

# PHOTIZO

LIGHT THERAPY



INSTRUCTIONS FOR USE 

CE 0123



# *Thank you*

Thank you and congratulations on your purchase! You are now the proud owner of a Photizo Professional LED Light Therapy unit. You can expect years of smooth and trouble free operation of the Photizo Professional. Great effort, thought, dedication and research has been put into bringing you this amazing, high quality device.

We believe that this device will assist you in your healing, pain relief and general health, as many others have experienced. We are proud to be your new partner on the road to wellness.

Please visit our website for more information:  
[www.photizo.net](http://www.photizo.net).

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## INTRODUCTION

Throughout the ages, sunlight (as the earliest form of phototherapy) has been known to have both healing and wellness properties. Light is energy, and energy sustains life - it cannot be destroyed, but it can be transformed into other forms. Light Emitting Diodes (LEDs) do not deliver enough power to damage the tissue, but they do deliver enough energy to promote natural self-healing and pain relief. With its power output optimized to be most effective, the LEDs provide a much gentler delivery of the same healing wavelengths of light as laser, but without the risk of accidental eye damage that lasers have.

The Photizo Professional is an LED device that emits red and infrared light that penetrates the skin to stimulate energy production and other metabolic processes in targeted areas. Infrared light is one of the only physical therapies that act to create a healing effect. Cells that are injured can actually be rejuvenated by light.

LEDs are merely convenient devices for producing light at specific wavelengths, and several studies established that it is the light itself at specific wavelengths that is therapeutic in nature. All biological systems have a unique absorption spectrum that determines which wavelengths of radiation will be absorbed to produce a given therapeutic effect. The visible red and invisible infrared portions of the spectrum have been shown to have highly absorbent and unique therapeutic effects on living tissue.

LEDs also allow the light beam to spread out instead of being a pinpoint light beam. The wide-angle diffusion of the LED confers upon it a greater ease of application, since light emissions are thereby able to penetrate a broader surface area, and this results in a faster treatment time for a given area than laser.

The Photizo Professional provides one-touch, pre-programmed, effective dosages of LED light for the treatment of many painful conditions. Photizo Professional is intended for use by medical professionals such as physiotherapists, chiropractors, physicians, etc.

## PRECAUTIONS

The following residual risks that the user needs to take notice of exist on this device

- If the cleaning procedure between treatments or patients is not followed you may compromise the health of the patient by cross contamination.
- Do not touch broken skin or open wounds as it will not assist with the treatment and will only pose a potential cross contamination risk.
- If you over-treat, thus do not follow the proposed treatment times and frequencies, you might compromise the efficacy of the treatment.

Please note that the Photizo Professional must be seen as an ancillary treatment modality, used in conjunction with medical treatments, and that the manufacturers and distributors of the Photizo Professional always advocate the use of the device under supervision of a clinician. The Photizo Professional is not intended as a replacement for standard medical procedures, medication and/or treatment. The manufacturers and distributors of the

Photizo Professional can in no way be held responsible for any damages, losses or injuries incurred using the device outside the advocated guidelines and protocol treatments. Please also note that not all conditions will benefit in a similar fashion from light therapy. Do not rely solely on the Photizo Professional and do not discontinue the use of other medications, antibiotics or antifungal treatments.

Although there are no known side effects to Photizo Light Therapy treatments, we do want to bring your attention to the following precautions:

- **Cancer:** Light therapy alone will not cure or cause cancer. Do not use light therapy on any cancer or suspected cancerous mass. Light therapy cannot cause cancer – no mutational effects have been demonstrated for LED-based light therapy devices in any medical or scientific literature to date.
- The light produced by Photizo Professional is infrared and near infrared, non-ionizing light and is at the opposite end of the light spectrum to harmful ultraviolet (UV) light. LED light therapy has been used in photodynamic therapy (PDT) to destroy cancerous growths when combined with photosensitive compounds. The Photizo Professional is however useful in treating many of the side effects of cancer treatment, such as mucositis, a painful side effect of chemo and radiation therapy.
- **Pregnancy:** Photon therapy treatment is a safe and effective treatment during pregnancy. The effects of red or infrared light therapy have not been tested in pregnancy. While the foetus cannot be negatively influenced by light, we would not recommend using the Photizo Professional on areas directly over the developing foetus.

