

Activ Cryo

Manual guide



Metrics

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Manufacturer**

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Table of Contents

1	Description	5
2	Technical parameters	6
3	External dimensions of the cryosauna	8
4	Recommendations	10
5	Room	10
6	Cryosauna nitrogen supply	11
7	Cryosauna commissioning	14
8	Use of Activ Cryo	15
9	Settings	26
10	Dry	27
11	Freeze	28
12	Service	29
13	Rules for safe use	30
14	Indications and contraindications	32

Description

Activ Cryo device is intended for hospitals, spas, rehabilitation and wellness and fitness centres, as well as individual customers for execution of individual systemic cryotherapy.

The source of cold in Activ Cryo cabin is liquid nitrogen supplied from cryogenic tank. The cryosauna is equipped with moving floor that adjusts its position to the height of the patient, so that the person is submerged to the shoulders, with head above the layer of cold gas, allowing for breathing the air from the general room.

The operation of the device is based on the liquid nitrogen evaporation system that supplies the nitrogen to the cabin in volatile form in order to produce and maintain low temperatures. Activ Cryo is operated using a built-in automatic system, controlled using LCD touch panel.

The temperature is adjusted by the operator during the treatment within the range of -120 to -160°C , the treatment time is also adjusted to the duration of up to minutes 3. The operator may select any treatment time and temperature individually for each patient. Regular daily treatments, initially 25 sessions, and then 20, 15 and 10 every 6 months, are recommended.

