

User Manual



Vacuum therapy device
b-Lift C

Instructions for Use & Technical Description

Please read this entire manual carefully before using your new device!

This manual is an integral part of the device and must be kept for the life of the product.

This device was designed and manufactured for therapeutic use. Only professionals with proper training are authorised to use this device.

In the event of a breakdown, or if you have questions that are not answered in this manual, please contact your distributor (see stamp on last page) or Électronique du Mazet at:

Tel.: (+33) (0)4 71 65 02 16 - Fax: (+33) (0)4 71 65 06 55

Please complete the warranty certificate, found on our website www.mazetsante.fr, "Activation of your warranty", within the 15 days following installation or reception.

1 Device presentation

b-Lift C is a vacuum therapy device that can treat pathologies in the following sectors:

- *Therapeutic*: rheumatology, scarring over
- *Aesthetic*: cellulite, facelift, relaxation
- *Sport physiotherapy*: recovery of the muscle elasticity, tendonitis

Thanks to the technology used for the b-Lift C, the use and the navigation between the menus are easy to do.

The programmes are predefined in the device and most of the massage techniques can be reproduced:

- Pinching and Twisting
- Kneading
- Stretching

With those predefined programmes in the b-Lift C, you can work:

- Precisely with the little suction cups
- Globally with the bigger suction cups

For all of those programmes, the adjustable parameters are the following:

- The duration of the treatment
- The mode of pressure (continuous or throbbled)
- The pressure applied (in mbar)
- The movement of the suction cup

Those parameters can be modified and registered.

Two ways of fonctionnement can be chosen with the b-Lift C:

- The access to the treatments by a clinical guide according to the pathologies with predefined parameters but adjustable et recordable.

With this option, it is easy to use the device and it gives a security for the user.

- The access to the treatment by the custom base where all the parameters are adjustable and recordable.

With this option, the programme can be adapted to a special need.

Maintenance of the device:

- Washing the filters regularly (once a day minimum)
- Washing the suction cups after each use with an antibacterial wipe and a bleach soaking once a day.

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2 Description and technical information

- This manual was written to facilitate the use and maintenance of your b-Lift C device, from reception, to commissioning, to the successive stages of use, to maintenance. If you have questions that are not answered in this manual, please contact the manufacturer, Électronique du Mazet, or your dealer or distributor.

- This document must be kept in a safe place, protected from the elements, where it will not be damaged.

- This document ensures that the devices and their documentation are up-to-date technically at the time of sale. However, we reserve the right to make changes to the device and its documentation, without obligation to update the present documents.

- In the event that the device is transferred to a third part, you must provide Électronique du Mazet with the contact details of the device's new owner. It is imperative that you provide the new owner with all of the device's documents, accessories, and packaging.

- Only personnel who have read the present document are authorised to use this device. Non-compliance with any of the instructions contained in this document exempts Électronique du Mazet and its authorized distributors from the consequences of accidents or injury to personnel or third parts (for example, patients).

2.1 Symbols used



Warning: This symbol draws your attention to a specific point.



Operating instructions: This symbol informs you that the operating instructions must be read in order to use the device safely.



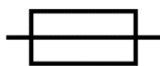
Applied part, type B: Applied part that comes in contact with the patient and can be earthed.



Recycling: This device must be disposed of at an appropriate recovery and recycling facility. Contact the manufacturer.



Protective Earth



Fuse



Warning: Device stop / start



Alternating current



Serial number



Manufacturer



Date of manufacture



Product reference



Do not lean on the device



Medical device



Unique Device Identification

2.2 Technical specifications

2.2.1 General characteristics

- Operating temperature: 0°C to 40°C.
- Storage temperature: -40°C to 70°C.
- Operating relative humidity: 30% to 75%.
- Operating altitude: < 2000 metres
- Operating pressure: between 80 and 110 kPa

2.2.2 Technical specifications of the b-Lift C

- Dimensions of housing: 350 x 320 x 140 mm
- Weight of housing : 2,8 Kg
- Housing color: white – screen: metallic grey

- Electrical power supply: 230VAC - 50Hz
- Absorbed power : 50VA (230VAC)
- Fuses: 2 x T2A-250V size 5x20mm
- Classe I electrical device
- Power indicator: display illumination

- Class Iia medical device
- Type B Applied Part.

2.2.3 Accessories

The standard version of this device comes with the following accessories:

- 1 power cord
- 1 flexible air hose
- 2 more « foam » filters washable (the device comes equipped with a filter)
- Conectors 1/8'' to be adapted on most of the suction cups
- 1 user manual

The use of accessories not recommended by the manufacturer exempts the manufacturer from liability.

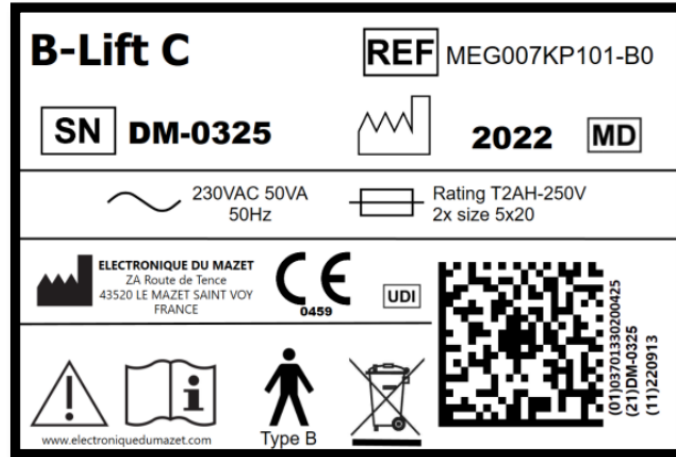
The accessories supplied are not destined to be placed in direct contact with the patient, so they are reusable after a washing.

It is the practitioner responsibility to select the adapted suction cups to do the treatment on the patient.

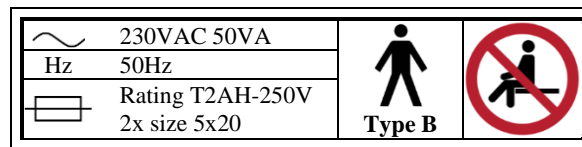
2.3 Nameplate label

The nameplate label on the back of each device provides information and characteristics.

2.3.1 Device's nameplate label



2.3.2 Mains socket's / accessory's nameplat label



3 Warnings



WARNING: Install the device on a flat and stable surface. Do not obstruct the ventilation opening (no objects within 4cm)



WARNING: The multi-socket power strips must not be laid on the ground. No other electrical device, nor other power strip, may be connected to the device's power strip.



WARNING: The device must be plugged in a socket with an earth terminal (Class I electrical device).



WARNING: The device must be positioned in such a way as to ensure that the power cable remains accessible in the event of an emergency.



WARNING: In the event of an emergency, unplug the power cable directly from the device.



WARNING: No modification of the device is authorised. Opening the device's housing is expressly prohibited.



WARNING: This device complies with applicable electromagnetic compatibility standards. If you notice that your device malfunctions in the presence of another device, due to interference or otherwise, contact Électronique du Mazet or your distributor for advice on how to avoid or minimize potential problems.



WARNING: Operating altitude: less than 2000m.
The device's performance diminishes with altitude.



WARNING: This device must be used with the accessories supplied by the manufacturer.



WARNING: This device must not be accessible to the patient.
The minimal distance between the patient and the device is at least 1,5m.
It must not be placed in contact with the patient.



WARNING: This device has not been manufactured to be used with creams, essential oils or every other product, their use can cause an obstruction of the piping and a premature wear of the suction cups.



CAUTION: Any serious incident occurring in connection with the device must be notified to the manufacturer and to the competent authority of the Member State in which the user and/or the patient is established.

4 Precautions

4.1 Potential risks

The application of an excessive aspiration with an oversized suction cup, on a fragile part of the body, during a too long time, can provoke a rupture of the capillary vessels, and a bruise. The practitioner must disconnect, as soon as possible, the fast connector that is linking the hose to the suction cup, in order to put the patient's skin at atmospheric pressure.

4.1.1 Power outage

In the event that a power failure occurs during a treatment, disconnect the pneumatic connector level with the suction cup in order to release the depression applied on the skin.

4.1.2 Particular case of using big suction cups

While using big suction cups, it is important to reduce the value of the depression asked, in the case of a too high depression, the risk of bruises is increased.

4.1.3 Treated areas

Regulate the power and the diameter of the suction cup according to the area to treat. The device is not provided to be used on mucous membranes, endocavitary or sensitive areas (eyes, eardrums...). A such use could generate irreversible lesions.

4.1.4 Fluid aspiration

The device is not provided to vacuum any type of fluid. In the case of an involuntary aspiration, stop immediately the device, unplug the aspiration hose, and substitute the filter on the back of the device by a dry filter.

4.1.5 Deteriorated suction cup

Cracks on the suction cup can generate a drop of the depth of the vacuum and reduce the performances of the device.

If the impact is more violent, the break of the suction cup or of the massage roller accessory can have sharp edges.

Immediately substitute it by a new one.

5 Device installation

Open the cardboard packaging, remove the accessories and the b-Lift C device.

Remove the light plastic sheaths that cover the device

Check the contents of the box by looking at the **packing list** included with the documentation.

Check that the contents of the box are not damaged, if you are concerned about the condition of the device or its accessories and the device's ability to function properly is called into question, please contact Électronique du Mazet.

If the device was stored in a cold environment and there was a risk of condensation, **allow the device to rest at room temperature, approx. 20°C, for at least 2h, before turning it on.**

We recommend cleaning the device and its accessories before the first use (see **§8Maintenance, Servicing**).

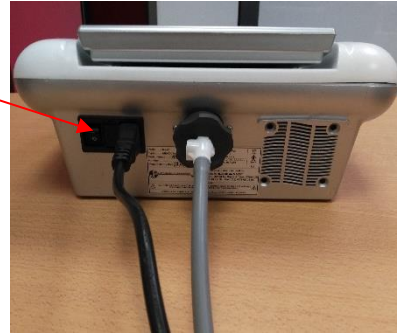
Install the device on a stable support that is at working height and outside of the patient's area (at least 1,5m).

Check there is a foam filter
unscrewing the filter support.



Plug the power cord on the back of the device.

Plug the flexible air hose thanks to the pneumatic
Connector on the back of the device.



Case of using a suction cup on an applicator tool:

Plug the other side of the flexible air hose to
the applicator tool and screw the
suction cup previously washed.



Case of using a suction cup directly on the flexible air hose:

Screw a connector on the suction cup previously washed
Plug then the suction cup on the hose.



6 User Manual

6.1 Getting to know the device

6.1.1 Power on / Start-up / Stop

Power on the device with the switch on the back of the device (Position I: On / position 0: Off) (See § **Device Installation**).
The home screen comes up and displays the software version.



6.1.2 Using the touch screen

The “action” buttons on the touch screen are used to display lists of choices on the screen, confirm choices, and navigate through the menus. To access the desired function; press in the indicated area.

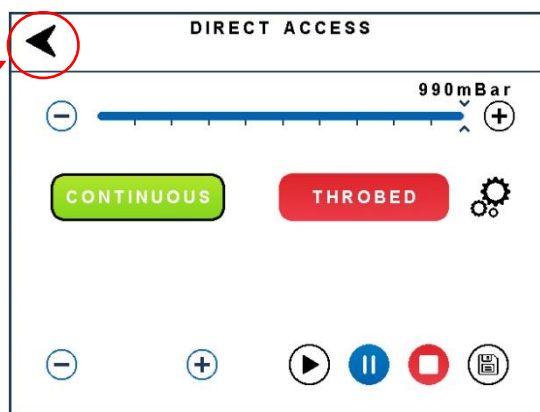
6.1.3 Main menu

By pressing the corresponding key, this menu allows you to access:

- The direct access menus
- The pre-registered programmes “**Programmes**”
- The customised treatments “**Custom Base**”
(See §6.2.3 Choosing a treatment from the custom programmes)
- Technical information and settings: “**Configuration of settings**” (See §6.6 Technical information, Configuration & Settings)



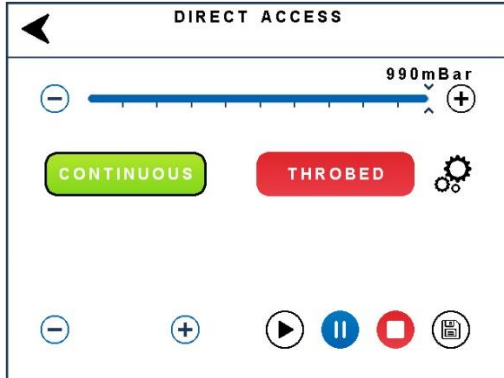
All menus that can be accessed subsequently will be equipped with a button that will allow you to return to the main menu (in the top-left of the screen)



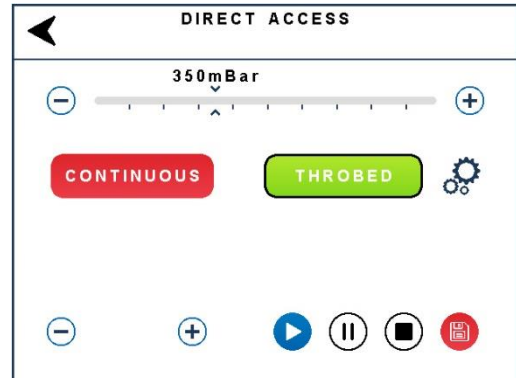
6.2 Choosing a treatment

6.2.1 From a treatment in Direct Access

The device displays the “Treatment” menu



Mode **Continuous**



Mode **Throbed**

6.2.2 From a diagnosis

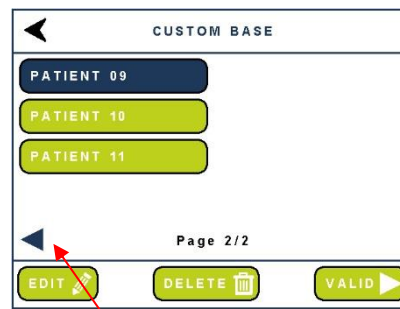
Select the pathology to treat by pressing the corresponding action key allows access to the menu §6.3 Changing the settings.

The detail of the predefined parameters for each pathology is detailed in §7 Clinical Guide.

6.2.3 From custom programmes



This icon takes you to the previous page



This icon takes you to the next page

Your own programmes (until 40 spaces), distinguished by the name you gave them (16 characters available), can be assigned to your patients or specific pathologies.

Click on the treatment chosen to go to the menu §Changing the settings.

6.3 Changing the settings

At the moment of accessing to the treatment, and before launching it, it is possible to change the settings “Time” (of the treatment) and “Depression” clicking on the buttons “+” or “-”. It is also possible to choose the depression mode wanted clicking on “Continuous” or “Pulse”.


6.4 Perform a treatment

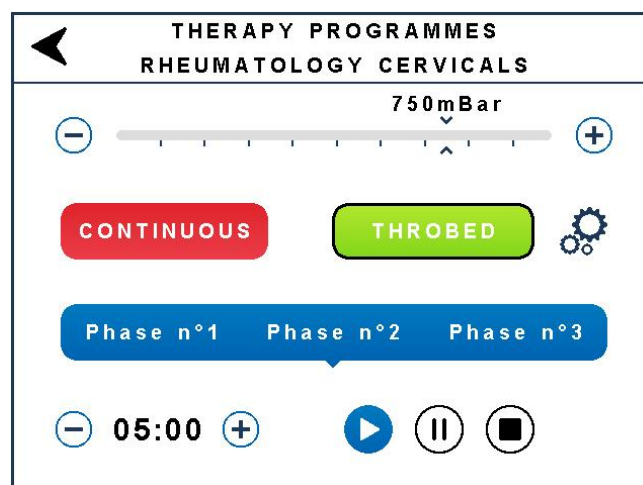
6.4.1 Launch the treatment

Warning: Before launching a treatment, it is obligatory to have chosen previously the **high depression parameters** adapted to the pathology, to the size of the suction cup and to the fragility of the area to treat.

Choose the desired treatment.

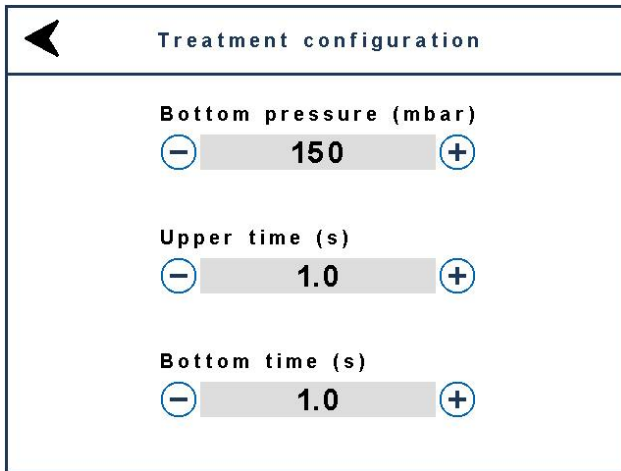


Once you have chosen a treatment, adapt the setting to the patient and click on the icon .





Click on this icon to go to the treatment's configuration page.

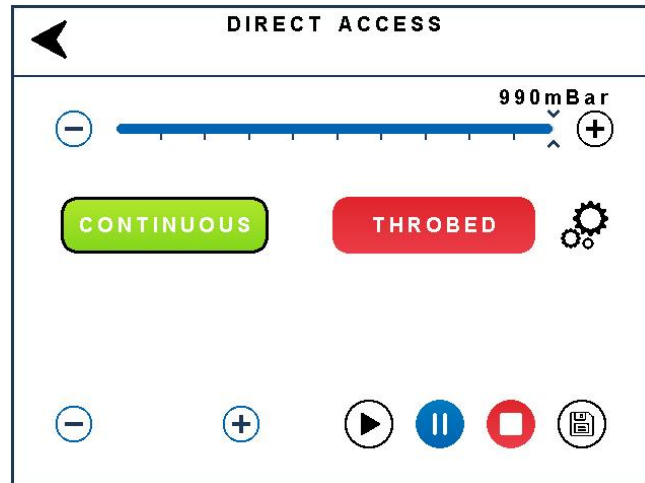


Low pressure from 0 to 990 mbar
Upper time from 0 to 2 seconds
Bottom time from 0 to 2 seconds

6.4.2 During the treatment


All the settings can be modified during the treatment by making a selection on the touch screen.

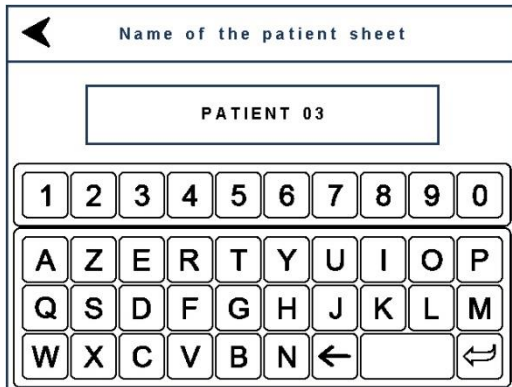
The treatment can be stopped or restarted by making a selection on the touch screen.



6.5 Saving a treatment

After stopping, at the end of a treatment or before starting a treatment, the user can save the settings used for a treatment in one of the programmes in the custom database (see §6.2.3).

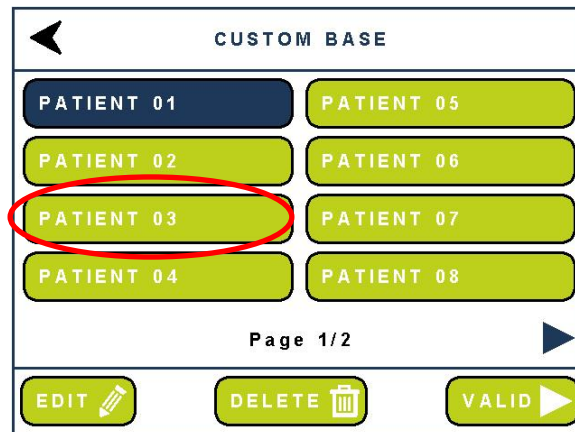
To do this, the user must press the “Save” button  on the treatment’s launch screen.




Choosing a programme for the custom database:

- Using the keyboard, enter the name of the treatment (16 characters max.). A total of up to 40 custom programmes can be saved.

We can then find this programme in the custom database.



When a programme is saved in the custom database, an icon  appears on the main menu. Click on this star to launch the first programme in the custom database.

6.5.1 Confidentiality of patient data

The device collects data when saving a treatment. The data is stored in the device. It is the responsibility of the practitioner to apply and comply with the General Data Protection Regulation 2016/679 of the European Parliament.

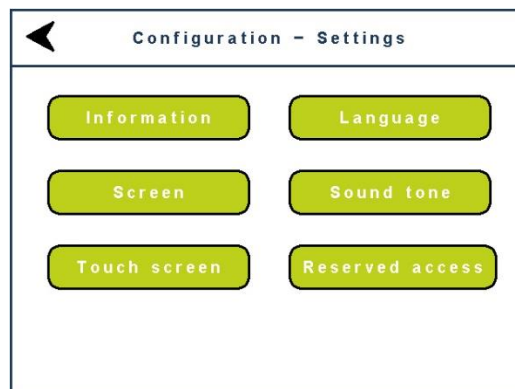
When returning to the After-Sales Service, the practitioner must delete patient data so that it is not disclosed.”

6.6 Technical information, Configuration & Settings

This screen provides access to the device’s technical information, to the language selection for the menus, to the screen’s brightness settings, sound settings and testing.



You then have access to the following menu:



- **Information:** provides our contact information and the contact information for our customer service department
- **Language:** allows you to select a language for the device (French, English or Spanish)
- **Screen:** allows you to adjust the contrast
- **Beep tone:** allows you to enable or disable the sound of the buttons (the beep at the end of treatments cannot be disabled)
- **Touch screen:** allows you to adjust the touch screen’s sensitivity
- **Reserved access:** allows you to launch a self-test of the device using a code that is provided to you by the customer service department (Information button) in the event that the device fails or functions poorly

6.7 Switch off the device

Switch off the device using the button on the back side of the device (Position 1: ON / Position 0: OFF) (See §4 Installation of the device).

7 Clinical Guide

7.1 Target population

This device is intended for use on any adult person aged 18 years old and up, regardless of sex.

7.2 Expected performance

Prog.	Type de PRODUIT	PATHOLOGIE	SPECIFICATION	PHASE	Accessoires	Durée de la phase (en min)	Mode CONTINU	Mode PULSE	T haut (en s)	Vide Haut (en mBars)	si mode pulsé	
											T bas (en s)	Vide Bas (en mBars)
1	THERAPEUTIQUE	RHUMATO	Fesses / Dos Lombaires	APPEL CAPILLAIRE	Ventouses	5	x			250		
				MOBILISATION	Ventouses	5		x	0,2	250	0,4	0
				DETENTE	Ventouses	5				250		
2	THERAPEUTIQUE	RHUMATO	Cervicales	APPEL CAPILLAIRE	Ventouses	5	x			250		
				MOBILISATION	Ventouses	5		x	0,2	250	0,2	0
				DETENTE	Ventouses	5	x			250		
3	THERAPEUTIQUE	SPORT	Tendineux Entorse	DETENTE	Ventouses	8		x	0,3	250	0,2	0
				MOBILISATION	Ventouses	5	x			750		
4	THERAPEUTIQUE	CICATRISATION	Cicatrices	MOBILISER	Ventouses	5		x	0,3	900	0,3	0
				ASSOULIR	Ventouses	5	x			900		

7.3 Contraindications

This device must not be used in the following cases:

- When the treatment area presents cancerous lesions.
- When the treatment area presents open wounds.
- When the treatment area presents an acute inflammation.
- Hemarthrosis and acute traumas with bruise.
- Deep venous thrombosis
- Infections (erysipelas, lymphangitis)
- Serious arteriopathies (stages 3 & 4)
- Non-treated heart failures
- Haemophilia
- Capillary fragility
- Dermatitis
- Hypertrophic scars
- Irradiated skins
- Delicate and non-epidermised skins
- Wounds

Contraindications are not exhaustive, and we recommend to the user to contact Électronique du Mazet in case of any doubt.

7.4 Side effects

Current medical literature does not note side effects involving vacuum therapy.

8 Maintenance, Servicing

The B-Lift C device has a lifespan of 5 years.

To ensure peak performance throughout its working life, it is necessary to have the device inspected by Électronique du Mazet every 2 years.

Électronique du Mazet provides, on request, the circuit plans, the list of the components, the descriptions, the instructions of calibration or any other information useful for the maintenance staff to repair some parts of the device that can be done by themselves.

8.1 Housing

The housing requires only normal, periodic cleaning if its exterior becomes dirty. This applies to the power cord, as well, the hoses...

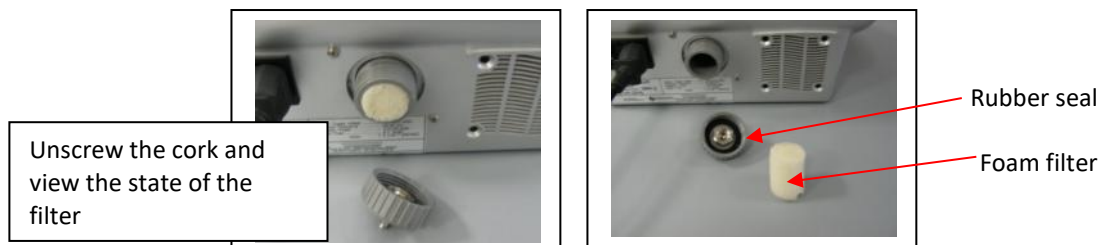
The touch screen must be cleaned with a soft, dry cloth, **without using cleaning products or water.**

Use only a dry or very slightly damp cloth to clean the rest of the device.

Be sure to disconnect the power cord before doing any cleaning.

Foam filter

The foam filter must be checked regularly (frequency to evaluate according the use and the areas treated), washed with clean water or changed if needed.



The filter reassembled must be clean and dry. Le filtre remonté doit être propre et sec. Check the rubber seal is well installed before screwing the cork back up.

8.2 Accessories

In order to ensure a perfect hygiene, it is obligatory to clean systematically every material and equipment in direct contact with the patient.

8.3 Sterilization

The device and its accessories are not sterile and are not intended to be sterilized.

9 Malfunction

If a malfunction occurs that is not mentioned in the device's accompanying documents (see below), please inform your dealer or the manufacturer.

If the device must be shipped, please follow these instructions:

- Decontaminate and clean the device and its accessories.
- Use the original packing, particularly the maintaining flanges.
- Include all the device's accessories.
- Secure the different elements.
- Ensure that the packaging is properly closed.

Shipping Address:

**Électronique du Mazet
ZA Route de Tence
43520 Le Mazet St Voy
FRANCE**

Tel.: (+33) 4 71 65 02 16

Fax.: (+33) 4 71 65 06 55

E-mail: sav@electroniquedumazet.com

Possible malfunctions:

Description of the malfunction	Possible causes	Actions
Screen off	Problem with the electrical network	Check the mains connection
	Blown fuses	Check and change the fuses
Error message on the screen	Reading / writing problem with the SD card	Switch off and relight the device
Lack of vacuum sensation in the suction cup	Hose poorly or not connected to the suction cup or the applicator	Check the connection at the suction cup or the applicator
	Corked hose Dirty filter	-Disconnect the hose at the cork of the filter -Cork the entry of the connector with the finger and check the aspiration ->if it is OK: change the hose ->if not: check the filter
Vacuum setpoint not reached	Altitude of use	-Vacuum max limited at -850mBars at 1000m -Vacuum max limited at -750mBars at 2000m
	Bad contact with the skin	Check the contact with the skin
	Suction cup poorly screwed with the applicator	Check the waterproofness tightening the suction cup
	Pulse mode too fast for a too high vacuum level wanted	Increase the upper time or Reduce the setpoint of the high vacuum

If the device falls or water gets into it, it must be checked by Électronique du Mazet to avoid potential hazards (for both patient and practitioner) involved in use of the device.

10 Customer service and warranty

Your supplier provides a warranty for this device under the conditions specified in this document, provided that:

- Only accessories provided by Électronique du Mazet or its distributors are used.
- All modifications, repairs, extensions, adaptations and adjustments made to the device are carried out by Électronique du Mazet or its distributors that are authorized to perform these operations.
- The operating environment meets all regulatory and legal requirements.
- The device is used only by competent and qualified personnel. Use of the device must comply with the instructions in this user manual.
- The treatments are used only for the applications for which they are intended, as described in this manual.
- The device undergoes regular maintenance as per the manufacturer's recommendations.
- All the legal requirements concerning the use of this device are respected.
- Only accessories provided by or specified by the manufacturer are used with the device.
- The parts of the machine and its spare parts are not replaced by the user.

Inappropriate use of this device or negligent maintenance releases Électronique du Mazet and its authorised distributors of any liability in the case of, e.g., faults, failures, malfunctions, damage, injury, etc.

The warranty is void if the instructions in this manual are not strictly followed.

The 24-month warranty starts on the date that the device is delivered.

The accessories have a 6-month warranty, which also starts on the date that the device is delivered

Transport and packaging costs are not covered by the warranty.

11 Scrapping

11.1 Accessories

As soon as any damage to an accessory is found, the device must be cleaned with a broad-spectrum disinfectant and returned to the manufacturer.

11.2 Electronics

If the b-Lift C device is no longer functional or proves unusable, we request that you either return it to the manufacturer or dispose of it in a Récyclum recycling collection point.

As part of its commitment to helping the environment, Électronique du Mazet finances the Récyclum recycling system which is dedicated to professional WEEE. Récyclum is a free service that takes electrical lighting equipment, control and surveillance equipment, and used medical devices. For more information, go to www.ecosystem.eco.



12 Transportation and storage

The device must be stored and transported in its original packaging or in packaging able to protect the device from any destructive outside forces.

Store at room temperature in a clean and dry place.

13 EC Declaration of Conformity

ÉLECTRONIQUE DU MAZET will provide the EC Declaration for this device upon request

The device first obtained a medical device CE mark on 22/01/2015.

14 Manufacturer

Électronique du Mazet is a company located in the heart of the Massif Central. EDM started out as an electronic card maker, and over the years it has developed its own brand of medical devices, primarily intended for use in physiotherapy.

Today, EDM is researching, developing, manufacturing and marketing devices for pressotherapy, vacuomobilization and electrotherapy (urinary re-education).

If you like to find out more information, please do not hesitate to contact us.

SAS Électronique du Mazet
ZA Route de Tence
43520 Le Mazet St Voy
FRANCE
Tel : +33 (0)4 71 65 02 16
Fax : +33 (0)4 71 65 06 55




facebook.com/MazetSanteFrance/



www.electroniquedumazet.com

15 Tableau de conformité CEM

Electromagnetic compliance as per IEC / EN 60601-1-2 (2014)			
This device is intended to be used in the electromagnetic environment specified below. The client/user of this device must ensure that it is used in such an environment.			
Emissions test	Standard	Compliance	Electromagnetic environment – Directives
RF Emissions	CISPR 11	Group 1	This device only uses RF energy for its internal functions. As such, it has very low RF emissions, which are not likely to cause interference with neighbouring electronic devices.
RF Emissions	CISPR 11	Class B	This device is suitable for use in all premises, including in homes and premises directly connected to the public low-voltage power supply network that supplies buildings used for housing.
Harmonic emissions	IEC 61000-3-2		Class A
Voltage fluctuations / Flicker	IEC 61000-3-3		Compliant
L'appareil est prévu pour être utilisé dans l'environnement électromagnétique spécifié ci-dessous. Il convient que le client ou l'utilisateur de l'appareil s'assure qu'il est utilisé dans un tel environnement.			
Immunity test	IEC 60601 Test Level	Level of compliance	Electromagnetic environment – Directives
Electrostatic discharge (ESD) IEC 61000-4-2	6 kV contact 8 kV air	6 kV contact 8 kV air	The floors should be made of wood, concrete or ceramic tiles. If the floors are covered with synthetic materials, relative humidity should be at least 30%.
Electrical fast transient / burst immunity test IEC 61000-4-4	± 2 kV for electrical power supply lines ± 1 kV for input/output lines	± 2 kV for electrical power supply lines	The quality of the electrical power supply network should be typical of a commercial or hospital environment.
Transient overvoltage (surge) IEC 61000-4-5	± 1 kV between phases ± 2 kV between phase and earth	± 1 kV between phases ± 2 kV between phase and earth	The quality of the electrical power supply network should be typical of a commercial or hospital environment.
Voltage dips, short interruptions, and voltage variations on power supply input lines IEC 61000-4-11	<5% <i>UT</i> (>95% dip in <i>UT</i>) for 0.5 cycles 40% <i>UT</i> (60% dip in <i>UT</i>) for 5 cycles 70% <i>UT</i> (30 % dip in <i>UT</i>) for 25 cycles <5% <i>UT</i> (>95% dip in <i>UT</i>) for 5 s	<5% <i>UT</i> (>95% dip in <i>UT</i>) for 0.5 cycles 40% <i>UT</i> (60% dip in <i>UT</i>) for 5 cycles 70% <i>UT</i> (30% dip in <i>UT</i>) for 25 cycles <5% <i>UT</i> (>95% dip in <i>UT</i>) for 5 s	The quality of the electrical power supply network should be typical of a commercial or hospital environment. If the user of the device requires that the device function continuously during interruptions in the power supply, we recommend powering the device with an uninterruptible power supply or a battery. NOTE: <i>UT</i> is the AC mains voltage prior to application of the test level.
Magnetic field at power frequency (50/60 Hz) IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical domestic, commercial, or hospital environment.
Immunity test	IEC 60601 Test Level	Level of compliance	Electromagnetic environment – Directives
			Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated using the equation applicable to the frequency of the transmitter. Recommended separation distance

<p>Conducted RF disturbances IEC 61000-4-6</p>	<p>3 Vrms 150kHz-80MHz 3V/m 80MHz-2.5GHz</p>	<p>3 Vrms 3V/m</p>	<p>$d = 1.67 \cdot \sqrt{P}$ $d = 1.67 \cdot \sqrt{P} \text{ 80MHz-800MHz}$ $d = 2.33 \cdot \sqrt{P} \text{ 800MHz-2.5GHz}$</p> <p>where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey (a), should be less than the compliance level in each frequency range (b). Interference may occur in the vicinity of devices marked with the following symbol:</p> 
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NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

(a) Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radios, AM and FM radio broadcasts and TV broadcasts cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the device.

(b) Over the frequency range of 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications devices and the device.

The device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the device as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)		
	150kHz - 80MHz	80MHz - 800MHz	800MHz - 2.5GHz
0.01	0.117	0.117	0.233
0.1	0.369	0.369	0.737
1	1.167	1.167	2.330
10	3.690	3.690	7.368
100	11.67	11.67	23.300

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter's manufacturer.

NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.



ELECTRONIQUE DU MAZET

ZA ROUTE DE TENCE
43520 LE MAZET SAINT VOY
FRANCE

Tel: +33 (0)4 71 65 02 16
Mail: sav@electroniquedumazet.com

Your dealer / distributor: