

# SPERTI VITAMIN D LAMP

Model: DUV-4F

# Owner's Manual

#### KBD, Inc.

4208 West Cheyenne Ave, Ste. 120 North Las Vegas, NV 89032 www.sperti.com

toll-free **1-800-544-3757** local **702-473-9411** fax **702-605-8174** email **info@sperti.com** 



**Contraindication:** This product is contraindicated for use on persons under the age of 18 years.

**Contraindication:** This product must not be used if skin lesions or open wounds are present.

**Warning:** This product should not be used on individuals who have had skin cancer or have a family history of skin cancer.

**Warning:** Persons repeatedly exposed to UV radiation should be regularly evaluated for skin cancer.



The Sperti Vitamin D Lamp is intended to raise your Vitamin D levels.



Read All Directions Before Use!



Always wear protective eyewear during lamp operation.

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# **KBD, INC. HISTOLOGY**

In the 1930s, our Vitamin D ultraviolet source was introduced for sale and use in the home. With the recent realization that even with dietary supplementation many people do not get enough solar UV exposure to maintain sufficient Vitamin D levels, we incorporated a timer for safety and in 2006, we re-introduced our classic D/UV model. The original Sperti Sunlamp consisted of an altered intermediate pressure mercury lamp, approved by the AMA in 1940 as a sunlamp, with a label claim noting that Vitamin D would occur due to exposure. Today's Sperti Vitamin D Lamp is an updated version utilizing fluorescent technology, specifically formulated to produce ultraviolet energy in the specific Vitamin D producing range and eliminating any harmful UVC energy. In order to comply with modern safety guidance, the (5) minute timer provides an exposure, at 15 inches from the user's skin, of 1 Standard Erythemal Dose (SED). The SED is an internationally standardized measure of UV radiation equivalency.

### **KBD D/UV-4F LAMP**

The D/UV-4F lamp is intended for individuals who may not be able to receive needed sunlight exposures, or tolerate or process Vitamin D supplements. It is not intended to substitute for a rich Vitamin D diet.

### **HOW MUCH VITAMIN D WILL I MAKE?**

The ultraviolet spectrum of the D/UV-4F lamp has been measured and compared with the Vitamin D action spectrum yielding a Vitamin D effective irradiance which confirms that the Vitamin D production process will result from exposure to the D/UV-4F. It is impossible to say exactly how much Vitamin D because an individual's ability for Vitamin D production in the skin by exposure to natural or artificial ultraviolet energy varies greatly. Contributing factors include the location and amount of skin exposed, dietary habits, percent of body fat and more. Outdoors in sunlight, geography, time of day and time of year also contribute to the variations. Scientific literature indicates exposing 10% of the body to ultraviolet B can generate 1000-2000 IU's of Vitamin D per day. The literature also shows 1000 IU of Vitamin D per day synthesizes approximately 10 ng/ mL. Published recommendations indicate that 40-60 ng/mL to be the optimal level of Vitamin D.

**CAUTION:** Protect your eyes; wear protective eyewear. To avoid injury to eyes, protective eyewear (KBD, Inc. Cat. No. 31050A) must be worn by all persons in room during lamp operation. Read the instruction booklet before use.

# LABELS AND SYMBOLS

#### **SYMBOL MEANING**



General caution warning. Read all instructions and statements carefully before use.



UV Light Hazard- Do Not Look Directly at Light.



Protective warning about the potential risk of fire and/or burns.



DANGER! RISK OF ELECTRIC SHOCK.



PROTECTIVE EYEWEAR MUST BE WORN AT ALL TIMES WHILE OPERAT-ING. FAILURE TO DO SO CAN RESULT IN PERMANENT DAMAGE TO THE EYES.

# SYMBOL **MEANING** Operating Instructions. consult operators manual Type B Applied Part. "ON" (power) "OFF" (power) Fragile. Handle with care. Do not get wet.

#### **DEVICE LABELS**

AC Input: 120V Frequency: 60Hz

Replacement Tube Type Fuse: T 2A 250V-Current 1.31A

Sperti Vitamin D

**Model: DUV-4F** 

Manufactured By: Global FabTech c/o Sperti Sunlamps, No. 318 Tianfu Road, Shanghai, Chinz 800-544-3757 \* 859-331-0800 \* www.sperti.com

**DANGER:** Ultraviolet radiation. Follow instructions. Avoid overexposure. As with natural sunlight, overexposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause premature aging of the skin and skin cancer.



