

# **CRYO IQ**<sup>®</sup>

*Innovative Veterinary Cryosurgery*



Veterinary line

## **USER'S GUIDE**

### **DERM plus, PRO**

**-89°C / -128°F**



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*The most recent version of this user manual and other language versions can be downloaded from the manufacturer's website [www.cryoIQ.com](http://www.cryoIQ.com)*

All mentioned products are manufactured in the European Community by:



CryoIQ global  
Apelrödsvägen 1  
439 32 Onsala  
Sweden

Phone: +46 31-400 500  
E-mail: [info@cryoIQ.com](mailto:info@cryoIQ.com)  
Website: [www.cryoIQ.com](http://www.cryoIQ.com)

## 1. Introduction and Warnings

CryolQ® devices are intended for the controlled destruction of unwanted tissue by application of extreme cold using liquidified N<sub>2</sub>O.



With this device you will operate directly on the animal. Therefore it is mandatory to carefully go through the user guide and to follow the instructions in detail. If there are any doubts please consult your dealer or contact the manufacturer in Sweden.

Only licensed specialists are allowed to use the units.

## 2. Legal

CryolQ® is the registered trademark of SKAFTE Group AB.

The production of our veterinary products is following the same procedure as when we produce our medical device for cryosurgery. The production for medical products are certified according Medical Device Directive 93/42 and ISO 13485:2016

Please note the liability waiver at the back of this manual.

Other registered trademark are a property of respective owners.

## 3. Used symbols



Manufacturer



Warnings



Upper temperature limit 50°C/122°F



Part number



Serial number



Protect from direct sun exposure

## 4. Products

This user guide is applicable for the following veterinary products and accessories:

### Devices

CryoIQ DERM plus - Liquid  
CryoIQ DERM plus - Contact 1  
CryoIQ DERM plus - Contact 3  
CryoIQ DERM plus - Contact 5  
  
CryoIQ PRO - Liquid  
CryoIQ PRO - Contact 1  
CryoIQ PRO - Contact 3  
CryoIQ PRO - Contact 5  
CryoIQ PRO - Contact 7

### CryoIQ Ref

**REF** CIQ-DP-L-VET  
**REF** CIQ-DP-C1-VET  
**REF** CIQ-DP-C3-VET  
**REF** CIQ-DP-C5-VET  
  
**REF** CIQ-P-L-VET  
**REF** CIQ-P-C1-VET  
**REF** CIQ-P-C3-VET  
**REF** CIQ-P-C5-VET  
**REF** CIQ-P-C7-VET

### Cartridges with valve

Cartridge 25 gram N<sub>2</sub>O  
Cartridge 25 gram N<sub>2</sub>O, box of 4 pcs

**REF** CIQ-G-VN25  
**REF** CIQ-G-VN25/4

### Applicators for use with PRO

Derm tip, L=22 mm, spray freezing Ø1-6 mm  
Derm tip, L=22 mm, spray freezing Ø7-18 mm  
Derm tip, L=22 mm, spray freezing Ø9-22 mm  
  
Contact tip, Ø1 mm "gold-plated"  
Contact tip, Ø3 mm "gold-plated"  
Contact tip, Ø5 mm "gold-plated"  
Contact tip, Ø7 mm "gold-plated"  
  
Long tip, 5°, L=130 mm, spray freezing Ø7-18 mm  
Angled tip, 45°, L=80 mm, s.freezing Ø7-18 mm

**REF** CIQ-PA-D1  
**REF** CIQ-PA-D2  
**REF** CIQ-PA-D3  
  
**REF** CIQ-PA-C1  
**REF** CIQ-PA-C3  
**REF** CIQ-PA-C5  
**REF** CIQ-PA-C7  
  
**REF** CIQ-PA-L13/5  
**REF** CIQ-PA-A45

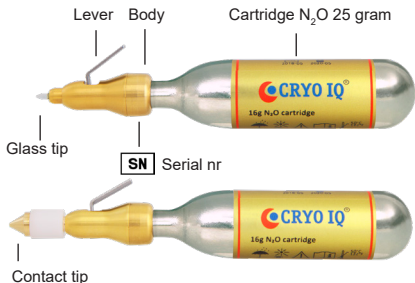
### Accessories for use with PRO

LED light, for 16 gram gas cartridge.

