



Instruction for use

SURGYBLUE

SURGY-00-AA

Accessory for Medicons®

Document Revisions Summary

Date	Version	Author	Modification Type	Modification Description	Major Impact
07/10/2021	0	CC		First emission	
23/03/2022	1	CC		Procedure change	
12/04/2022	2	CC		Insert of pictures	
03/06/2022	3	CC		Change of start-up time	



This User Manual contains instructions for using the Surgyblue reusable device and it is available and downloadable in pdf format at www.emc-computers.ro/surgyblue/. The website contains also the form where to contact technical support.

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1. Technical features

The SurgyBlue device is powered by 4 batteries AA LiFe. The device has 3 buttons, an LCD display to communicate with the user and a motor (84 RPM with > 400mN in stall) designed to rotate the Medicons® for a period of time that can be set by the user. The device is equipped with automatic Power-Off and Sleep mode functions to preserve the life of the batteries, which can reasonably be estimated in 4-5 hours of non-continuous operation, presenting the single mission a duration of approximately 100-200 seconds.

1.1. Buttons

“Up” Button: Increases the amount of seconds

“START/PAUSE” Button: Switches on the devices and activates the motor



Fig. 1

“Down” Button: Decreases the amount of seconds

START/PAUSE Button: With the device switched off, pressing the START/PAUSE button for approx. 1,5s switches the SurgyBlue on. The initial logo is displayed and, after few seconds, the battery voltage in mV is displayed for 2 seconds, see Fig. 1 (note: a value greater than 4500mV indicates fully charged batteries); then only the standard processing time pre-set at 30 seconds appears. With the device activated (with the motor running), pressing the START/PAUSE button pauses processing (thus stopping the motor) until the same START/PAUSE button is pressed again to reactivate it, continuing the interrupted count-down without restarting it.

Up&Down Buttons: They change the processing time when the cycle is off and the device on, from a minimum of 30 seconds to a maximum of 180 seconds. They are also used in Sleep-mode to get out of it, returning regularly to function. During processing and during processing pause, these keys are unusable. When the device is turned off, the Up & Down buttons have no function.

Modality: Sleep-mode & Power-Off.

The *Sleep-mode* lowers the brightness of the display to 20% and shows the last working time set in a sliding way on the display, to avoid the memory effect, and to indicate to the user that the device is in *Sleep-mode* and not in *Power-Off*. It intervenes after 30 seconds of inactivity outside a working cycle. It is also active during processing pauses. To exit the *Sleep-mode* it is necessary to press the + key or the - key, while the START/PAUSE key has no effect.

The *Power-Off* completely shuts down the device, intervening after 5 minutes of inactivity. Any modification of the processing time is lost. After the *Power-Off*, the device must be switched on again with the START/PAUSE button, starting from the standard 30s.

2. Instructions for connecting Medicons®

Before using the SurgyBlue, make sure that it is contained in a suitable packaging and that the unit packaging has not suffered damage from falling / impact / crushing or other mechanical damage; repeat the same check on the Medicons® packaging. Also check that the product code is SURGY-00-AA.

Once the suitability of both devices has been ascertained, connect them mechanically as shown in the image below, using the supplied connection shaft:



Fig. 2

Fig. 3

Make sure during the mechanical connection that the SurgyBlue and Medicons® assembly is vertical and on a stable surface. Firmly hold the Medicons® with any hand (the most comfortable for the operator) which, once the SurgyBlue is started, will be subjected to a slight counter-rotating torque and must be kept still. For this purpose, wings were inserted laterally to the Medicons® (Fig. 4).



Fig. 4

Remember that Medicons® is not stuck in SurgyBlue, therefore it is necessary to keep it still and vertical with one hand (the one that does not hold SurgyBlue) in order to avoid detachment during the processing cycle.

3. Instruction for use

Once the devices are properly connected, turn on the SurgyBlue by pressing the START/PAUSE button for 1,5s approx. Be sure to press the buttons gently and axially, until you hear a slight click. The device will respond by turning on the display, showing the initial logo in blue and, after 4 seconds, showing the battery voltage in mV, at the bottom left in green (Fig. 5).



Fig. 5

Subsequently, only the standard processing time pre-set at 30s appears in blue in the centre of the display, and the number of residual cycles at the bottom right, in green (Fig. 6).



Fig. 6

It is possible to change the time set in 10s steps by using the Up & Down buttons, always pressing gently and axially, until you hear a slight click. After setting the desired time, press the START/PAUSE button to start the cycle. The working time counter will be decremented every second: the colour of the digits will be white for times over 30 seconds, yellow from 29 seconds to 10 seconds and red from 9 seconds to 0. 0 is not displayed, the count starts from the number set (es. 30s) and goes down to 1. 0 stops the motor. At the end of the cycle, the counter will return to the pre-set standard value of 30s (in blue) and you will notice the decrease in the number of cycles left in the lower right corner (in green) (as in Fig. 6 but with 14 remaining revolutions instead of 15, for example).

It is possible to carry out up to 20 + 1 cycles of maximum 120s each.

In case of no operator input for over 1 minute, the device will automatically go into *Sleep-mode* to conserve the batteries.

To pause a machining in progress, a slightly longer pressure of the START/PAUSE button (at least 400ms) is required until the seconds counter remains stationary; to restart it, press the START/PAUSE button again for a shorter time than before (about 100ms).

At the end of use, separate the Medicons®.

4. Conservation and storage information

Store this device in a suitable, dry and clean place, at temperatures no higher than 40°C, no lower than 5°C and in conditions of humidity below 80%. It should be noted that the residual life of the batteries contained therein, or the ability to make the device work according to the parameters indicated, is strongly inversely dependent on the temperature with reversible effects in the short term; for this purpose, the user is advised that, if the device has been stored for a long time at temperatures below 18°C, it is necessary to bring the device for a few hours at room temperature (> 18°C) to allow the batteries to recover their functionality to the fullest.

Keep away from sources of heat and flames.

Keep the device in its original packaging.

5. Warnings

- Use the device only with Medicons® disruptors. Use with any other type of disruptor or rotating tool could irreparably damage both devices, and is therefore absolutely prohibited;
- Connect the device and Medicons® following only the instructions provided;
- Use and handle the device only with gloves;
- Do not handle and use the device with dirty gloves;
- Do not handle and use the device with wet hands and / or gloves;
- Do not turn on the device without first connecting Medicons®;
- Do not open and / or disassemble the device;
- Do not use the device near heat sources;
- Do not use the device in conditions of temperature below 18 ° C for at least three hours;
- Do not use the device in conditions of humidity higher than 80%;
- Do not dispose of the device in unsorted collection but follow the return instructions provided in this Manual;
- In case of accidental fall of the device, do not use it and place it in the appropriate container to be returned to the relevant Distributor, packing it differently from the others so that it can be recognized by the Manufacturer and tested with greater care, to ensure that its function is not compromised;
- Vibrations and minor noises are expected from normal use of the device and are within the safety limits, therefore they do not constitute a danger to the user.