

**JOINT-STOCK COMPANY
"KRONT-M"**

AIR RECIRCULATION IRRADIATORS
ULTRAVIOLET BACTERICIDAL
DEZAR-KRONT 801, 802 (wall-mounted)
DEZAR-KRONT 801p, 802p (portable)

OPERATING MANUAL

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Attention! Operational properties of the recirculator provided in this operation manual are calculated for operation of only one device. If it is necessary to disinfect larger volumes (areas), the corresponding number of recirculators should be used, placing them on the main air flow routes.

The recirculator's design is calculated based on the optimum proportion of productivity, dimensions and sound characteristics and is protected by patents.

Appearance of ultraviolet bactericide irradiators-air recirculators
DEZAR-KRONT



DEZAR-KRONT 801
DEZAR-KRONT 802
(wall-mounted)



DEZAR-KRONT 801p
DEZAR-KRONT 802p
(portable)

1. PURPOSE OF THE PRODUCT

- 1.1. Ultraviolet bactericide irradiator-air recirculator DEZAR-KRONT is developed in accordance with the Manual "Use of ultraviolet bactericide radiation for air disinfection in premises".
- 1.2. DEZAR-KRONT is a closed-type irradiator (hereinafter referred to as Recirculator), **and is intended for air disinfection in hospitals, polyclinics, maternity hospitals, other medical institutions and social facilities by means of ultraviolet bactericide radiation with the wavelength 254 nm:**
- in absence of people:**
when preparing premises for operation (as the final stage in the complex of sanitary and hygienic measures), in order to lower the level of microbial content of the air in the premises of Category III-V (DEZAR-KRONT 801, 801p) or of Category I-V (DEZAR-KRONT 802, 802p).
- in presence of people:**
in order to prevent a rise of microbial content level of the air (especially in cases of high risk of airborne diseases) in the premises with capacity up to 80 m³ regardless of the Category (see Table 1).

Table 1

Category	Type of premises
I	Operating theatres, pre-surgical, maternity, sterile zones of central sterilization departments, children's wards in maternity hospitals, wards for premature and traumatized infants.
II	Dressing wards, breast milk sterilization and pasteurization wards, resuscitation department wards, premises of non-sterile zones of central sterilization departments, bacteriological and virological laboratories, hemotransfusion stations.
III	Wards, offices and other premises of medioprofilactic institutions (not included in Category I or II).
IV	Playrooms for children, school classrooms, orphan's homes, nursing homes, residential care homes, amenity rooms of industrial and public buildings crowded by people for a long time.
V	Smoking rooms, public toilets and staircases of premises of medioprofilactic institutions.

- 1.3. Ultraviolet bactericide irradiator-air recirculator DEZAR-KRONT comes in two versions:
- Ultraviolet bactericide irradiator-air recirculator, wall-mounted – model DEZAR-KRONT 801 and 802;

- Ultraviolet bactericide irradiator-air recirculator, portable – model DEZAR-KRONT 801p and 802p.

The manufacturer reserves the right to replace components with analogues, installation of which does not change the technical characteristics of the recirculator.

2. TECHNICAL SPECIFICATIONS

Recirculators DEZAR-KRONT 801 and 801p and DEZAR-KRONT 802 and 802p are produced in the same bodies, have the same technical and biomedical characteristics.

- 2.1. Productivity at nominal supply voltage: $80 \pm 8 \text{ m}^3/\text{h}$.
- 2.2. Air flow disinfection efficiency for *Staphylococcus aureus*:
DEZAR-KRONT 801, 801p – 95.0 %;
DEZAR-KRONT 802, 802p – 99.9 %;
- 2.3. Radiation source:
DEZAR-KRONT 801, 801p – 1 ultraviolet lamp with bactericide flow of 6.6 W;
DEZAR-KRONT 802, 802p – 2 ultraviolet lamps with total bactericide flow of 13.2 W.
Bactericidal ultraviolet lamps with capacity 25 W produced by the company Cnlight, type ZW25D12W-Z216, lamp base E27 is used.
- 2.4. Air fan: 1 pcs.
- 2.5. Registration of the lamp operation time is performed by a digital four-digit meter allowing to register total operation time since installation of the new lamps, in hours. Upon request Recirculators can be supplied without a meter.
- 2.6. Average lifespan of the lamp when observing operation and maintenance rules: at least 8000 hours.
- 2.7. The Recirculator is intended for operation in the following conditions:
 - Ambient air temperature: $+10 \dots +35 \text{ }^\circ\text{C}$
 - Relative humidity: max 80 % at the temperature $+25 \text{ }^\circ\text{C}$
 - Pressure: 630...800 mm Hg
- 2.8. Recirculator power supply: 230 V, 50 Hz alternating current mains with permissible voltage deviation $\pm 10 \%$ of the nominal value.
- 2.9. Total recirculator power consumption at nominal voltage of 230 V:
DEZAR-KRONT 801, 801p – 50 W;
DEZAR-KRONT 802, 802p – 88 W.
- 2.10. The recirculator's body is made of polymeric material (ABS resin). Outer surfaces of the recirculator are resistant to disinfection by wiping with all permitted disinfectants.
- 2.11. Climatic version: for cold-temperate climate in case of installation in closed premises with artificial ventilation.

