

## 1. Dermaray UV: Operating Instructions

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Dermaray<sup>®</sup> - UV

“universal”

User's Guide

Read all instructions prior to  
activating the device.

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Purchase invoice number: \_\_\_\_\_

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### **3. Introduction**

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#### **Welcome and preface**

Thank you for choosing an innovative Dermaray® - UV phototherapy device. Dermaray® - UV represents the most advanced, effective and more importantly, the safest hand held phototherapy system available. Be assured that no expense has been spared in the design and construction of Dermaray® - UV and that you now own a premium quality medical device. At Dermaray, we not only design the world's best phototherapy devices, we use them ourselves.

#### **Environmental notice**

In the interest of taking care of our environment Dermaray will use recycled packaging and printing materials where possible. Appropriate environmental manufacture and waste disposal regulations are followed. Dermaray has been manufactured to all appropriate environmental standards. Note that the special UV bulb used in this product, like all florescent bulbs contains a very small amount of mercury and should therefore only be disposed of appropriately. The relevant environmental agency in your local area should be consulted for advice on how to dispose of this correctly; alternatively the bulb can be returned to Dermaray for safe disposal.

#### **How to use these instructions**

This user's guide should be read completely from start to finish PRIOR to following any specific instructions or attempting to use or charge the Dermaray® - UV batteries for the first time. Once read fully, you should follow all instructions and then also refer to these instructions while configuring your Dermaray® - UV for the first time. The suggested process is as follows;

- Read these instructions fully from front to back
- Charge batteries fully as described in these instructions
- Configure Dermaray® - UV for initial use
- Refer to this guide as required
- Contact your supplier for assistance if required
- Contact Dermaray technical support if required

## 4. Safety Information

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Dermaray® - UV is a powerful hand held Ultra Violet (UV) lamp, it is a Class IIa ionizing radiation emission device. It must only be used in accordance to this user's guide titled "Dermaray® - UV User's Guide." Incorrect usage of this device may be dangerous. User guides are replaced from time to time; please download the latest user guide from;

[www.dermaray.com/forms/dermaray-uv-manual.pdf](http://www.dermaray.com/forms/dermaray-uv-manual.pdf)

### **Device compliance**

Dermaray medical devices are manufactured to strict ISO quality control standards and meet or exceed the following recognised standards;

- CE electronic device approval
- TGA Class 1 medical device approval
- ACMA electronic device approval
- FCC electronic device approval
- RoHS reduction of hazardous substances (including lead free)

### **Safety precautions**

Sunburn from over exposure should be avoided with phototherapy. Similarly avoid excessive direct natural sunlight before, after and between phototherapy treatments. If after treatment your skin appears red or pink, feels excessively itchy, hot or prickly discontinue use until your skin has fully recovered. If symptoms persist, please see your health care professional. If burning results shorten the next several treatments and consider extra recovery time between treatments. Phototherapy programs are a suggestion and should be used as a guide only.

NOTE: Burning as a result of over exposure or excessive and too frequent exposures may not be immediately noticeable and may take 12-24 hours to become apparent. Never repeat treatment more than once in a 24 hour period unless under direct medical supervision. Other precautions include;

- Please follow these instructions carefully to minimize health risks and damage to property.

- Dermaray® - UV emits intense UV radiation which can be dangerous if overdosed resulting in sunburn/skin burns, conjunctivitis, keratitis (retina damage,) aging of the skin and skin cancer.
- Never operate without UV safety goggles. You must wear the safety goggles at all times. When possible, also keep your eyes closed, particularly if treating the scalp or face.
- Any person in the vicinity of the device must also wear safety goggles, particularly if assisting the patient.
- Never look directly into the light with your eyes open (even with goggles.) If treating your face, keep eyes closed and goggles on at all times.
- Perform irradiation only as described in the operating instructions or as recommended by a doctor.
- Never use the appliance in the bath tub or other wet areas.
- Never use a damaged product or damaged power supply.
- Ultra Violet radiation from sunlight and other sources has been proven to cause aging of the skin and skin cancers, however there is no proven link between measured medical dose phototherapy and skin cancer. UV phototherapy should be considered a potential carcinogen.
- Do not perform UV phototherapy after photosensitizing of the skin by cosmetics, foods or medicine etc.
- Do not use UV phototherapy concurrently or within several months of radiation therapy unless instructed by your doctor.
- Cover parts of your body that you do not want to treat.
- Use a high protection sunscreen on areas not requiring treatment, apply this at least 20 minutes before treatment.
- Consider wearing a protective glove on the hand holding the device to protect your hands from frequent unnecessary exposure.
- The side effects of excessively long time treatment or over exposure are, burning similar to sunburn, erythema, blisters and erosions, pigmentation and itching.
- Eye lids and the male testicles can not receive UV phototherapy under any circumstances – the skin is too thin and damage will occur.
- Use only the approved safety goggles supplied – sunglasses or other generic goggles may not provide adequate protection.
- Home phototherapy should ideally be supervised by an appropriate medical practitioner.
- Use only in accordance with local government regulations and safety protocols.
- Only use the device in areas of temperature below 40c and in low humidity environments.
- Store in a cool, dry place away from heat and direct sunlight.

- Avoid charging Dermaray when it is warm or hot.
- Never use Dermaray® - UV while connected to mains power, use only on battery operation.

### **When not to use Dermaray® - UV**

You should not use Dermaray® - UV if you are undergoing any form of skin treatment, taking any medications or receiving or recently undergone radiation therapy, without first speaking with your health care professional. Dermaray® - UV should not be used if you suffer from any of the following conditions;

- hyperthyroidism
- suffer from or have a history of skin cancers
- lupus erythematosus
- tumorous skin changes
- diseased hyperphotosensitivity (e.g. xeroderma pigmentosa)
- porphyrin disease
- fluoride tuberculosis or other fluoride processes
- accompanying medical treatment with potential skin damage or intensified photosensitivity
- pregnancy, because there have been no trials conducted

### **Hazards when using Dermaray® - UV**

Dermaray® - UV has been built to international ISO quality control standards in compliance with recognized safety standards. The equipment can only be used;

- for that purpose for which it was intended,
- when in perfect working order and
- in accordance with all applicable laws, rules and regulations.

Improper use, or use contrary to these instructions, can cause serious damage to the operator's health and/or third parties (including damage to the skin and eyes) as well as potentially damaging the equipment.

### **Proper use**

Dermaray® - UV is a UV radiation appliance for the treatment of skin diseases. Any other use of the equipment going beyond this shall be deemed improper and may be hazardous. The operator may use the equipment only after reading this user guide in full and accepting

any direct or indirect results. Failure to do so may render the manufacturer's warranty invalid. You must;

- Adhere to all the information contained in the operating instructions
- Adhere to the schedule for inspection and maintenance work
- Adhere to the general and specific safety information and safety regulations contained in these operating instructions as well as the prevailing accident-prevention regulations.

### **Bulb replacement**

In order to maintain effectiveness and efficiency, UV bulbs need to be replaced on a regular basis if any ONE of the following situations occurs;

- If bulb has been used for ~300 hours
- If the bulb is 2~3 years old
- If the bulb becomes very grey or blackened
- If the effectiveness of treatment rapidly becomes less
- If the bulb fails to start properly or is damaged
- If a device is used in a clinic or professional environment where it is used more frequently, bulbs should be replaced more often, at least every 12 months.

**WARNING:** Use only genuine Dermaray® - UV supplied replacement bulbs. Using a non Dermaray® - UV supplied replacement bulb will damage your device and is not covered by any warranty. The non-standard bulb will also be damaged. Damage of this nature is explicitly not covered by any warranty. Fire or explosion may result using a non genuine UV bulb.

A UV bulb gradually loses intensity while in use, but also due to mechanically starting and the nature of how fluorescent bulbs operate. As Dermaray® - UV intelligently manages bulb activation and power regulation, a bulb in a Dermaray® - UV will have a longer than normal effective life span and maintain its useful intensity longer. Refer to Chapter 9 "Bulb replacement guide" for specific bulb replacement instructions.

## 5. Getting started

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### Description

Dermaray<sup>®</sup> - UV is different from other UV phototherapy devices. It is battery operated, contains an inbuilt computer including a real time clock and calendar, is fully programmable, very versatile and comes with a universal power supply for charging the batteries.

Dermaray<sup>®</sup> - UV electronically starts the Philips medical grade UV bulb for an innovative “instant-on” experience. Other phototherapy systems use a mechanical starter that can take up to 30 seconds to ignite the UV medical bulb (seen as a flickering effect.) Dermaray<sup>®</sup> - UV has no flickering, very little delay and requires a significantly reduced warm up period to reach full UV intensity. Electronically starting the UV bulb ensures longer lasting and sustainable UV output from each UV bulb.

Dermaray<sup>®</sup> - UV intelligently manages internal power and operates the Philips medical grade UV bulb at high frequency for maximum efficiency. This sustains the energy output of the bulb while also increasing the life span of the bulb. Resulting in more effective treatment and reduced running cost by less frequent bulb replacements. Other systems reliant on mains power operate the bulbs at either 50Hz or 60Hz that is not ideal, resulting in shorter bulb life spans and a more rapid deterioration of the UV energy output.

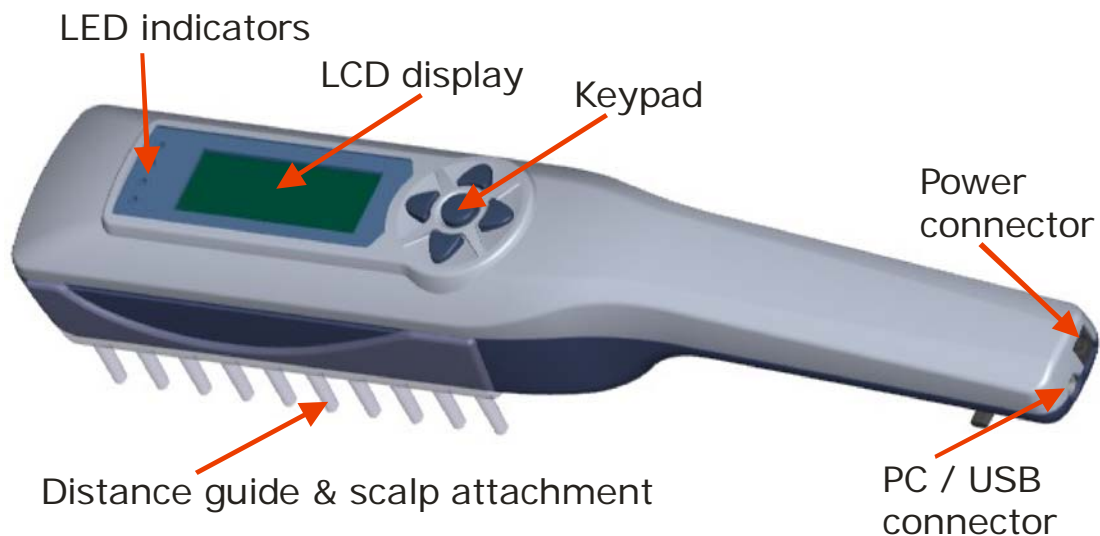
Dermaray<sup>®</sup> - UV uses a powerful onboard computer system that is capable of managing multiple patient treatment programs. Traditionally home phototherapy patients need to manually calculate their starting session time, manually time each individual session with an external egg-timer, manually calculate the next session and keep a record of all sessions including date, time and length of each session in a treatment diary, plus manage session frequency and repetition for each body area requiring treatment. Needless to say, this is a complicated procedure for most home phototherapy patients and accidental over exposure would often result in sunburn. Dermaray<sup>®</sup> - UV is the first hand held unit to perform this service for you and manage your exposure times, frequency and repetition accurately and precisely. It can even keep track of individual area treatments and guard against excessive exposure and accidental repetition of exposures significantly reducing the chance of both over exposure and accidental exposure (both resulting in sunburn.)

### **Proximity detection explained**

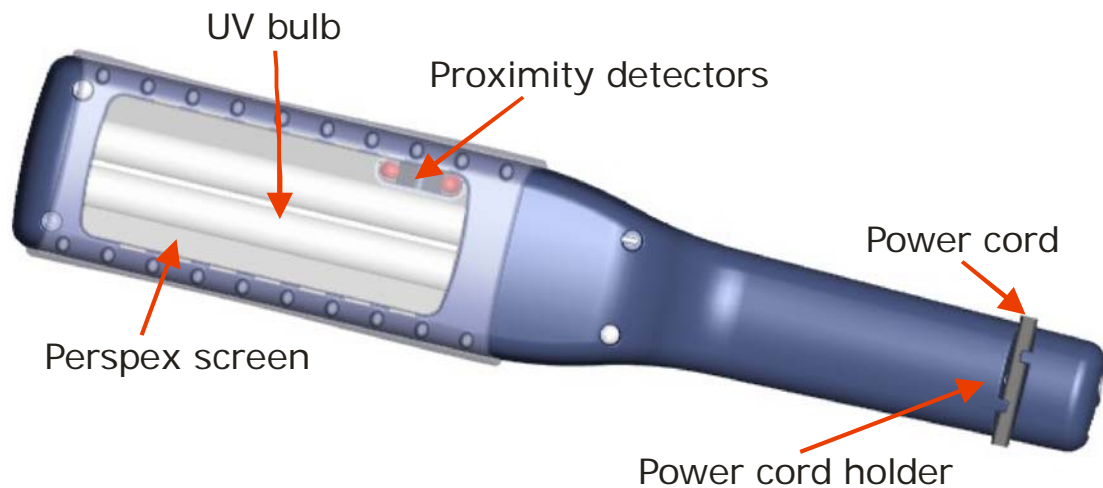
Dermaray<sup>®</sup> - UV is the safest and most technologically advanced hand held phototherapy system available today. By using a unique and innovative proximity detection system, the brain or on board computer of the Dermaray<sup>®</sup> - UV is able to activate the lamp once it is held in close proximity against a surface (such as a treatment area) and also sound an alarm or deactivate the lamp if it is moved away from the surface. This technology protects against accidental exposure and provides a level of safety not found in any other phototherapy device.

NOTE: As a precaution to safe guard against premature bulb damage, Dermaray<sup>®</sup> - UV will not turn the UV lamp back on within 10 seconds of the last de-activation. This means from time to time, when attempting to start the lamp or during use, a count down timer may be displayed saying "lamp will start in X seconds."

### **Main components identified**



**Figure 5-1: Top view showing main components.**



**Figure 5-2: Bottom view showing main components.**

**Items included with your Dermaray® - UV**

Prior to proceeding, please confirm that you have received all components including the following items. If any component is missing, please contact your place of purchase immediately prior to using your device.

- Dermaray® - UV
- Mains power supply / battery charger
- Main power cable to suit country location
- UV safety goggles compact
- UV safety goggles large
- User guide and warranty registration card
- Clear plastic distance guide and scalp attachment

**Battery charging battery care**

Dermaray® - UV contains a high quality NiMH rechargeable battery pack and is supplied with a universal (100-240v @ 50-60Hz) battery charger. The power cable with wall connector can be changed to suit different locations with different wall power sockets.

The high quality Japanese NiMH batteries used in the Dermaray® - UV are reliable and not susceptible to the “chemical memory” problems of older NiCad batteries. It is recommended to perform a full charge prior to initial use of your Dermaray® - UV to ensure the best performance and extend the life of your batteries.

Connect the Dermaray® - UV to mains power for a minimum of 12 hours prior to initial use. The CHARGING indicator should flash yellow when charging. The CHARGING indicator will go out (not be

lit) when fully charged. However, for the initial charge, leave connected for a total of 12 hours which will include time after the charge indicator stops. Future charging is completed once the yellow CHARGING indicator goes out (not be lit.)

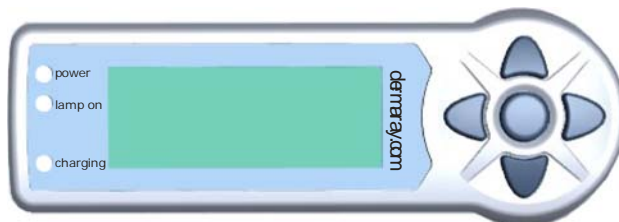
After the initial long charge, Dermaray® - UV can be charged between each use and disconnected from charge once the battery charge indicator shows battery full, or it can be charged when the unit indicates low battery.

Dermaray® - UV can be connected to mains power when battery low indicator sounds. The low battery indicator will sound and display a low battery message with approximately 10 minutes of treatment time left and again with 5 minutes left. Batteries will charge at a reduced rate while the device is in use, however it is recommended that treatment be suspended while the batteries are charging. Fully charged batteries will give approximately 45 minutes of treatment time, this time may be reduced if the device has not been charged for some time.

The battery charger that is built into the unit is intelligent and protects against over-charging and resulting battery damage by constantly measuring battery voltage and temperature. When connected to power and charging the LED indicator "charging" will glow yellow, see below. Note batteries will not charge if the device is too hot or too cold.



**Figure 5-3: Display showing Charging Yellow indicator.**



**Figure 5-4: Display showing battery charge completed, "Charging" indicator will be OFF.**

**NOTE:** During charging the large end of Dermaray® - UV will become warm. Near to completion and after completion of battery charging,

the handle will also become warm as it contains the batteries. This is normal operation.

NOTE: Battery life while in standby is around 2~3 months. If Dermaray<sup>®</sup> - UV is not used for a number of weeks it is suggested to fully charge the batteries prior to the next use. Batteries may be completely flat if Dermaray<sup>®</sup> - UV has not been used for some time.

## 6. General operation

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### Description

Dermaray<sup>®</sup> - UV can be configured in different ways for different treatment purposes. The default and standard configuration is NB-UVB or Narrow Band UVB-311. The available configurations are as follows;

- **NB-UVB, narrow band UVB, 311nm** – primarily for treatment of psoriasis, vitiligo, dermatitis and other inflammatory or immune response conditions. This is the default configuration and suits 95% of patients.
- **WB-UVB, wide band UVB, 295-320nm** – primarily for Vitamin D deficiency and Seasonal Affective Disorder and treatment when NB-UVB has proven ineffective.
- **UVA** – primarily for medical treatment of Alopecia Areata hair loss, tanning and other auto immune conditions. It is not suitable for any other form of hair loss treatment. Also used in conjunction with PUVA for psoriasis.
- **Woodlamp** – medical diagnostic equipment uses only.

Please ensure that you have received the appropriately configured system for your treatment.

### Setup and configuration

Prior to commencing treatment, you should have fully charged the battery in the Dermaray<sup>®</sup> - UV as detailed in section 5. Do not activate the Dermaray<sup>®</sup> - UV unless you have firstly charged the battery and read these instructions in full.

Dermaray<sup>®</sup> - UV comes fitted with a distance guide comprising of a number of clear plastic teeth. This guide establishes the correct distance between the lamp and exposure area, makes scalp treatment more convenient and effective and allows proper operation of the proximity detection system. Permanent removal of this distance guide is not recommended and may lead to accidental over exposure, burning and failure of the proximity detection safe guards. Temporary removal is acceptable for cleaning or maintenance purposes only. The distance guide slides off and also slides and clicks back into place.

Common sense must be applied to any phototherapy treatment program, always err on the side of caution. If unsure of any facet of

treatment or operation, contact the person whom supplied your device or your supervising doctor.

Dermaray<sup>®</sup> - UV can store details for 10 patients, each with up to 32 treatment areas. If one patient has more than 32 treatment areas, configure the additional areas under another patient (e.g. Patient 1a and Patient 1b.)

### **Establishing a treatment program**

Phototherapy treatment is different for each person. Any phototherapy program should be considered a guide and may need to be adjusted on an individual basis or in consultation with your health care professional. Dermaray<sup>®</sup> - UV however, generally automates this process for you and uses proprietary methodology based on established best practices. There are many variables including but not limited to the following that are considered;

- Patient skin type
- Disease being treated
- Areas requiring treatment

Once programmed, Dermaray<sup>®</sup> - UV will intelligently suggest a starting exposure time for your individual condition (based on the information above) and create an entire treatment program specifically for you. This treatment program will be automatically managed and increase at a rate suitable for your skin type and condition, to a maximum exposure level, also appropriate for your situation.

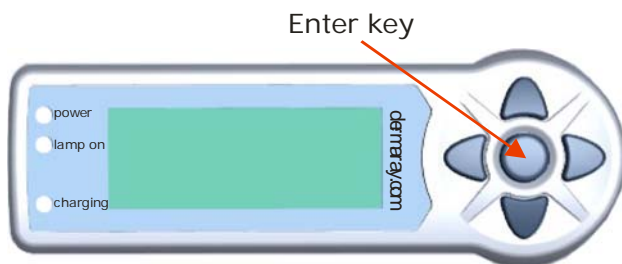
Once the suggest treatment program is completed and your maximum exposure reached, a less frequent maintenance program will then be suggested and used for all further treatments.

**WARNING:** Dermaray<sup>®</sup> - UV is incapable of determining your suitability for phototherapy, level of UV sensitivity, your medical background and assessing any adverse reactions to treatment that you may experience. Therefore, common sense must always prevail and you, or a doctor, must monitor your individual condition and results of each treatment session.

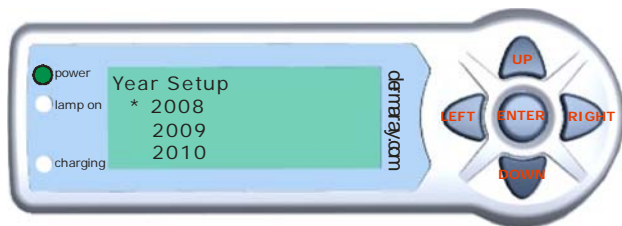
### **Waking Dermaray<sup>®</sup> - UV: The WAKE command**

**NOTE: Do not perform this function until this document has been read in full.**

Operating and programming will be explained in more detail throughout this guide. Firstly, it is important to learn how to Wake Dermaray® - UV. This feature will be called WAKE throughout this User's Guide. Normally the Dermaray® - UV is in SLEEP mode. To WAKE Dermaray® - UV press and hold the ENTER key for 3 seconds (central round button, see below.) Dermaray® - UV will beep and the top green indicator will be on. You will see information presented on the display. If left unattended Dermaray® - UV may return to sleep and need to be WAKEN again. Perform the WAKE function for the first time only after fully charging the batteries.



**Figure 6-1: The "WAKE" command, press and hold ENTER button for 3 seconds.**



**Figure 6-2: Dermaray Setup Wizard is started when the lamp is first activated.**



**Figure 6-3: Dermaray Welcome Screen is shown on subsequent WAKE commands after completion of the Setp Wizard.**

**To turn Off Dermaray® - UV (enter sleep mode)**

At any time and at most menus to turn off Dermaray® - UV, PRESS and HOLD the ENTER button for 3 seconds. This will turn the unit OFF and is called SLEEP mode.

## **Dermaray® - UV: Setup Wizard**

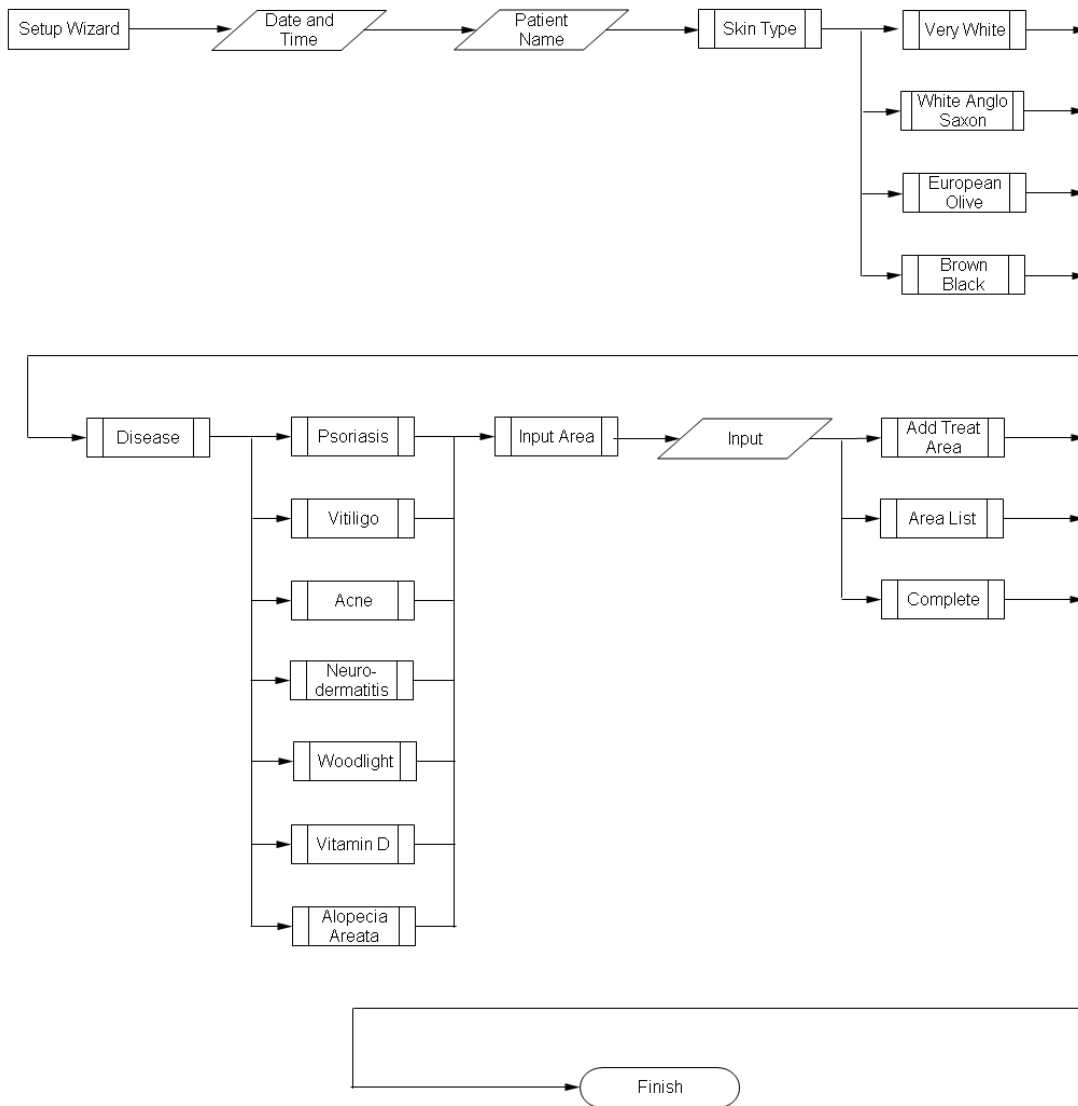
When Dermaray® - UV is WAKEN for the first time, it will present a SETUP WIZARD. On subsequent activations Dermaray® - UV will present the WELCOME SCREEN. In some instances Dermaray® - UV may present the SETUP WIZARD again, for example after a software upgrade, a full software reset or manual activation of the Setup Wizard. Please now follow the procedure below;

1. Fully charge Dermaray® - UV
2. WAKE Dermaray® - UV
3. Proceed through Setup Wizard as follows.

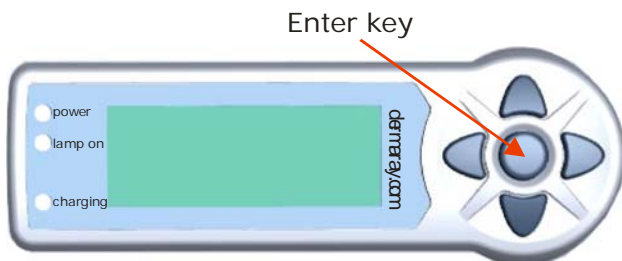
The SETUP WIZARD is an automated setup procedure; it will prompt you for system information as well as patient treatment information. It is suggested to make some notes prior to starting the SETUP WIZARD. The Setup Wizard must be completed within 25 minutes otherwise Dermaray® - UV will return to SLEEP. (If this happens, the information will need to be entered into Dermaray® - UV manually via the SYSTEM CONFIG MENU and TREATMENT CONFIG MENU.) Information can easily be amended or deleted at a later stage. The SETUP WIZARD will ask the following questions;

- Date (year, month, day)
- Time (hour and minutes in 24:00 format)
- Patient name
- Patient skin type
- Disease
- Treatment areas (by area name e.g. scalp, chest, left leg etc)

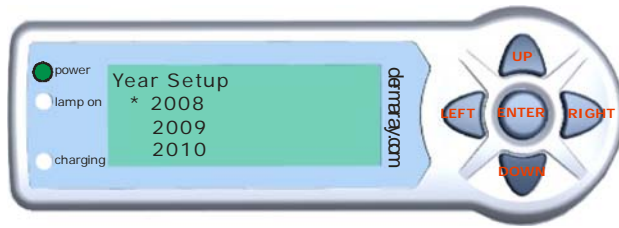
▪ **Setup Wizard Flowchart**



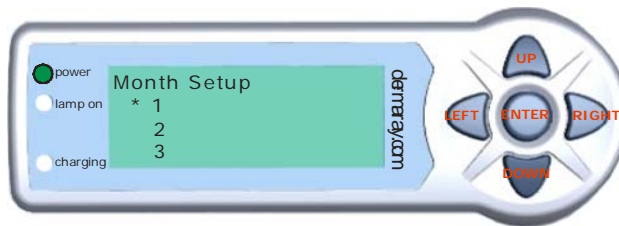
▪ **Setup Wizard: Date (year, month, day)**



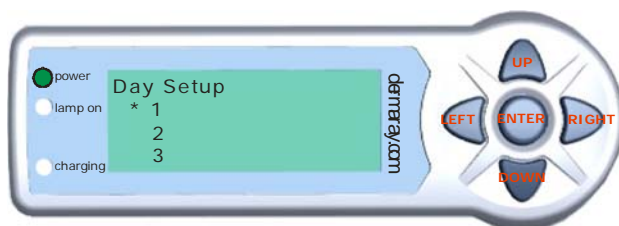
To begin setting up Dermalay® - UV for initial use, please WAKE the device by pressing and HOLDING the “ENTER” key for 3 seconds.



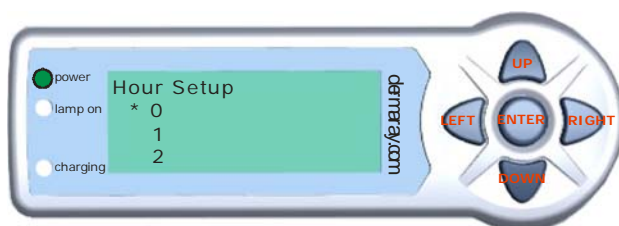
Select the current YEAR by pressing or holding the UP and DOWN keys and then press ENTER.



Select the current MONTH by pressing or holding the UP or DOWN keys and then press ENTER. 1 = January, 2 = February, 3 = March etc.



Select the current DAY by pressing or holding the UP or DOWN keys and then press ENTER. 1 = 1<sup>st</sup> of the month, 2 = 2<sup>nd</sup> of the month, 3 = 3<sup>rd</sup> of the month etc.



Select the current HOUR in 24 hour format (00:00) by pressing or holding the UP or DOWN keys and then press ENTER. 1 = 1:00am, 6 = 6am, 18 = 6pm, 0 = midnight etc.



Select the current MINUTE in 24 hour format (00:00) by pressing or holding the UP or DOWN keys and then press ENTER. 1 = 1 minute past the hour, 15 = 15 minutes past the hour, 30 = 30 minutes past the hour, 45 = 45 minutes past the hour etc.



After entering the Date and Time either 1.Complete the setting or 2.Discard & Exit.

▪ **Setup Wizard: Input Patient Name**



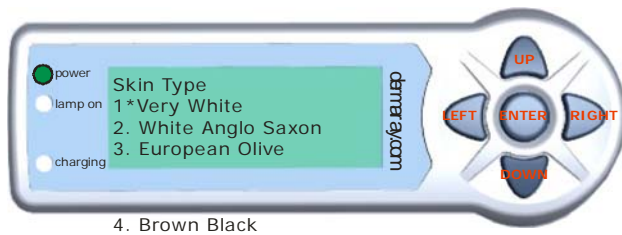
Enter the patient name by selecting letters from the alphabet. Press or hold the LEFT or RIGHT arrow to scroll through the alphabet, press ENTER to select the highlighted letter e.g. "A" and repeat scrolling for subsequent letters. "\_" = space. To delete an incorrect letter select "Del" to delete the last letter(s). To finish entering the Patient Name press the ENTER button after selecting the last letter. Press either the ENTER button or select "Exit" to finish using the Setup Wizard.

NOTE: UP and DOWN arrows can be used for advanced editing to swap between the input line and alphabet selection line. A maximum of 10 Patient Names can be stored.



After entering the Patient Name either 1.Complete the setting and store the Patient Name, 2.Discard & Exit or 3.Cancel and return to the Input Patient Name screen.

▪ **Setup Wizard: Skin Type**

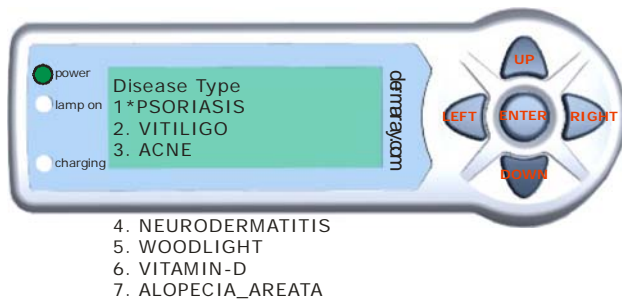


Select the patient SKIN TYPE by pressing or holding the UP or DOWN keys and then press ENTER. Options that do not appear on the LCD are included in the picture above. The list will automatically scroll. A confirmation page will display to confirm your selection. Skin types can be further explained as;

<b>Skin Type / Description</b>
<p><b>1. VERY WHITE - Celtic type:</b></p> <ul style="list-style-type: none"> <li>• Light skin, red or fair haired, blue or green eyes, freckles.</li> <li>• Always quick to sunburn; scarcely or no bronzing even after repeated treatments</li> </ul>
<p><b>2. WHITE ANGLO SAXON - European type:</b></p> <ul style="list-style-type: none"> <li>• Fair-haired, blue, grey or green eyes.</li> <li>• Almost always sunburn; moderate bronzing after repeated treatments.</li> </ul>
<p><b>3. EUROPEAN OLIVE – Dark skinned European type:</b></p> <ul style="list-style-type: none"> <li>• Light brown or brown hair, brown eyes.</li> <li>• Sometimes sunburn; progressive bronzing after repeated treatments.</li> </ul>
<p><b>4. BROWN BLACK – African, or black colored type:</b></p> <ul style="list-style-type: none"> <li>• Dark brown or black hair, brown eyes.</li> <li>• Rarely sunburn, rarely bronze or tan.</li> </ul>
<p><b>5. CHILD – Small children</b></p> <ul style="list-style-type: none"> <li>• For very sensitive skin type such as children or the elderly</li> <li>• This setting can be used for a very conservative treatment</li> </ul>

Selecting a skin type allows Dermaray® - UV to adjust exposure programs to best suit your sensitivity to light. Lighter skin has shorter exposures than darker skin. Darker skin can tolerate longer and more frequent doses of UV than lighter skin.

- **Setup Wizard: Disease Type**



Select the patient DISEASE TYPE by pressing or holding the UP or DOWN keys and then press ENTER. Options that do not appear on the LCD are included in the picture above. The list will automatically scroll. A confirmation page will display to confirm your selection.

Selecting a disease type allows Dermaray® - UV to calculate and exposure programs for particular condition considering your skin type.

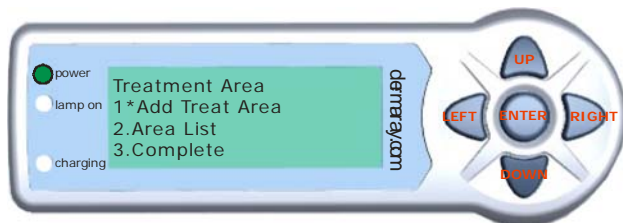
- **Setup Wizard: Treatment Areas**



Treatment Areas are locations on the body that require exposure such as Scalp, Face, Left Leg, Right Arm etc. Up to 32 locations can be entered and treatment times and exposures are individually recorded for each area. Individual areas can be treated separately or all areas can be treated in turn in one session. There may also be only one area, such as for treatment for Hair Loss.

Enter the Treatment Areas by selecting letters from the alphabet. Press or hold the LEFT or RIGHT arrow to scroll through the alphabet, press ENTER to select the highlighted letter e.g. "A" and repeat scrolling for subsequent letters. "\_" = space. To delete an incorrect letter select "Del". To finish entering the Patient Name press the ENTER button. Press either the ENTER button or select "Exit" to finish using the Setup Wizard. A confirmation page will display to confirm your selection. After the first Treatment Area is added, Dermaray® - UV will present the "Treatment Area" menu.

NOTE: UP and DOWN arrows can be used for advanced editing to swap between the input line and alphabet selection line. A maximum of 32 Treatment Areas can be stored per Patient Name.



To view add additional treatment areas select 1. Add Treat Area, select 2. Area List to view already entered Treatment Areas or select 3. Complete when finished entering all Treatment Areas.



Once Date & Time, Patient Information and Treatment Areas have been entered the Setup Wizard is now complete. Dermaray<sup>®</sup> - UV will return to the Welcome Screen. The current Date and Time should display. If no button is pressed, Dermaray<sup>®</sup> - UV may return to SLEEP and need to be WAKEN again. Information entered via the SETUP WIZARD is stored in memory and also protected by battery backup.

- **Setup Wizard: What to do if the Wizard is not presented**

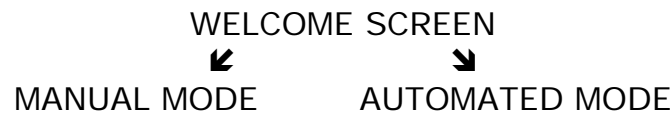
Under some circumstances, the Setup Wizard may not be presented or may need to be started manually. In order to resolve this issue for a brand new Dermaray<sup>®</sup> - UV please follow the instructions titled "A Software Reset" at Section 13 "Performing a Reset Function."

**Subsequent activations: Welcome screen**

After initial completion of the SETUP WIZARD and AWAKE on subsequent occasions, the Dermaray<sup>®</sup> - UV will present a WELCOME SCREEN. The WELCOME SCREEN displays the date, time, battery voltage and a scrolling welcome message.



At the WELCOME SCREEN Dermaray® - UV behaves in a similar way to a traditional non-computer controlled phototherapy lamp, it may be activated or deactivated on a manual basis. Or at the WELCOME SCREEN pressing ENTER again will access treatment programs and other configuration and automated features.

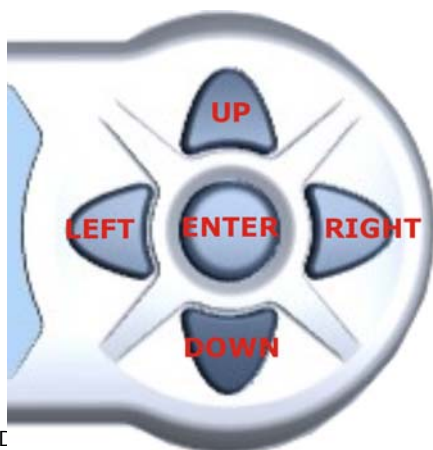


### **Entering Manual Mode**

Dermaray® - UV is a very sophisticated device, but it can also be used in a similar fashion to a manual phototherapy system by simply being turned on and off. This mode may be useful for people whom are;

- unable to program the device successfully
- do not wish to use an automatically generated program
- are already familiar with manual phototherapy
- continuing a pre-existing treatment program
- other non-standard application for UV light
- as prescribed by a doctor
- have already configured a DEFAULT USER and wish to proceed with their next pre-defined treatment session with no additional change, to programming

Three manual modes and one short cut key are available at the WELCOME SCREEN as follows;

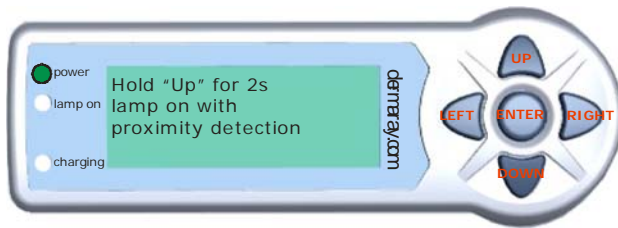


- UP manual activation.
- DOWN activation for set time.
- LEFT for HELP menu.
- RIGHT begin next programmed session ALL areas for default user.

▪ **Manual Lamp Activation with timer – UP button.**



WAKE Dermaray® - UV, by pressing and holding the ENTER key for 3 seconds. Then at the WELCOME screen;



Press and hold the UP button for 2 seconds to manually activate the lamp. Dermaray® - UV will start counting how long it is activated for. Once started a treatment surface must then be detected before the lamp will activate.

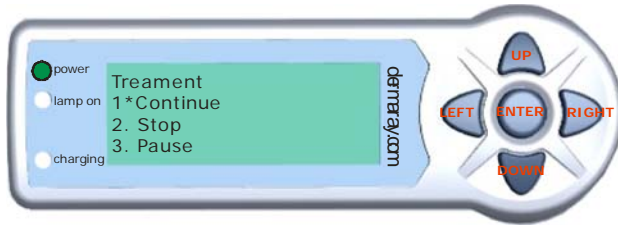


Move the lamp to the appropriate area requiring treatment.



Once a surface is detected the lamp will turn on and the treatment will be administered. The RED LED will also be activated to indicate the UV system is active.

NOTE: This is a timer that increases with no set limit. In this mode, the lamp will remain on until a manual de-activated or a de-activation is triggered or caused by another event such a low battery.



Once the UV lamp has been activated, pressing any key will allow the current treatment to be Stopped, to Continue or to be Paused with the option to Cancel or Resume.

- **Manual Lamp Activation with count down – DOWN button.**



WAKE DERMARAY® - UV, by pressing and holding the ENTER key for 3 seconds. Then at the WELCOME screen;

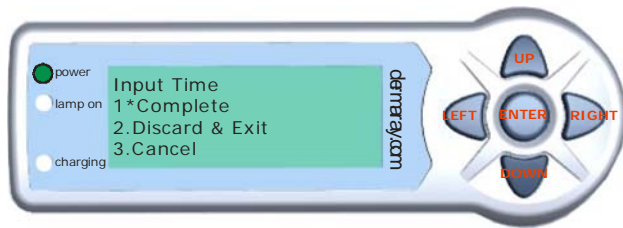


Press and hold the DOWN button for 2 seconds to manually activate the lamp, with proximity detection and with a user defined count down timer (shut off will occur once timer has expired.)



Enter the time in SECONDS to manually turn on the UV lamp. Press or hold the LEFT or RIGHT arrow to scroll through the numbers, press ENTER to select the highlighted number. E.g. 60 seconds = 1 minute, 180 seconds = 3 minutes. To delete an incorrect number

select "Del" to finish entering the number press the ENTER button or select "Exit" to finish entering the time and begin the treatment.



After entering the Manual Treatment Time either 1.Complete the setting and begin the treatment, 2.Discard & Exit or 3.Cancel and return to the Input TIME screen. Once started a treatment surface must then be detected before the lamp will activate.



Move the lamp to the appropriate area requiring treatment.



Once a surface is detected the lamp will turn on and the treatment will be administered. The RED LED will also be activated to indicate the UV system is active.

NOTE: This is a timer that decreases from the specified time limit. In this mode, the lamp will remain on until automatically deactivated when the timer reaches zero or manually stopped by pressing ENTER and selecting STOP.

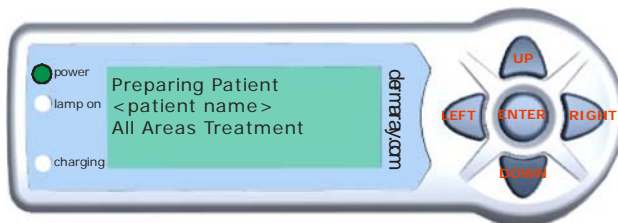
- **Manual Lamp Activation next programmed treatment – RIGHT button.**

Once the SETUP WIZARD has been completed, at the WELCOME SCREEN, pressing and holding the RIGHT button for 3 seconds will invoke the next treatment session for the last user for all areas. This is an extremely useful feature. It allows the primary user of Dermaray® - UV to invoke their next treatment program quickly and

easily without accessing extended programming menus. Dermaray® - UV will know the next appropriate session duration and also protect against too frequent exposures by providing warning notes.



WAKE Dermaray® - UV, by pressing and holding the ENTER key for 3 seconds. Then at the WELCOME screen, press and hold the RIGHT key for 3 seconds.



A confirmation page will display the last Patient Name and advise All Areas Treatment has been automatically selected.

- **Accessing the onboard HELP system – LEFT button.**



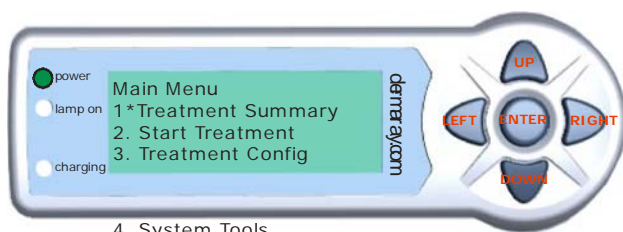
WAKE Dermaray® - UV, by pressing and holding the ENTER key for 3 seconds. Then at the WELCOME screen, press and hold the LEFT key for 3 seconds to access the HELP MENU.

### **Entering Programming Mode**



WAKE Dermaray® - UV, by pressing and holding the ENTER key for 3 seconds. Then at the WELCOME SCREEN press ENTER again once to enter the MAIN MENU for programming. If a button is not pressed within 4 seconds the MAIN MENU will exit and the WELCOME SCREEN will be displayed again. Simply press ENTER again to access the MAIN MENU. If Dermaray® - UV is left unattended for a short while, it will exit programming and return to the WELCOME SCREEN. If still left unattended it will also return to SLEEP to conserve batteries. If this happens, please WAKE the unit and begin programming again.

NOTE: During programming, to exit a menu press the RIGHT button to return to the previous menu.

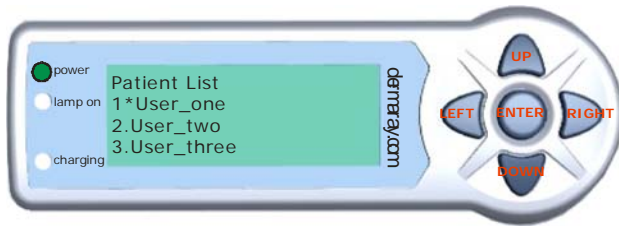


4. System Tools

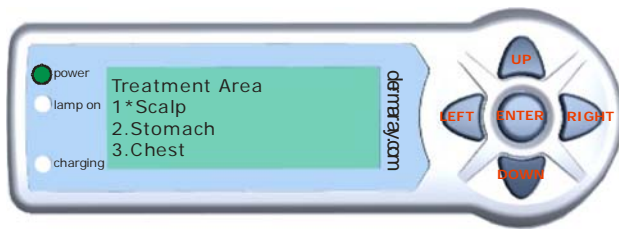
The Main Menu had 4 options;

- Treatment summary displays a list of Patients and statistics for each treatment area for each individual patient including skin type, disease, the last session time and total exposure time.
- Start Treatment allows a user setup via the SETUP WIZARD or entered manually to start either all treatment areas or a selected individual treatment area. This menu also allows for manual activation or manual activation with a fixed time.
- Treatment Config allows existing patients to be modified or deleted, plus new patients to be added.
- System Tools provides access to the Setup Wizard, System Information, Tube/Bulb Configuration, LCD Back Light Control, Power Control, Time Setup, Software Synchronisation with a PC, Reset to Default Settings, Software Upgrade from PC.

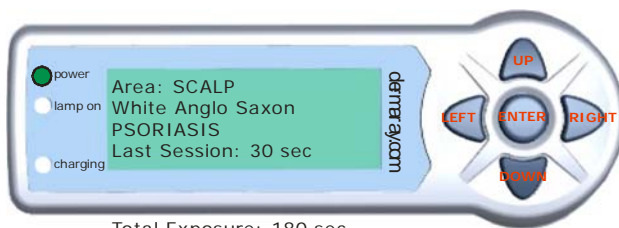
▪ **MAIN MENU: 1. Treatment Summary**



From the MAIN MENU, selecting 1.Treatment Summary will display a list of configured patient names, there may be any number of patients configured. Make a selection and press ENTER to view the treatment areas that are configured for that user.

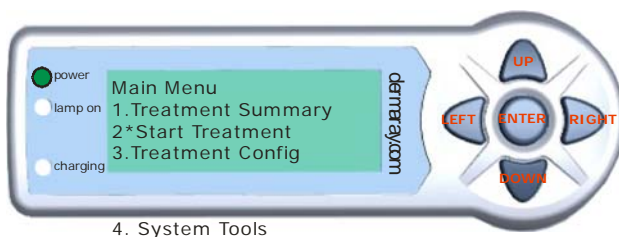


From the TREATMENT AREA MENU, selecting a Treatment Area from the list will display detailed information about that area, there may be any number of Treatment Areas configured. Make a selection and press ENTER to view the additional information.

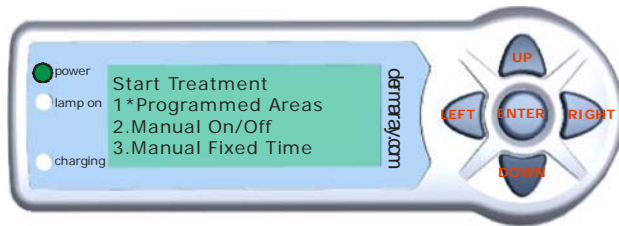


Information contained for each treatment area includes the above details, examples included. To exit this menu press the RIGHT button. To return to the MAIN MENU or WELCOME SCREEN continue pressing the RIGHT button.

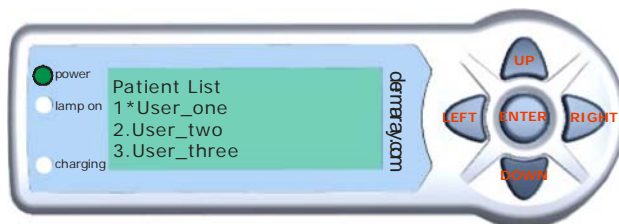
▪ **MAIN MENU: 2. Start Treatment**



From the MAIN MENU, selecting 2.Start Treatment will display the START TREATMENT MENU.



From the START TREATMENT MENU, selecting 1.Programmed Areas will present a PATIENT LIST. Manual On/Off and Manual Fixed time are the same function available via UP and DOWN arrows at the WELCOME SCREEN.



After selecting a Patient from the PATIENT LIST a TREATMENT AREA menu is displayed.

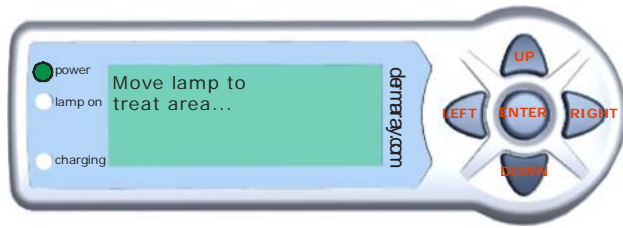


At the TREATMENT AREA menu select 1.All Areas to treat all pre-programmed areas or select an individual area to perform treatment on.



4. Cancel

After making a selection at the TREATMENT AREA MENU above, the AREA MENU will be presented at the start of each new area requiring treatment – only once if an individual area was selected. Each Treatment Area can either be 1.STARTED, 2. SKIPPED or 3.RESTARTED. The system will automatically move to the next area in succession.

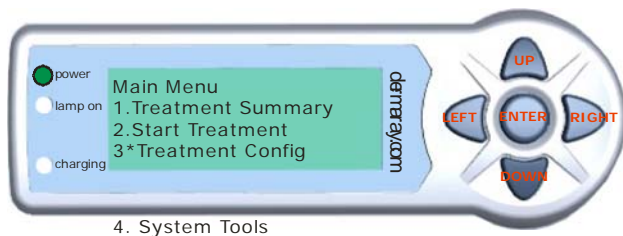


Move the lamp to the appropriate area requiring treatment.



Once a surface is detected the lamp will turn on and the treatment will be administered. The RED LED will also be activated to indicate the UV system is active. The timer will display with the time REMAINING for this treatment session. A session can be STOPPED, PAUSED or SKIPPED by pressing ENTER during the session.

▪ **MAIN MENU: 3. Treatment Config**



4. System Tools

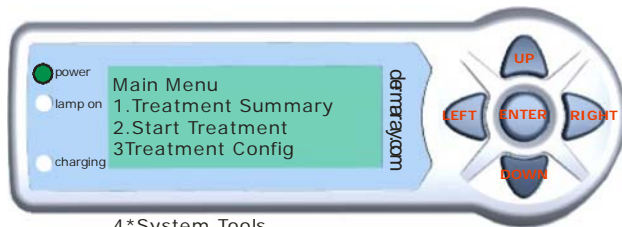
From the MAIN MENU, selecting 3. Treatment Config will display the TREATMENT CONFIG MENU.



The TREATMENT CONFIG MENU above. Option 1. Add Patient will create a new patient profile – a similar process as the SETUP WIZARD 2. Patient List will allow an existing patient to be edited or deleted.

- **MAIN MENU: 4. System Tools**

The System Tools menu should be used with some caution. These options typically control vital components of Dermaray® - UV and some functions, if selected, can not be easily undone.



4\*System Tools

From the MAIN MENU, selecting 4.System Tools will display the SYSTEM TOOLS MENU.



- 4. Back Light Cntrl
- 5. Power Cntrl
- 6. Time Setup
- 7. Syscfg Sync
- 8. Reset to Default
- 9. Software Upgrade

The SYSTEM TOOLS MENU functions are as follows;

1. Setup Wizard: This function allows for the easy addition of a new user, a similar process to the Patient Information entered during the original Setup Wizard, without modifying the current system Date and Time.
2. System Info: Displays the current Software Version Number, the unique Serial Number of the device, the type of bulb installed (NB-UVB, WB-UVB or UVA etc.) and other fixed system information.
3. Tube Config: Allows selection of the installed UV tube, plus manual tube life expectancy and other tube management features.
4. Back Light Cntrl: Allows the continual activation of the LCD display back light, or automatic management. Continued activation will reduce battery life. Automatic management will turn off the LCD backlight when no new information is available, and turn on the LCD backlight when there is new information to present on the display (default is automatic.)
5. Power Cntrl: Allows the continual activation of the lamp without automatic shut down (default is automatic.)
6. Time Setup: Set new Date and Time information.

7. Syscfg Sync: Synchronise patient information with a PC such as for programming by a medical professional or distributor.
8. Reset to Default: This function will delete all user entered information, historical data and patient information. This is useful if giving the device to a new patient or configuring with a new bulb or for a new patient. WARNING: Bulb life span is also reset.
9. Software Upgrade: A function to upgrade operating system software within Dermaray<sup>®</sup> - UV. This function would only be performed with an original Dermaray<sup>®</sup> - UV upgrade kit.

## 7. Automatic Safeguards

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Dermaray<sup>®</sup> - UV has unique features designed to increase safety for the patient including protection against using the system too often (frequency protection) and also against direct over exposure (duration protection.) Frequency protection warning is presented prior to the Duration protection warning if required.

- **Over Exposure Protection (frequency)**

Dermaray<sup>®</sup> - UV helps to protect against administering treatments too often by alerting the user if the system is activated within 1 day of the previous treatment.



Typically at least one full day's rest is required between phototherapy treatment to allow the skin to recover and signs of over exposure (if any) to become evident. For some conditions, or some patients, extra recovery time may be required. This is the suggested minimum recovery period.



Pressing any button will present the screen above to either CANCEL or CONTINUE with the next treatment.

- **Over Exposure Protection (duration)**

Dermaray<sup>®</sup> - UV helps to protect against over exposure by automatically reducing the next exposure if any redness or burning was experienced from the previous treatment. Redness or burning may take 12~24 hours or more to become noticeable.



Prior to each treatment, the message above will be presented.



Pressing any button will present the screen above, selecting NO will continue with the next treatment as normal and either increase the exposure time if appropriate or continue with the next usual exposure time. Selecting YES will continue the next treatment with a reduced exposure time.

## 8. General Use and Operation

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Once programming has been completed on your Dermaray® - UV the duration of your treatment has been calculated automatically. Treatments start off slowly and work up to a maximum of several minutes depending on your condition and skin type. UV phototherapy is recommended at most every two days, allowing your skin to rest between treatments. Daily treatment is not recommended, but if required, should be closely monitored by your health care professional. Sensitive skin may require additional days for recovery between treatments.

Dermaray® - UV can be used by either continuously moved over the entire treatment area or held for the entire treatment on one area.

If Dermaray® - UV is moved too fast, an alert will sound and the display will give an "IR disconnect" error. This is part of the normal operation. If you continually receive this error, please ensure you are holding the comb flat against the treatment area. Try moving Dermaray® - UV either faster or more slowly until you find the best method of use for yourself.

It is important to hold Dermaray® - UV flat against your scalp or treatment area and move it in contact with your skin. Lifting Dermaray® - UV to move between treatment areas will cause an IR Disconnection warning. This is part of the normal operation. If lifting and moving between treatment areas is required, setup additional treatment areas or disable proximity detection via the System Tools menu.

### **Online User Support Forum**

For additional advice, discussion and assistance using your Dermaray® - UV please visit and join our support forum. This is the best place to ask questions, search for answers and learn more about your Dermaray® - UV. Plus meet and chat with other users.

<http://www.beatpsoriasis.com/phpBB3>

## 9. Online tutorial videos and demonstrations

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In addition to this user guide, we are pleased to document the main features of the Dermalay<sup>®</sup> - UV via online videos. Click on the following links to view the videos.

- [Charging the battery](#) or <http://www.youtube.com/watch?v=OeVLrJobRVw>
- [Completing the Setup Wizard](#) or [http://www.youtube.com/watch?v=UUFpXOdF\\_ng](http://www.youtube.com/watch?v=UUFpXOdF_ng)
- [How to Start and Use](#) or <http://www.youtube.com/watch?v=1Fez-t8MWCs>
- [Proximity Detection Explained](#) or <http://www.youtube.com/watch?v=o51xWohffMk>

## 10. Doctor and Physician's PC Connectivity

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Dermaray<sup>®</sup> - UV can optionally be connected to a Personal Computer system using an optional USB connection cable and specialist Dermaray<sup>®</sup> - UV software. This feature allows the following;

1. Locking a Dermaray<sup>®</sup> - UV to a specific patient by name.
2. Establishing a set customised treatment program for individual patients.
3. The ability to LOCK or PRESCRIBE a predetermined program by either date and time or number of sessions to administer, e.g. after 3 months or 50 sessions, Dermaray<sup>®</sup> - UV will need to be returned to the doctor to PRESCRIBE additional sessions or treatment and for a patient checkup by their doctor.
4. Allow a doctor or specialist to establish a customised treatment program for particular patients or conditions such as small children or patients hypersensitive to UV light.
5. This feature allows for greater regulatory and safety control.

**WARNING:** Use only genuine Dermaray<sup>®</sup> - UV supplied USB connector cable. Using a non Dermaray<sup>®</sup> - UV supplied USB connector cable will damage your device and is not covered by any warranty. Damage of this nature is explicitly not covered by any warranty. Fire or explosion may result using a non genuine USB cable.

## 11. Bulb replacement guide

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The following section describes how to change or replace a bulb. Instructions here are a guide only, this procedure should be undertaken strictly by a person suitably qualified or experienced with electronic equipment and tools.

**WARNING:** Use only genuine Dermaray<sup>®</sup> - UV supplied replacement bulbs. Using a non Dermaray<sup>®</sup> - UV supplied replacement bulb will damage your device and is not covered by any warranty. The non-standard bulb will also be damaged. Damage of this nature is explicitly not covered by any warranty. Fire or explosion may result using a non genuine UV bulb.

**NOTE:** Ensure Dermaray<sup>®</sup> - UV is NOT connected to mains power and is currently OFF or ASLEEP. If the bulb is broken or shatters, wash hands immediately and observe general chemical handling cautions when disposing of the debris.



Figure 11-1: Slide scalp attachment off.

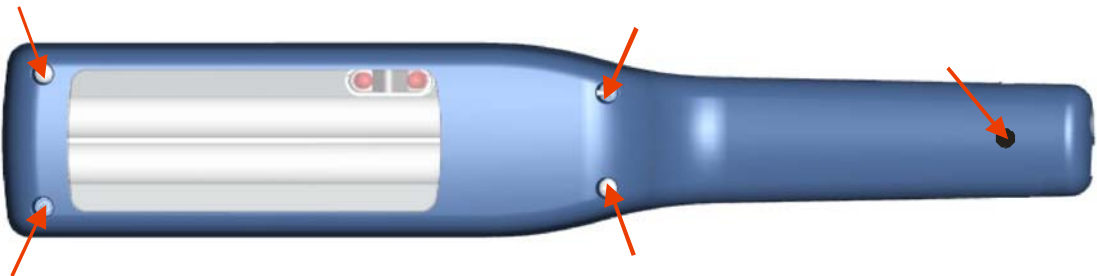
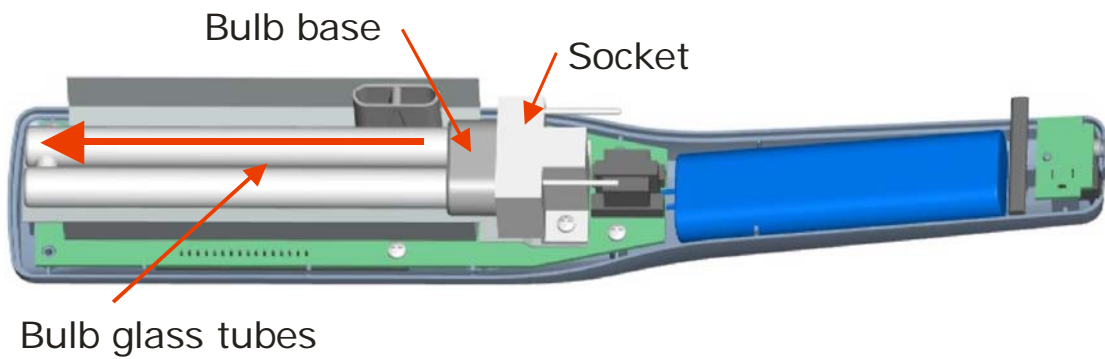


Figure 11-2: Remove 5 screws, taking note of their specific locations for reassembly.

