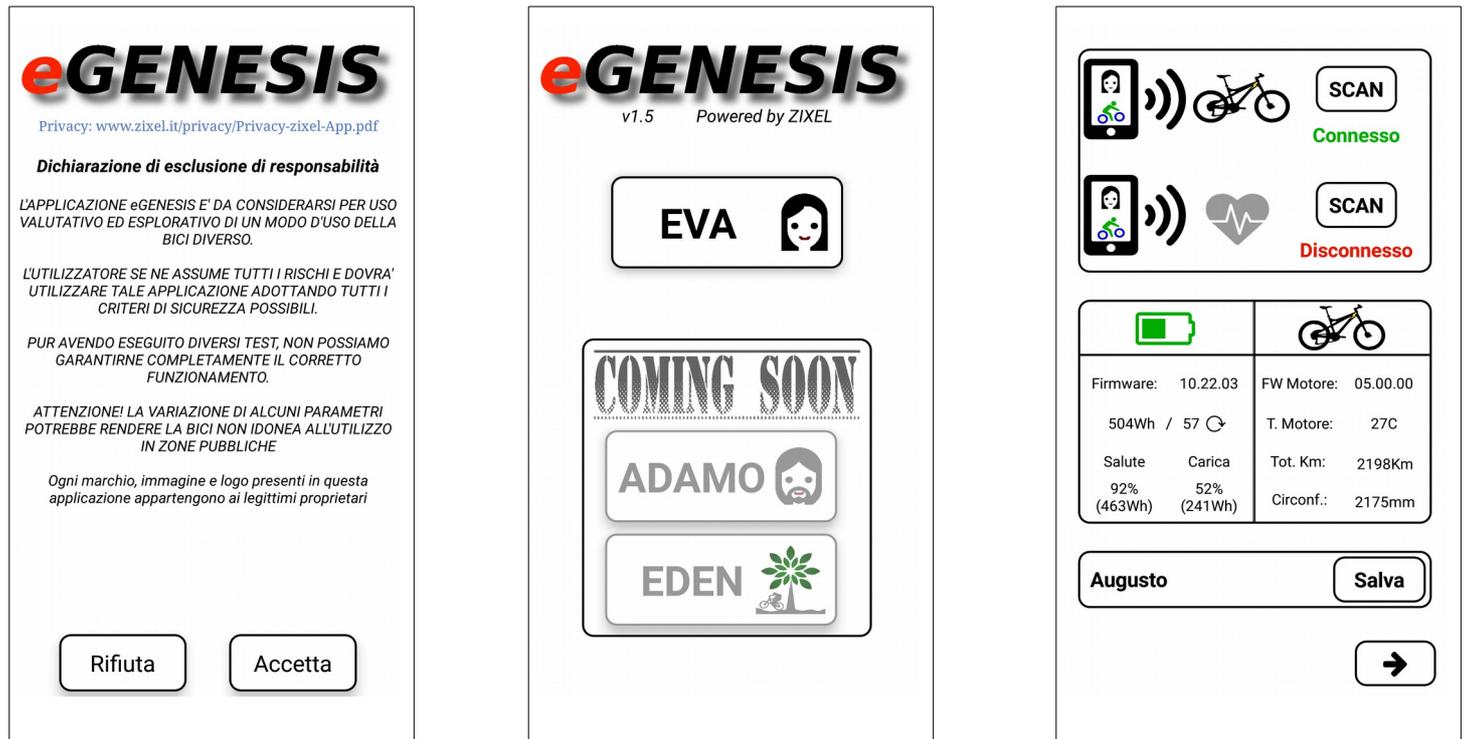


eGENESIS

eGENESIS is an APP for Android and iOS, consisting of three sections that allow you to manage the operation of electric bikes, Turbo Levo * and Kenevo *, in an innovative, simple and targeted way, expanding its functionality.



- **EVA** allows the use of three modes: Manual, Extended, Automatic. In the Manual, once the parameters have been set on the bike, the Smartphone is no longer needed unless you want to record or monitor the statistics. In Extensive an extension is created that leads to 6 or 9 assistance that can be recalled by remote control and / or by the buttons on the Smartphone. This mode requires the Smartphone to remain always with the active APP. In Automatic, the Smartphone, which must remain with the APP active even if the screen is off, will constantly send the recalculated assistance data based on the needs of the user and the route. Three assistance methodologies will be used: Separate Zones, Zones, Delayed Zones.
- **ADAMO**, through the addition of an electronic board, allows you to directly control and manage the engine without the Smartphone being constantly connected. At the moment it is under advanced development.
- **EDEN** allows managing the intervention mode of an additional battery. At the moment it is under advanced development.



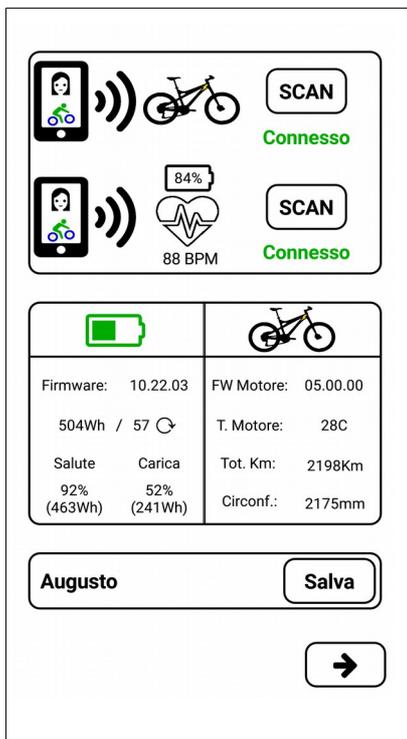
eGENESIS
zixel.dev@gmail.com

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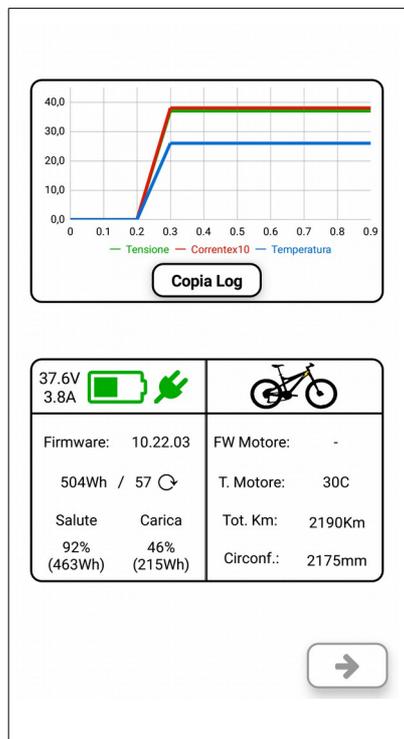
Disclaimer of liability / Disclaimer

THE APPLICATION eGENESIS IS TO BE CONSIDERED FOR VALUATING AND EXPLORING USE OF A WAY OF USE OF THE DIFFERENT BIKE. THE USER ASSUMES THE RISKS AND WILL HAVE TO USE THIS APPLICATION BY ADOPTING ALL POSSIBLE SECURITY CRITERIA. PUR HAVING TAKEN DIFFERENT TESTS, WE CAN NOT COMPLETELY COMPLETE THE CORRECT OPERATION. ATTENTION !: THE VARIATION OF SOME PARAMETERS MAY MAKE THE BIKE NOT SUITABLE FOR USE IN PUBLIC AREAS.

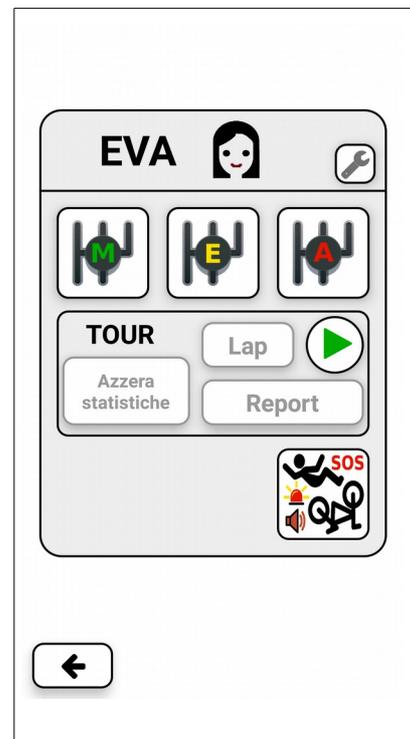
* Each brand or logo in this document belongs to its legitimate owners



the



During first



connection you will have to run the SCAN in order to find the bikes present. Select your own and then proceed. Once done eGENESIS will remember the bike and it will do it automatically. In case you want to connect to another bike, it will be enough to press SCAN again. If you want to connect a cardio band, just press the relevant SCAN and select the desired band. Attention, only compatible BLE / SMART bands.

If the bike is charging, a graph will appear directly indicating the charge values such as Current Voltage and Temperature. There is a button (Copy Log) that will allow you to copy the Log data to the clipboard and then be pasted into the clipboard / email / etc. and possibly stored or sent to whomever is desired.

In case there are problems of data communication towards the motor during the connection of the bike, a message will appear that will say to check the motor cable. In these cases it is always better to disconnect and clean it properly.

If everything has worked properly, we will meet on the EVA page, where on the top right is the button to access the general configuration. Just below are the three buttons to access the Manual, Extended, Automatic modes of operation. Below are the start and stop of the Tour and the Lap to make a partial within the Report. Starting the Tour automatically resets the previous data. The Tour data in the Report can be viewed on site and can be copied to the clipboard and then glued to where you want.

When one of the three modes is activated, you can not activate another mode until the one in use is terminated. Within each mode, you will find the settings first and then you can access the Display page with constantly updated data. The assistance mode activated, remains working even when the phone is on standby with the screen off. In the case of selecting the Manual mode, if they do not affect the statistical data, once the configuration data is sent to the bike, the Smartphone is no longer needed and you can exit the application.

At the bottom right is the emergency mode enable button. If activated, after a settable time in which there is no more connection with the bike or the bike is still, the activation is both sound and visual emergency with the SOS message in Morse code. This feature will allow you to find the person or cell phone in the case of loss of cell phone or fall with loss of consciousness or inability to seek help. To restore the system after the event, just press the close button that will appear.

The configuration page contains all the following general customizable parameters:

The image shows four screenshots of the application's configuration interface:

- Messaggi vocali:** A screen for configuring voice messages. It includes a volume slider (Tonalità: 1.1), a 'GENERALE' section with various messages (e.g., 'Benvenuto in EVA', 'Tour avviato') and their status (on/off), and a 'TOUR' section at the bottom.
- Vocal Messages:** A screen for configuring voice messages. It features a frequency slider (Frequenza: 10min) and a list of messages with play and status icons. Messages include 'Dislivello di @ metri', 'Hai fatto @ chilometri', 'Batteria bici al @ %', etc.
- Soglie cardio:** A screen for configuring heart rate thresholds. It shows 'Tempo in movimento di @ ore e # rr', 'Sei in @', 'Eco', 'Treil', 'Turbo', 'La temperatura motore è di @ gradi', 'Hai bruciato @ chilocalorie', and 'Marcia @'. It includes 'Copia' and 'Salva' buttons.
- Sensore prossimità:** A screen for configuring the proximity sensor. It shows 'Sensore prossimità' with a hand icon, a 'Test' button, and a 'Salva' button. Below it is the 'IMPOSTAZIONI GENERALI' section with 'Vibrazione tasti' and another 'Salva' button.

The screenshot shows the 'IMPOSTAZIONI GENERALI' (General Settings) page. It includes a 'Vibrazione tasti' (Key vibration) section with a 'Salva' button. Below it is a warning: 'La modifica di questi dati sarà applicata solamente dopo il riavvio dell'MTB' (Changes to these data will be applied only after the MTB restarts). The settings include: 'Circ. reale: 2175mm' (Real circumference), 'Vel. max: 50Km/h' (Max speed), 'Accelerazione: 4=Gara' (Acceleration), 'Fake channel: Disabilitato' (Fake channel disabled), and a checked 'Beeper' option. There is an 'Invia' (Send) button and a 'Ripristina parametri default' (Reset to default parameters) button with a 'Set' button.

