



ODAK GEL CARD INCUBATOR

USER MANUAL



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

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

HAZARD!

Any injuries and damages (including illnesses) can be minimized by acting in accordance with the instructions.



WARNING!

AUTHORIED SERVICE/AFTER SALES SUPPORT and OPERATOR should know that the instrument is appropriate to be used by people with any illness and injury (including illness).



CAUTION!

Any situations causing damage to the instrument and the operator. This situation can be overcome by applying protective measures and other treatment methods.



NOTE:

Used for descriptive, supplementary or highlighting information.



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's manual contains all necessary and adequate information for any operators who will work with ODAK GEL CARD INCUBATOR 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 INCUBATOR instrument ensures incubation of gel cards in a heated medium for a previously specified period and at 37 °C.

1.2 Objectives, Limits and User Training

1.2.1 Objectives

ODAK GEL CARD INCUBATOR instrument is designed for conducting incubation procedure of gel cards that require incubation especially at 37°C.

The ODAK GEL CARD INCUBATOR enables the incubation of two different card groups independently by means of the right and left blocks.

1.2.2 Limits

ODAK GEL CARD INCUBATOR instrument is designed only for incubation of gel cards and shouldn't be used for other procedures.

1.2.3 Training




The ODAK GEL CARD INCUBATOR 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:

<p>HAZARD! In order to prevent the risk of electricity shock, the instrument should only be connected to its protective grounded source.</p>	
<p>HAZARD! This instrument is operated for substances with chemical and biological risk. When working in laboratories where the device is installed, regulations regarding the use of appropriate gloves or other personal protective equipment must be followed.</p>	
<p>WARNING! This device should only be used by authorized service / after-sales support personnel, trained users.</p>	

2.2 Labels of the Instrument

The following labels are used on Odak Gel Card Incubator instrument:

- Description label
- Biological risk label

2.2.1 Description Label

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

2.2.2 Biological Risk Label



It is on the incubator instrument and warns about the biological risk caused by the substances covered by the incubator area. It warns that there may be a biological hazard on the surface due to the residues remaining in the reservoir.

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.
- Liquid spills may cause apparent damages.
- 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.
- It should be ensured that incubator covers are fully closed and the card(s) is/are pushed into the groove before starting the test.
- 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.



ODAK GEL CARD INCUBATOR SPECIFICATIONS

Technical Specifications

MODEL	Card Incubator	
LOADING CAPACITY	24 Gel Cards	
INCUBATION RESERVOIRS	2 Independent sections with series timing	
INCUBATION TEMPERATURE	37 °C ± 1°C	
UNIT OF TEMPERATURE	° C	
INCUBATION TIME	Adjustable 15 minutes	
ALARM SYSTEM	Two independent sensors for temperature measurement and control.	
ACOUSTIC ALARM	Available, it informs the end of incubation and errors.	
INTERFACE	LCD display	
POWER SOURCE	Voltage:	220 - 240 V ~
	Frequency:	50-60 Hz
	Input Power:	160 W
OPERATING CONDITIONS:	Internal conditions	
	Temperature:	15 °C - 30 °C
	Mains Maximum Voltage fluctuation:	±10% of nominal Voltage
HANDLING AND STORAGE CONDITIONS	Temperature:	(-10 °C) – (50 °C)
	Maximum relative humidity conditions:	85 %



