



BIOPTRON® 
LIGHT THERAPY SYSTEM By Zepter Group

Medical Devices for:

Wound healing

Pain treatment:

- In rheumatology
- In physiotherapy
- In sports medicine

Dermatological Disorders and skin problems

Seasonal Affective Disorder (SAD)

For adults, children and newborns

**more than two million people
own a Bioptron device.**



do you know any of them?



ask them!





Z E P T E R S P O N S O R S H I P S

Light Therapy:

- **B.C.: Sunlight**
- **1903: Nobel Prize in medicine**
- **1980: Science meets modern technology**
- **1988: BIOPTRON Light Therapy System**

SUNLIGHT - SOURCE OF LIFE

The use of light therapy in medicine has a long history. The first light source used in photomedicine was natural sunlight. Even in ancient Egypt, sunlight was used for medical treatments. Later, Hippocrates described the use of sunlight to cure various medical disorders. Although sunlight therapy had no scientific explanation at that time, the healing power of it was clear, and Roman and Arab physicians introduced light therapy into general medical use.

Today it is known that the human organism transforms light into electrochemical energy, which activates a chain of biochemical reactions within cells, stimulating metabolism and reinforcing the immune response of the entire human body.

NOBEL PRIZE

The Danish physician Niels Ryberg Finsen founded modern light therapy about 100 years ago. In 1903 he was awarded with the Nobel Prize in medicine for his achievements with light therapy. Finsen created the first device to generate technically synthesized sunlight and achieved outstanding results in the treatment of patients suffering from a special type of skin tuberculosis.¹



References:

1) Finsen, R.N. *Phototherapy*. London: Edward Arnold, 1904

2) Mester, E.; Mester, A.F.; Mester, A. *The biomedical effects of laser application*. *Lasers Surg Med* 1985; 5: 31-39



SCIENCE MEETS MODERN TECHNOLOGY

In the early 1980s, a research team of scientists created a light source that was originally based on low-level laser therapy but actually worked with almost the whole range of visible light and a portion of infrared light.² The research revealed certain physical characteristics that are essential for the effectiveness of light therapy.

light

BIOPTRON Light is:

- **Polarized**
- **Polychromatic,**
with no uv radiation
- **Incoherent**
- **Low-energy light**

**BIOPTRON LIGHT HAS A
BIOSTIMULATIVE EFFECT ON CELLS!**

BIOPTRON Light Therapy can:

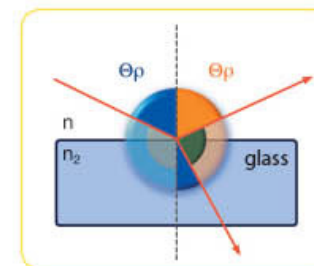
- Improve microcirculation
- Reinforce the human defence system
- Stimulate regenerative and reparative processes of the entire organism
- Promote wound healing
- Relieve pain or decrease its intensity

The outstanding characteristics of BIOPTRON Light enable the light to penetrate not only the skin but also the underlying tissues. Thus the positive effect of BIOPTRON Light is not limited to the treated skin area, but also has a beneficial effect on the entire organism.

BIOPTRON LIGHT CHARACTERISTICS ARE:

1. Polarization

BIOPTRON Light is polarized light: its waves move (oscillate) in parallel planes. The light emitted by the BIOPTRON devices reaches a polarization degree of 95%.



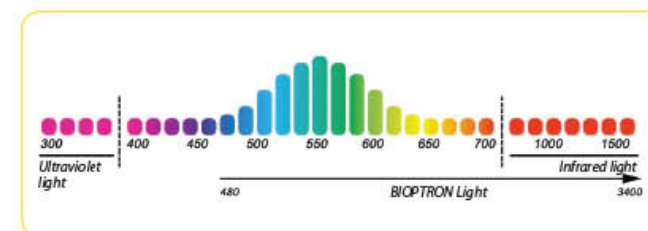
Polarization by reflection



Up to 95% polarization of the emitted spectrum

2. Polychromy

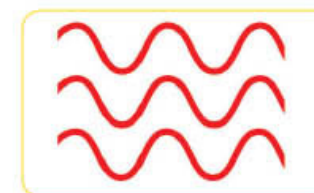
BIOPTRON Light is a polychromatic light. This means it contains not only one wavelength (like laser light), but a wide range, including visible light and a portion of the infrared range. The wavelength of BIOPTRON Light ranges from 480 nm to 3,400 nm.



