DENTMATE
TECHNOLOGY CO., LTD.

LEDEX™

DENTAL CURING LIGHT

WL-090

Instructions for use

CE

EN

Thank you for choosing DENTMATE LEDEX™ WL-090 Dental curing light. A lot of researches & developments have gone into the manufacturing of this product. We sincerely hope that it will give you many years of trouble-free use. Please read and understand all the instructions before using this equipment, and save this manual for your reference.

IT

Per la progettazione e la realizzazione di questo dispositivo sono stati necessari lunghi studi di ricerca e sviluppo, e ci auguriamo sinceramente che Vi consenta un lungo utilizzo senza problemi. Vi raccomandiamo di leggere completamente tutte le istruzioni prima di usare il dispositivo, e di tenere a disposizione questo manuale per consultazioni future.

DE

Für die LEDEX™ WL-090 Polymerisationslampe wurden ausschließlich hochwertige Materialien verwendet und ist nach neusten Forschungen entwickelt worden. Wir hoffen aufrichtig dass sie Ihnen ein sorgenfreies und angenehmes Arbeiten ermöglicht.
Bitte lesen Sie alle Anweisungen, bevor Sie das Produkt benutzen. Bitte bewahren Sie diese Bedienungsanleitung in Ihrem eigenen Interesse auf.

One Touch, And You Will Enjoy The Powerful Light

Dear Customer,

Thank you for choosing DENTMATE LEDEX™ WL-090 Dental curing light.

A lot of researches & developments have gone into the manufacturing of this product. We sincerely hope that it will give you many years of trouble-free use. Please read and understand all the instructions before using this equipment, and save this instruction for use for your reference.

The instruction for use is subject to change without further notice.

DENTMATE TECHNOLOGY CO., LTD.

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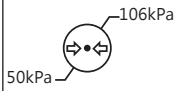
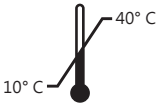
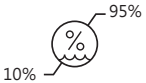
Table of Contents

1. Symbols Used

1.1. In these instructions for use

If the instructions are not followed properly, the operations may lead to hazards for the product or the user/patient.

1.2. On the product/packaging

	Serial number		Catalogue number
	Manufacturer		Date of manufacture
	Class II (AC Adapter)		Consult the Instructions for use
	This shows the Type B applied part.		Do not dispose it with normal household waste
	Recycling	IPX0	Ordinary equipment
	EU-representative		Atmospheric pressure for storage
	Temperature limits		Storage humidity range
	CE marking		Keep dry

2. Product Information

The light has been manufactured with a super-high luminosity 10 W LEDs. The light wavelength of LEDEX™ WL-090 is between 440 and 480 nm and the intensity is up to 3200 mW/cm². It can cure the composite over 2 mm in 1 sec. These characteristics enable the light to polymerize almost all photosensitive composite resins.

LEDEX™ WL-090 dental curing light is characterized by :

7 powerful extensive modes including Low, Ramp, Standard, High, Fast Ortho, Turbo and Plasma modes.

- The turbo light guide rod is made from genuine optical fiber and not inferior acrylic that optimizes light conduction and minimizes loss of light from source to tip. Therefore, it ensures the highest possible intensity of light at the light guide tip.
- Advanced and high efficient cooling heat sink are designed and accompanied with over temperature protection. A thermal protection circuit and safety mode are also designed to protect the light from overheating.
- The automatic memorization of the last operation is another unique feature of the light.
- There is display built-in radiometer and auto sleep designs for saving the energy of the battery.

2.1. Indications for use

LEDEX™ WL-090 is a visible curing unit programmed for polymerization of dental light cured materials by dental professionals.

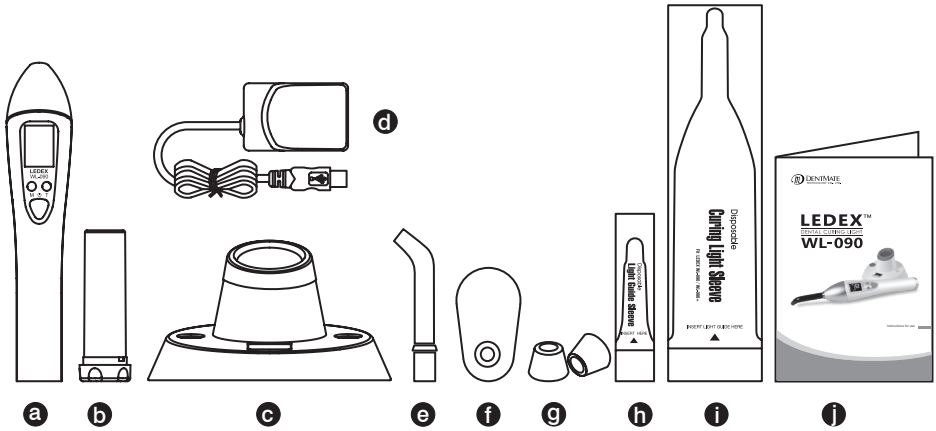
FOR DENTAL USE ONLY!

2.2. Procedure

Please follow the insturction before use. As for handpiece instuctions, please refer to 2.6-2.7. It is required to use the disposable sleeves to prevent cross infection.

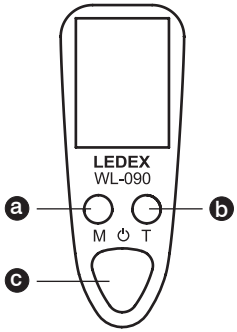
Put the sleeve and cover the handpiece before operation. After conducting a sugery on a patient, please take off the sleeve and throw away, as the sleeve is prohibited to reuse.

2.3. System components



Item	Description	Quantity
a	LEDEX™ WL-090 Handpiece	1
b	Battery (3.6 V/3350 mAh)	1
c	Cradle	1
d	Power supply (Input AC100~240 V, 50-60 Hz, output DC5 V/2 A)	1
e	Optical fiber light guide rod (Ø 11>8 mm)	1
f	Filter	1
g	Anti-glare shield	2
h	Disposable light guide sleeves	20
i	Disposable curing light sleeves	10
j	Instructions for use	1

2.4. Features

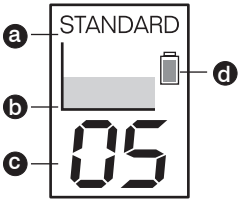


ⓐ MODE : Pressing this button sequentially toggles the unit through the 7 curing modes.

ⓑ TIME : Pressing this button sequentially toggles the unit through the serial curing time.

ⓒ ON-OFF : Pressing this button initiates the selected curing cycle. Pressing this button during the cure cycle will interrupt or end the cycle. If the unit is in the sleep mode, pressing this button will awaken the unit of the curing mode which is last used.

2.5. Display



The display allows different information required by the user.
As shown above, it comprises different zones identified from top to bottom as follows:

ⓐ A display of the curing mode selected.

ⓑ The output mode icons represent the type of light emission.

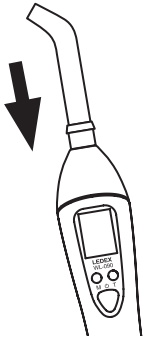
ⓒ There's a display in seconds of the duration of the selected curing cycle. During operation, this countdown display indicates the remaining activation time until the current cycle is completed.

