.1;
- P07: Speed measuring magnetic steel number: range: 0-100;
- P08: Speed limit: 0-100;
- P09: Zero start, kick start setting, 0: zero start; 1: indicates kick start up
- P10: Drive mode set 0: power assisted drive (determine how much power output by power assisted gear, at this time The handle is invalid).
 - 1: Electric drive (by turning the handle drive, at this time the power gear is invalid).
 - 2: Both booster drive and electric drive coexist
- P11: Power sensitivity setting range: 0-5;
- P12: Power start strength setting range: 1-5;
- P13: Booster magnetic steel plate type setting is not opened
- P14: The default value is 12A. The value ranges from 1 to 20A
- P15: Controller undervoltage
- P16: ODO Clearing Setting Long press the up key for 5 seconds to clear ODO
- P17: 0: Disable cruise. 1: Enable cruise. Auto cruise optional (only for Protocol 2)
- P18: NFC card management: save up to 10 cards;
- P19: 0:0 is enabled. 0: with 0 and 1: without 0
- P20: Protocol 0: 2 Protocol 1: 55 Protocol 2: standby 3: standby


Button operation



1、 Turn off condition, long press  to turn on; after turn on, If there is an NFC card bound, it will be

displayed  , wait for swiping, No NFC card bound then go directly , short press , interface switches between ODO, TRIP, VOL。



2、 Under turn on condition, long press  to turn off, short press , PAS+1, short press , PAS-1;

3、 Long press  +  enter mode settings, press and hold both buttons at the same time


Parameter value modification : In a certain parameter condition , short press  shift


parameter, short press  increase the data, short press  reduce data, after finishing

modification, short press  shift to next parameter, and

save the last parameter data; After parameter modification, long press  +  exit setting interface, if not pressed, wait 8 seconds to automatically exit and save the parameters.

4、NFC card setting: 3 NFC cards are bound by default in the factory, in the setting mode, short

press  shift to P18 option, long press  increase card, up to 10 cards, long

press  Clear all NFC card bindings, then no need to swipe the card when turn on.

5、The crank adjusts the speed of the motor, and when it is moved from top to bottom, the speed of the motor increases, and when you let go, it returns to the zero position.

V、Menu item settings

VI、Frequently Asked Questions and Answers

1) Q: Why can't I turn on?

A: Check whether the instrument wiring harness is in good contact with the connector of the controller.

2) Q: What should I do if the meter shows a fault code?

A: Timely to the after-sales agency for maintenance.

VII、Quality commitment and warranty scope

After the instrument leaves the factory, the shell scratches, damage is not repaired; Lead scratches and breaks are not covered; Circuit function loss, warranty period: from the instrument factory within 12 months.

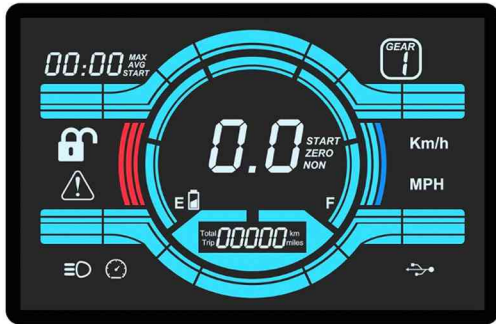
VIII、Version changes

The upgrade of the company's products may show some differences with the instructions, but it will not affect your normal use.

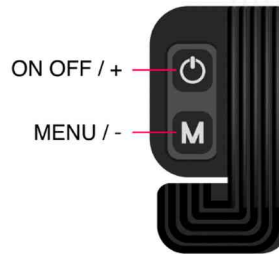
DISPLAY - middle big screen

1. Display consists of two parts: ←

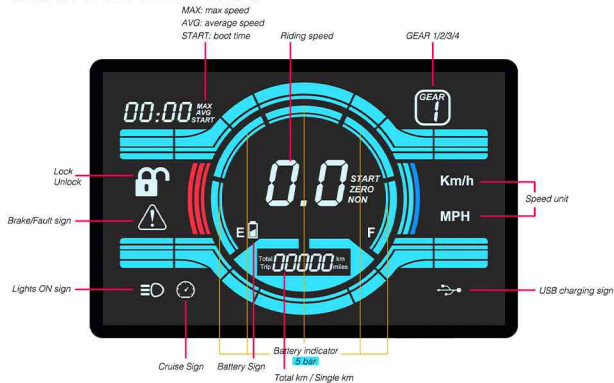
- ① Screen ←
- ② Thumb accelerator with 2 buttons ←



