



# FILLMED by Filorga CRYOLED





# **Treatment Modalities Using Cryotherapy**

Various methods have been devised in the use of cryotherapy of lesions. They include the spray freeze technique, the applicator technique, the cryoprobe method, and the thermo-coupler method

Liquid nitrogen is the best and universal freezing source because of its low boiling point and its ease of use. Other sources that are used to freeze, such as Freon, carbon dioxide, and nitrous oxide, do exist, but they are not as efficient in destroying lesions because of their higher boiling points

Using nitrous oxide cartridge capacity the tip of the these pens reaches -89°C. The reason for this is to create a thermal shock at the region where the gas is pointed by causing a rapid drop in temperatures. The temperature drop has the effect of crystallising the fluid contents of the targeted cells, turning them into ice shards, resulting in the destruction of skin lesions as the membrane surrounding the treated cells is ruptured and destroyed











This treatment involves exposing individuals to extremely cold dry air (below -100 °C) for two to four minutes. To achieve the subzero temperatures required for WBC, two methods are typically used: liquid nitrogen and refrigerated cold air

- · Pain relief and muscle healing
- Weight Loss
- Reduced inflammationPreventing dementia
- Reducing anxiety and depression
- Improving symptoms of eczema
- **Treating Migraine Headaches**

Cryolipolysis is a non-invasive body contouring treatment used to reduce fat cell volume by freezing. The method involves controlled application of cooling within the temperature range of +5 to -11 °C for the non-invasive, localized reduction of fat deposits, intending to reshape the contours of the body

## **CRYOLED**

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There are a variety of methods used in modern cosmetology utilizing the drainage and oxygenation effects on the skin. In this case, cryoplasty is chosen - a combination of local hardware hypothermia and special cosmetic gel-serums

The device used for aesthetic cryotherapy is the Cryolift III®, Laboratories Filorga, France (Registration Certificate for Medical Device No. RZN 2013/771)

Based on a thermoelectric cooler effect (the Peltier effect)

When passing through semiconductors, covered with metal plates, a constant electric current, heat of one of the plates is released and heat of the other is absorbed

The working surface of the device is a metal nozzle (with an area of 5 or 2.5 cm<sup>2</sup>), which reduces the skin temperature by a specified amount (from -10 to -18 C)

As a result of a stable low temperature delivered to the skin by conduction and convection, a so-called thermal (thermal) shock. This phenomenon, well studied by modern medicine, is accompanied by three effects; controlled

Analgesia

Action of pain relief

Dermocryophoresis

The thermal regulation of the dermis leads to a rapid succession of vasoconstriction and vasodilation

Oxygenation

Oxygen is essential to the health and maintenance of the cells

#### Indications for use:

- Correction of age-related skin changes (wrinkles, atonia, atrophy)
- Intensive moisturizing of extremely dehydrated skin.
- Targeted prevention of photo-aging during excessive insolation (tourism, mountaineering, downhill skiing, etc.)
- Comprehensive treatment of erythroperopes
- "Stress" skin
- Degenerative changes in the skin during menopause and andropause
- Preparation for carrying out and rehabilitation after chemical peels, laser polishing, dermabrasion, plastic surgery







#### What are the main effects of Cryoplasty?

- •Dermaphoresis quick contraction and dilation of blood vessels improves the penetration of the active substances into the skin. The penetration of cosmetic products into the deeper layers of the skin.
- •Oxygenation activation of microcirculation and oxygen supply to skin cells

#### What are the benefits of Cryoplasty if the procedure is performed using CRYOLED

CRYOLED uses a modern thermoelectric effect, which is also called the Peltier effect. Based on stable temperature optimum method, it causes the temperature to drop quickly and evenly

The device helps to maintain a comfortable temperature throughout the therapeutic procedure and allows controlling the area of the target zone: the whole area of the body or face or individual zones

#### How is CRYOLED different from other similar devices used in cosmetology?

Only a special metal tip, which can cool down to -18°C, comes into contact with the skin. There is no direct effect of electric current on the skin, which allows using this method when other physiotherapeutic procedures are not permitted.

