

EMC TABLES

Guidance and manufacturer's declaration – electromagnetic emissions		
The Essentials Compact LED Curing Light is intended for use in the electromagnetic environment specified below. The customer or the user of the Essentials Compact LED Curing Light should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The Essentials Compact LED Curing Light uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The Essentials Compact LED Curing Light 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.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable	

Recommended separation distances between portable and mobile RF communications equipment and the Essentials Compact LED Curing Light

The Essentials Compact LED Curing Light is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Essentials Compact LED Curing Light can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Essentials Compact LED Curing Light 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 MHz to 2,5 GHz $d = 2,3 \sqrt{P}$
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 estimated 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.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

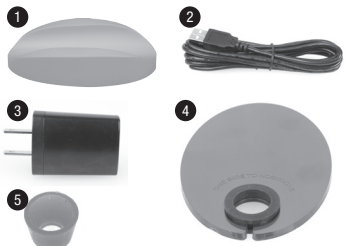
Guidance and manufacturer's declaration – electromagnetic immunity

The Essentials Compact LED Curing Light is intended for use in the electromagnetic environment specified below. The customer or the user of the Essentials Compact LED Curing Light should assure that it is used in such an environment.

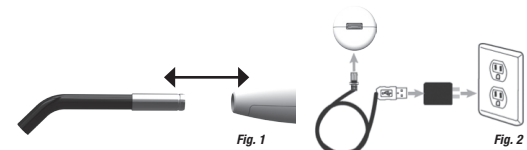
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/burst IEC 61000-4-4	± 2 kV 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 line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.

Accessories

1. Holding Cradle
2. Micro-USB Cable
3. Power Adapter
4. Glare Shield
5. Anti-glare Cup



SETUP



1. Insert light guide into nose cone until it clicks securely into place. To remove, firmly pull light guide straight out (Fig. 1).
2. Slide glare shield over handpiece. Make sure side with "This side towards handpiece" is on the handpiece side.
3. Place orange anti-glare cup on light guide and adjust according to preference.
4. Insert the micro-USB cable into charging port on bottom of handpiece. Connect micro-USB cable to power adapter and then plug into outlet (Fig. 2).

Note: When plugged in, the time indicator lights will illuminate in an alternating pattern to indicate handpiece is charging. All 3 lights will illuminate when fully charged.

- Place handpiece in holding cradle while charging or when not in use.
- Allow handpiece to fully charge (minimum 2 hours) prior to first use.

OPERATION

Caution
<ul style="list-style-type: none"> • Wear protective eyewear and ensure glare shield and/or anti-glare cup is secured in place before use. • Light guide can become hot during continuous use; avoid prolonged exposure to skin or oral soft tissue.

Curing Operation

Basic Operation

- Press On/Off button to wake up handpiece. An audible beep will sound and time indicator light from previous curing cycle will illuminate.
- Press Time button to toggle through curing times (5 seconds, 10 seconds or 15 seconds).
- Press On/Off button to begin curing. A beep will indicate 1 second left in cycle and a 2nd beep will sound at end of cycle.
- Press On/Off button to stop curing during a cycle.
- Press On/Off button to start next curing cycle or press Time button to change curing time before starting next curing cycle.

Note: The handpiece will automatically go to sleep after 30 seconds of inactivity. Press On/Off to wake up handpiece.

Charging

Caution
<ul style="list-style-type: none"> • Ensure handpiece is completely dry before charging. • Charge and store handpiece in cool environment. Keep away from heat sources.

Note: To maximize the life of your high performance lithium battery: Avoid overcharging; do not store handpiece while plugged in for extended

Interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % (>95% dip in UT) for 0,5 cycle	<5 % (>95% dip in UT) for 0,5 cycle	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Essentials Compact LED Curing Light requires continued operation during power mains interruptions, it is recommended that the Essentials Compact LED Curing Light be powered from an uninterruptible power supply or a battery.
	40 % UT (60 % dip in UT) for 5 cycles	40 % UT (60 % dip in UT) for 5 cycles	
	70 % UT (30 % dip in UT) for 25 cycles	70 % UT (30 % dip in UT) for 25 cycles	
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	<5 % UT (>95% dip in UT) for 5 sec	<5 % UT (>95% dip in UT) for 5 sec	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
	3 A/m	3 A/m	
NOTE UT is the a.c. mains voltage prior to application of the test level.			

