

# SolRx™ Frequently Asked Questions (FAQ)

## ***What is ultraviolet (UV) phototherapy ?***

Ultraviolet phototherapy is the use of specific wavelengths of the sun's natural spectrum for the treatment of skin disorders such as psoriasis, vitiligo and atopic dermatitis (eczema). Phototherapy devices use either the short wavelength Ultraviolet-B (UVB) rays or the longer rays of Ultraviolet-A (UVA). UVB light produces biological reactions within the skin that lead to clearing of the lesions. UVB is also the waveband of light that produces Vitamin-D in our skin; essential to good health.

## ***How long has ultraviolet phototherapy treatment been used ?***

The benefits of UV phototherapy for psoriasis was recognized by the medical community as early as 1925 by a study of the effects of natural sunlight on psoriasis patients. Devices to produce artificial light for the treatment of psoriasis have been in use for over 50 years and today there is a phototherapy clinic in most cities. Home units are a more recent phenomenon, as lower costs have made them more attainable to the average person. This remarkable ancient Egyptian wall carving shows a sick infant being treated with sunlight, probably for infant jaundice (Hyperbilirubinaemia). Today, affected babies receive the same treatment, albeit from artificial light sources. The therapeutic rays are in the UVA spectrum in this case. Our bodies evolved in an environment bathed in ultraviolet light, so we developed responses to use the light beneficially (Vitamin-D photosynthesis) and to protect us from over-exposure (tanning). Our modern lifestyles; being fully clothed, having protection from the sun, and many of us living in extreme northern/southern latitudes; has significantly reduced our UV exposure and contributed to health problems in some.



## ***Will home UVB phototherapy work for me ?***

The best way to determine if home UVB phototherapy will work for you is to first get a proper diagnosis from your physician, and, if warranted, take treatments at a phototherapy clinic near you to establish efficacy. SolRx devices use exactly the same UV bulbs as used in the clinic, so if the clinic treatments prove successful, there is an excellent chance that home phototherapy will also work, as supported by the medical study of twenty-five SolRx UVB-Narrowband home units in the Ottawa area: "Are Narrow-band Ultraviolet B Home Units a Viable Option for Continuous or Maintenance Therapy of Photoresponsive Skin Diseases?". If you cannot attend a phototherapy clinic, your response to natural sunlight is usually a good indicator. Does your skin condition get better in the summer? Have you ever deliberately taken sun exposure to improve your skin? Do you take vacations to sunny climates to clear your skin? Have you had some success clearing your psoriasis using tanning equipment?

Note: Tanning equipment emits UVA light, but contains some UVB, up to a government regulated maximum of approximately 8%. For comments from actual home phototherapy users, see our **Testimonials** brochure.

## ***Should I be using UVA or UVB for home phototherapy ?***

For the vast majority of people, UVB is the best treatment option. UVA is less desirable because it requires the use of the drug methoxsalen (Psoralen), taken orally or in a pre-treatment "bath", and carefully measured doses of UVA light using a light meter. These "PUVA" treatments, are much more difficult to administer in the home than UVB. PUVA is therefore usually reserved for the very worst cases and is best done in a clinic. PUVA also has more side effects than UVB. UVB home phototherapy does not require use of any drug to be effective, and does not require use of a UVB light meter. UVB home phototherapy can also be used in combination with topical drugs applied directly to the lesions for greater efficacy. For example: tar preparations (LCD), steroids and calcipotriene (Dovonex, Dovobet, Taclonex).

## ***What is the difference between UVB "Broadband" and UVB "Narrowband" ?***

Conventional "Broadband" UVB bulbs emit light in a broad range that includes both the therapeutic wavelengths specific to the treatment of skin diseases plus the shorter wavelengths responsible for sunburning. Sunburning has a negative therapeutic benefit, increases the risk of skin cancer, and limits the amount of therapeutic UVB that can be taken. "Narrowband" UVB bulbs, on the other hand, emit light over a very short range of wavelengths concentrated primarily in the therapeutic range. UVB Narrowband is therefore theoretically safer and more effective than UVB Broadband, but requires either longer treatment times or equipment with more bulbs to achieve the same dosage threshold. UVB Narrowband now dominates worldwide new equipment sales, but UVB Broadband will likely always have a role. Solarc's UVB-Narrowband models have an "UVB-NB" suffix in the model number. Broadband models have the "UVB" suffix only. See also our **Understanding Narrowband UVB Phototherapy** brochure.