#### **Contraindications:**

- Colds and infections
- Fever
- Different types of dermatitis
- Oncological skin diseases
- Cold allergy

#### **Benefits Include:**

- •Reduces inflammation
- Stimulation of the skin
- •Improve & enhances circulation to the skins
- •Smooths and tightens the skin
- •Minimises the appearance of large pores
- •Reduces facial redness
- •Smooths out fine lines and wrinkles
- Used as a lymphatic massage
- •Improves circulation in the skin leaving a healthy glow

Because of vasoconstriction followed by vasodilation encourages microcirculation to increase in the treated areas. With regular use this will increase cellular turnover, bringing new cells to the skins surface, enhancing and improving the skins cellular quality

# **Treatment**

- The procedure of cryoplasty with **CRYOLED** is; a mixture of gels are applied to the skin and subsequent reciprocating movements of the handpiece in accordance with the location of muscle fibres and lymphatic vessels
- When performing lymphatic drainage massage of the face, it is necessary to take into account anatomical and topographic (location of lymph nodes and vessels)

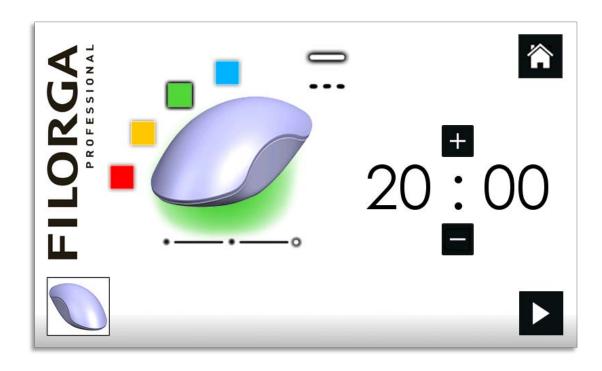


- It is recommended to carry out a full cycle procedure first on one half of the face and then move on to the opposite half
- As a rule, the course of procedures 1-2 times a week for 6 weeks
- If necessary, it can be used as a one-time procedure (from 30 to 60 minutes) to improve the appearance and condition of the face
- Vasoconstriction and vasodilation of the capillaries constantly alternate with each other, creating a pumping effect in the skin
- Vasoconstriction and vasodilation increases skin permeability to the product components and contributes to a better distribution in the skin of the active ingredients of cosmetic serum gels selected depending on the needs of the skin
- In this case, the product Skin Perfusion Gel Serum is selected, similar in composition to the NCTF 135® mesotherapy cocktail from the Filorga Laboratories, containing 59 active ingredients from 6 classes of compounds, including the membrane protector inositol, histidine antioxidants and Hyaluronic acid





# **LED User Interface**





# **Light Emitting Diode (LED)**



"LED stands for Light Emitting Diode, which is a computer chip encased in a glass-like resin, which emits therapeutic wavelengths (or colours) of light energy

Not to be confused with laser, the light therapy was originally developed to fast-track the healing of wounds and post surgery scars. The rejuvenation of healthy skin, too, was a happy coincidence

"If the therapeutic light energy is in the correct wavelength, the cells in the dermis layer of skin will convert that light energy into ATP (adenosine triphosphate), which is the fuel that the cell uses to do its job. The fibroblast cells in the dermis layer have the job of producing collagen (which give the skin fullness or that plumped look) and elastin (which give the skin the ability to bounce back). Thus, LED gives the cells a 'full tank of fuel' and these fibroblast cells start to produce collagen and elastin

#### **How does LED light therapy work?**

Our skin has the ability to absorb light and use it as a source of energy to stimulate a healing response.

LED therapy uses specific colour wavelengths of light that penetrate the skin at varying depths. The light works to energies cells in the skin to produce collagen, improve elasticity and increase blood circulation and oxygen flow while releasing toxins.

This stimulates the anti-ageing process, helps to normalize cellular imbalance and improves skin tone and clarity.

It is a natural reaction, similar to that of plant photo-synthesis which triggers the body to convert light energy to cell energy

#### When will I see results?

The number of treatments you will need can vary with skin type and condition. One session is an ideal 'pick me up' for the skin. A course of treatment is recommended for long term results

#### Will LED light therapy work for me?

The treatment is a gentle, heat free treatment that is clinically proven to be safe for all skin types, colours and conditions. So the treatment will work for yo

#### In cosmetology, LED is used for:

- Elimination of inflammation (erythema, edema)
- Prevention of hypertrophic scars and post-inflammatory hyperpigmentation
- Accelerate the healing of skin lesions
- Ensure antimicrobial effects
- Correction of alopecia, fibro-sclerotic panniculopathy and involutive changes of varying severity, etc.

