



ODAK GEL CARD READER

USER MANUAL



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PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE STARTING TO OPERATE THE ODAK GEL CARD READER INSTRUMENT.

Symbols used in this user's manual are as follows:

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>HAZARD! Any injuries and damages (including illnesses) can be minimized by acting in accordance with the instructions.</p> | |
| <p>WARNING! AUTHORIZEDSERVICE / AFTER SALES SUPPORT andOPERATOR should know that the instrument is appropriate to be used by people with any illness and injury (including illness).</p> | |
| <p>CAUTION! Any situations causing damage to the instrument and the operator.This situation can be overcome by applying protective measures and other treatment methods.</p> | |
| <p>NOTE: Used for descriptive, supplementary or highlighting information.</p> | |

DEFINITIONS:

Authorized service / After Sales Support Personnel: The person or group responsible for the installation, maintenance and repair of the device and for providing these training to the user.

Operator: Person authorized to use the device. The user must be trained in use and basic maintenance.

*All warnings notified to the Authorized Service /After Sales Support Personnel are also applicable for the operator.

The rights to make changes in the device design and technical specifications are reserved.



1. INTRODUCTION

This user manual contains all necessary and adequate information for any operators who will work with ODAK Gel Card Reader instrument.

Read the information especially in maintenance section before starting to operate the instrument, obtain information about any liquids that may lead to its contamination.

This user's manual should be readily accessible for all personnel who will work with the instrument.

1.1 Appropriate Usage Conditions

ODAK Gel Card Reader is used for reading and assessing the agglutination reactions occur in Across gel cards.

In order for ODAK Gel Card Reader to operate properly, original software and image- processing card should be installed.

1.2 Limits and User Training

1.2.1 Limits

ODAK Gel Card Reader instrument is designed only for observing of reaction results of gel cards and shouldn't be used for other procedures.

1.2.2 Training

The ODAK Gel Card Reader must be used for its intended purpose, and the user must be trained in its use and basic maintenance.



2. SAFETY INFORMATION

2.1 Safety Instructions

The following warnings are directly related to the safety of the instrument

HAZARD!

In order to prevent the risk of electricity shock, the instrument should only be connected to its protective grounded source.



HAZARD!

This instrument is operated for substances with chemical and biological risk. In order to work in laboratories where the instrument is installed, regulations regarding use of appropriate gloves or other personal protection equipment should be observed.



WARNING!

In case of any spill into the instrument, the instrument is disconnected from the mains, isolated and immediately cleaned and decontaminated. The instrument should only be dismantled by a authorized service / after-sales support and shouldn't be reinstalled until it is inspected by a fully qualified authorized person.





2.2 Labels of the Instrument

The following label is used on ODAK Gel Card Reader instrument:

- ODAK label
- Description label

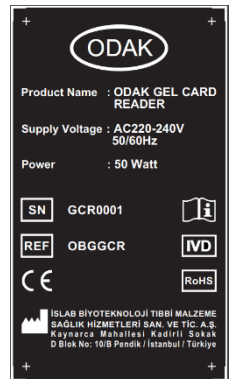
2.2.1 ODAK Label

It is the ODAK label on the front of the device.



2.2.2 Description Label

Label at the back of the instrument showing the model, serial number and manufacturing date of the instrument.





2.3 Please Read Before Using

- Only use for the purposes contained in the user’s manual and do not drop or insert anything into the instrument.
- If there is any problem with the instrument or if it doesn’t operate, do not use it.
- Leaks may cause concealed damages to the instrument.
- Do not operate the instrument with flammable and volatile gases.

- Do not use any accessories which haven’t been supplied or recommended by the manufacturing company.
- Only authorized service / After Sales Support personnel should dismantle the instrument for internal cleaning and/or repair.

- In case of a power failure, it is recommended that the device is used together with UPS (Uninterrupted Power Source) in order to finish the test started.