### ***If necessary, can I switch the UV waveband type in a SolRx device ?***

All three SolRx device families can interchangeably use bulbs of any of the three waveband types: UVB-Narrowband, UVB-Broadband and UVA. Also, Solarc does not produce a UVA Users Manual for any of the three device families, so it will be necessary for you to obtain UVA exposure guidelines from your physician. When changing waveband types it is also necessary to change the device's labeling.

### ***I live in the USA; why do I need a prescription ? Do others need a prescription?***

Prescriptions are MANDATORY for all shipments to USA addresses, and OPTIONAL for Canadian and International shipments. In the USA, this is strictly mandated by the US Code of Federal Regulations [21CFR801.109]

"Prescription Devices". In Canada and the rest of the world, no such legal requirement exists, and device safety and effectiveness has been proven over many years. A prescription is NOT required for Canadians to claim the Medical Expense Tax Credit on their income taxes, but may be useful for an employer health insurance claim.

Even without the need for a prescription, there remains a very important role for the physician. **Solarc Systems Inc. strongly advises the Responsible Person to seek the advice of a physician.** In particular:

- The physician's diagnosis is needed to determine if UVB phototherapy is the best treatment option
  - The physician is in the best position to judge if the patient is likely use the device responsibly
  - The physician plays a role in the ongoing safe use of the device, including regular follow-up skin exams.
- Note: The prescription does not have to come from a dermatologist; any medical doctor (MD) is acceptable.

### ***How safe is ultraviolet phototherapy ?***

As with natural sunlight, repeated exposure to ultraviolet light can cause premature aging of the skin and skin cancer. However, when these risks are weighed against the risks of other treatment options, often involving strong prescription drugs, ultraviolet phototherapy is usually found to be the best treatment option. SolRx devices use exactly the same bulbs as the phototherapy devices in clinics, hospitals and doctor's offices. The decision to use home phototherapy is an individual matter that requires initial physician consultation and periodic follow-up.

### ***How do I take a treatment ?***

For the SolRx 1000 Series Full Body Panel, the patient covers any areas of the body not requiring exposure and puts on the ultraviolet protective goggles. Standing 8 to 12 inches from the device, the key is put in and turned to the ON position. The timer is set to the desired treatment time for one side, the START button is pressed and the lights go on. When the first side is complete, the lights go off automatically. The patient then turns around and repeats for the other side(s). The whole procedure takes little more than the time actually spent under the bulbs. Many people take their treatment immediately after a shower, which has the added benefit of exfoliating dead skin to improve light transmission to the lesions. For 500 Series devices, the procedure is similar, but positioning is different depending on hand/foot use or spot treatment. Likewise for the 100 Series Hand-held unit. For all devices, it is important to not significantly overlap treatment areas because this may cause localized overexposure.

### ***How often are treatments taken and how long are the treatment times ?***

For psoriasis: during the "clearing" phase, treatments are taken 3 to 5 times per week. Treatment times are slowly increased with the number of exposures. The first treatments are only seconds long, working up to several minutes per side after forty or more exposures, and depending on the individual and physician advice. After significant clearing is achieved, the "maintenance" phase begins; treatments are taken anywhere from three times per week to not at all and times are reduced accordingly. For vitiligo: treatments are usually taken twice per week, never on consecutive days. Treatment times are typically less than those for psoriasis. The SolRx UVB-Narrowband and UVB-Broadband User's Manuals are complete with a detailed exposure guideline tables for both psoriasis and vitiligo. Eczema and other less common skin diseases and UVA require physician guidance for treatment times.

### ***How long does it take to get results ?***

This is of course an individual matter, but typically some remission is evident after only a few weeks. More advanced clearing requires two to six months. Long term low-dose maintenance can go on for years as determined by the supervising physician.

### ***What are the advantages of home phototherapy ?***

The greatest advantage of home phototherapy is the tremendous time savings it allows while still providing totally effective phototherapy treatment. For those that have been going to a phototherapy clinic, the convenience of home treatment eliminates scheduling problems and traveling costs, and makes missed visits a thing of the past. This is supported by **The Ottawa Home Phototherapy Study** of twenty-five SolRx home phototherapy users. For those living too far from a phototherapy clinic, a home UVB unit may be the only real option. As a condition of sale, use of a home phototherapy unit requires regular follow-up skin examinations by a physician at least once per year.

### ***What SolRx model should I buy ?***

There are several considerations when choosing a SolRx phototherapy device model. We have a brochure dedicated to helping you make the right choice. Please see our **Selection Guide**.

