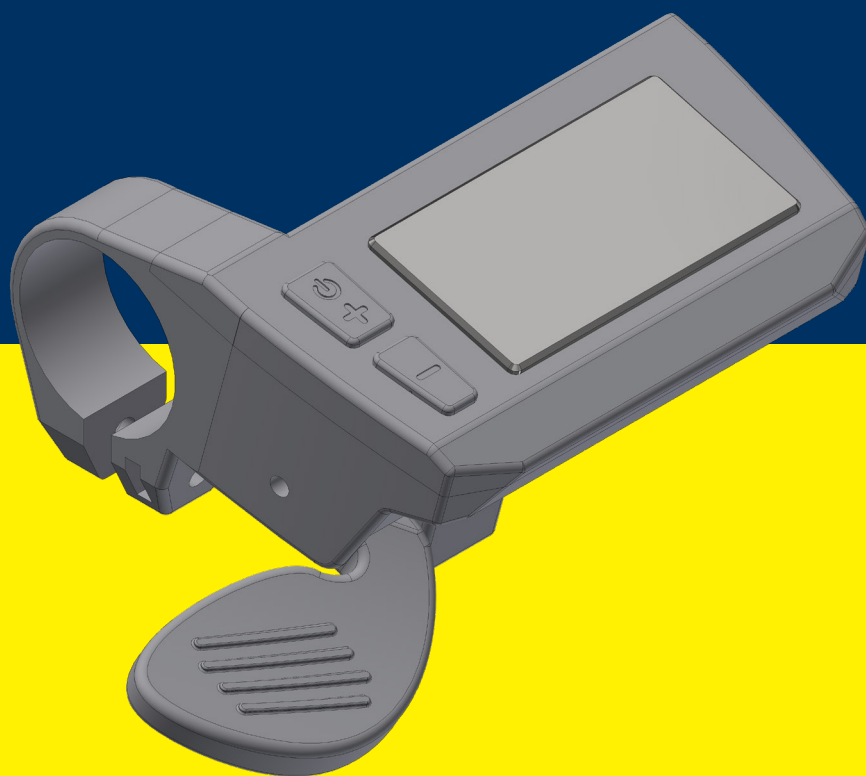


# OLI EASY DISPLAY

## MANUAL

### USE AND MAINTENANCE



---

Revision - 00 on 25/03/2020



Original instructions: Italian

---

# INDEX

## **1. GENERAL INFORMATION** 3

---

1.1. PURPOSE OF THE MANUAL	3
1.2. PRESERVATION OF THE MANUAL	3
1.3. MANUFACTURER	4
1.4. DESCRIPTION	4
1.5. CERTIFICATION	5
1.6. WARRANTY	5
1.7. TECHNICAL ASSISTANCE	5
1.8. TRANSPORT, PACKAGING AND STORAGE	6
1.9. TECHNICAL DATA	6
1.10. MEASUREMENTS AND OVERALL DIMENSIONS	6
1.11. DECLARATION OF CONFORMITY	7

## **2. USE AND MAINTENANCE** 8

---

2.1. SAFETY RULES	8
2.2. UNIT DESCRIPTION	8
2.3. SUMMARY OF FUNCTIONS	9
2.4. SWITCHING THE SYSTEM ON/OFF	9
2.5. TRIP RESET	9
2.6. ASSISTANCE LEVEL SETTING	10
2.7. WALK ASSISTANCE MODE	10
2.8. LIGHTS	11
2.9. BATTERY	11
2.10. ERROR CODES	12
2.11. TROUBLESHOOTING	14
2.12. CLEANING	14
2.13. RETURNS	14
2.14. DEMOLITION AND DISPOSAL	15

# 1. GENERAL INFORMATION

---

## 1.1. PURPOSE OF THE MANUAL

This manual is an integral part of the HMI OLI EASY DISPLAY unit and has been written by the manufacturer in its original language (Italian) to provide all the information necessary for an adequate and safe use of the unit throughout its life cycle (from transport , delivery, use and maintenance up to disposal).

