# Thank you for your choice!

The Potok 150-M-01 standalone air disinfection unit (ADU) (Premier) is designed for ensuring and maintaining the required air purity in medical facilities of various types, including those specializing in curing tuberculosis, infectious diseases, as well as in kindergartens, pharmaceutical and food companies, in transport and places of a mass congestion of people, etc.

This Operation Manual applies to the Potok 150-M-01 standalone air disinfection unit (ADU) (Premier) (hereinafter - the unit) and contains instructions for its operation, maintenance, transportation and storage, as well as information certifying the manufacturer's warranties, and certificates of acceptance and packaging.

Prior to using the unit, please read this Operation Manual carefully and keep it at hand for future reference in case of questions in the course of its operation.

#### Attention!

Warning signs used on the inside and outside of the unit and their explanation:



- Attention! Refers to THE OPERATION DOCUMENTS



- B-TYPE EQUIPMENT



- HAZARDOUS VOLTAGE

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General			
Potok 150-M-01 standalone air disinfection unit (Premier)			
Serial number Date of manufacture			
Manufacturer: Potok-Inter LLC			
Address: 115162, Moscow, Khavskaya str. 18, bldg. 2;			
tel./fax:+7 (499) 678-2099; e-mail: post@potok.com			

Web-site: www.potok.com

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# Parts and accessories

The supply package shall be in line with the following table:

Product:	Quantity, pcs
Air disinfection unit Potok 150-M-01 ADU, standalone (Premier)	1
Spare pre-filter	1
Operation Manual	1
Package	1

Additional accessories: wall-mount bracket; set of pre-filters.

# **Technical data and parameters**

Power supply	220 VAC 50 Hz			
Power consumption	max 10 VA			
Productivity	130 m3/h			
Effectiveness of inactivation of RG1-4 microorganisms in the air min 99%				
Time required for inactivation	0.5 s			
Microorganism inactivation control mode	automatic			
Particle filtration efficiency	class H14 filters			
Chief dimensions (WxDxH):	590x424x392 mm			
Weight	max 13 kg			
Lifetime without replacement of structural el	ementsat least 10 years			
No consumables need to be used during the unit service life.				

In terms of potential risks arising from application, the unit belongs to Class 1 according to GOST R 51609.

According to the National Product Classification, the unit was assigned OKP code 945120.

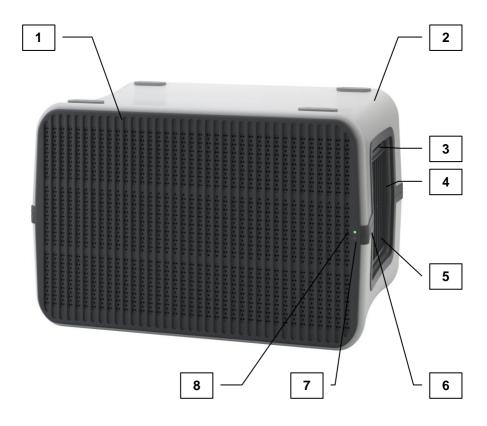
Actual concentrations of harmful substances in the working zone air shall not exceed maximum permissible concentrations specified in GN 2.2.5.1313-03.

The unit climatic version is UKHL4.2 according to GOST 15150.

The vibration and noise characteristics of the unit are in line with the regulatory and technical documentation requirements.

The unit is suitable to be used in the electromagnetic environment as per GOST R 51318.11, GOST R 51317, GOST R 50648. The unit is suitable for use in any locations, including residential homes and buildings that are directly connected to the electrical distribution network.

# **Unit appearance**



- 1- Front panel with perforated air distribution surface
- 2- Unit case
- 3- Spring clips
- 4- Inflow grid
- 5- Air pre-filter
- 6- Power on button
- 7- Red LED indicates abnormal operation of the unit
- 8- Green LED indicates normal operation of the unit

## Labeling

Label contains the main data in accordance with the requirements of GOST R 50444.

# **Package**

The Unit is packed in the manufacturer's shipping containers in accordance with GOST R 50444.

## **Principles of operation**

The unit consists of the following functional assemblies: an outer case, wherein the Potok 150-M-01 ADU is installed, a front panel with a perforated air distribution surface, pre-filter, a fan and an automation unit.

The unit performs high efficiency air flow disinfection by inactivation of all types of microorganisms and viruses and further filtration of aerosols.