Guidance and manufacturer's declaration – electromagnetic immunity

The Essentials Compact LED Curing Light is intended for use in the electromagnetic environment specified below. The customer or the user of the Essentials Compact LED Curing Light should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the Essentials Compact LED Curing Light, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1,2 \sqrt{P}$ ----- $d = 1,2 \sqrt{P}$ 80 MHz to 800 MHz ----- $d = 2,3 \sqrt{P}$ 800 MHz to 2,5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, * should be less than the compliance level in each frequency range. * 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	3 A/m	

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

* Field strengths from fixed transmitters, such as base stations for 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 Essentials Compact LED Curing Light is used exceeds the applicable RF compliance level above, the Essentials Compact LED Curing Light should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the Essentials Compact LED Curing Light.
* Over the frequency range 150 kHz to 80 MHz, field strengths should be less than V/m.

periods of time.

Do not store curing light when battery is fully charged or when nearly empty.

Use curing light at least once a month.

Allow handpiece to fully charge (minimum 2 hours) prior to first use.

1. Insert micro-USB cable into charging port on bottom of handpiece. Connect micro-USB cable to power adapter and then plug into outlet (Fig. 2).
2. Place handpiece in holding cradle while charging or when not in use.

Time Indicator Lights

Charging: Alternating flashing lights

Fully Charged: All 3 lights are illuminated

No Power: All lights flash 3 times when On/Off button pressed

Note: If battery is completely discharged, it may take a few minutes for Time Indicator Lights to begin flashing.

CLEANING AND STERILIZATION

Caution
<ul style="list-style-type: none"> • Sterilize light guide before first use. • Sterilize light guide after each patient use. • Use a disposable barrier sleeve over handpiece during use to prevent cross-contamination. • Keep in sterilization pouch until ready to use. • Wear appropriate personal protective equipment during cleaning and sterilization process. This should include eye protection and gloves. • Do not run or submerge handpiece in water. • Do not use cold sterile, alcohol or disinfectant on your handpiece or light guide. • Do not sterilize handpiece body.

1. Wipe handpiece with a damp cloth to remove debris.
2. Remove light guide by firmly pulling it straight out.
3. Wipe both ends of light guide with damp cloth to remove debris or bonding residue.
4. Place light guide in sterilization pouch and seal. Bag light guides separately.
5. Sterilize light guide at 273° F / 134° C at 75 psi for 5 min.

ACCESSORIES

570-0572 8 mm Replacement Light Guide

TROUBLESHOOTING

Problem	Cause	Solution
Curing light doesn't turn on	Battery not charged	Charge battery
	Battery or PC board failure	Contact ProRepair
Curing light doesn't charge	Power adapter or micro-USB cable not fully plugged in	Reconnect micro-USB cable to handpiece and power adapter Check connection to power outlet
	Micro-USB cable or power adapter failure	Contact ProRepair
	Handpiece battery failure	Contact ProRepair
Curing light doesn't cure	LED module failure	Contact ProRepair

