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## **WHAT IS LED LIGHT THERAPY?**

LED light therapy is a natural and completely non-invasive beauty treatment for all ages, skin types, and skin tones. It's fantastic for all-round skin health, delivering energy into the skin's cells to boost collagen, elastin and hyaluronic acid.

It hydrates and plumps your skin leaving you with a lovely glow and even skin tone, and is fantastic for those with more problematic or sensitive skin, correcting irregularities, such as eczema, psoriasis, acne.

Highly respected and much-admired by doctors, dermatologists and therapists, LED light therapy offers wide-ranging, scientifically-proven benefits.

### **Key Benefits**

- Prevents, repairs and maintains ageing skins
- Smooths fine lines and wrinkles
- Boosts collagen and elastin production
- Improves skin tone and texture
- Aids cell detoxification, helping in the prevention and treatment of glycation
- Increases blood circulation and lymphatic drainage in the target area
- Improves lasting hydration in the skin
- Treats active acne, dermatitis, rosacea and psoriasis
- Strengthens the skin
- Prepares the skin pre and post UV exposure
- Powerful healing treatment, whilst reducing the potential of scarring
- Calms the melanocytes and improves pigmentation

## **WHAT SKIN CONDITIONS CAN LED THERAPY TREAT?**

LED light therapy is excellent for treating:

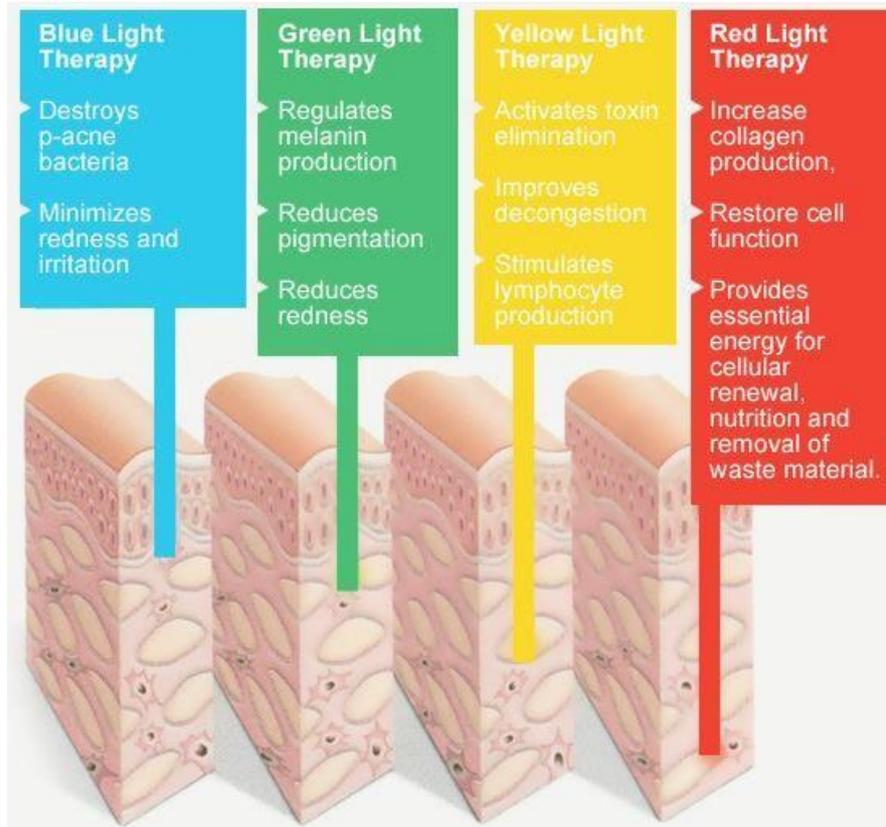
- Acne
- Extreme Skin Sensitivity
- Eczema
- Psoriasis
- Rosacea

## **WHAT'S DIFFERENT ABOUT LIGHT TREATMENTS?**

The Light lets you offer Express, Super-boosting, 15-minute Facials, delivered in a unique way: clients can sit upright in a comfortable chair, there's no need to undress, no fuss, and most

importantly, they can be in and out in 20 minutes. You can have it done whilst having a manicure or pedicure or on its own. That's the Light difference.

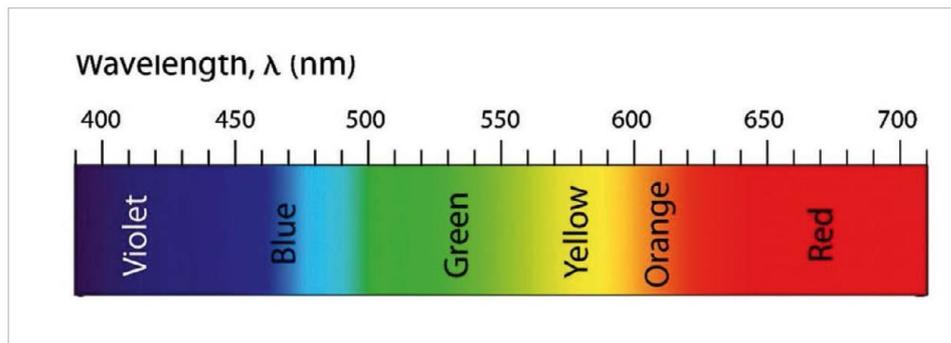
## LED TECHNICAL DETAIL



The technical name for this non-invasive facial skin rejuvenation technology is the Bio-Synthesis Light Activated Rejuvenation System. It uses LED photo technology to activate cellular metabolism and energy, assisting the production of collagen and elastin synthesis by increasing ATP synthesis and metabolising the fibroblast cells

Photo-modulation emulates photosynthesis in human skin cells, using the cell's own cytochromes to build new proteins just as plants use chlorophyll to convert sunlight into structural building blocks.

Low wattage light is directed through the skin's epidermis and aimed at fibroblast cells, which produce collagen and elastin. The light stimulates the cell's own energy transport system, therefore helping to stimulate and renew the skin.



**RED:** Anti-ageing, stimulates collagen, reduces fine lines, scar reduction and, rejuvenates skin.

**YELLOW:** Tightens and tones, detoxifies and stimulates the sensory motor nervous system.

**BLUE:** Treats acne, antibacterial, regulates oil glands

**VIOLET:** Treats psoriasis, dermatitis and Vitiligo

**GREEN:** Calms red skin, broken red capillaries, anti-inflammatory, Rosacea, traumatized skin (sunburn), aid in fading pigmentation and uneven skin colour

\*Light doses ranging in colour have been proven to be most effective for skin rejuvenation treatments that relate to rehabilitation of the microcirculation and encouragement of fibroblast activity.

**Techniques that pulse the light at specific cycles or codes (on-time and off-time) have reportedly proved most effective and this technique is called LED Photo-modulation.**

This relatively new process has the unique ability to stimulate and/or inhibit cell-signalling pathways for skin rejuvenation and potentially represents the next frontier in anti-aging medicine.

Photomodulation is a process that manipulates or regulates cell activity using light sources without thermal effect. This is achieved using portions of the visible light spectrum that **does not contain any Ultra Violet or Infra-Red**, thus achieving a non-thermal, non-invasive, and non-ablative method of skin rejuvenation.

Studies of LED Photomodulation have shown skin textural improvement accompanied by increased collagen deposition with reduced MMP-1 (collagenase) activity in the papillary dermis. Using Photomodulation, scientists theorise that we are both slowing down collagen breakdown and building up new collagen.

## **WE USE LED TO SUPPORT 3 PRIMARY SKINCARE AREAS**

### 1. Skin Health

When used as part of a smart skincare regime, LED therapy provides the perfect foundation to everyday great skin and is a fundamental beauty treatment that can freshen complexions and lift the mood in just 15 minutes. A lovely glow will be visible for around 3-4 days after just 1

light, but we recommend weekly or fortnightly treatments for continued skin health and maintenance.

Studies show that when using LED Light Therapy skin cells grow 150%-200% faster when exposed to different wavelengths of light. When the light penetrates down to the target cells, a change is caused within the cell. This strengthens the skin's blood capillaries, leading to improved oxygenation and detoxification of the skin.

LED can be used weekly to protect, nourish, treat, correct and restore the health of your skin. There are no other aesthetic treatments available that can be used so frequently and achieve such wide-ranging results. This holistic view of skincare is unique in addressing both healthy and compromised skin.

The treatment is highly effective in doubling lymphatic flow, boosts your skins protective cells, and enables cells to accept and utilise skincare products more effectively and efficiently, ultimately meaning products last longer.

## 2. Corrective

LED therapy is effectively a 'first-aid kit', healing wounds, reducing bruising and swelling and calming skin disorders (including acne, rosacea, psoriasis, eczema). It can be used to treat the most vulnerable and sensitive skin types and acts as an anti-inflammatory, whilst also strengthening the skin to help alleviate further symptoms.

Blue LED light therapy (415nm) is fantastic for the treatment of mild to severe acne in adolescents and adults, acne scarring, and skin maintenance to prevent further acne outbreaks.

Blue light treatment is a natural and powerful technique, targets the follicle to kill p.acnes, the bacteria that grows deep inside the pores, where it feeds off sebum and can cause inflamed spots. The near-infrared rejuvenation facial then reduces inflammation in the blemish, speeds up the healing process and improves overall condition of the skin. Complexions will be fresher & brighter and skin texture & tone improved.

## 3. Anti-ageing

LED light therapy puts the skin into a state of repair, which leads to an increase in the production of collagen, elastin and hyaluronic acid.

Hydration is boosted, improving plumpness, reducing fine lines and wrinkles, and brightening the complexion, allowing the skin to look fresher. The visible effects of ageing are lessened by the simple fact that the treatment boosts the levels of collagen, elastin and hyaluronic acid, which naturally diminish with age.

LED therapy also maintains youthful complexions and supports and repairs ageing skin, speeding up blood circulation that nourishes the treatment area, further boosting regeneration. It switches on your immune system, allowing the body to efficiently ingest compromised and damaged cells, reproduce healthy cells and aid cell detoxification, which helps in the prevention and treatment of glycation, (a crepe-like texture to the skin).

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## **THE CONSULTATION PROCESS**

IN ALL CASES CLIENT MUST FILL OUT A CONSULTATION FORM

### **Medication**

If clients are taking any of the listed medications it is important to let them know that the treatment is extremely safe and we require the information as a precaution only. If they are taking any of the light sensitive medications listed below, the medication might allow the body to absorb more light than under normal circumstances, leading to a reddening of the skin. This is temporary. In instances where a strong drug like roaccutane is being prescribed, the client should definitely not be treated until at least 5 days following completion of the course of the drug. Other medications might allow the body to absorb more light than under normal circumstances, leading to a reddening of the skin. This is temporary.

**Client History and Treatment Questions** Ask the client if they have ever had an LED treatment before.

Ask what they are looking to achieve from the treatment and if they have any concerns – this will give you a useful point to start a conversation and will allow you to suggest the most beneficial course of treatment.

Clients ultimately want to know what the treatment does and how quickly results will be seen. It's really important you explain the process very simply initially without an overload of technical and medical detail.

After the first treatment there may be further questions; it's much easier at this stage to deliver more detailed information. Don't worry if you don't have an immediate answer, but do offer to email with further information, ideally the same day but definitely within 24 hours. Look in your notes, ask your colleagues or email [lisa@universalipl.com.au](mailto:lisa@universalipl.com.au)

It's important that you feel comfortable with your knowledge of the treatment and it's many benefits, so please don't be afraid of asking questions!

## **CONTRAINDICATIONS: THE DO'S & DONT'S**

**ALWAYS REMEMBER: LED IS COMPLETELY HARMLESS!**

In the 20 years that LED has been used in the medical and beauty industry, there have been no reported incidents of adverse reactions or damage caused by LED therapy.\*

If the client is taking medication that increases light sensitivity there may be a temporary, slight reaction. However, these are to be flagged as a precaution not a contraindication.

### **LIGHT SENSITIVE MEDICATION**

Medication that cause light sensitivity may potentially allow your body to absorb more light than normal. However, because LED therapy delivers non-harmful low-level light (as opposed to UV, for example), the only side effects would be a slightly red/flushed appearance to the skin, or possibly a rash. This is temporary and will go down after a few hours.

## **Photosensitising medications**

**Codarone X, Amiodarone or Aratac.** Use: Anti-Arrhythmic

**Ledertrexate/Methotrexate.** Use: Anti-Cancer

**Grisovin.** Use: Anti-Fungal Antibiotic

**Doxycycline.** Use: Antibiotic

**Azapropazone.** Use: Non-Steroidal Anti-Inflammatory

**Tetracycline Group.** Use: Antibiotic (including Minomycin, Tetracycline, Oxytetracycline, Lymecycline, Demeclocycline, Vibramycin)

**Quinolone Group.** Use: Antibiotic

(Including Nalidixic Acid, Norfloxacin, Ciprofloxacin Hydrochloride, Ofloxacin, Moxifloxacin Hydrochloride)

**Chlorpromazine Hydrochloride.** Use: Antispasmodic and Hypotensive

**PLEASE NOTE:** Using LED in conjunction with the listed medication will not cause any advanced photosensitivity, but DO NOT treat if the medication has caused flushed, inflamed, sore, hot skin.

## PERFUMES & ST JOHN'S WORT

May make the skin light sensitive but you can just treat with caution as with the above medication. Clients can come with perfume on their skin but they may get a little bit of temporary redness (this does not create long term damage). They can have the treatment with the same advice as above or stop taking the medication.

## ROACCUTANE MEDICATION

The doctor/dermatologist who has prescribed the drug will ask the client not to use LED therapy until the course of treatment has been completed. It is important that this guidance is respected. However most doctors have said that clients can start having LED therapy the day after stopping taking roaccutane medication. This point shows again that there's very little risk associated with mixing the medication with LED treatments.

## TOPICAL ROACCUTANE – ISOTRETINOIN

This very strong retinol product can cause skin irritation, redness, burning, dry or peeling skin. The client can still have the treatment, but if the skin is very red and raw ask the client to reduce their usage of the Isotretinoin, then introduce LED a few days later. It's much better to recommend that the client use a topical product slowly, gaining results without causing vulnerability to the skin. If the application of Isotretinoin is reduced to every 2nd or 3rd night and LED is then introduced, good results will be gained without causing discomfort.

It's advisable to ask clients to refrain from using the cream the night before they have LED therapy.

## AUTOIMMUNE DISEASES

Generally, it is fine to treat clients with most forms of autoimmune disease. For example, some clients have rheumatoid arthritis or polymyalgia rheumatic but can still have LED treatment.

An exception to this is if clients are suffering from lupus erythematosus. In this case you must get permission from the clients doctor before proceeding with treatment.

Lupus is the name given to a collection of autoimmune diseases in which the human immune system becomes hyperactive and attacks normal, healthy tissues. Symptoms of these diseases can affect many different body systems, including joints, skin, kidneys, blood cells, heart, and lungs.

## PREGNANCY

This is a precaution as manufacturers never test equipment on pregnant woman. Our insurance does not cover the treatment of pregnant women, so before treatment can proceed the clients' obstetrician or doctor must be made aware.

The client has to sign the consultation form saying a doctor has given consent.

## BREAST FEEDING MOTHERS

Breast feeding is not a contraindication. However, for insurance purposes clients need to consult their GP or midwife and follow their recommendations.

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## KEY POINTS SUMMARY

### **The following apply for both in-salon or phone consultations.**

- LED therapy enhances and maintains the results of any other aesthetic treatment that clients may be undergoing.
- The treatment rejuvenates and promotes skin health, enabling cells to accept and utilise skincare products more effectively and efficiently, ultimately meaning products last longer.
- LED therapy speeds up blood circulation, and delivers oxygenated blood which boosts and nourishes the whole body, lowers stress hormones, reduces inflammation, boosting the immune system and 'feel-good' hormones.
- The device used is a medical piece of equipment used in hospitals and treats even the most vulnerable skins (burns patients, for example).
- The client will notice a glow to the skin, which will last 2-3 days. Reassure them that although immediate visible results are short-lived, even a single treatment is beneficial to the skin.
- There is a warmth to the treatment but it is nurturing, not damaging heat. A visible yellow light moves across the light panel, acting in combination with the warming near-infrared light to create a soothing and meditative experience. Most clients fall asleep and/or find the treatment very restful.

- Ultimately, the treatment is very relaxing, pain free, and with no down-time. It can be used on all skin types and tones and it strengthens sensitive and vulnerable skin.
- 

## APPENDIX

### IMPORTANT BENEFITS TO REMEMBER

#### Hydration

Treats dry and dehydrated skin by boosting Hyaluronic Acid within the skin. Treats deep and superficial hydration, plumps and reduces fine lines and wrinkles.

#### Oily Skin

Balances out oil production and mattifies.

#### Thin, vulnerable skin

LED is a fantastic tool for strengthening crepey, vulnerable skin. It encourages new healthy cells and supports them until they mature into nice plump cells - many people over exfoliate nowadays, which means their skin has a flatness to it, and the cells remain in a premature state, never fully maturing.

#### Thickened skin

Whilst LED greatly strengthens skin, especially fragile and vulnerable skin, it also helps refine very thick and over oily skin, which is improved, along with texture.

#### Pigmentation

LED doesn't work in the same way as IPL and laser, which targets pigmentation by breaking it down and bringing it to the surface. Instead LED calms the melanocytes and thickens the epidermal layer by producing healthy cells, encouraging them to mature, improving plumpness and reducing the appearance of pigmentation. Treats the complexion as a whole, improving clarity and overall tone.

#### Texture

Greatly improves texture. One of the first things that clients notice is a smoothness and softness to the skin. We usually say they will notice improvements to their skin around treatment 4, but some clients notice improvements earlier and smoothness is one of them.

#### Fine lines and wrinkles

Increases hyaluronic acid and collagen production, which in turn plumps the skin and reduces the appearance of fine lines and wrinkles.

## Acne

Attacks and destroys the bacteria that causes acne and reduces inflammation in the blemish, speeds up the healing process and improves overall condition of the skin. Your complexion will be fresher & brighter and skin texture & tone improved.

## Red blood vessels

Strengthens the skin's blood capillaries, leading to improved oxygenation and detoxification of the skin. Doesn't target veins, but improves appearance by hydrating capillaries and thickening epidermal layer.

## Pre & post sun exposure

Boosts anti-oxidants and protective cells, preparing skin to deal with sun exposure and restoring skin post.

## Rosacea/ Eczema/ Psoriasis

Switches the system on to create healthy cells, whilst renewing the lining in blood vessels and forming new blood vessels to improve skin's appearance,

## Bone Density

Penetrates bone and brings oxygenated blood to the area, which improves bone density. Bones naturally degenerate as we age, and this will help maintain bone structure around the eye socket and jaw line.

## Allergies (hayfever asthma)

Improved lymphatic system can help your body fight off infection, speed up healing and recovery from illness and reduce the chance of suffering from minor colds and viruses.

## Puffiness

Improves puffiness by reducing inflammation and improving lymphatic system - flow can be doubled with LED use, increasing drainage and toxin removal.

## Scar tissue

Can break down and speed up healing in scar tissue.

## Stress

Lowers stress hormones during the treatment, including cortisol levels.

## Energising

Stimulates blood flow round the whole body, energising and nourishing skin and organs.

## Anti-oxidants

Boosts anti-oxidants in skin (helps protect against free radicals) and body (helps fight illness and colds).

## Cold sores

Great at killing bacteria and infection. As soon as the immune system is feeling low and a cold is coming, get under the light to stimulate the auto-immune system. The same applies if the tingle of a cold sore is present. If the cold sore is visible or starting to surface LED will most likely stop it from surfacing or heal the sore quicker.

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## THE TREATMENT EXPLAINED

### LED - AN OVERVIEW

LED therapy delivers energy in the form of light deep into the body to energise and improve cell activity, kick-starting the rejuvenation process and treating all layers of the skin as it penetrates, conditioning and hydrating the outer cells as well as boosting the deeper cells.

It places the skin into a state of repair, which leads to an increase in the production of collagen, elastin and hyaluronic acid. Hydration is also boosted, improving plumpness, reducing fine lines and wrinkles, and brightening the complexion, allowing the skin to look fresher.

LED therapy also maintains youthful complexions and supports and repairs ageing skin, speeding up blood circulation which nourishes the treatment area, further boosting regeneration. It switches on your immune system, allowing the body to efficiently ingest compromised and damaged cells, reproduce healthy cells and aid cell detoxification, which helps in the prevention and treatment of glycation.

LED therapy is effectively a 'first aid kit', healing wounds, reducing bruising and swelling and calming skin disorders (rosacea, psoriasis, eczema). It can be used to treat the most vulnerable and sensitive skin types and acts as an anti-inflammatory, whilst also strengthening the skin to help alleviate further symptoms.

Even the most inflamed conditions can be treated; improvements in acne-prone skin, for example, can be seen from the first treatment.

There are no adverse reactions or limitations to the treatment or pre- or post-guidelines. Most importantly, no damage is done to the skin to gain a result - the treatment is entirely non-invasive. However, although results are noticeable from the very first treatment, the cumulative effect means the longer the course of treatment, the better (and the longer lasting) the results.

Clients therefore need to be patient with LED.

LED is also the perfect option when traditional facials aren't financially viable, or when time is limited. When incorporated into a traditional facial regime it will enhance the results of the other treatments.

The treatment has many secondary wellbeing benefits, including: boosting anti-oxidants and the immune system, stimulating blood flow round the body and reducing stress hormones, allowing clients to recharge mentally and physically.

#### DOES LED THERAPY HELP THE AGEING PROCESS?

Yes, the visible effects of ageing are lessened by the simple fact that the treatment boosts the levels of collagen, elastin and hyaluronic acid, which naturally diminish with age.

#### HOW LONG CAN CLIENTS CONTINUE WITH THE TREATMENT?

There are no treatment limits as LED therapy is totally harmless. The skin remains receptive no matter how many times it's exposed, although a rest period between sessions is recommended to avoid overloading the cells, reducing the effectiveness of the treatment.

A continuous regular programme of one treatment a week would benefit both the skin and the body generally.

#### AS LED THERAPY STIMULATES CELLS, WILL IT ENCOURAGE CANCER CELLS TO GROW?

No, it will stimulate healthy cells, increasing their effectiveness in the fight against damaged cells.

LED therapy not only stimulates skin cells, it also works on the lymphatic system and drainage, therefore helping to rid the body of toxins.

#### CAN LED BE USED WHILST UNDERGOING CANCER TREATMENT?

If undergoing a course of chemotherapy it is advised to wait until the cancer treatment is complete before carrying out LED therapy, unless specifically requested by the clients oncologist.

Those post-cancer, or with cancer and not in the middle of treatment, can take advantage of the multiple benefits of LED therapy.

#### OTHER BENEFITS TO LED THERAPY

It acts as a preventative in terms of the breakdown of the body, slowing the various side-effects of ageing.

If a cold sore is either already visible or starting to surface, a treatment will either stop it breaking out or quicken the healing process.

When used before exposure to sunlight it helps to prevent damage to skin, the newly stimulated cells acting as protective layer.

It's great at killing bacteria and infection. At the first hint of a cold or if you feel run-down, a treatment will stimulate the autoimmune system, aiding in the recovery process.

Ultimately, LED therapy is a preventative treatment, reducing the recurrence of a particular condition.

## REMEMBER, SKIN CELLS NEED LIGHT TO SUPPORT LIFE

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### WHAT LED DEVICE DO WE USE?

#### THE QUATTROLUX

You have the **QUATTROLUX** a medical-grade machine regularly used to its ability to regenerate, rejuvenate and heal the skin. The QuattroLux is a respected piece of medical equipment that is highly recommended by dermatologists as a beneficial preventative option in the treatment of acne. It is also used to reduce bruising pre- and post-operative. The Quattro lux is absolutely safe.

There is no radiation emitted, no damage caused and no photosensitivity caused. Although there is a warmth to the treatment, it is nurturing heat and the opposite end of the light spectrum to UV, so will never cause damage to the skin.

It can be used immediately after fillers, botox or plastic surgery; it will prolong results and heal the affected area, helping to embed the filler or botox.

The power of LED is especially effective when used for the treatment of signs of ageing, acne, and skin irregularities, with the skin benefiting hugely from the intensive rejuvenation properties.

## THE WOUND HEALING PROCESS

### WHAT IS THE WOUND HEALING PROCESS?

Red light is delivered into the cell and increases the cell energy, in the form of a chemical called adenosine triphosphate or ATP for short. ATP is an energy currency that every cell in our body can use.

The main target for red light, is the cell membrane. Red light activates the cells from the membrane inwards, and then back out to the membrane (creating a photochemical reaction).

The end result is: **A PHOTOACTIVATED CELL**

A photoactivated cell will:

Repair a damaged or compromised cell, either individually or with the help of other activated cells.

Improve the efficiency of a cell that has a job to do; for instance, fibroblasts producing collagen, elastin and proteoglycans.

Help to create more cells if necessary.

Compromised cells will respond much better to light therapy than healthy cells.

The effect is systemic, meaning nearby cells will be activated by their healthy neighbours. A compromised cell is 250% more active once treated by light therapy.

## THE PROCESS IN DETAIL

No physical wounds are necessary to activate the process when using LED therapy, instead the light energy causes inflammation in the treatment area, thus starting the wound healing cycle.

There are three main stages:

### Stage 1

Inflammation (First 3-4 days)

The protective mast cells\* and neutrophils\* are activated (in effect the bodies chemist/pharmacist). These help to protect the area from infection and antioxidants are released.

The macrophage\* (clean up) cells are activated and remove old cells and collagen, ensuring the matrix is clean. Stem cells and fibroblasts are then activated - these are essential to ensuring the cellular structure is in the best possible condition for proliferation. Fibroblast growth factor (FGF) is also released.

The first line of defence in the autoimmune system is switched on, killing invading pathogens, and the transforming growth factors TGA and TGE are released.

Mast Cells (Healing Cells) - Accelerate wound healing and release growth factors  
Neutrophils (Defence Cells) - Boost the immune system and release growth factors  
Macrophages (Cleaning cells) - Keep the dermis ECM clean of rubbish and release growth factors

### Stage 2

Proliferation (Day 3 - Fibroblasts are activated)

Fibroblasts\* are the multi-tasking cell. They:

Maintain matrix homeostasis (essential for cell development and wound healing).  
Produce new collagen.  
Produce elastin to make elastic fibres.  
Replenish & renew hyaluronic acid (which in turn keep the ground substance in a good state).  
Act as small blood vessel cells, clumping together to form the wall of new blood vessels to repair a wound or bring oxygen to the affected area.

Fibroblasts - Maintain homeostasis: they synthesize collagen, elastin and the lubricating ground substance

### Stage 3

Remodelling

During the proliferation stage increased amounts of collagen is produced, but in a random fashion. Myofibroblasts\* then hook on to the collagen and the muscle contracts, pulling the collagen into alignment, giving skin better resilience. Once this process is complete the myofibroblasts dies.

Along with the production of hyaluronic acid the skin is plumper, reducing wrinkles.

Myofibroblast (Fibroblasts with muscles) - Use little hooks to pull the criss-cross collagen into tight bundles, creating stronger, longer-lasting collagen

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## **IMPORTANT REMINDERS & TREATMENT TIPS**

All new clients must fill out a consultation card.

It is essential that photographs should be taken of the front and sides of the face before the first treatment. Stress to clients that everything is confidential and is for staff use only.

Ensure the LED panel is correctly positioned over the face: the LED panel should evenly surround the face and should sit at the same angle as the head (not closer at the forehead and further away at the chin). The width of a hand is perfect (around 12-15cm), but the panel should not be more than 15cm away from the face. During the treatment, light should visibly hit both the top of the forehead and the chin/neck area. It's extremely important that the entire face and neck is exposed so the client gains the best possible absorption of light.

Once the treatment has started double check that light is hitting all the right areas. In much the same way as with a laser head treatment the position of the equipment is key.

Always complete client notes. Please make sure you make notes after each treatment is completed. The more thorough and specific you can be the better - you may not deliver the clients' next treatment, so any comments help to make the other therapists job easier.

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## **TREATMENT OVERVIEW**

Consistency plays a key part in gaining good results with LED therapy. Regular weekly or fortnightly treatments will promote and maintain healthy skin whilst lessening the effects of the ageing process.

To gain optimum results from LED therapy and to prime cells fully, encourage your client to do two treatments a week for one or two weeks, before progressing to a weekly or fortnightly programme.

To correct and heal skin irregularities effectively, or gain the quickest rejuvenation results, it's best to follow a more intense protocol as illustrated below; these programmes have been created following thorough clinical and medical trials and in-depth research.

Managing client expectation is one of the most important aspects of the treatment. You need to inform them in a gentle and straightforward way that educates and interests them – the treatment gains long term benefits from multiple treatments and clients generally start noticing a difference around the 4th or 5th treatment, however everyone is different.

## FURTHER KEY BENEFITS OF LED

### FURTHER BENEFIT 1

#### The immunity boost and detoxification of the cells.

LED therapy is highly effective in stimulating and improving the function of the lymph system. The lymph system is part of your body's immune system and helps fight infection and also helps with cellular clean-up (the removal of dead and degenerated cells), the healing process generally (once infection is removed, healing begins), and also plays an important part in fighting infection.

It also aids in detoxifying tissue and improving lymphatic system activity. Lymphatic flow can be doubled with the aid of LED therapy, increasing drainage and toxin removal.

#### Improved lymphatic system activity can:

- Help your body fight off infection and speed up healing and recovery from illness.
- Reduce the likelihood of suffering from minor colds and viruses.
- Reduce symptoms caused by allergies such as hay fever and asthma.
- Improve skin texture by reducing swelling, puffiness and blotches.
- Encourage healthy pores.
- Speed up healing in scar tissue.

LED therapy is highly effective at killing bacteria and infection. At the first hint of a cold or when feeling run-down, a treatment will stimulate the autoimmune system, aiding in the recovery process. Similarly, if a cold sore is either already visible or starting to surface, a treatment will either stop it breaking out or quicken the healing process.

Ultimately, LED therapy is a preventative treatment, reducing the recurrence of a particular condition. For instance, if used 2-3 times a week for life, both the skin and body would be in better condition due to the immune boosting benefits.

Studies show that when using LED Light Therapy skin cells grow 150% - 200% faster when exposed to different wavelengths of light. When the light penetrates down to the target cells, a change is caused within the cell. This strengthens the skin's blood capillaries, leading to improved oxygenation and detoxification of the skin.

### FURTHER BENEFIT 2

#### The Power Nap / 'Me Time'

The deeply relaxing nature of our light treatments often causes clients to drift off to sleep.

It has been proven that even short naps of six minutes (not counting the average time of five minutes it takes to fall asleep) make a difference in how well people retain information. This timeframe fits perfectly into our 15-minute treatment period.

Power naps of 6 and 10 minutes restore wakefulness and promote performance and learning. Although a short nap won't completely reset the body clock, it can prolong the time before tiredness sets in again.

This short burst of 'me time' can be accessed perfectly during LED treatments.



## QUATTROLUX

### WRINKLE REMOVAL – 25 MINUTES

COLOUR	STAGE	TIMEFRAME
red	stimulation	7 minutes
Yellow, green, purple (alternating)	Invigoration	12 minutes
	<b>PRES START TO RESUME</b>	
Red	Drainage	6 minutes

### FACIAL FIRMING – 30 MINUTES

COLOUR	STAGE	TIMEFRAME
Red and green (alternating)	Invigoration	12 min
Purple and green (alternating)	Activation	12 min
	<b>PRESS START TO RESUME</b>	
Red (selective zone)	drainage	6 min

### ACNE TREATMENT– 35 MINUTES

COLOUR	STAGE	TIMEFRAME
Blue	Activation	25 min
red	Invigoration	10 min
	<b>NO DRAINAGE</b>	

#### ANTI -ALLERGY – 31 MINUTES

COLOUR	STAGE	TIMEFRAME
Yellow	Invigoration	20 minutes
Red	Activation	11 minutes
	<b>NO DRAINAGE</b>	

#### SPOT REMOVAL – 15 MINUTES

COLOUR	STAGE	TIMEFRAME
Yellow	Invigorate	15 minutes

#### BODY FIRMING – 20 minutes

COLOUR	STAGE	TIMEFRAME
Green	Invigoration	7 minutes
Red	Intensification	7 minutes
	<b>PRESS START TO RESUME</b>	
Green	Drainage	6 minutes

#### BODY CONTOURING – 20 minutes

COLOUR	STAGE	TIMEFRAME
GREEN	Repair	5 minutes
RED	Activation	10 minutes
	<b>PRESS START TO RESUME</b>	
GREEN	Drainage	5 minutes

#### Technical Specifications

##### Input Power

600 Watt

##### Number of wavelengths

4 ( RED 625nm, Blue 420nm, Green 530nm, Yellow 590nm

##### Output intensity

485mW /Cm<sup>2</sup>

### Pre-programmed treatments

6 (Wrinkles, Hydration, Facial Firming, Acne, Spots

Removal & Anti- Allergy

Teeth Whitening Program

Optional

Body Treatments

Possible with 2 Programs

Weight

60Kg

Frequency

10-100Hz

Power Intensity

0-500j/Cm<sup>2</sup>

LCD Touch Screen

10 inches

### **LED FAQ's**

What is a LED Facial?

It is a technology based skin treatment that uses specific wavelengths of natural light energy to restore the skin's normal, healthy activity.

How does it work?

The energy delivered by the amber, red, and infrared light emitting diodes (LED's) enhance cellular metabolism. This in turn stimulates the body to build new collagen, increases circulation, and improves the functioning of the lymphatic system. The result is younger, healthier looking skin.

Is there proof that this technology works?

Clinical studies, scientific and medical research, independent testing and patient testimonials exist to prove the efficacy of Light-Therapy. Research conducted by NASA's space program has proven that near-infrared LED light therapy promotes wound healing and human tissue growth.

Are there any adverse effects from this treatment?

No. This treatment has no adverse reactions and no down time. LED-emitting devices are classified by the FDA as possessing "non-significant risk" due to the fact that they are completely safe and possess no possibility of harm from over-exposure.

Is the process abrasive or painful?

No. A LED treatment is a gentle, painless, safe, non-invasive and non-abrasive treatment.

How is the treatment administered?

Answer: A trained skin care specialist will follow specific protocols to treat specific treatment areas. You will experience a feeling of relaxation, light warmth and well being.

What is the recommended schedule for the LED Facial Series?

Depending on age and the condition of the skin, the manufacturer recommends a series of 8-15 treatments done weekly or bi-weekly, followed by regular monthly maintenance. Your skin specialist will help you determine how many initial treatments will be most beneficial.

What is the length of time for the treatment?

As a stand-alone service, or maintenance treatment allow about an hour. During your initial series, each treatment takes about 40 minutes.

Do I need maintenance treatments?

Yes. Maintenance treatments are important in order to maintain your visible results. Usually a once a month treatment is recommended, unless otherwise determined by your skin care specialist. Maintenance treatments take 60 minutes and include a full, comprehensive facial.

How soon can I expect to see results?

The skin looks different after the first treatment, smoother and more hydrated with a natural radiant glow. As the device is essentially stimulating the body's natural healing mechanisms, the most visible results are not immediate. Results occur gradually over several weeks. With each treatment you will see improvement. An effective home care regimen will be recommended that will further enhance your results.

Is LED a good complement to other skin care treatments?

Absolutely! It helps strengthen and rejuvenate the skin at a cellular level so it amplifies the results achieved in any facial treatment.

Can I put my make-up back on immediately?

Yes, there is no downtime with this treatment.

Can I go out in the sun after this treatment?

Yes, the treatment does not increase photo-sensitivity. It is recommended that you apply a broad spectrum UVA and UVB sunscreen every day. Sunscreen is applied after every treatment.

Can I undergo micro-current treatment while being treated with LED?

Yes, they work synergistically to increase collagen and elastin and improve the skin's circulation. Micro-current gives you the added benefit of muscle re-education and toning.

Is LED for everyone?

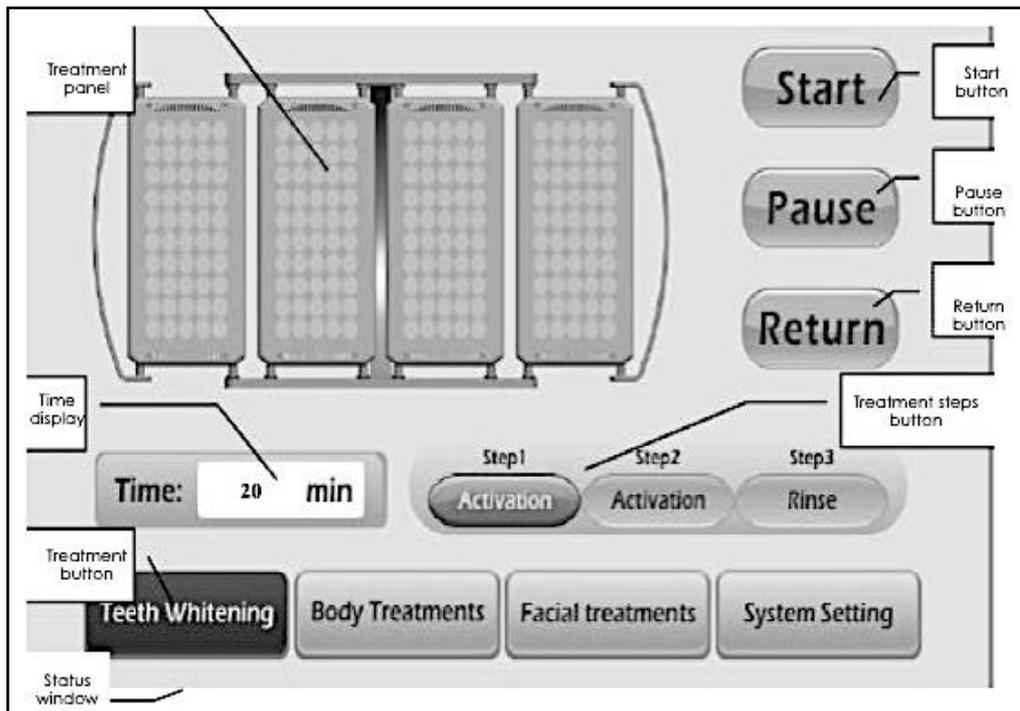
While almost everyone can benefit from the use of light therapy, these treatments will have the greatest impact on skin with sluggish metabolism and slow cellular activity showing visible signs of aging. Contraindications for light therapy include pregnancy and epilepsy, photo-allergy, and medications that cause light sensitivity (such as Tetracycline). Also, if you are currently taking steroids or cortisone injections, you should not receive light therapy.

Treatment Interfaces

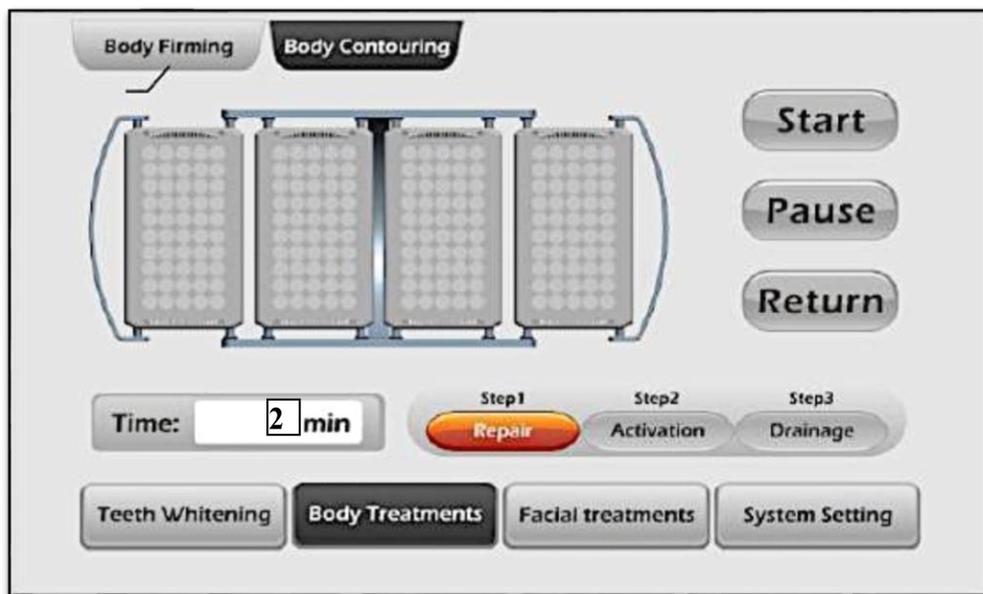
### **Teeth Whitening Treatment**

Select the Teeth Whitening mode.

In this treatment interface, we can select: treatment panel status, treatment time, treatment parameter adjustment, energy control and the handle refrigeration switch control for easy operation.

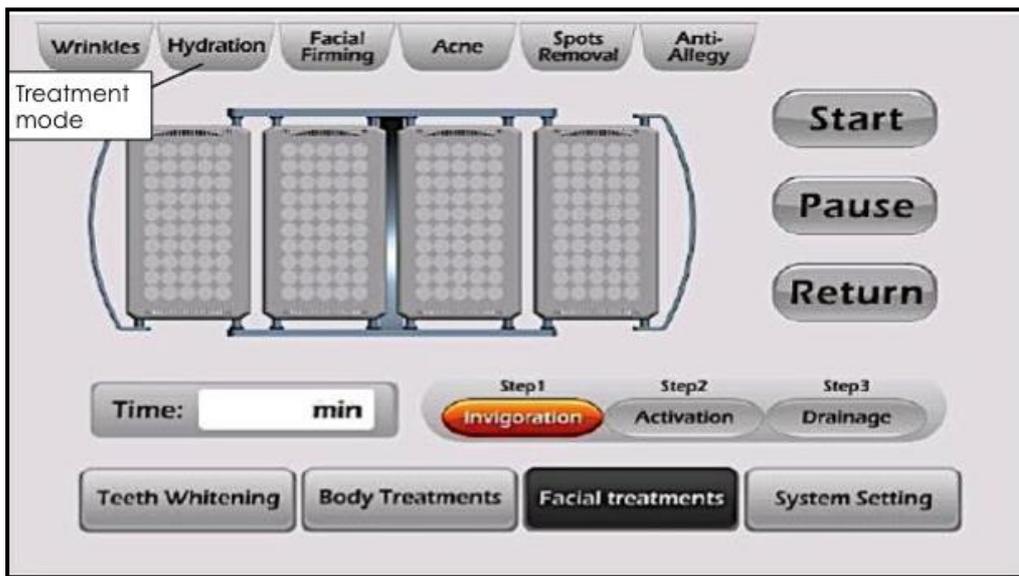


Body Treatments





## FacialTreatments



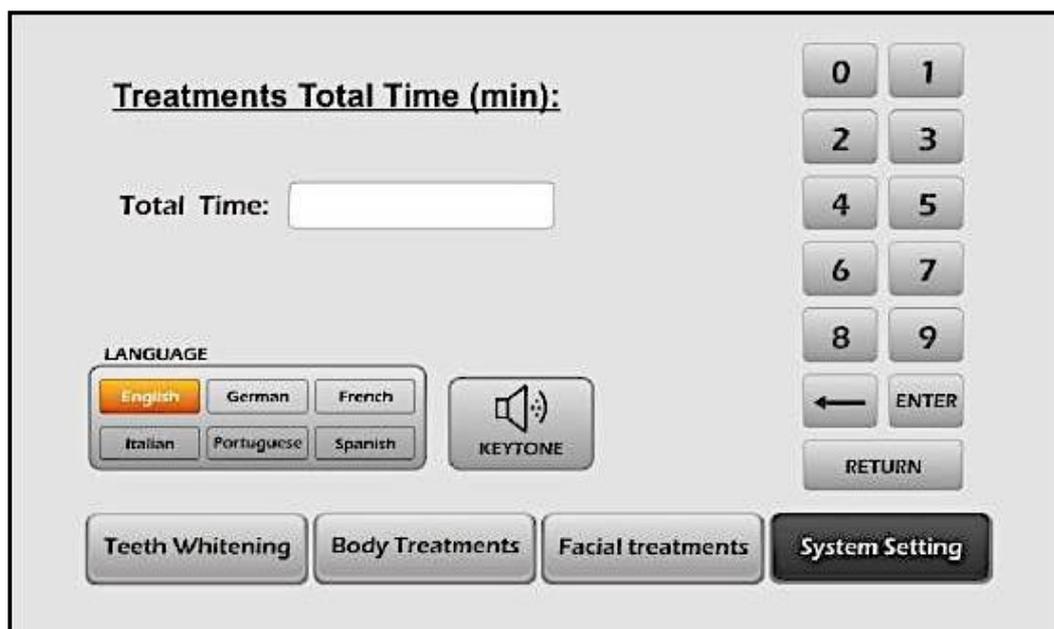
Treatment pattern selection makes the LED platform easy to operate. For Facial treatments there are six standard and pre-programmed settings making the system easy to use. These pre-set programs will help with cosmetic treatments like:

Wrinkles

Hydration and Facial Firming Acne

Pigment reduction Anti-Allergy

## Settings Interface



Press the "System settings" button to enter into the system functions parameter settings interface, then you can check the treatment total time here. You can set the following options:

**Language:** change this setting to obtain the language in which you prefer to see all the text messages on the equipment.

**ENGLISH** is the primary language. If you want to choose another language, you just press the relevant language button.

**Key-tones:** Select the sound to be heard when you press a button on the screen.

## Help Screens

The Help button is in the bottom left of the screen and keys.

Press this button to access a window that will give you instructions for operating the machine in the work mode you are currently using. There are several buttons at the bottom of the screen to browse the different help topics.

## Free Mode - for multiple, different concurrent treatments

The user can manually program the following application settings:

LED emission color: red, blue, green or white.

Treatment time: you can set a value between 1 and 99 minutes.

Intensity of LED emission: you can choose between low, medium and high. The deep effects of the LED's, such as electromagnetic waves, from more superficial to deeper, are: blue, green, red. Choose one of these according to the tissue you want the light to reach. The color blue is absorbed by the outermost layers of the skin, the color green can reach the deep dermis and red is capable of penetrating subcutaneous fatty tissue.

It is recommended the maximum intensity always be applied to guarantee sufficient energy. However the intensity can be reduced if people experience the light intensity to be too much - protective goggles must still be worn.

Once the application time reaches zero, the equipment will show a message and emit a specific sound to tell you that the treatment is finished.

The user may save the settings at any time in one of the nine memories provide. To do so, press the button.

Choose one of the 9 available locations for saving the program. If the location is already being used, the upper parts of the button will be illuminated. In that case, you will be asked for your permission to overwrite the previously saved content.

To recover the saved data, you must press the button. You will then access a window that will ask you which programs you want to load. You can only select the illuminated locations, because these contain a program you have previously saved.

On the right hand side of the window you will see the content of the saved programs. You can change the selection as many times as you like, allowing you to view the content of any programs before loading it.

When the desired program has been selected, press the button.

If you want to delete a saved program, press the programs is finally deleted button. You will be asked for confirmation. Press the button to confirm the operation or to prevent the programs being deleted.

## General Treatment Programs / Phases

The effect of the first treatment phase is to stimulate the treatment zone using a combination of different LED wavelengths.

The second phase of the treatment process is designed to produce a second, specific effect, such as toning of the tissue.

The third phase is the application of a cosmetic product with active ingredients on the targeted area. This is left to act for a few minutes. After that time, press the key on the screen to continue to the fourth phase.

The fourth stage is drainage, photo-rejuvenation and electromagnetic massage on the skin, which enables the product to be absorbed and increases its effects. Once the application time reaches zero, the QuattroLux will show a message and an emit specific sound to tell you that the treatment is finished.

## Localised Treatment Programs

This application will be used in facial treatments when the area of concern is located on just one part and not the entire face.

The area to be improved can be treated with different light and or light intensity as the rest of the skin. The QuattroLux is capable of performing multiple different treatments with different settings all at the same time and on different areas of the total treatment area.

One can select a combination of specific wavelengths for specific areas, while the rest of the face can be treated with different wavelengths to improve blood flow to the areas needing improvement.

This work mode can be programmed for the following applications:

- Front area
- Side area
- Front and side areas
- Expression lines around the eyes
- Front expression lines
- Expression lines around the mouth
- Teeth whitening