Air flow treatment in the unit is a two-stage process. The inactivation zone (the first stage) is an area where repeated depolarization of the microorganism cell membranes is carried out with electrostatic fields of a given orientation and intensity, which results in disintegration of their structure.

The fine filtration zone (the second stage) is an area that captures fragments of microbial cells and aerosol particles contained in the air flow being treated.

## **Important safety information**

#### **OPERATIONAL CONSTRAINTS**

- If the unit was stored or transported in the cold season, allow it to warm up to room temperature for 2 hours before starting it.
- Apply the power supply voltage in accordance with the technical parameters. A different voltage may damage the unit.
- Do not connect the unit to a faulty socket. Do not use adapters and extension cords, wherever possible. If used, make sure that these comply with the applicable standards.
- Never cut nor pinch the power cord, avoid twisting and overtension.
   Such actions may cause damage to it. The power cord or plug damage may cause electric shock hazard.

- In case of a long-term shutdown, disconnect it from the power supply.
- Do not place containers with liquid onto the unit.
- Avoid letting any objects or your fingers getting trapped in the inlet grating of the unit.
- It is not recommended to operate the unit without the inflow grid and pre-filter being installed. Operation of the unit with a coarse-mesh filter not installed will reduce its service life.
- Never obstruct the inflow grid and front panel with the perforated air distribution surface of the unit (never move the unit to the wall with the inflow grid facing it).
- Do not place heaters near or under the unit.
- Do not stand nor sit on the unit housing; take necessary actions to avoid damaging it.
- Do not open the unit by yourself. This may result in damage to the unit and warranty to be revoked.

#### RECOMMENDATIONS FOR USE

The required number of units in premises with a normal bacterial load level is recommended to be determined on the basis of: one unit per 50-60 m<sup>3</sup>. In case of more strict requirements for indoor air disinfection level, the number of units can be increased.

To arrange a "pure" working area (e.g. a surgical table), the front panel with a perforated air distribution surface of the unit should face toward the object that is being treated.

The use of air cross flows from two or more units can improve the degree of purity in the working area.

To achieve the maximum aseptic effect, it is recommended to carry out wet cleaning of the premises with the unit running.

In order to maintain the achieved level of air purity, the unit must run continuously.

The unit has no constraints with regards to its use.

#### PREPARATION FOR USE

Make sure the unit housing is fully unpacked and unwrapped and has no damage. Make sure the pre-filter is in place and visually inspect its condition.

The unit is recommended to be mounted at a height of no less than 50 cm from floor level so that the inflow grid and front panel with perforated

air distribution surface is located at least 30 cm from the wall or any objects blocking the free passage of air.

The unit installation location shall ensure the best air circulation indoors.

The unit location shall provide an easy access to a power socket.

There are mounting holes (M6) on the rear wall of the housing, which are used for securing the unit on the wall bracket with attachment standard VESA MIS-F 200x200, M6 and a load-carrying capacity up to 30 kg.

#### **DESCRIPTION OF CONTROLS**

A power switch button is located in the middle of the unit side wall, on the inflow grid side. The following LEDs are located in the middle on the right part of the front panel: green LED - indicates normal operation of the unit; red LED - indicates abnormal operation of the unit.

#### **ENABLING / DISABLING**

Connect the power cord to a grounded power supply socket 220 (± 22) V 50 Hz.

## Attention! Make sure the plug is securely plugged in!

Set the power switch in the ON position.

After switching on the unit, you will hear the sound of a running fan, and the green LED on the front panel will become lit. **Short-term** illumination of the red LED is possible.

Attention! If the red LED is continuously lit, contact the manufacturer's customer service.

#### **POTENTIAL FAULTS**

When turning on the unit, you do not hear the fan running and the green LED on the front panel is not lit, please

double check the following: the power cord is connected to the socket; the power cord is not faulty; the power supply voltage is on.

Information about the unit's operation is displayed on the front panel in the form of lit red LED.

In the event of any failure, contact the manufacturer's customer service.

### **Maintenance**

#### Attention!

# Before carrying out any maintenance, make sure the unit is disconnected from the power supply!

During maintenance, perform the following operations:

- visual inspection of pre-filter clog
- visual inspection of the unit for damage
- visual inspection of the power cord for integrity
- monitoring of the front panel indicators
- checking the unit location.

#### **PRE-FILTER**

The user shall regularly conduct visual pre-filter inspection. Periodic flushing and disinfection of the coarse-mesh filter is necessary to ensure the unit normal operation.