- 2.12. By electrical safety the recirculator conforms to Class II (second class – highest safety class). Electrocutation protection in this product is provided by double insulation consisting of main insulation and additional insulation formed by insulating dielectric plastic body. Connection of the product to protective ground wire of permanent installation is not required. The recirculator may be connected to any household socket (including sockets without grounding).
- 2.13. Outer dimension:
DEZAR-KRONT 801, 802 – 700 × 230 × 100 mm;
DEZAR-KRONT 801p, 802p – 835 × 450 × 485 mm.
- 2.14. Weight:
DEZAR-KRONT 801, 802 – not more than 3.5 kg;
DEZAR-KRONT 801p, 802p – not more than 6.0 kg.
- 2.15. In presence of people, recirculator may be operated **continuously** during the whole time necessary for maintaining level of microbial content of the air at the nominal level, depending on functional requirements to the premises and number of people in it. **Intervals between being switched on are not regulated.**
- 2.16. Adjusted acoustic power level: 40 dB.
- 2.17. Service life: 5 years.

3. ADDITIONAL FUNCTIONS OF THE PRODUCT

The recirculator is equipped with a replaceable filter (air filter or charcoal air filter). The filter is installed on the air grid from inside of the recirculator body and fixed with rubber attachments.

Use of the air filter and charcoal air filter provides reduction of dust content of ultraviolet bactericide lamps and irradiation chamber's inner surface.

3.1. Replaceable air filter FVS-"KRONT" – Class G2.

FVS-"KRONT" filter is made of high-quality non-woven, environmentally friendly white filtering material (100 % polyester) made of high quality synthetic unbreakable fibres.

Replaceable air filter is intended for filtration of incoming air stream from dust (pollen, plant spores, mould, dry disinfectants, aerosols).

3.2. Replaceable charcoal air filter FUS-"KRONT" – Class G2.

FUS-"KRONT" filter is made of carbon-bearing fibrous combined material consisting of two layers of polyester fibres with one layer of carbon fibre between them.

Activated carbon has highly developed porous structure, very large absorption area (up to 1500 m²/g), therefore it has high sorptive properties.

Removal of harmful substances takes place in "automatic mode". If there are toxic substances the absorption process takes place, otherwise the

filter is in the "standby mode". After saturation of the activated carbon surface, the filter ceases absorption.

Replaceable charcoal air filter is intended for filtration of the incoming air from dust (settling dust, pollen, plant spores, mould, dry disinfectants, pairs of disinfectants and sterilizing agents, pairs of acids and alkali, nitrogen oxides, etc.) and additional absorption of organic substances of base or acid nature from the air (aerosols, anaesthetic gases, antibiotics, etc.) with the purpose to protect respiratory system.

Replaceable charcoal air filter FUS-"KRONT" is installed instead of an air filter in cases when harmful substances are in the air of medical institution premises.

4. SET OF THE PRODUCT

4.1. DEZAR-KRONT 801, 802 recirculator supply set includes:

4.1.1. Recirculator – 1 pcs.

4.1.2. Auxiliary accessories and spare parts:

Fixture components for installation of recirculator on a wall:

- dowel – 2 pcs.;

- screw – 2 pcs.

Replaceable air filters FVS-"KRONT" – 12 pcs.

Replaceable charcoal air filters FUS-"KRONT" – 3 pcs.

4.1.3. Operation documents:

Operation documentation – 1 pcs.

4.2. DEZAR-KRONT 801p, 802p recirculator supply set includes:

4.2.1. Recirculator – 1 pcs.

4.2.2. Portable support (trolley) – 1 pcs.

The portable support set if supplied disassembled includes:

- Support – 2 pcs.;

- Lower frame – 1 pcs.;

- Cross-beam – 1 pcs.;

- Wheel set – 1 pcs.;

- Fixture set – 1 pcs.