3. ODAK GEL CARD READER SPECIFICATIONS

3.1 Technical Specifications

| | | |
|--------------------------------|---------------------------------------|-------------------------|
| MODEL | ODAK GEL CARD READER | |
| LOADING CAPACITY | 1 Gel Card | |
| POWER SOURCE | Voltage | AC 220 - 240 V ~ |
| | Frequency | 50-60 Hz |
| | Input Power | 50W |
| OPERATING CONDITIONS | Internal Condition | |
| | Temperature : | 15 °C - 30 °C |
| | Maximum relative humidity conditions: | 80 % |
| | Mains Maximum Voltage fluctuation: | ±10% of nominal Voltage |
| HANDLING AND STORAGE CONDITION | Temperature: | (-10 °C) –(50 °C) |



4. ODAK GEL CARD READER DEFINITIONS

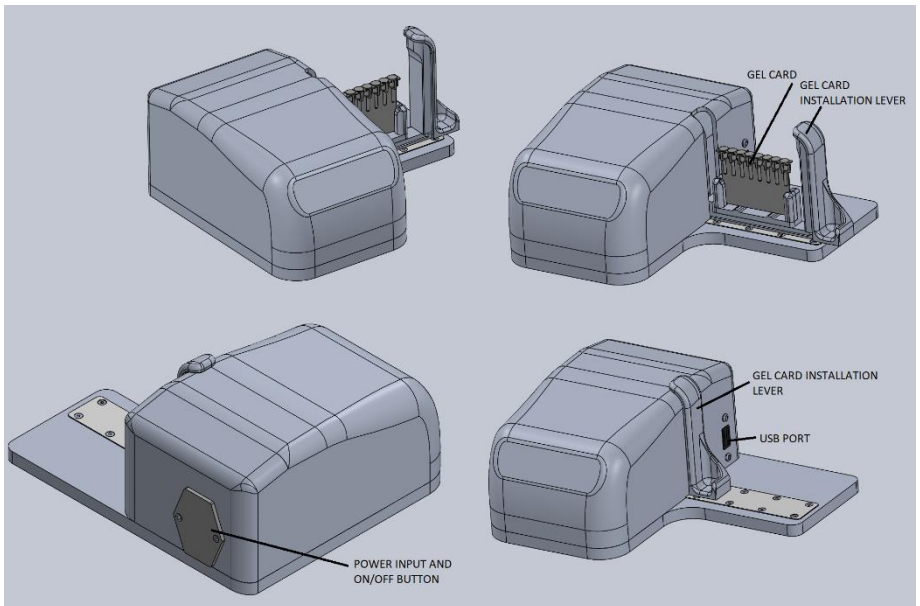
4.1 General Definitions

The appearance of the device and its parts are indicated below.

4.1.1 Device Parts

Usb port, gel card installation lever and power input are important parts for the user.

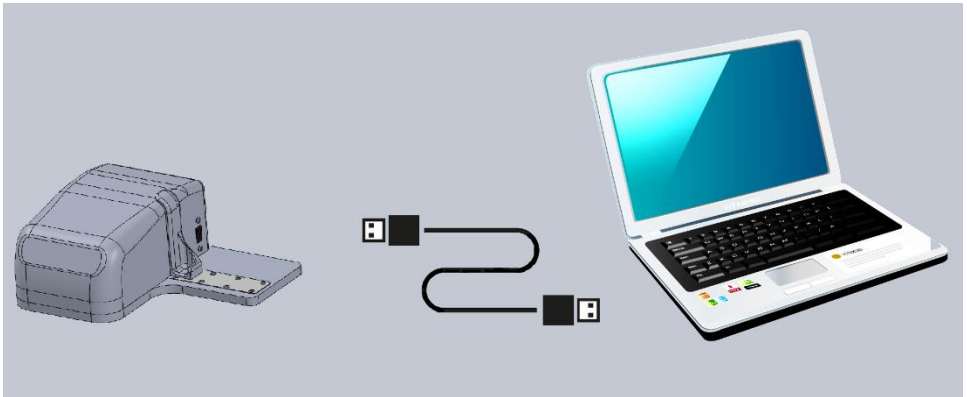
- **USB Port:** It has the touch panel feature and enables the use of the device.
- **Loading Handle:** It has 1 gel card capacity. In order to interpret and read card, there is a slot in which the card can be inserted.
- **Power Input:** It is the part where the power cable of the device is connected. With the On/Off button in this section, the energy of the device can be turned off and on.





4.1.2 Computer Connection

The program is installed on an external computer and the ODAK Gel Card Reader device is connected to the computer with a USB cable. Card reading is not possible without a cable connection.



5. INSTALLATION

5.1 Things to Do Upon Delivery

This instrument should be directly installed by the operator or authorized service / after sales support.