2. Button function ←



3. Screen interface



① Turn on the display, boot time, max speed & average speed, and the next will be automatically switched in 5 seconds; when the menu is set, "P01-P20" is the menu [item](#). ←



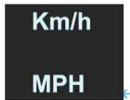
② When riding, the riding speed is displayed; when the menu is set, the value of the menu item is [displayed](#). ←



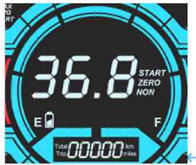
③ Total mileage, single mileage, voltage, current, acceleration value, fault code display, switch by pressing the menu button **M**;



④ The gear value, in the riding mode, use the power button "⏻" to operate;



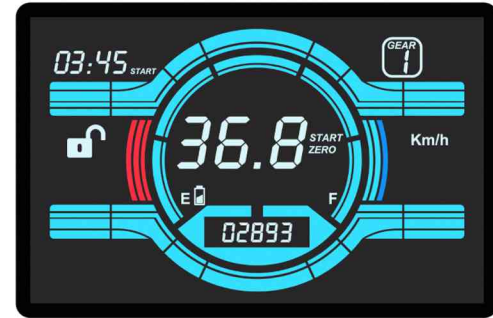
⑤ Speed units: Km/h & MPH



⑥ The battery power is represented by the battery sign, "E", "F", 5 grid; 5 grids mean fully charged, and the battery sign will flash when scooter no power;



⑦ Other signs: fault sign, lights on sign, cruise sign, Bluetooth sign, USB charging sign, lock & unlock status sign;



On riding, the screen speed is 36.8 km/h

4. Error code

Error code	Cause of issue
06	Battery undervoltage
07	Motor fault (including Hall fault and phase loss fault)
08	Throttle failure
09	Controller failure
10	Display cannot receive the controller signal
11	Controller cannot receive the display signal

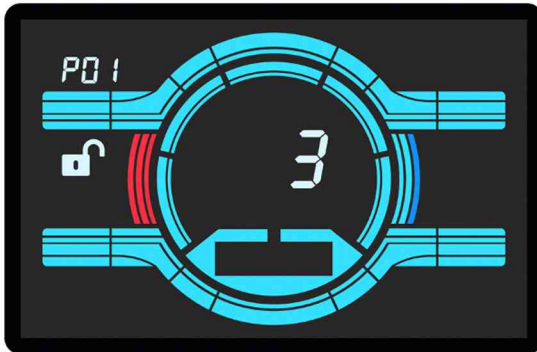
5.Menu settings←

Press and hold the menu **M** button for 3 seconds to enter the menu settings.←

Short press the menu **M** button: switch P01 - P20 cycle,←

Press and hold the **ON/OFF** button for 3 seconds, the setting value will flash, press the **ON/OFF** button, and the setting value will increase, pressing the **M** button will decrease the setting value.←

Press and hold the **ON/OFF** button for 3 seconds to return to the main menu mode, in menu mode, long press the menu **M** button for 3 seconds to return to riding mode.←



P01: LCD screen brightness, level 1 is the darkest, level 3 is the brightest; default: 3

P02: mileage unit, 0: km; 1: mile; default: km

P03: Voltage level: 24V, 36V, 48V, 52V, 60V; default 60V;

P04: Sleep time: 0, no sleep; other numbers are sleep time, range 1-60 minutes, default: 5;

P05: Spare

P06: Wheel diameter: unit, inches; precision: 0.1; default 10.0;

P07: Number of speed measuring magnets: range 0-255; default: 28;

P08: speed limit value: range 5-100; default 100;

P09: Zero start and non-zero start settings; 0: Zero start; 1: Non-zero start; Default: Zero start

P10: spare;

P11: EABS switch selection, range 0-5; 0: Disabled 1: Weakest 5: Strongest Default 1;

P12: Soft and hard start strength, range 1-5; 1: Weakest 5: Strongest Default 3;

P13-P14: Spare

P15: Undervoltage value, the undervoltage value is set according to the voltage level set by P03

P16: ODO reset setting: M button for 5 seconds, ODO reset;

P17: Cruise switch setting; 0: Cruise off; 1: Cruise on; Default: 0;

P18: Spare

P19: System setting value, cannot be changed;

P20: The default communication protocol is 4, which is not adjustable;

5.Multifunctional area digital description

The numbers in this area are used to show the total mileage, single mileage, voltage, current, acceleration value, and error code information. In the riding mode, short press the **ON/OFF** button to switch the content in [turn](#).

