

# SDI | RADII PLUS

HIGH POWERED CORDLESS LED CURING LIGHT



THE  
RADII PLUS  
DOES  
IT ALL

# NOT JUST A POWERFUL LED CURING LIGHT

HIGH INTENSITY

**1,500** mW/cm<sup>2</sup>

ROTATABLE HEAD

**360°**

Curing? Whitening? Transilluminating?

The Radii Plus does it all. The amazing transformation takes place with a simple pull and click of the LED attachment.

It's unique, easy to upgrade design, provides unlimited potential making it the best investment you will ever make!

LIGHTWEIGHT

**177** g

WARRANTY

**5** years\*



\*5 year warranty on all parts except battery and full arch bleaching LED attachment which is 2 years.

# BASIC FEATURES

## HIGH INTENSITY - 1,500 mW/cm<sup>2</sup>

The higher the intensity, the more the light penetrates to efficiently cure the restorative.

## SIMPLE TO REPLACE PARTS

Designed with snap-in or screw in connections, each part of the Radii Plus including the battery is easy to remove and replace.

## RECHARGING

The Radii Plus does not need to be constantly recharged. It can be used for 1200 ten second cures with just one charge.

Number of ten second cures



## CORDLESS

The Radii Plus is a cordless unit allowing complete freedom of movement and total control.

## NO NOISY FAN

Unlike other LED lights, the Radii Plus does not require a fan. It uses heat sink technology to reduce the amount of heat emission.

## INFECTION CONTROL

Perfectly fitted disposable barrier sleeves prevent cross contamination.

## BUILT IN INTENSITY INDICATOR

The Radii Plus' built-in intensity indicator provides a simple test to ensure the functionality of the light.

## LIGHTWEIGHT - 177G

The standard Radii Plus' ergonomic and lightweight design minimises user fatigue and maximises comfort.

## ROTATABLE HEAD

The head of the Radii Plus can be easily turned 360° to what ever position required. Upper quadrants are simple to access.

## SLIMLINE DESIGN

The small tip and slimline design of the Radii Plus allows users to have easy access to the posterior area. This is particularly beneficial when treating children.

## TECHNICAL DATA

### Handpiece Radii Plus standard unit

(battery, control section and contra angle standard LED attachment)

Wavelength range	440 nm - 480 nm
Peak wavelength range:	460 nm
Light intensity:	1500 mW/cm <sup>2</sup> [peak]
RAMP mode elapsed time to full intensity:	5 seconds
Duration of continuous use:	
NO RAMP mode:	60 seconds
RAMP mode:	65 seconds
Total continuous run time with fully charged battery:	3 hours 20 minutes
Dimensions:	22 mm diameter x 243 mm long
Weight:	177 g / 6.2 ounces
Battery:	7.4 V Lithium Ion - 14 Wh

### Multi-region plug pack

AC input:	100-240 V ~ 1.0A, 50/60 Hz
DC output:	12 V $\approx$ 1.5 A, 15 W MAX
Dimensions:	38 mm [H] x 45 mm [W] x 70 mm [L]
Weight:	104 g / 3.65 ounces

### Charger

Time to charge battery:	60 - 180 minutes
Operating temperature:	10°C - 40°C
Total height with handpiece:	255 mm
Dimensions:	70 mm [H] x 40 mm [W] x 130 mm [L]
Weight	84 g / 3 ounces

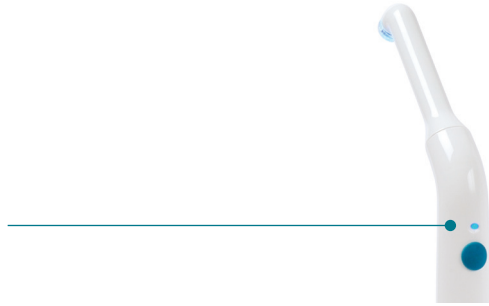


# CURING



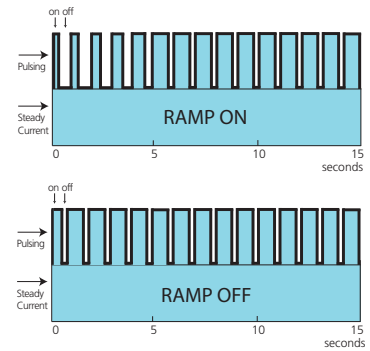
## RAMP MODE (SOFT START)^

You have a choice. The Radii Plus is initially set up without a ramp. When the ramp mode is selected, the Radii Plus' light output power gradually increases during the first 5 seconds. This minimises polymerisation stress in the restoration. To switch between modes, hold down the on/off button until audio beeps are heard. A blue light comes on when the ramp mode is activated.