- Epilepsy: Some suggest that pulsed visible light at frequencies in the 3-30 Hz ranges may induce seizures. The Photizo Professional does not pulse in the 3-30 Hz range, however anyone with seizure disorders should avoid looking directly at the light beam emitted from the probe as a preventative measure.
- Immune suppressant drugs: When treating with the Photizo Professional, the immune system will be stimulated. If immune suppressant drugs are used for example after a kidney transplant etc., do not use light therapy to treat ailments.
- Do not over-treat; it will not result in faster healing or pain relief. Excessive daily use may result in over-stimulation and delayed healing (inhibitory effect).
- In some patients with chronic conditions, initial treatment with light therapy might cause some slight discomfort. This is due to the body's response to start the healing process. This is not a cause of concern, and treatment should be continued.
- No eye protection is needed, but as the light is very bright, do not look directly into the emitted light.
- With repeated dosages the treatment lens will get hot and may be uncomfortable on sensitive skin or thin skin. In these cases, please allow to cool before continuing treatment.
- Please do not discontinue your medications and health-care practitioner's prescriptions. Photizo Professional treatment is a complementary treatment, assisting and stimulating the cells to speed up the healing processes, relieve pain and muscle spasms.
- Please take into account that after treatment, you may have a false picture of health. Do not overuse the area treated.

It is safe to use Photizo Home Care on:

- Growth plates in children.
- Patients with pacemakers, and other metal implants.
- Patients using anti-clotting medications.
- Diabetics. Light therapy will greatly assist in treating complications of diabetes.

## CONDITIONS AND TREATMENT

### **Chronic pain:**

Usually associated with an underlying condition. Always treat with the probe against the skin, and if possible, press lightly in order to mechanically block the superficial blood flow, as blood absorbs most of the light. This will ensure deeper penetration of the light.

Start with treating the painful areas once (1) daily, for 5 days, thereafter, treat two (2) to three (3) times a week.

### **Non-chronic pain:**

A sudden onset of pain usually due to an injury. Always treat with the probe against the skin, and if possible, press lightly in order to mechanically block the superficial blood flow, as blood absorbs most of the light. This will ensure deeper penetration of the light.

In cases of acute pain, you may treat twice daily for two (2) to three (3) days, but revert back to two (2) to three (3) times a week.



## Wounds:

Photizo treatment is not a replacement for wound care or wound care products but serves as a complimentary treatment. Prescribed wound care products are crucial for the healing process. Please follow your health care practitioner's prescriptions.

Photizo treatment should be given when changing bandaging and after the wound has been cleaned, and before wound care products and bandaging is re-applied. Debris and bandaging will block the light penetration.

Treat the whole wound area as well as the surrounding tissues. In the ideal situation, treatment should be applied two (2) to three (3) times a week, but it will depend on the wound care regime. You may treat the areas surrounding the bandaging when the wound needs to be covered for more than three (3) days.

Do not exceed daily treatment for more than seven (7) days, to prevent the possibility of inhibiting the cell growth. Revert back to two (2) to three (3) times a week. **Keep the probe as close as possible to the open wound without letting the probe touch it.**

THE FOLLOWING FREQUENTLY USED FUNCTIONS MIGHT INFLUENCE TREATMENT AS STATED BELOW:

NO	FREQUENTLY USED FUNCTION	HAZARD	SCENARIO DESCRIPTION	HARM	USER INTERFACE CONTROL MEASURE
1	Wrong protocol is chosen for the chosen application – Professional Use.	Not effective enough for the ailment.	The patient or healthcare worker uses the wrong protocol for the chosen application.	Less effective.	Users are warned in the IFU to use the Photizo as indicated.
2	Plugging charger into device to charge battery.	Battery will charge and charge LED on back panel will flash.	Using charger lower than 9V won't charge battery. Using charger higher than 9V will charge battery but too high voltage charger will blow a fuse on the driver board and the unit will stop functioning.	None.	Power supply can handle 110V to 240V.
3	Pressing on/off button while device is plugged into mains power or not plugged into mains power.	LED at on/off button will switch on. Nothing else will happen.	LED at on/off button doesn't switch on.	None.	IFU indicates the method of application.