WEAR PROTECTIVE EYEWEAR; FAILURE TO MAY RESULT IN SEVERE BURNS OR

-ONG-TERM INJURY



PLEASE REFER TO THE MANUAL

before using sunlamp if you are using medications or have a history of skin problems or believe yourself especially sensitive to sunlight. If you do not tan in the sun, you are unlikely to tan from the use Medications or cosmetics may increase your sensitivity to the ultraviolet radiation. Consult physician

Operating Instructions for your Sperti Vitamin D Sunlamp: of this product.

Wear protective eyewear provided with the sunlamp.

Plug unit in.

Place unit 15" from skin

 See Recommended Exposure Schedule Turn power switch to the on position

Unplug unit for storage and service

Maximum number of people to be exposed during same session = '

Recommended Exposure Schedule	Skin Type	Week 1 3 Exposures	Week 2 3 Exposures	Week 3 3 Exposures	Week 4 and beyond
Sensitive skin, very fair, red hair, dense freckles.	-	DO N	OT USE '	DO NOT USE THIS APPLIANCE	LIANCE
Burns easily, tans minimally or lightly.	=	3 minutes	4 minutes	5 minutes	5 minutes
Often referred to as "average" complexion. Burns moderately, tans about average.	=	3 minutes	4 minutes	5 minutes	5 minutes
Burns minimally, tans easily and above average with each exposure.	N	3 minutes	4 minutes	5 minutes	5 minutes
Rarely burns, tans easily and substantially.	^	3 minutes	4 minutes	5 minutes	5 minutes

SKIN TYPES SHOULD USE THE SAME DISTANCE RECOMMENDATIONS. Exposure at a bulbs. Do not exceed more than 3 exposures per week FOLLOW THE EXPOSURE SCHEDULE FOR APPROPRIATE SKIN TYPE. The use of exposure positions other than the recommended distance may result in overexposure.

This product complies with 21 CFR 1040.20.

It can take up to 17 weeks to raise your Vitamin D levels.

Contraindication: This product is contraindicated for use on persons under the age of 18 years be used if skin lesions or open wounds are present Warning: This product should not be used by individuals who have had skin cancer or have a family Warning: Persons repeatedly exposed to UV radiation should be regularly evaluated for skin cancer Contraindication: This product must not history of skin cancer.

DATE OF MANUFACTURE JULY 2019

# **PACKAGE CONTENTS**

Before using your Sperti Vitamin D Lamp for the first time, please review your package to ensure it contains all of the items listed below. If you are missing an item, please contact customer support at 1-800-544-3757.



#### D/UV-4F

Main unit. (Sperti Vitamin D Lamp)



#### **User Manual & Warranty Card**

Download your digital copies at www.sperti.com



#### **Protective Safety Goggles (x2)**

Included are two pair of protective safety goggles



#### **Bulbs**

Custom D/UV-4F bulbs are made exclusively for the Vitamin D Lamp, model D/UV-4F.



#### **Power Cord**

Use only the power cord provided with your device



#### Wire Lamp Guard

Pre-assembled to the main unit (side view), protecting the custom reflector bulbs

#### **Maintenance & Replacement Parts**

- Maintenance the bulbs included in your Sperti Vitamin D Lamp have a life of 1,000 hours.
- Replacement parts for your Sperti Vitamin D Lamp can be purchased by calling our office at 800-544-3757 or visiting our website at www.sperti.com.
- Replacement parts available are: Power cord, UV protective eye wear, and bulbs.
- A copy of this user guide can also be downloaded directly from our website.

SKIN TYPE	SKIN COLOR	AFTER SUN EXPOSURE
I	Pale white	Always burns - never tans
II	White to light beige	Burns easily - tans minimally
III	Beige	Burns moderately – tans gradually to light brown
IV	Light brown	Burns minimally - tans well to moderately brown
V	Moderate brown	Rarely burns - tans profusely to dark brown
VI	Dark brown or black	Never burns – tans profusely

SKIN TYPE 1, HIGHLY SUN SENSITIVE PEOPLE (THOSE WHO ALWAYS BURN & NEVER TAN), SHOULD NOT USE THIS ULTRAVIOLET DEVICE.