5.2 Installation Requirements

Requirements for the place where the equipment will be installed are as follows:

- Do not place the instrument outside the working area.
- Do not place any flammable material on the instrument.
- Do not place any other instrument that may block operation of the main switch.
- Prevent contact of the instrument or power cable with hot surfaces.
- Do not disconnect the device from the computer.
- Do not place anything on the instrument.
- Electrical installation to be connected to the instrument (including protective grounding), power source should be compliant with the required conditions in regulations. There should be a protective grounding line in electrical outlet.



5.3 Unpacking the Instrument

To unpack the instrument, act in accordance with the following instructions:

- Open top of the box.
- Remove all guards.
- Check the instrument for any damages as a result of storage and handling. . If there is damage, contact authorized service / after-sales support personnel.

5.4 Installation procedure

Follow the steps below to install ODAK Gel Card Reader instrument:

- Plug the power cord into the wall socket.
- Turn on the main switch.
- Connect the device to the computer with the USB cable.
- The movement of the gel card loading handle is controlled.



6. ACTIVITY PROCEDURE

Start Reader program on the desktop. When we open the program for the first time, the following window will appear. Login with username and password from this window. By default, the user name is "islab" and the password is "islab".



6.1 Test Work

When the program is opened for the first time, you will see the test tab. In this tab, the card tests that you have prepared before are scanned. After entering the barcode id name and surname information, the "Get image" button is clicked and the camera image is expected to become clear. When the image becomes clear, the "Set" button is pressed and the device reads the test and evaluates it. The reading results of the columns are checked one by one. If the results are correct, the image in the picture is displayed. such as "results approved by the user" option is checked and the "Save" button is clicked to save the evaluation results.

Results Confirmed by User



If you think there are errors in the results, you can correct them using the "edit" tools. Editing tools are as in the picture.

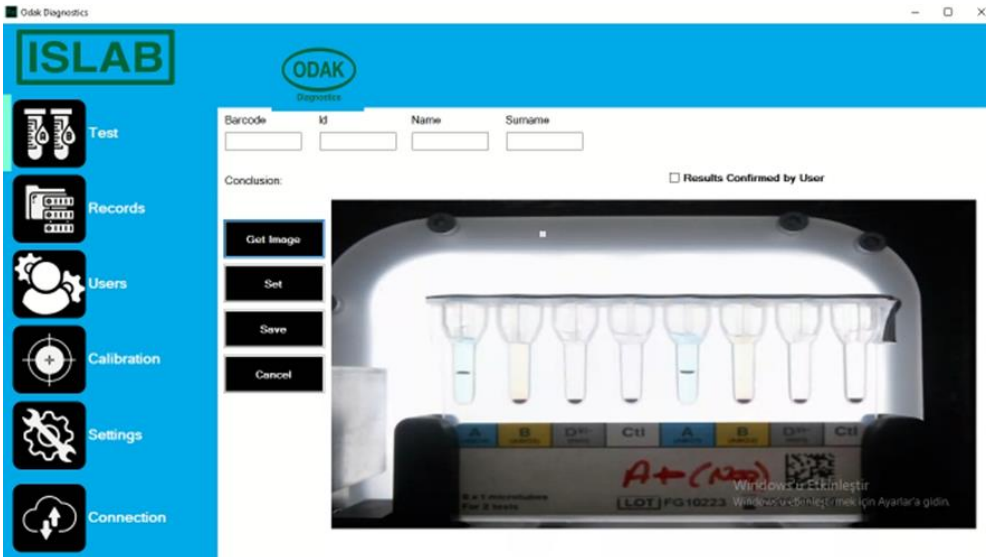
Edit

Allow editing

| | | | | | | | |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1.M.Colon | 2.M.Colon | 3.M.Colon | 4.M.Colon | 5.M.Colon | 6.M.Colon | 7.M.Colon | 8.M.Colon |
| +2 | +2 | +1 | hatali | negativ | negativ | +1 | +1 |

Confirmation

When using the edit tools, first select the "allow editing" option. Then, the change option is activated by clicking on the columns with the name of the column you want to edit. After the changes are made, the "Confirmation" button is clicked to change the evaluation result. After the editing process is finished, the "save" button is clicked and the work is saved.





6.3 Users

By clicking the "User" button, the users tab can be accessed. User registration, editing and deletion operations are done from this tab.

| | Id | Name | Surname | User Name | is Adm |
|---|----|-------|---------|-----------|--------|
| ▶ | 8 | islab | islab | islab1 | Admin |
| | 9 | a | a | a | Norma |
| | 10 | 123 | 123 | 123 | Admin |

USERS

Name

Surname

User Name

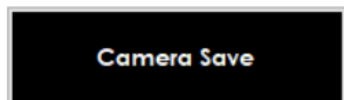
Password

6.4 Calibration

By pressing the "Calibration" button, the calibration tab can be accessed. From this tab, which camera will be used in the reading process, the focus setting of the camera and the reading sensitivity of each column can be adjusted.