4.2.3. Auxiliary accessories and spare parts:

Replaceable air filters FVS-"KRONT" – 12 pcs.

Replaceable charcoal air filters FUS-"KRONT" – 3 pcs.

4.2.4. Operation documents:

Operation documentation – 1 pcs.

5. SAFETY NOTES

5.1. Recirculator may be operated by personnel instructed in safety engineering and acquainted with this operation manual.

- 5.2. The recirculator during installation and connection should be placed in such a way so that power plug (mains plug) is easily accessible.
- 5.3. **Caution! Be careful!**
All work related to functional tests of the lamps or works requiring switching on of the recirculator with the lid open must be performed in clothes that protect the skin from UV radiation. In order to prevent inflammation that can be caused by ultraviolet rays getting into the eyes, it is forbidden to switch on the recirculator with the lid off and without safety goggles.
- 5.4. Bactericidal lamps with expired lifespan or that are out of commission, must be kept packed in a separate room. Bactericide lamps must be recycled in accordance with the requirements and regulations in force in the territory of the country where the device is used.
- 5.5. In case of disintegration of a bactericide lamp's bulbs demercurization of the premises should be performed in accordance with the requirements and regulations in force in the territory of the country where the device is used.
- 5.6. In case the recirculator is not used in accordance with this operation manual, the safety of the recirculator may be compromised.

6. DEVICE AND PRINCIPLE OF OPERATION

- 6.1. The recirculator is a closed-type UV irradiator, where bactericide flow by the ozone-free lamps is distributed in a small closed space, and the air is disinfected in the process of its circulation with the use of the ultraviolet radiation lamp chamber with the help of fans. Air flow is filtered at the input of the recirculator.
- 6.2. The irradiation chamber has a light-reflecting coating (aluminium foil) with high reflective properties providing efficient bactericide treatment of air flow.
- 6.3. The body and light-screen membranes at the recirculator's input and output reliably protect personnel and patients from exposure to the ultraviolet radiation.
- 6.4. Electric insulation of metal components used for the recirculator installation on the wall or on the portable support, that are outside of the body and may be under voltage in conditions of insulation failure, is performed with the help of special plastic caps.
- 6.5. Connection to 230 V mains is performed by a twin-wire power cable with wire section $2 \times 0.75 \text{ mm}^2$.
- 6.6. "MAINS" switch is on the control panel located on the face-plate of the recirculator lid.

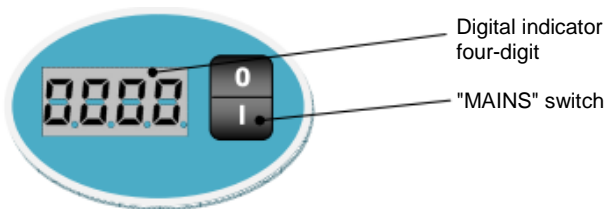


Fig. 1 Control panel

- 6.7. Registration of the lamp operation time is performed by a digital four-digit meter allowing to register total operation time in hours and to store the existing information in case of switched-off recirculator for 1 year.

7. PREPARATION AND OPERATION SEQUENCE

- 7.1. Unpack the recirculator: remove it from the box, remove the polyethylene packaging.
- 7.2. After storing of the recirculator in a cold room or after transportation in winter conditions, it may only be connected to the mains after 6 hours of storage at room temperature
- 7.3. The recirculator should be placed in the room, so that air intake and discharge takes place freely. It is necessary to avoid installation in corners of a room, where dead zones can form.
- 7.4. The wall-mounted recirculator DEZAR-KRONT 801, 802 is installed on a wall not less than 1.0-1.5 m (lower body part) above the floor level.
- 7.5. Install the recirculator DEZAR-KRONT 801, 802 in the selected place on the wall. Use dowels and screws supplied in the set for installation of the recirculator. The distance between the dowels installation points should be 148 mm.
- 7.6. The portable recirculator DEZAR-KRONT 801p, 802p should be installed and fixed on the pre-assembled portable support with the help of washers and nuts supplied in the set: insert the screws protracting from the body into the openings in the bars of the support and tighten the cover nuts (Fig. 2). The portable support assembly procedure is provided in Annex 2.



Fig. 2 Mounting the recirculator on the portable support

- 7.7. Insert power cable plug in 230 V socket. Switch on the "MAINS" switch.
- 7.8. After completion of the work switch off the "MAINS" switch, disconnect the power cable plug from 230 V socket.
- 7.9. It is necessary to take into account the operation time of the bactericide lamps. registration of the operation time and timely replacement of the bactericide lamps may be performed based on the readings of the digital meters.