ⓓ A battery charge level indicator is symbolized by a ladder with 0 to 5 levels and charging status.

2.6. Installation and charging

Startup

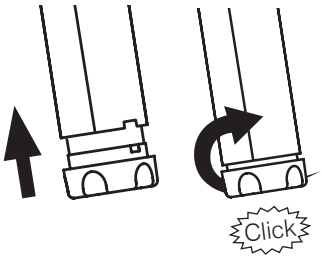
On receipt of the unit, any damages may occur during transportation. If necessary, contact your supplier.



Handpiece

First of all, it is essential that the sterilizable accessories which includes the light guide and protective shield are sterilized and the unit base is disinfected (see the chapter 7).

Remove the protective caps from the handpiece which should to be kept during maintenance to prevent the liquid products from damaging the LEDs. Then and insert the sterilized light guide into the handpiece. Ensure the light guide is properly inserted.

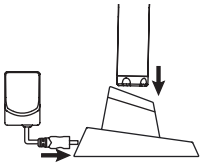


Battery

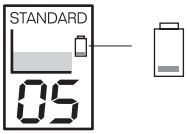
We recommend you to charge the battery fully before the first use.

Put the battery into the handpiece and rotate in the clockwise direction until you hear the sound and feel it clicked into the right place.

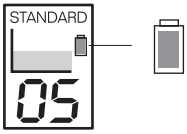
Ensure all the segments of the display are shown. The battery supplied is only charged to about 60% prior to shipment. Each time, charge it fully before using it.



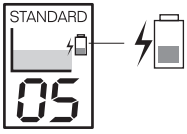
1. Connect the power supply to AC100~240 V electronic socket and plug-in the connector to the cradle. Put the handpiece into the cradle to charge the battery.



2. When the battery is in a low status, the display of the handpiece will glow and show the of low battery sign.



3. When the battery is fully charged, the display of the handpiece will glow and show the of full battery sign.

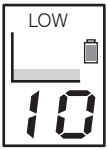
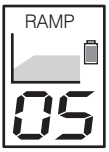
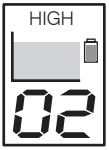
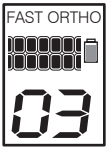
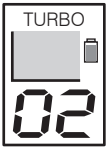


4. When the battery is charging, the display of the handpiece will glow and show the sign of charging battery.

2.7. Operating modes

Each time, disinfect surfaces of the curing light, light probes and, anti-glare cones before using.
Select curing programs and curing time. The curing programs and the curing time can be individually set. LEDEX™ WL-090 is equipped with the following 7 curing programs for different indications. Use the mode selection buttons to choose the curing programs. The display will change accordingly (see Indicators on the handpiece). The device comes equipped with the following preset programs :

Factory settings

Icon	Mode	Curing time duration (sec)	Intensity of light
	LOW	10,20,30,40	600 mW/cm^2 (+/-15%)
	RAMP	5,10,15,20,25,30,35,40	1000 mW/cm^2 (+/-10%)
	STANDARD	5,10,15,20,25,30,35,40	1000 mW/cm^2 (+/-10%)
	HIGH	2,4,6,8,10	1800 mW/cm^2 (+/-10%)
	FAST ORTHO	3,4,5 repeat 10 times	1800 mW/cm^2 (+/-10%)
	TURBO	2,3,4,5	2400 mW/cm^2 (+/-10%)
	PLASMA	1,2,3,4	3200 mW/cm^2 (+/-10%)

Light intensity

Recommended Curing Time (on STANDARD mode)

Fill Materials	Curing time
Universal composite (2 mm depth)	10 seconds
Universal composite (4 mm depth)	20 seconds

**Generally, these recommendations apply to situations. The emission window of the light probe is placed directly over the material in order to be polymerized. Extend the curing time accordingly to increase the distance between the light source and the material.

Recommended curing modes

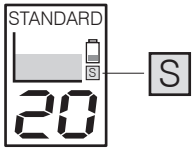
Mode	Application
LOW	Tooth and composite resin.
RAMP	Wide area of composite resin, avoid shrinkage.
STANDARD	Most cases.
HIGH	For orthodontic or pediatric dentistry,
FAST ORTHO	For orthodontic, easy to bond materials.
TURBO	Dental cement, porcelain veneer, fiber post.
PLASMA	

Sound mode

1. Press button M to switch to sound setting. 

2. In sound setting, press button T to switch between Mute and Unmute.
3. Press button M to return to other mode.

Safety status :



When LEDEX™ WL-090 is operated frequently for long periods of time, the temperature may become too high , so the “Safety” mode function will then be activated automatically to protect the light. The safety mode cuts the light intensity in approx. half and extends the irradiation time.

When the temperature becomes quite high, the display of handpiece will glow and show the sign of “Over Heat”.

Auto sleep designed :

LEDEX™ WL-090 will sleeps automatically if no operations are performed for three minutes, the display will be turn off.

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3. Contraindications

For patients who are prone to photobiological reactions :

Do not use the LEDEX™ WL-090 dental curing light for patients with a history of photobiological reactions (including patients with Urticaria solaris or erythropoietic protoporphyria) or those who currently have treatments with photosensitising pharmaceuticals.

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4. Warnings

4.1. User

The handpiece is intended for the polymerization of light-cured materials and is used only by trained and qualified professionals, such as dentists.

4.2. Ambient conditions

Do not place the device in humid surroundings or any places which are close to any liquids.

Do not expose the device to any heat sources. Store the device in a safe environment.

- The device could be operated up to a maximum temperature of 35 °C and up to an altitude of 2,000 m above sea level.
- Do not use the device in the presence of free oxygen, anesthetics or flammable substances.
- The device may interference or interfere with the radio or the operation of the equipment nearby. If this happens, reduce the interference by reorienting and repositioning the device or screening off the immediate environment. The electromagnetic radiation emitted from this device is below the recommended limits specified by the applicable relevant provisions(EN 60601-1-2:2007 & EN 60601-1:2006).
- The device requires special precautions with regard to electromagnetic compatibility (EMC) and it must be installed and operated in strict compliance with the EMC information. Especially, do not use the device in the vicinity of fluorescent lamps, radio transmitters, remote controls, portable or mobile RF communication devices, even if they meet CISPR 8 requirements.
- Do not charge, operate or store the device at high temperatures. Comply it with the specified operating and storage conditions.

4.3. To avoid electric shock (shock hazard)

The LEDEX™ WL-090 Dental Curing Light is an electric device designed to meet the worldwide electrical safety standards, which includes U.S.A. and Europe, so it's safe and effective for all dental applications.

To avoid electric shock:

- Do not attempt to open or alter the unit in any way. Only the service centers authorized by DENTMATE can open the unit housing and repair the device.
- Do not put any foreign objects into the housing of the unit.
- Use only the LEDEX™ WL-090 cradle when recharging this product. Never attempt to use any other devices for recharging.
- Connect the power plug into a suitably grounded and approved outlet. When you use an extend cable, make sure the grounded line is not interrupted.
- Always unplug the charging dock before disinfecting.
- Never use the power supply if the cord has been damaged.

