



Electroluminescent Backlight

Keytouch designs and manufactures front panels, membrane switches and electro mechanical operating panels with embedded electroluminescent backlight (EL-film).

Screening

A layer of screening is embedded in every single EL-film construction, to prevent crosstalk from the EL-film to other electronics.

Advantages with electroluminescent backlight:

- Thickness 0,2 mm
- Gives off no heat
- Light weight
- Flexible
- Large assortment of colors available
- Light is distributed evenly on large surfaces
- Dimming function
- Luminary buttons, texts, frames, logos etc.



EL-film structure

EL-film is printed in layers onto a polyester surface composed of a layer of custom-made phosphorous situated between two electrodes. When AC-voltage is connected, an electric field is created which ignites the phosphorous particles.

Keytouch provides power to the illuminated area to control dimming and luminous intensity. Duration of the EL-film depends on voltage and frequency. Optimal duration is best obtained by dimming the light, installing a light sensor, or by time-limited activation.

Since 1997, the production process related to EL-film has undergone constant evolution. Our expertise on the area currently includes technical printing processes, chemical processes, graphic design and electronic solutions.

Technical data

Power consumption mA/cm ²	0.15
Dimming	Yes
Luminous intensity	Lux 20-25
Serial reproducibility	± 15%
Wear life, 20 °C / 50% RH	Timer >50.000
Thickness	mm ≥0.175
Storage temperature at 30% RH	°C ÷40 - +100
Application temperature at 30% RH	°C ÷40 - +85