## PULSE TECHNOLOGY

Using a combination of pulse technology and steady current, the Radii Plus can achieve a higher light output without generating excess heat.



## 5 YEAR WARRANTY\*\*

The Radii Plus' robust and reliable construction assures your investment is long lasting. The standard Radii Plus unit has a 5 year warranty. The battery section has a 2 year warranty.

## DEPTH OF CURE

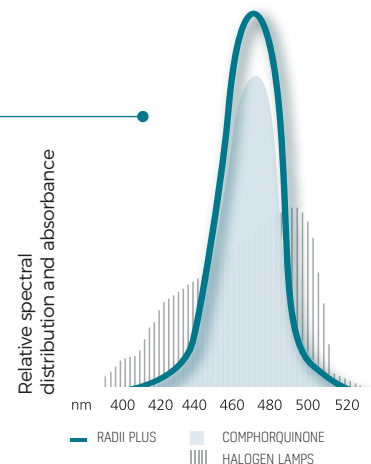
Radii Plus' up to 6mm depth of cure enables more complete curing of the restoration. This ensures interfacial adaptation and longevity of the restoration.

## EFFICIENT ENERGY USE

The light emitted by the Radii Plus corresponds to the maximum absorbance of camphorquinone ensuring efficient curing of most light cured dental materials.

## OPTIONAL TACKING TIP

Autoclavable tacking tips (1 mm and 2 mm openings) are available for veneer procedures. Simply place over the lens cap.



# IN-OFFICE WHITENING

The full arch bleaching LED attachment is designed for use as an adjunct to in-office whitening systems such as Pola Office+.

## NO UV EMISSIONS

Unlike many other bleaching lights on the market, the Radii Plus Bleaching LED attachment does not emit any harmful ultraviolet light.

## UNLIMITED NUMBER OF USES

Whilst some other companies require the purchase of a special in-office whitening system for use with their light, the Radii Plus is suitable for use with most whitening products.

## LIGHTWEIGHT, CORDLESS AND COMPACT

When the assembled unit is attached to the bleaching stand you can move it around and position where needed with ease. The entire unit can be safely put away in your cupboard.

## SAFE HEAT EMISSIONS

Some bleaching lights on the market emit high temperatures that may cause pulpal necrosis. The Bleach Arch LED attachment emits a safe temperature of  $37^{\circ}\text{C} \pm 2^{\circ}\text{C}$ .



Full Arch bleaching LED attachment



Bleach Arch Stand



# TRANSILLUMINATION



The diagnostic LED attachment lights up those hard to see clinical problems that traditional examination procedures can not. It employs a non-invasive technique and is a must have for all dental practices.

## EARLY DETECTION

The Radium Plus diagnostic LED attachment emits a safe white light which passes through tooth structure. A healthy tooth has an index of light transmission greater than that of decay or calculus. The diagnostic attachment is a great tool to assist you with early caries management.

## SAFE

The Radium Plus diagnostic LED attachment is ideal for patients who are not suitable for radiographs.

## ADJUSTABLE BRIGHTNESS

Depending on your requirements, brightness of the light can be altered from high to low by holding down the on/off button.

## OPTIONAL DIAGNOSTIC ADAPTER TIP

Should a finer beam of light be required to illuminate sites where access is difficult, an adapter tip is also available. Simply replace the lens cap with this adapter.