### ***How much room do I need for a SolRx 1000 series unit ?***

The SolRx 1000 Series Full Body Panel is designed to take up an absolute minimum amount of room in your home. They are only 3½" thick by 29" wide and mount flat up against a wall, or in a corner, with the bottom resting on the floor. Casters are not practical because they must have a wide wheelbase to keep the unit from tipping over, and therefore greatly increase the floor space needed. Casters also increase the distance between the bottom of the bulbs and the floor, making a platform necessary for lower leg treatment. Our considerable experience has been that once the device is mounted, it is out of the way and there is little need to have it moved. The author's personal 1000 Series unit has been in the same place for over 15 years.

### ***What are the electrical requirements ?***

All SolRx phototherapy Units plug into any standard 120 Volt - 3 prong electrical outlet common to almost all homes in North America. There are no special electrical requirements. The AC Current ratings at 120Vac are:  
1000 Series Full body models: 1740 = 3.1 amps, 1760 = 4.7 amps, 1780 = 6.3 amps, 1790 = 7.9 amps.  
500 Series Hand/Foot & Spot models: 520 = 0.7 amps, 530 = 0.9 amps, 550 = 1.6 amps.  
100 Series Hand-held model 120 = 0.4 amps. Most homes use 15 amp circuit breakers.

### ***Are the SolRx models with more bulbs physically larger devices ?***

No. For a given device family, all models use the same steel frame components and differ only in the number of bulbs installed. For example, the eight-bulb 1780 uses the same main frame as a four-bulb 1740, but the bulbs are packed in much tighter to increase the device irradiance (light power density) and reduce treatment times. Devices with more bulbs will also have more ballasts, and weigh more.

### ***Does the unit produce a lot of heat ?***

No. All SolRx Phototherapy Units use modern fluorescent bulbs and electronic ballasts where possible. They produce about as much heat as any other similar sized fluorescent bulb.

### ***Will I get a tan using a home UVB phototherapy device ?***

Some people report that they get a tan and others don't. UVB is known to create more melanocytes in your skin, the cells needed for maximum skin darkening, but UVA light is the primary contributor to tanning. Dosages also play an important role. The SolRx Users Manual provides conservative treatment times. Excessive tanning has not been reported. More likely is some temporary skin reddening if the dosage approaches its maximum. (erythema)

### ***Will the UV light fade colours in the room ?***

It is a fact that prolonged exposure to ultraviolet light will fade colours. However, this requires considerable cumulative amounts of UV light. Because a home UVB unit is used relatively infrequently, (as compared to exterior paint exposed to daily sunlight), our practical experience is that colour fading is not an issue. If it occurs, it is barely perceptible. The only possible exception to this is that fine art should be protected.

### ***How long do the UV bulbs last ?***

Under normal home phototherapy usage, the bulbs have a useful life of at least three to five years, and as many as ten years. Fluorescent bulbs gradually lose power over time so that over many years, treatment times are perhaps double that of new bulbs, but the type of light remains consistent (has nearly the same relative spectroradiometric profile). The decision to replace bulbs is therefore only a matter of the patient's tolerance of longer treatment times. SolRx devices use standard UV bulbs available from several different suppliers. (Not 'Special' bulbs with special end connector arrangements.) UVB lamps are very specialized and cost CDN\$50 to \$120 each, depending on type.

### ***Why are the UVB bulbs so expensive ?***

There are several reasons why medical fluorescent UVB bulbs are expensive:

- To allow passage of the UVB light, expensive and sometimes difficult to obtain quartz glass must be used. Standard glass filters out UVB light.
- Medical UVB bulbs are produced in much smaller quantities than other fluorescent bulb types.
- Medical bulbs are subject to higher regulatory standards, controlled distribution and greater compliance costs.
- In the case of Philips TL/01 UVB-Narrowband bulbs, the phosphor (white powder) within the bulb is expensive to produce and has legacy development expenses.
- The bulbs are fragile and subject to shipping damage losses.

### ***What maintenance does a home phototherapy device require ?***

The only maintenance that is required is the occasional cleaning of the bulbs and reflectors using any common glass cleaner. We also recommend checking the accuracy of the digital timer periodically. Appropriate maintenance instructions are given in the SolRx Users Manual.

### ***What is the warranty ?***

Solarc is ISO-13485 (medical device) certified. We use only the highest quality components and manufacturing methods in the construction of the SolRx Home Units. These devices have an excellent track record of reliability and boast a four year warranty on the device and an unequalled one year limited warranty on the bulbs.

### ***What if the unit arrives damaged ?***

Any product containing glass bulbs is at risk of shipping damage. Our shipping containers are highly developed and heavy duty, but yes, there are times when damage does occur. In the vast majority of cases, this is simply a broken bulb(s). Our long-standing **Arrival Guarantee** policy is to immediately ship the replacement bulbs (or any other part if necessary) at no cost to the customer. We ask that the customer make the repairs on site. Solarc reserves the right to request proof of the damage.

### ***Does Solarc Systems ship to the USA ?***

Routinely. All Solarc/SolRx devices are US-FDA compliant. Payment is made in US dollars using the US Order Form. The amount listed is all that you pay, freight and brokerage included. The devices are NAFTA eligible and duty free. Solarc does not collect any US taxes. If US taxes are payable, they are payable by the purchaser. Our US website is located at [solarcsystems.com/us\\_main.html](http://solarcsystems.com/us_main.html)

### ***Does Solarc Systems ship Internationally ?***

Yes. We have been using a single reliable freight forwarder for several years. Some of the countries and remote locations we have supplied products to include: Alaska, Albania, Australia, Brazil, Cyprus, Guam, Hawaii, Hong Kong, India, Israel, Italy, Korea, Mexico, New Zealand, Panama, Qatar, Saudi Arabia, United Arab Emirates, United Kingdom, Yukon. Extra freight charges apply. All shipments are air-freight to the nearest international airport, where the customer is responsible for importing the device according to local requirements. There is no "door-to-door" delivery. You must go to the airport to pick up the product. All import customs, duties and brokerage is payable by the purchaser. The device is shipped with our standard customs paperwork package, including a commercial invoice and product identification. All the paperwork you need is typically attached to the outside of the shipping box. Pricing is per the US order form, plus extra freight charges supplied by quote. We can converse by email in any language using a web translator such as Altavista's Babelfish. We are pleased to help our friends worldwide.

### ***Will my insurance company help with the cost ?***

Many insurance companies recognize home phototherapy equipment as 'Durable Medical Equipment' (DME), and will help with some or all of the initial purchase. Sometimes; however, this requires some persistence because "home phototherapy device" is sometimes not on the insurance company's list of pre-approved devices. The best results are usually obtained by referring the request to more senior human resources staff, and making the case that the device will save drug costs and improve quality of life. A Doctor's letter to that effect is also useful. Solarc continues to work at getting all insurance companies to cover this equipment. See also: **Tips for Insurance Reimbursement** brochure.

### ***Can I claim home UV phototherapy equipment on my Canadian income taxes ?***

Yes. The 2005 Canadian Federal Budget added "phototherapy equipment for the treatment of psoriasis and other skin disorders", as an allowable "Medical Expense Tax Credit" (METC), as listed in the Income Tax Act, 118.2(2)(i). A prescription is NOT required. Please visit our **METC** webpage for more info.

### ***How Do I Place An Order ?***

Solarc Systems requires the following to complete an order for Home Phototherapy equipment:

- If applicable, a physician's prescription indicating UVB-Narrowband or UVB-Broadband home phototherapy device **OR** the completed "Physician's Approval" section of the Order Form. Note: The physician does NOT have to be a dermatologist; any medical doctor (MD) is acceptable.
- The Solarc Order Form completed by the patient or responsible person, including the signed Terms & Conditions of Sale;
- Payment by **VISA, Mastercard** or cheque payable to: "**Solarc Systems Inc.**". Certified cheques are processed immediately. Personal cheques may require 5-10 business days for clearance before shipping.

Fax (705-739-9684), Scan & Email, or Mail your order to Solarc Systems using the contact information that appears in the top left corner of the Order Form. We will acknowledge your order as soon as it is received. Prescriptions may be subject to verification with the physician. Shipping is normally from stock, next day direct to your home and takes one to nine working days depending on the destination. It takes about 30 minutes to unpack and setup a 1000 Series device. 500 Series devices take about 15 minutes to unpack and setup. 100 Series Handheld units are ready to go. An invoice marked "Paid" is supplied for submission to your insurer or for tax purposes. See also our **Home Phototherapy Ordering Information** webpage.

---

### ***More Questions ?***

If you have any more questions, please contact us toll free at **1-866-813-3357** [ 705-739-8279]. We can also be reached by fax at 705.739.9684 or by email at: [info@solarcsystems.com](mailto:info@solarcsystems.com) . Alternatively, visit our website at [SolarcSystems.com](http://SolarcSystems.com) for much more information and pictures. The website has a **Contact Us** section where you can send a message.