8. MODES OF USE

The recirculator is intended for disinfection of the air in the premises of medical treatment and preventive care institutions (the list of such medical institutions is presented in Table 1 of Section 1 of this Manual).

in absence of people when preparing premises for operation (as the final stage in a complex of sanitary and hygienic measures), in order to lower the level of microbial content of the air in Category III-V premises.

in presence of people in the premises in order to prevent an increase of microbial content of the air (especially in cases of high risk of airborne diseases).

8.1. Modes of recirculator use in presence of people.

The recirculator is intended for work **in the continuous mode**, the duration of which is determined by the functional requirements of individual premises.

Influence of the recirculator in presence of people (up to 3- persons) on the level of microbial content of the air in the premises.

Premises capacity, m ³	Dynamics of the level of microbial content of the air in the premises
up to 80	Decrease compared to the initial one and subsequent stabilization of the microbial content level

In case there are more than 3 persons present in the premises the same effect of the recirculator can be attained by installation of an additional recirculator.

If it is necessary to disinfect the air in the premises with a capacity of more than 80 m³ it is necessary to increase the number of recirculators as follows: one recirculator for each 80 m³.

8.2. Modes of the recirculator use in absence of people.

The recirculator DEZAR-KRONT 801, 801p in absence of people can be used during preparation of Category III-V premises for use, the premises maximum capacity is 50 m³.

Premises capacity, m ³	Time of treatment (min) for provision of efficient bactericide treatment* of 95%, not less than
up to 50	60

The recirculator DEZAR-KRONT 802, 802p in absence of people can be used during preparation of Category I-V premises for use, the premises capacity is maximum 50 m³.

Premises capacity, m ³	Time of treatment (min) for provision of efficient bactericide treatment*, not less than		
	99,9 % (premises of the Category I)	99,0 % (premises of the Category II)	95,0 % (premises of the Category III)
up to 50	60	45	35

* This level of efficient bactericide treatment of the air by means of a recirculator is provided in regard to the characteristic representatives of air microflora, such as *Staphylococcus aureus*.

9. MAINTENANCE

Names of the recirculator design components provided in this section match the assembly scheme and flow chart (Fig. 5 and Fig. 6, Annex 1).

- 9.1. Maintenance of medical equipment should be performed by technical experts according to valid regulations and recommendations.
- 9.2. **Attention! All activities performed within the framework of maintenance should be performed with the "MAINS" switch switched off and the recirculator disconnected. In order to disconnect the recirculator from mains, it is necessary to remove the power cable plug from the socket.**
- 9.3. **During maintenance it is necessary to observe safety measures, provided in Section 5.**
- 9.4. For effective use of the recirculator it is necessary to guarantee its cleanliness. It is necessary to periodically conduct disinfection of the outer surfaces by means of wiping with disinfectants, using a napkin. It is necessary to wring the napkin dry. It is necessary to use a disinfectant allowed for disinfection of surfaces of the devices and machines in accordance with the operating instructions for use of the disinfectants. The wiping of lamps in order to remove dust should be performed according to the preventive maintenance schedule for ultraviolet installations, approved by the company. The lamp bulbs are wiped with a lint-free tissue. Disinfection (treatment) is performed by medical personnel.

- 9.5. Upon end-of-use of the lamps (8000 hours) or in case of malfunction it is necessary to replace the lamps according to 9.8 and reset the electronic meter according to 9.9.
- 9.6. In case of performing preventive maintenance (wiping lamps to remove dust or filter replacement) and repair works requiring opening of the recirculator body, perform the following activities before and after works:

Disconnecting the lid and base of the recirculator body:

- Place the product on a work table with the control panel upwards.
- Remove the decorative plugs, located at the edges of the central part of the body.
- Unscrew 5 self-drilling screws.
- Turn over the product with the control panel downwards.
- Remove the decorative plugs, located at the edges of the central part of the body.
- Unscrew 5 self-drilling screws.
- Remove the recirculator lid, place it nearby.

Assembling the recirculator body:

- Align the recirculator lid with the base.
- Fix the lid by means of 5 self-drilling screws from the front side and 5 self-drilling screws from the back side of the recirculator.
- Install the decorative plugs in the openings located at the edges of the central part of the body.