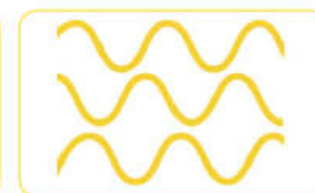
The BIOPTRON electromagnetic spectrum does not contain UV radiation!

3. Incoherency

Unlike laser light, BIOPTRON Light is incoherent, or out-of-phase light. This means that the light waves are not synchronized.



*Coherent or in-phase light
Laser light*



*Incoherent or out-of-phase light
BIOPTRON Light*

4. Low energy

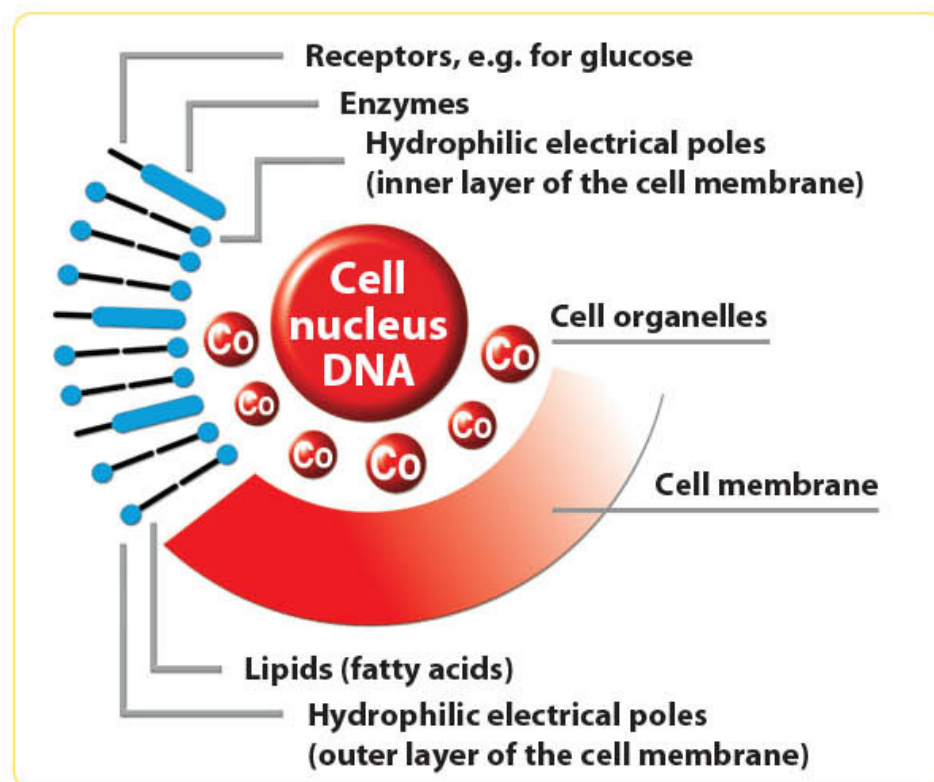
BIOPTRON Light has a low energy density. This energy density has biostimulative effects and allows the light to stimulate various biological processes in the body in a positive way.



*BIOPTRON Light has
a low energy density*

BIOPTRON worldwide:

- Polarized
- In over 50 countries
- Over 20 years on international market
- Over 2,000,000 devices sold



SCIENCE AND RESEARCH

More than 20 years of experience and research have affirmed the positive effects of BIOPTRON Light Therapy and have led to a wide range of applications in numerous fields of medicine.

The scientific team of BIOPTRON AG is working continuously with experts, researchers and physicians in numerous countries in order to examine the characteristics and therapeutic effectiveness of BIOPTRON Light Therapy.

