

# SDI RADIIXPERT LED ATTACHMENTS

ENGLISH

## INSTRUCTIONS FOR USE

### STANDARD LED ATTACHMENT MULTIWAVE LED ATTACHMENT DIAGNOSTIC LED ATTACHMENT ORTHODONTIC LED ATTACHMENT FULL ARCH BLEACHING LED ATTACHMENT

Thank you for purchasing this LED attachment for the Radii Xpert LED curing light. For operation and safety for the actual Radii Xpert LED curing light, please refer to the instruction manual contained in the kit. This manual only details safe operation in relation to the LED attachment purchased.

#### HOW TO CHANGE THE LED

To change the LED attachment, carefully pull off the attachment from the handpiece and click in a new LED attachment.

### STANDARD LED ATTACHMENT

The Standard LED attachment provides light curing at contra angle.

Status ring indicator: Blue

Run time: 2, 10, 20 seconds as selected. The light can be terminated prior to this time by pressing the (top button) once. Beeps at completion.

### MULTIWAVE LED ATTACHMENT

The Standard LED attachment provides wavelength ranges from 395 to 480 nm, making it suitable for polymerization of a variety of restorative materials. The wavelength range of the Multiwave LED attachment covers the absorbance spectrum of composites containing photoinitiators such as benzoyl peroxide, benzoin phenyl-propionate (PPD), acyl phosphine oxide (e.g. Lucirin TPO) or Ivocerin®.

Status ring indicator: Violet

Run time: 2, 10, 20 seconds as selected. The light can be terminated prior to this time by pressing the (top button) once. Beeps at completion.

### OPERATION (STANDARD AND MULTIWAVE ATTACHMENT) - 0.7mm

1. Remove the Radii Xpert handpiece from the charging dock and place a hygienic barrier sleeve.

Note: Ensure the Radii Xpert barrier sleeve fits flush over the lens without wrinkling/folds. The barrier sleeve should be positioned down the sides of the attachment and handpiece.

2. Rotate the curing tip to desired position.

3. Press (top button) to activate the curing light will illuminate to assist you to position the curing tip in the oral cavity. When the tip is in the correct position, release your finger tip and curing will commence. Status ring turns solid blue when the standard curing tip attached. The LCD displays 20, counting down to 0.

4. One long beep will sound when curing finishes and the status ring goes OFF.

5. Press (top button) to start another 20 second cure.

To change preset curing time (temporarily setting), press (bottom button) and hold for 1-2 seconds. Numbers on LCD start flashing.

6. Press (top button) to scroll up through the options from last setting used. 2, 10 and 20 seconds are available.

7. Press (top button) once to select. Numbers on LCD stop flashing.

8. Discard barrier sleeve after each patient.

9. Clean and sanitize the handpiece. See "CLEANING THE RADIIXPERT" section in this manual.

How to set favourite curing time

1. Press (top button) and hold for 1-2 seconds. Numbers on LCD start flashing.

2. Press (top button) to scroll up through the options from last setting used.

3. Press (top button) and hold for 1-2 seconds. Numbers on LCD stop flashing.

Status ring illuminates solid green for 2 seconds with one short beep, to confirm selection is saved.

4. A star appears on the bottom left of the LCD screen. Unit is ready to use.

How to delete a favourite setting and return to factory setting

Place the handpiece on the charging dock. Press (top & bottom button) simultaneously for 1-2 seconds, then status ring illuminates solid yellow for 4 seconds and returns to factory setting.

### DIAGNOSTIC LED ATTACHMENT

The Radii Xpert diagnostic LED attachment provides transmission to assist clinical diagnosis. Transillumination is a very effective, inexpensive and quick way of detecting some dental problems, such as fractures, caries, interproximal caries, subgingival caries, root canal openings, leaking restoratives and non-vital teeth.

Status ring indicator: White

Run time: 5 minutes. The light can be terminated prior to this time by pressing the (top button) once. Beeps at completion.

1. Remove the Radii Xpert handpiece from the charging dock and click in the Diagnostic LED attachment. Place a hygienic barrier sleeve.

Note: Ensure the Radii Xpert barrier sleeve fits flush over the lens without wrinkling/folds. The barrier sleeve should be positioned down the sides of the attachment and handpiece.

2. Rotate the tip to desired position.

3. Press (top button) to activate the light. The LCD displays 5 minutes, counting down to 0.

4. One long beep will sound when illumination finishes and the status ring goes OFF. Light brightness

The brightness of the light can be adjusted to the desired level. Low, medium or high intensity selections are available. The illumination of the Diagnostic LED attachment has a factory default setting of medium.