4.4. Heat development (burn hazard)

As it is the case with all high-performance lights, the high light intensity results in a certain heat development. Prolonged exposure near the pulp and soft tissues may result in irreversible or reversible damage. Therefore,this high-performance curing light must be operated by trained professionals.

Note : At least 10 mm gap between soft tissues and optical fiber light guide rod.

4.5. Battery

Use only original spare parts, particularly DENTMATE batteries and charging bases. Do not short circuit battery. Do not store at temperatures above 40 °C / 104 °F(or 60 °C / 140 °F for a short period). Always store batteries charged. The storage period must not exceed 6 months. It may explode if it's disposed of in fire.

4.6. Accessories

Only use original DENTMATE components/accessories and spare parts :

Original DENTMATE accessories
WL-090 Handpiece
Battery (3.6 V/3350 mAh)
WL-090 Cradle
Power supply(Input AC100~240 V, 50-60 Hz, output DC5 V/2 A)
Filter
Optical fiber light guide rod(Ø 11>8 mm)
Anti-glare shield
Disposable light guide sleeve
Disposable curing light sleeves

Using other accessories/spare parts may lead to increased emission of electromagnetic interference or to reduced electromagnetic interference immunity.

4.7. Repairs and defects

Do not use the device if you suspect its damage or defect.

4.8. Transport

Intact devices can be transported by land freight or air freight in the original packaging. The applicable requirements must be met. Defective devices can also be transported by air freight or land freight in the original packaging. If the battery is defective, the device won't be able to be transported by air freight under any circumstances.

5. Precaution

5.1. During operation, the light should be aimed straightly on the resin to ensure solidification effectively.

5.2. Never aim the light directly at unprotected soft tissues because this may lead to injury or irritation. Do not aim the light at eyes. Light reflected from the tooth surface may also injure eyes. Use the protective shield supplied with the unit or suitable, light filtering safety glasses.

6. Troubleshooting

Problem	Resolution
Can not turn on the handpiece	Remove the battery and insert it again. If the error persists, please plug-in the power supply to cradle and charge the battery at least 10 mins. Then push the ON/OFF button again.
Can not charge the battery	Please clean battery contacts. If the error persists, please change a new battery.
Display show "overheat" sign	If the temperature rises up too high, please wait a moment for cooling and then use it.
Display show "Error 1" sign	LED module is unnormal, please contact your qualified technician.
The intensity is too low	If the result of intensity test in Standard mode is under 700 mW/cm^2, and the output is too low, please contact with your dealer.

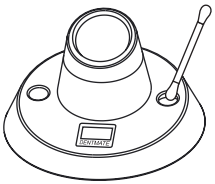
7. Daily Maintenance

Read this entire section before cleaning the unit. This product must be cleaned as normal preparation for each patient to prevent cross infection.
The use of the sleeve is an additional precautionary measure against contamination and does not substitute disinfection of the device.
After using, remove the sleeve. Clean the optical light guide rods and the handpiece with a cloth moisture with alcohol or cleaner. Keep solvents or flammable liquids from the unit because they may damage its plastic housing.
Always keep the charger, handpiece and light guide well. Moisture may cause electrical short-circuit or dangerous malfunction.

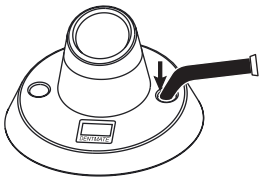
Test the Light Guide Attachment with the Radiometer

Verify the LEDEX™ WL-090 performance each time before using the radiometer which is built into the cradle.

1. The curing time interval should exceed 5 seconds for each cycle.

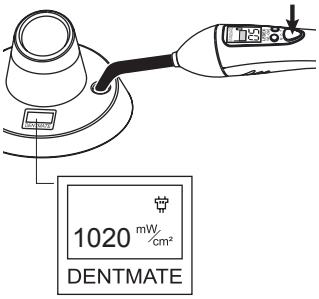


2. Verify the radiometer sensor which can impact the accuracy of the measurement. The surface of sensor area can be wiped with a cotton swab with alcohol.



3. Carefully hold the unit, so the Light Guide Attachment is aligned with the radiometer sensor and centered within the white circle provided.

Tips:
Optical fiber light guide must be horizontal alignment in the middle of the sensor area.



4. While holding the unit, press and release the ON-OFF Button. The radiometer will then provide a reading of the light intensity on the cradle display.

Notice:
The WL-090 built-in radiometer is only suitable for measuring 8 mm optical fiber light guide rod. It will cause incorrect measurement if it uses in other sizes of optical light guide rod.

5. Wait till the light is off before moving the Light Guide Attachment away from the radiometer sensor.

8. Disposal

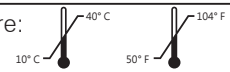
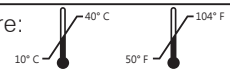
Comply with your national regulations, guidelines and requirements for the disposal of end-of-life electrical equipment and batteries. Specialized dental dealers will be pleased to provide you with country-specific information concerning disposal.
This device is provided with a Li-ion battery. For environmental reasons,please dispose of the device according to local environmental guidelines or regulations. Make sure the product or the battery is not mixed with other types of waste when it is disposed of. Prior to disassembly and disposal, your device has to be completely reprocessed and must not be contaminated.

9. Warranty

DENTMATE TECHNOLOGY Co., Ltd. warrants the product to be free of manufacturing defects for a period of one year from the date of purchase; this is deemed as the date of the invoice. It could be repaired or replaced at its own discretion all equipment failures due to manufacturing defects. However,the followings are expressly excluded from the warranty:

1. Damage and/or failure of the equipment caused by falling and/or jolting during transportation after purchase and/or during the normal use.
2. Damage and/or failure of the equipment caused by natural disasters, such as earthquakes, floods, lightning, pollution, incorrect electrical voltage and voltage spikes.
3. Any attempts to open the hand piece will invalidate the warranty.

10. Product Specifications

Type of Information	Specifications
Dental curing light	Medical equipment
Device name	LEDEX™
Model number	WL-090
Power supply	Input: AC100~240 V, 50-60 Hz Output: DC 5 V/2 A
Battery	3.6 V, 3350 mAh, type: Li-ion
Light source	10 W LED
The range of wavelength	440 to 480 nm ; peak: 460 nm
Radiant intensity	Up to 3200 mW/cm^2 (± 10%)
Hand piece dimensions	Ø38 (max.) x L190 mm
Hand piece weight	180 g (with battery & light guide rod)
Cradle dimensions	Ø115 (max.) x H68 mm
Cradle weight	140 g
Equipment class (AC Adapter)	Class II
Safety	IEC 60601-1
EMC(Electro-Magnetic Compliance)	IEC 60601-1-2
Protection from electric shock	Type B applied part
Protection from ingress of liquids	IPX0
Operation	Continuous operation patient application, duty cycle 40 seconds ON / 120 seconds OFF on STANDARD mode.
Operating environment	Ambient temperature:  Relative humidity:  Atmospheric pressure: 
Storage and transport environment	Ambient temperature:  Relative humidity:  Atmospheric pressure: 

11. EMC Declaration Of Conformity

Important information regarding Electro Magnetic Compatibility (EMC)
with the increased number of electronic devices such as PC's and mobile (cellular) telephones,medical devices in use may be susceptible to electromagnetic interference from other devices. Electromagnetic interference may result in incorrect operation of the medical device and create a potentially unsafe situation. Medical devices should not interfere with other devices, too.
In order to regulate the requirements for EMC (Electro Magnetic Compatibility) with the aim to prevent unsafe product situations, the EN60601-1-2:2007 standard has been implemented. This standard defines the levels of immunity to electromagnetic interferences as well as maximum levels of electromagnetic emissions for medical devices.
This medical device manufactured by DENTMATE conforms to thisEN60601-1-2:2007standard for both immunity and emissions. Nevertheless, special precautions are needed to be observed:

• Do not use mobile (cellular) telephones and other devices which generate strong electrical or electromagnetic fields near the medical device. This may result in incorrect operation of the unit and create a potentially unsafe situation. Keep a minimum distance of 7 m. Verify correct operation of the device in case the distance is shorter.
Further documentation in accordance with EN60601-1-2:2007 is available within this manual referring to section "Manufacturer's Declaration".