9.7. **To clean lamp bulbs and irradiation chamber inner surfaces,** perform the following:

- Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Perform 9.6 (disconnection of the lid and the base of the body).
- Wipe the lamp bulbs and irradiation chamber inner surfaces with lint-free cloths.
- Switch the recirculator on, visually check the lamp's operation, observing the safety engineering regulations in 5.3 of this manual.
- Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Perform 9.6 (body assembly).

9.8. **To replace a lamp,** perform the following:

- Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Perform 9.6 (disconnection of the lid and the base of the body).

- (For DEZAR-KRONT 802, 802p) Switch the recirculator on, visually detect the faulty lamp L1+LX (see flow diagram, Fig. 6), observing the safety engineering regulations presented in 5.3 of this manual.
- (For DEZAR-KRONT 802, 802p) Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Remove the faulty lamp L from the holder E.
- Replace faulty lamp with a new one.
- Connect the recirculator to the mains, switch the "MAINS" switch on. Visually check the lamp's operation, observing the safety engineering regulations in 5.3 of this manual.
- Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Perform 9.6 (body assembly).
- Recycle the faulty lamp.

9.9. **To reset the meter**, perform the following:

- Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Perform 9.6 (disconnection of the lid and the base).
- Place the lid of the recirculator with the indicator board upwards.
- Remove the lamp L1 from the holder E1.
- Remove the jumper J located on the indicator board (Fig. 3).

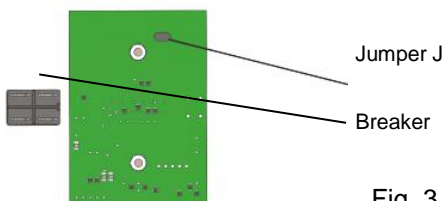


Fig. 3 Indicator board

- Turn the lid of the recirculator with the indicator board downwards.
- Connect the recirculator to the mains, switch the "MAINS" switch on, observing the safety engineering regulations in 5.3 of this manual.
- Control the count down readings of the digital board during 9 seconds: "RES9", "RES8", ..., "RES1", | 0 | 0 | 0 | 0 |. The last record means that the resetting was successfully completed.
- Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Insert the jumper J into its place.
- Insert the lamp L1 into the holder E1.
- Perform 9.6 (body assembly).

9.10. **To replace the control panel indicator board**, perform the following:

- Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Perform 9.6 (disconnection of the lid and the base).
- Disconnect the knife-edge terminals of the indicator board wires from the "MAINS" switch terminals and remove the wires from the holder E1 of the lamp L1.
- Unscrew 2 screws with nuts fastening the indicator board to the control panel.
- Replace the indicator board with a new one, fasten with 2 screws and nuts.
- Connect the wires from the indicator board to the holder E1 of the lamp L1 and connect the knife-edge terminals to the "MAINS" switch terminals.
- Perform 9.6 (body assembly). Make sure the time meter is operating by connecting the recirculator to the mains and switching on the "MAINS" switch.
- Recycle the dismantled indicator board.

9.11. **To replace the fan**, perform the following:

- Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Perform 9.6 (disconnection of the lid and the base).
- Disconnect the fan power wires from the lamp's holder E1 (DEZAR-KRONT 801, 801p) or E2 (DEZAR-KRONT 802, 802p).
- Unscrew 4 self-drilling screws fastening the fan on the recirculator's body. Remove the faulty fan.
- Install a new fan, taking into account the direction of the air flow for emission from the recirculator, fastening the fan on the body with 4 self-drilling screws.
- Connect the fan power wires to the lamp's holder E1 (DEZAR-KRONT 801, 801p) or E2 (DEZAR-KRONT 802, 802p).
- Perform 9.6 (body assembly).
- Recycle the dismantled fan.

9.12. **Filter replacement.**

The efficient work of the recirculator depends on the timely replacement of filters (air filter and charcoal air filter). It is recommended to replace filters once per month. In case of elevated concentrations of organic substances of base and acid nature it is necessary to change the charcoal filter more frequently.

Simultaneously with replacement of the filter it is recommended to conduct a disinfection treatment of the recirculator's body.

In order to replace a filter, perform the following:

- Switch the "MAINS" switch off and disconnect the recirculator from the mains.
- Perform 9.6 (disconnection of the lid and the base).
- Remove the used filter by taking off the rubber bands, observing the rules for handling infected materials.
- Treat the recirculator's body with disinfectants by wiping.
- Install a new filter on the air grid from the inside part of the body and fix it by means of the rubber bands (Fig. 4).

