



Jett Plasma Lift Medical

User Manual



Before you start using Jet Plasma Lift, read this manual and make sure you understand all instructions and warnings and follow them closely.

Made by **Compex spol. s r.o. In Czech Republic**

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1. Introduction – General Information

Jett Plasma Medical is a low-power portable DC electrocauter. This medical device is used for the treatment of skin, elimination of tiny capillary bleeding, removal of small warts and elimination of couperosis, red veins, acne and pigment spots. It also helps with the removal of scars and stretchmarks.

The aforementioned effects are achieved with a help of “a spark” discharge generated by DC voltage. This kind of discharge generates a heat that warms the skin and desirable indications are treated. It is the DC fulguration (from Latin fulgur – lightning) that was first used in 1982 at the ablation of AV knot. For many years, AC fulguration has been used in high-frequency electrocauters to destroy various skin protuberances or warts. Generated sparks in AC fulguration operate on a relatively big area of 1 cm². Unlike this, Jett Plasma Medical uses DC fulguration with the spark flow area of 1mm², which is a great advantage because of its accuracy in removal of undesirable skin protuberances or warts without damaging of the surrounding tissues.

Using a high breakdown voltage of about 5kV, which is between the tip of the device and conductively connected (to the device) skin of a patient and maintaining the distance of 2mm between the tip and skin (this constant distance is provided by a specific applicator), a spark discharge is generated with a corona at its side. To be able to generate the spark discharge, the air (containing free electrons) must absorb a great amount of energy leading to the breakdown of the air - it ceases to be an insulant and starts to conduct the electric current – the discharge is generated. The air is ionized and it becomes Plasma.

In case of any fulguration, a discharge is generated and that means that at any discharge, the gas is ionized and therefore the Plasma is created. This condition is one of the necessary ones, but it is not sufficient on its own.

Only a provably trained doctor who has read and understood all the instructions given in this manual and who is acquainted with generally known dangers and benefits of the stimulation of the treated place with Plasma discharge can operate Jett Plasma Lift.

Before using Jett Plasma Lift, it is necessary to read and understand all instructions and safety precautions in this Manual and you are obliged to follow them. During the treatment, make sure that you follow all safety instructions. Yu should also always be acquainted with indications and contraindications of the Jett Plasma Lift Medical use.

1.1. Package Contents

<p>Jett Plasma Lift Medical with applicator</p>	
<p>60 pcs of disposable sticking grounding CE electrodes</p>	 <p>Foam electrodes solid gel 51×33 mm č.v.:300612979</p>
<p>Flat applicator</p>	
<p>Golden applicator with pointed tip</p>	
<p>Cone applicator</p>	
<p>AC adapter</p>	<p>Type: DA12-050EU-M Input: 100-240V/50-60Hz Output: 5VDC, max 2.0A Power: max. 12 VA Manufacturer: Emerson</p>
<p>Manual</p>	

THE DEVICE SHOULD BE USED ONLY WITH THE ORIGINAL AUTHORIZED EQUIPEMENT SUPPLIED BY THE MANUFACTURER.

2. Intended use

JETT PLASMA LIFT MEDICAL is a medical device that uses the physical principle of the succession of sparkle discharge generated by DC. It is used to treat skin, stop small bleeding, removal of small warts, hemangiomas mesenchyme tumors of veins and undesirable skin structures, venectasia, melisma, fibroma and keratosis.

The device is intended for surgical treatments mentioned above. It is a medical device intended for repeatable use and it is introduced to the market in a non-sterile state. The aim of the use are corrections/removal of skin structures by the use of sparkle discharges generated by DC current.

Some of the aforementioned effects/indications are not of a clinical character- they are cosmetic flaws. The indications stated below are specified as indications included in the field of cosmetics /not included in the compliance assessment process/:

- skin tags
- tiny stem excrescences
- dilated vessels
- spider veins
- stretchmarks
- age spots

3. Indications and contraindications

3.1. Indications

- angioma senilis
- verrucae seborrhoicae
- verrucae plane
- angiokeratoma
- teleangiectasie
- lentigo
- fibroma molle
- keratoacanthoma
- conydomata acuminatum
- moluscum contagiosum
- verrucae vulgaris

- verrucae filiformes
- naevus capillaris
- naevus araneus
- keratosis actinica
- keratosis senilis
- keratosis seborrhoica
- melasma

3.2 Contraindications

- Pacemaker, Holter blood pressure monitoring system or ECG
- Other implanted electrical device
- Epilepsy
- Pregnancy
- Metal implants in the treatment area

Trained operation personnel of the device must be provably ensured that the treated patient does not suffer from any aforementioned contraindications and this must be proven by a signed informed consent.

4. Function Description

The device generates spark discharge and Plasma using DC 5kV with a maximal current of 1 mA which has also an AC part due to an oscillation (instability) of spark discharge. As it has been already stated, Jett Plasma Lift Medical is a medical device that can be operated only by a provably trained doctors. The main reason for this is that the energy absorbed by body can be, in cases of some applications, used for targeted destruction of skin cells.