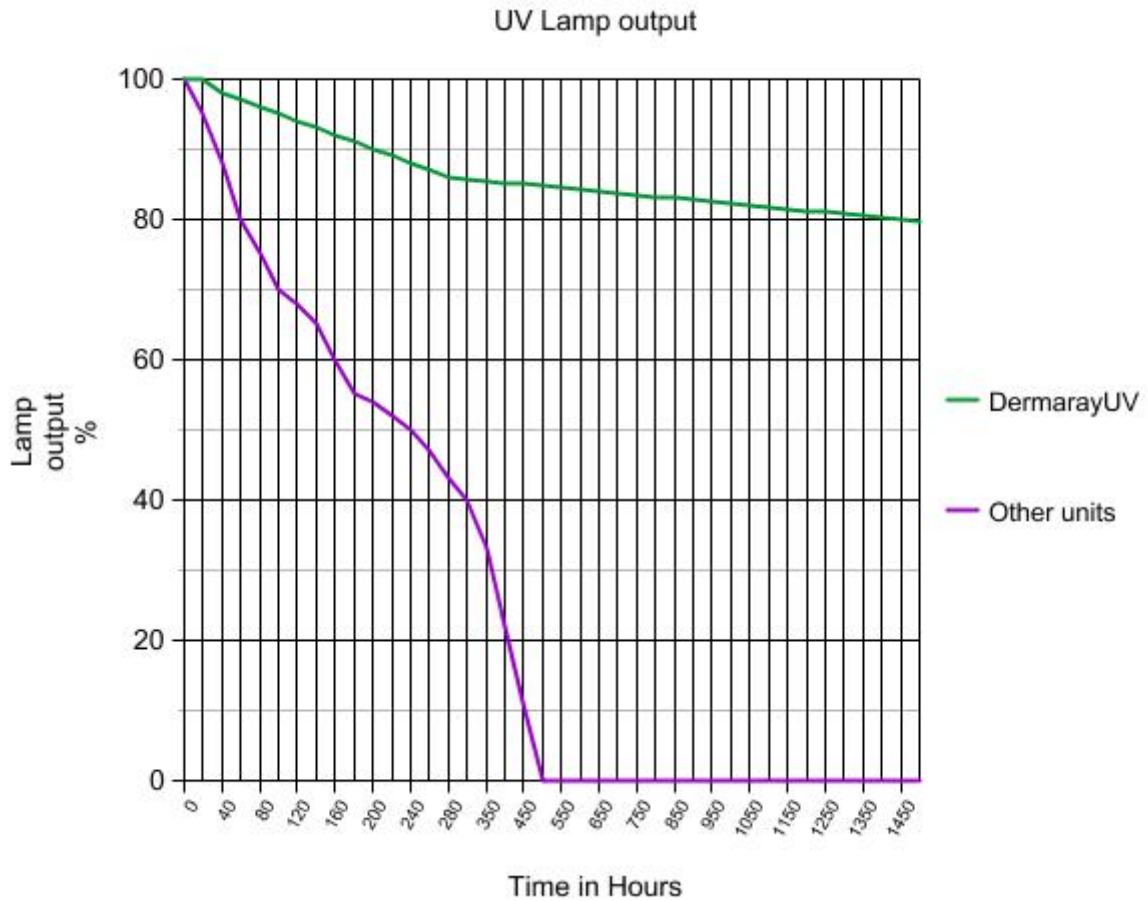
**WARNING:** Take care when removing screws that the lamp is not accidentally activated. It is suggested to hold the lamp rather than lay it flat while removing the screws.



**Figure 11-3: Holding the sides of the "Socket," gently remove the bulb to the LEFT by holding the "Bulb base." Some force may be required. Replace the bulb and reassemble the device. Replacement bulbs can be inserted in any orientation, the polarity is not important.**

## 12. Bulb Life Time and Power Output

Due to the unique method Dermaray UV uses to manage the Philips medical bulbs, there is little loss of power and a significantly higher output over much longer sustained usage. This means one bulb will outlast 3~4 bulbs in other UV lamps, while providing consistently better and more effective therapy by maintaining a higher power output for the duration of the bulb's usable life. The Dermaray UV's unique design maintains in excess of 82% power output after 1500+ hours. A typical mains powered UV device continually loses power with each use and has a 1/2 life of only approximately 300 hours.



### 13. Battery pack replacement guide

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The following section describes how to change a battery pack. Instructions here are a guide only, this procedure should be undertaken strictly by a person suitably qualified or experienced with electronic equipment and tools.

**WARNING:** Battery replacement should only be performed by a qualified and approved service centre.

**WARNING:** Use only genuine Dermaray® - UV supplied replacement battery packs. Using a non Dermaray® - UV supplied replacement battery pack will damage your device and is not covered by any warranty. Damage of this nature is explicitly not covered by any warranty. Fire or explosion may result using a non genuine battery.

NOTE: Ensure Dermaray® - UV is NOT connected to mains power and is currently OFF or ASLEEP. Battery packs should be disposed of in accordance with local environmental laws.



Figure 13-1: Slide scalp attachment off.

**WARNING:** Take care when removing screws that the lamp is not accidentally activated. It is suggested to hold the lamp rather than lay it flat on a surface while removing the screws.

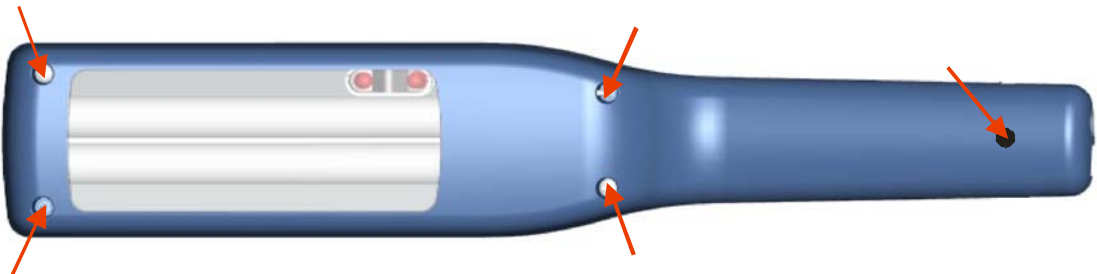
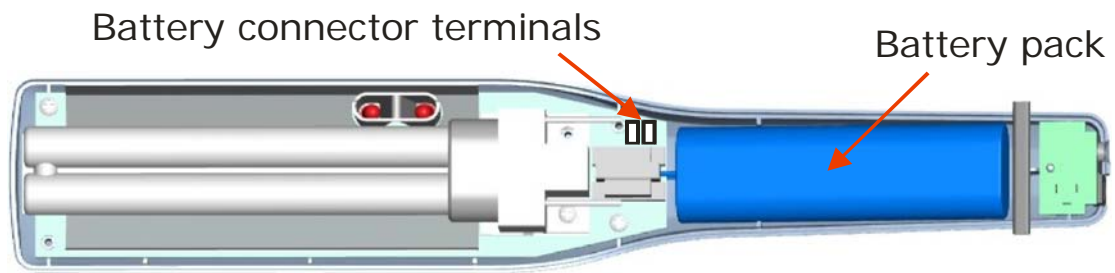


Figure 13-2: Remove 5 screws, taking note of their specific locations for reassembly.



**Figure 13-3: Locate the Battery Pack and Battery Connector Terminals. Disconnect the two connector plugs taking note of where they were connected. Replace the battery pack and reassemble the device.**



**Figure 13-4: Battery Connector Terminals are shaped to connect in the correct orientation. Power connector (black and red) is the left connector, temperature monitor are blue connectors to the right.**

## 14. Performing a software upgrade

---

The following section describes how to upgrade onboard software or firmware. This section should only be followed on explicit instructions from Dermaray or your authorised distributor. The software upgrade feature requires a custom PC connection cable and Dermaray specific PC software. Attempting to access Dermaray features or firmware via non-standard connector cable and / or PC software may cause permanent damage to the Dermaray® - UV.

**WARNING:** Use only genuine Dermaray® - UV supplied PC connector cable and PC software. Using a non Dermaray® - UV supplied PC connector cable and / or PC software will damage your device and is not covered by any warranty. Damage of this nature is explicitly not covered by any warranty. Fire or explosion may result using a non genuine PC connector cable.

**WARNING:** Performing a software upgrade will erase all entered and stored information. Dermaray® - UV will need to be reconfigured in the same manner as a new device. This includes all patient information, bulb life timers, treatment information, date and time etc.

**WARNING:** The Software Upgrade function must not be interrupted. Interruption of a software upgrade may render Dermaray® - UV unusable and a factory repair will be required. Damage of this nature is not covered by any warranty.

1. Ensure that Dermaray® - UV battery is fully charged.
2. Connect Dermaray® - UV to mains power.
3. Take note of the remaining bulb useful life time under System Tools -> Bulb Info.
4. Stop all unnecessary programs on the PC, disable all virus scanners and firewall applications.
5. Attach the supplied PC connector cable to a PC and to the Dermaray® - UV USB connector.
6. WAKE Dermaray® - UV, access the System Tools Menu, and select Software Upgrade, then select YES.
7. Using the supplied software, firstly ERASE the flash.
8. Using the supplied software, upload the new flash.
9. Perform a hardware reset.
10. Reconfigure Dermaray® - UV and re-input the remaining bulb life time.

## 15. Performing a Reset function

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The following section describes how to reset the Dermaray<sup>®</sup> - UV. There are two reset methods; a software reset and hardware reset. The software reset will clear all user memory, all entered and stored information will be lost and unrecoverable. In most instances a hardware reset is adequate, on rare occasions if Dermaray<sup>®</sup> - UV becomes jammed or locked, or after a software upgrade a hardware reset may need to be performed. A hardware reset will not erase any stored information in the Dermaray<sup>®</sup> - UV.