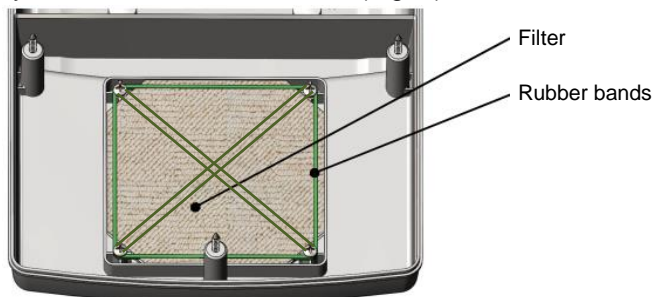


Fig. 4 Air filter

- Perform 9.6 (body assembly).
- Recycle the dismantled filter.

10. TRANSPORTATION AND STORAGE RULES

- 10.1. The recirculator in the manufacturer's packaging should be stored in the following conditions:
- Ambient temperature: -50...+40 °C;
 - Relative air humidity: max 90 % at +25 °C. In higher temperature the humidity must be lower.
- 10.2. The recirculator should be transported in the manufacturer's packaging in accordance with the package labelling ("Up", "Caution! Fragile!", "Do not take with hooks", "Protect from moisture").
Transportation by all types of transport is allowed in ambient temperature -50...+40 °C and relative humidity 90 % at +25 °C.

11. POSSIBLE FAULTS AND METHODS OF THEIR ELIMINATION

Table 2

Name of fault, external evidence	Possible cause	Method of elimination
1. Irradiator is not working.	1.1. Faulty mains socket or "MAINS" switch. 1.2. Burnt fuse FU1, FU2.	1.1. Repair. 1.2. Replace the indicator board (see 9.10).
2. Electronic meter does not work.	2.1. The indicator board is out of order.	2.1. Replace the indicator board (see 9.10).

3. Fan does not work.	3.1. Faulty fan.	3.1. Change the fan (see 9.11).
4. UV lamp does not work.	4.1. Faulty lamp.	4.1. Change the lamp (see 9.8).

* After the warranty period, **SIA "KRONT"** performs repairs and supply of all components for ultraviolet bactericide irradiators-air recirculators DEZAR-KRONT on a contractual basis.

12. RECYCLING

- 12.1. Bactericide lamps must be recycled in accordance with the requirements and regulations in force in the territory of the country where the device is used.
- 12.2. Filters must be recycled in accordance with the requirements and regulations in force in the territory of the country where the device is used.
- 12.3. The recirculator and its components after their service life must be recycled in accordance with the requirements and regulations valid in the territory of country where device is operated, by medical electrical device recycling services.

13. ACCEPTANCE CERTIFICATE

Ultraviolet bactericide irradiator-air recirculator DEZAR-KRONT _____ (with/without meter), factory number _____ conforms to the manufacturer's technical conditions and is acknowledged valid for operation.

Date of manufacture: _____

Signature (QC department stamp): _____ Factory stamp:

14. MANUFACTURER'S WARRANTY

- 14.1. The manufacturer guarantees conformity of the ultraviolet bactericide irradiator air recirculator DESAR-KRONT to the requirements of manufacturer's technical conditions.
- 14.2. The warranty period is 2 years from the recirculator's production date.
- 14.3. During the warranty period, the manufacturer repairs the device or replaces its components free of charge (provided that the customer observes transportation, storage and operation rules).
- 14.4. During the warranty period, the manufacturer may at his own account provide the customer with spare parts to be replaced, provided that replacement can be performed by qualified specialists in accordance with the requirements of operation documentation.

- 14.5. If repair on-site is impossible during the warranty period, the customer sends the faulty product or spare parts to the manufacturer at the manufacturer's account.
- 14.6. The manufacturer only accepts products with warranty certificate for warranty repair. The warranty certificate must be fully completed.
- 14.7. Fault elimination term is not more than 30 days after manufacturer receives the product.
- 14.8. Warranty does not include flaws (faults) of the product caused by:
 - mechanical damage to the product by impact or excessive force;
 - damage to the product by hot objects or liquids;
 - any modifications of the product design;
 - force majeure (incident, fire, flood).

