



Thank you for choosing a **DUCATI energia** product.  
To maintain over time original performances and security, it's necessary to follow the guidelines of this manual.  
This manual is integral part of the product.

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## SAFETY INSTRUCTIONS



This manual contains important information on installation and on proper use of FreeDUCk Wheel smartphone app, to be used with the FreeDUCk2 e-Wheel.

The user must have read and understand the content of the Manual.

- *Read this manual carefully before using the app.*
- *Do not focus on data while using the bicycle. Always be sure to ride safely.*
- *Check your country's Traffic Code on the use of pedal assist bikes.*

## 2 RULES FOR CORRECT USE

The FreeDUCk Wheel app is designed for maximum ease of use. You still need to comply with some simple rules for optimal use.



- *Follow the installation and using instructions in this Manual.*
- *The app is designed to be used on devices with intact hardware and firmware. Procedures such as Jailbreak, Root, Interop Unlock, change of the bootloader or of file and of system settings may result in faulty or not operational app.*
- *Communication with the wheel is via Bluetooth 4.0. Older Smartphones do not support this technology and then cannot communicate effectively with Freeduck Wheel.*
- *The app has been tested on the following operating systems:*
  - *Android 4.3, 4.4.4, 5.0, 5.0.1, 5.0.2, 5.1.1, 6.0;*
  - *iOS 8.1, 9.0, 9.1;*
  - *Windows Phone 8.1 (Lumia Cyan or Denim version to support Bluetooth Low Energy).*

- *The app has been tested on the following devices:*
  - *Nexus 5;*
  - *Samsung S3, S4, S6;*
  - *iPhone 5, 5S, 6, 6S;*
  - *Nokia Lumia 630, 830.*



- *Do not modify or adjust in a different manner from that indicated in this Manual.*
- *Communication with the wheel (FreeDUCk Wheel) is made through the 2.4 GHz frequency digital communications technology called Bluetooth. This technology limits interference from external disturbances and from other users, allowing for reliable communication. However, on rare occasions, the following objects and places can generate electromagnetic waves and very strong interference, which can cause communication problems:*
  - *Tv, PC, radio, engines or inside cars and trains;*
  - *level crossings or in the vicinity of railway tracks, TV stations or radar bases;*
  - *other wireless computers or digitally controlled lighting.*

### 3 PRELIMINARY OPERATIONS

#### 3.1 App download

The app is designed to support three operating systems: Android, iOS, Windows Phone.

To get the app it is required, depending on your operating system, to download it from Google Play Store, Apple App Store or the Windows Phone Store. Once downloaded, the app will automatically be installed on the smartphone.

#### 3.2 Introductory screens

When you start the app for the first time, or when this is not connected to any wheel, seven introductory screens are shown to describe the features of the app. To switch from one screen to the next simply swipe to the left.



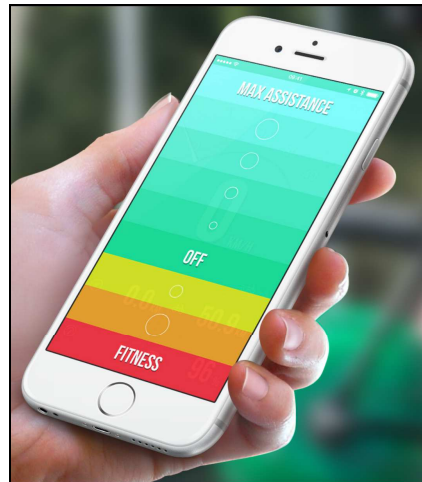
### FreeDUCk wheel

Turn your bike into a pedal assist one



### Dashboard

Current speed, charge level, odometer. All the tools you need when you travel!