VOCAL MESSAGES

Voice messages can vary the tone of the voice but also customize the text by playing with spiritual or dialectal phrases using punctuation and accented letters. Remember that in some fields @ and # indicate the value that will be spoken by the speech synthesizer. Depending on the parameter, it will be possible to disable the play, enable it with a single event (for example, the altitude will be pronounced every 100d +) or in time according to the selectable interval. Once these values have changed, remember to save them. In case you want to send to your friends the phrases that you have created, use the Copy button that will save them to the clipboard and that you can send by email or other.

CARDIO THRESHOLDS

The cardiac thresholds can be set according to a Min / Max window and a Reaction time with which the system will go, if enabled the cardio control on the motor through the special button, to act on the power supplied by the engine so as to fall within the limit of possible BPM in the indicated area. Obviously all these parameters depend on individual and individual and will therefore be found.

PROXIMITY SENSOR'

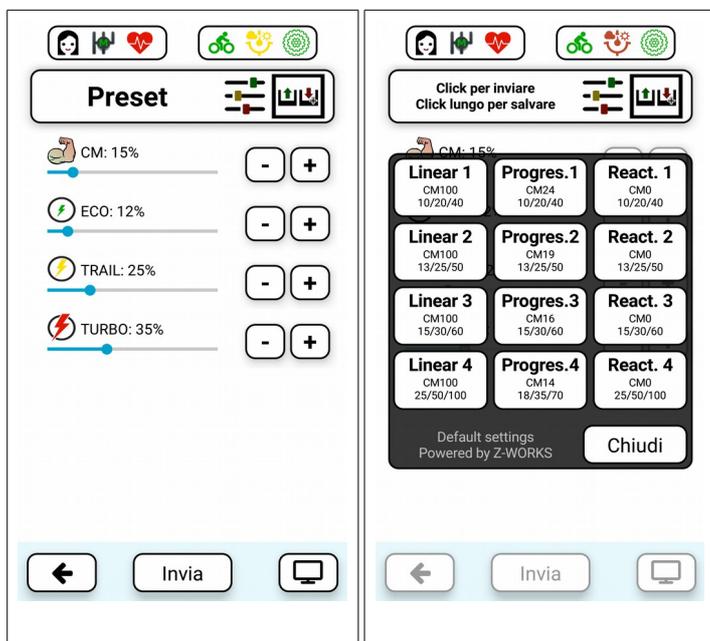
Through this sensor, when you are in the DISPLAY page you can save a lot of phone battery and activate some useful functions. The system works like this: Suppose the screen has already passed to the minimum brightness set. We pass with the palm of the hand above the sensor for less than 2 seconds. The screen will light up and stay there for the set time, before returning to the minimum brightness set. If with the screen on we pass the hand (always for less than 2 seconds) above the sensor, we will start a play audio of all the voice messages that we had selected as timed.

If the stay of the palm above the sensor exceeds 2 seconds, we will go to disable or enable the battery saving functionality through proximity sensor. Adjusting this function accordingly, we will leave the backlighting to a minimum barely perceptible value of the screen and in case it is necessary to visualize everything well, just a small passage with the palm of the hand above the sensor will suffice.

BIKE PARAMETERS

These are the classic parameters, but care must be taken that changing the speed limit makes the bike usable only in private areas as it goes beyond the legal limits of the highway code. To reset the bike with the default parameters there is the special button.

In the Manual page we find the following screens:

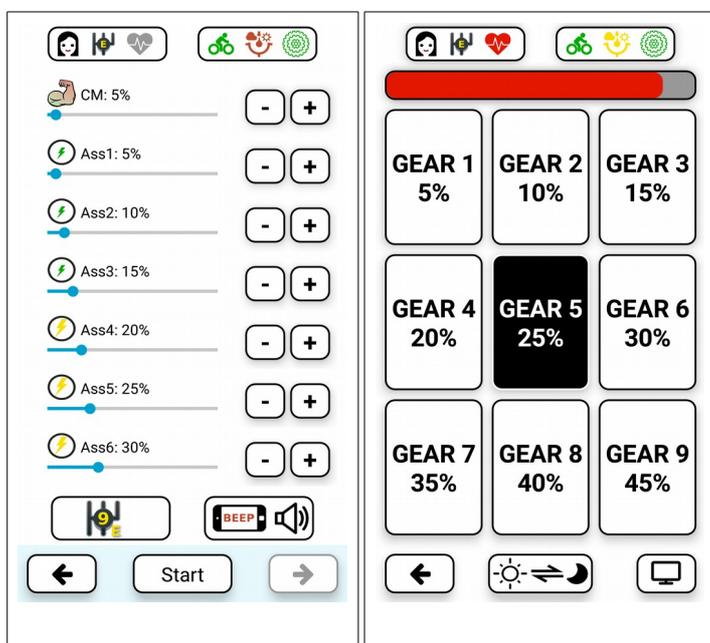


The icons at the top left indicate whether we are in EVA / ADAMO / EDEN mode, Manual / Extended / Automatic, Cardio on / off.

The icons at the top right indicate if eGENESIS is connected to the bike, the quality of the GPS and if with a barometric sensor, the ratio in the sprocket if right or too hard.

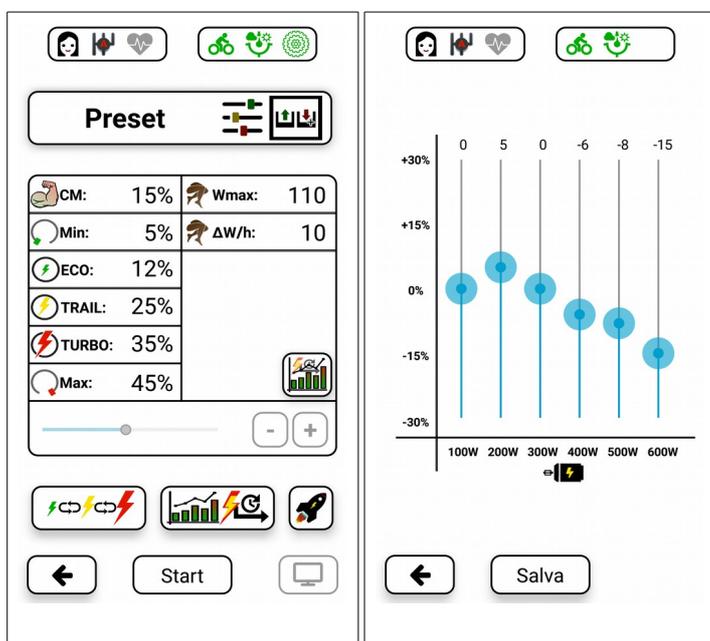
Below is the Preset box. By clicking on it we open it. If we make a short click let's go to recall the selected configuration. If we make a long click, let's save our settings in that box and change the name of the box. As for the eGENESIS parameters, depending on the battery firmware X.22 or X.23, it will adapt both the Preset archive and the screen, replacing in the X.23 case the CM with the three PPs.

In the Extended page we find the following screens:



This mode allows you to expand the system from the classic 3-speed Eco / Trail / Turbo in 6 or 9 gears. The icon on the bottom left allows the change 6/9. The icon on the bottom right allows you to manage the gear change beep on your mobile phone, on the classic bike beep or in silent mode. Select the various assistance desired, you can activate the system by pressing Start and then going to the next page. In this page we find a bar at the top that shows us the Green that can be changed, with the Yellow that if we change with that color we will have a double jump or if it is the third consecutive pressure we will go to Major or Minor gear depending on case. If the bar is Red, the change button will be hardly recognized by the system. After doing a bit of practice the first few times, it will no longer be necessary to look at the bar. Also the on-screen buttons allow a gear change, but in this case without the constraints above.