# **DANGER** — Ultraviolet radiation. Follow instructions. Avoid overexposure.

As with natural sunlight, overexposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause premature aging of the skin and skin cancer. **WEAR PROTECTIVE EYEWEAR; FAILURE TO MAY RESULT IN SEVERE BURNS OR LONG-TERM INJURY TO THE EYES.** Medications or cosmetics may increase your sensitivity to the ultraviolet radiation. Consult physician before using sunlamp if you are using medications or have a history of skin problems or believe yourself especially sensitive to sunlight. If you do not tan in the sun, you are unlikely to tan from the use of this product.

ALWAYS WEAR THE PROTECTIVE EYEWEAR SUPPLIED WITH THE SPERTI VITAMIN D LAMP. IT IS MANDATORY TO WEAR THE EYEWEAR BEFORE STARTING THE UNIT.

# **EXPOSURE SCHEDULE** (Appliance warm up is not required)

**RECOMMENDED EXPOSURE SCHEDULE:** Natural production of Vitamin D in the human body requires less exposure to ultraviolet rays than tanning or sun burning. To reduce the chance of unintended overexposure from this appliance and its ultraviolet rays, determine your skin type then follow the exposure schedule below.

**WEEK ONE** Exposure distance is 15 inches from wire guard to body surface (no closer) for a maximum of 3 minutes every other day. You may expose different parts of the body alternating front and back areas. If redness occurs, stop using the unit until ALL redness disappears, usually 24-48 hours. Confirm recommended time and distance. Restart the initial exposure schedule. If redness returns after resuming exposures, skin may be too sensitive to use this ultraviolet device.

**WEEK TWO** Using the same distance (15 inches), increase exposure time to a maximum of 4 minutes every other day. You may alternate exposing front and back parts of the body. If redness occurs, stop using the unit until ALL redness disappears. Then resume exposure 15 inches (no closer) for one week (as stated in Week One above) for a maximum of 3 minutes every other day. Move to WEEK TWO schedule when skin allows with no further redness.

**WEEK THREE** Using the same distance (15 inches), increase exposure time to a maximum of 5 minutes every other day. You may alternate exposing front and back parts of the body. If redness occurs, stop using the unit until ALL redness disappears. Then resume exposure at 15 inches (no closer) for one week (as stated in WEEK TWO) for a maximum of 4 minutes every other day. Move to WEEK THREE schedule when skin allows with no further redness. Continue with WEEK THREE schedule to improve Vitamin D levels.

The above schedule is recommended to acclimate the skin to the ultraviolet rays without erythema (redness). A maximum of 1 person may be exposed to the Sperti Vitamin D Lamp at the same time.

# IMPORTANT SAFETY INFORMATION



# **Before Use: Understanding Photosensitivity**

- Photosensitivity is typically defined as a chemically induced alteration in the skin that makes a person more sensitive to light. Photosensitive reactions can fluctuate from mild to chronic depending on the sensitivity of the individual.
- Many medications and topical solutions can cause the skin to burn or break out in a rash when exposed
  to ultraviolet light. The substances may be encountered orally, topically, or subcutaneously, but it must
  be present when the skin is exposed to ultraviolet light. Photosensitizers may cause sunburn, rashes,
  itching, scaling or inflammation and act to decrease tolerance to ultraviolet light (TUVR) and, therefore,
  increase sensitivity to UVR (SUVR).
- There is a list of drugs and other substances known to cause photosensitivity on the next page. The
  items with the highest probability of causing a reaction are highlighted. The brand names of products
  should be considered only as examples; they do not represent all names under which the generic
  product may be sold.
- Check with your physician when you begin taking any medication while using the Sperti Vitamin D Lamp.
   If you are taking psoralen drugs, you may become extremely photosensitive and should only use the Sperti Vitamin D Lamp under physician supervision.
- An item which causes a severe reaction in one person may not cause but a minimal reaction in another person. Also an individual who experiences a photosensitive reaction on one occasion may not necessarily experience it again. Everyday items such as perfumes, soaps, artificial sweeteners, tattoos and certain foods may cause photosensitivity. They often cause photodermatitis, which is characterized by inflammation of the skin when exposed to ultraviolet light. Some of the new "tingle" products can cause photodermatitis and you should test them on a small area before using them. If you experience rashes and/or itching, you should consult your physician.
- Thoroughly review the "Substances That May Cause Photosensitivity" list and consult your physician prior to using the Sperti Vitamin D Lamp if you are taking any of the "high probability" items.



