

## 1. Dermaray Canopy: Operating Instructions

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# Dermaray<sup>®</sup> - Canopy 10 & 24

## User's Guide

Read all instructions prior to  
activating the device.

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Serial number: \_\_\_\_\_  
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### **3. Introduction**

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#### **Welcome and preface**

Thank you for choosing an innovative Dermaray<sup>®</sup> - Canopy phototherapy device. Dermaray<sup>®</sup> - Canopy represents the most advanced, effective and more importantly, the safest phototherapy system available with a digital inline timer. Be assured that no expense has been spared in the design and construction of your Dermaray<sup>®</sup> - Canopy 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.

#### **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 the Dermaray<sup>®</sup> - Canopy for the first time. Once read fully, you should follow all instructions and then also refer to these instructions while configuring your Dermaray<sup>®</sup> - Canopy for the first time. The suggested process is as follows;

- Read these instructions fully from front to back
- Check Dermaray<sup>®</sup> - Canopy 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<sup>®</sup> - Canopy is a powerful Medical Phototherapy Device, it is an active ionising radiation device. It must only be used in accordance to this user's guide titled "Dermaray<sup>®</sup> - Canopy 10 & 24 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-canopy-manual.pdf](http://www.dermaray.com/forms/dermaray-canopy-manual.pdf)

### **Device compliance**

Dermaray medical devices are manufactured to strict ISO quality control standards and meet or exceed the following recognized 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 overexposure 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® - Canopy 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.

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

You should not use Dermaray® - Canopy 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® - Canopy 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® - Canopy**

Dermaray® - Canopy has been built to international ISQ 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® - Canopy 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 500~800 hours
- If the bulb is ~5 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 12~18 months.

**WARNING:** Use only genuine Dermaray® - Canopy supplied replacement bulbs. Using a non Dermaray® - Canopy 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® - Canopy intelligently manages bulb activation and power regulation, a bulb in a Dermaray® - Canopy 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.

**WARNING:** Device must only be Earth Grounded for proper safe operation.

## 5. Skin Type Determination

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Use the following chart to help determine your skin type. Skin type reflects the duration of each treatment. Lighter skin has shorter exposures than darker skin. Darker skin can tolerate longer and more frequent doses of UV than lighter skin.

<b>Skin Type / Description</b>
<b>1. VERY WHITE - Celtic type:</b> <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>
<b>2. WHITE ANGLO SAXON - European type:</b> <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>
<b>3. EUROPEAN OLIVE – Dark skinned European type:</b> <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>
<b>4. BROWN BLACK – African, or black colored type:</b> <ul style="list-style-type: none"><li>• Dark brown or black hair, brown eyes.</li><li>• Rarely sunburn, rarely bronze or tan.</li></ul>

It is advisable to have a specialist skin examination prior to starting phototherapy and every 6-12 months while under taking phototherapy.

## 6. Exposure Program for treatment

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There should be a 24 hour break between sessions, possibly 48-72 hours for sensitive skin. If burning (excessive pinkness, excessive itchiness) occurs, discontinue treatment until your skin has fully recovered and then resume treatment at a reduced exposure time. Once the initial program of 20 sessions has been completed, all future sessions can be at the maximum exposure providing there is no long break between exposures. Additional sessions can be used in maintenance mode, meaning once a week or several times per month to maintain remission of your condition, or used as required.

For Dermaray Canopy 10 systems, please repeat each session front and back if required. Dermaray Canopy 24 only one full body treatment is required.

Session	Skin Type #1	Skin Type 2&3	Skin Type #4
1	0:15	0:30	0:35
2	0:25	0:45	0:50
3	0:35	1:00	1:05
4	0:45	1:15	1:20
5	0:55	1:30	1:35
6	1:05	1:45	1:50
7	1:15	2:00	2:05
8	1:25	2:15	2:20
9	1:35	2:30	2:35
10	1:45	2:45	2:55
11	1:55	2:45	3:10
12	2:05	2:45	3:10
13	2:15	2:45	3:10
14	2:25	2:45	3:10
15	2:25	2:45	3:10
16	2:25	2:45	3:10
17	2:25	2:45	3:10
18	2:25	2:45	3:10
19	2:25	2:45	3:10
20	2:25	2:45	3:10

The exposure tables above are general and non-specific. They do not consider your individual situation. A skin specialist may recommend an alternative treatment program.

## 7. Using the Dermaray Canopy

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Dermaray® - Canopy 10 & 24 operate using an inline digital timer. The system will turn off at the end of the specified treatment time.