4. ODAK GEL CARD INCUBATOR DEFINITIONS

4.1 General Definitions

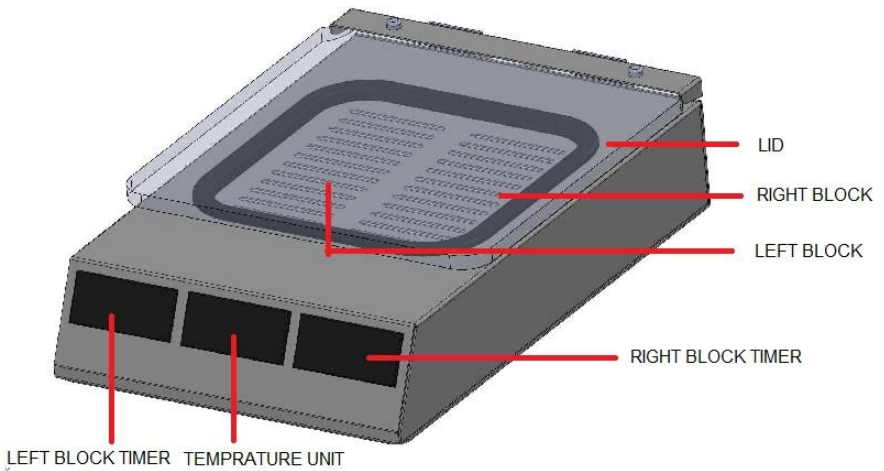
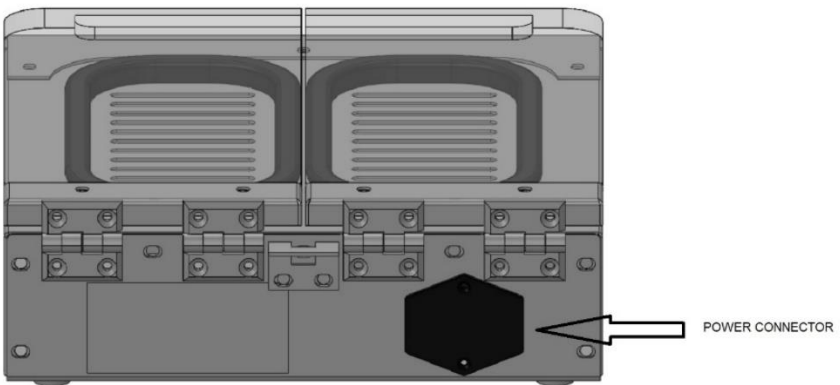


Figure 2





4.1.1 Heating Block

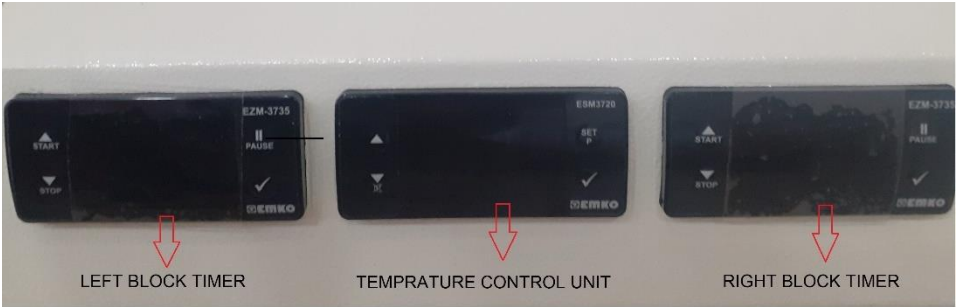
Heating blocks are the area the temperature of which is adjusted to 37 °C and in which gel cards are placed.

4.1.2 Protective Covers

There are two different covers to protect the gel cards inside the ODAK GEL CARD INCUBATOR instrument and ensure heat distribution. Furthermore, it facilitates entrance and exit of gel cards because of its compatibility with the design of the blocks.

4.1.3 Control Buttons

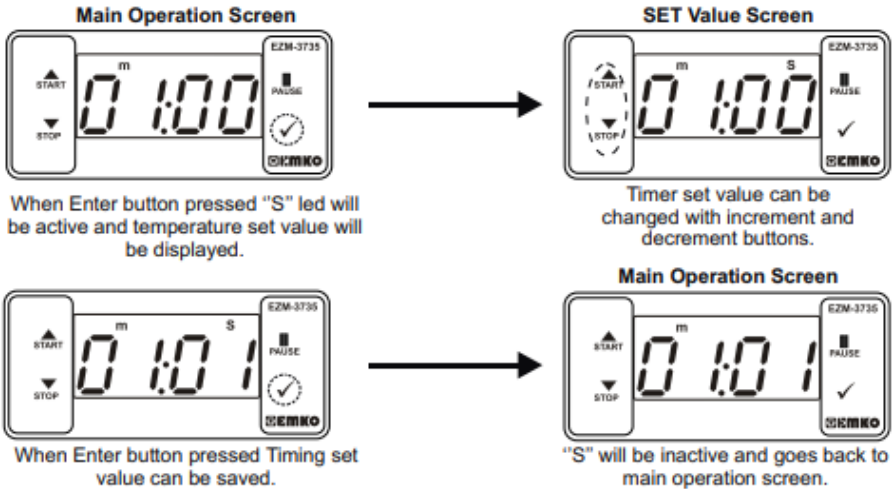
ODAK GEL CARD INCUBATOR instrument has 12 control buttons. They consist of buttons setting incubation time and start/stop buttons.



