



FIREFLY VEIN LIGHT® Model 2.0*

The Firefly Vein Light® was hand designed by two traveling pediatric ER nurses who recognized consistencies in delays in care in infants and newborns due to lack of reliable transilluminators (vein lights) available in hospitals around the country. Their dream was to design a vein light that nurses can carry on them at all times to ensure rapid venous access in infants and newborns with fewer failed IV attempts.

Important Safety Instructions:

- The device contains a small battery enclosed within the device. If swelling or leaking occurs, immediately cease use of the device, contact customer service and safely dispose of the device based on your regional hazmat standards.
- Protect the device from hitting and striking.
- Avoid ambient temperatures of 40C.
- Do NOT immerse the device in liquid.
- Do NOT puncture the device.
- Do NOT look directly into the lens of the device when the light is on.
- Do NOT leave the device with unattended children.

Using the Device:

To activate the device, push the red button on the side of the enclosure. The bright red light will turn on to the lowest brightness setting. Each time you push the button, it will cycle through the different brightness settings (4 different lumination settings in total). **To deactivate, press and hold the red button on the side of the device until the light deactivates.**

Fault Detection and Recovery:

- If the internal temperature rises above 55C, the device will activate its over-temperature fault. The main red light will no longer turn on or cycle through the different brightness settings, until the device exits the fault. An orange light will also blink quickly to indicate that a fault has occurred. Once the device cools to at least 50C, the fault will clear, the orange light will turn off, and the red light will turn on.
- If the battery state of charge gets low, the orange light will turn solid and to indicate the battery is almost drained. The main light will still work until the battery is drained and then the main light will turn off, however the orange light will remain on to indicate that the low battery fault has triggered.

Charging the device:

To charge the device, plug in a USB-C cable into the USB-C port on the side of the device. There are two charge status lights located on the device. A flashing orange light means the device is actively charging. The solid green light means that the device has finished charging.

Cleaning and disinfecting:

The *Super SaniCloth*® (aka “purple wipes”), *SaniCloth*® AF3, and Diversey Oxivir are the recommended cleaning and disinfection solution for the Firefly Vein Light® Model 2.0*. Wipe EXTERNALLY only and follow brand recommendations for disinfectant time. The Firefly Vein Light® Model 2.0* is not waterproof. DO NOT submerge in liquids.

Studded Surface:

This patent pending design was created to maintain traction on the patient’s skin when the patient is diaphoretic.

Battery:

The battery is enclosed inside of the device. Do NOT open and attempt to replace the battery yourself. Warranty will be void if the internals of the device are tampered with.

Disclaimer:

This product has **NO** assessment, diagnostic, or treatment capabilities. This product is intended to assist licensed medical professionals enhance their existing medical skills within their local and regional scope of practice. Firefly Vein Light® LLC is NOT responsible for patient outcomes while using its devices or services.

Use:

Place the Firefly Vein Light® Model 2.0* firmly beneath the patient’s extremity where the licensed medical professional desires to visualize the patient’s veins.

Activate the device to illuminate. Cycle through the lumen settings until desired lumen is selected.

Visualize desired vein and follow your local and regional standards for IV placement.

Target patients:

2 years old and younger (ideally).

Ideal location is the hands for larger infants.

Feet and ACs are best visualized for newborns and smaller infants.

Lower lumen settings are ideal for newborns and NICU patients.

Higher lumen is ideal for larger patients and darker skinned patients.

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There were no changes to the electronics or function of the original Firefly Vein Light®. Model 2.0* represents the upgraded exterior model only.

Technical Specifications

Type	Firefly Vein Light® Model 2.0*
Operating Temperature	10°C to 55°C (internal)
Battery	3.7V, 380mAh Li-Ion battery with ISO9001.
Storage Environment	Temperature: 0C to 40C, humidity: 15% to 95% (non-condensing)
Brightness Settings	7 lumens, 14 lumens, 22 lumens, 29 lumens
Device Dimensions	(L x W x H): 65mm 26mm x 16mm
Standby Time	Approx. 285 days (after a full charge)

Acknowledgements:

FDA Class 1 Medical Device Registration Number: 3024680050

FCC Approved Testing Site:

DNB Engineering Inc
1100 East Chalk Creek Rd
Coalville, Utah
84017
Report Number: UT36016A-001

- Firefly Vein Light® logo is a registered trademark (Reg. No. 7274029. Ser. No 97538460).
- Firefly Vein Light® name is a registered trademark (Reg. No. 7142318. Ser. No 97-356,977).
- Pediatric Nurse Owned Business
- Veteran Owned Business
- Proudly designed, manufactured, and assembled in the **U.S.A.** (with some foreign parts).
 - Engineered: Black Stripe Technology Inc. Glendale, California
 - Manufactured: ISO 13485: Odyssey Electronics Inc. Livonia, Michigan
 - Manufactured: ISO 13485: MedBio LLC. Clint Township, Michigan
 - Distribution Center: Chattanooga, Tennessee
 - Firefly Vein Light® LLC Headquarters: Chattanooga, Tennessee

Visit www.fireflyveinlight.com for more details.

“Place infant and newborn IVs like a **PEDS** nurse!”