**WARNING:** Performing a software reset will erase all entered and stored information. Dermaray<sup>®</sup> - UV will need to be reconfigured in the same manner as a new device. This includes all patient information, bulb life timers, treatment information, date and time.

### Software reset

1. WAKE Dermaray<sup>®</sup> - UV, access the System Tools Menu, and select Reset to Default.
2. When prompted with Reset Config, select YES.
3. All software information is now reset and any stored information is lost.

### Hardware reset

1. Remove the scalp attachment and proximity guide.
2. WAKE Dermaray<sup>®</sup> - UV.
3. Insert a straightened paper clip or other similar blunt thin object approximately 5mm.

Internal hardware reset button



Once pressed, the LCD display will flash and beep.

## 16. Trouble Shooting Tips

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Dermaray<sup>®</sup> - UV is a high quality precision device manufactured to the most exacting standards possible. However from time to time problems may be encountered. This section describes some common problem solving tips;

- **"IR Disconnection" error during treatments.**

A beep followed by an "IR Disconnection" error on the display indicates a problem with a treatment surface area. Try adjusting how you are holding Dermaray<sup>®</sup> - UV and ensure it is held flat against the treatment area. Also try adjusting how you move Dermaray<sup>®</sup> - UV by experimenting with a faster or slower movement, circular movements can also work for some situations.

If Dermaray<sup>®</sup> - UV is used near strong fluorescent light or near a strong natural light source, then the IR Detection could be more sensitive than usual. Try moving to another room or adjusting your position away from another strong light source.

The IR Sensitivity can be adjusted in the System Tools menu, in extreme cases it can also be disabled. Disabling IR Detection is NOT recommended.

- **Dermaray<sup>®</sup> - UV turns on, but won't start.**

If Dermaray<sup>®</sup> - UV shows a Yellow power led, but has no display on the display, please firstly ensure that battery is fully charged. If the problem persists follow the instructions for a Hardware Reset.

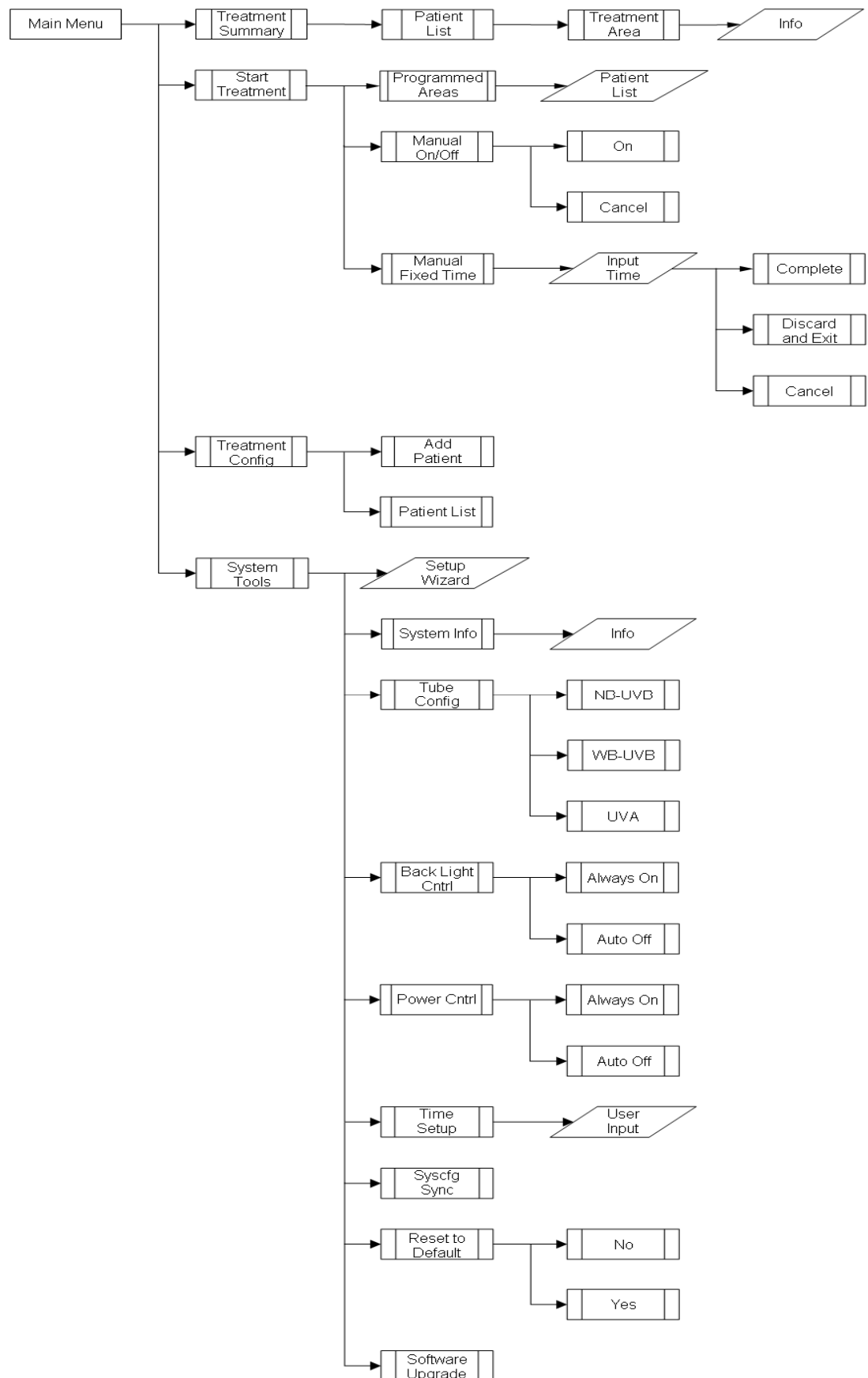
## 17. Specifications

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ITEM	DESCRIPTION
Product name:	Dermaray UV
Size of device:	H x W x D
Weight of device:	Kg and lb
Shipping size:	36.5 x 15.5 x 8cm
Shipping weight:	1000g or 1.0kg
Operating temperature:	5-45c
Internal cut out temperature:	~ 65c
Battery type:	4 x AA 2100mAh NiMH
Battery operating capacity:	~45 min continual use
Exposures per battery charge:	~15 depending on duration
Power supply:	100-240v 50-60Hz
Power input:	8VDC – 3.0A
Power consumption:	11 W
Microprocessor:	Philips PLC2138 (32bit, 60MHz)
Onboard memory:	512kb FLASH
PC Interface:	USB*
Bulb type:	Custom Philips TL01 type*
Patents:	Pending

**\* WARNING:** Use only genuine Dermaray<sup>®</sup> - UV USB cable and genuine Dermaray<sup>®</sup> - UV replacement bulbs. Using non-genuine parts will cause damage to the device and spare part that is not covered by warranty.

## 18. Menu Structure Flowchart



## 19. Warranty Information

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Total Control Pty. Ltd. (Australia) warrants the Dermaray® - UV against all defects in materials and workmanship for a period of **two years** from the date of the original purchase, subject to the following terms and conditions. UV bulbs are a consumable item and are covered by a limited 30 day warranty that excludes breakage or damage caused by abuse or improper installation or operation.

This warranty is not limited to the original owner and is fully transferrable. This warranty does not apply if the serial number or housing of the product has been removed, or if the product has been subject to physical abuse, improper installation, or modification. This warranty is only valid with a bill of original sale and a completed warranty registration form is received. Change of ownership must be notified in writing to Dermaray.

For products purchased from an authorised distributor, please contact that distributor to arrange warranty service, repair or replacement. Products not purchased directly from Dermaray.com may be returned directly, but return shipping must be paid by the customer and a service fee may apply. To obtain warranty service from products purchased directly from Dermaray.com, the product must be returned, insured and shipping prepaid to Total Control Pty. Ltd. at the address following, in its original packaging or suitable equivalent, along with a written description of the problem and the customer's full name, return address, contact telephone numbers and email.

Return Authorisation Numbers (RAN#) must be obtained and marked clearly on the outside of the package being returned. A service fee applies for items returned with no fault found. Items returned without a RAN# may not be accepted.

Total Control Pty. Ltd. disclaims all other warranties, expressed or implied, including warranties of merchantability and fitness for any particular purpose whatsoever and no other remedy shall be available, including without limitation, incidental or consequential damaged. In no event shall Total Control Pty. Ltd. liability exceed the purchase price of the product in question.

Total Control Pty. Ltd. wants you to be satisfied with its products. Should you have any difficulties with operation or performance of your Dermaray® - UV please contact us, see last page of this manual.

## 20. Manufacturer's Contact Information

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Should you need to contact Dermaray regarding sales, support, warranty or service here are the complete contact details;

Company name:	Total Control Pty. Ltd.
Physical address:	Unit 3 / 6 Barnett Court Morley, 6062, Western Australia, Australia
Postal address:	PO Box 154 Ballajura, 6066, Western Australia Australia
Webpage:	<a href="http://www.dermaray.com">www.dermaray.com</a>
Email:	<a href="mailto:info@dermaray.com">info@dermaray.com</a>
Telephone:	(+61) 08-9370-4038
Fax:	(+61) 08-9271-4305

**NOTE:** Please read the previous section regarding Warranty prior to returning any item directly to Dermaray.

## 21. Warranty Registration Form – Dermaray UV

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NOTE: To register and activate your 2 year transferrable warranty, this form must be completed and returned to the manufacturer directly with a copy of your invoice or bill of sale. Change of ownership must be notified to Dermaray in writing. Warranty may also be submitted online [www.dermaray.com/registration.htm](http://www.dermaray.com/registration.htm)

### Customer Information;

Full name: \_\_\_\_\_

Address: \_\_\_\_\_

Town/City: \_\_\_\_\_

Zip Code: \_\_\_\_\_ Country: \_\_\_\_\_

Phone: \_\_\_\_\_

Mobile: \_\_\_\_\_

Email: \_\_\_\_\_

Why you chose this product: \_\_\_\_\_

\_\_\_\_\_

Would you like to be informed of new products, updates and other important information by email?  Yes  No

### Place of Purchase Information;

Date of purchase: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Supplier's name: \_\_\_\_\_

Supplier's address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Supplier's phone: \_\_\_\_\_

Suppliers web page: \_\_\_\_\_

Purchase price: \_\_\_\_\_

Why you chose this supplier: \_\_\_\_\_

\_\_\_\_\_