Diagnostic Adapter Tip

## EASILY IDENTIFY:

.....  
CRACKED TOOTH SYNDROME

.....  
DEPTH OF A SUBGINGIVAL FRACTURE

.....  
SUBGINGIVAL CALCULUS

.....  
INTERPROXIMAL DECAY

.....  
CARIES, WHERE THE RADIOGRAPHIC IMAGE IS QUESTIONABLE

.....  
CARIES REMOVAL WITHIN A NEW PREPARATION

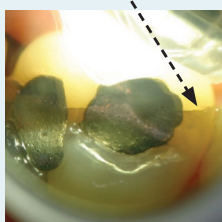
.....  
HIDDEN ROOT CANAL OPENINGS

.....  
NON-VITAL TEETH

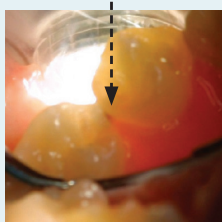
.....  
LEAKING RESTORATIONS

.....  
ROOT TIPS IN SURGICAL EXTRACTIONS

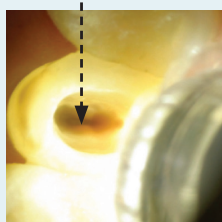
Fracture line



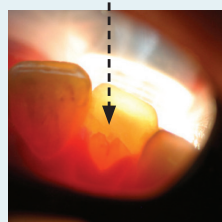
Interproximal decay



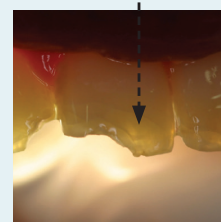
Canal opening



Fracture line







Internal fracture

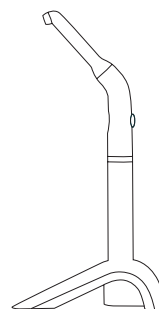


Photos courtesy of Dr John Comisi DDS, NY, USA

# SUMMARY OF LED ATTACHMENTS AVAILABLE

LED attachment type	Indications	Program	Wave length	Warranty
 <p>Contra angle standard LED attachment (comes standard in kit)</p>	Light curing at contra angle similar to a hand piece	<ul style="list-style-type: none"> <li>• Run time: 1 minute</li> <li>• Beeps every 10 seconds</li> </ul>	440~480 nm	3 years
 <p>Right angle standard LED attachment</p>	Light curing at right angle	<ul style="list-style-type: none"> <li>• Run time: 1 minute</li> <li>• Beeps every 10 seconds</li> </ul>	440~480 nm	3 years
 <p>Orthodontic LED attachment</p>	Light curing specifically for orthodontic use	<ul style="list-style-type: none"> <li>• Run time: 5 minutes</li> <li>• Beeps every 10 seconds</li> </ul>	440~480 nm	3 years
 <p>Diagnostic LED attachment</p>	Detection of cracks, fractures, calculus, decay, caries, root canal openings, non-vital teeth, leaking restorations and root tips	<ul style="list-style-type: none"> <li>• Run time: 5 minutes</li> </ul>	400~750 nm	3 years
 <p>Full arch bleaching LED attachment</p>	<ul style="list-style-type: none"> <li>• In-office whitening of upper and lower arch</li> <li>• Vital and non-vital whitening procedures</li> </ul>	<ul style="list-style-type: none"> <li>• Run time: 8 minutes</li> <li>• Beeps every 10 seconds</li> </ul>	440~480 nm	2 years

# ORDER DETAILS



## RADII PLUS LED CURING LIGHT

<b>Radii Plus LED curing light</b>	5600202
- 1 x handpiece	
- 1 x charger	
- 1 x multi-region plug pack	
- 100 x barrier sleeves	
- 3 x lens caps	
- 5 x light shields	
<b>Full Arch Bleaching LED attachment kit</b>	5600092
(for use on Radii Plus units with serial no. above 3-34900)	
- Full Arch Bleaching LED attachment	
- 2 x light shields	
- 50 x barrier sleeves	
<b>Diagnostic LED Attachment</b>	5600268
(for use on Radii Plus units with serial no. above 3-21745)	
<b>Orthodontic (Ortho) LED attachment</b>	5600259
<b>Right angle standard LED attachment</b>	5600260
<b>Contra angle standard LED attachment</b>	5600276

## ACCESSORIES AND REPLACEMENT PARTS:

<b>Radii Plus replacement lens caps (25 pack)</b>	5600054
<b>Radii Plus barrier sleeves (1000 pack)</b>	5600055
<b>Radii Plus light shield (5 pack)</b>	5600056
<b>Radii Plus replacement battery pack</b>	5600062
<b>Radii Plus control section</b>	5600261
<b>Radii Plus charger and plug pack</b>	5600065
<b>Bleach arch stand</b>	5600095
<b>Bleach arch barrier sleeves (50 pack)</b>	5600093
<b>Bleach arch light shield (5 pack)</b>	5600094
<b>Diagnostic Adapter Tip</b>	5600078
<b>Tacking Tips set (1mm and 2mm openings)</b>	5600079

## LED RADIOMETER

The Radii Plus unit already comes with a built-in intensity indicator. A separate unit, the LED Radiometer is also available to provide an instant digital reading.	5600028
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## ADVANTAGES

5 year warranty\*

Pulse technology = High intensity  
1500 mW/cm<sup>2</sup> plus low heat emission

Interchangeable LED attachments for curing, transillumination and whitening

Stays charged for 1200 ten second cures (equivalent to 3 h 20 min continuous cure)

Cordless, ergonomic design

Easy to reach all areas of the mouth  
- 360 degree head rotation

Up to 6 mm depth of cure

Advanced heat sink technology  
- no fan required

Lightweight - 6.2 oz/177 g

Choice of mode - 'ramp' or 'no ramp'

Built in intensity indicator

\*5 year warranty on all parts except battery and full arch bleaching LED attachment which is 2 years.

^ Not applicable to orthodontic attachment

\*\* Please refer to the chart for the warranty of optional LED attachments



YOUR SMILE. OUR VISION.



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