



What are the benefits of **LASER THERAPY?**

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What is a Laser?

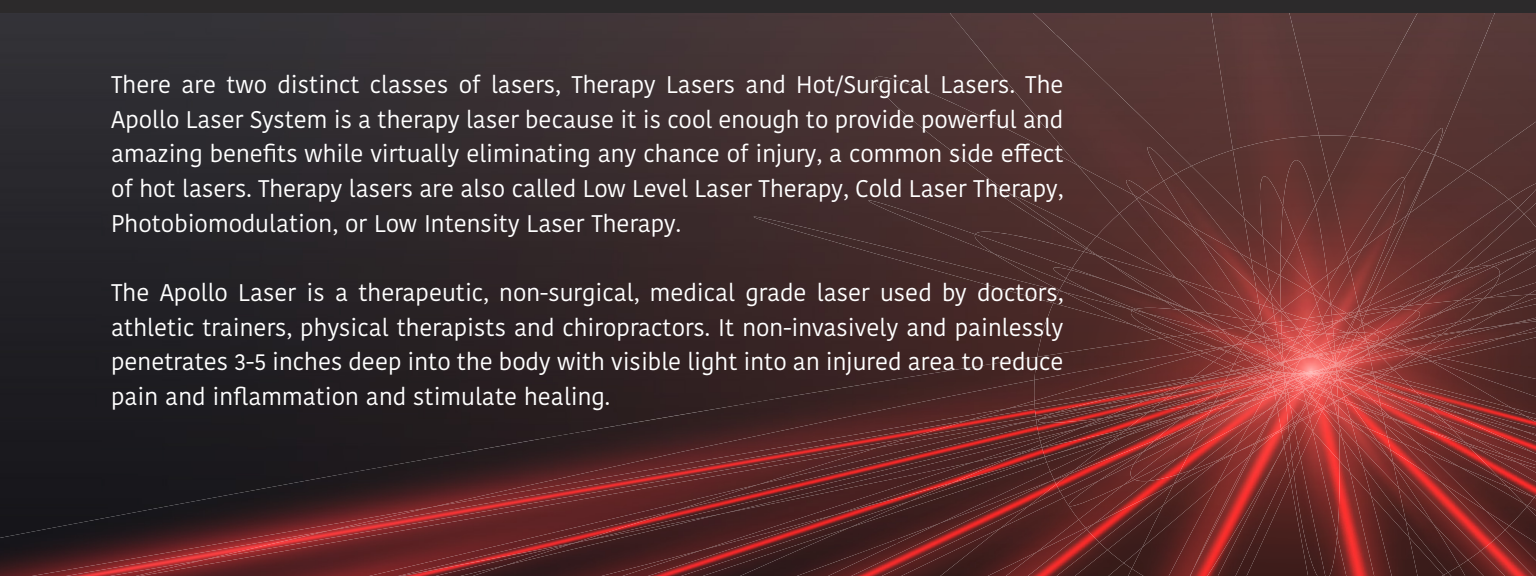
Laser stands for:

Light **A**mplification by **S**timulated **E**mission of **R**adiation

That means that the light or photons are stimulated by electricity until they reach a higher level of activity. When they reach this higher energy level, they are emitted from the laser.

There are two distinct classes of lasers, Therapy Lasers and Hot/Surgical Lasers. The Apollo Laser System is a therapy laser because it is cool enough to provide powerful and amazing benefits while virtually eliminating any chance of injury, a common side effect of hot lasers. Therapy lasers are also called Low Level Laser Therapy, Cold Laser Therapy, Photobiomodulation, or Low Intensity Laser Therapy.

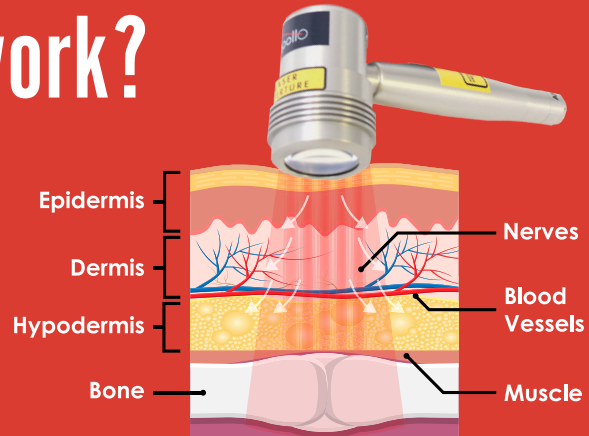
The Apollo Laser is a therapeutic, non-surgical, medical grade laser used by doctors, athletic trainers, physical therapists and chiropractors. It non-invasively and painlessly penetrates 3-5 inches deep into the body with visible light into an injured area to reduce pain and inflammation and stimulate healing.