NO	FREQUENTLY USED FUNCTION	HAZARD	SCENARIO DESCRIPTION	HARM	USER INTERFACE CONTROL MEASURE
4	Pressing Start/Stop button while device is plugged into mains power or not plugged into mains power.	Nothing will happen.	Start/Stop button can only function after the On/Off button has been pressed and then a protocol button has been selected.	None.	User cannot control this but the device will not operate until it is fully charged
5	Pressing any protocol button while device is plugged into mains power or not plugged into mains power.	Nothing will happen.	The protocol buttons can only be selected after the On/Off button has been selected.	None.	User cannot control this but the device will not operate until it is fully charged and the PSU unplugged.
6	During a cycle/dose on battery power, plugging the charger into the device.	Cycle /dose will continue uninterrupted, and after the cycle/dose has finished the battery will continue charging.	If charger less than 9V is plugged in, the battery won't charge after the cycle/dose is completed. If charger higher than 9V is used the battery will continue to charge after cycle/dose is completed, unless the charger's voltage is too high and a fuse will blow and the unit will stop functioning.	None.	User cannot control this but the device will indicate that it needs to be charged. The circuit protects the unit from overcharge.

NO	FREQUENTLY USED FUNCTION	HAZARD	SCENARIO DESCRIPTION	HARM	USER INTERFACE CONTROL MEASURE
7	Placing probe on the skin and following the correct sequence of On/Off button, Protocol button and then Start/Stop to start a cycle/dose	Treatment LEDs will go on and that specific area receives treatment	Treating wrong area, therefore no effect. Not treating long enough, therefore ineffective. Treating too long can cause inhibition effect.	None.	IFU indicates the method of application.
8	Holding probe away from the skin during cycle/dose.	Treatment LEDs will go on and that specific area receives treatment.	Holding the probe too far away therefore ineffective treatment.	None.	IFU indicates the method of application.
9	Administering treatment through bandage or clothing.	Treatment LEDs will go on and run through a cycle/dose as per normal.	Ineffective as the light is blocked by bandage or clothing.	None.	IFU indicates the method of application.
10	Administering treatment through see-through plaster.	Treatment LEDs will go on and run through a cycle/dose as per normal.	The light may be slightly blocked by the plaster depending on thickness and may cause the treatment to be slightly less effective than without the plaster.	None.	IFU indicates the method of application.

NO	FREQUENTLY USED FUNCTION	HAZARD	SCENARIO DESCRIPTION	HARM	USER INTERFACE CONTROL MEASURE
11	Probe touches open wound during treatment.	The treatment will be administered normally and the area will receive the correct dosage.	Lens may be covered with blood or other substances from the wound and can be a risk for cross contamination.	Cross contamination.	IFU indicates the method of cleaning.
12	Treatment administered anywhere on the skin.	Light energy is absorbed through the skin.	Either too little energy received in the skin leading to ineffective treatment or too much leading to inhibition effect.	None.	IFU indicates the method of application.
13	Treatment administered on the face.	Light energy is absorbed through the skin.	Effectiveness could be influenced by a beard that blocks some of the light.	None.	IFU indicates the method of application.
14	Treatment administered on the head.	Light energy is absorbed through the skin.	Effectiveness could be influenced by hair that blocks some of the light.	None.	IFU indicates the method of application.
15	Treatment administered around the eyes.	Light energy is absorbed through the skin.	Shines into eyes causing blurry vision for a short period.	None, Class 1.	IFU indicates the method of application.

