Honey bee venom collector V 2.0. wireless

Instruction manual

This device is designed for collecting bee venom. The device is consisted of:

1. Mobile phone with Android operating system which is used for controlling the device.
2. Device integrated into a part of a frame which is made of plastic. The whole frame is made from plastic, metal and electric field.
3. Network adapter for charging the device.

Device characteristics

Controling the device: using Android application on the phone.

Operating system: Android 5.0 +.

Output voltage of a device: from 10V to 35V.

Output voltage frequency: from 100 Hz to 1200 Hz.

Output voltage form: full 50%.

Length of an interval:1 to 25 seconds.

Pause length: 0 to 10 seconds.

Device operating time: from 1 minute to 240 minutes.

Device charging: with integrated battery of lithium-ion capacity 2,1 Ah.

Battery voltage: 3,4V.

Charging voltage: 5V initial contact.

Charging power: 700 mA.

Charging battery time: 5 hours.

Methods of charging the accumulator: constant current and constant voltage.

Audio alarm in case of a short circuit in a frame.

The device is used over the application which you can download from a site www.pcelinjiotrovi.com. The application is based on Android program on mobile phones which have Bluetooth 4.0 with radio connection.

When starting the application you will see the first window on your phone screen and all of the available devices (frames for venom collecting). The application will not allow showing other devices in a nearby if there are any available.

First window:
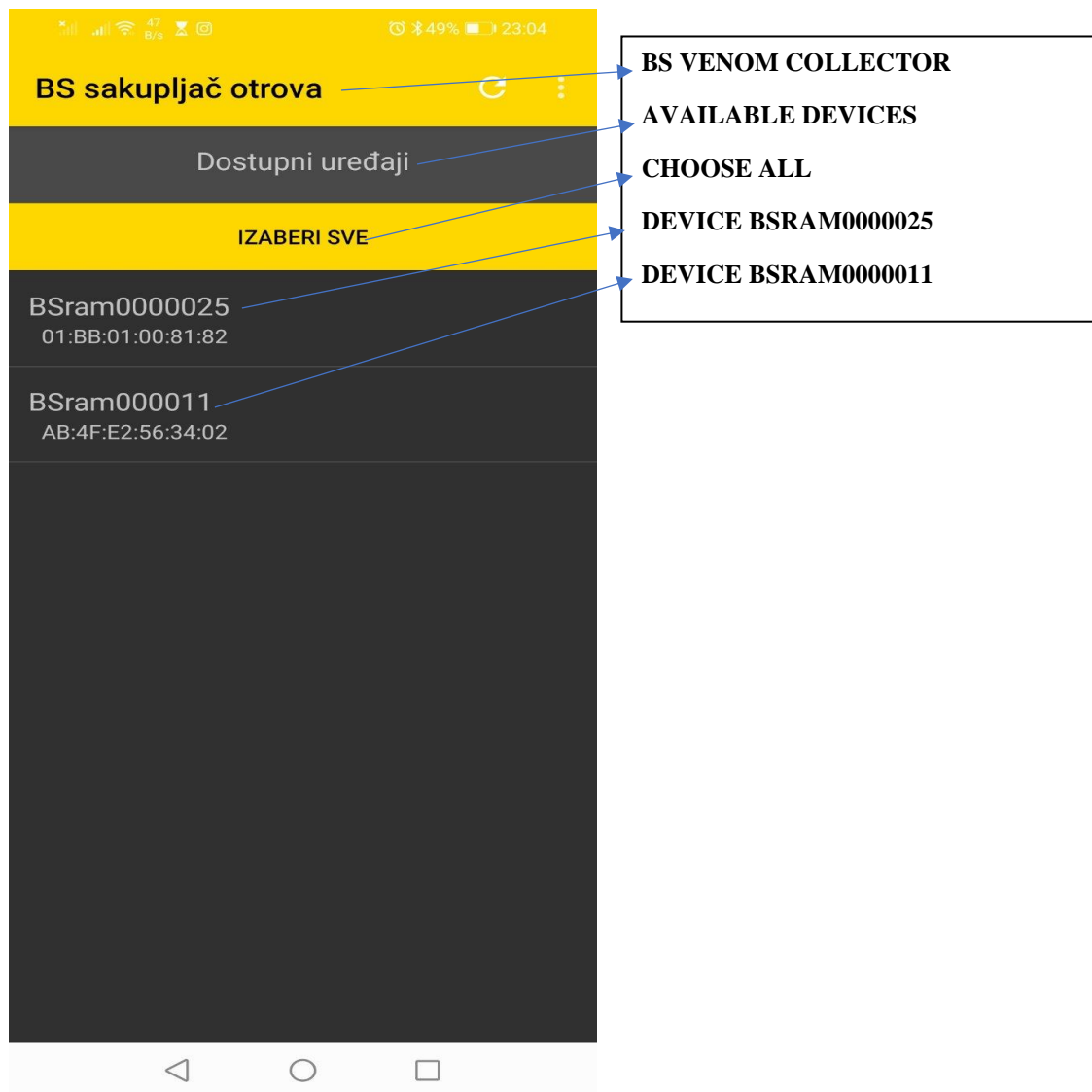
When pressing the button (on the phone screen) **CHOOSE ALL** you will be directed to the second window with adjustments. In case that you choose only one device from the screen you will be redirected to the second window but you will control only one device.