Manufacturer's address: JSC "KRONT-M":

Russia, 141400, Moscow Region, Khimki city,
ul. Spartakovskaya 9, apt. 1

Tel. (495) 572-84-10, fax (495) 572-84-15

HOTLINE PHONE: (495) 500-48-84

E-mail: info@kront.com; Internet: www.kront.com

Importer/exclusive representative in the EU: SIA "KRONT":

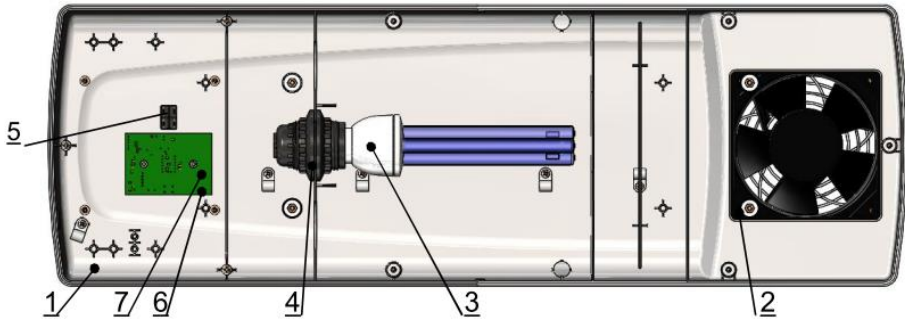
Blaumana iela 32-6, Riga, LV-1011, Latvia

Tel. (371) 20220888

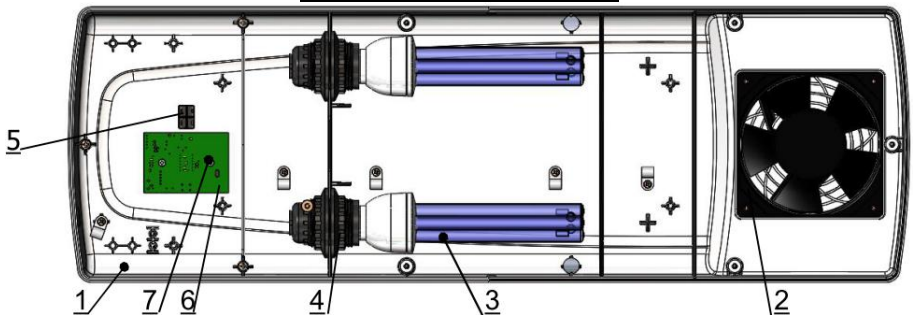
E-mail: dezar@kront.eu; Internet: www.kront.eu

Attention! After the warranty period, **SIA "KRONT"** performs repairs and supply of all components for ultraviolet bactericide irradiators-air recirculators DEZAR-KRONT on a contractual basis.

Fig. 5 Assembly
DEZAR-KRONT 801, 801p

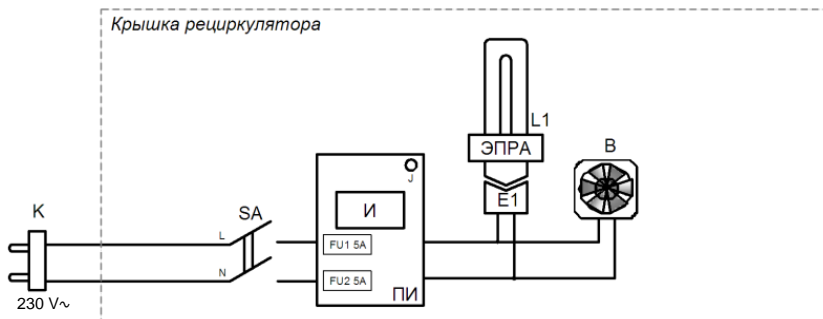


DEZAR-KRONT 802, 802p

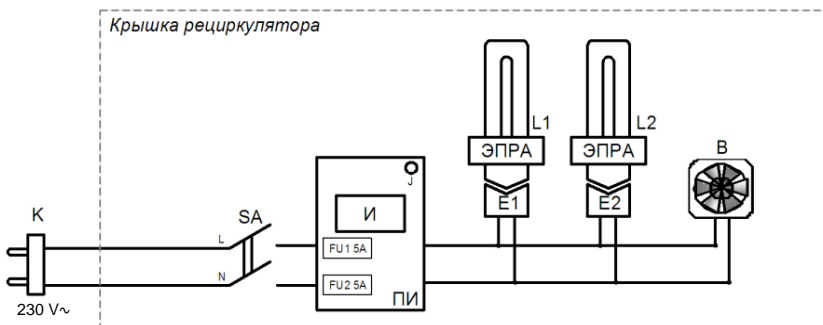


№	Name	Qty	
		DEZAR-KRONT 801, 801p	DEZAR-KRONT 802, 802p
1	Recirculator lid	1	1
2	Fan	1	1
3	25 W ultraviolet ozone-free bactericide lamp with incorporated ECG 230 V	1	2
4	Electric ultraviolet lamp holder E27	1	2
5	"MAINS" switch	1	1
6	Indicator board with electric meter	1	1
-	Digital four-digit indicator	1	1
7	Jumper for resetting of the electric metre readings	1	1
-	Power cord 2x0.75 mm ² with socket	1	1
-	Fuse 5 A/250 V	2	2