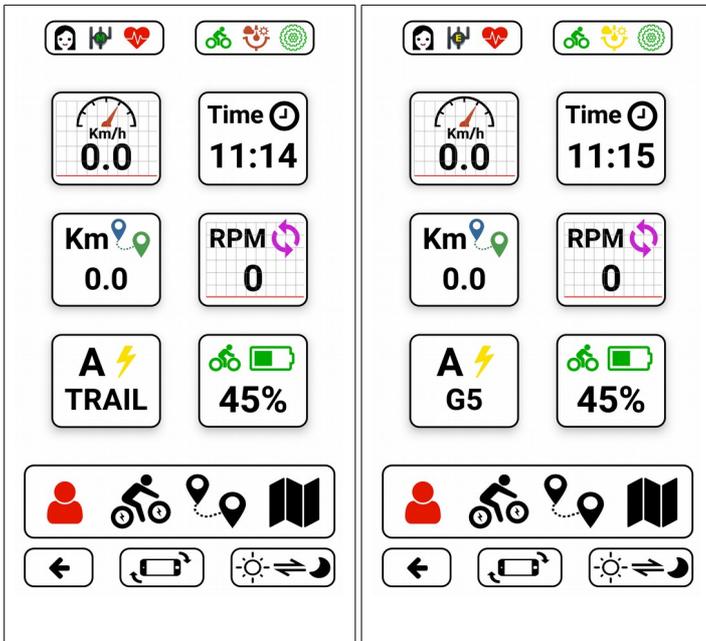
In the Automatic page we find the following screens:



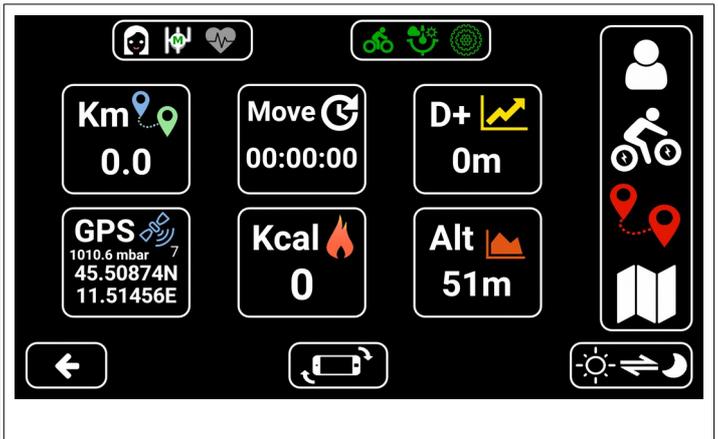
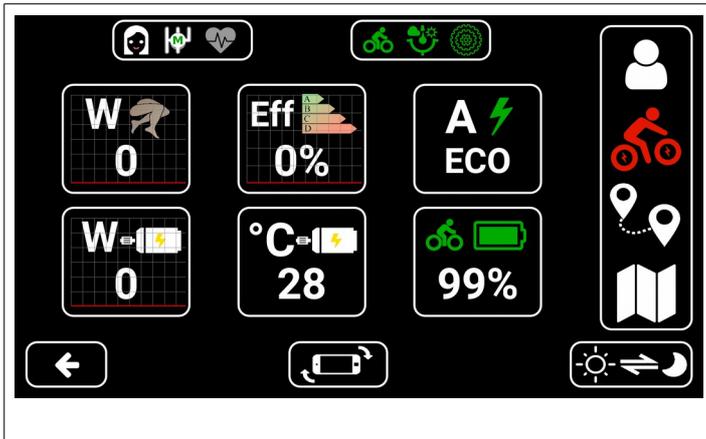
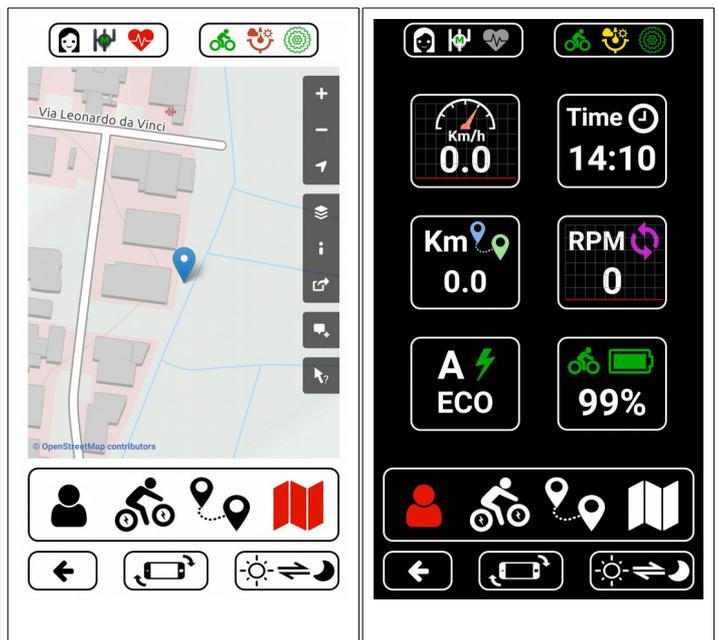
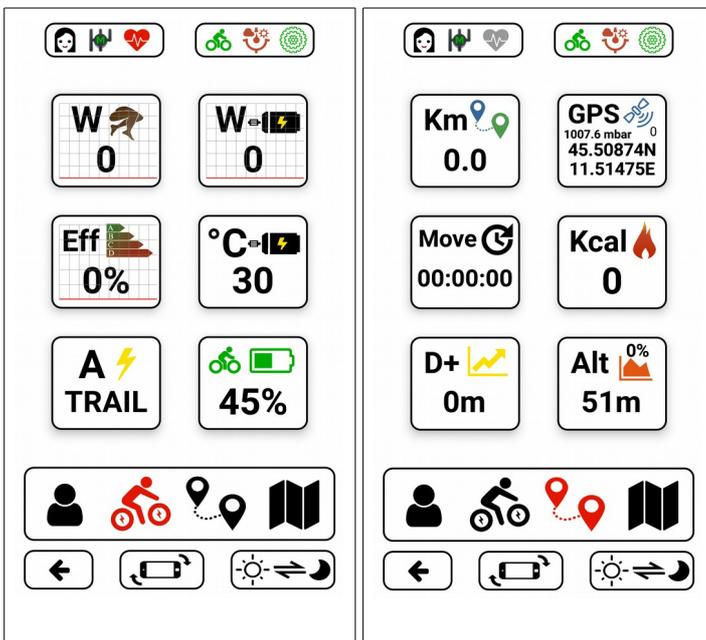
This mode allows the automatic adjustment of engine assistance power according to the set parameters. In particular we are going to set a Wmax legs, which will be the threshold beyond which the engine will compensate to make us fall back from the effort, and a DeltaW / h that will be linearly reducing the Wmax legs every hour of cycling, because start of the tour is getting fresher than at the end of the lap. The icon on the bottom left indicates if we want the variation of assistance separately for zones and then we will manually select the zone, or if we want the passage zones to be done automatically, or automatically and with delay in the transition to the Turbo zone. The center bottom icon allows us to save battery using a mappable profile for power delivery.