The use of LED radiation does not cause allergic and toxic complications; photodermatosis (porphyria) is a contraindication to use





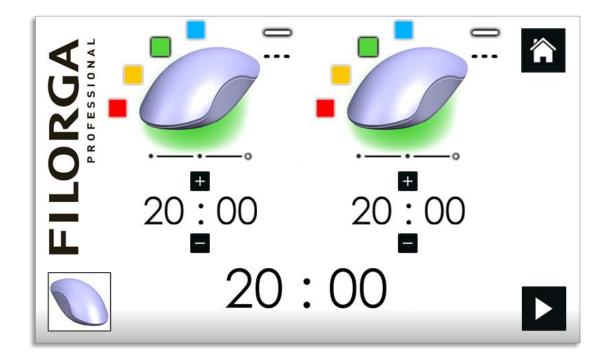
One advantage of LED devices is that they are well tolerated by patients. With no pain, large surface areas of skin can be treated simultaneously

Typically LED devices emit a range of wavelengths. These devices are available in various wavelengths from blue to infrared

The interaction of LED devices with the skin is unclear, although most believe that photomodulation of cell receptors, cell organelles, or existing protein products is partially responsible

Unlike many of the devices discussed previously, nonthermal interactions with the extracellular matrix and fibroblasts remodel existing collagen, increase collagen production by fibroblasts

In a study of 633- and 830-nm LED biostimulation, two treatments per week over 4 weeks (8 treatments) showed increases in collagen production and mild wrinkle improvement





Colours	Actions
Red Light (650- 730nm)	Increases the formation of ATP in the mitochondria of cells, has anti-inflammatory, anti-collagenase, antioxidant effect and photoporation effect
Blue Light (430- 450nm)	Bactericidal and bacteriostatic, immunomodulatory and venoprotective effects, increases the saturation of tissues with oxygen
Green Light (525- 550nm)	Green helps to normalize sebaceous glands, promotes skin hydration and corrects the processes of melanogenesis
orange Light (565- 590nm)	Improves wound healing processes, Alleviates redness from inflammation, sunburn and rosacea

- ATP Giving your skin the energy it needs. Known as the "energy currency of life", Adenosine Tri-phosphate (ATP)
- Mitochondria The cells powerhouse (Duracell battery)
- Bactericidal kills bacteria
- Bacteriostatic stops bacteria from reproducing
- Immunomodulatory function of the immune system, stimulation of antibody formation
- Melanogenesis Production of melanin

#### **BLUE LIGHT**

- Destroys & sterilizes propionibacterium (p-acne bacteria).
  Used for treating acne and pimples
- Positive effects have also been known to treat eczema, rosacea and psoriasis
- Balances pH
- Assists with Seasonal Affective Disorder (SAD lack of daylight)
- Assists with sleep disorders
- Decreases redness and inflammation
- Reduces stress and promotes relaxation

#### **GREEN LIGHT**

- Regulates melanin & oil production
- Reduces pigmentation
- Controls hyperpigmentation
- Assists in fading freckles, brown patches, age, sun and liver spots
- Smooths and brightens the skin
- Stimulates cellular growth
- Promotes healing
- Reduces redness
- Assists with

#### YELLOW LIGHT

- Rejuvenates an brightens the complexion
- Reduces redness, flushing, swelling, couperose and
- Assists with lymphatic drainag to eliminate toxins
- Energizes the cells builds collagen and reduces wrinkles
- Decreases the appearance of capillaries
- Encourages circulation and boosts the body's immune system

#### **RED LIGHT**

- Anti-aging & antiinflammatory effects on the skin
- Stimulates fibroblasts to produce collagen and elastin
- Provides essential energy for cellular renewal
- Improves skin strength, elasticity and plumpness and reduces the appearance of fine lines and wrinkles
- Increases circulation
- Assists with tightening and firming the skin
- Assists with lymphatic drainage to eliminate toxins
- Stimulates production of ATP

460nm-465nm 525nm-535nm 590nm-595nm 620nm-625nm





# FILLMED by Filorga CRYOLED





LIGHTER, MORE ROBUST

NEW TOUCH-SENSITIVE

**SCREEN** 

NEW MATERIAL: QUALITATIVE & ROBUST

> NEW TOP-END PRINTED CIRCUIT



CRYO PROBE: NEW COOLING FAN

-NOISE REDUCTION

-TEMPERATURE CONTROL

NEW PLEXIGLASS® PROBE HOLDER

NEW PROBES DESIGN WITH SOFT-

TOUCH:

**ENHANCED SUSTAINABILITY** 

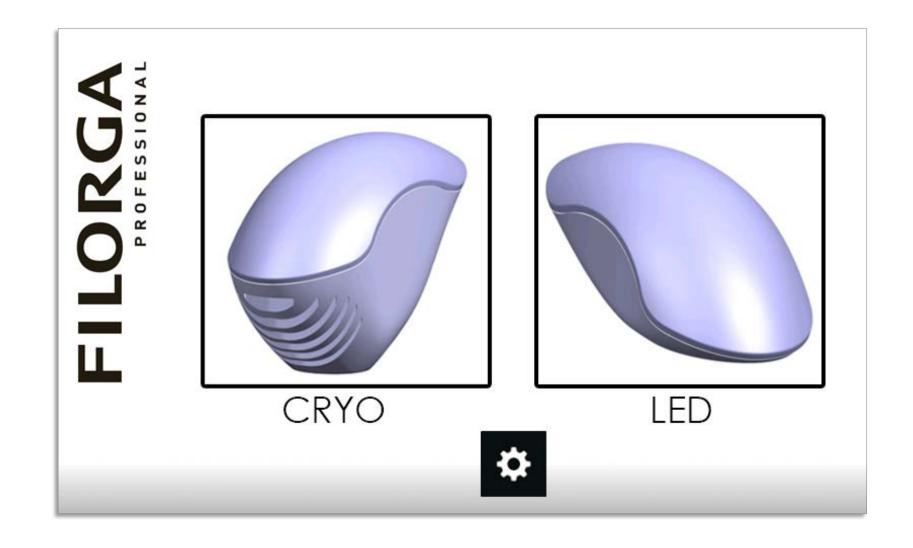
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**HEAVIER PROBES:** 

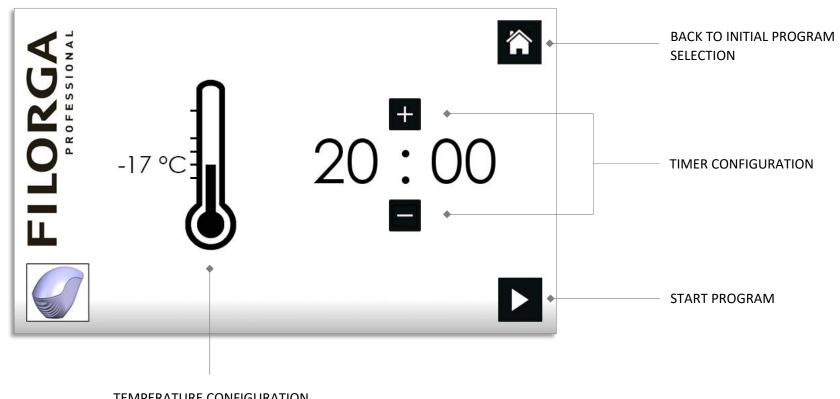
IMPRESSION OF A HIGHER

QUALITY DEVICE AND BETTER

**HANDINESS** 



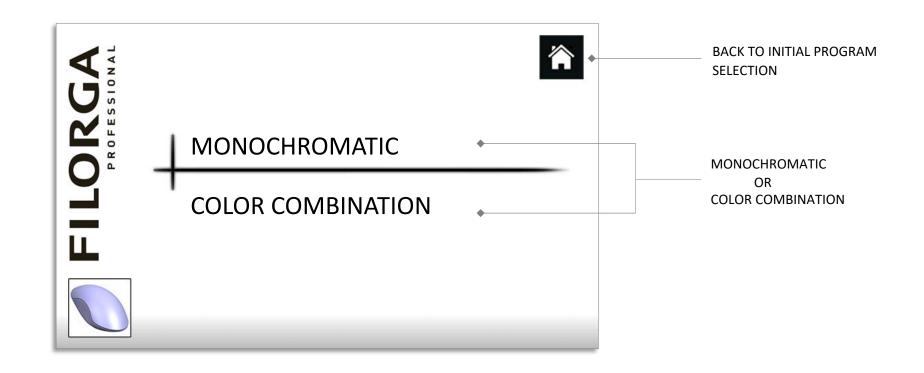




TEMPERATURE CONFIGURATION (-10°C, -15°C, 16°C, -17°C, -18°C)