### Assistance

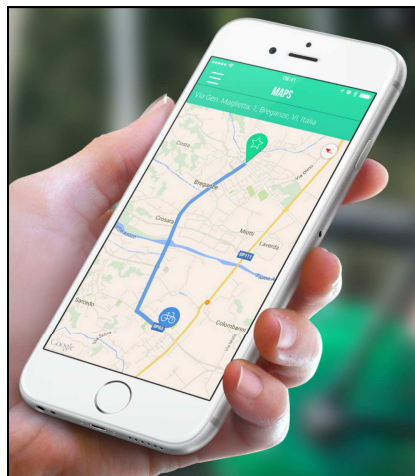
Nine levels of customization for maximum comfort on each route.





### Performance

Measure your performance and be aware of how you are doing good for the environment



### Maps

Get directions on your route with Google Maps®



### Family sharing

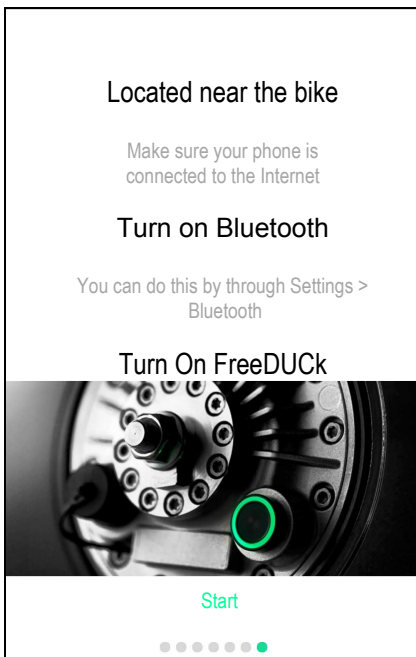
To connect multiple phones to the wheel is easy: you just need the email address with which you registered it the first time: the owner must then click "accept" in the Inbox message.



Note: in this version of the app Maps functionality is not implemented on Windows Phone, therefore the app version of this operating system is not fitted with the introductory screen.



### 3.3 Connection to the wheel - main user



The last screen of the opening sequence introduces connection operations with the wheel. This procedure allows to create a link between the telephone, the mail of the main user and the wheel itself.

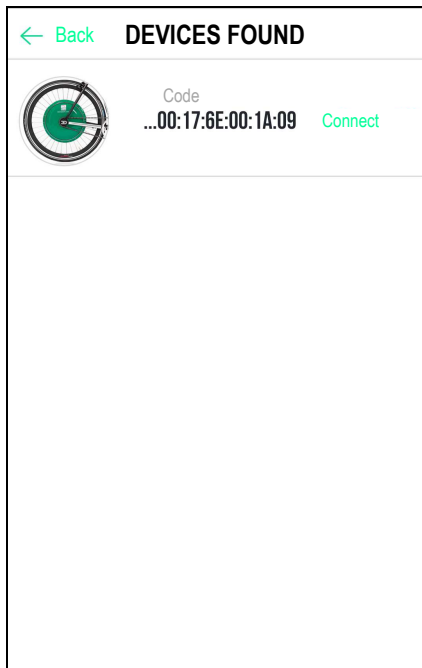
To perform the connection, it is required to:

- position yourself near bike on which the FreeDUCk Wheel is mounted;
- make sure the phone is connected to the Internet and bluetooth is turned on;
- only for Windows Phone, under Settings → Bluetooth press on DucatiE\_XX. XX. XX to crate a link and connect to the wheel; \*
- turn on FreeDUCk Wheel and wait for the led light on the wheel becomes fixed;
- press Start.

\* Note: on Windows Phone, before carrying out any connection between the app and the wheel, it is required that under Settings → Bluetooth the orange-coloured word "connected" is shown under the "DucatiE\_XX. XX. XX" device.

The wheel stays connected with Windows Phone and therefore unavailable for other connections until you press again on DucatiE\_XX. XX. XX and the "connected" word is replaced by "associated".





The app searches for close active wheels to communicate with. If more wheels are present, we recommend that you turn them on one at a time so as to make it easy to identify the wheel you want to be connected to.

