#### Precaution

- Do not use ECG Dongle Full at temperatures above +55°C or below +5°C.
- Do not expose ECG Dongle Full to excessive mechanical load: falling, squeezing, shaking. Do not exert significant force while connecting plugs this can damage them.
- Avoid exposure of any liquids on the ECG Dongle Full gadget.
- Do not keep ECG Dongle Full in direct sunlight, near air conditioner, electric heater or other heat sources, in zone of strong magnetic fields or excessive vibration.

#### Specification

- •Size (LxWxH): 86 mm x 44 mm x 13 mm.
- Weight: 26 g.
- · Hard Drive: none.
- Power supply: from the mobile device via the USB-connector.
- · Warranty: 1 year.

Produced by CJSC Nordavind, Russia.

# Scan to download the mobile application «ECG Dongle»:





Phone technical support: +7 (499) 608-0188
Website: www.cardio-cloud.ru/

# **ECG Dongle Full gadget**

ECG Dongle Full allows you to obtain the condition of your heart simply and accurately. You can easily send obtained measurements to a cardiologist and quickly get his opinion on the state of cardiovascular system of adults and children over 12 years, with the mobile application and the «CardioCloud» service.

### **Functionality**

- · Heart rate and stress level measurement.
- · Display the heart work in real time.
- Free mobile application for Android or iOS.
- •Send the data to the service «CardioCloud» to get a cardiologist's opinion.

#### Equipment

- ECG Dongle Full device to record data on the work of the heart.
- •OTG-cable to connect to smartphones and tablets, equipped with micro-USB. \*
- Cable to connect electrodes to the gadget.

## System requirements for the mobile application

- •The tablet or smartphone that supports connection of USB-devices (USB OTG standard).
- •Android operating system 4.2 or later versions. iOS operating system 9.0 or later versions. Saving the results to PDF is available for Android 4.4 and later version.
- -Internet connection to download free app and send data to the cloud service on order to get a doctor's opinion.
- 15 MB of RAM and 15 MB of memory to install the app.

# **Using electrodes**

How well the electrodes are attached to the body reflects the accuracy of the data.

For a better connection of electrodes we recommend preliminary clean the skin with an alcohol swab.

The electrodes are sold separately.

<sup>\*</sup> Adapters to connect to tablets and smartphones equipped with other than USB and micro-USB connectors, are not included. Check the information of how to connect USB-devices to them.

#### Take an examination

- **1.** First download and install the application «ECG Dongle» on your mobile device from official Google Play or App Store services.
- 2. Attach electrodes to wires.
- **3.** Place electrodes on the body according to the color-coded scheme

# Placing electrodes

Limb leads:	Chest leads:
L - Yellow - Left Arm	C1 (V1) - Red
R - Red - Right Arm	C2 (V2) - Yellow
F - Green - Left Foot	C3 (V3) - Green
N - Black - Right Foot	C4 (V4) - Brown
	C5 (V5) - Black
	C6 (V6) - Purple

- **4.** Connect wires with electrodes to the ECG Dongle Full gadget.
- **5.** Connect ECG Dongle Full to the micro-USB connector on your mobile device using the OTG-cable, or directly to a USB connector, if there is.

### ATTENTION!

It is not allowed to connect the device to a personal computer and other equipment connected to a power line of alternating current, even via a charger!

**6.** Run mobile application «ECG Dongle» manually, if it is not started automatically.

**7.** Take a comfortable position, relax and wait for stabilization of the isoline on the screen (signals vary relatively to their respective horizontal lines, do not «jump» and do not «float» on the screen).



Check the body contact with working electrical appliances.

It is better to take measurements at a maximum distance from the working strong electromagnetic field sources: vacuum cleaner, refrigerator, TV, CRT monitor, microwave ovens and other household appliances.

- 8. Click on «Start recording».
- **9.** After 30 seconds or more (up to 10 minutes) you can complete the record. Follow the mobile application instructions and send the data to a physician to the cloud service.

A service analysis is paid. The cost of service and payment methods are specified in the application. The result is a detailed opinion of a specialist on the condition of the cardiovascular system, which is sent to the email address provided in the form.

**10.** The result of the research can be saved in a PDF format (available for Android 4.4 or later versions) to show to your physician and keep in a private archive.