# radii plus

HIGH POWERED CORDLESS LED CURING LIGHT

KABELLOSES LICHTPOLYMERISATIONSGERÄT MIT LED-TECHNOLOGIE

FOTOPOLIMERIZADOR LED SEM FIO DE ALTA ENERGIA

UNIDAD LED FOTOCURADO INALAMBRICA DE ALTA POTENCIA

LAMPE À PHOTOPOLYMERISER SANS FIL DE HAUTE PUISSANCE À TECHNOLOGIE LED

LAMPADA FOTOPOLIMERIZZATRICE AL LED SENZA FILI

HIGH POWER DRAADLOOS LED POLYMERISATIELAMP

STÆRK LEDNINGSFRI LED HÆRDELAMPE

TRÅDLØS HERDELAMPE MED HØY EFFEKT

SLADDLÖS LJUSHÄRDNINGSLAMPA MED HÖG EFFEKT

ΥΨΗΛΗΣ ΙΣΧΥΟΣ ΦΩΣ ΦΩΤΟΠΟΛΥΜΕΡΙΣΜΟΥ LED, ΧΩΡΙΣ ΚΑΛΩΔΙΟ



TUGEVA VÕIMSUSEGA JUHTMEVABA LED LAMP

JAUDĪGA BEZVADU DIOŽU POLIMERIZĀCIJAS LAMPA

DIDELIO GALINGUMO BELAIDĖ DIODINĖ KIETINIMO LEMPA

VYSOCE VÝKONNÁ LED POLYMERAČNÍ LAMPA

YÜKSEK LED GÜÇLÜ KABLOSUZ IŞINLI CİHAZ

高出カコードレスLED重合ライト

強力無線LED冷光筆









Contra angle x

# not just a powerful LED curing light

# 





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!

# > Basic features

# High intensity - 1,500mW/cm<sup>2</sup>

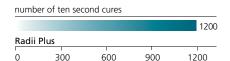
The higher the intensity, the more the light penetrates to efficiently cure the restorative.

# 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. Its can be used for 1200 ten second cures with just one charge.



## 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 radiometer**

The Radii Plus' built-in radiometer 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.

# > Curing



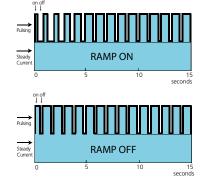
# Ramp mode (soft start)\*

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\*\*

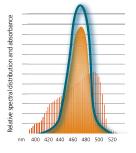
The Radii Plus' robust and reliable construction assures your investment is long lasting. The standard Radii Plus unit has a 5 year warranty. The battery section has a 2 year warranty.

# 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 (1mm and



2mm openings) are available for veneer procedures. Simply place over the lens cap.

# > In-office whitening



The single tooth and full arch bleaching LED attachments are designed for use as an adjunct to in-office tooth whitening systems such as Pola Office+.

## No UV emissions

Unlike many other bleaching lights on the market, the Radii Plus Bleaching LED attachments do 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.



Full Arch Bleaching LED attachment



Single Tooth Bleaching LED attachment

# 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  $37^{\circ}C \pm 2^{\circ}C$ and the single tooth bleaching attachment will heat to  $45^{\circ}$ C ±  $2^{\circ}$ C.

# > Transillumination



The diagnostic LED attachment lights up those hard to see clinical problems that traditional examination procedures can not. It employs a noninvasive technique and is a

must have for all dental practices.

# Early detection

The Radii 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 Radii 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.

# 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

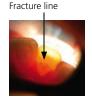


Interproximal decay



Canal opening





Internal fracture



Photos courtesy of Dr John Comisi DDS, NY, USA

# > Summary of LED attachments available

LED attachment type	Indications	Program	Wave length	Warranty
Contra angle standard LED attachment (comes standard in kit)	<ul> <li>Light curing at contra angle similar to a hand piece</li> </ul>	<ul><li>Run time: 1 minute</li><li>Beeps every</li><li>10 seconds</li></ul>	440~480nm	5 years
Right angle standard LED attachment	Light curing at right angle	Run time: 1 minute     Beeps every 10     seconds	440~480nm	5 years
Orthodontic LED attachment	Light curing specifically for orthodontic use	<ul><li>Run time:</li><li>5 minutes</li><li>Beeps every</li><li>10 seconds</li></ul>	440~480nm	5 years
Diagnostic LED attachment	<ul> <li>Detection of cracks, fractures, calculus, decay, caries, root canal openings, non-vital teeth, leaking restorations and root tips</li> </ul>	• Run time: 5 minutes	400~750nm	5 years
Full arch bleaching LED attachment	<ul> <li>In-office whitening of upper and lower arch</li> <li>Vital and non-vital whitening procedures</li> </ul>	<ul><li>Run time: 8 minutes</li><li>Beeps every minute</li></ul>	440~480nm	2 years
Single tooth bleaching LED attachment	<ul> <li>In-office whitening of one tooth at a time</li> <li>Vital and non-vital whitening procedures.</li> </ul>	<ul><li>Run time: 30 minute</li><li>Beeps every 30 seconds</li></ul>	440~480nm	5 years

## Radii Plus LED curing light

- 1 x handpeice
- 1 x charger
- 1 x multi-region plug pack
- 100 x barrier sleeves
- 3 x lens caps
- 5 x light shields

Full Arch Bleaching LED attachment kit 5600092 (for use on Radii Plus units with serial numbers above 3-34900)

5600202

- Full Arch Bleaching LED attachment
- 2 x light shields
- 50 x barrier sleeves

Diagnostic LED Attachment	5600268			
(for use on Radii Plus units with serial numbers above 3-21745)				
Orthodontic (Ortho) LED attachment	5600259			
Right angle standard LED attachment	5600260			
Contra angle standard LED attachment	5600276			
Single tooth Bleaching LED attachment	5600258			

## Accessories and replacement parts:

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



LED Radiometer 5600028

The Radii Plus unit already comes with a built-in radiometer. A separate unit, the LED Radiometer is also available to provide an instant digital reading. The unit is specially calibrated for any LED curing light.



- \* Not applicable to orthodontic LED attachment
- \*\* Please refer to the chart for the warranty of optional LED attachments.

# Technical data for standard Radii Plus unit.

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

- wavelength range: 440 nm 480 nm
- peak wavelength range: 460 nm
- RAMP mode elapsed time
- to full intensity:
- light intensity:

- duration of continuous use: NO RAMP mode:

RAMP mode:

- total continuous run time

60 seconds 65 seconds

5 seconds

with fully charged battery:

3 hours 20 minutes

1500 mW/cm<sup>2</sup> (peak)

- dimensions:

22mm diameter x 243mm long

weight:battery:

177g /6.2 ounces 2 x 4.2V Lithium Ion – 1400 mAh

# Multi-region plug pack

- AC input 100-240V ~ 1.0A, 50 - 60 Hz - DC output: 12V, 1.5A & 15W Max

- dimensions

(not including region pins): 38mm high x 45mm wide x 70mm long

- weight: 104g / 3.65 ounces

# Charger

time to charge battery:
 operating temperature:
 total height with handpiece inserted:
 255mm

- dimensions: 70mm wide x 40mm high x 130mm long

- weight 84g / 3 ounces