SPECIFICATIONS

HANDPIECE	
LED lamp	5 W
Light intensity:	1,100 mW/cm ²
Wavelength:	420 ~ 490 nm (peaks at 455 ~ 465 nm)
Weight handpiece:	105 g
Weight light guide:	16 g
Dimensions handpiece:	6 11/16 in x Ø 15/16 in (170 mm x Ø 24 mm)
Dimension light guide:	3 11/32 in x Ø 5/16 in (85 mm x Ø 8mm)
BATTERY	
Power:	3.7 V, 800 mAh
Input power:	AC 100 ~ 240 V, 50/60 Hz
Output power:	DC 5 V, 1 A
GENERAL	
System operational conditions	Temp: 77° ~ 95° F (25° ~ 35° C)
	Humidity: 15% - 95% at 140° F / 40° C, noncondensing
	Pressure: 700 to 1060 hPa
System storage conditions	Temp: -4° ~ 149° F (-20° ~ 65° C)
	Humidity: 15% - 95% at 140° F / 40° C, noncondensing
	Pressure: 700 to 1060 hPa
System transport conditions	Temp: -4° ~ 149° F (-20° ~ 65° C)
	Humidity: 15% - 95% at 140° F / 40° C, noncondensing
	Pressure: 700 to 1060 hPa

SERVICE

For items that require service, including warranty service, please send to Henry Schein ProRepair.
Henry Schein ProRepair
620 S. Placentia Ave.
Placentia, CA 92870 USA
Phone # 714-579-0175
Fax # 714-579-0186

WARRANTY

This product is designed for use in a dental office and this warranty is not applicable to other uses. This product is warranted against manufacturing defects in materials and workmanship 1 year from date of purchase.

Henry Schein® will repair or replace product at its sole discretion. This warranty shall be limited to replacement or repair of the product or its parts and shall not extend to any other claims, including but not limited to loss of profit, cost of removal or replacement, incidental or consequential damages or other similar claims arising from use of this product. Damage to product resulting from acts of God, faulty installation, misuse, tampering, accident, abuse, negligence, alterations, unauthorized repairs or problems unrelated to materials and workmanship are not covered by this warranty.

DISPOSAL OF MEDICAL DEVICES

Any medical devices which could possibly be contaminated must first be decontaminated by the responsible doctor or medical institution and then be disposed of by an agent licensed and qualified to handle medical and industrial waste.

Essentials

COMPACT LED CURING LIGHT

INSTRUCTIONS FOR USE INSTRUCCIONES DE USO MANUEL D'UTILISATION

Read before use. Keep in safe place for future reference.

Caution: Federal (US) law restricts this device to sale by or on the order of a licensed professional.

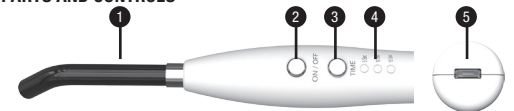
Warning
<ul style="list-style-type: none"> • Do not operate curing light without light guide in place. • Never look directly into light source or direct it towards eyes. • Wear protective eyewear and ensure glare shield and/or anti-glare cup is secured in place before use. • Light guide can become hot during continuous use; avoid prolonged exposure to skin or oral soft tissue.

Caution
<ul style="list-style-type: none"> • Sterilize light guide prior to first use. • Use a disposable barrier sleeve over handpiece during use to prevent cross-contamination. • To avoid damage to LED handpiece, do not drop or subject it to excessive shock. • Keep away from water and other liquids. • Do not use cold sterile, alcohol or disinfectant on your handpiece or light guide. • If either charger or LED handpiece comes into contact with water or other liquids, stop using immediately and send to Henry Schein® ProRepair for evaluation. • If necessary, after continuous use allow unit to cool for at least 30 seconds before beginning another cycle. • Do not disassemble handpiece. • Keep away from heat and direct sunlight. • If any abnormalities are found, stop using immediately and contact Henry Schein® ProRepair.

INDICATION FOR USE

The Essentials Compact LED Curing Light is a light emitting diode (LED) dental curing unit used for the polymerization of light-cured materials within the range of 420 ~ 490 nm. It is only to be used by trained dental professionals.

PARTS AND CONTROLS



1. 8 mm Black-coated Light Guide
2. On/Off Button
3. Time Select Button
4. Time Indicator Lights
5. Micro-USB Charging Port

Distributed by:
Essentials Healthcare Products
Distribuido por:
41 Weaver Road
Distribuído por:
Denver, PA 17477 USA

Made in Taiwan
Fabricado en Taiwán
Fabriqué à Taiwan

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