

Horizon Quick Set Guide

Description:

Hill Laboratories Horizon produces infrared and red light. It contains 36 Infrared (880nm) LEDs and 7 Visible Red (660nm) LEDs. The diameter of the LED cluster is approximately 2 inches. Infrared light is not visible to the human eye. The red LEDs are visible. Medical studies and research show that cells absorb light photons and transform their energy into adenosine triphosphate (ATP), the form of energy that cells utilize.

Power Output: The Horizon Produces 800mW of power.

Dosage: Every 90 Seconds produces slightly less than 4 Joule/cm²

Timing and Recommended Dose:

- Minimum Tissue to Bone Depth: 90 270 Seconds per area until entire injury is covered
- Deeper Musculoskeletal: 180 360 Seconds per area until entire injury is covered

Indications

Application of infrared energy to apply topical heating for the treatment of selected medical conditions such as:

- Temporary increase in local blood circulation
- Temporary relief of minor muscle and joint aches, pains and stiffness
- Relaxation of muscles
- Muscle spasms
- Minor pain and stiffness associated with arthritis

Contraindications

- 1. Cancer (tumors or cancerous areas)
- 2. Direct irradiation of eyes
- 3. Treatment of patients with idiopathic photophobia or abnormally high sensitivity to light. Some medications are known to increase sensitivity to light
- 4. Patients that have been pre-treated with one or more photosensitizers
- 5. Direct irradiation over the fetus or the uterus during pregnancy
- 6. Direct irradiation of the thyroid gland and endocrine glands
- 7. Patients with pacemakers
- 8. Growing children (Epiphyseal plates)





Treatment Parameters:

- Acute musculoskeletal: Daily treatment is ideal
- Resolving musculoskeletal: every 2-3 days
- Chronic musculoskeletal: weekly if palliative but every 2-3 days with low grade inflammation
- Acute wounds: daily
- Chronic wounds: 1-2 times weekly
- Infected ulcers: twice weekly until infection clears

Arndt-Schulz law for an open ulcer: doses between .01 and 10 J/cm² are stimulatory where higher are inhibitory.

Technique:

- Use direct skin contact as long as it is not too painful.
- If icing an injury, use Horizon after ice. Wait until tissue is back to normal color.
- Use Horizon before any heating modality diathermy, ultrasound or hot packs
- Some pain may be experienced during or after treatment. As long as this pain is not caused by heat buildup it is normal.

Patient Setup

When treating an acute or chronic non-wound condition:

- Use alcohol or an alcohol wipe to prepare the treatment site.
- Treat with direct contact.

When treating an acute or chronic wound condition:

- Use plastic wrap over the wound or probe to prevent cross contamination.
- Treat with direct contact. Treat outer edge of wound first.

Operating the Horizon IR Light Probe

1. The probe is operated continuously at one power level and can be set to four different time levels: 30, 60, 90 seconds and continuous mode when all LEDs are illuminated.

- 2. Use the Select button to select a 30, 60, 90 second or continuous treatment.
- 3. Press the Start/Stop button to begin the treatment.
- 4. Press the Start/Stop a second time if you want to stop the treatment.
- 5. Keep the probe in one location at a time. Do not move or "bathe" the treatment area.





Horizon Infrared Therapy Applications

This is a starting reference guide. Additional points can be administered directly over an injury or tender points.