With the icon on the bottom right you set the responsiveness of the system to the change in the request for assistance.

From all the various modes we can access the following **DISPLAY** page:



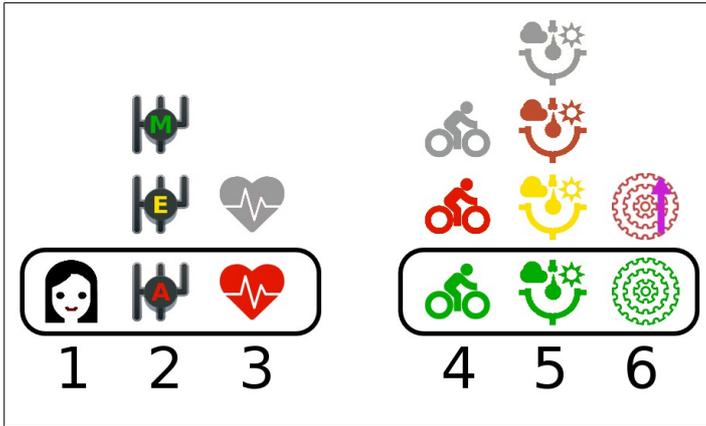
In each box there will be some data displayed and in some also some graphs in real time. On some panels, a short click allows you to view, temporarily or continuously according to the case, the other values / data. In other frames a long click allows instead to change the unit of measurement (Km / Miles / Centigrade / Fahrenheit). Depending on the four icons at the bottom of the screen, you can view different data pages and with the last, if active data network, view the map of where we are and the related paved roads and dirt roads that surround us. Using the screen rotation button you will have the possibility of a horizontal view of the page while with the close button to change the representation night and day.



