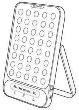
Comfytemp



READ THIS MANUAL COMPLETELY AND CAREFULLY BEFORE USING THIS PRODUCT

Keep this manual in a safe location for future reference

Model: K4037

V1.0

EN

Table of Contents

1. Safety Information and Important Warnings

1.1 Contraindications......1
1.2 Photosensitivity Test......2
1.3 Important Precautions and Warnings......4
2. Getting to Know Your Device......5

3. Light Therapy Principles and Health Benefits

3.1 How Light Therapy Works......8
3.2 Health Benefits......10

4. How to Use

4.1 Basic Operation......13
4.2 App Connection and Usage Guide......17
4.3 Customizing Your Treatment......20
5. Maintenace and Cleaning......28
6. Troubleshooting......29
7. Frequently Asked Questions (FAQs)......30
8. Technical Specifications......35
9. FCC Statement......37
10. Reference......38
11. Warranty......39

---

1. Safety Information and Important Warnings

Welcome to the Comfytemp Red Light Panel ! Thank you for choosing our product to begin your professional at-home light therapy experience. Before you begin using the device, please read and understand the following important safety information thoroughly. Proper use is essential for experiencing the benefits of light therapy, and your safety is our top priority.

1.1 Contraindications

This product is a wellness aid and is not a medical device. It is not intended to diagnose, treat, cure, or prevent any disease and should not be used as a substitute for professional medical advice or treatment.

(Absolute Contraindications: DO NOT USE if any of the following apply to you)

(1) Cancer Patients/Cancer History: Use is prohibited. Red light may potentially promote cell proliferation.

(2) Recent Burns: Do not irradiate any area that has sustained a burn within the last 48 hours.

(3) Hyperthyroidism: Irradiation of the neck and upper chest (thyroid area) is strictly prohibited unless explicitly permitted by your endocrinologist.

(4) Pregnancy: Irradiation of the abdominal area is strictly prohibited.

(5) Epilepsy: Flashing light may trigger seizures in photosensitive individuals.

(6) Photosensitive Conditions: If you have a photosensitive disease (e.g., Systemic Lupus Erythematosus - SLE) or are taking photosensitizing medications (e.g., certain antibiotics, tranquilizers), use only under the direct supervision of your physician.

1.2 Photosensitivity Test

To ensure your safety and avoid potential photosensitive reactions, you MUST perform the following test before first use of this product.

Test Procedure:

(1) Select a Test Area: Choose a small patch of skin on the inner part of your arm. Cleanse the area thoroughly to ensure it is free of any cosmetics, ointments, or lotions.

(2) Perform the Test: Aim the device at this area, keeping it at the recommended distance (12-18 inches), and irradiate at the lowest intensity setting for 5-10 minutes

(3) Observe the Reaction: Turn off the device. Closely observe the test area for any skin reactions over the next 24 hours.

Result Interpretation & Actions:

- **Normal Reaction:** Slight, temporary redness or a warm sensation that subsides within 1-2 hours is normal. You may proceed to use the device.
- **Abnormal Reaction (STOP USE):** IMMEDIATELY DISCONTINUE USE and CONSULT A PHYSICIAN if any of the following occur in the test area or generally:
  - o **Severe Reaction:** Burning pain, intense itching, rash, or blisters during or immediately after the test.
  - o **Delayed Reaction:** Any of the above discomfort symptoms appearing on the test area the day after use.
  - o **Systemic Reaction:** Feeling dizzy, nauseous, experiencing heart palpitations, or any other general discomfort during or after the test.

Important Notes for Testing:

- **Test on Bare Skin:** You MUST cleanse the skin completely before testing. Residues from cosmetics can react with light, affecting results or causing injury.
- **Avoid Blood Vessels:** Avoid direct irradiation over visibly broken capillaries (telangiectasia), spider veins, or hemangiomas.
- **Environment:** Perform the test in a well-lit room. Do not operate the device in complete darkness to reduce visual strain or potential dizziness.

1.3 Important Precautions and Warnings

(1) Avoid Direct Eye Exposure: Always keep your eyes closed or wear the provided protective goggles during use. Do not look directly at the active light sources.

(2) Proper Device Placement: Place the device securely on a stable, dry, flat surface. Keep it away from flammable materials. Ensure children cannot access or operate the device unsupervised.

(3) Monitor Body Response: A mild sensation of warmth is normal during use. STOP USE IMMEDIATELY if you feel excessive heat, stinging, pain, or any other discomfort.

(4) Special Area Considerations:

- **Tattoos:** Red and black ink may absorb more light energy, leading to overheating or potential fading of the tattoo. Avoid direct irradiation.
- **Darker Skin Tones:** May absorb more energy, potentially leading to higher surface temperatures. It is advised to start with the lowest intensity setting and shorter durations.

The above are the most critical safety prohibitions. Furthermore, if you have a fever, active infection, bleeding tendency, tattoos, dark skin, or any other health concerns, you MUST consult your physician before using this device. This product is a wellness aid and is not a substitute for medical devices or professional medical advice.

---

(2) Mode 2: NIR Only (Deep Relief Mode)

① **Wavelength:** 850nm (Near-Infrared Light) | Output: Continuous Wave

② **Profile:** Targets deep pain and inflammation. Specializes in penetrating bone, muscle, and joints to address deep-seated inflammation and pain.

③ **How It Works:** 850nm NIR light has exceptional penetration depth, reaching deep into tissues. It works by reducing deep inflammatory markers, improving microcirculation, and decreasing oxidative stress to effectively relieve deep pain and support injury repair.

④ **Ideal For:**

- Targeted relief of deep joint inflammation and pain.
- Alleviating chronic neck, shoulder, back, and waist pain.
- Promoting deep tissue repair.

(3) Mode 3: Red Only (Skin Revitalization Mode)

① **Wavelength:** 660nm (Red Light) | Output: Continuous Wave

② **Profile:** Focuses on epidermal repair and aesthetics. Concentrates all energy at the skin level, making it ideal for skincare and addressing superficial concerns.

③ **How It Works:** 660nm red light is efficiently absorbed by the mitochondria of skin cells, significantly boosting cellular energy (ATP) production. This accelerates the generation of collagen and elastin, revitalizing the skin from within.

④ **Ideal For:**

- Daily skincare routine, improving skin texture, and diminishing wrinkles.
- Promoting skin repair after acne inflammation subsides.
- Supporting hair growth and improving scalp health.

(4) Mode 4: Pulsed NIR (Cellular Energy Recovery Mode)

① **Wavelength Combination:** 660nm (Red Light - Continuous Wave) + 850nm (Near-Infrared Light - 40Hz Pulsed Wave) | Output: Hybrid (Red: Red Light-Continuous Wave, NIR: Pulsed)

② **Profile:** High-efficiency energy recovery and performance enhancement. This mode uses advanced pulsed technology designed to maximize cellular energy (ATP) output, invigorate the body, and accelerate the recovery process.

③ **How It Works:** 40Hz pulsed NIR light is a non-thermal bio-stimulation technique. The pulsed delivery allows for more efficient energy conversion and oxygen exchange in tissues during the light intervals. Research suggests this can stimulate mitochondrial function more effectively than continuous light, potentially maximizing ATP production. The simultaneous 660nm red light addresses surface repair. This mode delivers powerful energy support, reducing feelings of fatigue at the cellular level.

④ **Ideal For:**

- Enhancing Athletic Performance: Use pre-workout to help warm up muscles and potentially increase endurance and power output.
- Optimized Post-Exercise Recovery: Use post-workout aiming to maximize recovery speed and significantly reduce deep muscle fatigue and soreness.
- Daily Energy Boost: Use when feeling fatigued or low on energy to help the body recover from tiredness more quickly.
- Enhanced Repair Support: Use as an intensive alternative to Mode 1 when the body needs maximum reparative support.

Note: Individual results may vary. These statements are based on the principles of photobiomodulation (PBM). Consistent use is typically necessary to experience potential benefits.

4.3.2 Detailed Explanation of Light Irradiance

Mode: Red+NIR & Pulse			
		6 inch (mW/cm²)	12 inch (mW/cm²)
Intensity Levels	10W	27.5	23.3
	25W	63.1	52.9
	40W	102.8	86.4
	55W	159.2	130.4

Mode: NIR			
		6 inch (mW/cm²)	12 inch (mW/cm²)
Intensity Levels	5W	17	14.1
	10W	33.4	28.1
	20W	82.6	72.1
	30W	102	82.7

Mode: Red			
		6 inch (mW/cm²)	12 inch (mW/cm²)
Intensity Levels	5W	8.8	7.2
	10W	16.7	13.5
	20W	35.5	26.9
	25W	58.5	43.2

4.3.3 Dosing Guidelines

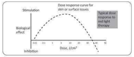
(1) Dosage Calculation Formula

Dose (J/cm^2) = Irradiance (mW/cm^2) × Time (s) × 0.001

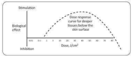
Note: The actual dose depends on both the usage time and the distance from the product.

(2) Schematic Diagram of General Dosage Range

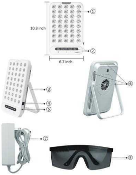
① Here is an illustration of the general optimal dose range for skin treatments (or tissues near to the surface of the body).



② Here is an illustration of the general optimal dose range fo deeper tissues eneath the skin.



2. Getting to Know Your Device



① LED Light Source Array

- **Description:** Features a scientific layout of 660nm red light and 850nm near-infrared (NIR) light LEDs.
- **Function:** Delivers high-power irradiance, enabling a synergistic effect for surface skin repair and deep tissue therapy.

② Display & Buttons

- **Digital Display:** Shows real-time information including treatment time, active mode, and current power level.
- **Function Buttons:** Integrated buttons for mode selection, power adjustment, and timer setting, allowing you to personalize your treatment easily.

③ Adjustable Stand

- **Description:** A supportive stand structure enabling multi-directional adjustment.
- **Function:** Allows approximately 180° rotation and angle adjustment to ensure the light source accurately and comfortably targets the desired area.

④ Master Power Switch

- **Type:** Rocker switch.
- **Function:** The main power switch for the device, controlling the connection and disconnection of the internal circuit.

⑤ DC Power Input Jack

- **Type:** DC-in jack.
- **IMPORTANT WARNING:** For use with this device only. Must only be connected to the original power adapter provided with the product to prevent damage.

⑥ Active Cooling System

- **Description:** Incorporates a highly efficient, low-noise fan (or "multi-vent heat dissipation design").
- **Function:** Continuously dissipates heat from the LED module, ensuring stable operation during extended use and prolonging the product's lifespan.

Accessories

⑦ Original Power Adapter

- **Specifications:** DC Output 24V⎓ 3A, 72W.
- **IMPORTANT WARNING:** This specific rating is the dedicated configuration for the device's full-power operation. The use of any other model of adapter is strictly prohibited.

⑧ Professional Protective Goggles

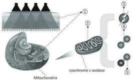
- **Purpose:** To avoid direct eye exposure to the light, providing essential eye protection.
- **Safety Warnings:**
  - o Ensure the goggles fully cover the eye area during use.
  - o Cease use immediately if the lenses become cracked, broken, or scratched.
- **Care & Cleaning:** Clean gently with a soft, dry cloth. Avoid abrasive materials or harsh chemical solvents like alcohol.

3. Light Therapy Principles and Health Benefits

Welcome to a deeper understanding of your Comfytemp Red Light Panel. This section will familiarize you with how the device works and its benefits, empowering you to use it more confidently and effectively.

3.1 How Light Therapy Works

Your Comfytemp Red Light Panel utilizes specific wavelengths of light delivered by Light Emitting Diodes (LEDs) in a process known as photobiomodulation (PBM) or light therapy. This non-invasive technology is designed to support your body's natural processes at a cellular level by providing energy to the mitochondria – your cells' power plants.



① The device's LEDs generate 660nm of visible red light and 850nm of invisible near infrared (NIR) light. These specific wavelengths can penetrate the skin to reach cells beneath the surface.

② This light energy is absorbed by the mitochondria, stimulating the activity of an enzyme Cytochrome c oxidase. This stimulation enhances the production of ATP (adenosine triphosphate, cellular energy) and triggers the release of signaling molecules like Nitric Oxide (NO) and Reactive Oxygen Species (ROS).

③ ATP (Energy): ATP is the primary energy currency for most cellular functions. With more available energy, cells can operate more efficiently, rejuvenate themselves, and repair damage.

④ ROS (Signaling Molecules): At optimal levels, ROS act as vital signaling molecules that activate a cascade of cellular repair and regeneration mechanisms. This promotes cell proliferation and migration, which is beneficial for reducing chronic inflammation, supporting the wound healing process, encouraging soft tissue regeneration, and stimulating the release of antioxidant enzymes.

⑤ NO (Vasodilation): Nitric Oxide is a potent vasodilator. Its release helps increase local blood circulation, reduce inflammation, and enhance the delivery of oxygen and immune cells throughout the tissues.

Note: Tip for Optimal Efficacy: For best results, ensure the light is applied directly to the skin. Avoid coverage by thick or dark-colored clothing, as it can block and significantly reduce the effectiveness of the light waves.

3.2 Health Benefits

This device utilizes a scientific ratio of 660nm visible red light and 850nm invisible near infrared (NIR) light. The 660nm red light is well-absorbed by the skin, while the 850nm NIR light offers deeper tissue penetration. Working synergistically, these wavelengths effectively penetrate the skin's surface and are absorbed by light-sensitive components within cellular mitochondria, such as Cytochrome c Oxidase. This absorption triggers a series of photobiomodulation (PBM) effects, enhancing cellular energy (ATP) production, reducing oxidative stress, and activating numerous reparative signaling pathways. The primary benefits are demonstrated in the following areas:

(1) Deep Pain & Inflammation Relief

- **Mechanism:** 850nm NIR light reaches deep into affected areas, effectively reducing the activity of pain-inducing substances like Prostaglandin E2 (PGE2) and key inflammatory markers such as Tumor Necrosis Factor-alpha (TNF-α). 660nm red light helps manage inflammation at the surface level, working together to provide potent pain relief and reduce inflammation.
- **Benefit:** Particularly suitable for alleviating deep muscle strain, joint inflammation (e.g., knee osteoarthritis, frozen shoulder), ligament injuries, and neuropathic pain.

(2) Accelerated Tissue Repair & Wound Healing

- **Mechanism:** After being absorbed by cellular mitochondria, 660nm red light significantly boosts ATP synthesis, accelerating fibroblast proliferation and the production of collagen and elastin—key components of skin wound repair. 850 NIR light ensures energy supply for deeper tissue repair.
- **Benefit:** Effectively promotes the healing of post-surgical incisions, burn recovery, diabetic ulcers, and skin repair post-acne inflammation, while also helping to minimize scar formation.

(3) Enhanced Muscle Performance & Recovery

- **Mechanism:** 850nm NIR light penetrates deep into muscle tissue, improving microcirculation, enhancing oxygen exchange, and reducing post-exercise oxidative stress and lactic acid buildup. 660nm red light aids in relieving surface-level muscle soreness.
- **Benefit:** Use before exercise to warm up muscles and enhance performance; use after exercise to significantly reduce deep muscle fatigue and Delayed Onset Muscle Soreness (DOMS), accelerating overall recovery.

(4) Improved Skin Health & Revitalization

- **Mechanism:** Known as the "beauty wavelength," 660nm red light is preferentially absorbed by skin cells, directly stimulating fibroblasts to produce more collagen and elastin, thereby improving skin structure from the dermis layer.
- **Benefit:** Consistent use helps diminish fine lines and wrinkles, reduce the appearance of pores, improve skin firmness and elasticity, even out skin tone, and impart a natural, healthy glow.

(3) Recommended Dosages for Different Purposes

Please refer to the table below to customize a personalized plan based on your goals. First-time users should start with shorter durations and lower power to allow the body to adapt gradually.

Use Case / Goal	Recommended Mode(s)	Distance	Recommended Duration	Power & Irradiance (Ref. @ 6 inches)	Additional Notes
Beauty / Anti-Aging (Dose ≈ 5–10 J/cm²)	Red / Red & NIR	6-12 inches	5-10 minutes	Red: 10W (~16.7 mW/cm²) Red & NIR: 10W (~27.5 mW/cm²)	Start with low power. Avoid prolonged sessions.
Acne / Skin Inflammation (Dose ≈ 3–6 J/cm²)	Red	6-12 inches	5-8 minutes	Red: 10W (~16.7 mW/cm²)	Reduces inflammation and aids repair. excessive use (over 10 mins may cause irritation).
Post-Exercise Recovery (Dose ≈ 15–25 J/cm²)	Red & NIR / Pulse	6-12 inches	12-20 minutes	Red & NIR: 25W (~63.7 mW/cm²) Pulse: 25W (~63.7 mW/cm²)	Target large muscle groups, such as the back or legs.
Joint / Deep Muscle (Dose ≈ 20–40 J/cm²)	Red / Red & NIR	6-12 inches	20-30 minutes	NIR: 20W (~82.6 mW/cm²) Red & NIR: 25W (~63.7 mW/cm²)	Requires sustained irradiation for deep tissue, e.g., knees, lower back.
Chronic Discomfort Management (Dose ≈ 15–30 J/cm²)	Red / Red & NIR	6-12 inches	20-30 minutes	NIR: 10W (~33.4 mW/cm²) Red & NIR: 10W (~27.5mW/cm²)	Start with low power and gradually increase.

4.3.4 Usage Frequency Guidelines

- Recommended Frequency: Use the device 4 to 6 times per week (i.e., no more than once per day).
- Start Gradually: When first beginning, it is advised to start with a lower dose (shorter time, lower intensity) and gradually increase to the recommended range as your body adapts.
- Sensitive Areas: For areas with sensitive skin or joints, it is recommended to appropriately reduce the usage frequency and duration to avoid any potential discomfort.
- Consistency is Key: Long-term, consistent use yields better therapeutic results than short-term, high-frequency, or excessive use.

Note: Individual needs may vary. Listen to your body and adjust usage accordingly. If you have any specific health concerns, please consult with a healthcare professional prior to use.

4.3.5 Expected Effects (Comprehensive)

- **Short-term effects (around 1 week of use):**
  You may feel mild warmth and relaxation in the treated area. Local blood circulation may improve, and tension or soreness may be relieved.
- **Mid-term effects (after 2–3 weeks of continuous use):**
  Pain and discomfort may gradually ease, muscle fatigue may recover more quickly, and skin texture may show slight improvement.
- **Long-term effects (after 4 weeks or more of continuous use):**
  Chronic pain may be significantly relieved, joint flexibility and muscle endurance may improve. Meanwhile, skin elasticity and radiance may gradually enhance, leading to an overall sense of better well-being.

5. Maintenance & Cleaning

To ensure the long-term stable operation of the device and maintain optimal light output, please follow these maintenance and cleaning recommendations.

5.1 Routine Maintenance

- Ensure the device is powered off and has cooled down completely before cleaning or storing.
- Store the device in a dry, well-ventilated area away from direct sunlight.
- If the device will not be used for an extended period, disconnect the power adapter and cover it with a dust cloth.
- Avoid contact with water sources, damp environments, or flammable materials.

5.2 Cleaning Methods

- Panel Surface: Gently wipe with a soft, dry, or slightly damp cloth to remove dust and fingerprints.
- Warning: Do not use alcohol, gasoline, strong acids, strong alkalis, or other chemical solvents for cleaning, as these may damage the surface or the LED bulbs.
- Protective Goggles: Clean with the provided microfiber cloth or a soft, clean fabric. If soiled, gently wash with a mild, neutral soap solution and dry thoroughly.

5.3 Prohibited Actions

- Do not clean the panel while the device is powered on or operating.
- Do not use sharp or abrasive objects to scrape the device surface.
- Do not immerse the device in water or clean it with large amounts of liquid.

6. Troubleshooting

Issues

1. Device does not power on.

- Confirm the power adapter is securely connected to the device and the wall outlet.
- Check if the power outlet is functioning.
- If the issue persists, please contact Comfytemp Customer Support.

2. Some LEDs appear not to be lit.

- This is normal. 850nm NIR light is invisible to the human eyes. Some LEDs (NIR) are working but cannot be seen.
- If a significant number of LEDs (red ones) are clearly off, please contact Comfytemp Customer Support.

3. Skin feels excessively hot during use.

- Check if the irradiation distance is too close.
- Maintain the recommended distance of 6-12 inches.

4. Unusual odor or noise from the device.

- Ensure the ventilation ports are not blocked.
- If the odor or noise continues, immediately discontinue use and contact Comfytemp Customer Support.

5. Timer function is not working.

- Confirm the timer button was pressed correctly to set a duration.
- Restart the device. If the problem continues, please contact Comfytemp Customer Support.

7. Frequently Asked Questions (FAQ)

Q1: Do I need to wear protective goggles during treatment?

A: For safe use of our light therapy device, please always follow these guidelines:1.

(1) Core Principle: The need for goggles depends on the light wavelength's penetration depth and potential risk to the eyes.

(2) Mode-Specific Guidance:

① NIR Mode: Goggles are REQUIRED.

- Reason: Although invisible, NIR light has high penetration power and can reach the retina, posing a potential risk of thermal damage. Wearing the provided goggles is an essential safety measure.

② Red Mode: Goggles are NOT required, but it is STRONGLY RECOMMENDED to keep your eyes closed.

- Reason: Red light has lower penetration and is relatively safer. Keeping your eyes closed avoids glare and ensures a more comfortable, relaxing experience.

③ Combined Modes (Red & NIR / Pulse): Goggles are REQUIRED whenever NIR light is being emitted.

(3) Important Reminder:

① Do NOT use regular sunglasses or eyeglasses as a substitute for the provided professional protective goggles. Our goggles are specially designed to block the specific wavelengths emitted by the device.

② Never look directly into the light sources, even briefly, when using a mode that includes NIR.

Q2: What is the difference between Red Light and Near-Infrared (NIR) Light?

A: The core differences lie in their wavelength and properties:

(1) Red Light: Has a wavelength of 660 nm. It is part of the visible spectrum and appears red to the human eyes.

(2) Near-Infrared Light (NIR): Has a wavelength of 850 nm. It lies just beyond the visible spectrum and is invisible to the human eyes.

(3) Tissue Penetration: Generally, NIR light can penetrate deeper into tissue compared to red light.

Q3: Are the Near-Infrared (NIR) LEDs working if I can't see them?

A: Yes, they are working. Near-infrared light (850nm) is invisible to the human eyes. You might see a faint pinkish glow from the LEDs, which is normal. Please be assured that even if you cannot see bright red light, the device is still functioning, and the LEDs are efficiently emitting significant light energy. This is the normal operating state for the NIR mode.

(5) Hair Growth Support

- **Mechanism:** 660nm red light is absorbed by hair follicle stem cells and dermal papilla cells. By increasing ATP production and improving microcirculation around the follicles, it creates a better environment for hair growth and may help transition resting (telogen) follicles back into the growth (anagen) phase.
- **Benefit:** May aid in managing conditions like androgenetic alopecia and alopecia areata, helping to thicken hair shafts and promote growth.
  Note: This benefit typically requires consistent long-term use.

(6) Potential Mood & Sleep Support

- **Mechanism:** Application of 850nm NIR light to the head is theorized to positively impact brain metabolism, increase blood flow, and modulate mitochondrial function. It may also indirectly support sleep by alleviating chronic pain and helping to regulate circadian rhythms.
- **Benefit:** May help improve mood, reduce anxiety, and enhance sleep quality.
  Note: Research in this area is ongoing; this is considered a potential benefit.

(7) Comprehensive Health Benefits

- **Promotes Circulation:** Both wavelengths work together to stimulate the release of Nitric Oxide (NO), a vasodilator, improving local blood supply.
- **Neuroprotective Effects:** 850nm NIR light has shown positive effects on peripheral nerve tissue and may support repair following nerve injury.

4. How to Use

4.1 Basic Operation

4.1.1 Button Functions

⏱ **(1) Timer Button:**

A single press cycles through the following preset durations: 5min → 10min → 15min → 20min → 25min → 30min.

M **(2) Mode Button:**

Cycles sequentially through the following four light therapy modes:

- Red & NIR Mode: 660nm Red Light and 850nm Near-Infrared Light
- NIR Mode Only: 850nm Near-Infrared Light only (Constant ON)
  (Note: 850nm wavelength is invisible to the human eyes)
- Red Mode Only: 660nm Red Light only (Constant ON)
- Pulse Mode: 660nm Red Light (Constant ON) + 850nm Near-Infrared Light (40Hz Pulsation) (Note: "Pulse" refers to a light pulsation mode, not physical vibration).

☼ **(3) Intensity Button:**

Cycles through different power output levels. (Note: The same intensity level will have different irradiance (light intensity) and energy output across different modes).

4.1.2 Standard Operating Procedure

(1) Setup & Safety

① **Placement:** Position the panel on a stable, flat surface or stand, ensuring it will not slip or tip over.

② **Distance:** Align the treatment area (e.g., face, shoulder, knee) with the panel, maintaining the appropriate irradiation distance. Refer to the recommendations in Section 4.2 for guidance.

③ **Safety:**

- Do not wear contact lenses or look directly into the LED light sources.
- It is recommended to wear the provided protective goggles.

(2) Operation

① **Connect to Power:** Plug the power adapter into the DC-in jack on the side of the panel, then plug the adapter into a power outlet.

② **Power On & Default Settings:**

- Flip the rocker power switch on the side of the panel to the "-" position to turn on the device.
- Upon startup, the device will automatically load with the default settings:
  - Timer: 10 mins
  - Mode: Red & NIR (Red Light and NIR Light output simultaneously)
  - Intensity: Low Level (10W)

③ **Select Light Mode:**

- Press M to cycle sequentially through the following four light modes. The selected mode will be shown on the display:
  - Red & NIR: 660nm Red Light and 850nm Near-Infrared Light (Constant ON). Ideal for comprehensive benefits; suitable for most scenarios.
  - NIR: 850nm Near-Infrared Light only (Constant ON). Targets deep tissue and joints.
  - Red: 660nm Red Light only (Constant ON). Focuses on skin health and superficial tissue.
  - Pulse: 660nm Red Light (Constant ON) + 850nm Near-Infrared Light (40Hz Pulsation). Designed for enhanced athletic performance and recovery.

④ **Set the Timer:**

- Device Panel Control: Briefly press ⏱ to cycle through these preset durations: 5min → 10min → 15min → 20min → 25min → 30min.
- App Control: By connecting to the official app, you can set any duration between 1 and 30 minutes with 1-minute precision.

⑤ **Adjust the Intensity Level:**

- Press ☼ to cycle through the different power levels.
- Please note: The same intensity level will produce different irradiance (light intensity) and energy output across different modes. Generally:
  - Higher levels provide stronger light output, allowing for potentially shorter treatment times.
  - First-time users are advised to start at Level 1 to allow the body to adapt gradually.

(3) Begin Your Treatment

① **Relax and Enjoy:**

During the light therapy session, ensure you are wearing the protective goggles.

② **Ending a Session:**

- Automatic Shut-off: The panel will automatically turn off and emit an audible alert when the timer counts down to zero.
- Manual Interruption: To end the session early, simply flip the rocker power switch back to the "o" position to cut power.

③ **Consecutive Use:**

- After a single session concludes, if you wish to immediately treat another area of the body, you do not need to turn the main power switch off. Simply press any button on the panel or in the app (e.g., Mode, Timer, Intensity) to reactivate the device; the countdown will restart from the beginning.
- Do not forget to turn the main power switch off after you are completely finished using the device.

Helpful Tips:

① **Optimal Frequency:**

For best results, it is recommended to use the device 4-6 times per week. For detailed protocols targeting specific goals (e.g., pain relief, skin rejuvenation, athletic recovery), please refer to the complete guide within the manual.

② **Cleaning:**

Before and after use, gently wipe the surface of the panel with the provided microfiber cloth.

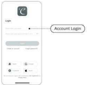
4.2 App Connection and Usage Guide

(1) Scan the QR code to download the App or APK file. or search for "Comfytemp" in the app store to download it.

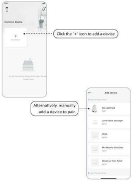
ios

android

(2) "Create an account" or "Enter as a guest"



(3) Pair the device



Q4: The Pulse, Red, and Red+NIR modes all look like red light. What's the difference?

A: The difference lies in the invisible energy and its depth of effect, not in what your eyes can see.

(1) Red Mode: Visible Red Light only. Targets superficial layers for skin health and surface-level soothing.

(2) Red & NIR Mode: Red Light + Invisible NIR Light. Targets superficial AND deep layers. Builds on red light benefits by adding effects on muscles, joints, and other deep tissues.

(3) Pulse Mode: Constant Red Light + Pulsed Invisible NIR Light. Targets deep layers with optimization. Builds on Red & NIR by pulsing the NIR light at a specific frequency (40Hz), designed to provide additional support for deep repair and cellular recovery.

(4) Please note: Goggles are REQUIRED for any mode that includes NIR light (i.e., Red & NIR or Pulse).

Tip: To confirm the NIR LEDs are working, try this in a dark room. Use your smartphone camera to look at the device while it is in NIR Only mode. You will likely see faint white spots on your camera's screen from LEDs that appear "off " to your naked eye. This proves the NIR light is being emitted.

Q5: Are there any side effects to using light therapy?

A: Based on extensive clinical research, Red and NIR Light Therapy is widely recognized as a safe, non-invasive, drug-free physical treatment. It works through photobiomodulation and is associated with almost no known side effects or significant health risks when used as directed. It can effectively help relieve pain, reduce inflammation, and promote tissue repair.

Q6: Can I use it if I have a pre-existing condition or am taking medication?

A: Out of an abundance of caution, we strongly recommend that you:

(1) Consult your healthcare provider if you have any pre-existing medical conditions (e.g., photosensitive skin disorders, epilepsy) or are taking any medications (especially photosensitizing drugs like certain antibiotics, diuretics, etc.).

(2) Special Note: Corticosteroid medications work by suppressing the immune system, while light therapy may stimulate it. Due to their potentially opposing actions, concurrent use is not recommended without medical guidance.

Q7: Can I use it on burned or damaged skin?

A: Clinical research has shown that light therapy can aid the recovery of damaged skin. However, as we cannot provide clinical diagnoses, if you have severe burns, open wounds, or any concerns, we recommend you first consult a trusted healthcare provider regarding your specific condition to obtain professional guidance.

Q8: Is red light therapy safe for children?

A: Although significant clinical research validates the safety and efficacy of light therapy, for use by children, we strongly advise you to first consult your pediatrician or other healthcare provider.

(1) If use is approved, it must be conducted under the constant supervision of an adult.

(2) It is absolutely mandatory for the child to wear the professional protective goggles and to ensure they do not look directly into the light sources during treatment.

8. Technical Specifications

Parameter Category	Details
Model	Red Light Panel
LED Type	High-Intensity 660nm Red & 850nm Near-Infrared (NIR) LED Dual Chips
Wavelengths	Red: 660nm ± 10nm NIR: 850nm ± 10nm
Peak Irradiance	Max. 159.2 mW/cm² (@ approx. 6 inches from surface)
Input Power	DC 24V, 3A (Included dedicated power adapter)
Rated Power	≤ 55W (Maximum power consumption)
Control Method	• On-Device Control: Smart buttons for Power On/Off, Mode Selection, Intensity Adjustment. • App Control (Optional): Remote control for all functions via dedicated application.
Timer	6 preset durations: 5 / 10 / 15 / 20 / 25 / 30 minutes, with auto-shutoff.
Cooling System	Smart fan cooling system + heat dissipation vents for safe and stable prolonged operation.
Dimensions	10.3*6.7*1.3 in
Net Weight	1.6 lbs
Standard Accessories	• Professional protective goggles (effectively filters intense light for enhanced comfort during use). • 24V/3A DC power adapter (4.9ft cable length).

9. FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and.

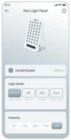
(2) This device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

10. Reference

- Karu T.
  Primary and secondary mechanisms of action of visible to near-IR radiation on cells. J Photochem Photobiol B. 1999;49(1):1–17.
- Wong-Riley MT, Liang HL, Eells JT, et al.
  Photobiomodulation directly benefits primary neurons functionally inactivated by toxins: role of cytochrome c oxidase. J Biol Chem. 2005;280(6):4761-4771.
- Avci P, Gupta A, Sadasivam M, et al.
  Low-level laser (light) therapy (LLLT) in skin: stimulating, healing, restoring. Semin Cutan Med Surg. 2013;32(1):41–52.
- Barolet D.
  Light-emitting diodes (LEDs) in dermatology. Semin Cutan Med Surg. 2008; 27(4):227-238.
- Leal-Junior EC, Vanin AA, Miranda EF, et al.
  Comparison between single-diode low-level laser therapy (LLLT) and LED therapy in exercise-induced skeletal muscle fatigue recovery. Lasers Med Sci. 2009; 24(6):909-914.
- Hamblin MR.
  Shining light on the head: Photobiomodulation for brain disorders. BBA Clinical. 2016;6:113–124.
- ARI WHITTEN
  Whitten A. The Ultimate Guide to Red Light Therapy. Orlando, FL: Self-published; 2018.



Note:

The wireless connectivity feature is always active. To connect, simply download the Comfytemp App, enable wireless connectivity on your smartphone, and search for the device named "Comfytemp K4037" to pair. Upon successful connection, you will hear two beeps from the device, confirming the link is established. You may then proceed to use the app for full control.

4.3 Customizing Your Treatment

4.3.1 Mode Details

(1) Mode 1: Red & NIR (Comprehensive Repair Mode)

① **Wavelength Combination:** 660nm (Red Light) + 850nm (Near-Infrared Light) | Output: Continuous Wave.

② **Profile:** All-around deep care. The most versatile general-use mode, targeting both the skin's surface and subcutaneous deep tissue for synergistic repair.

③ **How It Works:** 660nm red light primarily focuses on superficial skin repair and reducing surfacelevel inflammation. 850nm NIR light penetrates deeper, reaching muscles, joints, and nerves, responsible for deep pain relief, reducing inflammation, and acce-lerating tissue repair. The dual wavelengths work together from the surface inward for comprehensive care.

④ **Ideal For:**

- Relieving deep muscle soreness and joint pain.
- Post-exercise recovery, reducing Delayed Onset Muscle Soreness (DOMS).
- Promoting wound healing and minimizing scar appearance.
- Overall skin health improvement and reducing the appearance of fine lines.

11. Warranty

24 Hrs Quick Customer Support

30 Days Free Return

365 Days Warranty

If you have questions or concerns, don't hesitate to contact us directly at:

US Customer Services Hotline

1(833)990-0618

Monday to Friday, 9 AM to 5 PM EST

Email: help@comfytemp.com

www.comfytemp.com

Product Name: Red Light Panel

Model: K4037

EU REP

Company: E-CrossStu GmbH
Address: Mainzer Landstr.69, 60329 Frankfurt am Main,Hessen
E-mail: e-crossstu@outlook.com , E-CrossStu@web.de
Telephone: +49 69332967674

UK REP

Company: YH Consulting Limited
Address: C/O YH Consulting Limited Office 147,Centurion House, London Road,Staines-upon-Thames, Surrey,TW18 4AX,London
E-mail: H2YHUK@gmail.com
Telephone: +44 07514-677868

Manufacturer: Shenzhen Yicai Health Technology Co. , Ltd
Address: 11th floor, Zhenqian Building, Yousong Community, Longhua Street, Longhua District, Shenzhen,Guangdong, China, 518110.

Email: help@comfytemp.com

CE RoHS UK CA FC MADE IN CHINA

Quick Start Guide

Welcome to Comfytemp! The Comfytemp Red Light Panel is a wellness device and is not intended to cure or diagnose any medical condition. This device is designed to help promote overall health and well-being by supporting cellular function. The Comfytemp Red Light Panel should only be operated according to the usage guidelines in this user manual.

First-Time Users (Required Reading)

Mandatory Pre-Use Test: Photosensitivity Check
Before first use, you must perform a photosensitivity test to ensure safety. For detailed test procedures and evaluation criteria, you must consult the full instructions in 【Chapter 1: Safety Information and Important Warnings】 of this manual.

⚠ **Important Precautions:**

(1) Initial Use: Start with 2-4 minutes per area, gradually increasing to 10-15 minutes.

(2) Avoid concurrent use with:

① Products containing Retinol or Alpha/Beta Hydroxy Acids (AHA/BHA)
② Any skincare products that may increase photosensitivity

Standard Usage Protocol

(1) Recommended Session Length: 10 minutes

(2) Recommended Distance: Maintain 12-18 inches between the device and your body.

(3) Usage Frequency:

① Wait at least 6 hours between sessions on the same area.
② Do not exceed 15 minutes per session on a single area.
③ 4-6 times per week; it is recommended to rest for 1 day.

Longer time does NOT mean better results. Scientific evidence indicates that benefits diminish beyond a certain exposure time.

Eye Safety Warning

LED light is very bright. Always wear protective goggles provided. Do not look directly at the device, especially in NIR (Near-Infrared) mode.