Second window:

Device operating time step 1 minute

From 0 to 240 minutes

Frequency from 100Hz to 1200 Hz

Step 10 Hz

Impulse duration for which the device is sending an impulse from 0 to 25 seconds step 1 second

Pause from 1 to 10 seconds, step 1 second

Voltage from 10 to 35 V, step 1V

Start all devices

Start only one device

Read state

Stop all devices

Button for saving presetted parametres

When pressing buttons + and – you increase (+) and decrease (-) value of the device operating time, frequency, pause impulse and voltage which serves for running the device. With button **START ALL**, all devices will automatically start with given parametres on the screen. Button **STOP** serves for stopping every device. In case that one of the devices is turned off in a meantime or if it does not have communication with the phone there will be message on the screen that device is not receiving command. Button **SAVE ALL PARAMETRES** opens menu with

PRESSETING PARAMETRES where you can save parametres so that there will not be any need for retyping parametres for every startup of the application.

In case that we turned off the application or open some presetted state or forgot what was presetted with button **READ STATE** there will be shown devices which will display how much time remained of the device operating time.

State 1 – position where it is possible to remember parametres which we want

State 2 - position where it is possible to remember parametres which we want

State 3 - position where it is possible to remember parametres which we want

SAVE PARAMETRES
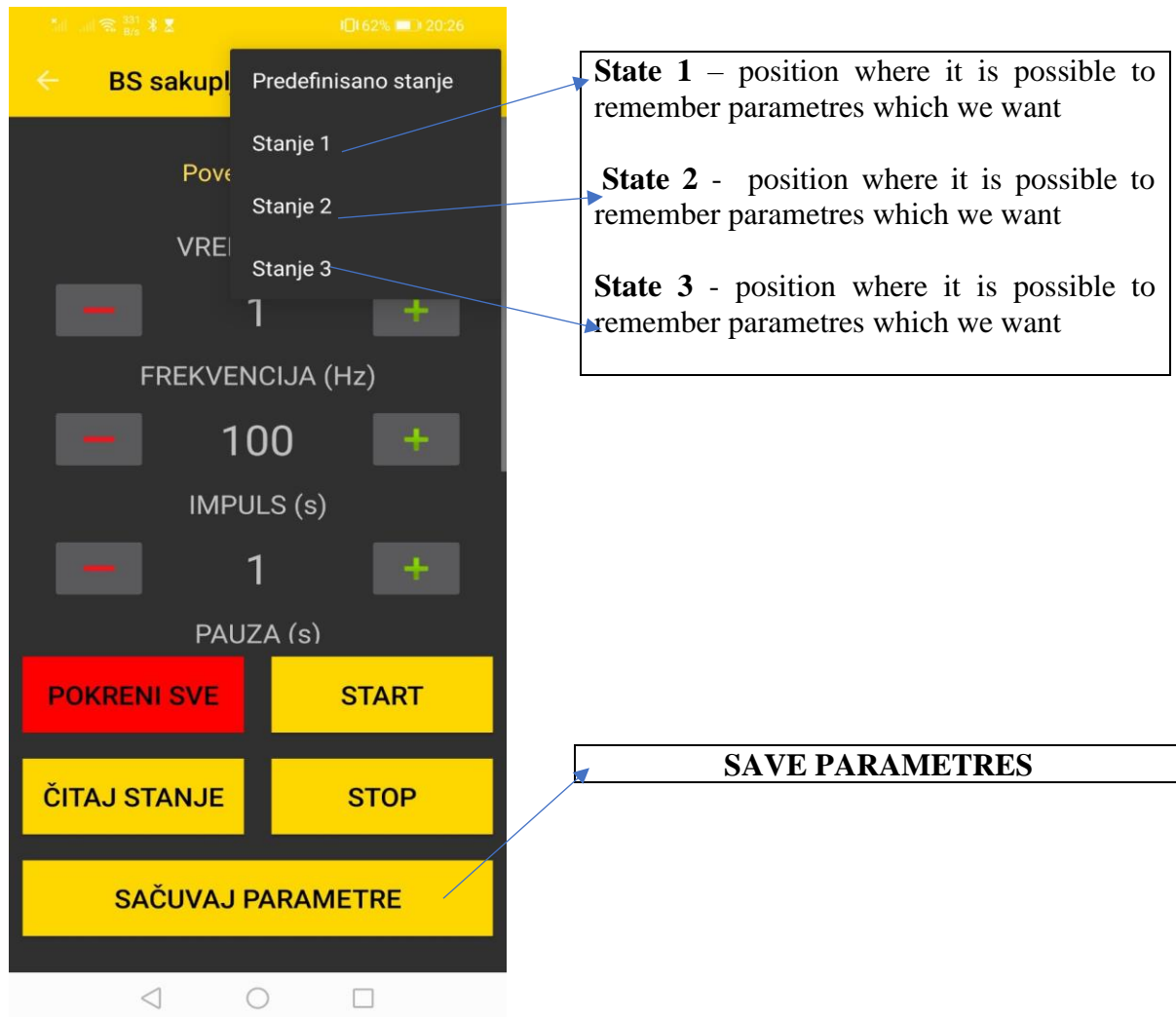
When connecting the device on the main switch , a led diod will be turned on to indicate device operating time with the duration of 1 second. There would be also heard beeping signal with the duration of 1 second. In case that there is not being heard beeping signal and seen light signal you should check if the battery is being empty.

