

## In brief ...

● **LightGraphix Ltd** has appointed a new distributor for its complete range of products: Design Lighting (Bristol) Ltd.

● **Apollo Lighting Ltd** is a new company formed to embrace the former activities of Apollo Emergency Lighting Services and ABT Lighting. Keith Parsons has joined the board of directors. The company is operating from Apollo House, North West Road, Leeds LS6 2QE.

● **Quest Lighting Ltd** and Emess Lighting (UK) Ltd have been amalgamated and will now trade as Quest Emess Ltd, from Stourbridge. Barry Lister has been appointed managing director, Peter McGrath chairman and Allen Mitson vice-chairman.

● **Lighting & Ceiling Louvres Ltd** has now received a certificate confirming that its quality assurance scheme meets the requirements of BS5750 Part 2.

● **Pact International Ltd** has added a £1 million extension to its warehouse, providing increased capacity for growth and rapid response to new market opportunities. Orders are processed by a computerised on-line stock control system and an identical back-up system has been installed.

● **Profile Lighting Services Ltd**, a recently formed commercial lighting company, is based at Links Business Centre, Raynham Road, Bishops Stortford, Herts CM23 5NZ.

● **Urban Enviroscope Ltd** is now offering its sealed beam road lanterns with Osram's new 70W SON lamp, which at 2000 hours is stated to have an output of 6180 lumens giving 10% extra illuminance.

● **Derek Phillips Associates** is in future to be known as DPA. Its team of experts now covers the fields of architecture, daylighting, illuminating engineering, luminaire design, theatre lighting and lasers, providing a balanced approach to deal with any architectural lighting project.

● **Rada Lighting Ltd** has been certified as a company of Assessed Capability to BS5750 Part 1/ISO9001:1987, gaining assessment to full European certification standards for quality assurance.

● **ICC Financial Surveys Ltd** has published *Electrical Wholesalers Financial Survey*, price £195. It is available from ICC at 72 Oldfield Road, Hampton, Middx TW12 2HQ.

## INSIDE THIS ISSUE

News	1,2,16
New products	4,5
EMILAS awards	6
Town centres	8,9
conservation	11
Letters to the editor	11
Classified advertising	12
Where to buy	
directory	13,14,15
Catalogue directory	15

## Emess expands in France

Emess plc is to acquire some 89% of the issued share capital of Eclatec of France, for approximately £5.3 million, to be satisfied by a vendor placing of 4.6 million 6.25p (net) convertible cumulative redeemable preference shares of 5p each at 115p. The transaction has been cleared by the French Direction du Trésor. Emess is obtaining an irrevocable acceptance in respect of a further 10% of Eclatec's issued share capital and the shares concerned will be acquired for cash.

Eclatec, a non-quoted French company operating from Nancy and Paris, is stated to be the third largest manufacturer of commercial lighting fittings in France.

Principal products are lighting for roads, tunnels and motorways; this includes traditional style street lighting. Other outdoor products are luminaires for petrol stations and car parks. Another major area is luminaires for offices and public buildings.

In 1988, on sales of 137 million francs, profit before tax was approximately 8 million francs. Recent prestigious projects completed by Eclatec include the Grande Arche at Tête Défense, the Musée d'Orsay in Paris and the Pont de l'Île de Re where Eclatec products were installed to illuminate the 3km length of the bridge.

Guy Cervellini, formerly managing director of the Jumo Concord, Lumiance and Le Dauphin lighting companies has been appointed as the chairman of Eclatec.

Commenting on the acquisition Michael Meyer, chairman of Emess, said that Eclatec had been purchased to expand the commercial lighting interests of Emess in France.

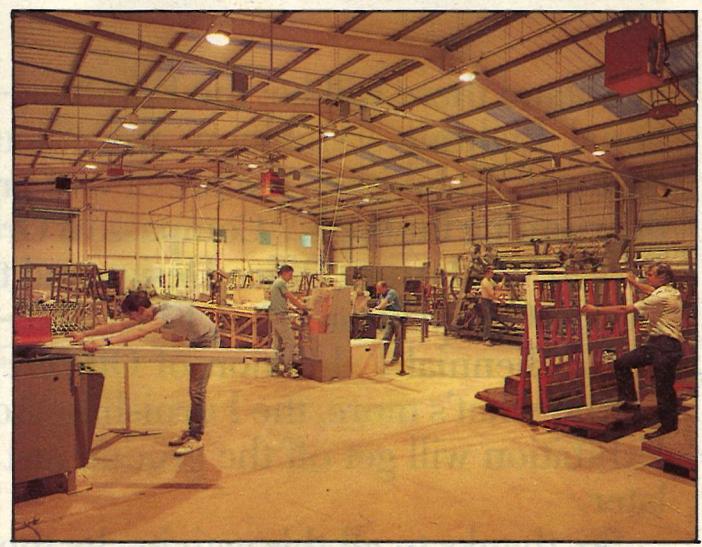
It will facilitate the sale of Marlin lighting fittings there because Eclatec has no products similar to Marlin's. Ownership of Eclatec will also enable its complementary lighting to be distributed in the UK. At present Eclatec exports 30% of its production.

Mr Meyer says that Eclatec is a well managed company with an enviable product reputation in Europe. He added: "I am particularly pleased that the present management has agreed to assist us in our development in France".

Among British-owned lighting fittings companies, Mr Meyer thinks that Emess is now probably the second largest (after Thorn).

When asked by *LEN*, "Where is Emess going after this?" he replied, "We've got a lot more to do. We've only just started". He envisages expansion not only in Europe but in North America and the Pacific Basin. Currently, the company claims to have just over 1% of the world market for lighting fittings.

Emess shares have just been listed on the Frankfurt Stock Exchange — further evidence of the multinational character of the company.



## Aiming high

Sheffield University and Thorn Lighting are undertaking a joint venture to investigate the high temperature operation of lighting sources using advanced laser and computer modelling equipment. The aim is to improve the energy efficiency and performance of lamps, particularly discharge and tungsten halogen light sources.

To this end they have set up high

temperature science laboratories at the university, which occupy some 70 square metres of floor space and contain optical tables for six lasers.

During a lamp's operation, high temperatures are achieved in a small confined volume — for example in a high pressure mercury discharge lamp, temperatures can reach up to 5700°C, enough to vapourise most materials. The combination of laser technology and powerful computer modelling provides a unique, non-intrusive



Photos: Didier Degrendel

## Setting the Bastille alight 1989 style

From dawn to dusk, pulsating lighting at the Opera Bastille, the new Paris opera house, enhances the architectural features of the building: its transparent elements, massing and angles. The lighting display is governed by a computer which reveals by rhythms and harmonies in external lighting the internal functioning of the building, picking up electrical impulses from building services elements, such as lifts, air conditioning and security systems, and transforming these into pulses of light.

The installation was designed by Yann Kersalé, best known for the pulsed lighting system he installed in the Grand Palais, in Paris, in 1987. Equipment and lighting engineering were supplied by Philips Eclairage.



## A new light on windows

The new factory of M & M Windows, a Sussex-based upvc double glazed window manufacturer. The 622 square metre factory unit in Uckfield is the company's second. The lighting system comprises 15 industrial Radpak fittings incorporating 250W de luxe high pressure sodium lamps.

The new building recently received a highly commended award in the EMILAS scheme. Our feature on page 6 looks at other award-winning schemes.

method to help measure temperature and chemical reactions, and to examine gas flows within such lamps. This will lead to a greater understanding which will help to improve lamp life and create options for new products.

The chemistry department at Sheffield University has developed expertise in many areas, including high temperature physical chemistry, fluid flow modelling and laser spectroscopy, which are directly relevant to the new project.

**HELVAR**  
PRODUCTS THAT SOLVE PROBLEMS  
01-568 6205

SIMPLE INSTALLATION - 2 WIRE  
FLEXIBLE PROGRAMMING  
SINGLE OR MULTI CHANNEL

THE NEW - LIGHT CONTROL SYSTEM

# The Salone del Mobile di Milano will open its doors on September 20<sup>th</sup> 1989. It'll be the last chance to get into Europe before the 1990s.