## The following health conditions can make usage hazardous

- AIDS / HIV (\*)
- Related Allergies
- Lung Tuberculosis
- Lupus Erythematosis

- Psoriasis
- Estivalis Prurigo
- Sun Poisoning
- Photoallergic Eczema

- Albinism
- Rosacea
- Varix

Xeroderma Pigmentosum

- Porphria
- Lichen Rubber
- Melasma
- Polymorphous Light Eruption

- Dermatomysitis
- Solar Urticaria
- Vitiligo
- (\*)Human Immunodeficiency Virus

The risk of photosensitivity and the possibility that you may have one of the diseases listed above is possible. Consult with your physician if you suspect you have a condition listed and/or prior to taking any medication while using the Sperti Vitamin D Lamp.

# **IMPORTANT SAFETY INFORMATION** (CONTINUED)



### **Substances That May Cause Photosensitivity**

#### ANTIDEPRESSANTS

clomipramine (Anafranil), isocarboxazid (Marplan), maprotiline (Ludiomil), mirtazapine (Remeron), sertaline (Zoloft), TRICYCLIC AGENTS, eg., Elavil, Asendin, Norpramin, Sinequan, Tofranil, Aventyl, Vivactil, Surmontil, venlafixine (Effexor)

#### ANTIHISTAMINES

astemizole (Hismanal), cetirizine (Zytec), cyproheptadine (Periactin), dimenhydrinate (Dramamine), diphenhydramine (Benadryl), hydroxyzine (Atarax, Vistaril), loratadine (Claritin), terfenadine (Seldane)

#### ANTIBIOTICS

azithromycin (Zithromax), griseofulvin (Fulvicin, Grisactin), \*nalidixic acid (NegGram), QUINOLONES, eg., Cipro, Penetrex,, Levaquin, Floxin, \*Maxaquin, Noroxin, \* Zagam sulfasalazine (Azulfidine), \* SULFONAMIDES, eg., Gantrisin, Bactrim, Septra, TETRACYCLINES, eg., \*Declomycin, Vibramycin, Minocin, Terramycin

#### ANTIPARASITICS

\*bithionol (Bitin), chloroquine (Aralen), mefloquine (Lariam), pyrvinium parnoate (Povan, Vanquin), quinine

#### ANTIPSYCHOTICS

chlorprothixene (Taractan, Tarasan), haloperiodol (Haldol)

#### CANCER CHEMOTHERAPY

\*dacarbazine (DTIC), fluororacil (5-FU), methotrexate (Mexate), procarbazine (Matulane, Natulan), vinblastine (Velban, Belbe)

CARDIOVASCULARS (see also Diuretics)
 ACE INHIBITORS, Capoten, Vasotec, Monapril,
 Accupril, Altace, Univasc, \*amiodarone
 (Cordarone), diltiazem (Cardizem), disopyramide
 (Norpace), losartan (Hyzaar), lovastatin (Mevacor),
 nifedipine (Procardia), pravastin (Pravachol),
 quinidine (Quinaglute), simvastatin (Zocor), sotalol
 (Betapace)

DIURETICS (see also Cardiovasculars)
 acetazolamide (Diamox), amiloride (Midamor),
 furosemide (Lasix), metolazone (Diulo,
 Zaroxolyn), \*THIAZIDES, eg., HydroDiuril,
 Naturetin

#### \*HYPOGLYCEMIC SULFONYLUREAS

acetohexamide (Dymelor), chlorpropamide (Diabinese), glimepiride (Amaryl), glipzide (Glucotrol), glyburide (Diabeta, Micronase), tolazamide (Tolinase), tolbutamide (Orinase)

#### NSAIDs

All nonsteroidal anti-inflammatory drugs, eg., ibuprofen (Motrin, Naproxen (Anaprox, Naproxyn), Orudis, Feldene, Voltaren, etc. The new NSAID agents include: etodolac (Lodine), nabumetone, (Relafen), oxaprozin (Daypro)

#### PHENOTHIAZINES

Compazine, Mellaril, Stelazine, Phenergan, Thorazine, risperidone (Risperdal), thiothixene (Navane

