



 mitoredlight

# MitoRed Light Bed

## USER MANUAL

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# ABOUT US

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Located in Scottsdale, Arizona, **PRO RLT** is an exclusive retailer of Mito Red Light Commercial products.

Having extensively studied and realized the benefits of red light therapy firsthand, PRO RLT was brought into existence in order to provide business with the best quality commercial RLT products on the market.

If you have any further questions, please feel free to contact us at:

[admin@prorlt.com](mailto:admin@prorlt.com)

You can also call our phone number

Monday - Friday 9am - 5pm MST

**(833)477-6758**

Mail correspondence can be sent to:

RLT Commercial, Inc

9319 N 94th Way, Suite 200 Scottsdale, AZ 85258

# GETTING STARTED

## INDICATIONS FOR USE

Mito Red Lights are general wellness devices and are not intended to cure or diagnose any medical conditions. Use of this device is designed to help promote overall health and wellness by supporting cellular function. Mito Red Lights should only be operated based on the user guidelines, as outlined in this user manual.

## FIRST TIME USERS

For first time users, we recommend starting out with 2-3 minute sessions and slowly working up to a 10-minute session over the course of 2-3 weeks as your body acclimates to the therapy.

## STANDARD USE

**Mito Red Light Bed:** We recommend 10-minute sessions

Additional 10-minute sessions may be beneficial but beyond a certain point, the scientific evidence points to diminishing returns. More is not always better. For this reason, we recommend you allow at least 6 hours between sessions on the same area. We recommend no more than 15 minutes in any one session. We recommend using the device 4-10

times per week. We recommend taking at least one day off per week.

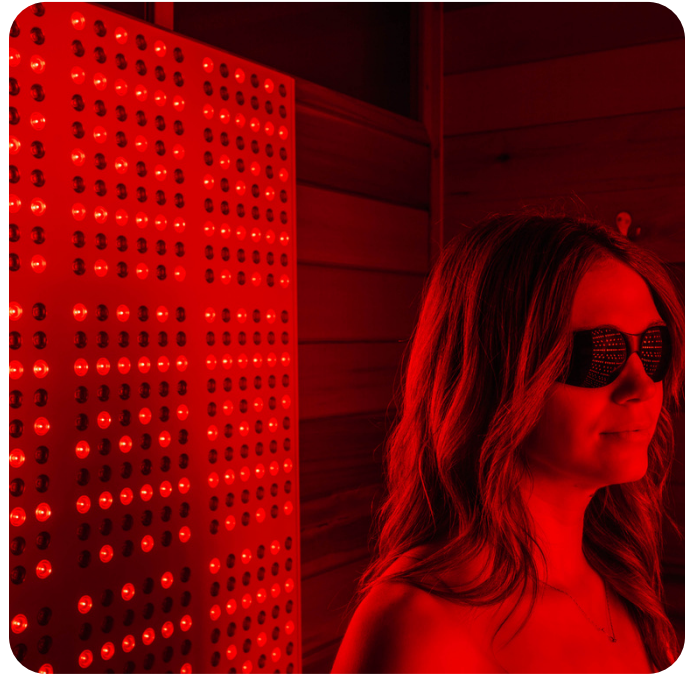
Because the LEDs are very bright, eye protection should be worn when looking directly towards the light, particularly when NIR is active.



# CONTRAINDICATIONS

## CONTRAINDICATIONS FOR RED LIGHT THERAPY

There are no industry-wide accepted contraindications for red light therapy or list of accepted contraindications that is designated or enforced by regulatory agencies. Research in red light therapy is ongoing, and contraindications are derived from existing research and clinical inferences.



## POTENTIAL HAZARDS

**Heat** - Red light therapy will generate thermal energy as light is absorbed. This heat may present a hazard in some conditions.

**Light** - The electromagnetic radiation used in red light therapy is low in energy, but it may affect tissues that are sensitive to light.

**Tissue Stimulation** - Red light therapy is intended to stimulate tissues. In some disease states this may be undesirable.

## ABSOLUTE CONTRAINDICATIONS

**Recent Burns** - Recent burns may still contain residual thermal energy that may be increased by heat from red light therapy.

**Malignant Cancers** - There is a theoretical risk that red light therapy may increase cell proliferation in malignant cancers.

**Hyperthyroidism (Neck & Upper Chest)** - Red light therapy on the neck and upper chest may increase thyroid activity in those with hyperthyroidism.

**Pregnancy (Abdomen)** - The effects of red light therapy that reaches a developing fetus are not fully understood and may potentially have a negative effect.

**Eye Disease (Eyes)** - Red light therapy's effects on various eye conditions is not fully understood and light sensitive cells in the eyes may respond unfavorably to intense red light.





Light Sensitivity - Individuals with rare conditions causing extreme sensitivity to light or who have previously reacted to red light therapy should avoid its use.

### **RELATIVE CONTRAINDICATIONS**

Fever or Infection - There is a theoretical risk that the use of red light therapy can worsen existing hyperthermia caused by fever or infection.

Systemic Lupus Erythematosus (SLE) - SLE can cause skin sensitivity, increasing the risk of a reaction to red light therapy.

Severe Bleeding or Blood Loss - Some research suggests that red light therapy may slow the body's ability to stop bleeding.

Use of Photosensitizing Medications - Medications that increase sensitivity to light may increase risks of sensitivity to red light therapy.

Tattoos - Red light therapy may cause cosmetic defects to body art, especially body art that uses red inks may be prone to fading when exposed to intense red light. The tattoo ink may also cause uneven absorption of red light, causing therapy to be less uniform.

Dark skin pigmentation - The effect of skin pigmentation on red light therapy is still being studied. Those with darker skin tones may find that their skin absorbs more light, making it warmer than those with lighter skin tones would experience. A smaller amount of red light may actually reach deeper tissues, however, this effect is not likely to be large.



Dark hair - Darker colors of hair may absorb more light, causing increased warmth and decreased penetration of red light. This effect is not likely to be large.

Melasma / Hyperpigmentation - Our own product study showed improvement from red and NIR light on hyperpigmentation, particularly when paired with a high antioxidant serum. However, in rare instances users can experience the opposite effect. We suggest starting slowly and using red light only if this is a concern.

A detailed discussion of this can be found in our article: Red Light Therapy & Hyperpigmentation.

Anyone with a contraindication to red light therapy (or any health condition at all) should consult with their physician before using red light therapy.



# FAQS

## **IS RED LIGHT THERAPY SAFE? ARE THERE SIDE EFFECTS?**

Mito Red Light uses only the red and near infrared wavelengths that are clinically proven to be effective and safe. However, we always recommend consulting with your healthcare provider for specific questions about any concerns or health conditions.

## **DO I NEED SAFETY GLASSES WITH THIS LIGHT?**

While there is a growing body of scientific research suggesting that modest amounts of red and NIR LED light may benefit certain eye conditions, Mito Red's plug-in lights are very bright! As such, eye protection is provided and should be worn when facing the lights, particularly when NIR is active.

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### **WHEN USING, DO NOT STARE DIRECTLY INTO THE LIGHT EMITTING DIODES (LEDS).**

Again, our Mito Red Lights are very bright and if you have any eye problems, or any other health conditions at all, please consult with a licensed healthcare professional before using a device like Mito Red.

## **ARE THE NIR LEDS NOT WORKING?**

NIR is just beyond the visible spectrum and is invisible to the naked eye. You will only actually be able to see a pink dot, or a subtle pink glow emanating from the LEDs when they are on. Please rest assured that there is a significant amount of light energy emanating from those LEDs and your Mito Red Light is in fact working exactly as designed.

## **WILL LIGHT THERAPY TREATMENTS CAUSE DETOX SYMPTOMS?**

It is possible that a Mito Red Light session can cause some detox related symptoms while your body acclimates. If you experience these types of issues, we recommend stopping use until the symptoms go away. Then start out at 2-3 minutes per session area and work



your way slowly up to 10 minutes over the course of 2-3 weeks. This will help your body adapt. If you continue to experience detox-related symptoms and have any concerns regarding the use of red light therapy, we recommend stopping use and consulting with your healthcare provider.



### **WHAT IF MY SKIN IS BURNED OR DAMAGED?**

Red light therapy has been clinically-proven to help damaged skin heal from cuts, burns, and other blemishes. We recommend consulting with your healthcare provider if you have any concerns.

As we are not licensed healthcare practitioners, we are not able to offer definitive clinical guidance. We recommend consulting with your trusted health care provider with specific questions.

### **WHAT IF I HAVE A PRE-EXISTING HEALTH CONDITION OR TAKE MEDICATIONS?**

Mito Red Lights are classified as a general wellness devices. Out of an abundance of caution, we recommend you consult with your healthcare provider if you have any pre-existing conditions or if you take photosensitizing drugs. Steroids work to suppress the immune system while red light therapy may work to stimulate it. To the extent that the two therapies may work against each other, we do not recommend they be used together.

### **CAN CHILDREN USE MITO RED LIGHT®?**

Clinical studies have shown red and NIR light therapy to be quite safe. However, if you are considering using it with children, we recommend consulting with a healthcare professional. All treatments with children should be done under adult supervision.



### **CAN PREGNANT OR NURSING WOMEN USE THE LIGHTS?**

As there has been no clinical research with red light therapy treatments on pregnant or nursing subjects, do not use the device if pregnant or lactating before consulting with your healthcare provider.

### **OTHER CONSIDERATIONS: BOTOX, BREAST IMPLANTS, AND LASIK**

Users with a history of facial fillers and/or Botox injections should consult their dermatologist prior to use.

Users with breast implants should consult their plastic surgeon prior to use.

Do not use the device during the healing period post Lasik eye surgery.

Before resuming use, we recommend getting clearance from your doctor. As always, we recommend following our treatment guidelines and making sure to use the provided protective eyewear.



# MITO RED LIGHT BED

## ASSEMBLY: TOP PIECE

### Step 1:

Lay the stand base upside down to get access to the four holes for the caster wheels. Then screw in all 4 caster wheels into place.



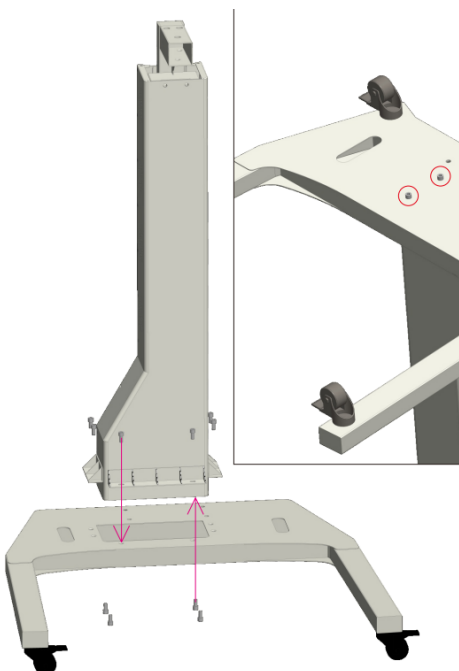
### Step 2:

After the wheels have been installed, turn the stand base back over. Now grab your stand motor with the hole on the top of the motor facing the front "legs" of the stand.



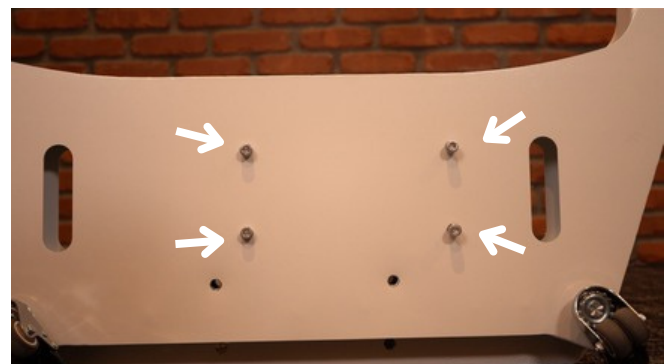
### Step 3:

Secure the stand motor to the stand base with 6 of the small allen screws provided.



### Step 4:

Then lay the stand on its back install 4 more of the same small allen screws in the 4 holes on the bottom of the stand base.



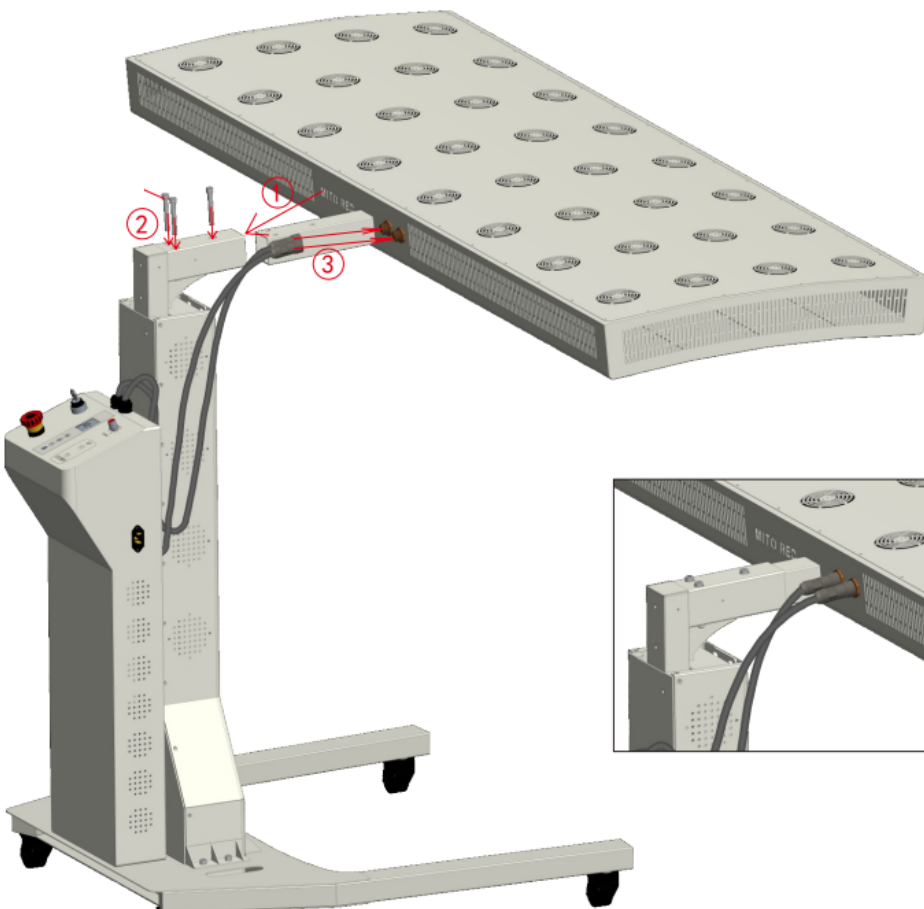




# MITO RED LIGHT BED

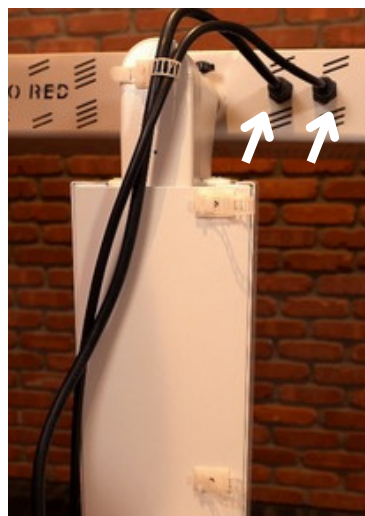
## ASSEMBLY: TOP PIECE CONTINUED

**Step 7:** Lift the panel up and slide the square tube into the receiver portion on the stand as shown below. Once all three holes are aligned, install and tighten the three long allen head bolts.



### Step 8:

Locate the two cords coming out of the control box and plug each into the according port on the panel, each plug is different so they will only go in one way. Once plugged in screw the locking caps down hand tight and plug your power cord from the wall outlet into the control box.





# MITO RED LIGHT BED

## BED CONTROLS:

Once your bed is plugged in, insert the key and turn clockwise, then turn the red safety switch clockwise until it releases. The home screen will then appear. Using the '+' and '-' buttons you can adjust the time for the current session. If all the other settings look good, press 'GO' to start and stop your session.

To adjust the brightness settings turn the 'level' knob to the left to turn down the brightness and to the right to turn up the brightness. 'Set' and toggle between each setting using the '+' and '-' buttons. Once you have adjusted these settings, press 'GO' to go back to the home screen, and then 'GO' again to start/stop your session.

Please note, changing the time on the setting screen will not affect the current session.

Once a new default time is selected, press the go button to save the selection then turn off the power switch on the back of the unit and turn the switch back on. Your new default time will be displayed.

Top



Bottom



### Attention!

If using both top and bottom bed pieces, each piece will need to be plugged into outlets on **separate** circuits due to the amperage draw of each.

# MITO RED LIGHT BED

## Remote Controller:

The 'up' and 'down' buttons are used to adjust the height positioning of the top section of the red light bed. Press either button once then release. The bed will then travel in that direction until the stop button is pressed or it reaches its travel limit.

Once you have the top piece in the desired position, you can proceed with starting your session.

Pressing the 'set' button allows you switch between modes Red only, NIR only, and a combination of Red and NIR at the same time.

The 'Reset' button will reset the time, and mode to the default setting.

The '+' and '-' buttons allow you to increase or decrease the time of the session .

The 'pause' and 'play' button starts and stops the session.

Once your settings are selected, simply press the play button and enjoy the therapy!



# MITO RED LIGHT BED

## BED CONTROLS CONTINUED:

The 'up' and 'down' buttons are used to adjust the height positioning of the top section of the red light bed.

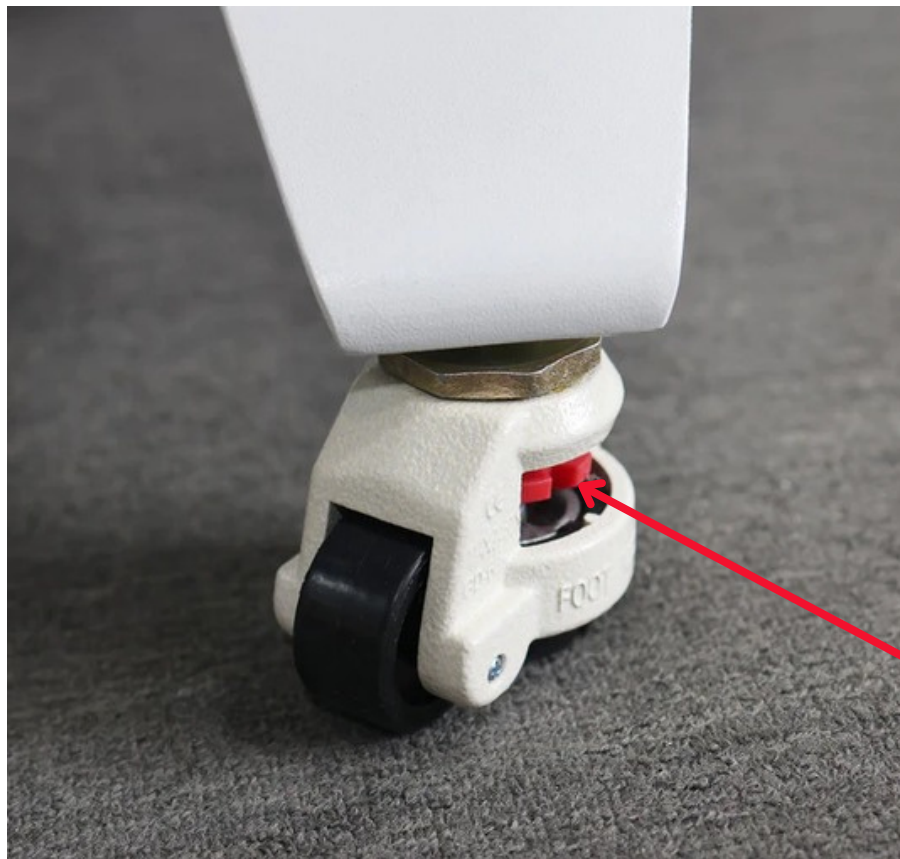
Once you have the top piece in the desired position, you can proceed with starting your session.



# MITO RED LIGHT BED

## ASSEMBLY: BOTTOM PIECE

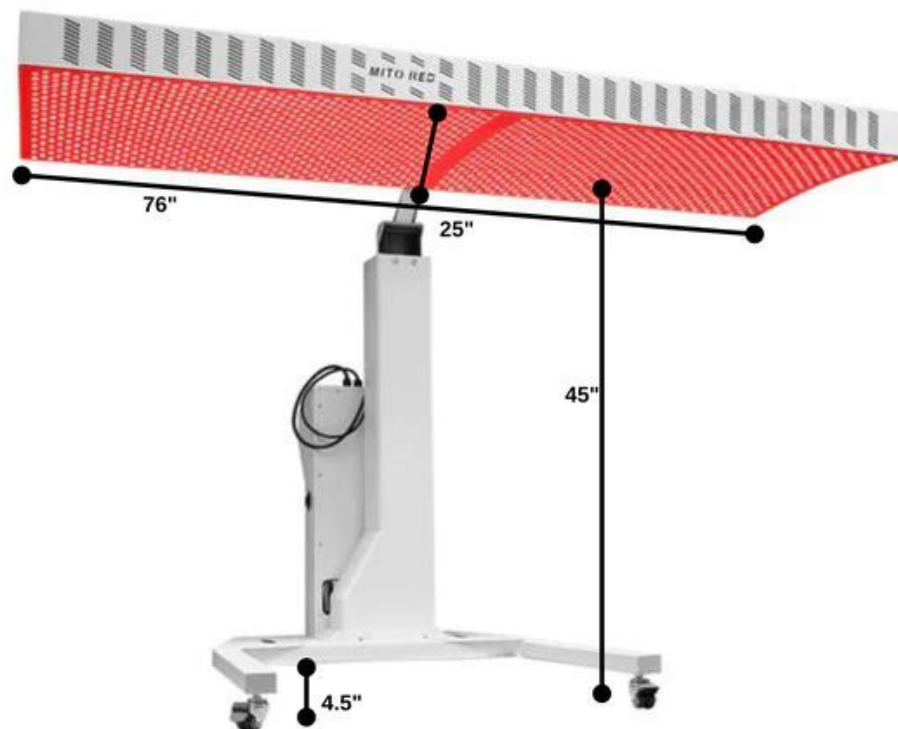
Once you roll the bottom piece into place, lower the castor wheel onto the rubber mount to keep the bed from rolling around. To do this twist the orange dial on the wheel clockwise until you see the rubber foot make contact with the floor



# MITO RED LIGHT BED TECH SPECS

## TECH SPECS - TOP

- Dimensions: 76" x 25" x 4"
- LED Quantity: 1,000
- LED Size: 42mil
- Cooling fans: 32
- Beam Angle: 60 degrees
- Wavelengths - 630nm, 660nm, 810nm, 850nm
- Weight: Panel: 75 lbs , Stand: 130 lbs
- Input voltage: 100-240V 50/60 Hz
- Power Consumption: 1450W
- Warranty: 3 years





# MITO RED LIGHT BED TECH SPECS

## TECH SPECS - BOTTOM

- Dimensions: 75" x 27" x 27"
- LED Quantity: 3,200
- LED Size: 22mil
- Cooling fans: 24
- Beam Angle: 120 degrees
- Wavelengths - 630nm, 660nm, 810nm, 850nm
- Weight: 200 lbs
- Input voltage: 100-240V 50/60 Hz
- Max Load Capacity: 500 lbs
- Power Consumption: 805W
- Warranty: 3 years



# LIGHT THERAPY OVERVIEW

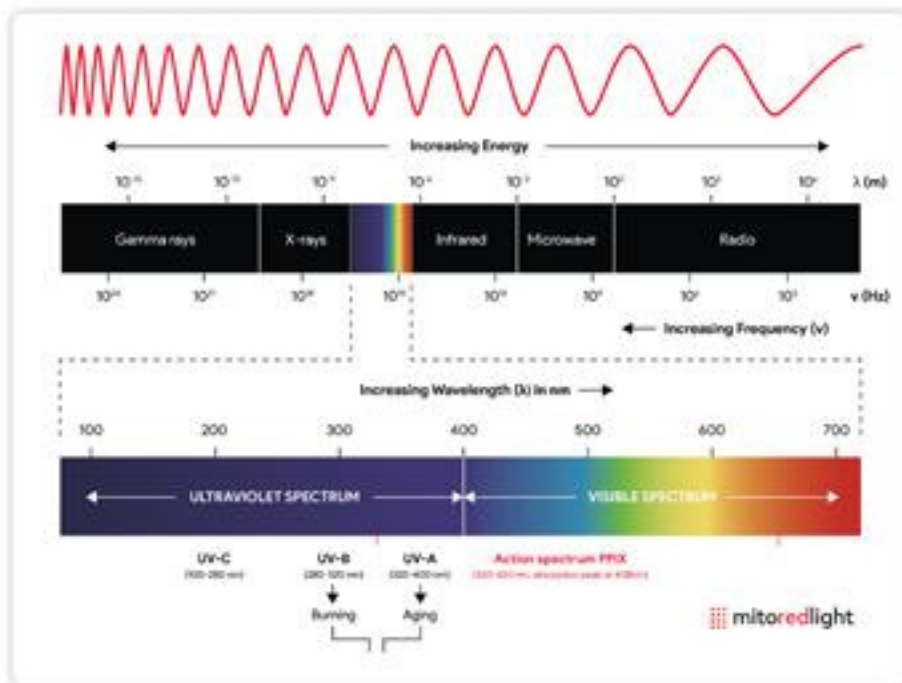
## What is Red and Near Infrared Light Therapy?

Red and near-infrared light are part of the electromagnetic spectrum, and more specifically, part of the spectrum of light emitted by the sun. These wavelengths of light

are  
"bioactive" in humans.

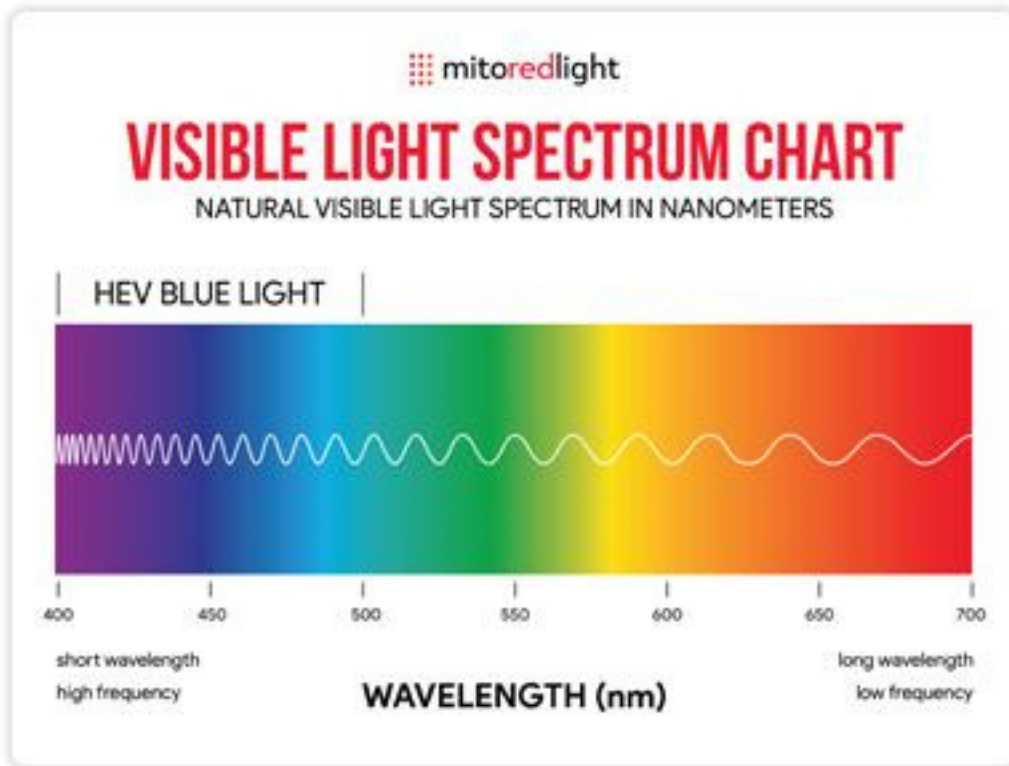


Below is a chart outlining the electromagnetic spectrum:



If you remember high school physics, when you pass white light through a prism it separates out the different colors based on their wavelengths (ROYGBIV). Only a tiny part of this spectrum (roughly 400nm to 700nm) is actually visible to the human eye.

# LIGHT THERAPY OVERVIEW



At the highest end of the visible light spectrum is red light, which goes from a little over 600nm to approximately 700nm. Above the visible light spectrum is near-infrared (NIR) from about 700nm to a little over 1,100nm.

It is specifically these red and near-infrared wavelengths that have amazing effects on our bodies. Most research showing benefits of red light and near-infrared light have used wavelengths in the ranges of 620-680nm and 800-880nm.

There have now been literally thousands of studies done in both animals and humans. Overall, red and near infrared light has been repeatedly shown to have positive effects on cell

function in animal and human studies and aid in improving a wide range of conditions.

It's all about PENETRATION.

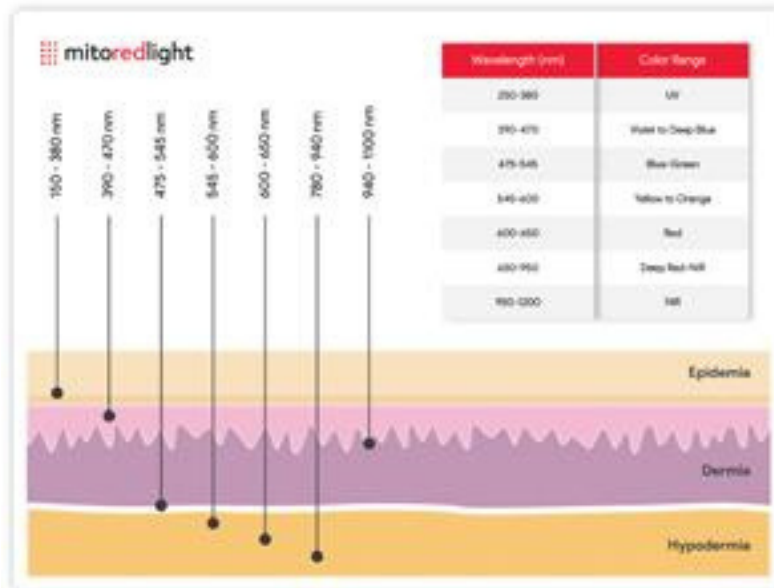
Most wavelengths of light (UV, blue, green, yellow, etc.) are unable to penetrate into the body - instead they stay in the layers of the skin.

However, as the picture above shows, red and near-infrared light are able to penetrate deeper into the human body and are able to reach the cells, tissues, blood, nerves, into the bones and even into the brain!

# LIGHT THERAPY OVERVIEW

**The benefits of red light:** Red light between 600–700nm offers benefits for skin texture and tone, smoothing fine lines and wrinkles, promoting collagen production and generally rejuvenating the appearance of skin and hair.

**The benefits of near-infrared light:** Near-infrared light (NIR) 700nm – 1100nm. penetrates deeper into the tissues to assist with wound healing, muscle recovery, nerve injury, and joint pain.



## RED LIGHT BOOSTS CELLULAR ENERGY PRODUCTION

The most well studied mechanism of action surrounding red and near infrared light therapy is increased Mitochondrial energy production in the cells. Mitochondria are tiny organelles that are the energy power plants of all the cells in our body. Red and near infrared light therapy helps the Mitochondria create more of that energy.

The specific photons found in red and near infrared light interact with a photoreceptor within our cells called

cytochrome c oxidase. This interaction stimulates the mitochondria in our cells to use oxygen more efficiently, which allows the Mitochondria to produce more ATP (adenosine triphosphate). Adenosine triphosphate is a complex organic chemical that provides energy to drive many processes in living cells, e.g. muscle contraction, nerve impulse propagation, and chemical synthesis. Found in all forms of life, ATP is often referred to as the "molecular unit of currency" of intracellular energy transfer. When our cells have more energy, they simply perform better and the body follows suit!

# SAFETY INSTRUCTIONS, WARNINGS, AND DISCLAIMER

To preserve the life and functionality of the light, always store in a cool, dry place when possible. For proper use and safety, please be sure to read this manual and follow all instructions and do not do any of the following:

DO NOT let children use the device without adult supervision.

DO NOT use this on infants.

DO NOT let sleeping, disabled, or unconscious persons use the device.

DO NOT exceed 20 minutes of use in one therapy session.

DO NOT use on open, fresh wounds.

DO NOT use in combination with liniments, salves, ointments, or balms that contain heat producing ingredients. A skin burn could be the result of doing so.

DO NOT modify or attempt to repair this equipment. There are no parts that are serviceable by the user. The Mito Red Light is an electrical device. To avoid electric shock and other electricity-related dangers, adhere to the following instructions:

DO NOT wash electrical parts with water or other liquids.

DO NOT drop your device in water or other liquids or place it where it may fall into water or other liquids.

DO NOT expose to running water. If your light comes into contact or becomes submerged into water or other liquid, unplug it immediately from the electrical power outlet. If it is to be used in the vicinity of water, we recommend using an electrical outlet protected by Ground Fault Circuit Interrupter (GFCI).







DO NOT directly touch the light or touch the plugs or switches with wet hands.

DO NOT apply or touch the light to, or with, wet or damp skin.

DO NOT pull, or lift the light by its cord. If the cord is damaged, don't use the light.

DO NOT use on or near heated surfaces.

DO NOT operate this light in areas where it could be exposed to flammable or combustible products or vapors. Explosion or fire may occur.

DO NOT store or use your device in hot temperatures exceeding 130 degrees Fahrenheit.

DO NOT use your light if it is damaged. Continuous use of a damaged light may result in electric shock or injury.

DO NOT use extension cords unless they are designed to carry the total wattage of the light being powered.

DO NOT unplug by pulling directly on the cord. Grasp the plug itself, not the cord, when unplugging from an outlet.

DO NOT cover the cooling fans while operating the light.

# CAUTIONS & DISCLAIMER

## CAUTIONS

Mito Red Light® recommends consulting with your healthcare provider prior to use if you believe that you are sensitive to light. Some cold and allergy medications, pain medications, and medications used to treat infection may cause light sensitivity.

We also recommend consulting with your healthcare provider prior to using the light if you are pregnant, have any suspicious or cancerous lesions, or have recently had a steroid injection or use topical steroids.

If you experience discomfort or have a concern about the light, stop use immediately and contact your healthcare provider.

Unplug from outlet when not in use to avoid tripping hazards.

## DISPOSAL

The light should not be disposed of with other household waste. The light requires disposal via a designated collection point for the recycling of electrical waste.

Please recycle your equipment at the time of disposal to help conserve natural resources and protect human health and the environment.

## DISCLAIMER

The statements in this manual have not been evaluated by the Food and Drug Administration (FDA). The information provided is not intended to diagnose, treat, cure, or prevent any disease and should not be construed as medical advice. Our products are low-risk, general wellness / fitness products.

Mito Red Light makes no claims or representations or otherwise warranties regarding the ability of this product to cure any physical or mental conditions. A qualified health professional should always be consulted prior to using this product in regards to any condition that may require medical attention.

## CALIFORNIA PROP 65 REQUIRES THE FOLLOWING NOTICE WARNING:

The enclosed hardware and power cord contain chemicals (such as lead) known to the State of California to cause cancer and birth defects or other reproductive harm. This is true of virtually all power cords and electronics sold in the marketplace at this time. Please wash hands after use.



[www.prorlt.com](http://www.prorlt.com)



**User Manual and Instructional Videos**

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