BIOPTRON FOR HEALTH:

Can be used as monotherapy and/or complementary treatment in:

- **Wound healing**
- **Pain treatment**
- **Dermatological disorders and skin problems**
- **Seasonal Affective Disorders (SAD)**
- **In Pediatrics**
- **In Newborns**



Wounds after an injury or operation



Burns

T H E P A I N F U L A R E A !



Venous leg ulcers



Decubitus

For your health

apply bioptron light for 4-10 minutes
once or twice a day

BIOPTRON Light Therapy

can be used both as a
complementary treatment to support
conventional medical methods
and as monotherapy for certain
indications

We recommend consulting a physician before using BIOPTRON Light Therapy in order to receive professional advice as to whether this treatment is recommendable or whether other medical treatment is necessary.

...MEDICAL INDICATIONS

Pain treatment:

In rheumatology,

- Osteoarthritis
- Rheumatoid arthritis (chronic)
- Arthroses

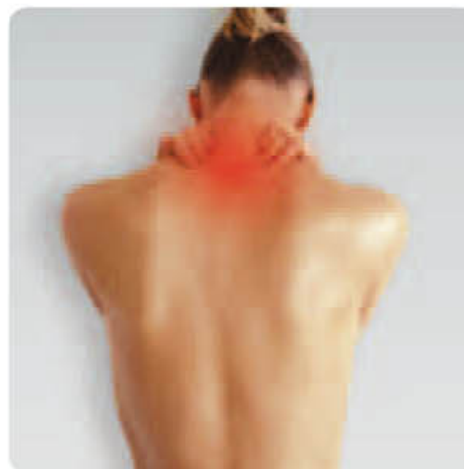
In physiotherapy and rehabilitation,

- Low back pain
- Shoulder and neck pain
- Carpal tunnel syndrome
- Scar tissue
- Musculoskeletal injuries

In sports medicine, such as soft tissue injuries of muscles, tendons and ligaments:

- Muscle spasm
- Sprains
- Strains
- Contusions
- Tendonitis
- Ligament and muscle tears
- Tennis elbow

BIOPTRON Light Therapy can be used both as a complementary treatment to support conventional medical methods and as monotherapy for certain indications. However, we recommend consulting a physician before using BIOPTRON Light Therapy in order to receive professional advice as to whether this treatment is recommendable or whether other medical treatment is necessary.



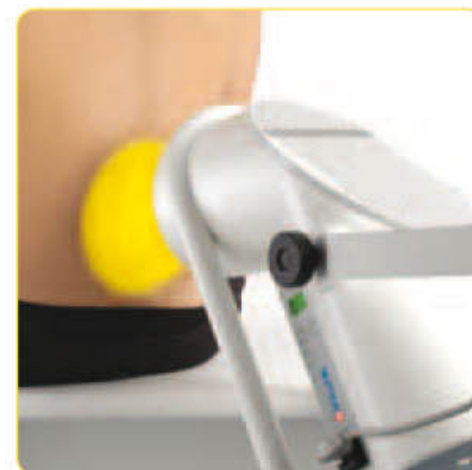
Muscular contraction



Sports injury



Neck pain



Lower back pain

THE PAINFUL AREA!



Skin problems

Dermatological disorders and skin problems,

- Atopic dermatitis
- Psoriasis
- Herpes simplex
- Herpes zoster
- Superficial bacterial infections
- Acne
- Acne rosacea
- Mucosal lesions

Illnesses in children:

- Pediatric dermal affections
- Endogenous eczema
- Upper respiratory tract infections
- Allergic respiratory diseases
- Pediatric musculoskeletal disorders and neurological disorders and deficits

Illnesses in newborn babies:

- Dermal affections as phlebitis, decubitus, intertrigo

Seasonal Affective Disorders (SAD):

- Winter depression symptoms as chronic fatigue syndrome, lowered motivation, increased need for sleep, asthenic conditions



Pediatrics

BIOPTRON Light Therapy

is a standard treatment in health-care institutions today and is in daily use in millions of homes in over 50 countries!

For additional information, please see the operating instructions.