#### SUNSCREENS

\*benzophenones (Arimis, Clinique), cinnamates (Arimis, Estee Lauder), dioxbenzone (Solbar Plus), oxybenzone (Eclipse, Presun, Shade), PABA (PreSun), \*PABA esters, (Block Out, Sea & Ski, Eclipse

#### MISCELLANEOUS

benzocaine, benzoyl peroxide (Oxy 10), carbamazepine (Tegretol), chlordiazepoxide (Librium), coal tar, eg., Tegrin, Zetar), CONTRACEPTIVES, oral estazolam (ProSom), \*etretinate (Tegison), felbamate (Felbatol), gabapentin (Neurontin), gold salts (Myochrysine, Ridaura, Solganal), hexachlorophene (pHisoHex), hypericum (St. John's Wort), interferon beta-1b (Betaseron), \*isetretinoln (Accutane), masoprocol (Actinex), olsalazine (Dipentun), \*PERFUME OILS, eg.,, bergamot, citron, lavender, sandalwood, cedar, musk, \*PSORALENS, selegiline (deprenyl, Eldepryl), \*tretinoin (Retin-A, Vitamin A Acid), zolpidem (Ambien)

**Note**: Items with an asterisk (\*) are shown in bold because they are more likely to cause photosensitivity reactions. Overall, the drugs listed above cause reactions in less than 1% of patients. You may experience an unusual "sunburn" or allergic or eczematous reaction in skin areas exposed to light. Consult with your physician or pharmacist and to discontinue exposure to UV radiation.

# **OPERATING INSTRUCTIONS**

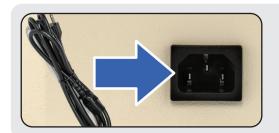
FOR YOUR KBD-D/UV-4F LAMP



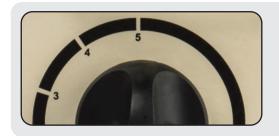
1. Wear protective eyewear provided with unit



2. Place unit 15" (inches) from skin



3. Plug unit into 120 volt - 240 volt (50Hz/60Hz) power source



4. Set timer to 3-5 minutes



5. Turn power switch to "ON" position



6. Unplug lamp for storage and service

# **PARTS DIAGRAM**



Power Cord Socket (located on back side)

# **CARE INSTRUCTIONS**

# **Cleaning**

### DANGER! RISK OF ELECTROCUTION



- ALWAYS unplug the power supply cord from the wall before cleaning.
- **KEEP AWAY** from water (including bath and shower). **DO NOT** drop or put the Sperti Vitamin D Lamp into water or other liquid.
- DO NOT reach for the Sperti Vitamin D Lamp if it has fallen in water or any liquids. UNPLUG immediately. Contact customer service at Sperti Sunlamps c/o KBD, Inc.
  - Wait for the Sperti Vitamin D Lamp to cool down for at least 15 minutes and come to room temperature.
  - Wipe the outside of the Sperti Vitamin D Lamp with a dry cloth.
  - Clean the protective goggles with a dry cloth.
- **NEVER USE** scouring pads and abrasive liquids such as scouring agents, petrol or acetone to clean the Sperti Vitamin D Lamp or the protective goggles.

# **Storage**

### DANGER! RISK OF ELECTROCUTION



- ALWAYS Unplug after each use.
- Do not place, store, or keep device where it can fall or be pushed into a tub, sink or any other
  vessel containing water.
- **KEEP** the power supply cord **AWAY** from heated surface.
- Unplug after use and allow the Sperti Vitamin D Lamp to cool down for at least 15 minutes and come to room temperature.
- Store the device and all its parts in a cool dry place.
- Avoid extreme temperatures.
- Store away from sources of water.



### **Note Regarding Lamp and/or Fuse Replacement Instructions:**

To replace the bulbs and/or fuse in your Sperti Vitamin D Lamp, please contact Sperti Sunlamps c/o KBD, Inc. for assistance.