Before carrying out any operation, users and technicians must carefully read the instructions and strictly comply with them. In case of doubts about their correct interpretation, contact the manufacturer to obtain the necessary clarifications. Only by observing what is reported below is it possible to ensure the regular operation of the unit over time and avoid the occurrence of dangerous situations for people and things. The manual provides warnings and indications relating to safety regulations for the prevention of accidents. In any case, operators must observe the safety regulations imposed on them by current regulations with the utmost attention. Any changes to the safety regulations that may take place over time must be acknowledged and implemented.

**CAUTION:** It is recommended that you read this manual carefully before putting the unit into operation.



With a view to continuous improvement, OLI eBike Systems may change some characteristics of the components used without notice. This does not affect the validity of the information contained in this document. If inconsistencies are found between what is described in the manual and the use of the unit, please notify the manufacturer.

**IMPORTANT:** The updated copy of this manual is available on the website [www.oli-ebike.com](http://www.oli-ebike.com).



---

## 1.2. PRESERVATION OF THE MANUAL

The use and maintenance manual must accompany the unit throughout its life cycle and must be available to all operators and technicians who may need it. The manual must follow the unit if it is transferred to a new user or owner.

---

## 1.3. MANUFACTURER

Our company is at your disposal for any problem or information. Communications and requests can be sent to:

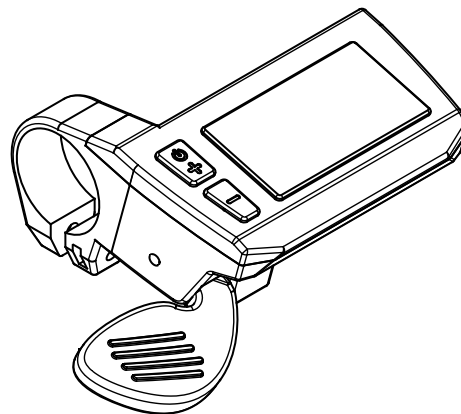
*OLI eBike Systems*  
*Via delle pesche, 891 - 47522 Cesena - (FC) -ITALY*  
*Tel +39 / 0547 / 318322*  
*info@oli-ebike.com*  
*www.oli-ebike.com*

For any need concerning the use, maintenance or request for spare parts, please specify the unit identification data shown on the manufacturer's plate.

---

## 1.4. DESCRIPTION

OLI EASY DISPLAY is an HMI unit that allows you to analyse and view the data relating to the e-bike and the training in progress. The unit is composed of a sturdy injected-moulded ABS body where an LCD display and buttons are placed that allow for control and navigation.



**CAUTION:** The OLI EASY DISPLAY unit is intended exclusively for use as an HMI on e-bikes. Uses other than those foreseen and not compliant with what is described in this manual, in addition to being considered improper and prohibited, can create dangerous conditions for people and things.



**IMPORTANT:** The manufacturer declines all responsibility for improper use of the product.

---

## 1.5. CERTIFICATION

The OLI EASY DISPLAY unit was manufactured in compliance with the relevant EU Directives applicable at the time of its placing on the market, as specified in the declaration of conformity, therefore it meets the safety requirements of the machinery directive 2006/42/EC.

Specifically, the following standards have been applied:

- UNI EN 15194:2018 - CEI EN 61000-4-2:2011-04 - CEI EN 55012:2009-03 - CEI EN 55012/A1:2010-05 - ISO 11451-1:2015

All the products described in this manual have been manufactured according to the operating procedures defined by the Quality System of OLI eBike Systems, division of OLI@spa. The company Quality System, certified in accordance with the UNI EN ISO 9001 Standard, is able to ensure that the entire production process, from the formulation of the order to the technical assistance following delivery, is carried out in a controlled and adequate manner to guarantee product quality standard.

---

## 1.6. WARRANTY

The OLI EASY DISPLAY unit is covered by a warranty on materials for a period of 36 months from the date shown on the transport document. The buyer loses the right to the guarantee in case of incorrect use or when he or she has made changes or repairs to the supply without the manufacturer's authorization. Upon receipt of the product, the recipient must verify that there are no defects, damage resulting from transport and / or incompleteness in the supply. Any complaints must be reported immediately to the manufacturer by means of written communication countersigned by the carrier. Labour services, such as the sending of a technician, are excluded from the warranty. In no case can compensation be demanded for damages. For further information on the conditions of assistance under warranty, please refer to the sales contract.

**IMPORTANT:** Products shipped for repair under warranty must be returned carriage paid to the manufacturer's factory.



---

## 1.7. TECHNICAL ASSISTANCE

Ordinary and extraordinary maintenance must be carried out in accordance with the instructions contained in this manual. For all cases not included and for any kind of assistance it is recommended to contact the manufacturer directly, referring to the data shown on the unit identification plate.

- > model;
- > serial number;
- > year of construction.

Correct reference ensures quick and accurate answers.

**IMPORTANT:** The manufacturer declines all responsibility for damage to persons or property deriving from improper use of the unit, from errors in use or from inexperience, imprudence and negligence with respect to the indications / instructions contained in this manual.



**IMPORTANT:** The manufacturer declines all responsibility for damage to persons or property, as well as the faulty operation of the unit if original spare parts and products recommended for cleaning and maintenance are not used.



## 1.8. TRANSPORT, PACKAGING AND STORAGE

The OLI EASY DISPLAY unit is supplied with a dedicated packaging that avoids damage due to transport.

Upon receipt of the goods, the customer must check whether the model and quantity received correspond to the data in the order confirmation.

The components must be stored indoors in dry environments, protected from atmospheric agents and at temperatures above -20°C.

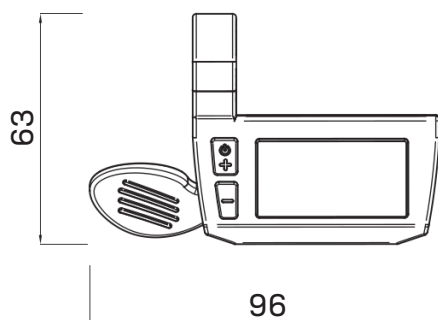
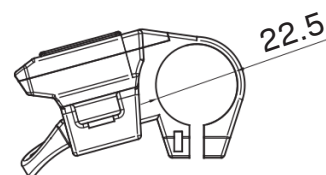
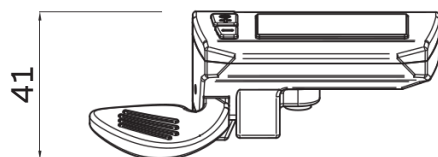


**IMPORTANT:** It is the user's responsibility to dispose of the packaging adequately in compliance with the laws in force.

## 1.9. TECHNICAL DATA

EASY DISPLAY OIL unit	
Display type	Dot matrix LCD
Operating temperature	-5°C / 40°C
Warehouse temperature	-20°C / 60°C
Protection rating	IP 54

## 1.10. MEASUREMENTS AND OVERALL DIMENSIONS



---

## **1.11. DECLARATION OF CONFORMITY**

The OLI EASY DISPLAY unit complies with the laws in force. Furthermore, as this product is undergoing strong technical and regulatory development, OLI eBike Systems reserves the right to update its products as quickly as possible to the latest technological knowledge and the applicable official standards (UNI, EN, ISO) that become available as and when.