**REF** CIQ-A-LED

\* Please note the gas cartridges (CA-K-V16 & CA-K-V25) from Cryoalfa® will not work with CryoIQ devices even if the products look similar.

## 5. Models



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### CryoIQ DERM plus

Liquid "Spray"  
Freezing



CIQ-D-L-VET

Contact  
Freezing



CIQ-D-C1-VET



CIQ-D-C3-VET



CIQ-D-C5-VET

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### CryoIQ PRO

Liquid "Spray"  
Freezing



CIQ-P-L-VET

Contact  
Freezing



CIQ-P-C1-VET



CIQ-P-C3-VET



CIQ-P-C5-VET



CIQ-P-C7-VET

## 5.1 Options for Model PRO

**Long tips for Liquid "Spray" Freezing**  
Glass tip, length 130 mm  
Treatment area  $\varnothing$ 7-18 mm



L13

**Angle tip 45°C**  
Glass tip, length 80 mm  
Treatment area  $\varnothing$ 7-18 mm



A45

### LED Light

Available for all models using  
16/25 gram cartridge



D1

D2

D3

### Tips for Liquid "Spray" Freezing

Glass tip, length 22 mm  
D1=Treatment area  $\varnothing$ 1-6 mm  
D2=Treatment area  $\varnothing$ 7-18 mm  
D3=Treatment area  $\varnothing$ 9-22 mm



C1

C3

C5

C7

### Tips for Contact Freezing

Contact surface  $\varnothing$ 1, 3, 5 mm



### Cartridge 25 gram with valve

Cartridge designed to work with the  
CryoIQ® | DERM plus, PRO

Packed in box with 1 cartridge  
Packed in box with 4 cartridges

## 6. How to work with your CryoIQ®

- 6.1 **Installation of cartridge N<sub>2</sub>O:** Unscrew the protection cap of the cartridge and remove the small stopper. Then screw (clockwise) the cartridge into the threads of the CryoIQ® body, continue to turn until feeling a light stop position. **DO NOT APPLY FORCE!**

The cartridge has a built-in filter and valve and can be screwed or unscrewed without any gas loss. When the cartridge is empty replace it with a new one.

- 6.2 **Operation Liquid "Spray" Freezing:** Remove the protecting cap from the glass tip. Bring the device into towards the lesion. By pressing the lever with the finger the flow of N<sub>2</sub>O begins.

- 6.3 **Operation "contact freezing":** By pressing the lever with the finger the contact tip starts to cool down. After approx 20 sec the tip has reached -50°C / -58°F and you are ready to start the treatment.

- 6.4 **Application range:** All typical indications occurring in veterinary practice, like treatment of all types of warts, skin lesions that is treatable with cryo-surgery.

- 6.5 **Treatment time:** Treatment time depends on the depth at which the user deems necessary. Please refer to the treatment guidelines (included) for more details.

- 6.6 **Cleaning:** The glass-/contact tip can be cleaned and disinfected with a disinfectant or alcohol. If the device comes into contact with blood, mucous, or any other infected area it is mandatory to steam sterilize.

Screw off the gas cartridge from the body and sterilize the body and glass-/contact tip. Use a steam sterilizer at 134°C / 273°F, according to EN norms 13060 and 285. All other sterilization methods are excluded.



A hot air sterilization may damage the glass tip and must be avoided under all circumstances.

- 6.7 **Storage:** After use, put the device back in the original package. Once closed, make sure the lever is not being depressed. Otherwise, gas will leak out unintentionally.



Protect the gas cartridge from heat and direct sun exposure. Never expose the gas cartridge to a temperature above +50°C / +122°F.



Before use, ensure that the gas cartridge has an ambient temperature of +21°C / +70°F. Make sure that the tip is always protected by the cap.

- 6.8 **Disposal:** Disposal must be conducted in accordance with local requirements. Empty gas cartridge may be disposed of as scrap metal.
- 6.9 **Safety instructions and risk:** Only use the device as described in the user's guide for the purpose specified therein. Do not try to modify the device. Any manipulations of the device will result in an exclusion of warranty and liability.



Cartridges are under extreme pressure. Follow all suggested safety instructions.



Never use a damaged device. The manufacturer should check any device that has been dropped before it is used again.

Do not apply pressure when connecting the components. Put on the feeder's thread perfectly straight when replace the cartridge.