Once you find the wheel, press Connect to start pairing.



<a href="#">← Back</a> ...00:17:6E:00:1A:09	
E-mail	john@smith.com
Your name	John
Your surname	: Smith
<p style="text-align: center; color: green;">Request</p> <p style="text-align: center;">You will receive an email, at the address given, showing the link to confirm your request for use.</p>	

Enter in the next screen, mail, name and surname of the main user.

Through the email address here entered the main user can enable or deny other users the connection to the wheel.

Once you have finished entering the required data, press Request.

You will receive an email to the address entered with the subject line "Activate your account". Press on the link in the email to complete the connection.

After clicking the link, a screen opens confirming the activation was completed. The app connects to the wheel and then to the main screen (Dashboard).

## 3.4

[← Back](#)
...00:17:6E:00:1A:09

The wheel is already linked with another smartphone. Enter the e-mail address with which you registered it, your name and surname to ask for permission to use the bicycle.

E-mail	john@smith.com
Your name	John
Your surname	Smith

[Request](#)

You will receive an email, at the address given, showing the link to confirm your request for use.

## Connection with the wheel - secondary users

The procedure for connection to the wheel the secondary users must carry out is similar to that of the primary user.

After pressing Connect, the app navigates to credential request screen. This time, however, the user is informed the wheel is already connected to a main user. The secondary user must then enter the email address of the main user, in addition to his/her name and surname, and press Request.

The main user will now receive an email with subject "Share your e-bike". The main user can then decide whether or not to grant the use of the wheel to the secondary user. If permission is granted, the app connects to the wheel and the main screen displays (Dashboard).



4

## MAIN SCREEN PAGES

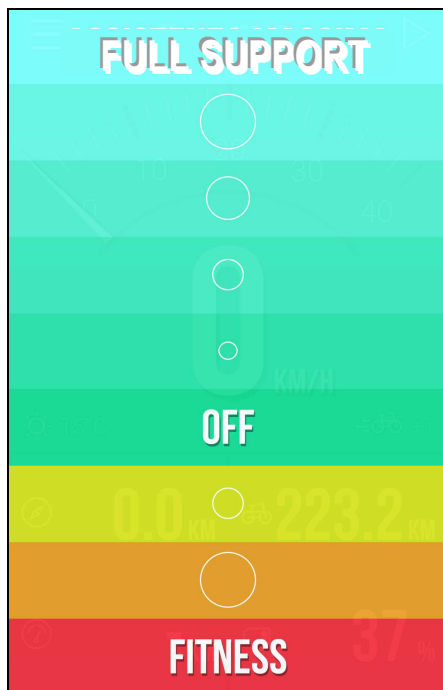
4.1

### Dashboard



Once the connection is completed the app connects to the wheel and switches to the Dashboard. For further use of the wheel with the same smartphone is not necessary to repeat the connection. Once the wheel has been started up and the app run, it automatically connects to the wheel it is connected to: after a short search the app directly switches to the Dashboard screen page.

1. Button to change screen page.
2. Button to start or stop partial kilometres (see (7)). Depending on the status, a triangle (disabled functionality) or a triangle flanked by a square (active functionality) is displayed.
3. Speed, in both analogue and digital mode.
4. Current state of the weather.
5. Bluetooth connection icon: indicates if the connection with your phone is active (fixed icon) or absent (flashing icon).
6. Current operation mode of the bicycle; in case of active assistance it ranges between +1 and +5; in case of active fitness it ranges between -1 and -3; 0 if the engine is turned off. As the mode changes also the background colour does.
7. Partial distance in kilometres.
8. Total distance in kilometres.
9. Endurance of the bike in kilometres, calculated considering the average current consumption in the last minute.
10. Remaining charge percentage of the bike



A short tap on any area of the screen (with the exception of (1) and (2)) provides access to the screen that allows the change the operation mode of the wheel. A second tap on one of nine areas the screen is divided into allows you to select the appropriate mode.

Alternatively, you can tap the screen and hold the contact while moving the finger (pan): the same screen appears. The area touched upon release defines the selected mode.

Proceeding from top to bottom we have the following possibilities.

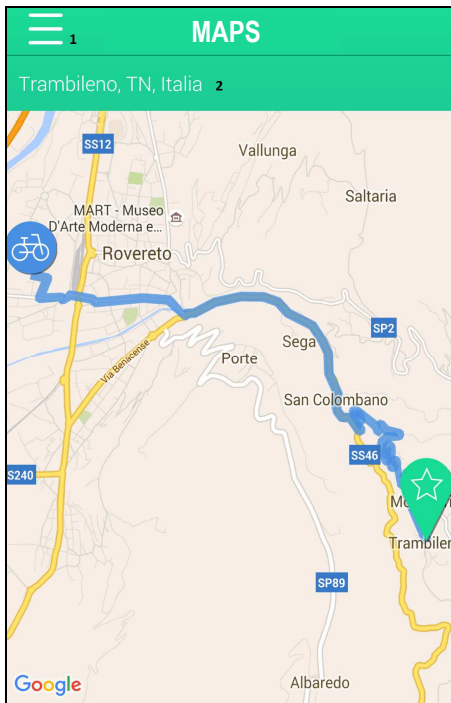
1. Support From level +5 to level +1. Green/blue areas.
2. Off. Level 0. Green area.
3. Fitness. From level -1 to level -3. Yellow, orange and red areas.

Note 1: after changing mode the background colour of the Dashboard screen immediately changes, while the value in (6) is confirmed in a few seconds.

Note 2: the various modes are not always available. When the battery is full charged ( $\geq 90\%$ ) or very hot ( $\geq 85^{\circ}\text{C}$ ), you cannot activate the Fitness mode. Similarly, when the battery is very low ( $25\%$ ) or very hot ( $\geq 85^{\circ}\text{C}$ ), the Support modes are progressively disabled.



## 4.2 Maps

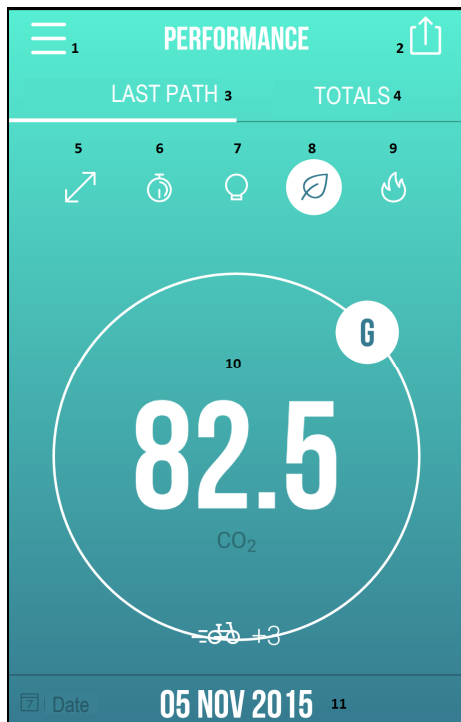


Maps screen allows you to define and display a route you will take from your current location. To use this function you need to activate the GPS on your smartphone. Before accessing the Map screen a reminder with some use indications is displayed. Read these tips carefully before you press OK and proceed to use.

1. Button to change the screen.
2. Destination. On this line, you can view the destination set or, by pressing it, define a new destination.

Note: in this version of Windows Phone app the Maps functionality is not implemented

### 4.3 Performance



The Performance screen allows you to view some data concerning the last route or all routes completed by the user.

To switch from one data to another simply swipe left or right within the numbered areas ranging from 5 to 10. The value shown in (10) is related to the symbol highlighted by a white circle.

