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
STÆRKLÆNEDSFRI LED HÆRDELAMPE
TRÅDLÖS HERDELAMPE MED HÖY EFFEKT
SLADDLÖS LJUSHÄRDNINGSLAMPA MED HÖG EFFEKT
ΨΗΛΗΣ ΙΣΧΥΟΣ ΦΩΣ ΦΩΤΟΠΟΛΥΜΕΡΙΣΜΟΥ LED, ΧΩΡΙΣ ΚΑΛΩΔΙΟ
BEZPRZEWODOWA LAMPA POLIMERYZACYJNA LED O WYSokiej MOCy
TUUGeva ṆIMSUSEGA JUHTMEVABA LED LAMPA
JAUDĪGA BEZVADU DIOŽU POLIMERIZĀCIJAS LAMPA
DIDELIO GALINGUMO BELAIDĖ DIODINĖ KIETINIMO LEMPA
VYSOCE VÝKONNÁ LED POLYMERAČNÍ LAMPA
YÜKSEK LED GÜÇLÜ KABLOSUZ IŞINLI CİHAZ

高出力コードレス L E D 重合ライト
強力無線LED冷光筆
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!

not just a powerful LED curing light

radii plus

radii plus
Basic features

**High intensity - 1,500mW/cm²**
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.

<table>
<thead>
<tr>
<th>number of ten second cures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radii Plus</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>300</td>
</tr>
<tr>
<td>600</td>
</tr>
<tr>
<td>900</td>
</tr>
<tr>
<td>1200</td>
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</table>

**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 whatever 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

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

**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.

**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.

**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.

**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.

**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°C ± 2°C and the single tooth bleaching attachment will heat to 45°C ± 2°C.

> 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 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

Photos courtesy of Dr John Comisi DDS, NY, USA
## Summary of LED attachments available

<table>
<thead>
<tr>
<th>LED attachment type</th>
<th>Indications</th>
<th>Program</th>
<th>Wave length</th>
<th>Warranty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contra angle standard LED attachment (comes standard in kit)</td>
<td>• Light curing at contra angle similar to a hand piece</td>
<td>• Run time: 1 minute</td>
<td>440–480nm</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Beeps every 10 seconds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right angle standard LED attachment</td>
<td>• Light curing at right angle</td>
<td>• Run time: 1 minute</td>
<td>440–480nm</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Beeps every 10 seconds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthodontic LED attachment</td>
<td>• Light curing specifically for orthodontic use</td>
<td>• Run time: 5 minutes</td>
<td>440–480nm</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Beeps every 10 seconds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic LED attachment</td>
<td>• Detection of cracks, fractures, calculus, decay, caries, root canal openings, non-vital teeth, leaking restorations and root tips</td>
<td>• Run time: 5 minutes</td>
<td>400–750nm</td>
<td>5 years</td>
</tr>
<tr>
<td>Full arch bleaching LED attachment</td>
<td>• In-office whitening of upper and lower arch</td>
<td>• Run time: 8 minutes</td>
<td>440–480nm</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Vital and non-vital whitening procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Beeps every minute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single tooth bleaching LED attachment</td>
<td>• In-office whitening of one tooth at a time</td>
<td>• Run time: 30 minutes</td>
<td>440–480nm</td>
<td>5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Vital and non-vital whitening procedures</td>
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<td></td>
<td></td>
<td>• Beeps every 30 seconds</td>
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</tbody>
</table>
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: 5 seconds
- light intensity: 1500 mW/cm² (peak)
- 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: 22mm diameter x 243mm long
- weight: 177g / 6.2 ounces
- battery: 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: 60 – 180 minutes
- operating temperature: 10°C - 40°C
- total height with handpiece inserted: 255mm
- dimensions: 70mm wide x 40mm high x 130mm long
- weight: 84g / 3 ounces

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

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