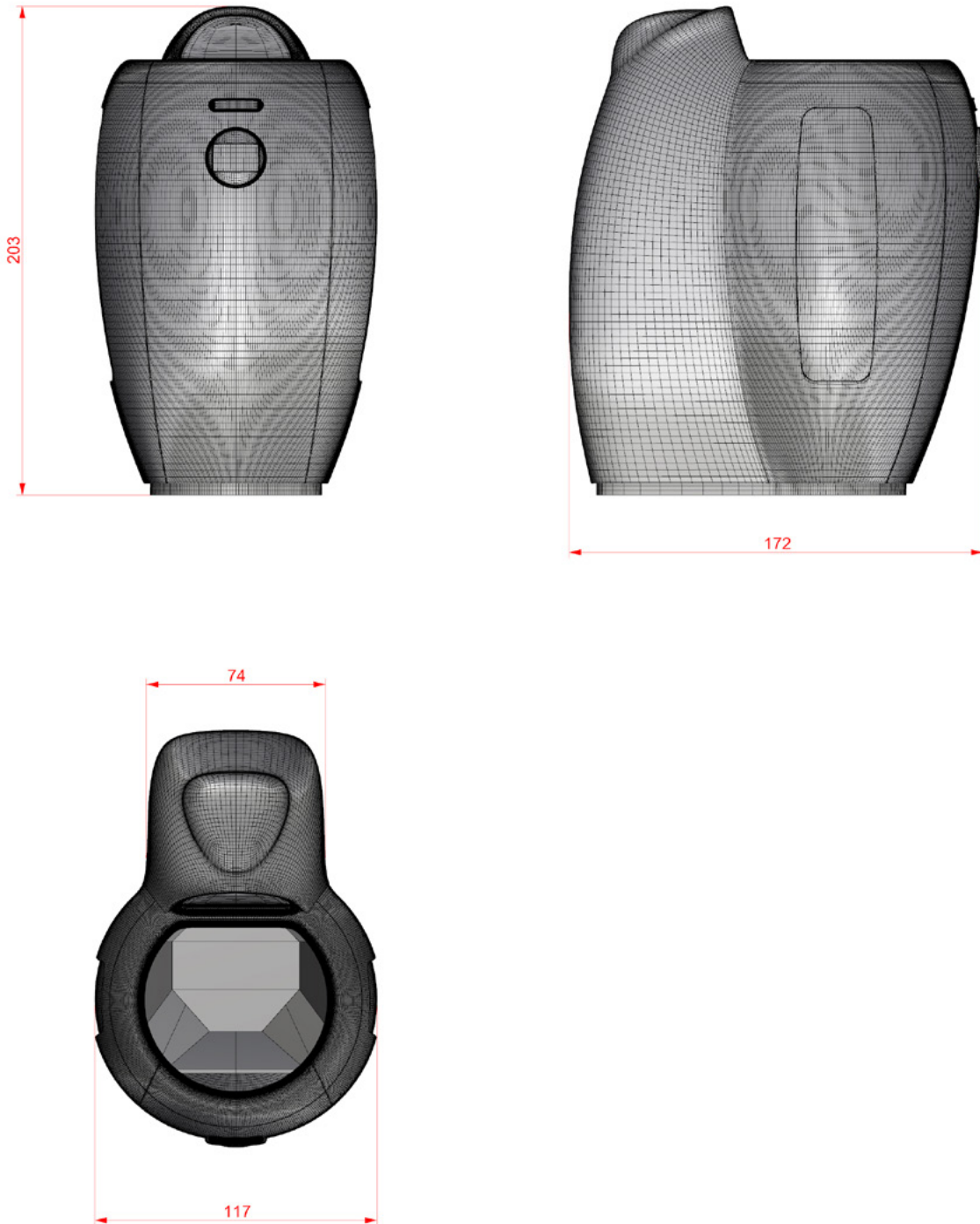


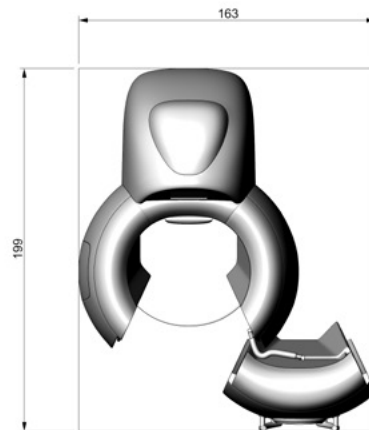
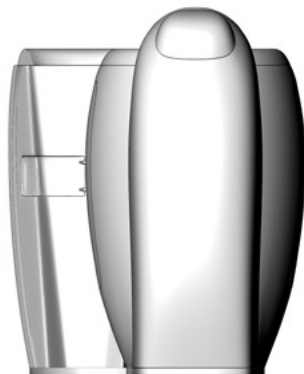
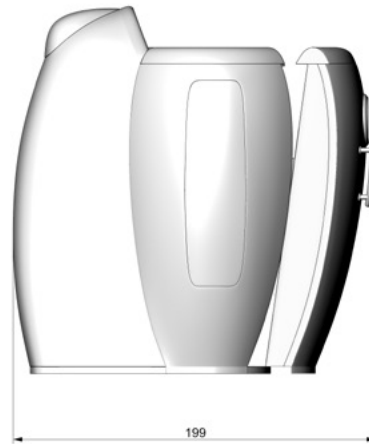
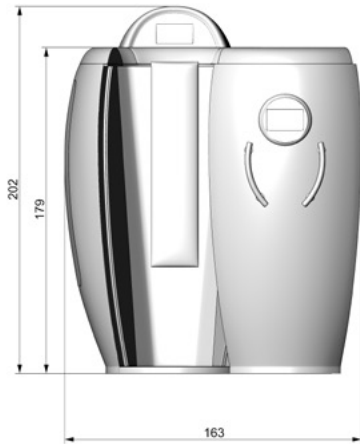
Technical parameters

Overall dimensions	
Width	1,170 mm
Lenght	1,720 mm
The total height (with the counter)	2,030 mm
The total height (without the counter)	1,800 mm
Height of the participant of the treatment	min. 150 cm
Weight of the participant of the treatment	Max. 180 kg
Electrical parameters	
Nominal electrical energy consumption	1.5 / 2 kW
Power supply	230/50 V/Hz

Technical parameters	
Temperature range in the cabin of CRYO-SAUNA during a session (adjusted)	-120 to -160 °C
Freezing time of the cabin of CRYOSAUNA (start-up)	4 to 8 min
Single session time (adjusted by the operator)	1 to 3 min
Nominal time of a single session (recommended)	90 sec
Maximum time of a single session	3 min
Maximum interval between subsequent sessions	3 min
Nominal nitrogen consumption	
CRYOSAUNA cabin freezing	~ 5 ÷ 8 kg
During a session	~ 1 ÷ 2.5 kg/min

External dimensions of Activ Cryo





Recommendation

- A patient receiving a treatment enters into the cabin of cryosauna wearing an appropriate protective clothing:
 - o swimsuit for women and shorts for men, thick knee socks, protective footwear e.g. wooden shoes, and gloves (preferably made of cotton);
- Make sure that the patient entering the cabin does not wear any jewellery.
- Person receiving a treatment may not breath the mixture of cold gases
- present in the cabin of cryosauna;
- Cryosauna must be located in a room equipped with properly working
- mechanical ventilation;
- Activ Cryo may be operated by well-trained person only.

