

# SewGlo™ ILLUMINATED THREAD

The only illuminated thread that works like real thread. Sew it, embroider it, run it through an industrial machine. SewGlo™ integrates EL lighting directly into fabric at 0.3-0.48mm — invisible until lit.

## THREAD VARIANTS

	<b>SewGlo™ LT</b> Ultra-Fine · Original	<b>SewGlo™ HD</b> Heavy Duty · Most Popular	<b>SewGlo™ XR</b> Industrial · Structural
<b>Diameter</b>	0.30mm ±0.03	0.48mm ±0.05	0.48mm
<b>Break Strength</b>	≥7N	≥60N (8x LT)	Aramid core
<b>Luminance</b>	≥13 cd/m <sup>2</sup>	≥20 cd/m <sup>2</sup>	≥40 cd/m <sup>2</sup>
<b>Hand sewing</b>	Yes	Yes	Yes
<b>Home machine</b>	Yes	Yes	Yes
<b>Industrial</b>	Caution	Yes	Yes
<b>Embroidery</b>	Low speed only	Yes	Yes
<b>Fine detail</b>	Best choice	Limited	Limited
<b>Load-bearing</b>	No	Limited	Yes
<b>Max run</b>	Short-moderate	Moderate	50m+
<b>Machine wash</b>	Cold, hang dry	Cold, hang dry	Cold, hang dry

## CHOOSE THE RIGHT THREAD

### SewGlo™ LT — Fine Detail Work

Script lettering, fine logos, intricate embroidery on lightweight fabrics. Maximum flexibility at 0.30mm. Best for hand sewing and hobby machines. Not recommended for industrial machines under high tension.

### SewGlo™ XR — Industrial and Structural

Aramid core delivers structural-grade tensile strength for load-bearing seams, safety apparel, and architectural textiles. The only variant rated for continuous 50m+ runs. Launching soon — contact us for pre-order.

### SewGlo™ HD — General Apparel and Production

The go-to for jackets, hats, bags, costumes, and stage builds. Runs through commercial sewing and embroidery machines. At 0.48mm and 60N break strength, it handles production-volume workloads. 8x stronger than LT.

### All Variants

Machine wash cold, hang dry. Available by the meter, in kits (1m / 2.5m / 5m), and on bulk spools. Custom lengths, colors, and connection services available — contact info@ellumiglow.com.

## WIRING DIAGRAMS

### BATTERY OPERATION



### PLUG-IN OPERATION



**BEST PRACTICES**

**Bending and Flexibility**

SewGlo™ can be knotted without breaking. For wearable applications, it will last the life of the garment. The connection point is the most vulnerable area. Keep it as stationary as possible to extend service life.

**Sewing and Embroidery**

Hand stitch exactly like standard thread. For sewing machines, run under 5kpsi. For embroidery machines, set thread diameter to 0.4mm and reduce tension. High-speed passes can snap the fiber — slow, consistent passes work best.

**Brightness**

LT outputs ≥13 cd/m², HD and XR output ≥20 cd/m². All look vivid at night or in low-light environments. In direct sunlight the glow will wash out. Plan your application's lighting conditions accordingly.

**Power Selection**

SewGlo™ draws roughly 1/4 the power of standard EL Wire per foot. An inverter rated for 15-30ft of EL Wire will support 60-120ft of SewGlo™. Calculate total wire length (all strands combined) and select an inverter rated for that range. Requires 800-6500Hz for best output.

**Connecting**

For step-by-step connection instructions and video guides, scan the QR code below or visit [ellumiglow.com/pages/el-guide](http://ellumiglow.com/pages/el-guide). Custom connection and splicing services are available — add a connector at checkout.

**Cleaning**

Machine wash cold, hang dry. Remove all electronics before washing. Apply waterproof adhesive to the cut end of any trimmed thread to seal out moisture.

**LEARN MORE**

Full wiring guides, connection videos, and integration tips at our Learning Center: [ellumiglow.com/pages/el-guide](http://ellumiglow.com/pages/el-guide)  
Scan the QR code or visit our product page for direct access.



**FAQ**

**Does SewGlo™ require an inverter?**

Yes. All EL-based products need an EL inverter (800-6500Hz). Battery packs and wall-outlet adapters are both supported. LumoS and LumoX are the most popular wearable options.

**Can it be cut?**

Yes. The thread glows to the cut point. Apply waterproof adhesive to the cut end to seal out moisture and debris.

**Is it machine washable?**

Yes. All variants are rated for machine wash cold, hang dry. Remove battery and inverter before washing. Seal the connector end with waterproof glue for frequent laundering.

**LT vs HD — which should I order?**

LT for fine detail, hand sewing, and delicate fabrics. HD for production runs, industrial machines, and any build that needs brighter output or higher durability.

**Can SewGlo™ be customized?**

Yes. Custom lengths, colors, and connection configurations are available. Volume pricing and OEM spool sizes supported. Contact [info@ellumiglow.com](mailto:info@ellumiglow.com) or 877.615.6556.

**Where are integration guides?**

Visit [ellumiglow.com/pages/el-guide](http://ellumiglow.com/pages/el-guide) for connection videos, embroidery guidance, and application notes.