1. Button to change the screen.
2. Button to share total performance data or concerning the last route through an image summary.
3. Last route. Key to display data concerning the last route. If this option is enabled it is underlined in white.
4. Totals. Key to display the data for all routes. If the option is enabled it is underlined in white.
5. Distance travelled symbol.
6. Journey time symbol.
7. Average power symbol.
8. Symbol of saved CO<sub>2</sub>.
9. Symbol of burnt kcal.
10. Data concerning the symbol highlighted in white at the top of the screen.
11. Date



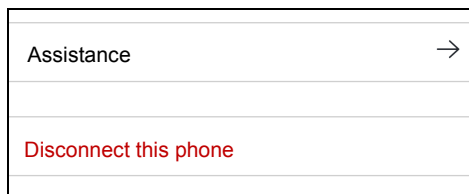
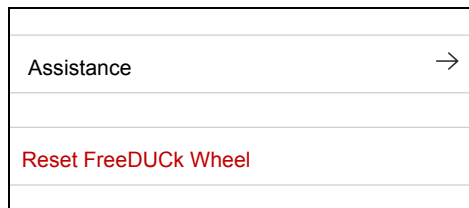
## 4.4 Settings

SETTINGS	
E-mail	ducatienergia1mobile@gmail.com
Name	Marina
Surname	Rossi
Last full charge	
Firmware	
Serial number	00176E001A09
Language	English ▼
Unity	Km/h ▼
Assistance	→

The Settings screen allows you to view some data related to the use of the app and of the wheel.

1. Wheel main user's email.
2. Name of the user who is using FreeDUCk Wheel.
3. Surname of the user who is using FreeDUCk Wheel.
4. Last charge of the wheel.
5. Firmware version of the wheel.
6. Serial number of the wheel.
7. Language currently used by the app. Pressing on this line you can switch languages, with a choice between English, Italian, German and French. The default language is the same of the smartphone.
8. Unit of measure. Pressing on this line you can change between metric units (Km/h) and imperial units (mph).
9. Support. Pressing on this line leads to another screen that contains the contacts for support.





10. Scrolling down one of the following strip is displayed:

- a. "Reset FreeDUCK Wheel" (main user). By pressing this strip the wheel is reset: the next user to associate will become the new main user.
- b. "Disconnect this phone" (secondary user). By pressing this strip you delete only the connection between the smartphone currently used and the wheel.

Note: all users who are paired to a wheel still have the opportunity to connect to it until reset, disconnection or uninstalling are carried out.



## 5

## TROUBLESHOOTING

Below is a short guide to solving the most common problems that may arise while using the app. It may be useful to better understand the operation of the application.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The app does not start.	Installation is not complete.	Uninstall the app and then run it again.
The bluetooth icon on the Dashboard screen flashes.	The smartphone is too far away from the wheel.	Get close to the wheel.
	Presence of electromagnetic disturbances.	Move away from the source of disturbance or, if possible, turn off the source of the noise.
The app doesn't find the wheel or does not connect.	The wheel is off.	Turn on the wheel.
	The wheel was turned on after starting the app.	Turn off the wheel and close the app. Turn on the wheel, wait until the LED of the button lights fixed. Launch the app.
	The wheel is already connected to another smartphone.	Disconnect the smartphone connected to the wheel.
The main user does not receive the activation or sharing email.	The email you entered is not correct.	Cancel the connection operation and repeat.
	In case of secondary user, you are not entering the email of the main user.	Cancel the connection operation and repeat by entering the email of the main user.
The main user cannot reset the wheel.	The app was inadvertently uninstalled.	Reset via the link at the bottom in the activation and sharing emails.
	The smartphone with which the activation was carried out is lost.	
It is not possible to connect or disconnect the wheel.	The smartphone is not connected to the Internet	Connect your smartphone to the Internet.
	The app is not connected to the wheel (disconnection)	Proceed connecting to the wheel.





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