How does Laser Therapy work?



The Apollo laser produces a beam of light, which is applied over the injured area to stimulate healing. The laser probe is applied directly to the skin and then activated by the practitioner. The laser light penetrates 3-5 inches into the tissue to stimulate cells. The patient will not feel any pain, heat or discomfort during treatment. The probe should keep moving quickly from point to point for the best results.



There are a number of terms that are presently being used to describe Low Level Laser Therapy including: low level laser therapy (LLLT), photomedicine, soft laser, low intensity laser therapy (LILT), cold laser therapy, photonic stimulation, biomodulation, light therapy and many others.

The term Low Level Laser Therapy assumes that the laser emission is low enough so that the treated temperature does not rise more than a few degrees Celsius above normal body temperature. Thus, there is no significant heating effect as there is with higher power lasers. With this lack of heat, Low Level Laser Therapy offers the benefit of effective treatment minus the safety risks that can be present with high power lasers.

Research describes that laser light achieves a range of physiological response:

- It reduces pain by causing production of natural pain killing endorphins;
- Laser reduces inflammation by suppressing inflammatory enzymes that create swelling, redness, pain and heat;
- It quiets tight muscles that create chronic pain, joint problems and decreased mobility by stimulating cell activity leading to repair.

What are the benefits of Laser Therapy?



The Apollo Laser System, through controlled infrared energy emission, is intended to offer a medical professional an easy to use tool that effects positive treatment, outcomes through a series of targeted, fast treatment sessions (treatment sessions are typically 2 minutes or less). The Apollo Laser System can benefit patients by improving conditions involving muscles and joints that are experiencing symptoms such as pain, stiffness, tightness and spasms.

For more than 40 years, laser has been used worldwide for the treatment of pain, wound healing and musculoskeletal problems.

There are more than 5,000 studies showing the efficacy of laser therapy. **Laser Therapy has been shown, in research literature, that it may help all of the following:**

- Arthritis
- Soft Tissue Injuries
- Sports Injuries
- All Types of Trauma
- Wounds & Fractures
- Chronic & Acute Pain
- Depression & Anxiety
- Nerve Problems of all types
- Acute & Chronic Sprain/strains
- Head, Face & Mouth Pain
- Sinus Problems & Headaches
- Muscle Pain & Trigger Points
- Degenerative Disc Conditions
- Strokes & Other Brain Injuries
- Side Effects of Chemotherapy

Apollo Lasers are also safe and effective for veterinary use.

COLD LASER



Are There Any Side Effects from Laser Treatment?

Apollo Lasers are considered a cold laser and are deemed safe. Treatments are quick, painless and non-invasive. It is always important for the patient and clinician to both wear proper safety glasses during treatments for eye protection.

What are the benefits of the Apollo?

Twenty years of engineering has produced an exceptionally safe and state-of-the-art laser design.

The Apollo was designed to be easy to use and extremely effective for all types of patients.

Fast Treatment: Treatment times vary from 1-2 minutes per area



The **Desktop Apollo** has two channels to allow for the use of two probes.

- You can use a large cluster probe with 3,000, 4,000, or 5,000 milliwatts for large areas.
- You can use a second cluster to treat two patients at once or purchase a point probe for laser acupressure or trigger points on small areas.

The **Portable Apollo** can be battery operated or plugged into a standard wall socket.

A metal enclosure and aerospace grade aluminum probes produce a rugged and dependable laser that can provide cool and effective treatment for many years.

You have the security of a 2 year manufacturer's warranty.

(see page 12 for details)

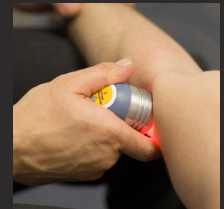
Is Laser Similar to Electric Stimulation or Ultrasound?

No. Ultrasound is a form of heat therapy that does not regenerate tissue or block pain like a laser. It can soften tight connective tissues, but does not promote healing. Electrical stimulation units are designed to temporarily block pain and reduce inflammation. **However, they are not as effective at stimulating healing like a laser.**



Thus, unlike ultrasound and electrical stimulation, laser has long-term effects, and is not palliative like ultrasound and electrical stimulation.

Apollo Lasers are in the cold laser category and are effective at stimulating healing all types of tissue, reducing inflammation and blocking pain at the same time.



This makes laser far superior to either ultrasound or electrical stimulation.

How is Apollo different from other lasers?

Price and Performance

Most Therapy Lasers are either hot lasers that cost 2-3 times the cost of the Apollo and are more dangerous to use or they are extremely low power and very ineffective.

The Apollo provides you with a safe and effective product with built-in early fault detection software as well as a diode test window. All of these features are available for a very competitive price. In fact, most class 4 lasers are 2-4 times the cost of the Apollo, making it the most cost effective, class 4 laser on the market today.

With probes up to 5 watts (5,000 mW) of continuous power at 810nm, these lasers were created to achieve optimum energy density in a very short period. When you purchase an Apollo Laser, you can control the energy density by using different probes and treatment times to achieve your desired results. No need to waste time trying to use complicated software driven lasers that will only interfere with your efficiency as a clinician. Plus, the laser comes with the best selling book, *Light and Laser Therapy: Clinical Procedures, 6th Edition*, which will teach you how to quickly and easily become a laser expert.



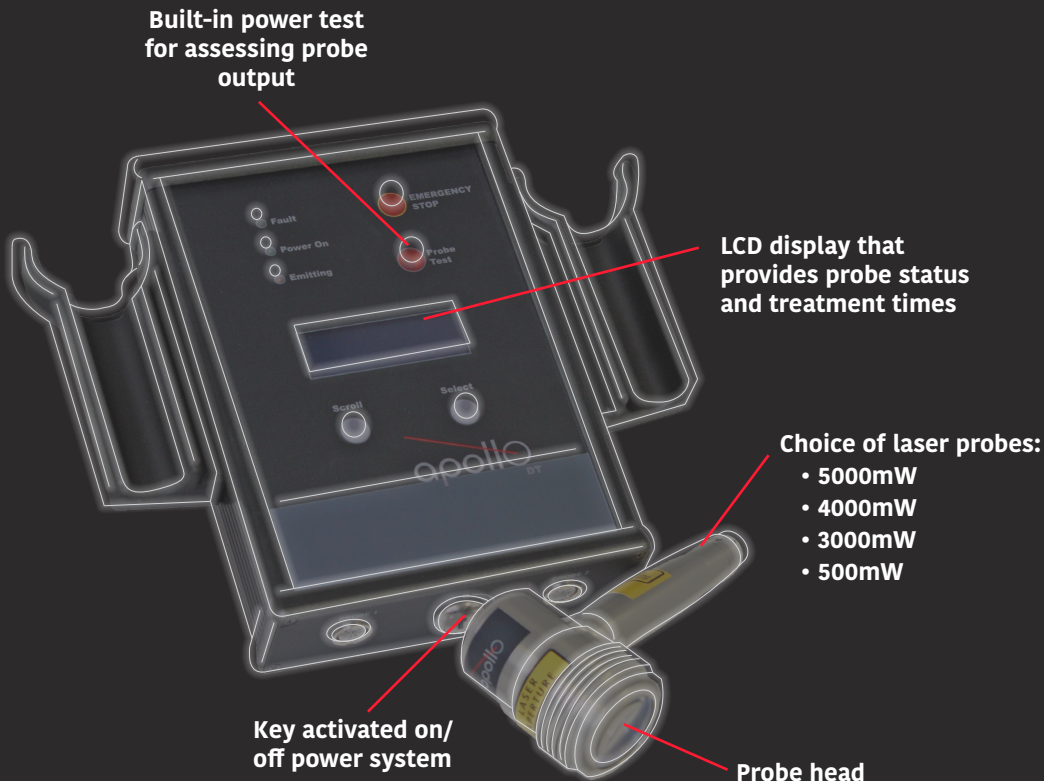
Durable aerospace quality aluminum assembly

ISO 13485 quality assured manufacturing

User controlled treatment times selectable between 10 seconds and 2 minutes

Built-in safety and fault detection software

Warranty (see page 12)



What are the Apollo's unique features?

What are the Main Differences between the Desktop and Portable Units?

APOLLO 2-CHANNEL DESKTOP LASER SYSTEM:

- Allows for two independent channels so you can work on two patients at the same time, or two areas on the same patient at one time
- All 4 probes are compatible with the Desktop unit
- Heavy duty construction for office and clinic environments



APOLLO PORTABLE LASER SYSTEM:

- Lightweight and portable for multi-office use or for sports so you can go on the field or in the locker room
- Convenient when power outlet is not available
- Weighs less than 3 pounds
- Equipped with a rechargeable, user replaceable NiMH battery that provides enough power to operate unplugged for approximately 60 treatment minutes
- Can only be used with 3000mW and 500mW Cluster Probes
- Includes a custom carrying case



Free 90 Days of Clinical Support with Dr. Curtis Turchin included with purchase.

What is the warranty?

APOLLO LASER THERAPY: Desktop & Portable

Parts Warranty:

- 2 Years on control unit
- 1 Year on probes
- Out-of-box on batteries, probe cables, and accessories

Labor Warranty:

Labor covered on repairs within the parts warranty.

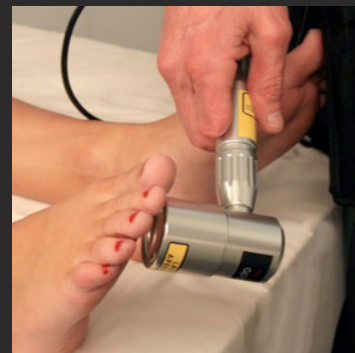
What is included with an Apollo Laser System?

- Power adapter
- Probe cable
- 2 pairs of safety eye wear
- Laser carrying case
- Clinical manual: *Light & Laser Therapy: Clinical Procedures*, 6th edition
- Choice of laser probes:
 - 5000mW
 - 4000mW
 - 3000mW
 - 500mW
- Laser tutorial DVD with systems overview



Which probes do I need?

| Probe Type | 3000mW Cluster Probe | 4000mW Cluster Probe | 5000mW Cluster Probe | 500mW Single Diode Point Probe |
|--|-------------------------------------|----------------------------------|---------------------------------------|--|
| Available with Desktop version | Yes | Yes | Yes | Yes |
| Available with Portable version | Yes | No | No | Yes |
| Laser Classification: | Class 4 | Class 4 | Class 4 | Class 4 |
| Designed For: | Versatile, All Purpose Fast Results | Advanced Healing, Faster Results | Most Powerful for the Fastest Results | Hard to reach or Small Body Parts, Laser Acupoints |
| Emitter Wavelength: | 810 nm | 810nm | 810nm | 810nm |
| Beam Divergence: | 9° x 38° | 9° x 38° | 9° x 38° | 9° x 38° |
| Total Power Output: | 3000mW | 4000mW | 5000mW | 500mW |
| Polarization: | Linear | Linear | Linear | Linear |
| NOHD: | 120cm | 150cm | 190cm | 80cm |
| Total Energy Delivery per Minute: | 180 Joules, 68 J/cm ² | 240 Joules, 91 J/cm ² | 300 Joules, 112.2 J/cm ² | 30 Joules, 160.8 J/cm ² |
| Treatment time for 4 J/cm ² : | 3.51 seconds | 2.65 seconds | 2.13 seconds | 1.49 seconds |
| Number of Emitters: | 4 | 4 | 4 | 1 |
| Optical Output Power per Emitter: | 750mW | 1000mW | 1250mW | 500mW |
| Emitter Type: | GaAlAs Semiconductor Laser | GaAlAs Semiconductor Laser | GaAlAs Semiconductor Laser | GaAlAs Semiconductor Laser |
| Aperture: | 25mm | 25mm | 25mm | 9.5mm |
| Spot Size: | 2.7 x 21mm, 0.567cm ² | 2.7 x 21mm, 0.567cm ² | 2.7 x 21mm, 0.567cm ² | 1.7 x 9.5mm, 0.161cm ² |
| 1/e ² Power Density (Irradiance): | 1.14 W/cm ² | 1.51W/cm ² | 1.87W/cm ² | 2.68W/cm ² |
| Applicator Type: | 3000-C | 4000-C | 5000-C | 500-S |
| Safety Goggle Requirement: | OD4 minimum @ 810nm | OD5 minimum @ 810nm | OD5 minimum @ 810nm | OD4 minimum @ 810nm |



Apollo uses the highest quality, Class 4, Infrared Continuous Wave Laser probes, which means the laser is capable of delivering a continuous emission of infrared laser energy so that, unlike with a pulsed laser, 100% of the emission is continuously entering the patient. This saves time and keeps the laser cooler than with pulsed laser diodes.

All Apollo probes are crafted of aerospace-grade aluminum for cool performance. The medical-grade, Class 4 laser diodes ensure an extra-long life as well as steady, even power output.



Are Power and Wavelength Important?

Yes, the more average output power a laser produces, the faster it can deliver the appropriate dose of energy required to complete a treatment. This means that the higher the output power is, the shorter the treatment time. When treating patients, you know that you only have a limited time to produce exceptional results. If the laser is very low power, treatment times can be from 10-20 minutes per patient. Higher power lasers, like the Apollo are considered more flexible because you can produce fantastic results in a short period of time, without any worry about side effects. Why spend 10-20 minutes with a low power laser when you can spend 2-3 minutes with an Apollo?

According to unbiased research literature, 810nm is the optimum wavelength because it produces the maximum results and the deepest penetration in the shortest time, with the least amount of heat. All Apollo probes have an emitter wavelength of 810nm so you can be assured fast, cool and effective treatments.



When should I not use laser therapy?

Laser Therapy should not be used over carcinoma, bacterial infections or on any pregnant patients, unless recommended by a medical doctor. There should not be direct irradiation of the eyes as the laser can cause damage to the eyes. The doctor and the patient should always wear protective eyeglasses.

Can a clinician bill for laser therapy?

The following are the most common codes used by practitioners of laser and LED therapy. We are not recommending any particular codes and cannot advise you on billing issues.

- **97039: Attended Modality, Unspecified** This is a code that is also being used to bill for attended modalities. Reimbursement is good because it is understood to take more time than an unattended code. The problem with the code is that, being unspecified, it is occasionally rejected by some insurance carriers or hand audited. Make sure you have a one-page description of the treatment if a carrier wants more information. This is also the code that is often used for wound care. When the claim form goes out it will usually say something like: *97039: Attended infrared therapy or 97039: Attended laser therapy 97039-52 (less than 15 mins)*
- **97026: Infrared** The beauty of this code is that it is for infrared light therapy. The problem with this code is that it is a code for a heat lamp and is a supervised, not constant attendance modality. Thus, reimbursement can be quite low, although for some practitioners, Medicare reimburses it. To improve reimbursement, try listing it as an attended modality or adding a -22 or an “unusual procedural services.” Two ways these codes can be used: *97026: Attended infrared light therapy 97026-22: Attended infrared therapy*
- **97139: Unlisted Therapeutic Procedure** This code is for a therapeutic procedure meaning that the doctor must have one-on-one contact with the patient. The strength of the code is that it tells the insurance carrier that the doctor is spending direct treatment time with the patient. The weakness of the code is that an unlisted procedure is more likely to be closely inspected by an insurance carrier. Billing might look like: *97139: Infrared Stimulation: Constant attendance*
- **97112: Neuromuscular Reeducation** This code is used for neuromuscular training to improve postural stability and control for functional issues, including reeducation of movement, balance coordination, kinesthetic sense, posture and proprioception. If laser is being used to foster this type of training and involves movement reeducation, it can be an effective code. This code is used correctly when the relationship of the procedure to sitting, moving or standing activities is evident. Many carriers have placed restrictions on the use of 97112 to patients with significant neurologic deficits. However, if there are neuromuscular problems and you use light therapy it is legitimate to use this code.
- **97140: Manual Therapy Techniques** This code is for a manual therapy technique meaning that the practitioner must have one-on-one contact with the patient and perform manual therapy. In this case the practitioner must be using light therapy as an adjunct to some type of manual therapy, including manual lymph drainage or soft tissue techniques. Because of the rounded head of the Apollo, you are performing massage while you are also performing a laser treatment.

“I have been very pleased with the Apollo Cold Laser by Pivotal Health Solutions. We utilize it in our office for many different conditions.

We use it to help treat patients who suffer from arthritis and other inflammatory conditions. Cold Laser is not only used on patients but animals as well (mainly dogs) in our office. It has multiple benefits and is very easy to use. My staff is trained to perform the treatment sessions while I am unable to attend to other patients.

It has been a great addition to the types of care offered in my office. In addition, the educational materials are superior. We provide the brochure regarding laser treatment to each new patient and this allows conversations to open about the therapy. The support at Pivotal Health Solutions has likewise been pleasant and professional to work with. I highly recommend this cold laser and educational materials.”

- Dr. Mary Ann Bough



Pivotal PROFESSIONALS

Our Pivotal Professionals are here to
**help support and grow
your practice.**



Dr. Curtis Turchin
Apollo Lasers

Curtis Turchin, M.A., D.C. is considered one of the experts in the fields of gentle adjusting, soft tissue work, light and laser therapy. He has been using LEDs and lasers for approximately 34 years. Dr. Turchin has taught therapists and doctors in the U.S., Europe, Japan, Brazil, Canada, and Guatemala. He has a bachelor's degree in pre-medical studies and psychology from the University of Southern California, a master's degree in education from San Francisco State University, and a doctor of chiropractic from Palmer College. He is in private practice in Sebastopol, California, in the heart of the Sonoma wine country and teaches doctors and therapists his unique techniques.

EDUCATION



WEBINAR: Treating the Untreatable With Light and Laser Therapy

Speaker: Curtis Turchin, DC



WEBINAR: Using Medical Massage with Laser to Improve Athletic Performance

Speaker: Curtis Turchin, DC



BLOG: Beat the Learning Curve: Low Level Laser Therapy



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