#### Attention!

The unit operation with a clogged pre-filter may negatively affect its performance.

To carry out maintenance on the pre-filter, remove the inflow grid. Pull the grid upward completely by sinking in two spring pins, and remove it by pulling it toward yourself. Replace the clogged pre-filter with the standby one, which is included in the supply package. Mount the grid in its initial position.

Wash the clogged pre-filter with a disinfectant or detergent solution at a temperature of not higher than 60°C, and dry it so it can be further used.

#### Attention!

In the event of damage to the pre-filter, you may buy additional filters through the manufacturer's customer service.

When using the unit inside premises with pathogenic microflora, the coarsemesh filter shall be treated with a disinfectant in accordance with the existing regulations.

## HOUSING, FRONT PANEL, INFLOW GRID

Wipe the surfaces with a soft damp cloth moistened with disinfectant solution or pure water. Do not use gasoline, kerosene, solvents or other chemicals, or abrasives. Remove any residual moisture with a dry cloth.

When using the unit inside premises with pathogenic microflora, its surfaces shall be treated with a disinfectant in accordance with the existing regulations.

Always check the unit location in accordance with the recommendations set forth in Section "PREPARATION FOR USE".

# **Storage and transportation**

The unit shall be stored in heated and ventilated premises where the following conditions are maintained:

- ambient air temperature: from +5°C to +50°C
- relative air humidity: max 80% at a temperature of +25°C
- no vapors of chemically active corrosive substances

The unit shall be transported by any types of transport, packaged, in the following conditions:

- ambient air temperature: from -50°C to +50°C
- relative air humidity: max 80% at a temperature of +25°C.

The unit shall be safely secured in the shipping containers.

The unit shall be stored in an upright position inside the package, which helps preserve the unit's integrity.

Stacking in a maximum of four rows is allowed. When transported or stacked, the unit must be in an upright position.

# **Disposal**

The unit is subject to disposal upon completion of its service life. No special disposal requirements are specified.

Certificate	
Potok 150-M-0	1 standalone air disinfection unit (Premier)
Serial number	Date of manufacture
technical spe	tested and packaged in accordance with the requirements of ecifications 9451-001-17481392-94 TU and desig KD 9451.001.00.000 and accepted as fit for use.
	Head of Quality Control Department
L.S	personal signature print full name
	year, month, date
Warranty sli	ip
Potok 150-M-0	1 standalone air disinfection unit (Premier)
Serial number	Date sold
	Stamp here
	Notes on warranty slip (date of receipt, date of handover)
The war	ranty period shall be extended by the warranty repair period

#### MANUFACTURER'S WARRANTIES

The manufacturer guarantees the unit compliance with the technical specifications, shall the customer follow the operation, transportation and storage conditions and requirements specified in the Operation Manual.

The warranty repair as well as elimination of any failures caused due to the manufacturer's fault, provided free of charge during the whole warranty period.

Warranty operation period of the unit -	
from the date sold.	

The unit is not subject to warranty repair in the following cases:

- Absence of a warranty slip; corrections in the warranty slip; the unit serial number does not correspond to the number specified on the warranty slip; damage or gluing traces of warranty labels
- Improper use of the unit; visual mechanical damage (chips, cracks, etc.); traces of chemically aggressive substances; malfunctions caused by foreign objects, liquids and concentrated vapors
- Natural disasters (lightning, fire, flood, etc.), and other causes that are beyond the reasonable control of the manufacturer and customer and that caused the unit damage

Warranty repair of the faulty unit shall be performed by the manufacturer: Potok-Inter LLC

Address: 115162, Moscow, Khavskaya str. 18, bldg. 2;

Tel./fax: +7 (499) 678-2099; e-mail: post@potok-inter.ru.

In case of the unit failure during the warranty period, the customer is advised to take one of the following actions in order to perform unit maintenance:

- call the manufacturer
- fill out an application for warranty repair and send it to the manufacturer's address
- fill out an application for warranty repair and deliver the unit together with the warranty slip to the manufacturer.

# Warranty repair application request

(to be filled out by customer)

Potok 150-M-01 standalone air disinfection unit (Premier)

Serial number Date sold

Customer (name, contact phone, address)

Brief description of failure

# Warranty repair slip

(to be filled out at the manufacturer's location during repair)

Potok 150-M-01 standalone air disinfection unit (Premier)

Serial number Date sold

Customer

Troubleshooting operations completed

(Customer's signature) (Foreman's signature)

Date accepted Date of repair completion