4.1.4 Display

Display informs remaining incubation time and temperature of the blocks to the operator.

4.1.4.1 Counter Information



4.1.4.2 Units

ODAK GEL CARD INCUBATOR instrument informs incubation temperature in °C to the operator on display by pressing the buttons, ▲ ▼.



5. INSTALLATION

5.1 Things to Do Upon Delivery

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

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 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.
- Remove the instrument from its box in the selected position.
- 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 INCUBATOR instruments:

- Check that the covers are opened correctly.



- Check card elevator system.
- Plug the ODAK GEL CARD INCUBATOR into mains.
- Turn on the main switch.
- When we open display switches, heating is engaged.
- After the preheat time has elapsed, the ODAK GEL CARD INCUBATOR is ready to start the incubation time of 15 minutes.

5.5 Instrument Configuration

There are certain predefined parameters on the Odak Gel Card Incubator instrument display.

- Temperature unit: °C

Automatically programmed incubation time is displayed on ODAK GEL CARD INCUBATOR instrument screen.

6. ACTIVITY PROCEDURE

CAUTION!

Do not use any cards that do not operate properly or have suffered any damage.



6.1 Preparation and Undertaking of a Collective Incubation

- To operate Odak Gel Card Incubator instrument properly, follow the steps below:
- Turn on the main switch, make sure there is an image on the screen. The ODAK GEL CARD INCUBATOR enters the preheating phase to bring the heating blocks to 37 °C. The device is ready to start the incubation time of 15 minutes.
- For collective incubation, remove the cover of one of the incubation areas.

NOTE:

To preliminary heating phase to bring heating blocks to 37 °C. When Operational temperature is achieved, the counter shows preset incubation time.



- Place gel cards in block grooves. The cover will stay fixed in the position it has been opened to facilitate placement of gel cards and not to block incubation section.
- Place the cards in the incubation chambers, close the incubator lid.
- Start collective incubation periods visible on screen by pressing TIME 1 / TIME 2 buttons. Remaining incubation time will be shown in minutes and seconds on card incubation instrument screen during incubation. After the completion of incubation time, warning will be activated by
- flashing in order to inform the operator through acoustic indicator on the screen that a preset incubation time has ended.

CAUTION!

When time values (incubation time out) are displayed on the timer, in other words when there are deviations from correct operation as described in the operating procedure, be cautious



- Open the cover of incubation area. Cards can be removed by raising them through the spring system in the instrument.
- Immediately remove cards from the incubator instrument.

CAUTION!

Cards should be immediately removed when incubation ends. After the counter stops, the temperature of thermostation blocks do not change and the cards remaining inside are exposed to incubation again.



6.2 Counter Resetting

During incubation, once a group is completed, counter stops and “□UEry” warning is displayed on the screen, cards are removed, alarm is shut down by pressing TIME 1 / TIME 2 buttons and the instrument is ready to be used for a new incubation and timing after the cards are removed. ODAK GEL CARD INCUBATOR counter shows a preset incubation time on the screen.

6.3 Stopping Incubation Time

In case incubation has to be stopped before set time ends for any reason, it is adequate to keep TIME 1 / TIME 2 button depressed for 1-2 seconds. The incubator instrument gives an alarm after the counter stops.

CAUTION!

Once we stop incubation, only the counter is stopped, temperature of incubation blocks does not change; unless the cards are removed from the instrument, incubation continues.