6.4.1 Camera Setting

When the calibration tab is opened, the camera is selected from the menu in the picture and the "Camera Save" button is clicked. After saving, the "Get Image" button should be used.

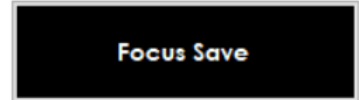




6.4.2 Focus Adjustment

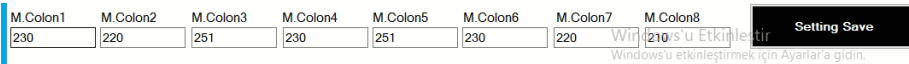
When the "Get Image" button is pressed, the menu in the picture becomes active. The sharpness of the camera is adjusted using the slider bar. When the image becomes clear, it is saved using the "Focus Save" button.

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6.4.3 Column Reading Adjustment

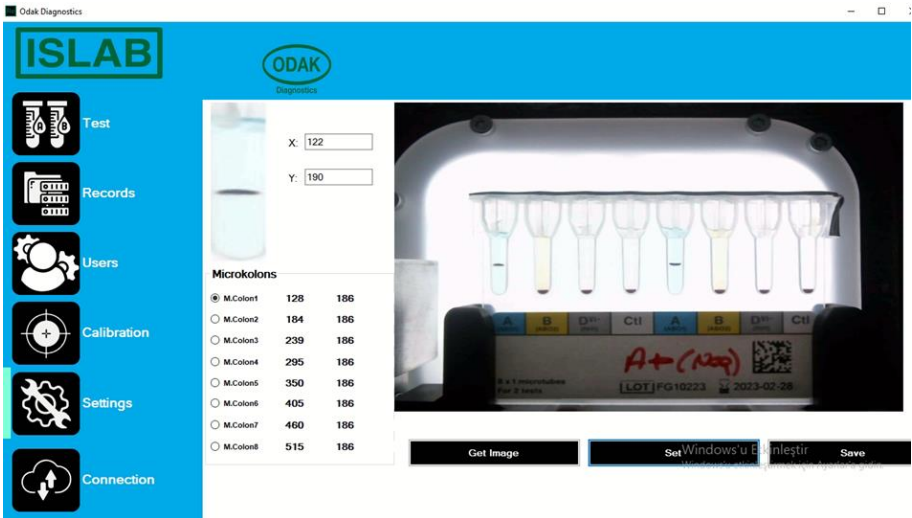
When the calibration tab is opened, the settings currently in use are loaded into 8 fields at the bottom of the window, respectively. For the columns that have problems in reading, the reading settings are made by changing the numbers here. It is recommended that these settings be made together with the technical team. After the settings are made, the settings are saved by clicking the "Setting Save" button.





6.5 Well Settings

By clicking the "Settings" button, the well settings tab can be accessed. From this tab, the region where the wells will be read in the reading process is set. First, the image is taken by using the "Get Image" button. The column to be adjusted is selected as in the picture. By clicking the "Set" button, the reading region is displayed. X and Y The reading area is set by changing the values and the settings are saved by using the "Save" button.



Microkolons

| | | |
|-------------------------------------------|-----|-----|
| <input checked="" type="radio"/> M.Colon1 | 128 | 186 |
| <input type="radio"/> M.Colon2 | 184 | 186 |
| <input type="radio"/> M.Colon3 | 239 | 186 |
| <input type="radio"/> M.Colon4 | 295 | 186 |
| <input type="radio"/> M.Colon5 | 350 | 186 |
| <input type="radio"/> M.Colon6 | 405 | 186 |
| <input type="radio"/> M.Colon7 | 460 | 186 |
| <input type="radio"/> M.Colon8 | 515 | 186 |



6.6 Connection Settings

By clicking the "Connection" button, the connection tab can be accessed. From this tab, the hospital automation connection settings and the name of the hospital to be seen in the report header can be adjusted. In order to set the report title, it is sufficient to simply press the name of the hospital in the field under the Hospital Name and press the "Save" button.