- 6.10 **Warranty:** The warranty is strictly limited to the exchange of defective parts. Dropped devices or broken tips are not under warranty. Other claims for damages such as loss of working hours, incorrect treatment and their consequences, non executed after treatment and their consequences as well as the non- observance of the safety instructions are excluded from all warranty and liability.

## 7. Liquid "spray" freezing

CryoIQ® Liquid Cryo provides a highly concentrated freezing for a successful treatment. Our cryosurgical devices are equipped with a specific liquid gas dosing applicator. The operator is able to control the release of sufficient liquid N<sub>2</sub>O to treat lesions without wasting gas. With a temperature of -128°F the liquid gas is evaporating on the lesion. A freeze/thaw method is recommended to achieve maximum results.

This process causes the cells of the tissue to be destroyed due to the cell membrane rupturing as a consequence of ice crystal formation within the cell.

**Please note:** According to clinical studies, the freezing method Liquid "spray" Freezing with N<sub>2</sub>O is as efficient as liquid nitrogen (N<sub>2</sub>) in most cryodermatologic indications.

## 8. Medical considerations

### Contraindications

- Treatment of cutaneous mass cell tumors.
- Treatment of tumors with bony involvement.
- Treatment of animals with history of conditions such as melanoma, compromised circulation, cold intolerance and cold urticaria.

### Not getting expected result?

- A. No result - Treatment probably did not last long enough or the glass tip was too far away from the lesion. Snow and the ice crystals do not effect the result only the liquid placed directly on the skin. Cryosurgery can normally be repeated. A "second freezing" can be applied after about one minute.
- B. A blister, sometimes filled with blood, may develop after the treatment. Do not puncture the blister; instead cover it with plaster or bandage.

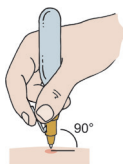
### Follow-up treatment suggestions

- Showering and swimming are permitted.
- Keep the treated area clean.
- The animal should not pick or scratch the treated area.

## 9. Suggested freezing times

The veterinary literature has many reports of varying cryogenic freezing technics. Also the thickness, location and hydration of the target tissue can affect outcomes. Veterinary professionals should be familiar with cryosurgical techniques when using CryoIQ®.

## 10. Simple treatment for success



1. Draw a circle around the lesion to be treated. Measure the size of the lesion to be able to see the treatment result by the next visit, document in a animal journal.
2. Put the animal in such a way that you can easily treat the lesion. If possible, the CryoQ device should be perpendicular to the lesion being treated.
3. Place your device with a soft pressure against the lesion which is going to be treated. Activate your device by pressing the lever on the side. The angle against the treatment area should be 65-90° to get the best result. **Spraying at a distance has absolutely no effect, max distance <1 mm.**
4. For every 3 seconds of freeze, the CryoQ is penetrating 1mm in depth of the skin. The freezing times will vary depending on the particular lesion being treated.
5. Freezing begins immediately. The animal may feel a little discomfort due to the extreme cold. However, a treatment will never exceed 20 seconds limiting any severe discomfort. Approximately 5 minutes after treatment, a skin blush will appear over the treatment area.

## **Liability waiver**

Improper use, including excess freezing levels beyond those, which are recommended or for an excessive duration, may result in bodily injury to clients/patients or to operator. CryoIQ global and their affiliates, respective directors, officers, shareholders, employees, agents and contractors are not liable or responsible, regardless of whether such liability or responsibility is based on breach of contract, tort, strict liability, breach of warranties, failure of essential purpose, fundamental breach or otherwise, for any death or injury, whether physical or mental, or for any incidental, consequential, indirect, special or punitive damages, arising out of the CryoIQ products, its design, specifications, possession and use, and treatment procedures, and whether or not any such death, injury, loss, damage(s) result from the negligence, default or error in judgment by CryoIQ global, their affiliates, respective directors, officers, shareholders, employees, agents and contractors, and even if advised of the possibility of such damages. You agree to indemnify CryoIQ global, their affiliates, respective directors, officers, shareholders, employees, agents and contractors, from and against any and all liability, damages, losses, costs, judgments, fines, penalties and expenses (including legal expenses) of any kind or nature, including, without limitation, incidental, consequential, indirect, special or punitive damages, arising out of claims, demands, actions, causes of action, proceeding or suits, whether in law or in equity, due to any death, injury, loss, damage or damages as hereinbefore referred to.