At the highest levels (6, 7 and 8), this device is used for electro fulguration, electrodesiccation and electrocoagulation. The highest intensities (6, 7 and 8) are able to destroy skin cells. The tip of the device can reach temperatures up to 80°C, when the tip gets as close to skin as 0,5 – 1 mm. This can be prevented by using a distance glass tube overreaching the tip by 2 mm.

Electrofulguration is an application of an electric discharge which is enclosed between the tip of the device and the skin of a patient, when the distance between them is 2 mm. In our case, electrofulguration affects only a small area of skin, as the generated spark discharge with the creation of Plasma is not emitted in a wide beam as it is in case of application of AC electric current. During the application, a doctor can target the treatment area relatively accurately, for example in case of warts removal and other undesirable skin perturbations.

Electrodessication is evaporation of cell liquids with a subsequent destruction of subcutaneous cells. Evaporation is caused by thermal energy generated by oscillating spark discharge. A relatively low electric power, at maximum 1.8 W is applied and as it affects only a small area, it is able to cause the evaporation of cell liquids.

Electrocoagulation is a process in which thermal energy of the spark discharge causes evaporation of water in cells and it disrupts their structure. High temperature causes coagulation of tissue and blood proteins, which is used for stopping a small bleeding – to closure of small veins with a diameter of 2-3 mm. The treated area is stimulated by spark discharge with a creation of plasma at the distance of 2 mm from the skin. The discharge is applied with a smaller power (1.8 W), compared to common electrocauters. Concerning the fact, that this power works in a very thin discharge beam and treats only a small area, there appears a considerably good local coagulation effect without a need to sterilize the application tip.

Electrodessication, electrofulguration or electrocoagulation can be used for the treatment of various indications in various medical fields. A detailed summary of application possibilities will be a subject of training together with the handover of the device. The device can be used in classical surgery, dermatology, gynecology or dental medicine.

At medium intensities (5-6) when there is no considerable destruction of skin cells, the device is used for the treatment of small veins, couperosis, scars and stretchmarks or pigment spots. Here, the thermal energy of the spark discharge is used for the removal of skin cells with accumulated melanin. These intensities can be satisfactorily used for the veins removal.

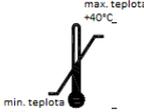
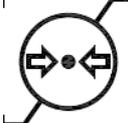
The spark discharge also opens Na/K channels of cell membranes in skin cells. Together with this, being generated by AC voltage with a minus pole on the tip, it is able to help with the absorption of various serums of negative ions character into the skin. Unlike other technologies, it works with a higher energy and a doctor is able to apply an optimal amount of serum very effectively. The desired effect is supported by the simultaneous opening of Na/K channels and the heat generated by the spark discharge.

At the lowest intensities (1-4), the spark discharge is used solely for aesthetic treatments that can be a supplement to a medical treatment or an extension of the offering of medical clinics or ambulances. The spark discharge generates a flow of negative electrons and positive ions. The discharge is generated by the DC current and there is a negative pole at the tip of the device. Most of cosmetic preparations contains negative ions that are very well processed thanks to the polarization. These intensities are used for lifting, treatment of wrinkles and rejuvenation.

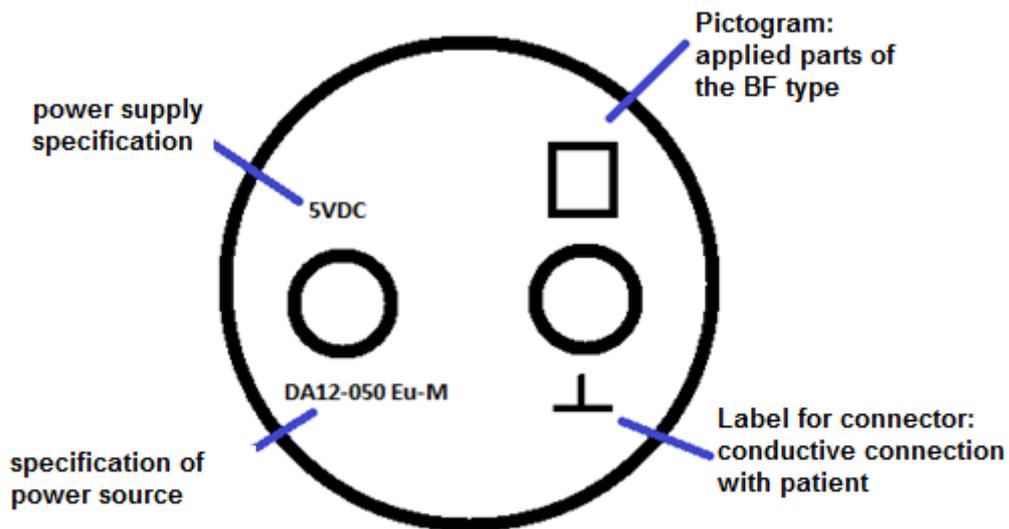
5. Description of Symbols

5.1 Symbols on the cover of the device, on the device and its equipment

	Graphic sign: Warning from a possible danger, follow instructions in the manual.
	Graphic sign: Manufacturer
	Graphic sign: Serial number
	Graphic sign: Applicator of the BF type: flat applicator and disposable electrodes
	Graphic sign: Electric waste, after the end of the lifespan of the device, it must not be disposed of in communal waste.
	Graphic sign: Double insulation.
	Graphic sign: Use indoors.
	Graphic sign: Protection from a lightning.
	Graphic sign: ground – galvanic connection with the device.
TAPE	Error message on the screen saying that the patient is not connected to the device.
TErr	Error message on the screen when two buttons are touched simultaneously.
SrvC	Error message on the screen: Error, send the device to the service. The device found a hardware malfunction in its own control procedures.
	Graphic sign: Disposable, for one use only

	<p>Graphic sign: Range of temperatures for storage and transport.</p>
	<p>Graphic sign: Range of pressure min. 50 kPa max. 106 kPa</p>
	<p>Graphic sign: Humidity limitations, min. 30%, max..75%.</p>
	<p>Graphic sign: Protect from rain</p>

Labels at the rear side of the device:



Flat applicator



Applied part of the BF type

5.2 Symbols from the Manual



=PRECAUTION! The text with the label “PRECAUTION” covers possible dangers that could cause minor or medium injuries or a damage of the device.



=WARNING! The text with the label “WARNING” covers possible dangers that could cause serious injuries or a destruction of the device.



= DANGER! The text with the label “DANGER” covers possible dangers that could cause a directly dangerous situations and a danger of the serious injuries.

6. Warnings and precautions

Safety instructions in this part of the manual as well as in its other parts are marked with special labels. Get familiar with these symbols and their explanations before you start to operate the device.



PRECAUTION! /introductory precautions/

All parts of the device must be connected in their places in the designed positions.

Use of a power adaptor other than the supplied one or the one that fits all specifications is strictly prohibited.

Do not plug the device in greasy, smoky, humid or dusty environment and at the places where it could get into the contact with water.

Follow the recommended treatment time and treatment method.

Do not use any equipment other than the equipment supplied by the manufacturer.

If a patient feels and unusual feelings during the treatment, pause the treatment immediately and contact the manufacturer.

If you have finished using the device or if you know that you will not use the product for a while, unplug it from the power supply (danger of fire).

Do not bend the supply cable or any other equipment with force and do not place any heavy or sharp objects on them (danger of fire or electric shock).

Do not plug more than one device into one power source (danger of fire).

Check the parameters of power source before plugging the device in.

If other than recommended power source is used, electric circuits can be damaged or there can be a danger of a fire.

It is necessary to monitor the effect of plasma discharge on skin cells during the treatment. If any unexpected effect appears, the tip must be taken off the skin immediately and treatment must be stopped immediately.

Do not place the device at the place, where it could be unplugged from the power source by chance.

Error Messages on the Screen:



TAPE – Grounding of patient

The device is equipped with a reliable safety system SCS (Safety Control System), which is able to detect whether the patient is grounded.

Warning: Patients must have the grounding electrode stick to their body during the whole time of the treatment. If the patient is not grounded, the display shows the warning „TAPE“ and the generator the Plasma is disconnected automatically.



TErr - Two buttons pushed simultaneously. Error of the Operation, the message “TErr” appears.



SrvC - Hardware error

If a hardware error appears, the device switches off automatically and an error message “SrvC” appears. The device cannot be switched on anymore and it must be sent into an authorized service.

- **Written consent, training of the staff:** Only trained doctors can use the device.



DANGER: The trained staff must make sure that the patient does not suffer from any of the contraindications before the treatment and he must make the patient sign the informed consent. Training of the operators is provided either by the manufacturer or authorized distributor. The trained staff receives a certificate entitling is holder to work with Jett Plasma Lift Medical. The trained staff must make sure that in his workplace untrained people can't work with the device.

The trained staff must continuously follow the working protocols set by the manufacturer and must avoid following safety dangers:

- **Preparatory heating of skin – Caution:** The temperature of skin cannot exceed 41°C, which is done by the trained staff by controlling the skin with touch thermometer.



- **Protection of skin from electric discharge – Caution:** In case of cosmetic treatments (Intensity of discharge 1-5), a sufficient layer of indifferent gel must be applied on skin. Application tip must be lead closely above the application gel. The optimal distance during application is 1-2 mm. After thorough consideration, a doctor can use a conductive serum instead of conductive indifferent gel.



- **Treatment close to the area of the eyes – operation with sharp tip. Caution:** It is necessary to carry the treatment in a safe distance from the eyes of patient. The trained staff must make all possible precautions to protect eyes of his patient. Application must be done in an absolute stillness and any other people must not be let into the closeness of the treatment, as they could distract the operator. The trained staff takes all responsibility for not using the sharp tip against the instructions recieved during the training.



- **Proper treatment – Caution:** The trained staff is permitted to treat only the recommended areas (see point 1.1 – Use).



- **Grounding – Caution:** Before the treatment begins, the patient must be grounded by a grounding disposable electrode which is stuck on the right shoulder blade.



- **Do not touch the tip – Caution:** Neither operator nor the patient are allowed to touch the tip during the treatment. When the application tip gets away from the conductive gel further than 5mm for more than 20 seconds, the supply of the tip is finished (the yellow LED control FLASH goes off). The voltage at the tip disappears in 1 second.



- **Do not touch the patient – Warning:** The trained staff is not allowed to touch the patient conductively. If there is a need to touch patient, it is necessary to use rubber protective gloves.



- **Changing of application tip – Danger:** When the application tip is being used, Jett Plasma Lift Device MUST BE unplugged from the power source. The device has 3 applicators – a spike, a flat applicator and a tip with a slim spike.



- **The trained staff can use the device only in the range defined by this manual ort the qualification training. Danger:** The trained person is allowed to use only the equipment supplied by the manufacture. It is forbidden to open the device, because there is a risk of electric shock.



- **After every use, the tip must be cleaned and disinfected. Caution:** Protect the device from hits and shocks.

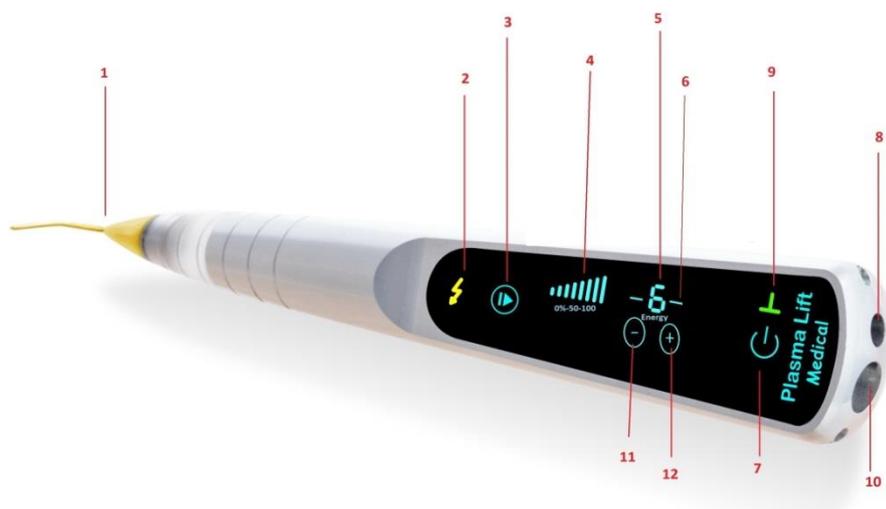


- **Working with power adaptor. Danger:** Do not pull the electric cable by force and do not touch it with wet or moist hand.



- 
General risks. Danger: If there are thunders, lightning or if there is an earthquake, stop using the device immediately and plug out the supply cable (there could be a risk of fire or an electric shock).
- 
Danger of explosion or fire. Do not use the device in places where there are explosives or flammable substances such as anesthetics, alcohol, gas or detergents. If it is possible, we recommend using of non-volatile substances.
- 
Danger of skin damage! Plasma Jett Lift Medical device set on the intensity of 6, 7 and 8 can irreparably damage skin cells (evaporation of warts). You should be constantly aware of the fact that the device can destroy skin cells at the intensity of 6, 7 and 8. Before every application, make sure twice that you have set the right intensity. That means that if you do the treatment of couperosis or veins, where you do not destroy skin cells on purpose, you should never set the intensity 7 or 8, and it is not recommended to use level 6 as well.
- 
Danger of electromagnetic interference. Do not use the device close to other electronic or electric device, as the electromagnetic interference could appear.

7. Operation of the device



- Golden exchangeable tip (applicator), for others see package contents
- Spark discharge indicator FLASH
- Play/Pause button for spark discharge
- Indicator of spark discharge effectivity (current going through patient)
- Indicator of spark discharge intensity (labeled „Energy“ on the display)

- 6) A dash before and after the number indication the intensity of spark discharge
- 7) ON/OFF button
- 8) Slot for connection of grounding cable for the connection of patient
- 9) Power Indicator
- 10) Slot for power supply cable
- 11) Button for decrease of discharge intensity
- 12) Button for increase of discharge intensity

Before every start of the device, carefully check the power cable, connecting cables, disposable grounding electrode with its connecting cable and device including its tip. If you encounter any damages, do not switch the device on and call the authorized service!

a) Plug the adaptor the power source (230V, 50Hz) and plug the other side of the supply connector into the slot of Jett Plasma Lift Medical (10). The device switches on automatically and a message “TAPE” appears on the screen, telling you that the patient must be grounded. You can also switch the device off and on by pushing the ON/OFF button (7) for 2-3 seconds.

b) When the patient is ready for the treatment, stick a disposable grounding electrode on his or her right shoulder blade or on his right hand. Plug the connector of the grounding cable into the grounding slot (8) and connect its other side to the disposable grounding electrode. The message “TAPE” disappears from the display and the lowest intensity level „-1-“, appears.

c) Setting the spark discharge intensity

After switching the device on, default intensity setting is 1. By pushing the “+” button, you can increase the intensity. Between the two dashes, numbers “2, 3, 4, 5” appear one by one. These are safe intensities that do not cause the destruction of skin cells. Decrease of safe intensities can be done by pushing the “-“ button (11). As soon as you set the first possibly dangerous intensity level “-6-“ (able to destroy cells), the device sets the intensity level automatically to “-1-“ and the dashes before and after start to blink. Now you have 6 seconds to set the intensity level to 6 or higher.

d) Discharge ignition

If the intensity of the spark discharge is set already, it is possible to set a higher voltage (6kV) at the tip of the device by pushing the button Play/Pause (3). As soon as the tip approaches the patient’s grounded skin to a distance below 2 mm, the spark discharge ignites.

e) Turning the discharge off

If you want to turn the high voltage at the tip of the device off, you must push the button Play/Pause (3). The change of the intensity of the discharge can be made only when the device is switched off, because there isn’t the 6 kV voltage at the tip.

f) Quicker changing of dangerous intensities

If you want to increase the intensity from the level 6 to the level 7, touch and hold the “+” button (12) for 2 second and then it is possible to increase the intensity by the held button.

g) Types of applicators and their use

1) Flat and conic applicator

Flat and conic applicators are used only for cosmetic treatments (intensities 1-5) of stretchmark, wrinkles and rejuvenation. The flat applicator is designed for the treatment of bigger areas. This applicator moves on skin covered with a conductive indifferent gel and it causes electrical stimulation of cells by DC current – Na/K channels are opened and cell membranes are depolarized. The conic applicator has the same use, but it does not touch skin – it touches only the indifferent gel.

2) Golden applicator with precise tip

It is designed for face treatments and precise removals of skin perturbations or causing fulguration micro-burnings of skin in the closeness of wrinkles that make the skin tightened after they are healed.

The golden applicator with a precise tip that can be used on its own or with a distant glass tube (see registered design no. 27650). When the distant glass tube is used, the constant distance of 2 mm is maintained between the tip and patient’s skin. This applicator with a distant tube is registered and protected by registered design no. 27650. Therefore, it is the first device in the world that can target the flow of sparks into a very thin beam and keep the distance of 2 mm from the skin at the same time.

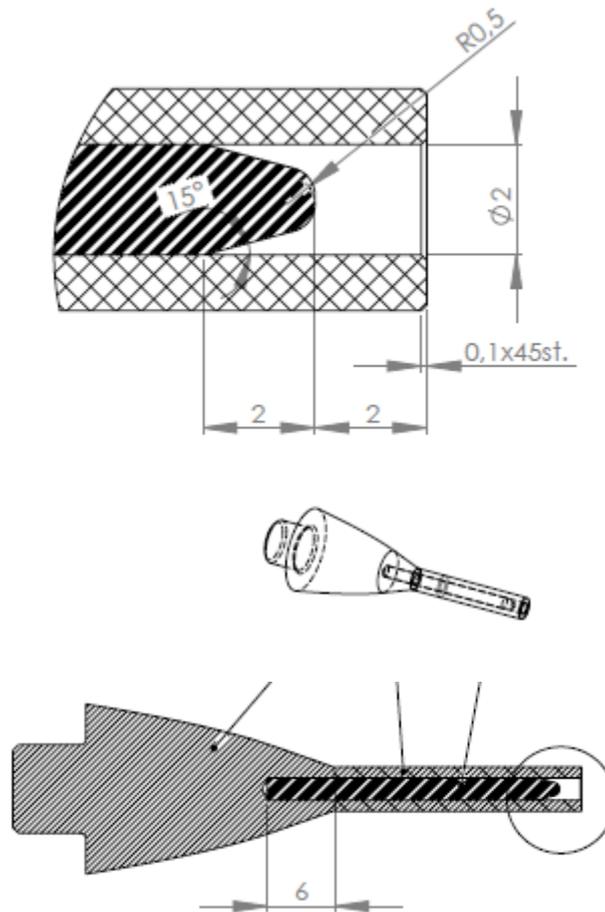


Fig. 1: Registered design no. 27650

h) Caution

As soon as the device is switched on, the spark discharge creating Plasma is ignited between the tip of the device and patient's grounded skin and the device starts a continual control of the current running through patient. If the current intensity exceeds 1mA due to a hardware failure or malfunction, the message "SrvC" is shown on the display, the device is switched off automatically and it cannot be switched on any more. It must be sent to an authorized service for maintenance.

i) Cosmetic treatment (Lower intensities 1-5)

Approach the tip of the device (1) to a treated place protected by an even layer of conductive indifferent gel or by a layer of a conductive serum (for example hyaluronic acid) as near as 2 mm above the gel. This causes a dielectric breakdown of the air between the tip of the device and the gel protecting patient's skin and a flow of spark discharges is generated. These sparks treat patient's skin. The time of treatment should not exceed 30 minutes. During the treatment, a bar graph shows the effectivity of the discharge, i.e. to what extent the possible effect of the discharge is used.

j) Medical treatment (desiccation, fulguration, coagulation) at the maximum intensity level of 6 – 8.

In this case, if it is necessary, the doctor applies only a suitable anesthetics on patient's skin and then the treatment begins. The succession of spark discharges is applied on one of the aforementioned indications. During the treatment, a bar graph shows the effectivity of the fulguration discharge.

k) Ending the treatment

The procedure can be ended any time by pushing the "Play/pause" button (3). It can be ended also by taking the applicator (1) away from the skin for more than 20 seconds. In this case, the device pauses automatically and the treatment can be resumed by pushing the button "Play/pause" (3) again.

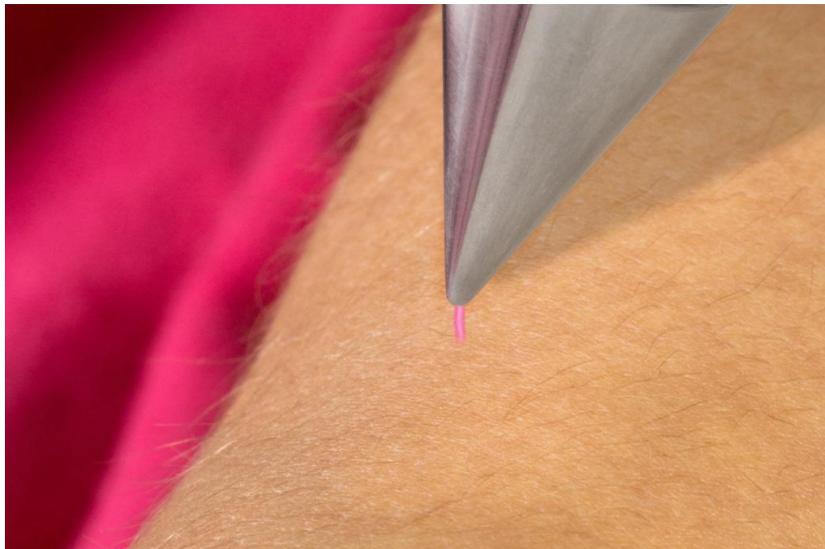


Fig. 2: Spark discharge between the tip and skin

8. Definition of plasma

Plasma is an ionized gas consisting of ions and electrons created by the separation of electrons from the electron shell of gases or by ionization. Plasma can be also defined as the fourth form of matter.

In this case plasma is quasineutral and low-temperature, in which there is an approximately the same number of positive ions and negative electrons. The creation of plasma is a concomitant phenomenon of all electric discharges in an ionized gas including air. This means that plasma is created in all current electrocauteres in the fulguration mode.

Plasma is created in all discharges in all current electrocauteres in fulguration mode. Jett Plasma Lift Medical uses this phenomenon by its ability to generate the flow of Plasma. This flow affects biological tissues and it triggers a specific reaction mechanism. This effect of plasma flows on tissues enables you to reach a very effective

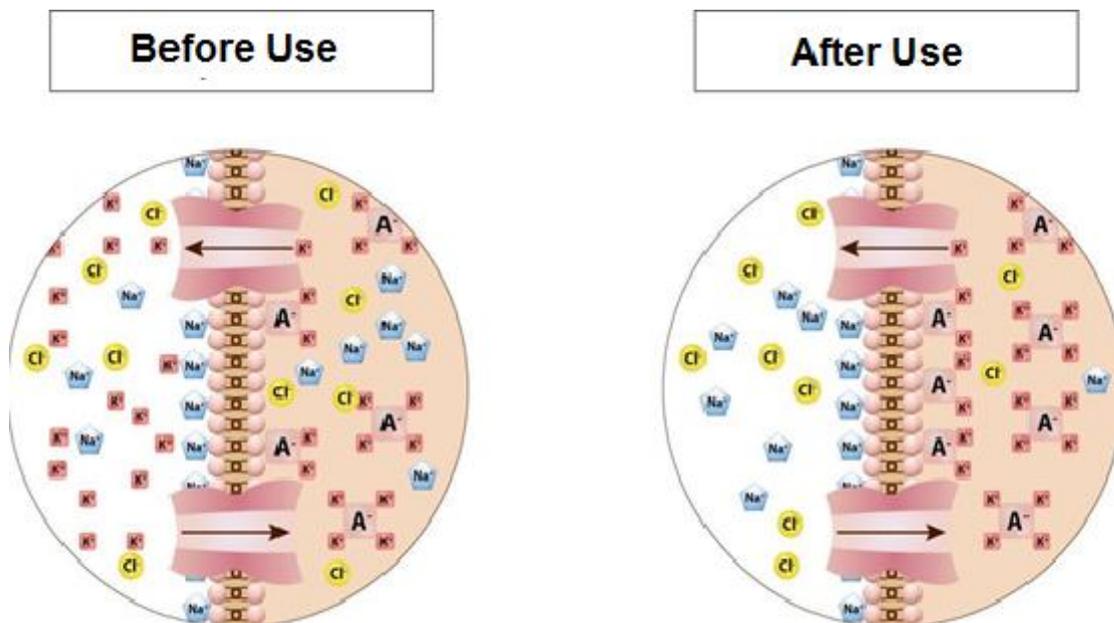
peeling, tissue recovery, its tightening, improvement of flexibility and it also stimulates immunity and resistance of tissues.

8.1 The nature of discharge generating

The spark discharge itself is generated by a high voltage of 4 – 6 kV at a very low current < 1 mA. Between it and the tip of the device place 2 mm above the skin, the discharge is generated. The electric circuit is closed by a disposable grounding electrode placed on the right shoulder blade of the patient.

9. Effect on cells

Every cell has a membrane potential on its membrane (the difference of electric potential between the two sides of the membrane). Inner side of the membrane has a negative charge, the inner side has a positive charge. As the skin is ageing, the electric charge is distributed unevenly along the membrane, and the electric voltage of the membrane is changed.



The Membrane potential is created and influenced by potassium and sodium cations. It is difficult for sodium cations to pass through the cell membrane, whereas potassium cations can pass through it very easily.

When DC electric current flows through cells, the membrane potential is change, the membrane is depolarized and this means that it can make various ions (Na^+ , K^+) to change the position and pass the membrane as well. The correct distribution of cations on the inner and outer side of the membranes makes the membrane potential balanced. Electric voltage of skin membrane is increased and the membrane tightens. If this process appears in the majority of cells in one area, the skin tightening is observable by naked eye.

Other electrocauters using AC current are not able to depolarize the membrane, because the effects of AC current either irritate cells or its effect of cells is trophic or analgetic

(depending on the used frequency and intensity). The depolarization does not occur because AC current is not able to pass through cell membranes.

Jett Plasma Lift Medical was designed to for controlled destruction of skin cells and other cells at the higher intensities of adjustable spark discharge. This is achieved thanks to the fact that at the highest intensities, the spark discharge carries a thermal energy as well and this thermal energy is able to evaporate small warts and close small vessels, which can be used for the treatment of red vessels, couperosis and to stop small capillary bleeding during small surgeries. It works with a continual sparks flow carrying thermal energy. As soon as this flow reaches the skin, the skin is heated. The spark channel generated by DC voltage is very slim (approx. 1 mm²), and therefore the treatment and the targeted destruction of cells is very precise.

The treatment of skin by spark discharge is a completely natural process and the desired effect is achieved thanks to physiological processes. No chemical substances are injected into the skin.

10. Use

The device can be used for the treatment of:

- **Face**
- **Décolletage**
- **Breasts**
- **Arms**
- **Abdomen**
- **Legs**

11. Types of treatment

The treatment by Jett Plasma Lift Medical is suitable for patients with:

- **Shallow and deep wrinkles**
- **Acne** – suitable after the acute phase is over, for better healing and prevention from scars
- **Couperosis** (dilated vessels) – for closing vessels
- **Pigment spots**
- **Scars and stretch marks**
- **Small warts – their removal**
- **Bleeding/ capillary bleeding/ after a minor surgery/ stops bleeding**

The effect of treatment is immediately visible. The maximal effect can be observed the morning after the treatment.

The number of treatments is set by a doctor. For evaporation of warts and stopping of capillary bleeding, only one treatment is necessary.

In case of cosmetic treatments, when the patient desires a long-lasting effect, 6 – 8 sessions are necessary in the following sequence:

Between the 1st and the 2nd treatment, there should be 3 free days, after every other treatment, a longer free period of 1 week is recommended. One treatment including preparation time and aftercare takes 1 hour.

After this sequence, the effect of the treatment lasts up to half a year. Then it is necessary to repeat the sequence based on the individual results. We recommend to repeat the treatment once a month for lasting effect.

Results before and after the treatment with Jett Plasma Lift Medical:



12. Working protocols for the treatments

1. Skin must be properly cleaned. Deep and surface cleaning are necessary to prepare the skin for the absorption of plasma discharges.

2. Properly cleaned skin must be heated thoroughly, which causes dilatation of collagen tissues. It is possible to use heating mask, heating by CryoJett device or by means of an intensive manual massage together with the use of a suitable cosmetic product (for example a serum based on the skin type). Cosmetic product is absorbed more easily due to the heat. However, it is necessary to check the temperature and reactions of patients skin.

!! BEWARE: Step 2 (heating) must be skipped when the treatment of couperosis is done, the heat would dilate the vessels!!

3. In case of cosmetic treatments, apply a 1 – 2 mm thick layer of ultrasound gel on the treated area with a help of brush or cosmetic spatula. Be especially careful around eyes and lips, where the skin is very thin. If the patient feels an unpleasant tingling, add more gel.

4. Apply the plasma flow treatment. Move the tip of the device firmly, slowly and carefully in the area of wrinkles, 1 – 2 mm above the gel, as you have been taught at the training. If bigger areas are treated, use the flat applicator that touches the skin directly. Flat applicator should be moved on the skin on which the indifferent gel has been applied.

Example of forehead wrinkles treatment:

Move the applicator at the straight angle along the line back and forth (————) and after that move the tip back and forth in the ZigZag way (/\ /\ /\ /\ /\).

5. It is recommended to apply a calming mask as an aftercare.

6. Working protocol for the evaporation of warts

The skin must be sterilized and it is recommended to use an anesthetic.

In this case, the discharges of the highest intensity (7 and 8) are applied and the spark flow desirably destroys skin cells. Because the area of the sparkle beam is very small, the wart is evaporated step by step and layer after layer, which enables a high precision of the destruction and a subsequent coagulation.

7. Coagulation working protocol – stopping the bleeding in minor surgeries. The intensity should be set at the level 7 or 8 and the doctor makes coagulation at the bleeding place, where the blood transforms into a solid matter.

13. Technical information, warranty, service, periodical safety technical checks in the given period

13.1 Basic technical information

Power supply:	100 to 240 VAC / 50 - 60 Hz
IEC protection class:	II
Type of device:	With an applied part of the BF type
Type of power supply source:	DA12-050EU-M, manufacturer EMERSON
Input of power supply:	100-240 VAC / 50 - 60 Hz
Output of power supply:	5VDC, max. 2.0 A
Consumption of power supply:	max. 12 VA
Voltage of plasma discharge generator:	0,8 – 7 kV
Intensity of plasma discharge:	0,3 – 1,8 W
Patient's grounding functioning detection:	SCS system
Automatic switching off high voltage at the tip:	after 20s
Accelerated decrease of voltage at the tip to zero after switching off:	after 1 s
Size:	245 mm * 45 mm
Weight:	approx. 350 g
Range of relative air humidity:	30% - 75%
Range of environment temperature:	+10 to +40 °C
Range of atmospheric pressure:	50,0 kPa – 106,0 kPa
Working environment	the device should not be used close to flammable anesthetic compounds with air or flammable anesthetics mixed with oxygen or nitrous oxide
Protection class:	IP20
Storage:	Store in the original package indoors, in a dry place with maximal temperature +5°C – 40°C and relative humidity of air up to 80%.
Transportation:	Transport in the original package in a sheltered transportation space with maximal temperature +5°C – 40°C and relative humidity of air up to 10- 100% without condensation. Range of atmospheric pressure: 50kPa to 106 kPa.

Any kind of modification the medical device Jett Plasma Lift Medical is strictly forbidden!

13.2 Warranty

This product is covered by the warranty including the material imperfections and production faults for one year after the supply of the product.

The manufacturer agrees to repair or change the product or its faulty parts in the time covered by the warranty, if these repairs are done by the manufacturer or its authorized agents.

The manufacturer takes responsibility for the security, reliability and effectivity of the product only if all repairs, changes of parts or alterations of the product are made by the authorized staff, if the device was used in accordance with this manual, if the parameters of the electricity in the room where the device is plugged fit all the requirements set by law.

If the product is sent to the manufacturer, the transport is paid by the user.

13.3 Storage, maintenance and safety technical checks

How to store and maintain the product after use:

- Storage temperature: 5 - 40 °C
- Store indoors in well-aired places and protect from direct sunlight and humidity.
- Store unplugged from power supply

Regular maintenance, cleaning and periodical safety technical checks in given time.

- **Maintenance** – the operators are obliged to follow all the instructions in this manual. The integrity of the device cannot be violated, maintenance can be done exclusively at the annual checks by the authorized service.
- The applicators must be disinfected after each use by common disinfectants stated below. The body of the device can be disinfected by moist cloth only.

Disinfection:

After each treatment, a thorough disinfection of the used applicator must be done by one of these disinfectants:

CUTASEPT F
SEKUSEPT EXTRA N
SEKUSEPT PLUS

The applicator must be wiped carefully. It is necessary to alternate the disinfectants!

Safety technical checks

If periodical safety technical checks (PSTC) are given by national laws or norms, they should be done annually. PSTC can be done only by a service worker or an authorized service. If the safety check has not been done by the manufacturer or an authorized service organization in a set period, the device must not be used until the check is done.

Service, maintenance or PSTC must not be done during the treatment of a patient.

Disposal of the product.



The waste consisting of electrical or electronic devices may contain substance that may be harmful for the environment or health. Jett Plasma Lift Medical is included in the electric waste and after the end of its lifespan, it must not be disposed of in communal waste.

13.4 Service

Warranty and after-warranty service is provided by the manufacturer:

Compex spol. s. r. o.
Palackého třída 105
612 00 Brno
Czech Republic
Tel: 00420 602 766 759, 00420 725 385 074
e-mail: nespor@compexbrno.cz export@compexbrno.cz

The manufacturer has a system of authorized service centers,

For more information see

www.jettcosmetics.cz

13.5 The Device Label

	Compex spol. s. r. o. Palackého třída 105, 612 00 Brno Czech Republic tel. : 00420 602 766 759 www.jettmedical.cz
Jett Plasma Lift Medical	
SN	0001/15
	CE 1023    

13.6. Manufacturing labels

	Compex spol. s. r. o. Palackého třída 105, 612 00 Brno, Czech Republic tel. : 00420 602 766 759 www.jettmedical.cz
Flat applicator	
SN	A 0001/15
DATE OF MANUFACTURE:	15/2/2015

	Compex spol. s. r. o. Palackého třída 105, 612 00 Brno Czech Republic tel. : 00420 602 766 759 www.jettmedical.cz
Golden applicator with a precise tip	
SN	B 0001/15
DATE OF MANUFACTURE:	15/2/2015
	

	Compex spol. s. r. o. Palackého třída 105, 612 00 Brno, Czech Republic tel. : 00420 602 766 759 www.jettmedical.cz
Conic applicator	

SN

C 0001/15

DATE OF MANUFACTURE: 15/2/2015