## 2. USE AND MAINTENANCE

### 2.1. SAFETY RULES

In order to minimize the causes that can create dangerous situations for users and others, we invite you to adopt good rules of conduct. In particular, when using the e-bike it is advisable to respect the following points:

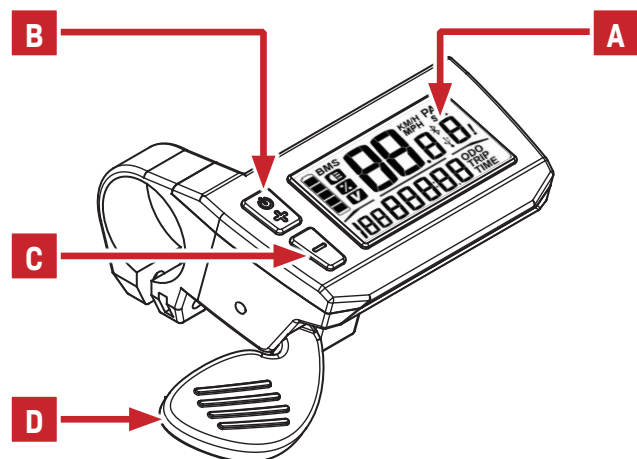
- › consult your doctor before starting an exercise program;
- › observe the traffic regulations relating to pedal assisted bicycles;
- › do not get distracted by looking at the display when riding the bicycle;
- › do not use the display as a handle;
- › use only the HMI unit and the supplied keypad;
- › remove the battery before carrying out any type of intervention.



**IMPORTANT:** The Manufacturer declines all responsibility in case of damage to persons or things deriving from improper use of the unit or failure to observe the instructions given in the use and maintenance manual.

### 2.2. UNIT DESCRIPTION

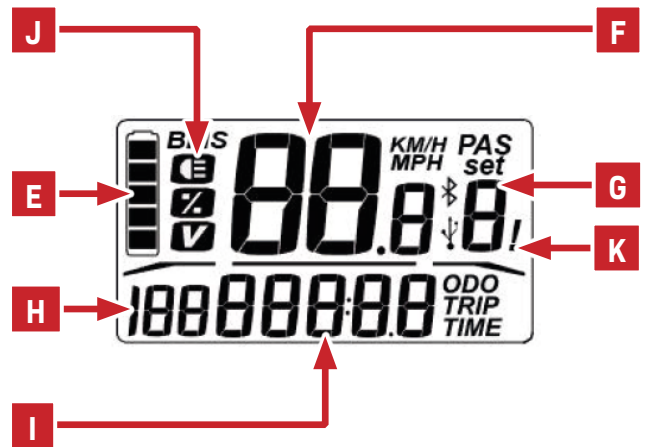
- A. Display
- B. ON / OFF / UP button
- C. SET / DOWN button
- D. Accelerator





## 2.3. SUMMARY OF FUNCTIONS

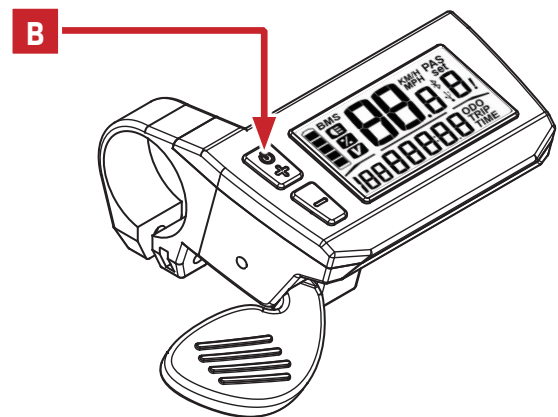
- E.** Remaining charge indicator
- F.** Instantaneous speed
- G.** Assistance level
- H.** Percentage of battery power
- I.** Total distance (ODO) / Single distance (TRIP). The two values are automatically displayed alternately
- J.** Lights
- K.** Error (refer to the error codes paragraph)



## 2.4. SWITCHING THE SYSTEM ON/OFF

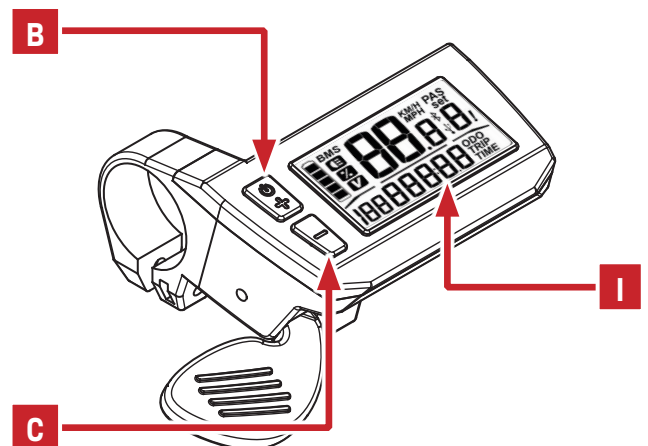
**Switching on :** Press button **B** to turn on the display and power the unit.

**Switching off:** Press button **B** for 3 seconds to turn off the display and power off the unit.



## 2.5. TRIP RESET

With the unit switched on, press buttons **B** and **C** simultaneously for 2 seconds to reset the single distance **I**.



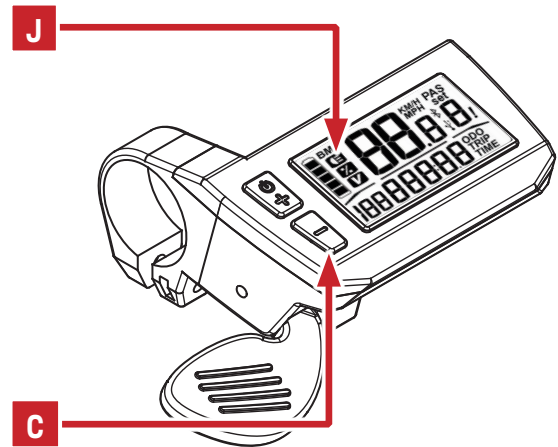


## 2.8. LIGHTS

With the unit on, press the **C** button for 3 seconds to activate the e-bike lights.

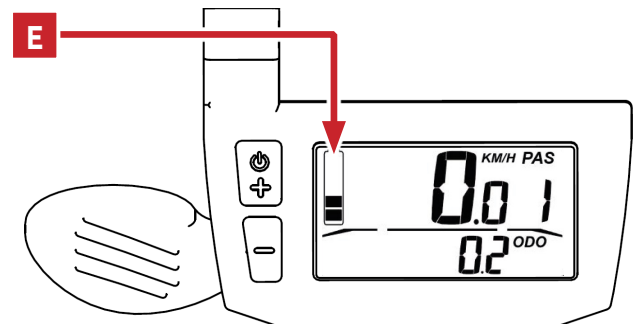
With the unit on and the lights on, press button **C** for 3 seconds to switch off the lights.

The switching on and off of the e-bike lights is indicated on the display by the **J** indicator.



## 2.9. BATTERY

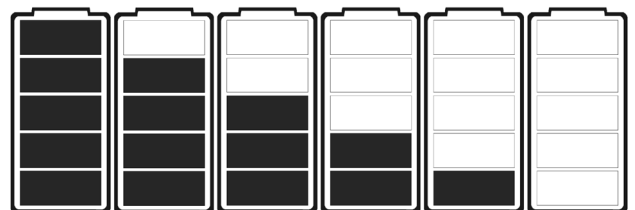
The remaining battery charge **E** is indicated on the left side of the display.



5 bars appear on the screen when the battery is fully charged.

The bar gradually fade away as the charge decreases.

When the battery is low the last bar flashes to warn that the battery needs to be recharged.

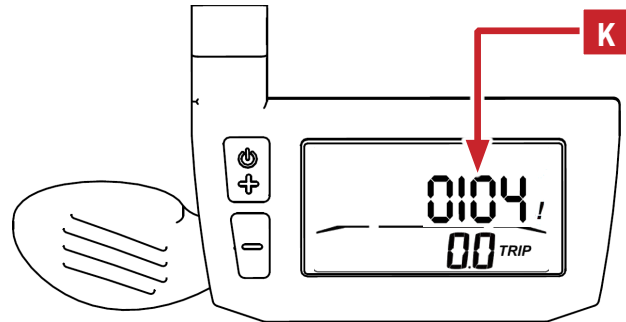


## 2.10. ERROR CODES

In the event of a malfunction, the display automatically shows a 4-character **K** code relating to the error corresponding to the fault found.