12. Manufacturer's Declaration

The LEDEX™ WL-090 is intended for use in the electromagnetic environment specified below. The customer or the user of the LEDEX™ WL-090 should assure that it is used in such an environment.

Electromagnetic Emissions: (IEC60601-1-2)

Emission Test	Compliance	Electromagnetic Environment
RF emission CISPR 11	Group 1	The LEDEX™ WL-090 uses RF energy only for internal functions. Therefore, this RF emission is extremely weak and there is little chance of it creating any kind of interference whatsoever with nearby electronic equipment.
RF emissions CISPR 11	Class A	
Harmonic emissions IEC 61000-3-2	Class B	The LEDEX™ WL-090 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes.
Voltage fluctuations/ flicker IEC 61000-3-3	Complies	

(IEC60601-1-2)Electromagnetic Immunity:

Immunity test	IEC60601-1-2 test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electric fast transient/burst IEC 61000-4-4	± 2kV for power supply lines ±1 kV for input/ output lines	±2 kV for power supply lines ±1 kV for input/ output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT for 0.5 cycle	<5 % UT for 0.5 cycle	Mains power quality should be that of a typical commercial or hospital environment. If the user of the LEDEX™ WL-090 requires continued operation during power mains interruptions, it is recommended that the LEDEX™ WL-090 be powered from an uninterruptible power supply or a battery.
	40 % UT for 0.5 cycle	40 % UT for 0.5 cycle	
	70 % UT for 0.5 cycle	70 % UT for 0.5 cycle	
	<5 % UT for 5 sec.	<5 % UT for 5 sec.	
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in atypical commercial or hospital environment.
Note: UT is the a.c. mains voltage prior to application of the test level.			

Immunity test	IEC60601-1-2 test level	Compliance level	Electromagnetic environment-guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz 80 %AM(2 Hz)	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the LEDEX™ WL-090, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommend separation distance d = 1.2 √P 150 kHz to 80 MHz d = 1.2 √P 80 MHz to 800 MHz d = 2.3 √P 800 MHz to 2.5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to he transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters as determined by an electromagnetic site survey[a], should be less than the compliance level in each frequency range[b]. Interference may occur in the vicinity of equipment marked with the following symbol 
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz 80 %AM(2Hz)	3 V/m	

Note1 : At 80 MHz and 800 MHz, the higher frequency range applies.
Note2 : These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

1. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the LEDEX™ WL-090 is used exceeds the applicable RF compliance level above, the LEDEX™ WL-090 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the LEDEX™ WL-090.
2. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended Separation Distances:

Recommended separation distance between portable and mobile RF communications equipment and the LEDEX™ WL-090

The WL-090 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the WL-090 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the WL-090 as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d = 1.2 \sqrt{P}$	80 MHz to 800 MHz $d = 1.2 \sqrt{P}$	800 kHz to 2.5 GHz $d = 1.2 \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be determined using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

Note1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

Note2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

	Questo segnale significa “prestare attenzione”. Leggete tutte le informazioni prima di utilizzare il dispositivo per la prima volta.
	Usate solo parti e ricambi originali per mantenere la onformita’ alla regolamentazione di legge.
	Non cercate di smontare il dispositivo. Entrare in contatto con i componenti interni potrebbe causare ferite. Nel caso in cui si verifichi un malfunzionamento, il dispositivo deve essere riparato solo da un tecnico qualificato.
	Quando inserite la batteria, rispettate la polarita’ e non cercate di inserirla in posizione inversa. Non esponete la batteria a fiamma viva o calore eccesivo. Non esponetela ad umidita’, e non immergetela in acqua.
	Per allungare la vita della batteria, per quanto possibile, riposizionate il dispositivo sul suo supporto quanto piu’ spesso possibile, e non lasciate la batteria inutilizzata per piu’ di 6 mesi. Evitate di scaricare completamente la batteria, e sostituitela con una nuova solo quando
	Il LEDEX™ WL-090 e’ un dispositivo specialistico per studi odontoiatrici e deve essere usato soltanto da personale specializzato nelle cliniche e ambulatori dentistici. Per evitare danni alla vista, non puntate il raggio direttamente verso gli occhi.
	Non prolungate il tempo di irraggiamento rispetto a quanto suggerito, stessa cosa per l’intensita’ della luce, altrimenti si potrebbe verificare un surriscaldamento dei denti.
	Non irradiate un’ area specifica per un tempo troppo lungo, perche’ potreste causare un surriscaldamento della testina del dispositivo. Eventualmente allontanate il dispositivo interrompendo il raggio per un po’, fino al raffreddamento. Rispettate sempre attentamente i tempi e l’intensita’ della luce suggeriti.
	Li-ion Se la batteria viene sostituita in maniera incorretta, c’e’ il rischio che questa esploda. Non smontate la batteria, non foratela con oggetti appuntiti, non cortocircuitate i poli esterni, non esponetela a temperature superiori ai 60° C (140 F), non gettatela in acqua o nel fuoco. Sostituitela solo con batterie originali. Le batterie devono essere smaltite secondo le leggi locali, e non devono essere gettate semplicemente nel cassonetto dell’immondizia. 

INFORMAZIONE AGLI UTENTI :

ai sensi dell'art.13 del Decreto Legislativo 25 Luglio 2005, n. 151 "Attuazione delle Direttive 2002/95/CE, 2002/96/CE e 2003/108/CE, relative alla riduzione dell'uso di sostanze pericolose nelle apparecchiature elettriche ed elettroniche, nonche' dello smaltimento dei rifiuti"

Il simbolo del cassonetto barrato riportato sull'apparecchiatura o sulla sua confezione, indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti.

L'utente dovra' pertanto, conferire l'apparecchiatura giunta a fine vita agli idonei centri di raccolta diferenziata dei rifiuti elettronici ed elettrotecnici, oppure riconsegnarla al rivenditore al momento dell'acquisto di una nuova apparecchiatura di tipo equivalente, in ragione di uno a uno.

L'adeguata raccolta differenziata per l'avvio successivo dell'apparecchiatura dismessa al riciclaggio, al trattamento ed allo smaltimento ambientalmente compatibile contribuisce ad evitare possibili effetti negativi sull' ambiente e sulla salute e favorisce il reimpiego e/o riciclo dei materiali di cui e' composta l'apparecchiatura.