For the hospital automation system, the host address to which the data will be sent should be written in the "Host name" section and the port information should be written in the "port" section. If the data is desired to be sent automatically when the test is saved, the "Send data" option is selected. If sample data is required to be sent during the connection procedures, the "Sample Send" button Sample data can be sent by using "ForwardReverse" as the test definition sentence while sending the record.

Host Name:

Port:

Send data

Hospital Name

Save

**Sample
Send**

Save



7. MAINTENANCE

Maintenance of ODAK Gel Card Reader instrument consists of cleaning and decontamination.

7.1 Maintenance Plan

Maintenance of the Reader instrument is comprised of a series of operations for protection of its functions.

As a general rule, if there is any irregularity, the following maintenance plan should be observed during long maintenance periods:

| Cleaning the instrument | Cleaning the surface and equipment of the instrument |
|---------------------------------|------------------------------------------------------|
| Gel Card Loading Handle Control | It is made manually. |
| Program Control | To control display values |

Decontamination procedures are conducted by a operator.

HAZARD!

During cleaning and/or decontamination procedures, the operator should wear gloves.



WARNING!

Before cleaning and decontamination procedures, all cards should be removed from the instrument.



WARNING!

During cleaning procedures carried on the surfaces of the instrument, power cable should be disconnected from mains.





7.1.1 Cleaning procedure

Biological samples, physiological serums, acidic and alkaline solvents that may cause damage to the instrument should be kept away from the outer surface of the instrument.

Outer surfaces of the instrument should be regularly cleaned with a damp cloth and mild detergent.

WARNING!

If there is any fluid inside the instrument, a qualified technician should carry out the cleaning and disinfection procedure. Call the closest authorized technical service provider.



WARNING!

Ensure that no cleaning solution seeps through the openings of the instrument.



HAZARD!

In case of any spill into the instrument, the instrument is disconnected from the mains, isolated and visible surfaces of device immediately cleaned and decontaminated. The instrument should only be dismantled by a authorized service / after sales support personnel and shouldn't be reinstalled



until it is inspected by a fully qualified ..authorized person.

7.1.2 Decontamination of the equipment

HAZARD!

Any part of the instrument may come into contact with blood; serum samples or any other biological fluid should be addresses as a potential contaminant.



It is very important to carry out decontamination procedures of the instrument before performing certain processes in order to prevent any infection risk.



Decontamination of the instrument should be undertaken in the following circumstances:

- In case of spillage and seeping of potentially contaminant fluids which spill during and after work, etc.
- During preparing the instrument for storage and handling □
Before technical service provider intervenes.
- When the instrument is dismantled.

To decontaminate the instrument, do the following:

- Turn off the instrument, disconnect from mains and wait until the instrument cools.
- In case of fluid spillage, absorb the fluid with a disposable absorbent material (e.g. paper towel, gauze or paper clothing).
- Surface is decontaminated by using non-corrosive proper decontaminant solution to do that, a disposable towel or cotton swab is immersed into the disinfectant until it is completely damp and surfaces are cleaned.
- Absorb the disinfectant solution with a disposable material.
- In order to eliminate any smell and harmful residual chemical components, rinse the surface with water and a mild detergent.
- Dry the surface.
- Dispose the contaminated materials used during decontamination of the instrument in a biological waste bin.

NOTE:

The procedures described above do not guarantee that the instrument has been fully decontaminated but may minimize any contamination risk.





8. HANDLING AND STORAGE

WARNING!

The instrument should be decontaminated before handling and/or storage.



If the ODAK Gel Card Reader instrument is stored and handled for long periods, keep it in its packaging.

Environment conditions necessary for storage are indicated in "Technical Specifications" section.

WARNING!

Carry the instrument in its original packaging.



9. DISMANTLING THE INSTRUMENT

Ensure that there isn't any reactive sample residual in the ODAK Gel Card Reader instrument and it is decontaminated before it is fully dismantled. After this, it should be sent to an authorized centre for processing electronic wastes.

HAZARD!

This instrument should only be dismantled by authorized service / service / after sales support personnel.





10. GUARANTEE

The guarantee for the instrument does not cover the following:

- Any damages caused by usage under conditions contrary to the user's manual
- Any damages caused by accidents not covered by the user's manual, negligence and violations.
- Any damages caused by external factors (atmospheric, geological, user's fault, etc.).
- Any damages arising from improper use.
- Plastic and rubber parts exposed to improper use and impacts, ruptured enamel and paints other than a flaw.
- Any malfunctions and defects during handling.