Operation Manual





Illuminator User's Guide



3.5V Mini Multi-Purpose Illuminator



3.5V Transilluminator

Thank you for purchasing this Illuminator. To prevent damage to the Illuminators or injury to yourself or to others, read the following safety precaution in their entirety before using this equipment. Keep these safety instructions where all those who use the device will read them.

Symbol:



BF applied part



Internal electrical power source

Attention : Read user's guide for warning and cautions and instructions for operating.



Warnings and Cautions



Warning: Use Illuminator only with all approved 3.5V power.



Warning: This device should not be immersed in fluids.



Warning: Federal law restricts this device to sale or order of a physician.

1. Purpose and features 3.5VThroat illuminator

1.1 Purpose

The Illuminator described in these instructions for operating have been produced for ENT.

1.2 Features:

- The Illuminator is rechargeable, composed by the handle and the head
- Halogen lamp provides light output for true tissue color and consistent, long-lasting illumination.
- The Illuminator is available with Li-ion battery. Show as Table 1.

Table 1

Туре	Features	
3.5V Throat illuminator	As a throat illuminator or a Pencil flashlight.	
3.5V Halogen Fiber-Optic Trans illuminator	Fiber-optic light transmission for cool distal light. Fully sterilizable with steam, water, gas or solutions.	
3.5V Nasal illuminator	Fiber optics project cool distal light. Simply detach the head to use as a throat illuminator/penlight.	

2. Operating Instructions

Examiner holding the handle, Depress On /Off Button on the ring of handle and rotate the ring.rotate clockwise to increase brightness, rotate counter-clockwise to reduce brightness.

Operating:

- 1. Patients should be sitting in front of the examiner or the examiner's left.
- 2. According to test the different station ,select the Illuminator and turn on the power.
- 3. Push the finger seat area of the illuminator, also the top of the blade open the same angle.
- 4. The front of the illuminator have a reflactor, The test station can be observed by the light from the mirror, and also the reflacotr can rotate on the fiber-optic tube. The hole of the mirror can place the posion.
- 5. power adapter output 9 VDC -12 VDC, the current 800 mA. -1200mA.

3. Maintenance

3.1 Replacing the illumination bulb

Turn off the main power switch, remove the Series Illuminator from the power . grasp end of bulb and pull out. Insert replacement bulb, Push bulb in firmly.

The specification of bulb for the Illuminator is 3.5 V/2.7 W



Caution: Please use the appropriate bulb. When the device is powered for an extended period, the bulb may become hot. Before removing the bulb, allow the bulb to cool.

3.2 Cleaning

The cleaning of the Illuminator is easily accomplished by wiping the external surface with a cloth dampened with a mild detergent and water solution, or a 70% isopropyl alcohol, or a 10% bleach solution (by volume). Do not immerse.

NOTE: Solution entering the assembly could damage internal components. Use caution to ensure cloth is not saturated with solution.



Caution: The Illuminator should never be placed in municipal waste.



Caution: The battery should never be placed in municipal waste. Please check local regulations for disposal of batteries.

Optical specifications			
Illumination Form		Fiber optics transmit light	
Electrical specifications			
Rated voltage		3.7 V rechargeable Li-ion battery	
bulb		3.5 V/2.7 W	
		Complying with EN60601-1	
		EN60601-1-2	
Electrical Cofets	Protection: Internal electrical		
Electrical Safety		power source	
		Operation mode: Intermittent 2	
		mins "ON" 5 mins "OFF"	
Environment requirements			
Operation	Environment Temperature		+10 °C −+35 °C
	Relative Humidity		30% - 75%
	Atmospheric Pressure		700 hPa – 1060 hPa
Shipping	Common Conveyance		
Storage	Environment Temperature		-40 °C −+55 °C
	Relative Humidity		10% - 90%
	Atmospheric Pressure		500 hPa – 1060 hPa

4. Technical Specifications