←



Total mileage: 0 km



Single mileage: 0 km



Voltage: 58.1V



Current: 0



Tachometer: press thumb throttle, the value is 2950 for the maximum acceleration, 00000 means that no throttle connected, and the tachometer is about 00700 and does not accelerate in its original position; the tachometer value is generally [700-2950](#).



E 08: Throttle failure

FOLDING & UNFOLDING



 **Unscrew**

 **Tighten**

- After loosening the screw, the folding wrench is opened, stem folds down.

- After the folding wrench is back in place, tighten the screw.



- Fix the stem after the buckle is fastened

OPERATIONAL INSTRUCTIONS

Riding Operations Instructions

Before Riding

- Wear protective gear
- Choose a suitable venue for riding.
- Unfold the electric scooter according to the instructions.
- Adjust the height of the handlebar tube according to your height.

Riding

- Press the power button to turn on the display. The speed is set by default to gear level 1
- For safety purposes, C-Pro scooter has a safe start design which means the motor can start only when the speed of the scooter is above 0. It prevents the motor from starting when the acceleration handle is pressed by mistake. To start the riding operations, put one foot on the standing board and the other foot on the ground and kick scoot it like a classic kick scooter. When the scooter is in motion and its speed is above 0, smoothly use the acceleration handle to start the motor. Once the motor starts put the other foot on the standing board and continue riding.

When riding, according to personal needs, adjust the Gear from 1 to 3, pay attention to the road conditions, turn on the lights and use the horn if necessary.

- Be aware of the cruise control function. The cruise control function is activated when the acceleration handle is pressed with the same pressure for 3 seconds.
- Be aware of the possibility of unpredictable sudden obstacles on your way and control the speed level.

Braking

- Use the rear brakes handle for braking under normal circumstances.
If you encounter emergencies that require emergency treatment,
- don't panic, brake and release the brakes quickly. Brake again to maximize the balance of the scooter. We recommend Predict the road conditions ahead in advance and slow down slowly.



MAINTENANCE

Tires

- When the tires are worn out or have a puncture, they need to be replaced timely.
- Contact the official distributor to replace the original tires.
- Inspect your scooter and its tires every month, check if the screws are tightened enough. If they are loose, tighten them.

Battery and Charger

- Only use the battery pack and charger provided by Arvala, do not use other batteries or chargers, do not use the charger to charge other batteries.
- Do not drop the battery or charger. Do not open, disassemble, or modify the battery or charger. No user-serviceable parts inside.
- Keep the battery out of intense sunlight. Keep away from heat. Heat will damage the battery.
- Keep the battery away from paper clips, coins, keys, nails, screws or other small metal items, to prevent shorting exposed battery contacts. Shorting battery contacts can cause severe burns, fire, or explosion.
- Before charging, make sure the charger and A/C outlet are the same voltage.
- Locate both charger and battery indoors, in a clean, dry area with good ventilation to charge. Make sure the area is free from combustibles to avoid fire from sparks or overheating. Keep charger ventilation openings unobstructed. Do not cover the charger or the battery.
- Disconnect the battery from the charger unit when fully charged. Unplug the charger from the wall outlet when not in use.

If you plan to leave the scooter for more than 1 month without using it, please fully charge the scooter and store it in a cool and dry place. An unused scooter should be fully charged every 2 months, otherwise, the battery may be damaged or malfunction. Such battery failures are not covered by the warranty.

WARNING

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN ELECTRICAL FIRES, EXPLOSION, OR SEVERE BURNS OR ELECTROCUTION.



Brakes and other parts

- Brake pads and braking - check and replace pads frequently.
- Fasteners can loosen over time. Have fasteners and mounted accessories checked often by a professional scooter mechanic.

Check for cracks or broken connections, high-speed dangerous driving may hit the curb or wall and cause the motor hub to deform or the frame to break. Please develop the habit of checking the motorcycle regularly.