Error codes are shown on the right of the display and highlighted by an exclamation point.

To clear the error codes turn the unit off and on again.



**ATTENTION:** Depending on the type of fault, the system could prevent the motor from starting or run at reduced power.

The following table lists the possible faults and the 4-character codes displayed in the error messages.

Fault code	Description
0001	Communication problem with the battery. The battery status data could be displayed incorrectly. Check that the battery wiring and contacts are intact and properly connected.
0101	Communication problem between drive unit and HMI. Check that the wiring is intact and properly connected.
0104	Speed sensor not detected. Check that the alignment between the magnet and the speed sensor is correct. Check that the speed sensor is properly installed and connected.
0105	Non-compliant torque meter signal. The torque transducer signal has a fault. Operation at reduced power.
0106	Non-compliant torque meter offset. The torque transducer signal has a fault.
0801	Motor rotation sensors faulty.
0802	Pedal rotation sensors faulty.
0804	Excessive controller temperature. The temperature sensor inside the controller has detected a temperature higher than the danger threshold.

Fault code	Description
0805	Excessive motor temperature. The motor has reached a temperature higher than the danger threshold.
0806	Non-compliant peripheral bus voltage.
0808	Rotor blocked. The motor failed to start due to a mechanical lock or a problem with the internal wiring of the drive unit.
0809	The battery voltage is higher than the maximum allowed.
0810	Non-compliant current sensor signal.
0811	The drive has detected an overcurrent.
1101	Communication problem between the HMI and the drive. Check that the wiring is intact and properly connected.
1102	A button on the keypad is locked in the push position.

## 2.11. TROUBLESHOOTING

The following table lists the main problems that may be encountered and the possible solutions to be taken.

Problem	Cause / Solution
The display does not turn on	Check the connection between the display and the controller
How to handle error codes	Check the problem according to the description of the error codes in this manual



**ATTENTION:** If after these operations the problem persists, it is necessary to go to a service centre.

## 2.12. CLEANING

Cleaning operations do not require dedicated products or tools. None of the components must be immersed in water or cleaned with a high-pressure water jet. For cleaning, only use a cloth moistened with water.



**ATTENTION:** Do not use aggressive products. Never use abrasive products or powders or basic or acidic chemical detergents.



**IMPORTANT:** The manufacturer declines all responsibility for damage caused by incorrect cleaning or resulting from the use of unsuitable products.

## 2.13. RETURNS

In case of return of the product, if the original packaging has been kept, reuse it for shipping. Otherwise, place the unit in a box, trying to protect it as well as possible from any shocks resulting from transport.

---

## 2.14. DEMOLITION AND DISPOSAL

When the unit is put out of service and dismantled, it is necessary to separate the plastic parts and the electrical components which must be sent to the separate collection centres in compliance with the regulations in force. The metal parts must be divided for correct recycling.

With reference to the WEEE Directive, the electrical and electronic components, marked with a special symbol, must be disposed of in authorized collection centres. The illegal disposal of "Waste Electrical and Electronic Equipment" (WEEE) is punishable with sanctions regulated by applicable laws in force.

Exhausted or defective rechargeable batteries must be collected separately and sent for ecological reuse. Return the no longer functional unit to an authorized e-bike dealership.


**IMPORTANT:** Demolition operations must be carried out by sufficiently trained personnel.





**OLI S.p.a.**

 **Via Canalazzo, 35  
41036 Medolla (MO) - Italy**

 **Tel. +39 0535 410 611  
Fax +39 0535 410 650**

 **[oli@legalmail.it](mailto:oli@legalmail.it)**

 **[www.oli-ebike.com](http://www.oli-ebike.com)**