**Step1:** Connect your Dermaray® - Canopy to an Earth Grounded electrical outlet. The power indicator will be on, but the digital timer will not yet display the time. Now put on and use the safety goggles. Use only the supplied goggles, do not use sunglasses or other eye wear.

**Step2:** Press the button [On/Off] button and you will hear the buzzer. The timer denotes Minutes : Seconds. The minutes will be flashing.

**Step3:** Press the timer button " + " or " - ". Adjust your desired number of the minutes required for your treatment. You may hold a button continuously to scroll faster. If you wait for 5 seconds (and before 5 minutes) pressing " + " or " - " will adjust the seconds.

**Step4:** After setting the timer, again press the button [On/Off] there will be another buzzer sound and the Dermaray Canopy will start treatment. The "Working" indicator will also be on.

**Step5:** When the allocated treatment time has expired to "00.00" the system will stop and display "End" and there will be a continuous buzzer for 100 seconds.

## 8. Cleaning and Replacing Bulbs

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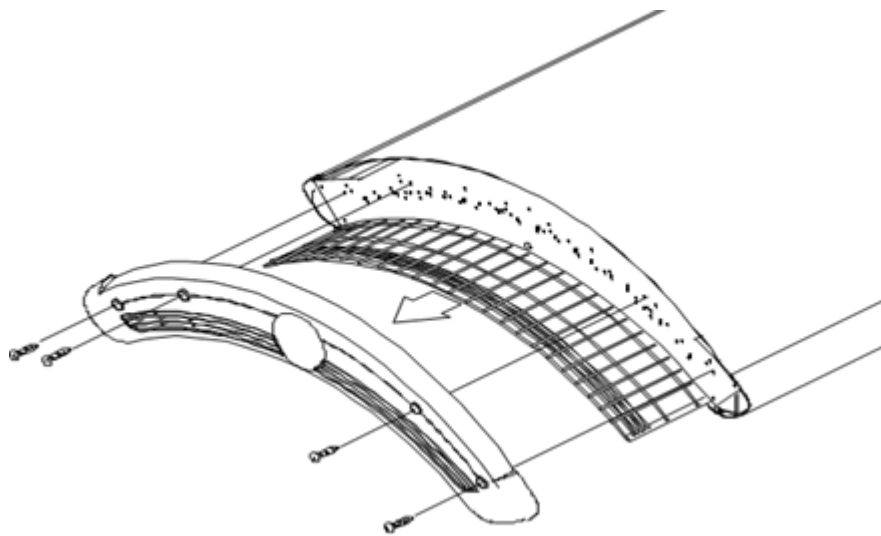
Dermaray® - Canopy 10 is a powerful Medical Phototherapy Device, it is an active ionising radiation device. It must only be used in accordance with all instructions. When bulbs need to be replaced please following these instructions closely;

**Step 1:** To remove the acrylic you must remove either endcap. The endcaps are held in place by four Phillips-head screws. Slide the acrylic out of the canopy as shown below.

**Step 2:** Grasp a lamp at one end and at the middle, then turn the lamp a quarter turn. The lamp may then be gently removed from its holder.

**Step 3:** To reinstall a lamp, insert the pins located on the ends of the lamp into the slots on top of the lamp holder and turn the lamp a quarter turn.

**Step 4:** Slide the acrylic back into the canopy and secure the endcap.



## 9. Warranty Information – Dermaray Canopy 10

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Total Control Pty. Ltd. (Australia) warrants the Dermaray<sup>®</sup> - Canopy 10 against all defects in materials and workmanship for a period of **one year** from the date of the original purchase, subject to the following terms and conditions.

This warranty is limited to the original owner and is not full 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 when a bill of original sale and a completed warranty registration form is received by Dermaray. Change of ownership must be notified in writing to Dermaray for warranty transfer purposes.

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<sup>®</sup> - Canopy 10 please contact us, see last page of this manual.

## 10. Specifications

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Weight	37.5kg
Electrical Voltage:	110~120v or 220-240v
Amperage:	8amp
Circuit Breaker:	15amp
Lamp output:	100watt per bulb, total of 1000watt
Ballast	Sustained 100watt
Timer:	Digital timer
Maximum exposure	28 minute timer

## 11. Manufacturers 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
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. Where possible, items should be returned to your primary place of purchase.

## **12. Warranty Registration Form – Dermaray Canopy**

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NOTE: To register and activate your one year 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: \_\_\_\_\_

\_\_\_\_\_