eGENESIS – EVA

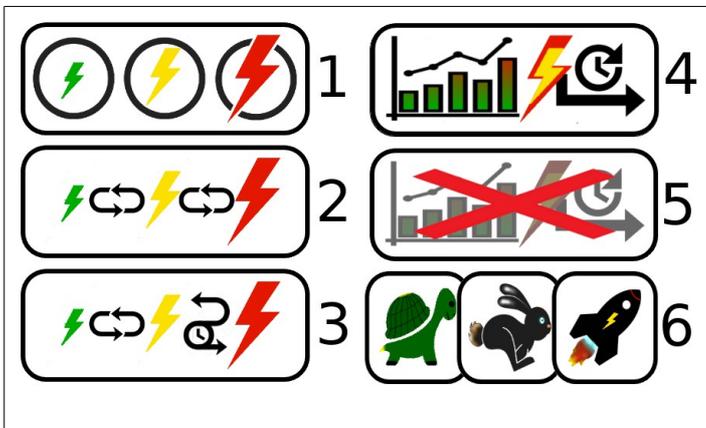
PARTICULARS & FURTHER INFORMATION

Icons at the top of the screens:



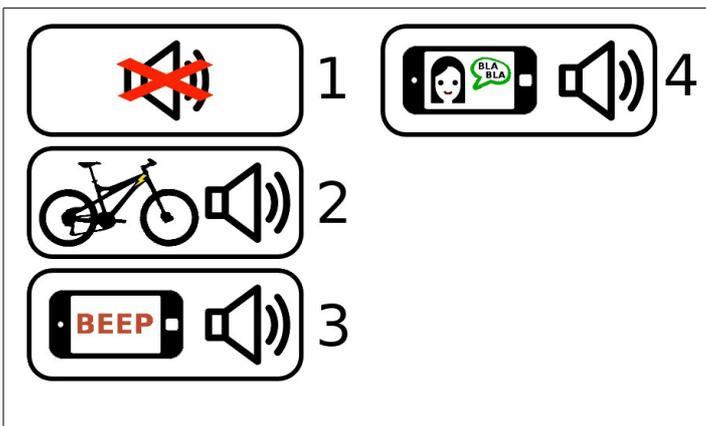
- 1) Indicates that you are in EVA
- 2) Mode in use: Manual, Extended, Automatic
- 3) Presence of cardio sensor
- 4) Bikes: Green = Connected and On
Red = Connected but Off
Gray = Not Connected
- 5) GPS sensor (full circle or GPS + Barometric)
Green = High Signal
Yellow = Medium Signal
Red = Poor Signal
Gray = Sensor not enabled
- 6) Pinion indicator OK or change to greater

Icons in the Automatic mode settings section:



- 1) Eco, Trail, Turbo separated. Selection via Remote
- 2) Legates and selection takes place automatically. The Remote can act only for a few moments.
- 3) Like (2) but the change from Trail to Turbo is slowed down
- 4) When activated, power will be delivered managed as per mapping set in the graph.
- 5) Function (4) is disabled.
- 6) The change in assistance requested is provided +/- quickly. Turtle = less, Rocket = more

Icons in the Extended mode settings section:



- 1) No audible change warning
- 2) Classic beep coming from the bike
- 3) Diversified beep coming from the Smartphone
- 4) Voice message at each gear change

Emergency function:



When the function is activated, if you lose the phone during the bike ride, or you fall and remain unconscious, after the time set that the phone has lost the connection with the bike or no longer receives parameters that indicate the bike in motion, is activated emergency light and sound signaling through Morse SOS code. To restore the system after an alarm just press the button that will appear.

WARNING: Between the Android and iOS version there may be slight differences in implementations and screens due to the specificities related to operating systems.