Fig. 6 Flow diagrams of recirculators
DEZAR-KRONT 801, 801p



DEZAR-KRONT 802, 802p



№	Name	Designation	
		DEZAR-KRONT 801, 801p	DEZAR-KRONT 802, 802p
1	Recirculator lid	-	-
2	Fan	C	C
3	25 W ultraviolet ozone-free bactericide lamp with incorporated ECG 230 V	L1	L1+L2
4	Electric ultraviolet lamp holder E27	E1	E1+E2
5	"MAINS" switch	SA	SA
6	Indicator board with electric meter	PI	PI
-	Digital four-digit indicator	I	I
7	Jumper for resetting of the electric metre readings	J	J
-	Power cord 2x0.75 mm ² with socket	TO	TO
-	Fuse 5 A/250 V	FU1+FU2	FU1+FU2

APPENDIX 2:

Portable support assembly scheme for the recirculators DEZAR-KRONT 801p, 802p

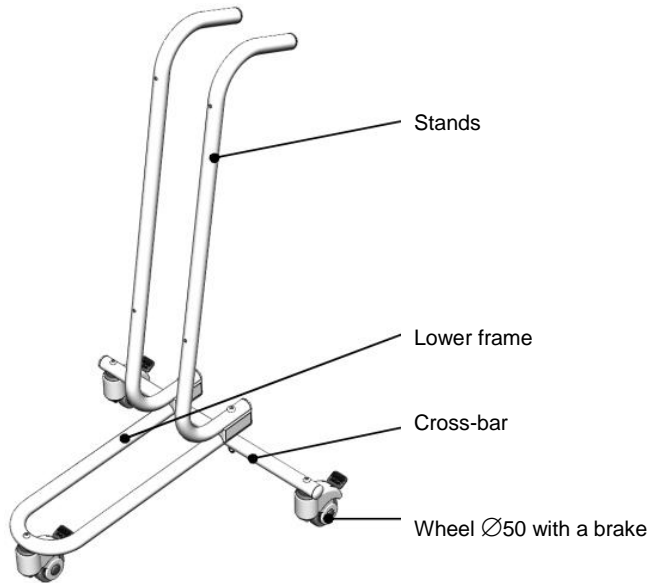
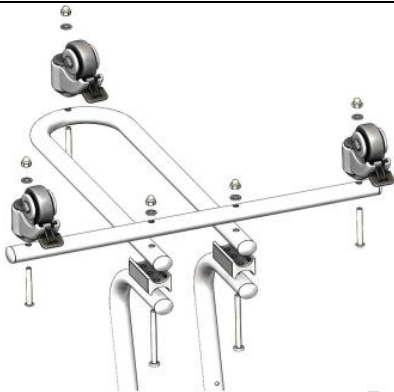


Fig. 7 Portable support

Portable support assembly order



- remove all the components of the portable support from the packing;
- connect the lower frame with the cross-bar and stands by means of M6×80 screws with cover nuts M6 and washers Ø6 mm, using plastic pieces as spacers;
- install wheels on the cross bar and the lower frame, attach them with the screws M6×75 with cover nuts M6 and washers Ø6 mm.

EU DECLARATION OF CONFORMITY

JSC "KRONT-M"

Russia, 141400, Moscow Region, Khimki city,
ul. Spartakovskaya 9, apt. 1, tel. (495) 500-48-84 (multichannel)
E-mail: info@kront.com; Internet: www.kront.com

Importer/exclusive representative in the EU: SIA "KRONT":

Blaumana iela 32-6, Riga, LV-1011, Latvia
Tel. (371) 20220888
E-mail: dezar@kront.eu; Internet: www.kront.eu

WARRANTY CERTIFICATE

for repair of the irradiator air recirculator,
ultraviolet bactericide
DEZAR-KRONT _____
factory No. _____

Date of manufacture: " ____ " _____ 20 ____

Factory stamp: _____
signature, QC department stamp

Owner and address: _____
company name (complete)

postal code, city, area/district, street, house, building, telephone

Fault characteristics: _____
is filled in by a person responsible for maintenance

Contact person, responsible for maintenance

Name, surname, patronymic, telephone, e-mail

Fault appearance day: _____

Signature _____

The work for fault elimination is preformed: _____

date

sign

Factory stamp: