



UNI LED

LED Curing Light™

USER'S MANUAL



CE

0434

**FDA 510K
K041303**

- All instructions in this USER'S MANUAL must be read completely before installation or operation.

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NOTE



Use only the specified accessories.

Read before use.

Type BF applied part.

Double insulated equipment.

1. PRESENTATION

The UNI LED is a LED curing unit intended for dental polymerization of light cured materials by professionals.

2.SAFETY INSTRUCTIONS

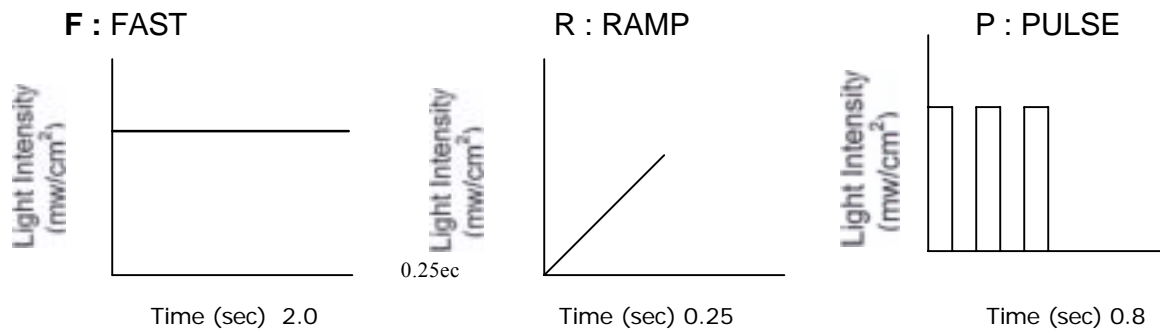
The unit shall be operated only by licensed professionals.

- 1.
2. Do not use this curing light as an illuminative device.
Never look directly in the blue light and do not shine into eyes directly, otherwise, the strong light will injure the eyes.
4. Wear protective glasses and place the attached oval protector on the guide before operation.
5. To avoid injuring patients' eyes, turn on the lamp ONLY after the guide is in patients' mouth.
6. Condensation inside an electrical appliance can be dangerous. If the device is transported from a cold area to a warm area, it must be left long enough to attain the new ambient temperature.
7. Do not use the device near flammable anesthetic liquid, oxygen or nitrous oxide.
8. Do not use near any heat source. Use of solvent or flammable products on this device could cause damage.
9. This unit must not be used by any person with a heart stimulator or pacemaker or any other person who is advised to operate small electrical devices with care.
- 10 This unit must not be used on or by any person who suffers, or has suffered in the past, from photo-biological reactions (including Urticaria solaris or protoporphyrie erythropetique) , or any person receiving medical treatment and using photosensitive medication (including methoxysorales or dimethylchlortetracyline) .

3. ADVANTAGES

- 1.LED with long life - no need to replace LED component constantly.
 - 2.Less heat produced and patients will feel more comfortable.
 - 3.operates continuously for long term use.
 - 4.Three modes preset
- F** : FAST - full power
- R** : RAMP- gradually increasing power in first 2 seconds, then full power til end
- P** : PULSE - 0.2 second interval after full power for 0.8 second

X Longer time needed for PULSE mode. User should follow the original instructions of the composite when curing.



5)) Timer

- Five preset curing times from 5, 10, 20, 30, til 40 seconds.

- Adjustable curing time according to users' application (refer to OPERATION: b. Set Timer).

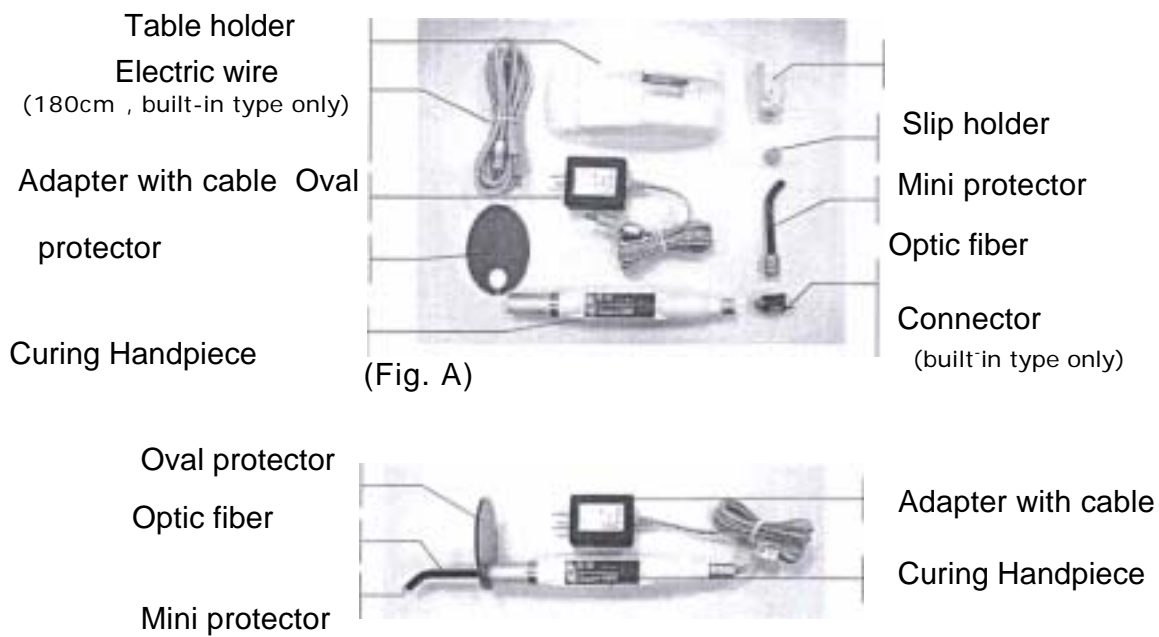
7)) Sleeping Mode

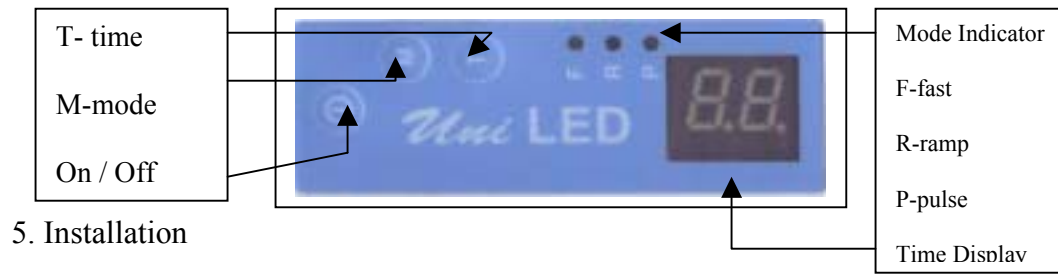
When unit is no longer in use for 3 minutes, the operation will turn into sleeping mode to save energy.

8)) Auto memory

When power off, it will return to the last setting for next operation, including timing and program.

4. CONSTITUTION AND PANEL FIGURES

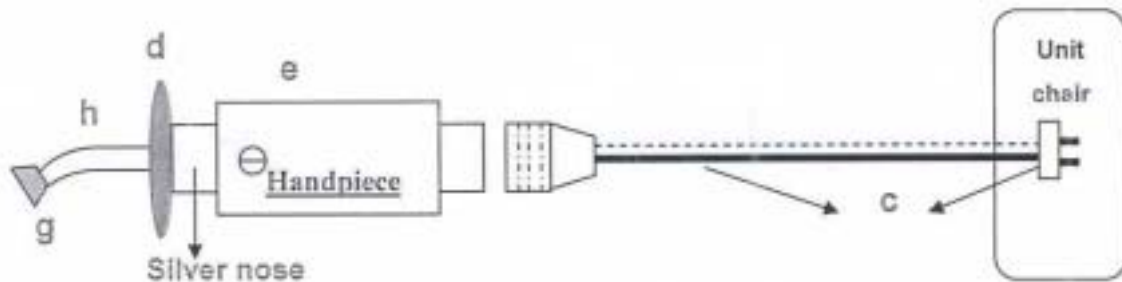




5. Installation

Table type of UNI LED: Connect the parts as follows in fig B.
 For built-in type use: There are two methods to choose:

A) Fixed Wire way (Part C, D, E, G, and H)



** The Voltage stickers on the adapter and handpiece must be matched or damage will occur.

1. **Install Light Guide:** (h) Insert the connector of light guide into the front of the silver nose.
2. **Install the oval protector (d) or mini protector (g)**

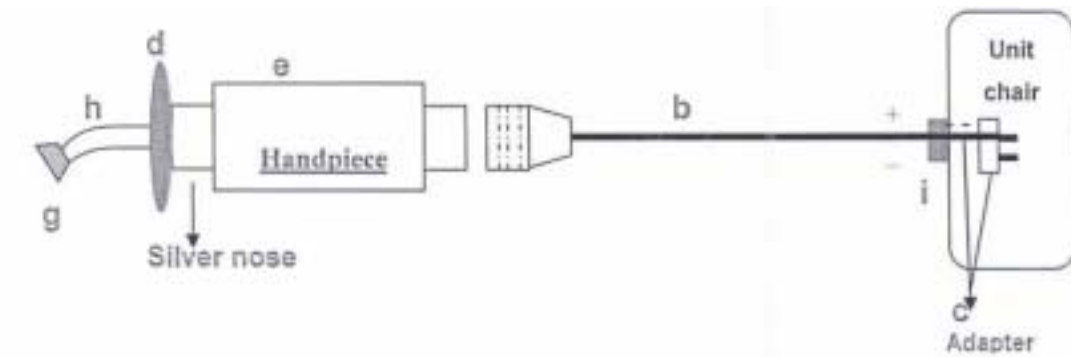
Oval Protector: Slide the oval protector over the front body of the silver nose. You should hear a click.

Mini Protector: (Rubber Shield) Put the mini protector onto the light guide with the small caliber toward the handpiece and set the large caliber outstrip the end of light guide about 1 mm to obtain better curing.

3. **Connector Switching Power Adapter (c)**

Connect the switching power adapter into the bottom of you UNI LED curing light. Screw the locking nut into place. Now you may plug the adapter into the AC socket (AC110V ~ 240V).

B) Separated wire way (all Parts)



** The voltage stickers on the adapter and hand piece must match.

1. **Install Optic Fiber (h), Oval Protector (d), and Mini Protector (g) The same as method a)** fixed wire way.
2. **Switching Power Adapter (c)** Leave proper length of the cable to build inside the unit chair with adapter.
3. **Connector:** Attach firmly the connector (i) on the unit chair->Peel off proper length of the cable of adapter (c) -Weld one wire cord of the cable of adapter (c) onto cathode (-) of the connector (i), and the other wire cord onto anode (+) of the connector (i).
4. **Electric Wire(C)** Connect the electric wire (b) with connector (i) -plug the other end of the cable into the handpiece (e) -screw tight the aluminum cover to the handpiece (e) ready for use.

Operation:

a. Set Program

Press M to select program.

- (1) F: Fast (2) R: RAMP (3) P: Pulse
(Refer to "Advantages" for further function explanation)

b. Set Timer

Press (T) to select pre set curing time between 5, 10, 20, 30 and 40 seconds. Press (T) and hold till a "beep" sounds, then using the M and T buttons you may now select curing times to be with in 1 to 65 seconds. Now press the "O" button to save your new curing time.

c. Start to operate

Press “ Θ “ to start curing program. A “beep” sound will be heard every 10 seconds. To interrupt a program just press “ Θ “ The curing light will turn off automatically after finishing the program.

d. Wake up from sleep mode

The operation will turn into sleeping mode automatically when the unit is not in use for three minutes or more. Press “ Θ “ to wake up the unit.

e. Switch off the power

NOTE : Time display could be changed to fit left-handers. Follow the instruction to change the display between left and right direction: Remove the adapter press T and simultaneously re-connect the adapter with the handpiece. Release button T.

Remove the switching power adapter.

7. Maintenance

1. Be sure no material is sticking on the surface of the light guide after using. X Be sure to turn off the LED light while checking. Be careful not to look directly at the blue light which may injure the eyes.
2. If there are some materials sticking on the light guide, immediately clean it with soft cloth. Keep it clean for better light output and longer life.
3. The light guide should be sterilized after each use. It can be safely autoclaved in saturated at 121°C, 1 kg/cm² for 30 minutes. Let it cool down for 30 minutes before handling
4. The other accessories such as handpiece, plastic oval protector ...etc., should be scrubbed by pure water or antiseptic and sheathed in accordance with standard disinfection procedures
5. Conditions for storage and shipment:

Temperature range	0°C ~ +40
Humidity range	10% ~ 90%
Atmospheric pressure range	700 ~ 1060hpa

8. TROUBLE SHOOTING

FAULT	POSSIBLE CAUSE	SOLUTION
A) The power of blue light is reduced.	1 . The light guide is not properly seating.	1 . Check the light guide and assemble it properly.
	2. The light guide has crevice.	2. Replace the light guide and make sure no fracture lines appeared.
	3. Some materials stick on the surface of the optic fiber.	3. Remove materials with a blunt tool from optic fiber.
B) Curing light, display and function indicators are not workable. No power comes out.	1 . Adapter is not properly connected with handpiece.	1 . Reconnect adapter with handpiece properly.
	2. Handpiece is out of order.	2. Return the unit for repair.
	3. Adapter is out of control.	3. Replace with new adapter.
C) Display works well, but no light emits out.	1 . Control unit is out of control.	1 . Return the unit for repair.
D) Display reverses from right to left.	Follow the instructions to convert it: Remove the adapter - press SU and simultaneously reconnect the adapter with handpiece - release b	

NOTE:

- Users need to follow instructions of materials or composite provided by its original manufacturer.

9. SPECIFICATIONS AND ACCESSORIES

1)) Switching Power Adapter

Input : AC 100-240, 47-63Hz
Output : DC 5V, 1.5A
Output power : 7.5W MAX

2)) Light Source

Model Type : High - flux Blue LED
Wavelength : 430-490nm

3)) Curing Handpiece

Length : 222mm
Diameter : 28mm
Net Weight : 94.5g

STANDARD ACCESSOREIS

1) Curing handpiece (295g)	x1
2) Table Holder	x1
3) Oval Protector	x1
4) Optic Fiber	x1
5) Switching Power Adapter	x1
6) Mini Protector (rubber shield)	x2

OPTIONAL ACCESSAREIS

BUILT-IN TYPE:

1) Electric Wire (180cm)	x 1
2) Connector	: x 1
3) Slip Holder	: x 1

10. WARRANTY

- 1) This instrument described in this manual has been fully inspected and conforms to the current product specification.
- 2) This instrument is warranted for its designated use, against original defects in materials and workmanship for period of 12 months from date of purchase. Repairs necessitated by misuse or disassembling of the equipment or by the parts not provided by the manufacturer are not covered by this warranty.
- 3) To prevent delays in processing a claim under the warranty, the registration card should be completed and returned at the time of purchase.
- 4) If repairs are necessary, the device must only be disassembled by TPC or TPC authorized technical service personnel. All other attempts to work on or disassemble the unit will result in a total loss of warranty.
- 5) All warranty terms are subject / based upon the warranty card enclosed in each unit.

WARRANTY STATEMENT

This instrument described below has been fully inspected and conforms to the current products specification.

This instrument is warranted for its designated use, against original defects in materials and workmanship for a period of 12 months from date of purchase.

Repairs necessitated by misuse or disassembling of the equipment, or by the parts not provided by the manufacturer, are not covered by this warranty.

The following parts are not included in warranty:

- 1) Scaling Unit : Scaling tip, Endo-holder, File. (The handpiece can be returned for free replacement once only during warranty period.)
- 2) Curing Light : Bulb, Light guide.
- 3) Air polisher unit : Air tip, Prophy-power (SoBiCa).
- 4) Air Abrasion unit : Air abrasion tip.
- 5) Autoclave : Door gasket.

INSTRUMENT TYPE _____

SERIAL NO. _____ INSPECTOR _____

POWER _____ VOLTAGE _____
(TEAR OFF HERE)

.....

RETURN INFORMATION CARD

INSTRUMENT TYPE _____

SERIAL NO. _____ DATE PURCHASED _____

POWER _____ VOLTAGE _____

CUSTOMER NAME _____

ADDRESS _____

