Veinlite LED®

READ INSTRUCTIONS BEFORE USE

CAUTION:
- United States Federal Law restricts this device for sale by or on the order of a qualified health care professional.
- Veinlite LED is designed for external examination only.
- To avoid contamination of the device, do not use Veinlite LED without the disposable plastic cover.
- To avoid spread of infection, always change the disposable plastic cover between patients.

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INSTRUCTIONS

Introduction
The Veinlite™ LED is a hand-held battery powered transillumination device for visualizing veins and superficial blood vessels. It utilizes the patented* transillumination technique known as side-transillumination, which enables the Veinlite LED to uniformly illuminate a small region of skin and subcutaneous tissue without any areas of shadow. The shadow-free side-transillumination technique allows better visualization of veins than any other transillumination method. The orange LEDs emit light with the optimal wavelength for highlighting the contrast between the venous blood vessels and surrounding tissue*.

Applications
- Venous access in adult and pediatric patients, especially those with a history of difficult venous access
- Easier visualization of veins in darkly pigmented patients
- Easier visualization of veins in geriatric patients
- Transillumination light for neonatal applications

Description of the Veinlite LED
The Veinlite LED has 24 light emitting diodes (LEDs), mounted in a circular array and angled towards the center of the circle. 12 LEDs emit orange light and 12 LEDs emit red light. The light from the LEDs shines through a clear plastic window [1] so that it is focused under the skin. There is an opening in the circle to allow access. The light from each set of LEDs has specific characteristics selected for optimal vein visualization at varying depths and through skins of different tones. The properties of the orange light are optimal for viewing small superficial veins and for use on patients with very fair skin, whereas the properties of the red light are optimal for viewing deeper veins and provide better penetration through darker skin.

Each set of LEDs can be independently selected by pressing one of two separate buttons [2] located one on each side of the Veinlite LED. The orange LEDs are controlled by the orange button and the red LEDs by the red button. Both sets of LEDs can be switched on at once by pressing both buttons at the same time.

Operating Directions
1. Place the Veinlite LED inside the single-use disposable plastic cover. Wipe the area of the cover coming in contact with the patient with an alcohol swab or germicidal wipe.
2. Turn off any fluorescent lights that are directly overhead, as these may interfere with the transillumination. Working under non-fluorescent side lighting is optimal.
3. Place the Veinlite LED against the skin with the LED side in contact with the skin.
4. Depress the orange and/or the red button/s [2] to turn on the LEDs.
5. Apply gentle pressure to the Veinlite LED to ensure it is in contact with the skin.
6. Use the orange button only if you are examining small superficial veins on fair skin. Use the red button also if you are examining deeper veins or if the skin is darkly pigmented.
7. To access a vein while viewing with the Veinlite LED, place the Veinlite LED over the vein. Rotate the opening in the Veinlite LED so that it faces away from the heart (see diagrams on next page).
8. Apply gentle pressure on the Veinlite LED to sequester the vein. Push back slightly on the Veinlite LED to stretch the skin and provide traction. Insert the needle into the vein in the normal way, through the opening in the circle of LEDs.
9. Discard the single-use disposable plastic cover after each patient.
10. The Veinlite LED may be cleaned periodically with a germicidal wipe but wiping the unit should be done in addition to using a new disposable plastic cover for each patient.
DO NOT LOOK AT THE LEDS WHEN THEY ARE SWITCHED ON!
DO NOT SHINE THE LIGHT FROM THEM DIRECTLY INTO ANYONE’S EYES!

Disposable Plastic Cover
The single-use disposable plastic covers for the Veinlite LED must be used whenever the Veinlite LED is placed in contact with a patient’s skin. The covers protect the Veinlite LED from contamination and prevent cross contamination between patients. These plastic covers are not sterile. Before using Veinlite LED, place it inside the cover with the flap on the same side of the the LEDs. When it is inside the cover, wipe the LED side of the Veinlite LED, and any part of it coming in contact with the patient, with a medically approved germicidal wipe. The Veinlite LED is shipped with a pack of 50 plastic disposable covers. Additional packs can be ordered from TransLite or its authorized dealer.