CLEANING

Daily Maintenance Tips and Best Practice

Lightly rinse your scooter with fresh water if exposed to saltwater/air

- Never pressure wash your scooter(e.g. water blaster)
- Dry your scooter and components off with a soft dry cloth
- Cover your scooter if transporting it in wet weather on car carrier racks
- Recommended servicing intervals: Check-up 6 weeks after purchase, then every 3-6 months after (higher kms = more frequent service intervals)
- Check your tyre pressure every fortnight or couple of rides (PSI range is on the tyre sidewall)
- Lubricate your chain every week in Winter and every two weeks over Summer
- Clean your scooter once a week if you are using it regularly

WARNING

Dry the surface of the scooter with a prepared dry cloth. Make sure that there is no residual moisture in key parts such as motors and circuits. Before using a dry rag, make sure that the rag is clean and tidy, free of stones, iron wires, etc., otherwise it will cause serious scratches on the paint.

LIMITED WARRANTY

BY USING THIS PRODUCT YOU AGREE TO THIS LIMITED WARRANTY. PLEASE READ THIS LIMITED WARRANTY CAREFULLY.

The warranty of the electric scooter is valid for 1 year. The warranty of the battery is valid for 6 months.

Model: _____

Warranty valid from: _____

Retailer's stamp, name and signature: _____

The warranty covers all malfunction and issues with the components of the e-scooter or other problems caused by faulty manufacturing. Normal wear and tear, as well as damages caused by the user, are not covered.

The warranty is valid only with the original warranty document or purchase document. The warranty is not valid if the e-scooter:

- has been opened, rebuilt, or repaired by the customer or any unauthorized after-sales service
- has been damaged by humidity, water, other liquids, mud, sand, snow, dust, gases, or temperature
- has been damaged by inappropriate use, including, but not limited to racing, jumping, mountain riding, stunt or trick riding, drop, hit or concussion, overloading, inappropriate speed, loss of power, accidents, etc.
- has been charged with any charger other than the original, over-discharged, or if the charge and storage instructions in this manual have not been followed.

Our authorized after sales partners provide original spare parts and make warranty repairs. For more information, please contact the distributor of the e-scooter.

LIMITED WARRANTY

BY USING THIS PRODUCT YOU AGREE TO THIS LIMITED WARRANTY. PLEASE READ THIS LIMITED WARRANTY CAREFULLY.

Warranty terms together with the “care and maintenance” sections provided in the user manual. This limited warranty applies to the extent permitted by law and unless restricted or prohibited by law.

This Limited Warranty covers the Product and each of its following component parts (“Components”) only:

- Motor

- Battery pack

(except if battery was short-circuited or the label on the battery surface turns red or seals of the battery enclosure or cells were broken were tempered or the battery was used in equipment other than its intended use);

- Controller

- Display

- Charger

What this Limited Warranty does not cover:

1. Products used for commercial purpose(s) including but not limited to leasing/hiring, use in competitions etc
2. Any logistical costs of returning the Product to Falcon or its authorised service centres for servicing or the cost of returning the Product to the customer after servicing.
3. Defects or damages resulting from use of the Product(s) other than its normal and customary manner as stated in the user manuals accompanying the Products.

4. Defects or damages from improper storage, exposure to moisture or dampness, modifications, connections, repairs (except as carried out by Falcon or its authorised centres), misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of Falcon, including damage caused by dropping, blown fuses, spills of food or liquid.
5. Defects or malfunctions of the product not notified by customer during the Warranty Period.
6. Products which have had their serial numbers removed or tampered with.
7. This Limited Warranty is in lieu of all other warranties, express or implied either in fact or by operations of law, statutory or otherwise, including, but not limited to any implied warranty of marketability or fitness for a particular use.

Disclaimer:

1. The customer understands the risk of serious injury or death in the operation of such products and shall agree to take the necessary precautions and exercise good judgement to avoid hazards and dangerous situations which may result in serious injury or death.
2. The customer shall agree to indemnify and hold harmless Falcon from all injuries or death arising from the operation of the product.
3. The use of safety and protective gear such as bicycle helmets is strongly encouraged. And so is the use of Good Judgement.
4. The customer is advised to take the following precautions:

- a. Do not ride on wet ground or in heavy rain;
- b. Take corners slowly and look out for pedestrians;
- c. Avoid potholes, kerbs and debris on the ground;
- d. Keep tires pumped to the specified pressure;
- e. Dismount in places with heavy human traffic and push the scooter manually;
- f. Service the product every 3 months on regular usage, 6 months for non-frequent usage;
- g. Do not use product on public roads and respect local road regulations.

How to request service under this Limited Warranty:

To obtain performance of TNE to repair and/or replace the Product or its Components under this Limited Warranty, the customer must during the Warranty Period.



A R V A L A

www.arvalascooter.com