On September 20<sup>th</sup> Italy will take a seat in the Europe of the nineties a good 100 days before the calendar.

A time machine, perhaps?

No, the Salone del Mobile di Milano (a fair success even before it begins, since Milan is Europe's furniture capital). Its aim is to fulfill new functional, aesthetic and emotional requirements through projects and production.

A new view of living space.

Is it the same old story of things made in Italy?

No, it's not. It's something new: Italians are facing up to the nineties.

At the same time as the 29<sup>th</sup> Salone del Mobile

di Milano there will be: the Euroluce - International Lighting Exhibition; the "Neoliberty e dintorni" Exhibition; the preview of products in the running for the XV Compasso d'Oro; Forum Design '89; Forum Office Design and the Office Design Competition. Plus, EIMU '89 - International Biennial Exhibition of Office Furniture.

And what's more, the Furnishing Accessories Exhibition will get off the ground just two days later.

So, thanks to all this activity, by the time the next decade reaches Milan, Italian Furniture will have been resting on its laurels over 3 months.

Published by Cosmit, Comitato Organizzatore del Salone del Mobile Italiano,  
Corso Magenta 96, 20123 Milano. Tel. 02/4988361, telefax 02/4813580, telex 334394 Cosmit I.



## Crowning glory

The natural beauty of Bamburgh Castle, an outstanding landmark on the Northumbrian coastline, has recently been enhanced by a floodlighting system from Osram-GEC.

The castle stands on an ivy covered rock outcrop, so a two-tier system was recommended as the most effective method of lighting both the outcrop and the castle, to give dramatic views from the surrounding countryside.

Lighting for the lower level is

provided by 17 Osram Solarflood luminaires, fitted with 400W metal halide lamps. The combination gives a dispersed, fan-shaped beam suitable for general lower level floodlighting, producing a soft green light to emphasise the hue of the ivy.

For the illumination of the castle, 18 Euroflood luminaires fitted with 400W Son Plus lamps are used, installed between the Clock Tower on the west side, and Davy Tower to the east. The luminaires

produce an intensified pencil beam, giving greater light projection to emphasise architectural features, and the lamps produce a pleasant golden light that complements the stonework of the castle.

The keep is separately treated. A Solarflood fitted with 400W Son Plus lamp is positioned to the west of the keep, creating a wide wall-washing effect, while a smaller Solarbeam with 250W Son is unobtrusively sited to light the public area.

## CIBSE moves to prevent sick buildings

While research into sick building syndrome is continuing, CIBSE is providing interim guidelines to members to ensure the highest standards of design, installation, commissioning and maintenance.

These are contained in a policy statement which reviews current knowledge of sick building syndrome, including possible contributory factors, and advises engineers on the assessment of complaints.

The document can be obtained from CIBSE at 222 Balham High Road, London SW12 9BS.

## Consultants cross the Atlantic

Oscar Faber plc has invested in Joseph R Loring Associates Inc a firm of consulting engineers based in New York and Washington DC. Oscar Faber has acquired a 30% interest in the US company with an option to acquire full ownership at a later date.

The agreement creates one of the largest trans-Atlantic alliances of consulting engineers: Oscar Faber employs 450 people; Joseph R Loring Associates has 160 employees; and the turnover of the new association exceeds £24m.

# COMMENT

## On designing white elephants

It is a sad comment on design education in Britain that the judges found it impossible to make an award for luminaire design in this year's New Designers Awards.

The judges' remarks here are most enlightening: they found nothing among the entries that could usefully be employed in a lighting design project! There were, they admitted a number of innovative ideas, but these were 'inappropriately conceived technically' and seemed to be in the tradition of design for design's sake rather than design for production.

Michael Jankowski, Marlin Lighting's Design Director, and one of the judges, felt that little consideration appeared to have been given to the 'realities of lighting at the onset of the project'. He went on to record a sense of disappointment that there seemed to be so much misunderstanding among students as to what market requirements really were.