Room

It is recommended to install Activ Cryo cryosauna in a separate room. The room should:

- not be smaller than 10 - 15 m² and should not be of height less than 250 cm;
- be equipped with efficient mechanical ventilation of appropriate number of exchanges per hour;
- have 2 kW single-phase electrical socket;
- be equipped with an efficient analyser of oxygen concentration in the air (oxygen detector) informing about the decrease of the oxygen content below 19%;
- Only personnel operating the cryosauna and the participant of the session may be present in this room.

Cryosauna nitrogen supply

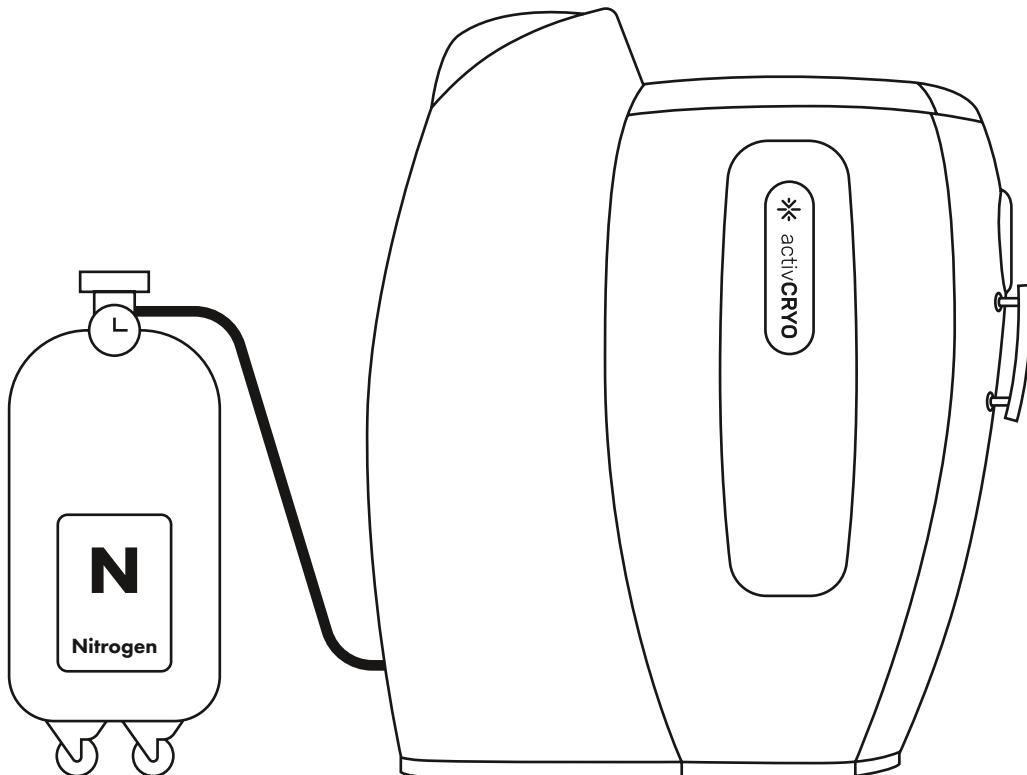
Activ Cryo is supplied in nitrogen from a portable or stationary liquid or compressed nitrogen cryogenic vessel. This vessel is connected via stub connection of Activ Cryo with stainless still cryogenic hose in flexible pleated braid with Missel Robust insulation. VacuActiv cryosauna is the only one that can be supplied in nitrogen in two ways. The first of them is an internal portable tank (located inside the device) filled with liquid nitrogen. The second manner of supplying Activ Cryo in nitrogen is an external portable or fixed pressure vessel. Portable pressure vessel may be installed right next to the device using a cryogenic pressure hose of 1.8 m length or in adjacent room. In case of greater nitrogen demand, a fixed external vessel (1000 L or larger) may be installed right outside the facility.

Portable liquid nitrogen vessel installed inside Activ Cryo device.

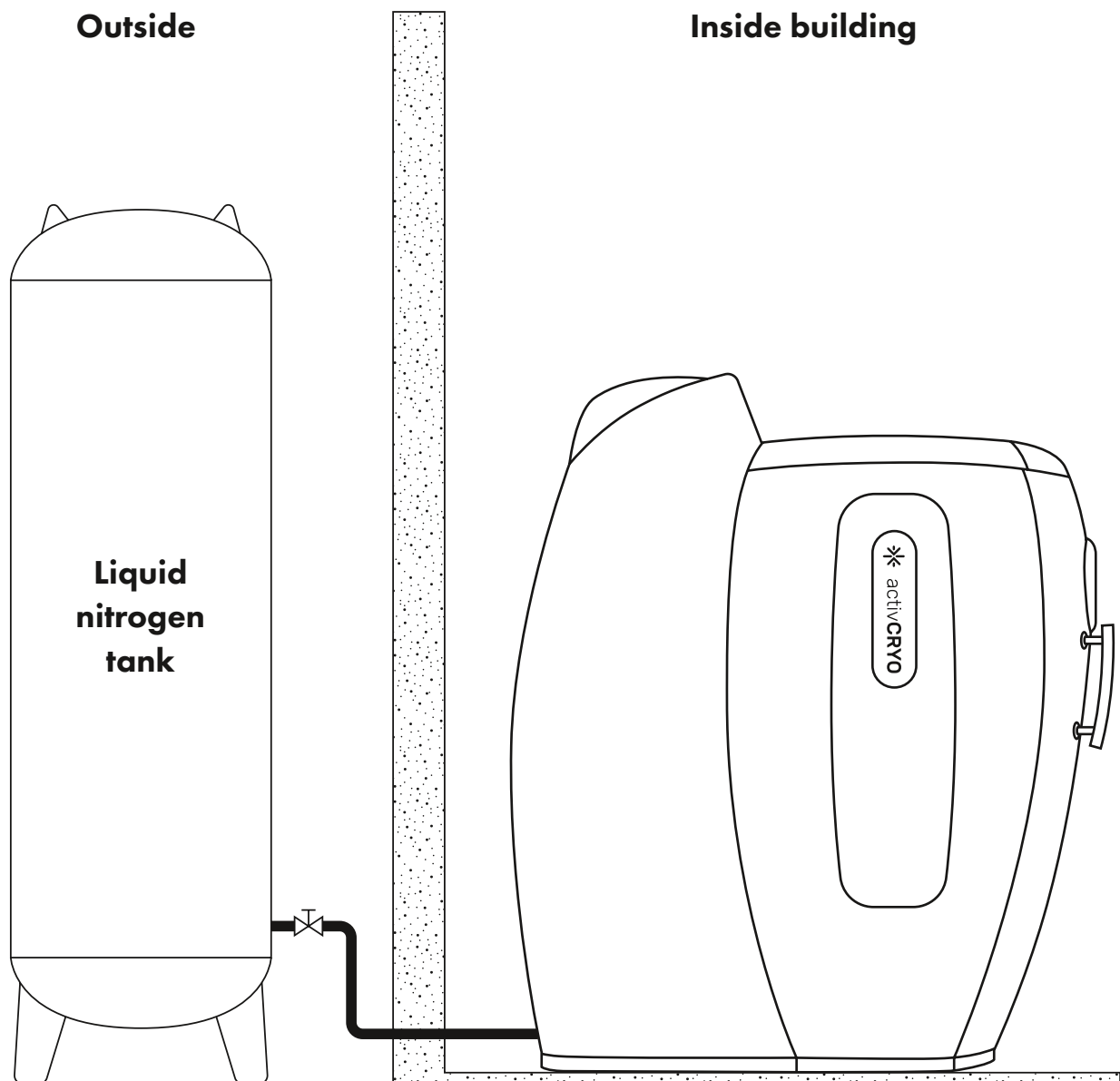
Note!

1. It is essential to follow rules included in the instruction manual.
2. The guarantee does not cover mechanical damage caused by the user or damage resulting from improper use of the device.
3. The cryosauna may be operated only by persons appropriately trained by the installer. The personnel training must be approved by issuing of training completion certificate.
4. Any repairs and adjustments may be carried out by authorised service personnel, trained by producer. In case of occurrence of defects such as:
leakage current, sparking etc., the device must be immediately disconnected from the power supply (disconnect the plug from the socket) and service must be called in order to remove the defects.

External portable pressure vessel installed outside ActivCryo device.



External fixed pressure vessel installed outside the building.pressure vessel installed outside ActivCryo device.

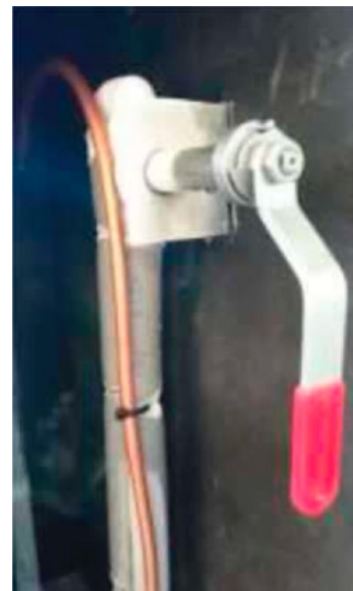


Commissioning of Activ Cryo

Before commissioning, make sure that the connections between the device and the electrical installation and nitrogen supply installation are correct.

Insert the cryosauna's power plug into a socket with a protective pin and protective ground-fault circuit breaker.

1. Check and, if needed, set the working pressure in the cryogenic tank or in the nitrogen supply system at the level lower than 20 psi (1.2 bar).
2. Open the main valve located on the liquid nitrogen vessel or open the valve of the nitrogen supply installation.
3. Open the main manual cryogenic valve in the device.



AFTER COMPLETING THESE ACTIVITIES, MAKE SURE THAT THE INSTALLATION IS TIGHT. IN CASE OF UNSEALING OF THE INSTALLATION, IMMEDIATELY CLOSE THE INSTALLATION AND CONTACT THE SERVICE. DO NOT ACTIVATE THE DEVICE UNTIL THE FAILURE IS REMOVED.

Use of Activ Cryo

1. Press the **MAIN SCREEN**



TIME - current time

TEMPERATURE - actual temperature in the device °C/°F

2. Select program



SETTINGS - settings

HOME - return to the main screen

PROGRAM - Activ Cryo programs

ACTIV CRYO PROGRAMS:

- **BEGINNER** - treatmentduration60s,temperature- 120°C
- **INTERMEDIATE** - treatmentduration120s,temperature- 140°C
- **ADVANCED** - treatmentduration180s,temperature- 160°C
- **MANUAL** - individual settings of treatment duration and temperature



In **MANUAL** mode, after pressing **SET SESSION TIME**, set the treatment duration and confirm by pressing OK.



In case of need to change the temperature of the treatment press **SET SESSION TEMPERATURE**, and press OK after making the change.



FREEZING

Before starting the first treatment, freeze the cabin.

To do this, press **PRE-FREEZING** button located in the bottom right corner, or select **SETTINGS** in the main menu.



Freezing consists of lowering the temperature in the cabin in order to prepare it for treatments. The freezing process lasts 240 s and is carried out when the cryosauna is empty, without the treatment participant. Do not freeze the cabin when there is a person present inside the cryosauna, as it may lead to serious burns and frostbites.

Press START and wait until the freezing process is completed.



Upon completion of freezing, begin further actions.

Open the door of ACTIV CRYO and let the participant enter.

The participant must wear warm, cotton knee socks, cotton swimsuit, cotton gloves, and, in case of men, two pairs of shorts.

Close the cabin door.



Using up/down arrows lift the participant to the appropriate height, so that his or her head is above the edge of the cabin, so that he or she can breathe the air from the room and not the mixture of cold gases from the cryosauna cabin.


The participant of the treatment may not breathe the mixture of cold gases present in the cryosauna cabin, as this may result in strangling and faint, or even death.


After proper positioning of the participant, start the selected program of the treatment using.





After completion of the treatment, open the door of the cryosauna.

The participant may leave the cabin of the cryosauna when the lift is lowered to the bottom by pressing 

The treatment may be stopped at any time by pressing 

After pressing  the lift with the participant is automatically lowered to the bottom.

Then, by opening the door allow the participant to leave the cryosauna.

Before starting the treatment, each participant must be informed about the possibility to stop the treatment. Treatment duration exceeding 60 s may be used only in case of persons of increased resistance to low temperatures.

After allowing another participant to enter, we repeat the aforementioned operations. Select the program, set the lift height, start the program.

It is recommended to make the breaks between subsequent treatments as short as possible, preferably several seconds. If the breaks are longer than 2 minutes the temperature in the cryosauna cabin during the treatment may not achieve the set temperature of the treatment,

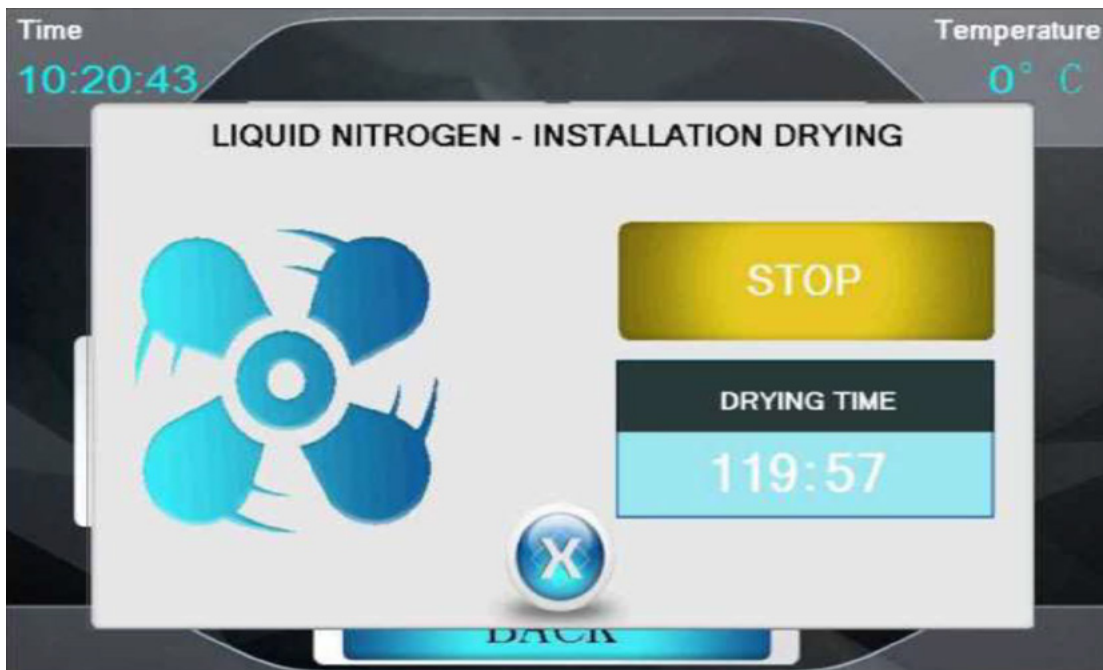
thus increasing the consumption of nitrogen. If the break between treatments is longer than 5 minutes, repeat FREEZING. Only after freezing the program may be selected and the treatment started.

After the last participant leaves the ACTIV CRYO, start **DRYING**

To do this select **SETTINGS**



Then press **DRY** and start it by pressing **START** button.



DRY

The drying process is carried out when there are no persons inside the cabin. It consists of removal of cold gas from the cabin of the cryosauna outside the room. The drying process lasts 120 min with the cryosauna door open. After completion of the process the screen automatically returns to the MAIN SCREEN.