1. Press (top button) and hold for 1-2 seconds. (intensity bar) on LCD starts flashing.

2. Press (top button) again, to scroll through to your desired brightness.

3. Press (top button) once to select. (intensity bar) will stop flashing.

4. When placed back in the charger, the brightness of the light will return to the factory default setting (medium).

How to set a favourite setting

1. Press (top button) and hold for 1-2 seconds. Numbers on LCD start flashing.

2. Press (top button) to scroll up through the options from last setting used.

3. Press (top button) and hold for 1-2 seconds to save. Numbers on LCD stop flashing. Status ring illuminates solid green for 2 seconds with one short beep, to confirm selection is saved.

4. A star appears on the bottom left of the LCD screen. Unit is ready to use.

How to delete a favourite setting and return to factory setting

Place the handpiece on the charging dock. Press (top & bottom button) simultaneously for 1-2 seconds, then status ring illuminates solid yellow for 4 seconds and returns to factory setting.

### ORTHODONTIC LED ATTACHMENT

The Orthodontic LED attachment is designed for use by orthodontists to better suit their clinical needs in applications such as the efficient bonding of brackets.

Status ring indicator: Blue

Run time: 5 minutes or 10 seconds as selected. The light can be terminated prior to this time by pressing the (top button) once. Beeps at completion. Factory default setting is 5 minutes.

1. Remove the Radii Xpert handpiece from the charging dock and click in the Orthodontic LED attachment. Place a hygienic barrier sleeve.

Note: Ensure the Radii Xpert barrier sleeve fits flush over the lens without wrinkling/folds. The barrier sleeve should be positioned down the sides of the attachment and handpiece.

2. Rotate the tip to desired position.

3. Press (top button) to activate the curing cycle. LCD displays 5 minutes, counting down to 0.

4. One long beep will sound when curing finishes and the status ring goes OFF.

Changing the run time selection

1. Press (top button) and hold for 1-2 seconds. Numbers on LCD will start flashing.

2. Press (top button) to scroll up through the options from last setting used.

3. Press (top button) and hold for 1-2 seconds to save. Numbers on LCD stop flashing. Status ring illuminates solid green for 2 seconds with one short beep, to confirm selection is saved.

4. A star appears on the bottom left of the LCD screen. Unit is ready to use.

How to delete favourite setting and return to factory setting

Place the handpiece on the charging dock. Press (top & bottom button) simultaneously for 1-2 seconds, then status ring illuminates solid yellow for 4 seconds and returns to factory setting.

### FULL ARCH BLEACHING ATTACHMENT

The Full Arch Bleaching LED attachment is designed for acceleration of in-office tooth whitening materials such as

Operating instructions  
Prior to using the Radii Xpert with this LED attachment, please ensure the battery is fully charged.  
1. Insert LED attachment into the control section of the Radii Xpert.  
2. Cover unit with a barrier sleeve.  
3. Place light shield over the sleeve arch.  
4. Once assembled, the unit can be operated by hand, or attached to the Radii Xpert Bleach Stand.  
NOTE: Barrier sleeve must be essential wear cross-contamination and provide protection for the light.  
5. Apply in-office bleaching material such as Pola Office or Pola Office+ as per manufacturer's instructions.  
6. Position the Radii Xpert bleaching light no more than 5-mm above the prepared teeth undergoing bleaching. If using the Radii Xpert Bleach Stand, use the various adjustable knobs to position accordingly.  
7. Press (top button) to activate the bleaching light. LCD displays 8 minutes, counting down to 0.  
8. One long beep will sound on completion and the status ring goes OFF.  
NOTE: The temperature emitted by the bleaching light reaches 37°C + 2°C (89.76°F + 3.5°F).  
9. Recharge the battery after completing one patient's treatment.  
NOTE: From a full charge, Radii Xpert gives up to seven 8-minute cycles before it requires battery charging.

Changing the run time selection

1. Press (top button) and hold for 1-2 seconds. Numbers on the LCD will start flashing.

2. Press (top button) again, to scroll through the run time selections of 8, 10 and 15 minutes. Press (top button) to select.

When placed back in the charger, run time selection will return to the factory default setting (8 minutes).

How to set a favourite setting

1. Press (top button) and hold for 1-2 seconds. Numbers on LCD start flashing.

2. Press (top button) to scroll up through the options from last setting used.

3. Press (top button) and hold for 1-2 seconds to save. Numbers on LCD stop flashing. Status ring illuminates solid green for 2 seconds with one short beep, to confirm selection is saved.

4. A star appears on the bottom left of the LCD screen. Unit is ready to use.

How to delete a favourite setting and return to factory setting

Place the handpiece on the charging dock. Press (top & bottom button) simultaneously for 1-2 seconds, then status ring illuminates solid yellow for 4 seconds and returns to factory setting.

### CLEANING THE RADIIXPERT

The ideal way to protect patients from cross-infection is to utilize Radii Xpert barrier sleeves. Barrier sleeves are also essential to keep the Radii Xpert clean.

Note: Ensure the Radii Xpert barrier sleeve fits flush over the lens without wrinkling/folds. The barrier sleeve should be positioned down the sides of the attachment and LED attachment are connected as one unit.

LIQUID CONTACT WITH TERMINALS OF HANDPIECE AND CHARGER WILL CAUSE DAMAGE VOIDING WARRANTY.

LIQUID CONTACT WITH WELD WILL CAUSE DAMAGE VOIDING WARRANTY.

LIQUIDS MUST NOT ENTER ANY PART OF THE HANDPIECE OR CHARGER.

DO NOT SPRAY LIQUIDS DIRECTLY ONTO, OR APPLY COIPOSIS AMOUNTS OF LIQUIDS TO THE RADIIXPERT.

DO NOT AUTOCLEAN THE RADIIXPERT.

General surface cleaning

General surface cleaning can be conducted with anti-microbial surface disinfectant. Chlorhexidine 0.12% or 0.2% (1:1000) or 70% isopropyl alcohol. When applying the disinfectant to any component of the device, spray the disinfectant agent onto a piece of cloth and wipe over the device areas to be cleaned.

### SAFETY AND PRECAUTIONS

The safe operation of this unit depends on strictly following the operating instructions in this manual. The Manufacturer accepts no liability for any damage arising from the use of this unit for any other purpose than the polymerization of dental restorative materials.

Automatic shut-off function

Should the LED attachment become too hot due to excessive use, the status ring indicator will show one red flash, then automatically shut off and be unusable for approximately 1 minute until it cools down.

CAUTION!

Irradiation of the eyes bears an inherent health risk. Hence, the light must not be directed towards the eyes. Exposure must be restricted to the area of the oral cavity in which clinical treatment is intended. Blue-light emitting diode goggles should be used. The Radii Xpert emits a high intensity light and intensive heat. Goggles should be worn and should be replaced if they become damaged. This exposure may cause damage or irritation. The emitted light should be placed directly above the material to be cured. If applicable cover soft tissue areas.

Do not use the Radii Xpert in patients who are users with:  
1. Heart pacemaker implants who have been advised to be cautious regarding their exposure to small electrical devices.

A history of photo biological reactions (including individuals with photosensitive drug reactions or erythropoietic protoporphyria or who are currently on photo-sensitising medication (including 8-methoxypsoralen or dimethylchloroacetraline).

A history of cataract surgery. These people may be particularly sensitive to the exposure to light and should be discouraged from Radii Xpert treatment unless adequate safety measures, such as the use of protective goggles to remove blue light, are undertaken.

A history of retinal disease. These people should seek advice from their ophthalmologist prior to operating the unit. In operating the Radii Xpert unit, this group of individuals must take extreme care and comply with all safety precautions (including the use of suitable light-filtering safety goggles).

WARRANTY PERIOD

SDI Ltd, the Manufacturer, extends the following warranty periods:

• Three (3) year warranty for the Radii Xpert Standard, Diagnostic and Orthodontic attachments.

• Two (2) year warranty for the Radii Xpert Full Arch Bleaching attachment.

Warranty covers defects in materials or workmanship to the original purchaser of this product. The Manufacturer agrees to correct any defects which develop within the warranty period either by repair or replacement, at its option. This warranty is valid providing factory inspection indicates that any such defect developed during normal and proper use subject to the conditions below.

• Please fill out the warranty card included in the kit and send promptly back to SDI Ltd with proof of purchase. Failure to do so may void warranty claim.

• A claim for damage in shipment should be filed promptly with the transportation company.

• All shipments claimed defective can only be returned to the Manufacturer (www.sdi.com.au) or authorised service personnel.

• All returned products must be accompanied by a full description of discrepancy or malfunction.

• Only SDI Ltd authorised service personnel are allowed to carry out repairs to Radii Xpert. Manufacturer shall be released from all obligations under this warranty if repairs or modifications are made by persons other than Manufacturer's own or authorised service personnel.

• Manufacturer shall be released from any damage resulting from the use of third-party replacement parts.

• Manufacturer shall be released from any consequential damages arising from the misuse of the product.

• Only the above stated warranty shall be applicable, and all other warranties, expressed or implied, are hereby excluded.

All correspondence concerning the product should specify the model and serial number.

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# SDI RADIIXPERT LED-AUFSÄTZE

DEUTSCH

## GEBRUCHSANWEISUNG

### Standard-LED-Aufsatz MULTIWAVE-LED-Aufsatz Diagnostik-LED-Aufsatz Kieferorthopädie-LED-Aufsatz Zahnbogen-Bleaching-LED-Aufsatz

Vielen Dank für den Kauf dieses LED-Aufsatzes für die Radii Xpert LED-Polymerisationslampe. Zur Bedienung und Sicherheit der Radii Xpert bitte die mitgelieferte Gebrauchsanweisung lesen. Die Radii Xpert enthält nur eine Anleitung zum sicheren Betrieb des erworbenen LED-Aufsatzes.

Zum Wechseln des LED-Aufsatzes sind vorsichtig vom Handstück abzuziehen und einen neuen LED-Aufsatz einzusetzen lassen.

NOTE: From a full charge, Radii Xpert gives up to seven 8-minute cycles before it requires battery charging.

Changing the run time selection

1. Press (top button) and hold for 1-2 seconds. Numbers on LCD will start flashing.

2. Press (top button) again, to scroll through the run time selections of 8, 10 and 15 minutes. Press (top button) to select.

When placed back in the charger, run time selection will return to the factory default setting (8 minutes).

How to set a favourite setting

1. Press (top button) and hold for 1-2 seconds. Numbers on LCD start flashing.

2. Press (top button) to scroll up through the options from last setting used.

3. Press (top button) and hold for 1-2 seconds to save. Numbers on LCD stop flashing. Status ring illuminates solid green for 2 seconds with one short beep, to confirm selection is saved.

4. A star appears on the bottom left of the LCD screen. Unit is ready to use.

How to delete a favourite setting and return to factory setting

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### STANDARD-LED-AUFSATZ

Der Standard-LED-Aufsatz liefert Licht zur Beschleunigung der in-office Zahnlackaufhellung.

Statusring-Anzeige: Blau

Laufzeit: 2, 10 und 20 Sekunden wählbar. Die Belichtung kann vorzeitig beendet werden, dazu einmal (obere Taste) drücken. Am Ende ist ein Signalton zu hören.

Wie Sie Ihren gewünschten Modus wählen können

1. (1-2 Sekunden gedrückt halten. Die Zahlen am Display blinken nun.

2. Drücken, um von der zuletzt verwendeten Einstellung durch die Optionen nach oben zu scrollen.

3. Drücken, um einen neuen 20-Sekunden-Zyklus zu starten.

4. Ein Stern erscheint unten links auf dem Display. Das Gerät ist betriebsbereit.

Bevorzugte Polymersationszeit einstellen

1. (1-2 Sekunden gedrückt halten. Die Zahlen am Display blinken nun.

2. Drücken, um von der zuletzt verwendeten Einstellung durch die Optionen nach oben zu scrollen.

3. Drücken, um Speichern der Auswahl (1-2 Sekunden gedrückt halten. Die Zahlen am Display blinken nicht mehr. Der Statusring leuchtet 2 Sekunden dauerhaft grün, und ein kurzer Signalton ist zu hören; dies bestätigt die Speicherung.

4. Ein Stern erscheint unten links auf dem Display. Das Gerät ist betriebsbereit.

Bevorzugte Einstellung löschen und zur Werkseinstellung zurückkehren

Handstück in die Ladestation stellen. (obere & untere Taste) 1-2 Sekunden gleichzeitig drücken, dann leuchtet der Statusring 4 Sekunden dauerhaft gelb, und die Werkseinstellung wird wiederhergestellt.

REINIGUNG DER RADIIXPERT

Die Radii Xpert Schutzhüllen sind ideal zur Vermeidung von Kreuzinfektionen bei Patienten. Zudem sind sie leicht zu reinigen. Die Radii Xpert enthält nur eine Anleitung zum sicheren Betrieb des erworbenen LED-Aufsatzes.

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### ZAHNBOGEN-BLEACHING-AUFSATZ

Der Zahnbogen-Bleaching-LED-Aufsatz dient zur Beschleunigung von Zahnaufhellungen in der Praxis mit Materialien wie Pola Office oder Pola Office+.

Statusring-Anzeige: Cyan

Laufzeit: 8, 10 und 15 Minuten wählbar. Die Belichtung kann vorzeitig beendet werden, dazu einmal (obere Taste) drücken. Bei jeder Wahl ist nach der Hälfte der am Ende der Zeit ein Signalton zu hören. Werkseitig sind 8 Minuten eingestellt.

Bevorzugte Einstellung

Vor Betrieb der Radii Xpert mit diesem LED-Aufsatz bitte sichergestellt sein, dass die LED voll aufgeladen ist.

1. LED-Aufsatz am Bedienteil der Radii Xpert be

