

TRANS CURE-T

- Clinical Diagnostic Transilluminator

The TransCure-T is a modular, clinical, intraoral illumination system designed to be conveniently portable for use in multiple operatories. The transilluminator is a completely self contained device incorporating a battery module, recharging electronics, 6mm x 4mm turbo light guide and a high intensity pure white LED emitter. The Trans-Cure construction utilizes a chemically resistant plastic body and glass light guide that is completely sealed to permit chemical disinfection without concern. **DEVICE CANNOT BE AUTOCLAVED OR CHEMICLAVED.**

Operational Description

The TransCure device employs a single chip, high intensity white light emitting diode (LED) operating at a color temperature of 5000K to produce the light intensity necessary for effective clinical examinations. Since transillumination technique requires a small diameter light beam, the fiber-optic or "light guide" is fabricated in the familiar "turbo" shape. This design permits the light entering the entrance aperture (6mm) to be compressed at the exit aperture (4mm) thereby creating the small diameter beam size. The light guide is not removable for sterilization purposes and is permanently retained within the probe handle.

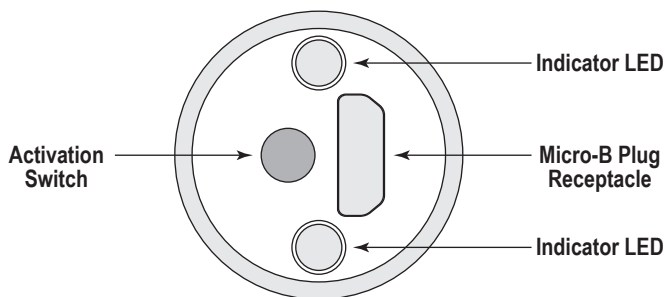
The power module consists of a single lithium ion cell that powers the LED emitter. Sophisticated electronics, including a micro-controller (MCU), closely monitors the battery and LED emitter condition for safety and performance characteristics. Also included in the electronics is a module that controls the rate of charging to insure the longest possible battery life.

The probe and light guide assembly is sealed on the charging end with a polyurethane rubber button cap. This cap is used to activate the light and also is translucent to permit a low battery warning signal to be displayed when battery charging is required. To prevent unnecessary battery depletion, watchdog electronics are incorporated that place the unit in sleep mode when not in use.

TransCure-T Operation

Before initial use, charge the battery module. To do so, remove the rubber button cap at the end of the probe handle. Underneath the cap is a micro-B connection receptacle. Plug the adaptor cable provided into the receptacle being careful to properly orient the micro-B plug. The other end of the cable can be connected to any computer USB port. Alternately, the cable can be plugged into the USB wall adaptor which is an optional accessory. If connection to a USB port or wall adaptor is successful, the two indicator LEDs will go on continuously showing that power is being received from the computer or wall adaptor.

When the battery requires recharging during normal use, the indicator LEDs below the rubber button cap will begin blinking. This will **ONLY** happen when the device is being used. It is not imperative that recharging be accomplished immediately. Generally, adequate battery energy will remain for continued operation. However, as the battery discharges further, the LED intensity reduces and may reach a point where the clinical evaluation is compromised.



Normally, a full battery charge only takes several hours and there is no indication when the charging is finished. It is completely safe to leave the device on charge for extended periods of time. The electronics continuously monitors the battery voltage and automatically terminates the charge cycle when the battery is fully charged. If attached to a computer USB port, the computer may prematurely abort the charge cycle during a sleep mode. It is recommended to check the computer operation to avoid a shortened charging cycle.

The TransCure-T logic sequencing is completely automatic and will commence as soon as the activation switch is depressed. The activation switch is located underneath the rubber button cap plug on the rear of the probe handle. Simply depress the center of the cap where the button is located. When the activation switch is depressed, the device will illuminate for a period of 60 seconds and then automatically deactivate. This cycle may be terminated at any time by depressing the activation switch again.

Infection Control Caution

The transilluminator probe assembly consists of a plastic probe handle made of polypropylene, glass light guide and a polyurethane rubber button cap. Together, the entire device is sealed and impervious to most chemicals. Spray or wipe down the entire device for adequate disinfection. The battery module is lithium ion and should **NEVER** be exposed to heat. **DO NOT AUTOCLAVE AND DO NOT CHEMICLAVE.**

