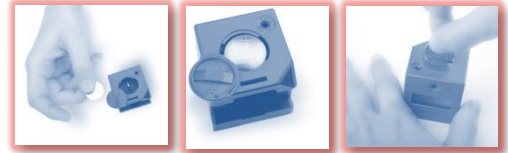# CombCam User Guide

Attention! Read this user guide before you use the CombCam for the first time.

The CombCam is a portable measuring device for semi-quantitative evaluation of the Biogal ImmunoComb test kits. Being a portable platform, the CombCam offers an internal memory to save a large number of measurement results. If you wish to, you can extract the data appearing on the CombCam screen and save it on your PC.
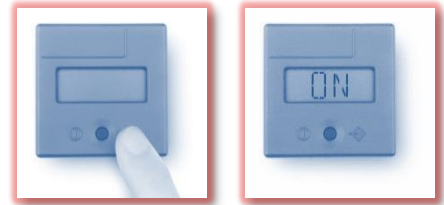
1. Installation

- ✓ Insert three **3V batteries** (coin cells) and close battery compartment.
- ✓ Alternatively use the provided **USB cable** and a wall socket power adapter as alternative power source.
- ✓ Make sure the appropriate provided **RFID card** is at hand.
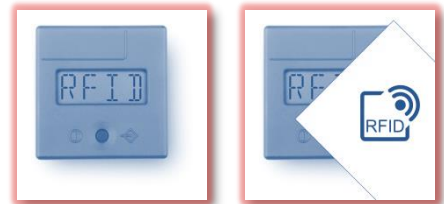- ✓ Make sure that the **Tooth Adapter** (white) is at the bottom of the **CombCam**.

2. Measurement

- ✓ Run the ImmunoComb/VacciCheck test according to the Kit's Manual Instruction.
- ✓ Wait for the complete drying of the Tooth/Teeth.
- ✓ If multiple teeth were tested, cut out the individual tooth at the allocated notch at the back of the Comb using scissors.
- ✓ Switch on the **CombCam** with a short press on the button. (< 1s).
- ✓ The **CombCam** shows ON.

- ✓ Press the button again, the **CombCam** shows **RFID**.
- ✓ Put test **RFID card** on top of the **CombCam** and wait for audible signal (Beep) as acknowledgement of the transmission.

Note: Make sure the correct RFID matches the corresponding ImmunoComb/VacciCheck kit. After the **CombCam** is activated with the **RFID card**, multiple teeth of the same kit can the read while skipping the RFID step by pressing the button until **TEST** appears.

- ✓ The **CombCam** shows **TEST**.
- ✓ Insert the Tooth, spots facing up, into the white adapter all the way in.
- ✓ Start measurement with a short press on the button. (< 1s).

- ✓ The **CombCam** shows **RUN** and after a few seconds the result.
- ✓ **Note:** Ensure that the results match the visual appearance.
- ✓ Refer to the Kit's instructions for results' interpretation.
- ✓ Results are saved automatically on the **CombCam**.
- ✓ The **CombCam** turns off by itself after 50 seconds of inactivity.
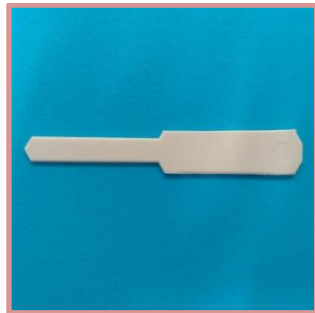
3. Data Management

Result data saved on the **CombCam** can be accessed with the **CombCam Viewer** software.

In order to extract the measurement data from the CombCam the CombCam Viewer is provided. Using this software, it is possible to read every saved measurement, to transfer it to a pc and general data management functions. Furthermore, the software allows direct operation and recording of measurements.
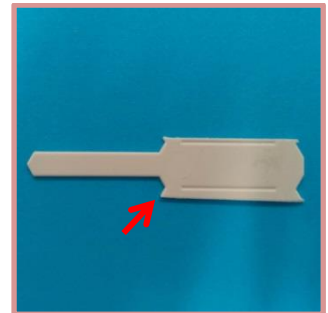
- ✓ Install the software on a PC from the download link or file provided by Biogal.
- ✓ Use the provided **USB cable** to connect the **CombCam** to the PC (installed drivers will be configured).
- ✓ Start the software to access data from the **CombCam** database.
- ✓ For multiple test reading, use the software with the **CombCam** connected.
- ✓ Refer to the **CombCam Viewer** Manual for detailed information on using the various software features.

4. Troubleshooting

Correct cut of the Tooth:
At the notch lines between teeth.

Incorrect cut of the Tooth:
Avoid protruding dents

Correct insertion of the Tooth

Incorrect insertion of the Tooth.

Problems	Possible causes	Solutions
The CombCam does not react when pressing the button	Batteries not in place or empty	Replace batteries. The CombCam can be operated without batteries using the provided USB cable connected to power plug or computer.
The result shows incorrect disease names	Incorrect RFID was used	Read again with the RFID that matches the kit in use.
The resulting scores don't match the visual reading by more than one unit (+/- 1)	The tooth was not inserted completely into the adapter	Insert the tooth into the adapter all the way in and read again.

For further assistance please contact your local Distributor, or Biogal Galed Laboratories directly by
E-mail: info@biogal.co.il or by tel: 972-4-9898605.