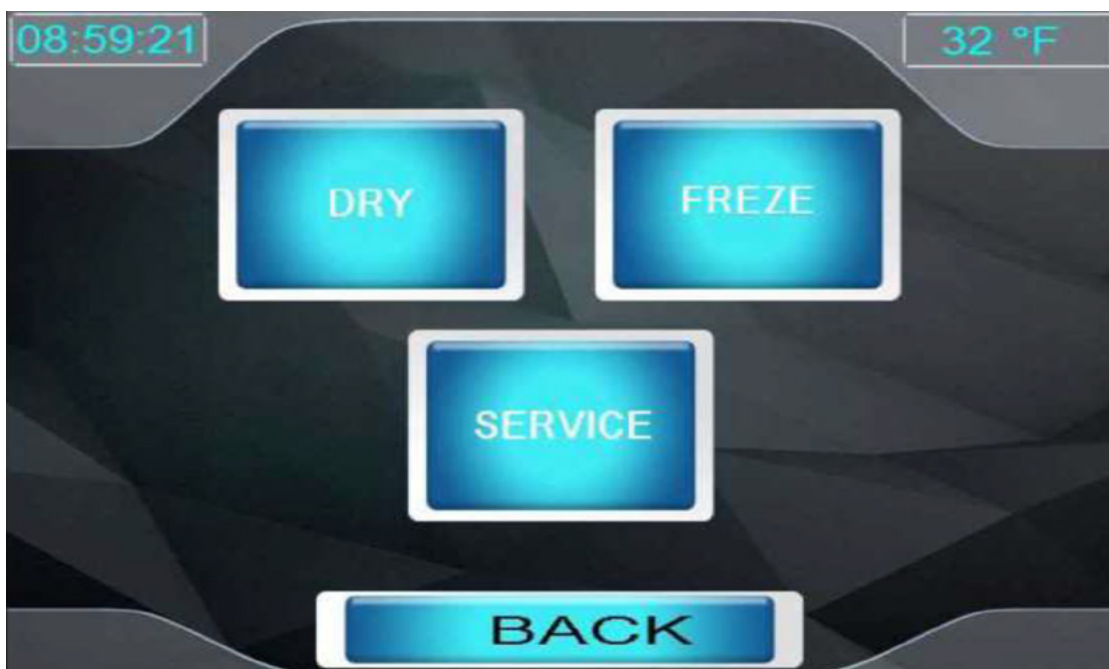
After completion of the DRYING process, close the cabin door and turn the device off by disconnecting the power plug from the socket.

Remember about closing the manual valve in the cryosauna and to turn off the valve located on the nitrogen tank.



Activ Cryo settings

To enter the settings of Activ Cryo press **SETTINGS**



Dry



The drying process is carried out when there are no persons inside the cabin. It consists of removal of cold gas from the chamber of the cryosauna outside the room. The drying process lasts 120 min with the door open. After completion of the process the screen automatically returns to the **MAIN SCREEN**.

Freeze



Freezing consists of lowering the temperature in the cabin in order to prepare it for treatment. The freezing process lasts 240 s and is carried out when the cryosauna is empty, without the treatment participant. Do not freeze the cabin when there is a person present inside the cryosauna, as it may lead to serious burns and frostbites.

Service



Information regarding actual temperatures in ActivCryo. It allows to appropriately control the operation of the cryosauna.

Rules for safe use of Activ Cryo

The cryosauna may be operated only by persons appropriately trained by the installer. The personnel training must be approved by issuing of training completion certificate.

Any repairs and adjustments may be carried out by authorised service personnel, trained by producer. In case of occurrence of defects such as: leakage current, sparking etc., the device must be immediately disconnected from the power supply (disconnect the plug from the socket) and service must be called in order to remove the defects.

Basic risks for the users of the cryosauna:

- Risk of falling out of the user from the cabin during the treatment;
- Risk of suffocation;
- Risk associated with the possibility of fall when leaving the cabin of the cryosauna;
- Skin burns (frostbites) after too long exposure to very low temperatures; - Skin burns (frostbites) after direct contact with nitrogen;
- Electric shock.

Each time after the nitrogen intake valve is opened, the person operating the cryosauna should visually control the cryogenic nitrogen installation in order to detect any leaks. In case of finding any leaks in the installation, close the valves and call the service in order to remove the leaks. Do not remove leaks on your own. Removal of leaks by unauthorised persons may cause serious burns (frostbites).

The producer requires the users to use protective clothing in a form of:

- thick, preferably cotton, knee socks;
- footwear with thick sole;
- gloves, preferably made of cotton;
- swimsuit in case of women;
- two pairs of shorts in case of men - preferably made of cotton.

Do not enter the cryosauna if you are sweaty. Sweaty persons must carefully wipe dry using a towel and wait to cool down. Do not enter the cryosauna directly after physical exercise, physical effort, swimming in a swimming pool, hydro massage, sauna etc. People under the influence of alcohol and drugs may not enter the cryosauna. The participant of the treatment may receive the treatment again after a period of time not shorter than 8 hours.

A participant may receive a treatment up to 2 times a day.

The participant of the treatment must hold his or her head above the upper edge of the cabin, so that he or she can breathe the air from the room, and not the mixture of cold gases from the cryosauna. Breathing the mixture of cold gases may result in suffocation and fainting.