Lo smaltimento abusivo del prodotto da parte dell'utente comporta l'applicazione delle sanzioni amministrative previste dalla normativa vigente.

LEDEX™ WL-090

Lampada per polimerizzazione dentale

Per la realizzazione di questo apparecchio sono stati necessari ricerca e sviluppo approfonditi, e sinceramente ci auguriamo che Vi dia molti anni di funzionamento esente da problemi. Vi raccomandiamo di leggere attentamente e comprendere le istruzioni prima di usare questo apparecchio, e di tenere sempre a portata di mano questo manuale per future referenze.

Utilizzo :

Il LEDEX™ WL-090 e' un dispositivo per cure mediche dentali, per l'indurimento (polimerizzazione) dei materiali dentali che deve essere utilizzato solo da medici professionisti.

Condizioni di utilizzo :

da 10°C a 40°C - con umidita' relativa 30-75%

da 500hPa a 1060hPa di pressione atmosferica

Rimessaggio e trasporto :

10°C - 40°C, 10%-95% di umidita' relativa.

500hPa - 1060hPa di pressione atmosferica.

PROPRIETA' DEL LEDEX™ WL-090 :

1. Il raggio luminoso e' realizzato con LED ad alta luminosita' di 10W. La lunghezza d'onda luminosa e' tra 440 e 480 nm e l'intensita' arriva fino a 2400 mW/cm2. Indurisce 2mm di spessore di pasta in 2 secondi. Queste caratteristiche consentono al raggio luminoso di polimerizzare quasi tutti i composti di resine.

2. Ci sono 6 diversi modi di utilizzo tipo : Low, Ramp, Standard, High, Fast Ortho, Turbo.

3. Il condotto per il raggio luminoso e' realizzato con fibre ottiche genuine e non in acrilico di qualita' inferiore, per ottimizzare la conduzione del raggio e minimizzare la perdita di potenza dalla sorgente all' estremita' della punta, garantendo cosi' la massima potenza.

4. Il sistema di raffreddamento e' efficiente, ed e' comunque dotato di una protezione contro il surriscaldamento, con un circuito che protegge il raggio luminoso da questo problema.

5. Memorizzazione automatica dell'ultima operazione eseguita .

6. Display a cristalli liquidi, radiometro incorporato, messa in stand-by automatica per il risparmio della batteria.

Contenuto :

Descrizione	Nr. articoli
LEDEX^{TM} WL-090 dispositivo maneggiabile	1
Batteria (inserita nel dispositivo, 3.6V/3350mah)	1
Supporto	1
Alimentatore (AC100-240v, uscita DC5V/1,2A)	1
Tubetto guida per il raggio di luce (diam.11>8 mm)	1
Filtro	1
Schermo anti riflesso	2
Guaina protettiva raggio di luce	20
Guaina protettiva induritore	10
Manuale d'uso	1

Carica della Batteria :

Quando l'apparecchio Vi viene consegnato, la batteria non e' completamente carica. Prima dell'uso, caricatela completamente. Il tempo richiesto e' di circa 2 ore. :

1. Collegate l'alimentatore ad una sorgente di corrente alternata (AC 100-240v), e collegate la spinetta al supporto da tavolo. Inserite il dispositivo nel supporto per ricaricare la batteria.
2. Quando la batteria si trova in condizioni di carica scarsa, il display sul dispositivo mostra il segnale negativo. (Vedi figura 1)
3. Quando la batteria e' completamente carica, il display sul dispositivo mostra il segnale di "pieno". (Vedi figura 2).
4. Quando la batteria sta caricando, il display sul dispositivo mostra il segnale di carica in corso. (Vedi figura 3).

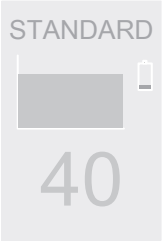


Figure 1

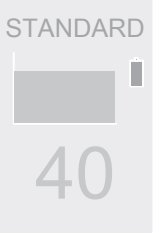


Figure 2

Figure 3

Per accendere il dispositivo :

Premete il pulsante ON/OFF ⏻

Emissione ed interruzione del raggio di luce :

Quando il dispositivo risulta acceso, per attivare il raggio di luce premete di nuovo il pulsante ON. ⏻

Durante il tempo di esposizione, premete nuovamente il pulsante ON/OFF per interrompere il raggio di luce. Il dispositivo emettera' un suono (beep) ed il tempo di esposizione verra' azzerato automaticamente.

Cambio modalita' di funzionamento :

premendo il pulsante "M" il modo puo' essere variato:

LOW > RAMP > STANDARD > HIGH > FAST ORTHO > TURBO ...e cosi' via LOW etc.

Per ogni MODO di FUNZIONAMENTO si puo' variare il TIMER :

premete il pulsante "T", per cambiare il tempo:

LOW : 10>20>30>40> poi riparte da 10> e cosi' via.

RAMP : 5>10>15>20>25>30>35>40> poi riparte da 5 e cosi' via.

STANDARD: 5>10>15>20>25>30>35>40> poi riparte da 5 e cosi' via.

HIGH: 2>4>6>8>10> poi riparte da 2 e cosi' via.

FAST ORTHO : 3>4>5> poi riparte da 3 e cosi' via.

TURBO: 2>3>4>5> poi riparte da 2 e cosi' via.

Modi d’uso raccomandati :

LOW : ideale per indurire il materiale di collegamento tra dente e resina composita.

RAMP : ideale per indurire aree piu’ estese di resina composita, puo’ evitare il restringimento.

STANDARD : e’ un’uscita stabile, ideale per la maggioranza dei casi.

HIGH : ideale per cure dentali ortodontiche o pediatriche, puo’ far risparmiare tempo.

FAST ORTHO : ideale per ortodonzia, unisce facilmente i materiali e fa risparmiare tempo.

TURBO: Ideale per denti devitalizzati, o per cemento dentale, vernici per porcellana, inserti di fibra in endodonzia.

Spegnimento automatico :

Il LEDEX™ WL-090 si spenge automaticamente se non vengono effettuate operazioni per un tempo di 3 minuti. Anche il display si spengera' fino a che il dispositivo non verra' nuovamente attivato.

Sicurezza :

Quando il dispositivo LEDEX™ WL-090 viene usato frequentemente e per lunghi periodi di tempo, la temperatura puo' salire oltre i livelli di sicurezza ed in questo caso la modalita' di sicurezza si attiva automaticamente per proteggere il raggio di luce. Questa modalita' riduce la potenza di luce di circa la meta', ed allunga i tempi di irradiazione. Fate riferimento alla figura 1.

Quando la temperatura diventa veramente alta, il display sul dispositivo mostrera' la scritta "Over Heat" (surriscaldamento). Fate riferimento alla figura 2.

Se e' stata selezionata la modalita' TURBO, il dispositivo ha bisogno di una grande potenza fornita dalla batteria per emettere una luce molto forte. Se le condizioni della batteria non lo consentono, viene attivata automaticamente una modalita' di "adattamento" che riduce di circa la meta' l'intensita' della luce ed aumenta il tempo di irradiazione. Fate riferimento alla figura 3.

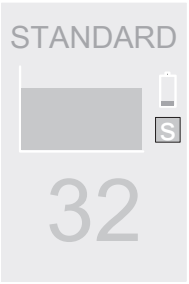


Figure 1

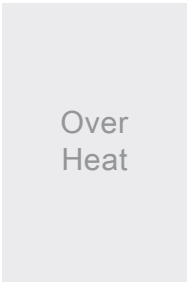


Figure2

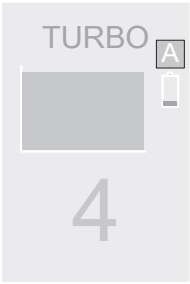


Figure 3

Controllo dell'intensita' del raggio luminoso :

Nel supporto da tavolo e' inserito un radiometro. Quando il supporto e' alimentato, applicate il raggio luminoso sull'area di rilevamento ed il radiometro mostrera' l'intensita' della luce.

LOW	ca. 600 mW/cm2 (+/- 15%)
RAMP	ca.1000 mW/cm2 (+/- 10%)
STANDARD	ca.1000 mW/cm2 (+/- 10%)
HIGH	ca.1800 mW/cm2 (+/- 10%)
FAST ORTHO	ca.1800 mW/cm2 (+/- 10%)
TURBO	ca.2400 mW/cm2 (+/- 10%)

Se l'intensita' del raggio luminoso nella modalita' STANDARD e' inferiore a 700 mW/cm2, la potenza e' troppo bassa. Contattate il rivenditore, che provvedera' al controllo del dispositivo.

Pulizia e sterilizzazione :

La plastica dell'impugnatura, del supporto da tavolo e del filtro per gli occhi possono essere puliti con un panno umido. La punta del condotto del fascio di luce puo' essere pulita con alcool, o sterilizzata in autoclave. Suggeriamo di usare l'autoclave a 134° C / e 75 PSI di pressione per i migliori risultati. Il tempo di sterilizzazione a 134° C dovrebbe essere di circa 5 minuti.
Si puo' usare una apposita guaina di protezione sul tubetto terminale del fascio di luce senza perdita di potenza. In questo modo diviene valida la procedura di sterilizzazione in accordo alla norma ISO 17665-1.

Garanzia :

il dispositivo LEDEX™ WL-90 viene garantito esente da difetti di fabbricazione come da disposizioni di legge. Rimane a discrezione del fornitore di riparare o sostituire un dispositivo guasto o difettoso.
L'assistenza in garanzia non si applica nel caso in cui:
1. Il danno e/o il guasto e' causato da cadute, oppure da urti subiti durante il trasporto, dopo l'acquisto e/o durante il normale utilizzo.2. Il danno e/o il guasto sia causato da calamita' naturali, ma non limitato a: terremoti, alluvioni, inquinamento, voltaggio elettrico non conforme, o scariche elettriche.

Non cercate di aprire e smontare il dispositivo, perche' questa operazione invalida la garanzia.

Specifiche :

Luce per indurimento materiali dentali	Dispositivo medico
Nome del dispositivo e modello	LEDEX™ WL-090
Alimentatore	Ingresso CA 100-240V, 5060 Hz. uscita: CC 5V/ 1,2 Amps.
Batteria	Ioni di Lithio (LiLO) 3.6v, 3350 mAh
Sorgente luminosa	LED dentali 10W
Ampiezza di lunghezza d'onda	440 a 480 nm
Intensita' radiante	600 a 2400 mW/cm2
Misure del dispositivo	diam. 38mm (max.) x 190 mm lun-
Peso del dispositivo	180 gr.
Misure del supporto da tavolo	diam. 115mm (max) x 68 mm. altezza
Peso del supporto da tavolo	140 gr.

Troubleshooting/Risoluzione dei problemi :

Situazione	Soluzione
Il dispositivo non si accende	Rimuovete la batteria e re-inseritela Nuovamente Se il problema persiste, provate a caricare la batteria sul supporto per circa 10 minuti e poi riprovate ad accendere il dispositivo.
La batteria non si carica	Ripulite i contatti della batteria. Se il problema persiste, provate con una batteria nuova.
Il display mostra "OVERHEAT" cioe' SURRISCALDAMENTO	La temperatura e' troppo alta. SURRISCALDAMENTO Aspettate qualche momento e poi riprovate.
L'intensita' della luce e' troppo bassa	Se l'intensita' della luce nella modali-ta' STANDARD e' inferiore a 700 mW/cm2, la potenza di uscita e' troppo bassa. Contattate il rivenditore.

⚠	Dieses Zeichen markiert Warnhinweise und Informationen, die vor der Benutzung des Produktes gelesen werden sollten, um mögliche Verletzungen zu vermeiden.
⚠	Benutzen sie lediglich die autorisierten Teile, um die Erfüllung der Produktregeln beizubehalten.
⚠	Öffnen Sie nicht die Produkthülle. Das Berühren von Innereien des Produktes könnte zu Verletzungen führen. Im Falle einer ehlfunktion sollte das Produkt nur von einem qualifizierten Techniker repariert werden.
⚠	Wenn Sie die Batterie einlegen, versuchen sie nicht die Batterie falschherum einzusetzen. Kürzen Sie die Batterie nicht ein oder nehmen Sie die Batterie nicht auseinander. Setzen Sie die Batterie niemals einer Flamme oder extremer Hitze aus. Tauchen Sie sie ebenfalls nicht in Wasser.
⚠	LEDEX™ WL-090 ist Spezialequipment für den Dental-Bereich und es sollte ausschließlich von Fachpersonal einer Dental-Klinik bedient werden. Um Schäden an den Augen zu vermeiden, richten Sie das Licht nicht in die Richtung der Augen.
⚠	Achten Sie darauf die Polymerisationslampe nicht für eine lange Zeit dauerhaft zu benutzen, da dies dazu führen könnte dass der Kopf des Patienten sich erhitzt. Fragen Sie den Patienten ob das Licht zu heiß ist, Wenn das der Fall sein sollte, vergrößern Sie die Entfernung zwischen der Polymerisationslampe und dem Mund des Patienten. 
⚠	Gefahr einer Explosion wenn die Batterie falsch ersetzt wird. Um das Risiko von Feuer oder Verbrennungen zu reduzieren, zerstören, kürzen, stechen oder kürzen Sie niemals externe Kontakte, setzen Sie ebenfalls das Produkt nicht Temperaturen über 60°C oder benutzen Sie es nicht Feuer oder Wasser. Ersetzen Sie die Batterien nur mit spezifischen Batterien für das Produkt. Recyceln Sie die benutzen Batterien nach den lokalen Vorgaben oder den Anweisungen die dem Produkt beiliegen.

Hinweise zur Benutzung :

Die LEDEX™ WL-090 ist eine Aushärtungseinheit zur Polymerisation von Lichtaushärtenden Materialien im Dental-Bereich.

Benutzungsbedingungen :

10℃~40℃ , 30%~75% relative Luftfeuchtigkeit

500hPa~1060hPa Luftdruck

Transport- und Lagerungsbedingungen :

10℃~40℃, 10%~95% relative Luftfeuchtigkeit

500hPa~1060hPa Luftdruck

Eigenschaften der LEDEX™ WL-090 :

1. Die LEDEX WL-090 wurde mit 10 extrem leuchtstarken LEDs ausgestattet. Die Lichtstrahlenlänge der LED ist zwischen 440 und 480nm und die Intensität reicht bis zu 2400 mw/cm^2. Diese Eigenschaften erlauben dem Licht, alle handelsüblichen, lichtempfindlichen Verbundstoffe innerhalb 2 Sekunden zu polymerisieren

2. Sie besitzt 6 Wirkungsvolle Modi: Low-, Ramp-, Standard-, High-, Fast Ortho- und Turbo Modus.

3. Der Lichtleiter wird aus hochwertigen Glasfasern hergestellt, um einen optimalen Lichtertrag zu bieten.

4. Eine Überhitzung der Polymerisationslampe wird durch ein höchst effizientes Kühlblech, einen eigenen Kühlkreislauf und einen zusätzlichen Sicherheitsmodus vermieden.

5. Die automatische Erinnerung der letzten Ausführung die ausgewählt wurde ist eine weitere, spezielle Charakteristik der Lampe.

6. Sie besitzt einen OLED-Display, einen Strahlungsmesser und einen Energiesparmodus.

Inhalt :

Beschreibung	Anzahl
LEDEX™ WL-090 Handstück	1
Batterie (im Handstück, 3.6V/3350mAh)	1
Basisstation	1
Netzteil (Eingang AC100～240 V, 50-60Hz, Ausgang DC5V/2A)	1
Optischer Faser Lichtleiter (Ø11＞8 mm)	1
Filter	1
Blendschutz	2
Einweg Lichleiter-Hüllen	20
Einweg Handstück mit Lichtleiterhülle	10
Bedienungsanleitung	1

Laden der Batterie :

Die Batterie ist nicht voll-geladen bei der Auslieferung. Bevor Sie das Produkt benutzen, laden Sie die Batterie bitte. Die Zeit für die volle Aufladung beträgt etwa 2 Stunden.

1. Verbinden Sie das Netzteil mit einer AC100～240V Steckdose und schließen Sie den Stecker an der Basistation an. Legen Sie das Handstück in die Basisstation um die Batterie zu laden.
2. Wenn der Batterie-Stand niedrig ist, zeigt das Handstück (Bild 1) an.
3. Wenn die Batterie voll geladen, ist zeigt das Handstück (Bild 2) an.
4. Wenn die Batterie geladen wird, zeigt das Handstück (Bild 3) an.

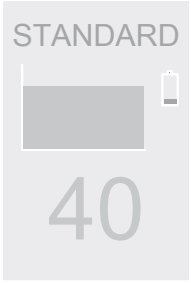


Bild 1

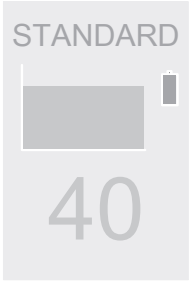


Bild 2

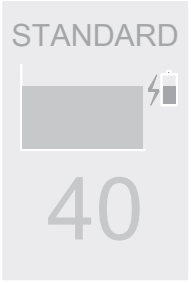


Bild 3

Anschalten des Handstückes :

Drücken Sie den “⏻“ On/Off Knopf um das LEDEX™ WL-090 Handstück einzuschalten.

Ausgeben/Unterbrechen der Bestrahlung :

Wenn der Status des LEDEX™ WL-090 auf ON ist, drücken Sie die “⏻“ ON/OFF Taste nochmals um das Licht einzuschalten.

Mithilfe des “⏻“ ON/OFF-Knopfes kann man den Polymerisationsvorgang unterbrechen. Dadurch wird die Zeit zurückgesetzt und das Gerät gibt ein Signal aus.

Ändern des Bestrahlungsmodus :

Drücken Sie den “**M**“ (Mode-Knopf):

LOW→RAMP→STANDARD→HIGH→FAST ORTHO→TURBO→LOW….

Ändern des Timers :

Drücken Sie den “**T**“ (Timer-Knopf):

LOW Modus : 10→20→30→40→10→20→30….

RAMP Modus : 5→10→15→20→25→30→35→40→5→10→15….

STANDARD Modus : 5→10→15→20→25→30→35→40→5→10→15….

HIGH Modus : 2→4→6→8→10→2→4→6….

FAST ORTHO Modus : 3→4→5→3→4….

TURBO Modus : 2→3→4→5→2→3→4….

Benutzungsempfehlung :

LOW Modus :

dieser Modus ermöglicht die sichere Polymerisation Bei niedriger Ausgangsleistung.

RAMP Modus :

Spezieller „Soft Start“ Modus für Composites, um extreme Schrumpfung oder Risse zu vermeiden.

STANDARD Modus :

Dieser Modus ermöglicht die sichere Polymerisation bei mittlerer Ausgangsleistung.

HIGH Modus :

dieser Modus ermöglicht die schnelle Polymerisation mit hoher Ausgangsleistung.

FAST ORTHO Modus :

dieser Modus ermöglicht die schnelle Polymerisation bei Kieferorthopädische arbeiten. Mit automatischer Neustart-Funktion.

TURBO Modus :

dieser Modus ermöglicht die extrem schnelle Polymerisation mit sehr hoher Ausgangsleistung. Ideal für Arbeiten in Zusammenhang mit devitale Zähne, Veneers, Glasfaser Wurzelstifte usw.

Auto-sleep Funktion :

LEDEX™ WL-090 wechselt automatisch in den “Sleep”-Modus, wenn für 3 Minuten keine Bedienung erfolgt.

Sicherheits modus :

Wenn die LEDEX™ WL-090 häufig benutzt, oder für eine lange Zeit in Benutzung ist, könnte die Temperatur zu hoch werden und der Sicherheits-Modus schaltet sich automatisch ein um die Lampe zu schützen. Der Sicherheits-Modus halbiert die Intensität des Lichtes und verlängert die Bestrahlungszeit. Wenn die Temperatur zu hoch ist, wird dies über das Display ausgegeben (Bild 1).

Wenn die Temperatur zu hoch wird, gibt der Display (Bild 2) aus.

Wenn der TURBO-Modus ausgewählt ist, wird genügend Energie der Batterie benötigt um diesen auszuführen. Wenn nicht genügend Ladung der Batterie vorhanden ist um den TURBO-Modus auszuführen, schaltet sich automatisch der “Adaptive”-Modus ein. Dieser halbiert die Lichtintensität und verlängert die Bestrahlungsdauer. (Bild 3)

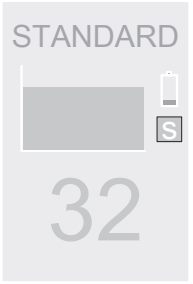


Bild 1

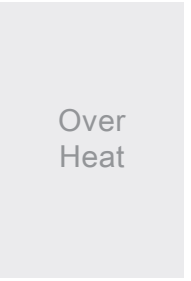


Bild 2

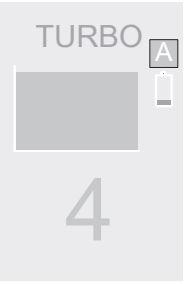


Bild 3

Intensitätstest :

In der Basisstation befindet sich ein eingebauter Strahlenmesser. Wenn die Basisstation an das Stromnetz angeschlossen ist, halten sie den Lichtleitstab auf das Testfeld, das Display gibt dann die Lichtintensität aus.

LOW Modus.....ca. 600 mW/cm^2 (+/-15%)

RAMP Modus..... ca. 1000 mW/cm^2 (+/-10%)

STANDARD Modus.....ca. 1000 mW/cm^2 (+/-10%)

HIGH Modus.....ca. 1800 mW/cm^2 (+/-10%)

FAST ORTHO Modus.....ca. 1800 mW/cm^2 (+/-10%)

TURBO Modus.....ca. 2400 mW/cm^2 (+/-10%)

Wenn der Lichtest im STANDARD-Modus weniger als 700 mW/cm^2 anzeigt, ist dies zu gering. Bitte benachrichtigen Sie ihren Händler, dieser wird Ihr Gerät überprüfen.

Reinigung und Desinfektion :

Das Plastik des Handstückes, die Basisstation und der Filter können mit einem feuchtem Tuch gereinigt werden. Der Lichtleitstab und der Blendschutz können mit Alkohol oder in einem Autoklav gereinigt werden. Es empfiehlt sich eine Temperatur von 134˚C/75psi für beste Ergebnisse. Die Zeit der Desinfektion bei 134˚C beträgt ca. 5 Minuten. Eine Einweg Schutzhülle erhältlich bei Ihrem Händler, kann als Schutz über dem Lichtleiter verwendet werden um keine Lichtintensität zu verlieren.

Der Anwender muss die Sterilisations-Prozedur nach ISO 17665-1 befolgen.

Garantie :

DENTMATE TECHNOLOGY Co., Ltd. Stellt eine Gewährleistung für Herstellungsfehler für ein Jahr, ab dem Kaufdatum, welches als Tag des Rechnungseinganges gilt. Es werden alle Fehler die auf die Herstellung zurückzuführen sind repariert oder ersetzt. Das Folgende ist explizit von der Garantie ausgenommen:

1. Schaden und/oder Fehler der Produktes welche durch Fallen und/oder Stöße während dem Transport, nach dem Kauf und/oder dem Gebrauch entstehen.

2. Schaden und/oder Fehler der Produktes die durch Naturkatastrophen wie Erdbeben, Fluten, Blitzen, Umweltverschmutzung, falscher elektrischer Spannung oder Ausschlägen der Elektrizität.

Versuchen Sie nicht das Handstück zu öffnen, wenn es geöffnet wurde, entfällt der Garantieanspruch.

Order Information Spare parts / Disposable parts

WL-070 Hand piece (including battery)	
3100-1001	WL-070 *white*
3100-1002	WL-070 *black*
3100-1003	WL-070 *orange*
3100-1004	WL-070 *blue*
3100-1005	WL-070 *green*
3100-1006	WL-070 *yellow*
3100-1007	WL-070 *pink*
WL-070+ Hand piece (including battery)	
3103-1001	WL-070+ *white*
3103-1002	WL-070+ *black*
3103-1003	WL-070+ *orange*
3103-1004	WL-070+ *blue*
3103-1005	WL-070+ *green*
3103-1006	WL-070+ *red*
3103-1007	WL-070+ *purple*
WL-070+ ORTHO Hand piece (including battery)	
3105-1001	WL-070+ ORTHO *white*
3105-1002	WL-070+ ORTHO *black*
3105-1003	WL-070+ ORTHO *orange*
3105-1004	WL-070+ ORTHO *blue*
3105-1005	WL-070+ ORTHO *green*
3105-1006	WL-070+ ORTHO *red*
3105-1007	WL-070+ ORTHO *purple*
WL-090 (+) Hand piece (excluding battery)	
3101-1001	WL-090
3102-1001	WL-090+
WL-120 Hand piece (including battery)	
3106-1002	WL-120
Power supply AC100~240V/DC5V - (micro) / (mini)	
2403-0003	Micro + US clip
2403-0004	Micro + EU clip
2403-0005	Micro + UK clip
2403-0006	Micro + AU clip
2403-0007	Micro + KR clip
2403-0008	Mini + US clip
2403-0009	Mini + EU clip
2403-0010	Mini + UK clip
2403-0011	Mini + AU clip
2403-0012	Mini + KR clip
Optical Fiber Light Guide	
2402-0001	Ø8mm, *black*
2402-0005	Ø8mm, *transparent*
2402-0003	Ø8>5mm, *black*
2402-0004	Ø8>3mm, *black*
2402-0006	Ø11mm, *black*
2402-0007	Ø11>8mm, *black*
2402-0009	Ø11>5mm, *black*
2402-0011	Ø11>3mm, *black*
2402-0013	Shortened Ø11>8mm, *black*
2402-0014	Shortened Ø8mm, *black*
2402-0015	Straight Ø11>8mm, *black*

2402-0016	Straight Ø8mm, *black*
WL-070 Holder	
2100-0060	WL-070 *white*
2100-0061	WL-070 *black*
2100-0062	WL-070 *orange*
2100-0063	WL-070 *blue*
2100-0064	WL-070 *green*
2100-0065	WL-070 *yellow*
2100-0066	WL-070 *pink*
WL-070+ Wireless Charging Stand	
3103-2008	WL-070+ *white*
3103-2009	WL-070+ *black*
3103-2010	WL-070+ *orange*
3103-2011	WL-070+ *blue*
3103-2012	WL-070+ *green*
3103-2013	WL-070+ *red*
3103-2014	WL-070+ *purple*
WL-070+ Ortho Wireless Charging Stand	
3105-2008	WL-070+ ORTHO *white*
3105-2009	WL-070+ ORTHO *black*
3105-2010	WL-070+ ORTHO *orange*
3105-2011	WL-070+ ORTHO *blue*
3105-2012	WL-070+ ORTHO *green*
3105-2013	WL-070+ ORTHO *red*
3105-2014	WL-070+ ORTHO *purple*

WL-090(+) / WL-120 Cradle	
3101-2003	Cradle Fit WL-090 *white*
3102-2008	Cradle Fit WL-090+ *black*
3106-2004	Cradle Fit WL-120
Battery	
2100-0050	Battery 3.6V/800mAh Fit WL-070/WL-070+/WL-070+ORTHO
2101-0024	Battery 3.6V/3350mAh Fit WL-090/WL-090+
2106-0029	Battery 3.6V/1940mAh Fit WL-120
Filter	
2100-0051	Filter Fit WL-070/WL-070+ /WL-070+ORTHO, 50 pcs/bag
2101-0026	Filter Fit WL-090/ WL-090+, WL-120, 50 pcs/bag
Anti-glare shield	
2401-0007	8 mm, 2 pcs/set, 50 sets/bag
2405-0002	11 mm, 2 pcs/set
Curing Light Sleeve	
2401-0002	Light Guide Sleeve, 400 pcs/box Fit 8mm light guide
2401-0004	Curing Light Sleeve, 100pcs/box Fit WL-070/WL-070+/WL-070+ORTHO
2401-0006	Curing Light Sleeve, 100pcs/box Fit WL-090/WL-090+/WL-120

NOTE

NOTE

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