

LCD Backlighting



Keyboard & Keypad Illumination



Touch Panel, Graphic Interface & Dead Front Illumination

# The World's Most Efficient LED-Based Edge Lighting Solutions

GLOBAL LIGHTING

TECHNOLOGIES INC.



General Illumination



Egress, Pathway & Exit Sign Illumination



High Volume Manufacturing



Strategic Worldwide Locations

## GLT. The Innovator in LED-Based Edge Lighting Solutions

### **About Global Lighting Technologies**

Global Lighting Technologies, Inc. is the world leader in new and innovative solutions for high-efficiency LED-based lighting. GLT was founded in 2000 to develop LED-based edge lighting technology for the latest generation of flat panel displays. Today, GLT offers the world's most efficient LED-based edge lighting utilizing industry-leading light extraction technologies combined with high-volume, cost-efficient manufacturing processes to provide the slimmest, most efficient and cost-effective light guide and general illumination solutions with more efficient light extraction and outstanding performance.

### **LED-Based Edge-Lit Illumination**

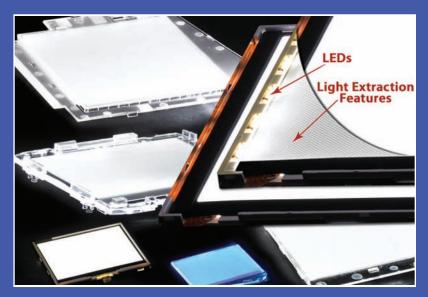
GLT specializes in focusing the light emitted from LEDs placed along one or more edges of a custom designed light guide and then extracting this light precisely as requested by the customer in a highly efficient and uniform manner. The light extraction technology employed by GLT allows for the brightest, most uniform light with the highest efficiency possible.

If it can be edge lit, GLT can provide the best illumination solution!

#### **Applications include:**

Global Lighting Technologies offers edge lighting solutions for a wide range of illumination applications:

- LCD Backlighting
- Keyboard & Keypad Illumination
- Touch Panel, Graphic Interface & Dead Front Illumination
- General Illumination
- Egress, Pathway & Exit Sign Illumination



## LCD Backlighting

GLT provides fully integrated edge lighting modules that can include LEDs, films, flex circuits, PCBs, connectors and light guides. Modules can be designed to incorporate mechanical holding features into the backlight or onto a custom-designed backlight frame.

#### **Applications include:**

- LCD TV
- Handheld, tablet, notebook, and desktop computers
- Mobile phones
- Handheld games
- GPS devices
- Automotive displays
- Thermostats
- Portable DVD players
- Instrumentation and control displays
- Any LCD from 0.24" through 65" diagonal



## **Keyboard & Keypad Illumination**

GLT offers the thinnest LED-based lighting for keyboard and keypad applications, utilizing the most efficient light extraction technologies and optical engineering expertise to extract light only where necessary for bright and uniform lighting.

#### **Applications include:**

- Notebook computers
- Desktop computers
- Mobile and desktop phones
- Hand-held devices



### Touch Panel, Graphic Interface & Dead Front Illumination

GLT's thin LED-based edge lighting technology allows our light guides to be placed within the stack-up necessary for the sensing of touch within devices.

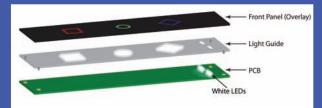
#### **Applications include:**

- White goods
- Printers
- Home entertainment devices
- Medical diagnostic displays

GLT's light guides are ideal for graphic interfaces employing capacitive or field effect touch technology:

- Directional symbols
- On/off buttons
- Company logos
- Rotary switches
- Sliders
- Keypads
- Wide array of graphic icons
- Dead front displays that illuminate upon activation





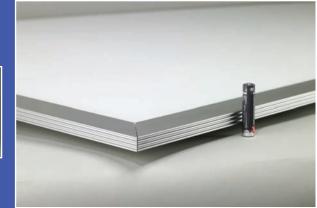
## **General Illumination**

GLT's unique light extraction features and manufacturing processes create extremely thin, highly efficient, light guides that can be custom designed for a variety of applications and sizes. These include:

- Edge-lit illumination for downlights and overhead lighting including task lights, troffers, and room lighting
- Under-cabinet, splash, and desk task lighting
- Architectural lighting
- White goods and industrial enclosure illumination



This 23.5" x 23.5" troffer downlight features a slim, lightweight backlight assembly that is edge lit with high efficiency LEDs that focus the light into a high-performance light guide.





## Egress, Pathway & Exit Sign Illumination

GLT offers edge-illuminated molded LED light guide panels for exit signs and all manner of egress and directional lighting.

- Custom light extraction for exceptional performance
- Thinnest available
- Exceptional lighting control
- Custom focusing of light emission
- Customized sizes and colors
- Capable of two-sided illumination
- Reduction in LED count





## **High Volume Manufacturing**

### Prototyping

GLT's prototyping capabilities provide the customer with a tangible sample that is optically representative of a production backlight.

- Custom prototyping
- Quick turnaround
- Reduced development times
- Minimal cost

### Tooling

GLT is vertically integrated, enabling us to control all aspects of tooling fabrication to ensure:

- Accurate reproduction of the simulated backlight
- Shortest possible lead times
- Excellent quality
- Maximum tooling life
- Minimal cost

### Production

Global Lighting Technologies maintains four company-owned production facilities:

- Shanghai, Suzhou, Taipei, Zhongshan
- Low-cost, high-volume manufacturing
- Complete engineering support close to our customers
- State-of-the-art facilities and equipment
- Comprehensive array of test and measurement equipment
- Multiple clean room assembly areas
- ISO 9001:2000; ISO 14001; RoHS compliant
- TS 16949 Certified facilities









## **Strategic Locations Worldwide**



Taipei, Taiwan – Corporate Headquarters, Sales, applications engineering, R&D, mold design and fabrication, light guide production including clean room molding and assembly



Suzhou, China – Light guide production, including molding of value-added components, clean room molding and assembly, and mold maintenance

### Contact Us

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Brecksville, Ohio, USA – Sales, applications engineering, prototyping, test and measurement, and optical modeling/simulation



Shanghai, China – Sales, applications engineering, mold design and fabrication, light guide production including clean room molding, assembly, and PCB assembly



Zhongshan, China – Light guide manufacturing for large size products including LCD TVs

