

TheraRay 15W Red Light Therapy Explanation

What it is:

TheraRay is a next-generation red and near-infrared light therapy system designed to deliver powerful healing — without long treatment times. This type of treatment is called **photobiomodulation (PBM)**. It works by stimulating your cells to repair and regenerate tissue.

Why High Power Matters

Many non-medical prescription low-power red light devices “trickles” light into the body over **20–30 minute sessions**. Research now shows this approach may be inefficient — and prolonged exposure may even stress cells.

New research shows that:

- Low-power light used for a long time may not work well.
- In some cases, it may even stress the cells.
- **Short, high-intensity treatments work better.**

TheraRay with **15 watts of true optical power**, delivers a rapid, concentrated dose that activates your cells quickly and effectively — without prolonged exposure. Because it's stronger, treatment takes only **30–60 seconds**.

Why Less Time Is Better

Healing isn't about blasting cells with the most energy possible. It's about giving them the **right amount at the right speed**.

There's something called the **Arndt-Schulz Law**, which says:

- Too little stimulation → no effect
- The right amount → healing response
- Too much or too long → can slow or block healing

Low-power devices with long exposure can push cells into the “too much” zone.

TheraRay works differently: Think of it like turning on a light switch instead of slowly dimming it up over half an hour.

- Delivers a quick burst
- Activates the cells
- Stops before overexposure happens

How It Works in the Body

Inside your cells are tiny energy factories called mitochondria. Red and near-infrared light activates them like flipping the “healing switch” inside your cells. This boosts:

- Increase cellular energy (ATP)
- Improve blood flow
- Reduce inflammation
- Accelerate tissue repair
- Support nerve recovery

Why Power Is Important for Deep Pain

If you're treating something deep like: A knee joint, shoulder, or a deep nerve.

The light has to pass through skin, fat, muscle, and blood. A lot of it gets absorbed along the way. If not enough light reaches the target, **nothing happens**. TheraRay uses high intensity so that:

- Even after some light is lost,
- Enough still reaches deep tissue,
- And triggers healing.

Low-power devices often can't reach that minimum level needed for deep tissues.

What About Safety?

Higher power does **not** mean more heat damage.

TheraRay controls heat using:

- Specialized cooling
- Pulsed delivery
- Very short treatment times

Since sessions last only 30 seconds, there isn't enough time to overheat tissue when used properly.

Immediate Pain Relief

High-intensity light can also reduce pain quickly by affecting pain nerve fibers directly.

Low-power systems usually can't reach the intensity needed for immediate pain relief — patients have to wait for slower healing effects.

Why Two Wavelengths?

TheraRay uses a blend of:

- **660nm (Red Light) – 40%**
 - Works closer to the surface
 - Helps with inflammation
 - Supports skin and nerve repair
- **810nm (Near Infrared) – 60%**
 - Penetrates several centimeters deep
 - Supports muscles, tendons, and joints
 - Boosts collagen production
 - Improves deep blood flow

Together, they treat both **surface pain and deeper structural issues** at the same time.

What This Means for Patients

TheraRay may help with:

- Nerve repair (like peripheral neuropathy)
- Joint pain (knee, shoulder, etc.)
- Muscle fatigue and recovery
- Tendon and ligament healing
- Improved strength and performance

Because treatment only takes **30–60 seconds**, it's easy to add into a routine.

Bottom Line

TheraRay works by:

- Delivering strong light quickly
- Reaching deep tissues
- Activating cellular energy
- Avoiding overexposure
- Providing fast pain relief
- Supporting long-term healing

It's about **maximum effect in minimum time**.