BIOPTON DEVICES



BIOPTRON devices are medical devices used under professional conditions - at hospitals, specialist institutions, sports centers and as well as at home. The BIOPTRON devices have an innovative technology and are designed to be user-friendly for everyone. Floor stands are available for each device and allow convenient positioning according to the individual user's needs. In this way, each part of the body is easily treatable, providing the user with a relaxed, enjoyable treatment. **Differing only in size and design, all three devices have the same physical light characteristics and thus an identical beneficiary effect on the human organism.**

BIOPTRON MedAll

It is designed for use at home, in hospitals, wellness and sports centres. It is easy to use, absolutely safe, powerful yet gentle with a stylish design and a state-of-the-art technology. BIOPTRON MedAll is ergonomic, easy to handle, portable and can be programmed anytime thanks to its integrated timer and display. The device comes also with a floor stand and a handy travel case for safe storage and transport.

The filter diameter of the BIOPTRON MedAll is approx. 5 cm.

BIOPTRON Pro 1

is designed for use at home, in spas, in hospitals and therapeutic centers. An ergonomic and easily adjustable table stand as well as the ability to rotate the device head make the appliance very user-friendly. Treatments can be easily timed by an electronic control panel. The device has an energy save function due to auto switch-off and integrated sleep-mode. An integrated distance holder facilitates the recommended application distance. The BIOPTRON Pro 1 table stand is equipped with a supportive mat ensuring comfortable treatment. **The filter diameter of the BIOPTRON Pro 1 is approx. 11 cm.** An additionally available floor stand will allow the comfortable application on all parts of the body.

BIOPTRON 2

is designed for use by health professionals. The device is easily manageable, and each treatment can be easily preset up to 95 minutes, which are divisible into one-minute increments. Furthermore, its angled shape together with different stand options enables flexible positioning. **The filter diameter of the BIOPTRON 2 is approx. 15 cm.**

ALL BIOPTRON LIGHT THERAPY DEVICES ARE MADE IN SWITZERLAND BY BIOPTRON AG

BIOPTRON AG is a Swiss company that became a member of the Zepter Group in the mid-1990s. Distinguished results in the field of light therapy emanated from the scientific research, experience and expertise potential of the Zepter Group. These findings have been continuously implemented in the production of the BIOPTRON Light Therapy System.



BIOPTRON MedAll



BIOPTRON Pro 1



BIOPTRON 2

Filter diameter approx.

- BIOPTRON MedAll	5 cm
- BIOPTRON Pro 1	11 cm
- BIOPTRON 2	15 cm

Power supply

- BIOPTRON MedAll	100-240 V~, 50/60 Hz
- BIOPTRON Pro 1	100-240 V~, 50/60 Hz
- BIOPTRON 2	100-240 V~, 50/60 Hz

Power consumption

- BIOPTRON MedAll	56 VA
- BIOPTRON Pro 1	160 VA
- BIOPTRON 2	1.4-1.0 A

Fuse

- BIOPTRON MedAll	-
- BIOPTRON Pro 1	-
- BIOPTRON 2	T2A/250 V

Rated power of halogen

- BIOPTRON MedAll	20 W
- BIOPTRON Pro 1	50 W
- BIOPTRON 2	90 W

Protective class

- BIOPTRON MedAll	Class II  , IP 20
- BIOPTRON Pro 1	Class II  , IP 20
- BIOPTRON 2	Class I, IP 20

Weight

- BIOPTRON MedAll (without stand)	0.5 kg
- BIOPTRON Pro 1 (with table stand)	3.4 kg
- BIOPTRON Pro 1 (with floor stand)	7.8 kg
- BIOPTRON 2 (without stand)	4.3 kg

Ambient temperatures

- Operation	from +10 °C to +40 °C
- Storage	from -25 °C to +70 °C


Wavelength	480-3400 nm
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Degree of polarization	>95% (590-1550 nm)
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Light intensity	min. 10,000 lux
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Specific power density	av. 40 mW/cm ²
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Light energy per minute	av. 2.4 J/cm ²
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CE labelling	
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