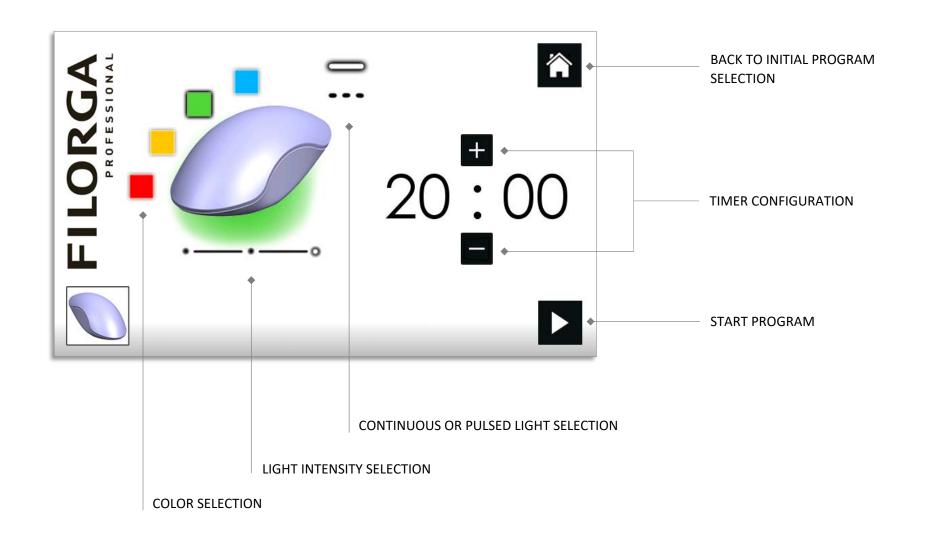






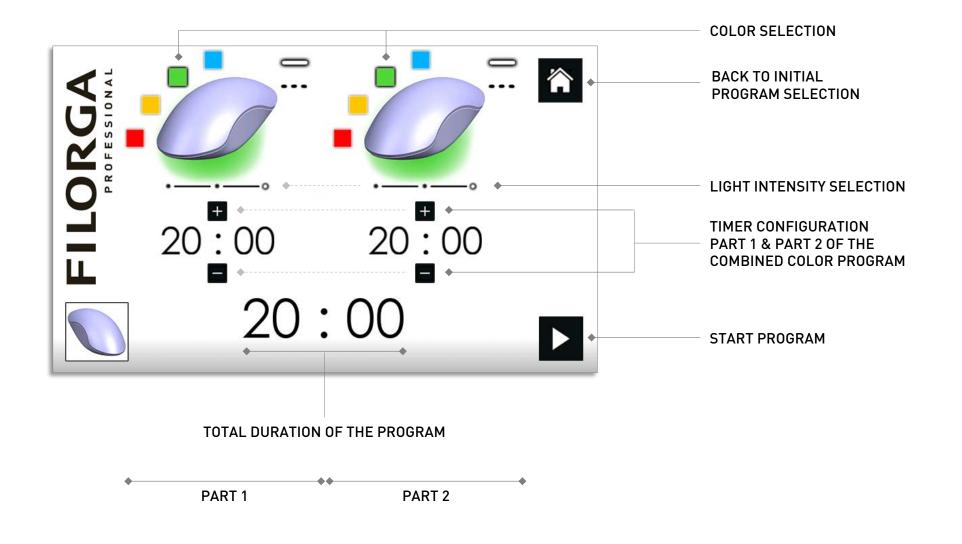






# Combined colours LED program screen







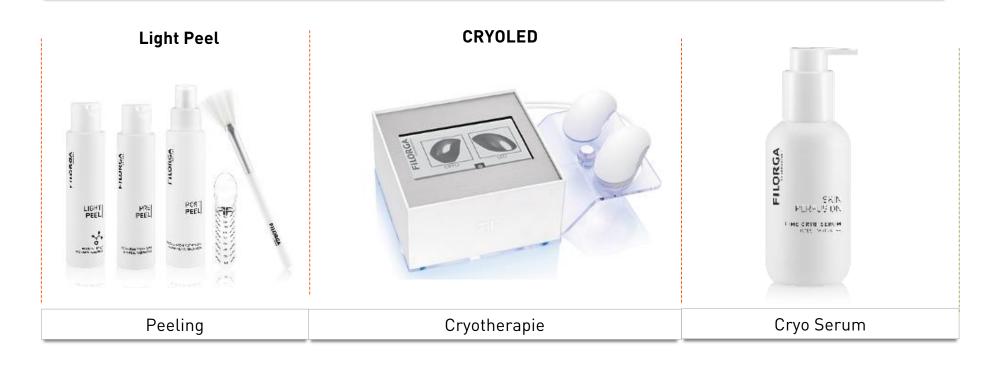
# Protocols







# in office





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### To combine with the cryoled cryoprobe



### Hydra Cryo-serum > Moisture

Hyaluronic acid - used by injection for its hydrating properties and filling action

Collagen - used in aesthetic medicine for its hydrating and firming prop

### Light Cryo-Serum > Radiance

NCTF - anti-ageing mesotherapy complex improves skin quality, & boosts radiance

## Time Cryo-Serum > Wrinkles

Galactomannans + oligosaccharides matrix - stimulates collagen synthesis, immediate and long lasting smoothing of even deep wrinkles

## Lift Cryo-Serum > Firmness

Marine DNA – powerful skin regenerator which maintains firmness Collagen - used in aesthetic medicine for its hydrating and firming properties