NO	FREQUENTLY USED FUNCTION	HAZARD	SCENARIO DESCRIPTION	HARM	USER INTERFACE CONTROL MEASURE
16	Plugs 150mW and 1200mW probe into back of control unit.	Nothing will happen.	Probes can only be activated after correct combination of buttons are pressed.	None.	IFU indicates the method of application.
17	Activating 150mW or 1200mW probe.	Activating wrong probe for treatment.	After pressing On/Off button, a single press on a protocol button activates the 150mW probe and a double press on a protocol button activates the 1200mW probe. Pressing Start/Stop button starts the cycle.	Smaller treatment area for the 150mw and penetration depth is less for 150mW probe. Less effective for large areas and deep tissue conditions.	IFU indicates the method of application
18	Only plugging in 1 probe at a time.	Can't quickly switch between probes.	If you wish to use the other probe not plugged in, you have to plug it into the control unit before it can be activated.	None.	IFU indicates the method of application.
19	Plugging in a probe while busy with treatment with the other probe.	Unit will continue with its dose.	Probe can only be activated once correct combination of buttons are pressed.	None.	IFU indicates the method of application.

## PREPARING FOR TREATMENT

### Cleaning, maintenance and storage

The Photizo Professional should be cleaned before and after use with the aid of a clean dry cloth and non-abrasive cleaner if required. Clean the skin before application of treatment, as make-up, cosmetics or debris may block the light. The Photizo Professional should always be stored in a safe, dry area, preferably within the carry bag provided. Care should be taken when working with the device and it should not be operated or immersed in water.

The Photizo LED diodes can perform for up to 100,000 working hours without a significant loss of output.

## GENERAL GUIDELINES DURING TREATMENT USING THE DIFFERENT PROBES

- Keep the probe at right angles to the treatment site during treatment. Always treat directly over the compromised cells. Direct probe towards the problem area, in the shortest, direct path. Treating with the probes in direct skin contact results in less refraction of the light, and pressing lightly against the skin ensures deeper penetration.
- When treating wounds, start at the outer edges of the wound, treating the edges first, and then proceed to the inner part of the wound.
- Treat once daily when possible, until the wound has healed. The doses administered by Photizo have been optimized for use once daily (or even once every two days), and more doses in a day

will not be harmful, but may result in delayed hearing. Therefore, use the Photizo daily for up to but not exceeding a 3 week period, whereby treatment should be reduced to twice a week for a period of 1 (one) month.

- Treat the lymph nodes proximal to the wound or treatment site, e.g. if the wound is in the foot area, treat the axillary lymph nodes.
- When using the 1200mW probe, treat both sides of the joints. And when using the 150mW probe, treat the whole joint line.
- If you find the button/protocol you are using is causing more pain, revert back for a day or two to the “21+ Day Wounds” protocol and then resume as before.
- Treating acupuncture points is also beneficial. Light therapy is not invasive and fewer risks are involved when compared to acupuncture needles.
- Treatment for pain relief may be given on the affected area twice daily at twelve hourly intervals.

## USING THE 150MW PROBE

- Place the Photizo Professional control box on a clean table or surface.
- Connect the small probe to the small probe connector at the back of the control box.
- Clean the transparent cap of the probe with a non-abrasive cleaner before and after treatment. The probe may also be wrapped in clear, clean plastic. If the treatment area is very large, it may require repeated re-application of a treatment – if the protocol is still running, simply press the STOP button on the control box.



- Press ON/OFF BUTTON on the front panel: a lighted green LED Light indicates the Photizo Professional is switched on and ready for use.
- Select the desired protocol by pressing one of the Treatment Buttons on the front panel once.
- Note that the protocol will be de-selected if the START/STOP button is not pressed within 30 seconds. The condition treatment chart supplied with the device will guide you in selecting the best protocol for each condition.
- Press the START/STOP button to start the desired protocol and commence treatment.
- When you need to pause the current treatment cycle, press the selected protocol button again. A fast flashing LED light will be active on the START/STOP button, to indicate that the treatment has been paused.  
By pressing the selected protocol button again, it will continue the current treatment cycle. The green LED light will revert back to a continuous green LED light.
- Press the START/STOP button to stop treatment and/or to reset the apparatus.
- During treatment, position and keep the probe stationary and at right angles in that position until the light temporarily turns off followed by four beeps. Move the probe to the next treatment position. Repeat until the entire wound or affected area has been treated.
- Press the ON/OFF button to switch the apparatus off.
- If not turned off, the Photizo Professional switches off automatically after five minutes if not used

- Please note that the 150mW and 1200mW cannot be operated simultaneously.

## THE 1200MW PROBE

- This probe must only be used by a skilled user who has studied this manual. The Photizo Professional recognizes the 1200mW probe when plugged into the control unit. Please note that the different probes cannot be used simultaneously.
- Take care not to drop the probes as the glass at the front of the probes will break. Some heat may be felt on the aluminium housing after continuous use, as the large LED transfers its heat to the housing. This is quite normal and should not be cause for concern.

## USING THE 1200MW PROBE

- Place the Photizo Professional on a clean table or surface.
- If desired, the 150mW and 1200mW may be connected simultaneously.
- Connect the 1200mW probe to the "U" shaped large probe connector at the back of the control box.
- Please note that the 1200mW probe will only be operational if the Photizo is connected to the Photizo charger mains power
- The 1200mW probe can only be connected to the TYPE B USB connector on the Photizo.

Connecting the probe to any other device with a TYPE B USB connector will damage the probe and the other device.

- Clean the probe with a non-abrasive cleaner before and after treatment. The probe may be wrapped in clear, clean plastic. If the treatment area is very large, it may require repeated re-application of a treatment protocol until the whole area has been covered.
- Press ON/OFF BUTTON on the front panel: a lighted green LED light indicates that the Photizo Professional is on and ready to use.
- By pressing the desired Protocol button once, a solid green LED will appear indicating the 150mW Probe is ready for use. By pressing the desired Protocol button twice, a slow flashing green LED will appear, indicating the 1200mW Probe is ready to use.
- When the 1200mW probe is plugged into the rear of the Photizo control box, each protocol button on the front panel will now have two functions. These functions can be activated by pressing the selected treatment protocol button twice on the front panel. A slow flashing LED light will flash next to the selected protocol. Once you have selected the treatment protocol, press the START/STOP button to commence treatment. If a protocol has finished in a selected mode, it can be reactivated by selecting the protocol button key once more. The last selection mode is recalled by the control box.
- If for any reason the 1200mW probe is disconnected from the Photizo unit during treatment, the Photizo unit will reset to the standard program (150mW probe option), which is a single function for each of the protocol selection buttons

on the front panel of the control unit.

- Note that the protocol will be de-selected if the START/STOP button is not pressed within 30 seconds. The condition treatment chart supplied with the device will guide you in selecting the best protocol for each condition.
- As stated above, press the START/STOP button to start the desired protocol and commence treatment.
- When you need to pause the current treatment cycle, press the selected protocol button again. A fast flashing LED light will be active on the START/STOP button, to indicate that the treatment has been paused. By pressing the selected protocol button again, it will continue the current treatment cycle. The green LED light on the START/STOP button, will revert back to a continuous green LED light.
- Press START/STOP button after treatment to stop treatment and/or reset the apparatus.
- During treatment, position and keep the probe at right angles and stationary in that position until the light temporarily goes off followed by four beeps. Move the probe to the next position. Repeat until the whole wound or affected area has been treated.
- Press ON/OFF button to turn the apparatus off.
- If not turned off, the Photizo Professional will stop automatically after three to four minutes if not used.

## SPECIFICATIONS

The device features a light-emitting array with high-power red & infrared light emitting diodes.

Product Specification and application time and outputs			
Protocols	Wounds	Chronic pain	Non-chronic pain
Duration of programs in seconds – 150mW probe & 1200mW probe	22 & 34	56 & 85	45 & 68
Risk Classification in accordance with EN 62471	1 (Low-Risk) although treatment is less than 100 seconds		
Power Output	150mW (Varies with a peak output of 180mW/cm <sup>2</sup> ) 1200mW (Varies with a peak output of 190mW/cm <sup>2</sup> )		
Coverage Area	150mW (1.2cm <sup>2</sup> ) 1200mW (16cm <sup>2</sup> )		
Wavelengths	150mW (red - 634nm) 1200mW (red – 625nm, infrared – 850nm)		
Mains Power	100 ~ 240 VAC		
Battery Type	Ni-MH		
Battery Voltage	12V (4 x AA 2800 mA/h)		
Battery Charger	9V 2A		

### WARNING!

ONLY USE THE PHOTIZO POWER SUPPLY SUPPLIED WITH THE UNIT AS ANY OTHER POWER SUPPLY MAY DAMAGE THE PHOTIZO

## WARRANTY

This product comes with a 2-year carry-in warranty from the date of purchase, provided original proof of purchase is presented. NO warranty claims stemming from malicious damage, accidental dropping, water damage, or organic solvent damage will be entertained. Please note that specifications may differ from those presented in this manual.

Should you need any assistance or experience product failure, please contact your nearest distributor or e-mail Photon Therapy Systems at [info@photizo.net](mailto:info@photizo.net).

## STANDARD ACCESSORIES


- Carry bag with foam insert
- Power supply



## TROUBLESHOOTING: PHOTIZO PROFESSIONAL AND 150mW PROBE

Problem	Solution
Unit does not switch on	<ol style="list-style-type: none"><li>1. Press "ON" button</li><li>2. Is the unite connected to power supply?</li></ol>
150mW Probe does not activate	<ol style="list-style-type: none"><li>1. Is the probe cord plugged in at the back of the unit?</li><li>2. Press "ON" button. Choose a protocol then press "START". A beep sound should be heard. Hold button in for a least one second.</li></ol>
I've treated an affected area and do not want to finish the full protocol cycle.	Press "STOP" when you have treated the affected area. The Photizo is programmed to repeat the dosages for a selected time frame.

<p>The 1200mW Probe does not switch on</p>	<ol style="list-style-type: none"> <li>1. Is the power probe securely connected to the USB port at the back of the Photizo control unit?</li> <li>2. Is the Photizo power supply connected to the Photizo control unit and connected to mains power?</li> <li>3. These probes can only operate if they are connected to the Photizo power supply</li> <li>4. The protocol button should be pressed twice (2x) and should flicker to activate the 1200mW probe.</li> </ol>
<p>The outer ring of LED's doesn't seem to be on/to be functioning</p>	<p>The outer ring LED's wavelength lies within the invisible range and will thus not be seen with the naked eye. To confirm if these LED's are functioning, view it through your cell phone camera.</p>

 PLEASE NOTE THAT PHOTIZO PROFESSIONAL IS NOT A SUBSTITUTE FOR SOUND MEDICAL ADVICE OR TREATMENT, BUT IS AN ANCILLARY, COMPLIMENTARY TREATMENT DEVICE. DO NOT ASSUME THAT ALL CONDITIONS ARE SUITABLE FOR TREATMENT WITH LIGHT THERAPY. PHOTIZO PROFESSIONAL IS NOT A DIAGNOSTIC TOOL AND IS NOT INTENDED TO REPLACE MEDICAL TREATMENT.

## CONTACT DETAILS



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## SYMBOLS USED

	<p>Attention! Please follow the instructions in the user manual.</p>		
	<p>This symbol on the unit means "Refer to user manual".</p>		
	<p>Serial number: indicates the manufacturer's serial number so that a specific medical device can be identified.</p>		
	<p>WEEE symbol. (Waste of electrical and electronic equipment). Recycling symbol. THE WEEE symbol used for this product indicates that the device may not be disposed of as a household product. Properly dispose of the product to help protect the environment. For more information on recycling this product, contact the local competent department, the household waste management company or the store in which the product was purchased.</p>		
	<p>This medical device is not water resistant and should be protected from liquids.</p>		
	<p>Attention! Infrared emission not visible.</p>		
<p><b>CE 0123</b></p>	<p>This symbol on your device indicates that it complies with the directive on medical devices (93/42/EEC). The number of the Notified Body is 0123.</p>		
 <p><b>DATE</b></p>	<p>It refers to the manufacturer.</p>		
<table border="1" data-bbox="156 1506 325 1566"> <tr> <td data-bbox="156 1506 236 1566"><b>EC</b></td> <td data-bbox="236 1506 325 1566"><b>REP</b></td> </tr> </table>	<b>EC</b>	<b>REP</b>	<p>It refers to the European representative.</p>
<b>EC</b>	<b>REP</b>		
	<p>Equipment providing a particular degree of protection against electrical shock, particularly regarding allowable leakage currents and reliability of the protective earth connection (if present).</p>		