# **SPECIFICATIONS** - SPERTI VITAMIN D LAMP

Voltage	120V - 240V	
Power	150W	
Frequency	60Hz	
Current	1.31A	
Ballast	IH2UNV270T8LNC	
Starter	Included in ballast	
Fuse	T 2A 250V~	
Cord Length	7 feet	
Tube Length	14 <sup>1</sup> / <sub>4</sub> inches	
Tube Type	2628-LT	
Safety Goggles	2	
Lamps	4	
Expected Life	1,000 bulb usage hours	
Weight	6350.50 grams (14 lbs)	
Device Dimensions	11 $^{3}/_{4}$ L x 4 $^{1}/_{2}$ W x 20 $^{3}/_{4}$ H (measured in inches)	
Treatment Area	330.2 cm <sup>2</sup>	
Equipment Class	Class II Medical Device	
Storage and Transport Condition	<ul> <li>Temperature: -10°C to 60°C/ 14°F to 140°F</li> <li>Relative humidity: 0%-100%</li> </ul>	
Operating Condition	<ul> <li>Temperature: 15°C - 30°C (59°F - 86°F)</li> <li>Relative humidity: 0%-93%</li> <li>Atmospheric pressure: N/A</li> </ul>	



**DISPOSAL:** The lamps of this device contain substances that may pollute the environment. When you discard the lamps, do not throw them away with the normal household waste, but dispose of them at an official collection point. Do not throw the Sperti Vitamin D away with the normal household waste at the end of its life, but hand it in at an official collection point for recycling. By doing this you will help to preserve the environment. Please call your local recycling depot for locations and proper recycling instructions.



#### **WARNING:**

- The Sperti Vitamin D should not be used in oxygen rich environments.
- Not intended for continuous operations.
- Not intended for use in electromagnetic environments.

### FACTS ABOUT VITAMIN D AND ULTRAVIOLET EXPOSURE

- Vitamin D is perhaps the single most underrated nutrient in the world of nutrition.
- Vitamin D is produced by your skin in response to exposure to ultraviolet radiation.
- UVB rays of ultraviolet light generate Vitamin D in your skin but cannot penetrate glass, so you don't generate Vitamin D when sitting in your car or home.
- It is nearly impossible to get adequate amounts of Vitamin D from your diet. Ultraviolet exposure is the only reliable way to generate Vitamin D in your body.
- You would need to drink ten tall glasses of Vitamin D fortified milk each day to get minimum levels of Vitamin D into your diet.
- People with dark skin pigmentation may need 6-10 times as much exposure as fair skinned people to generate the same amount of Vitamin D.
- Sufficient levels of Vitamin D are crucial for calcium absorption in your intestines. Without sufficient Vitamin D, your body cannot absorb calcium.
- Chronic Vitamin D deficiency cannot be reversed overnight. It takes months of supplementation and UVB exposure to replenish your Vitamin D supply.
- Sunscreens block your body's ability to generate Vitamin D by ~95%.
- It is impossible to generate too much Vitamin D from ultraviolet exposure. Your body will selfregulate and only produce what is needed.
- Vitamin D is "activated" in your body by your kidneys and liver.

### AN INTRODUCTION TO VITAMIN D

Vitamin D is essential for the development and maintenance of healthy bones. Early in life, Vitamin D is necessary for bone development and growth. Later in life, Vitamin D is necessary for bone maintenance. Vitamin D is normally made in our skin or ingested in the foods we eat. In our skin, Vitamin D is made by the photoconversion of 7-Dehydrocholesterol (a provitamin) to Previtamin D3. Previtamin D3 undergoes thermal isomeriaztion to Vitamin D3 which is picked up by serum proteins and carried first to the liver where it undergoes a hydroxylation to 25-hydroxy Vitamin D and then 25-Hydroxy Vitamin D is carried to the kidneys where a second hydroxylation occurs which makes the active form of the vitamin 1,25 calciferol.

When we ingest foods containing Vitamin D3, like certain fish, milks or cereals fortified with Vitamin D3, the D3 is transported through the gut and carried by proteins for the necessary hydroxylations by the liver and kidneys. There are several disturbing reports that some foods purported to contain Vitamin D, in fact, do not.

Vitamin D is stored in the body fat and the major circulating form of Vitamin D, 25 (OH)D has a circulating half life of approximately 2-3 weeks. Both of these in combination can help maintain a person's Vitamin D status in the normal range throughout the winter if they obtain enough Vitamin D during the spring, summer and fall from sun exposure. However, it should be appreciated that body fat can sequester Vitamin D, and has been shown that obese people are more prone to Vitamin D deficiency because of the irreversible sequestration of Vitamin D in the body fat.