Low Battery Level Indicator Light
The new Veinlite LED incorporates a low battery level indicator light located in the orange light push button [2]. The light is activated when either the orange or the red lights are turned on and the battery charge level has fallen to approximately 20% of the full battery charge.

Recharging the Battery
The Veinlite LED is powered by a rechargeable lithium Ion battery similar to a cell phone battery. This battery is designed to provide between 250 and 350 minutes of continuous usage, depending on whether one or both sets of LEDs are used at once. To recharge the Veinlite LED, plug the connector of the charger provided with the device into the charger opening in the Veinlite LED [5]. A red LED light [3] can be seen in the clear window [1] when charging the battery and a green LED light [4] can be seen when it is fully charged.

DO NOT USE ANY OTHER BATTERY CHARGER WITH THE VEINLITE LED!
USING ANOTHER BATTERY CHARGER WILL DAMAGE THE VEINLITE LED.

Replacing the Battery
The rechargeable lithium ion battery in the Veinlite LED is capable of over 500 charging cycles (typically approximately three years of use) before it requires replacement. Battery replacement is simple. Slide the battery cap [6] off and lift out the battery. Unplug the connector at the top of the battery. Replace the battery with a new battery and plug in the connector. Slide the battery cover back on. Before using your Veinlite LED, please read the detailed battery safety information on our website FAQ page http://www.veinlite.com/faq.

USE ONLY THE VEINLITE LED BATTERY FROM TRANSLITE!

Cleaning Directions
To protect the device and reduce the risk of cross contamination between patients, a new disposable cover must be used for each patient. Avoid using alcohol on the clear plastic window as this may cause it to become fogged.

DO NOT IMMERSE THE DEVICE IN LIQUID! DO NOT AUTOCLAVE THE DEVICE!
Troubleshooting
Before returning the Veinlite LED to TransLite for repair, please call or e-mail to obtain a return merchandise number and shipping information. No refunds for unauthorized shipping.

- LED Failure
The light source contains LEDs designed to have in excess of 50,000 hours of operation. They should not require replacement during the lifetime** of the Veinlite LED. If an LED fails, the unit is designed to continue operating using the remaining LEDs, with only a slight decrease in intensity of light output. In case of multiple LED failure, please contact TransLite to arrange return for repair. Do not attempt to replace any LEDs.

**The predicted lifetime of the Veinlite LED is 5 years.

- No Light from any LEDs
Recharge the battery. During charging, make sure the red light [3] comes on to indicate that the battery is charging and the green light [4] comes on to signal that the battery is fully charged. If the red light does not stay on, reseat the battery plug in the unit. In the event that the battery is fully charged but the unit does not turn on, call TransLite for assistance.

- Battery Fails to Charge
If the battery fails to charge and the Veinlite LED is over two years old, please replace the battery with a new one. You can order a replacement battery from TransLite via our web site, www.veinlite.com, or by calling TransLite or its authorized dealer.

Warranty
The Veinlite LED has a one year parts and labor warranty. It is not necessary to register your Veinlite LED for warranty: the process is automatic and the serial number of the unit provides all the information needed.

Veinlite LED Specifications
Number of LEDs: 12 orange and 12 red LEDs
Weight including battery: 71g
Dimensions: 95 x 55 x 21mm
Field of View Diameter: 21mm
Access Opening: 15mm
Rechargeable Battery: 3.7V, 1000 mAh Lithium Ion
Battery Charger: 90-240 volts AC input, 5 volts DC output

Explanation of Symbols

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<thead>
<tr>
<th>Symbol</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>REF</td>
<td>Model Number</td>
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<tr>
<td>SN</td>
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<td>Manufacturer</td>
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<td>EC REP</td>
<td>EC Representative (EU Only)</td>
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<td>Do not dispose as unsorted municipal waste.</td>
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