The device is protected from short circuit of the frame itself. When the device is connected on the main switch there would be a quick check (duration of 1 second) if there is a short circuit. If the device is in a short circuit there would be heard a constant beeping signal which would last until the device is not being reseted with shutdown onto a main switch.
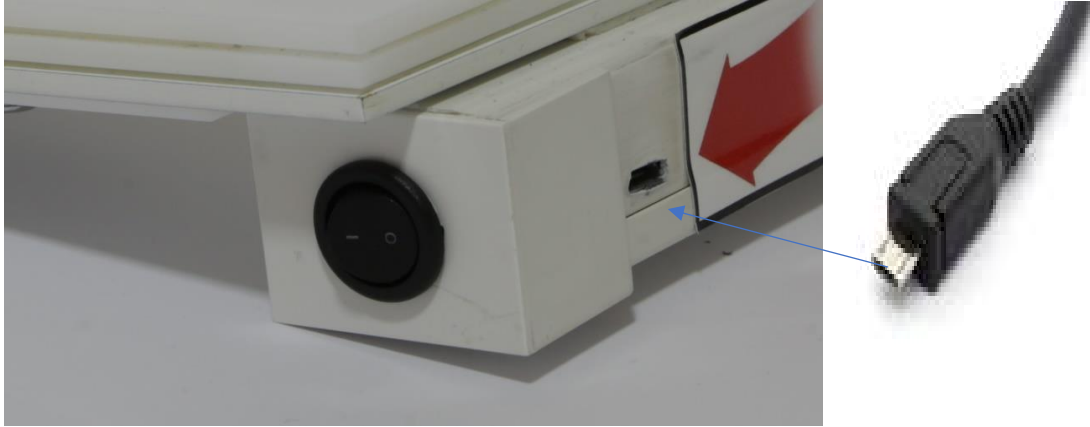
The device is charged with the mobile phone charger power of 5V which is limited to 700 mA. The connection for the charging is micro USB jack.

On the device itself there are two holes with light indicators:

1 – the red led diode to indicate that the device is charging

2 – the blue led diode to indicate that the battery is full charged.

When charging of the device is finished the red led diode is being turned off and the blue led diode is shining when the device is connected to a charger.

The battery is protected from overcharging and overempty as well as from short circuit and under voltage.

The device operating time is 30 hours with only one battery charging.

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