### AN INTRODUCTION TO VITAMIN D (continued)

It also should be recognized that you would need to raise your blood levels of 25 (OH)D into the 100-150 nmol/L (40-60 ng/ml) range by the end of the summer in order to store enough Vitamin D in your body fat and have enough 25 (OH)D in the circulation to sustain you throughout the winter. Since most children and adults never reach this blood level, it is necessary for them to increase their dietary intake of Vitamin D and to take a Vitamin D supplement throughout the winter to maintain their 25 (OH)D levels above 75/nmol/L which most experts agree is a healthy preferred level.

It is well documented that an increase in sensible sun exposure and/or Vitamin D intake improves overall health and well being. Exposure to ultraviolet B radiation or increasing intake of Vitamin D maximizes bone health in children; helps prevent osteoporosis in adults; decreases risk of common autoimmune diseases including multiple sclerosis, rheumatoid arthritis, Crohn's disease and type 1 diabetes; reduces risk of serious deadly cancers including cancers of the colon, breast, prostate, ovary, esophagus and others; and decreases risk of cardiovascular heart disease. In addition, it is well documented that exposure to solar ultraviolet radiation was an effective method of treating patients with tuberculosis. Recent revelations have documented that it is necessary to increase blood levels of Vitamin D either from solar ultraviolet irradiation, artificial ultraviolet irradiation or increasing Vitamin D intake for enhancing the immune system to destroy the bacterium that causes tuberculosis. Thus, sensible exposure to ultraviolet B radiation from sun or lamps is an effective method of maintaining adequate Vitamin D levels to sustain health throughout life.

### **TUBE REPLACEMENT**

Tools Required: Phillips Head Screwdriver

- Step 1 Position unit upright
- Step 2 Remove wire guard by compressing either side away from the metal housing
- Step 3 Remove the top front screw from both sides of unit. Remove the only screw on top of unit.
- Step 4 Remove top panel.
- **Step 5 -** Rotate each bulb 1/4 turn either direction. Gently pull top of tube toward you. Lift tube out of base connector. Remove all tubes in this manner.
- **Step 6 -** Align bottom pins of replacement tube front to back and insert into lamp holder. Seat top set of pins by pushing into top lamp holder.
- **Step 7 -** Rotate each tube 1/4 turn making sure the label/etching is facing you. You will notice the 'lighter' part of the tube is in the back. All logos printed on the bulb should be lined up perfectly facing out towards you.
- Step 8 Replace top panel and wire guard.

After all tubes are replaced, your D/UV-4F lamp can be restarted

# TROUBLESHOOTING INFORMATION

In the event that your Sperti Vitamin D Lamp device fails to perform as expected, the following suggestions will help to identify potential issues with the device and its setup. If you are unable to solve the problem with the information below, contact customer support at 1-800-544-3757.

Problem	Possibility	Solution
My Sperti Vitamin D Lamp will not turn on.	There is no power going to the unit.	Check the power source. Confirm power is available and not controlled by a wall switch.
My Sperti Vitamin D Lamp will not turn on.	The power cord is not plugged in correctly.	Unplug and then replug the power cord into the back of the unit. Ensure there is a tight connection into the Sperti Vitamin D Lamp.
My Sperti Vitamin D Lamp will not turn on.	The switch is in the Off position.	Turn the switch to the On position. Ensure the timer is set.
The light tubes are flashing when powered on.	The light tubes need to be reignited.	Make sure the labels on the bulbs are facing forward. Set the timer to five minutes. Flip the On/Off switch repeatedly every 1-2 seconds consecutively 15 times.

# **User Assistance Information**

For assistance with your Sperti Vitamin D Lamp, please contact our customer service department at:

### Sperti Sunlamps c/o KBD, Inc.

4208 West Cheyenne Ave, Ste. 120 North Las Vegas, NV 89032

> toll-free 800-544-3757 local 702-473-9411 fax 702-605-8174 email info@sperti.com website www.sperti.com

## WARRANTY

We will replace any defective parts that fail under normal indoor use of the Sperti Vitamin D Lamp for up to seven years after your purchase. UV bulbs have a one year warranty. For warranty issues, please contact our office at 800-544-3757 or info@sperti.com.

A warranty registration card is included with your Sperti Vitamin D Lamp. Please return the completed card. The completion and return of the warranty registration card must be sent to KBD, Inc., 4208 West Cheyenne Ave, Ste. 120, North Las Vegas, NV 89032.

This warranty covers the original purchaser only and does not cover commercial use.

