

## Expertise and Organisation = Source of Competitiveness

**Hello! Our objective is to keep you informed of the latest finds in the domain of PoS display lighting and animation, because your success also depends on the innovative ability and competitiveness of your suppliers:**

### Only seen at the Popai Exhibition!

The Loupi booth at the 2004 Popai exhibition is lit exclusively by LEDs with a total consumption of less than one Kilowatt! Some twenty LED daylight spotlights (20W mains power for each) illuminate the products and logos while an overhead light consisting of 3000 computer-controlled LEDs (300W mains power) in 5 different colours re-creates all the lights possible. 5 to 10 Kilowatts would be needed to create the same effect using traditional light sources. LEDs also contribute to conserving the environment by reducing energy consumption in diffusing a highly efficient and durable economic light. May the Gallium be with you!

Fabien POUTIGNAT



15 LED 1W + réflecteur flood

and stamped aluminium reflectors to achieve maximum optimisation of diode performance.

LED power is 1W, hourly consumption 350mA, voltage 3V to 4V. All Luxeon LED installations are supplied with a mains adapter, a LED driver or current regulator and diodes connected in parallel or in series. An electronic control unit and a customised power supply are associated with each configuration. Customised MCPCBs can be designed to meet requirements, with a LED installation conforming to the specifications.

Several types of lens are available, including the "side emitting" LED which allows the light box to be extra flat.

2 reflectors can be supplied "flood" (80° beam) and "spot" (15° beam) for creating different lighting effects in PoS displays. Like traditional LEDs, 1W LEDs can be part of an animation with gradual lighting and extinguishing, fla-

shing, colour changing or a whole range of other effects. The LEDs in this case are managed by micro-electronic control circuits using software conforming to your specification.

Its tiny light source of unbelievable intensity and unsurpassed continuous service life of more than 5 years without any deterioration of the wavelength of the emitted light make the 1W LED an exceptional lamp.

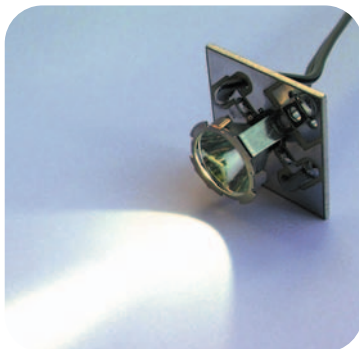
Maintenance-free, simplified standards (Class 3 electrical equipment), the unequalled combination of size, power, performance and lighting quality are the characteristics of these new electronic lights of the future.

### High intensity white LED

The 5mm diameter (6000 - 9000 mcd at 20mA standard) high intensity LED can be supplied in colour temperatures 3500K warm white, 6500K pure white and 9000K cold white.

Price reductions on white LED systems: now from 0.40 € to 1€ per light dot, flashing or fixed lighting kits using LR/20 Procell® from Duracell® batteries.

### **new** 1W LED Micro spots



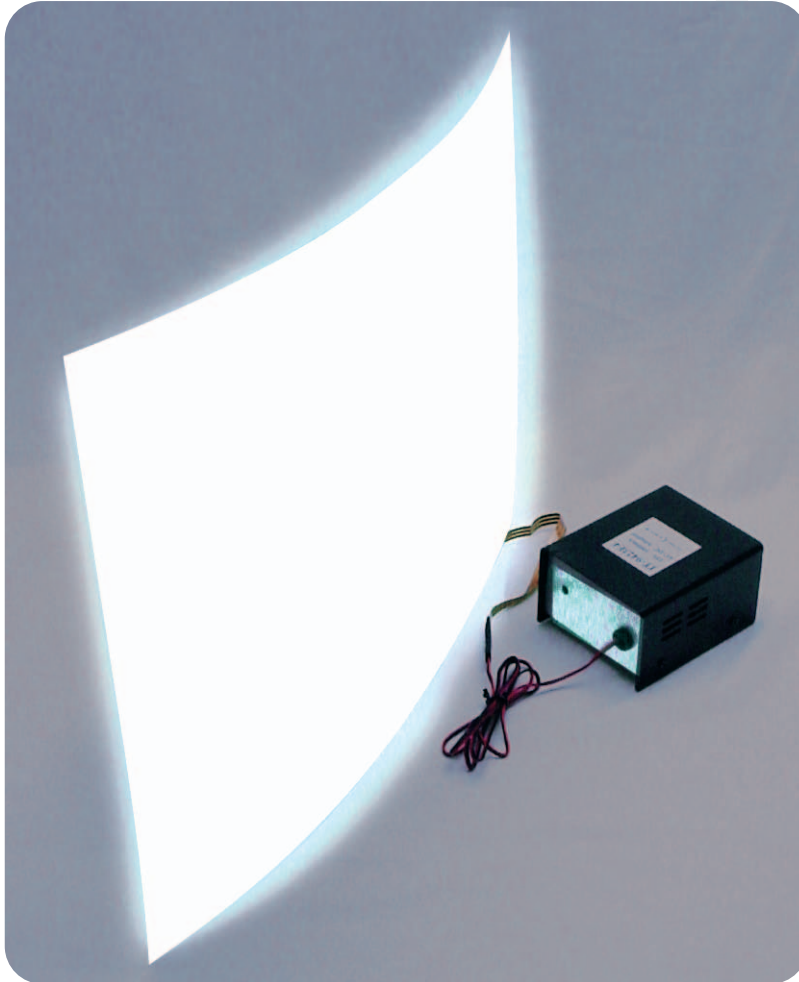
Micro spot

One LED ten times more powerful than the white LEDs usually used, 3000 lux measured 30cm from the emitter.

In cooperation with Future Electronics, sole European distributor of Luxeon® LEDs, we are developing a full range of double-layer metal circuits (Metal Core Printed Circuit Boards -- MCPCB, in view of the fact that metal is needed for thermal regulation of the diode)



# Électro luminescence



50 x 30cm Plate

## EL Plates

The thin flexible light-emitting sheets of electroluminescent PoS displays now provide a fully developed means of illuminating displays or simply of creating luminous decorative detail. The result is similar to a light box containing a traditional bulb or to a fluorescent back light without taking up the same amount of space.

An electroluminescent installation comprises a mains adapter, a driver and the Electroluminescent lamp (also known as the electroluminescent sheet).

EL lights can be animated with

simple flashers, fade-in/fade-out lighting and extinguishing sequences or sequence types requested by the customer.

We offer: evaluations, personal quotes, computer simulations, design and manufacture.

EL sheets are supplied in several white tones and in each "real" colour. Mixing is not possible, as each "closed" surface corresponds to a single colour based on the logic used for animated fluorescent displays.

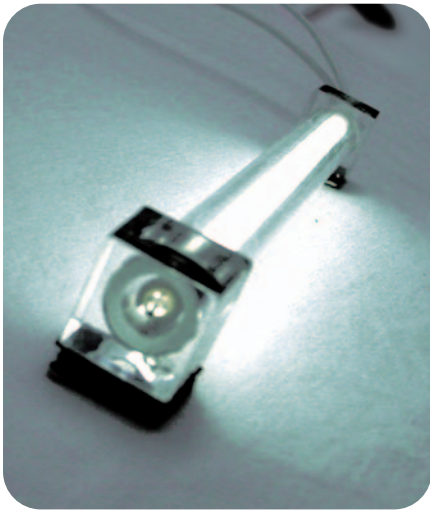
EL sheets are encapsulated in a protective transparent plastic coating which allows them to be screen process printed.

## Interaction capability creates PoS display autonomy

Every animation system, motor, 1W LED, EL sheet, voice module and LED system is capable of battery operation if remotely-controlled by a IR presence detector. This principle offers the following advantages: the display is only activated by passers-by, thereby enhancing its impact on the consumer. Also, it is easy to install since it has its own on-board power supply. The notion of non-stop PoS display autonomy is replaced by the notion of numbers of "hits".



Infrared + spot detector



**new CCFL Tubes**

« Cold cathode Fluo Lamp » is the name given to this small economical fluorescent tube, diameter 4.1mm, supplied in lengths varying between 15 to 60cm. Very robust (the tubes are encapsulated in transparent plastic cases), easy to install (adhesive Velcro®), powered through 12Vd.c. adapters and economical, these tubes provide an intermediate solution between white LEDs and conventional fluorescent tubes. Supplied in several colours, including "cold" white.

**Audio modules for every budget.**

Animated mailshots always succeed. Be sure that what you send out is unique and amusing.



*OTP2 Module*

Several technologies are available:

- OTP1 modules, supplied with your 10 or 20 second audio document, delivery of small quantities in one week.
- Programmable OTP2 modules,

supplied with your 6 second audio document, one month delivery from 5000 pieces.

- "Mask ROM" audio modules, price depending on quantity and the size of the audio file memory. Supplied from 30 000 pieces.

The most affordable audio modules: "Melody" modules emitting a series of sounds (tone generator) to reproduce your tune. Customised mask and chip from 30 000 pieces. A wide choice of standards from 5000 pieces.

Module prices vary depending on the technology and quantities: from 0.20 € for melody chips by the million to 4.00 € for 10 second OTP1 chips in small quantities.



*Flapsign configured for Nokia 09/04.*

**1 audio chip** →  
**From 0,20 €\***

*Melody Module*

\* Orders for over 20 000 pieces

**Flapsigns**

Loupi Electronic and Electronic Art Gallery are the exclusive European importers of PoS material supplied by the Japanese manufacturer Kokusai Display Industrial Co., renowned for its famous pendulums supplied by photovoltaic cells, and also for its animated PoS Flapsign displays.

The Flapsign is a system of shutters which open and close to reveal sets of several images up to a maximum

of three based on magnetic field technology. Flapsigns exert real fascination.

Very popular with our East European neighbours, there is every chance that Flapsigns will bring great success to anyone who adopts them in France!

Beware of imitations! Kokusai Display Solar Pendulums and Flapsigns are protected by international patents. There are illegal copies on the market.

## Stock items ready for use in Germany

A list of stock items readily available in any quantity is given on [www.loupi.com](http://www.loupi.com), click on "Stock".

A wide range of LED light systems, motors, turntables, voice modules for PoS displays, proximity sensors, audio modules for mailshots etc. are included in the list of "best sellers" we keep in stock.

## A stock of electronic components at the factory

In order to respond rapidly to requests for customised assemblies, most LEDs are stored as components. A back-up stock of 100,000 white LEDs in several colour temperatures allows delivery within about 3 weeks.

LED control chips (under the ownership of Loupi EAG), mains adapters

and most printed circuits are also kept in stock.



## Flashback

In 1984, during a fashion and electricity retrospective held at the Palais Galliera, Loupi exhibited its collection of the first electronic fashion accessories which started appearing in the Sixties, alongside luminous dresses by Poiret, fabulous costumes by Fellini and many other extraordinary creations based on the use of electric light bulbs. Monsieur Castet from Dior was visiting the show and asked Loupi to design lighting systems for Dior furs.

1985, avenue Montaigne, Paris. The house of Christian Dior is hectic. The new "Haute Fourrure" (furs) collection is to be presented. They're using an innovative feature – embedded electronics.

A white mink called "Saga" (see photo) had been decorated with several hundred miniature watch light bulbs (made for the first LCD watches) controlled by a programming circuit. The letters of "Paris – Dior" lit up one after the other to arrive at the full light display. Another mink called "Obsidiane" had 300 LEDs sewn into every edge of the garment.

I was there to take care of any technical hitches during the cat-walk show.

Which of course ended up being the case! But the emergency tool kit containing the required tools had disappeared.

In the meantime the security guards for the event told us that the entire building was subject to a bomb scare.

What had provoked it?

Our missing tool kit had been spotted!

Everything settled back to normal though, and the show took place without any further incidents.

I'm curious to know what happened to these futuristic furs.

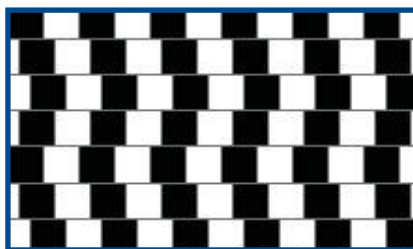
LOUPI



LOUPI

## Quiz

**Optical illusion – are the horizontal lines parallel?**



*Yes they are – you can check with a ruler!*

**What do we mean by "colour temperature" expressed in K?**

1) K is a unit defined by German scientist Von Karstadt which measures the range of colours in the rainbow spectrum.

2) K stands for Kelvin. It was Lord Kelvin who defined this unit of absolute thermodynamic temperature, and the light emitted from a heated black body is defined in K.

3) K stands for "kilo", which is a multiplier of 1000 and monochromatic light is measured in 1000 tones.

*Number two is the correct answer.*