6.4 Modification of Preset Counter

ODAK GEL CARD INCUBATOR instrument has been programmed for incubation of gel cards in accordance with the required technique and for a required period of time. Therefore, specified incubation time for gel cards according to the relevant user's manual is 15 minutes.

If the instrument will be operated for a period other than the predefined time, follow the steps below:

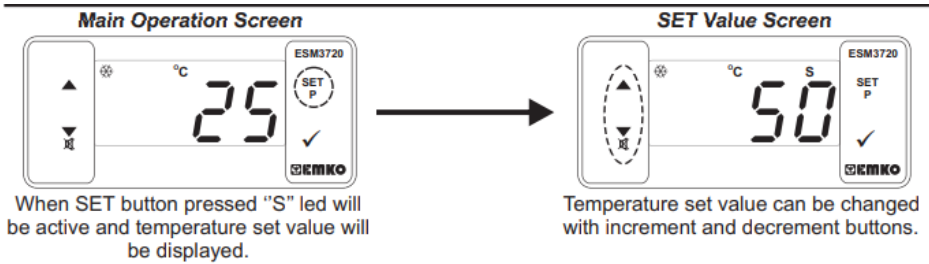
- When the instrument stops, choose either counter 1 or counter 2.
- In order to enter and change the required t (time) value, press ▼▲ buttons.

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6.5 Turning off Incubation

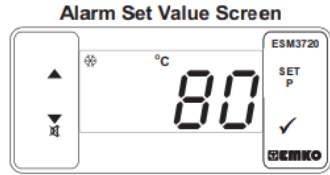
In order to prolong usage life of the incubator instrument, turn it off completely by the main switch at the end of the work day.

6.6 Temperature Calibration





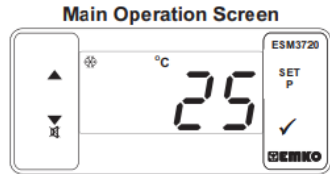
When ENTER button pressed temperature set value can be saved.



Alarm set value can be changed with increment and decrement buttons.



When ENTER button pressed alarm set value can be saved.



"S" will be inactive and goes back to main operation screen.

6.7 Switching to the Fahrenheit display



Temperature Unit Selection Parameter (Default = 0) MODBUS ADDRESS:40002

0	°C selected.
1	°F selected.

6.8 Start and Stop

The instrument start to heat automatically according to the previous set temperature as soon as power on. The default temperature is 37 ° C. The left "START/STOP" key control the left block and the left block and the right "START/STOP" key control the right block.

When the temperature of left block reach 37 ° C, you can press left "START/STOP" key to start the timing time of the left block .Also ,When the temperature of right block reach 37 ° C, you can press the right "START/STOP" key to start the timing time of the right block.



When the timing time of left block reach 0,the buzzer alarm “du, du, du...”and the display appear □UEry. Press any key to return, and press the “START/STOP” key to time again.

7. MAINTENANCE

Maintenance of ODAK GEL CARD INCUBATOR instrument consists of cleaning and decontamination.

7.1 Maintenance Plan

Maintenance of the incubator 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
Temperature Control	Control of block temperature is performed by probes.
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 the intervention of authorized service / after-sales support personnel.
- 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 disinfectant 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.
- 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.



7. 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.



8. 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. TROUBLESHOOTING

Certain warning and malfunctions in ODAK GEL CARD INCUBATOR instrument can be resolved by the operator himself during normal operation without assistance from technical service provider. Error messages are shown by following table:



Error	Cause	Solution
No Display	No main power connection. Power failure.	Plug in mains cable on both sides. Check the mains fuse.
No heating of the block	Heater failure	Contact service.
Press invalid	Keyboard failure	Contact service.



10.1 Acoustic Alarm

When Odak Gel Card Incubator instrument is configured, its sound can be adjusted in case of the following:

- When it sounds for a long time, collective incubation is completed.
- When the button (TIME 1/TIME 2) related to timing is kept pressed. The incubator instrument will alarm three times, indicating the instrument has stopped.

11. 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.



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