Each time the participant leaves the cabin of the cryosauna, the door is opened. The mixture of cold gases is "poured" from the cabin to the room, in which the cryosauna is located. Repeating the treatment many times may result in excessive reduction of oxygen in the air mixture, which in turn may result in suffocation of the personnel. The cabin of the cryosauna must be located in a room equipped with properly working mechanical ventilation. The room must be equipped with an active oxygen detector, which informs the personnel about the drop of oxygen content below 19%. In case of drop of oxygen content in the air below 19%, immediately stop the treatment and ventilate the room.

For safety reasons, the door of the cryosauna is closed only using magnetic holders without additional locks or bolts and may be opened at any time even by a person that is inside. Therefore, pay special attention to prevent the participant present inside the cabin from leaning against the door of the cryosauna, since the door may open due to pressure, making the participant fall out of the cabin.

The operators of the cryosauna must maintain eye contact with the patient inside and may not move away from the cryosauna.

Indications

Systemic cryotherapy treatment is kind of opposite to the Finnish sauna. First of all, it has remarkably beneficial effect on the psyche, it significantly improves mood, makes the feeling of depression and fatigue disappear. A completed session provides a feeling of physical relaxation, vigour and well-being. Therefore, a session of cryo bath is also relaxing.

Use of the cryosauna:

- accelerates post-exercise restitution;
- supports endurance and performance training;
- supports fighting with overweight and cellulitis;
- accelerates the healing processes;
- supports athletes;
- reduces muscle tension;
- increases muscle endurance;
- slows down the aging processes;
- increase the immunity;
- supports recovery of professional athletes and adults who are physically and mentally tired;
- increases the range of motion;
- is an element of prophylaxis of motor organs overstraining;
- supports treatment of muscle, joints and spine overstraining syndrome;

Use of systemic cryotherapy is particularly desirable in case of the following:

- emergency aid and treatment of early burns;
- to induce homeostasis of internal bleeding from gastrointestinal tract and external bleeding e.g. extensive abrasion of the epidermis;
- recovery of professional athletes and adults who are tired physically and mentally;
- comprehensive therapy of rheumatic and degenerative diseases, soft tissue rheumatism;
- primary and secondary degenerative diseases of the motion system;
- acute and strenuous injuries, including sport and post-surgery injuries, not disturbing but even speeding up the healing processes;
- treatment of rare autoimmune diseases and collagenoses;
- bone diseases with primary and secondary osteoporosis;
- combating chronic pathological pain;
- combating reflex and centrifugal spasticity of muscles in the process of neurological rehabilitation.

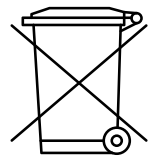
Contraindications

Contraindications for the use of the cryosauna: - cold intolerance;

- Raynaud's disease;
- cryoglobulinemia;
- cryofibrinogenemia;
- cold urticaria;
- central nervous system diseases;
- purulent and gangrenous skin lesions;
- agammaglobulinemia;
- debilitation and hypothermia of the body;
- influence of medication, especially neuroleptics, and alcohol; - anemia;
- local blood disorders;
- hypothyroidism;
- sympathetic nervous system neuropathies;

WARNINGS

The device is recycled. Dispose of used electronic parts only in the bins designated for them, or go to the nearest waste collection center.



- The device must be placed on an even surface. Make sure that the electric cable is not damaged.
- Make sure that after turning the device on, there are no objects in the vicinity that could damage the device or cause an injury to the exerciser.
- All kinds of repairs should be made by an authorized service center.

Thank you for purchasing our devices. Despite all efforts to ensure the highest quality of our products, errors or minor omissions occasionally occur. Please contact your nearest distributor if it turns out that your device is defective or any part is missing.

ATTENTION

Read the instruction manual before starting the assembly of the device and training.

Tension

Before connecting the electric cord to the socket, make sure that the voltage in the socket is the same as the voltage needed for the proper operation of the device. The appliance must be connected to an electrically grounded socket outlet that will match one of the plugs shown in the figure below. Detailed information about the voltage can be found on the nameplate.

Ground

The device must be connected to a grounded electrical outlet. If the equipment break down or malfunction, grounding will provide less electric power and reduce the risk of electric shock. The electric cable is terminated with a grounded plug. The device must be connected to the socket that matches the plug of the device.



115V EURO 208-220V
NEMA 5-20 CEE 7/7 NEMA 6-15

Requirements

Grounded socket
circuit: 115 VAC 5%, 60HZ and 20 Amp; 208
/ 220V, 60HZ, 15 Amp or 230V 5%, 50HZ

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