So, what are the shortcomings in design education that make this state of affairs possible? Jankowski compared the situation in the UK with that in continental Europe. When working in Holland he had regularly had contact with students and academics. Both would come and talk to him as a manufacturer and expect counselling, just to give the project that contact with reality that made it a useful learning tool for the student.

In his opinion, government, professional institutions, manufacturers, students and educationalists seemed to have more natural contact with each other in mainland Europe than we had in Britain.

If such contact does not develop naturally in this country how, then, can it best be stimulated? Schemes like *Designers into Industry* sponsored by the Royal Society of Arts, provide excellent industrial experience for those who wish to specialise in lighting, but can only offer a strictly limited number of places — and at graduate level.

What is really needed is ongoing contact at undergraduate level. How can we achieve this? According to Sally Storey of Lighting Design Ltd, who also judged the awards, tutors need to bring in outside consultants for lighting projects. These should include both a lighting consultant who can explain what lighting can do, and a manufacturer who can discuss the constraints imposed on luminaire design by production requirements. Although the former would probably need to be brought in by tutors using the limited budgets at their disposal, surely some manufacturers would be prepared to offer their expertise free of charge.

So manufacturers, if you wish to improve the general standard of luminaire design in this country, approach your local college of design and offer your services.



## Casting a new light on sales

Lighting is a major feature of the refurbishment of a Plymouth car showroom, Vospers Motor House.

The lighting design, by Light Years combines a medium ambient light level with highlighting of the cars using spotlights, and display lighting of the graphics around the perimeter of the showroom.

Over 40, 1.8m 70W low brightness surface-mounted fluorescent luminaires with triphosphor lamps at 3500K are installed in continuous rows to give a uniform ambient lighting level throughout the floor, the working planes and over the cars on show.

The luminaires have centrally mounted control gear which allowed the wiring to run through the luminaires rather than across the ceiling, and white stove-

enamelled crossblades were used to brighten the lighting effect of an essentially low brightness scheme.

Contrast has been achieved with strategically placed white Superbeam spotlights which use the powerful 3000K 75W Wotan Super Spot lamps, designed for accent lighting over long distances to highlight the cars on show.

Displays around the perimeter of the 500 sq m showroom have been illuminated with low voltage Universal spotlights using the Halo Star Super Spot lamp. The spotlights can be adjusted to any angle and are mounted on Tube Track 30 suspended from the ceiling.

Multiple switching allows fluorescent lighting to be reduced by as much as 75%. Low voltage fittings are on a separate circuit.

# LIGHTING EQUIPMENT NEWS

Editor: Judy Sewell

Associate Editor: Barbara Trigg

Art Editor: Lorna Francis

Midlands Area Manager: Jim Hughes

Northern Area Manager: Robert Ditchfield

Southern Area Manager: Jim Hughes

Classified Sales: Joanne Barker

Production Manager: Lee Hibbert

Circulation: Kirtee Parmar

Associate Publisher: John Bull

Publisher: Nigel Foster

Directors: R W Osborne, Canadian (Chairman), G J F Brigg (Managing Director), N C G Foster, D L Jones, D B Wright.

Published monthly by Maclean Hunter Ltd, Maclean Hunter House, Chalk Lane, Cockfosters Road, Barnet, Hertfordshire EN4 0BU.

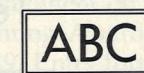
Telephone: 01-975 9759. Facsimile: 01-975 9753

Telex: 299072 MACHUN G. Northern Area Office,

Tel: Cannock (05435) 72771.

Origination by Facsimile Graphics Ltd, Coggeshall, Essex. Printed by E. T. Heron (Print) Ltd, Silver End, Witham, Essex.

Annual subscription £36 (£3.00 per copy including postage) but free to executives in the UK and Ireland concerned with all aspects of commercial, industrial, public and decorative lighting.



Member of the Audit Bureau of Circulations

© 1989 ISSN 0024-3418

# NEW PRODUCTS

## Solar powered lighting

Chronar Ltd has added another outdoor decorative lighting system to its range of solar powered garden and outdoor lighting.

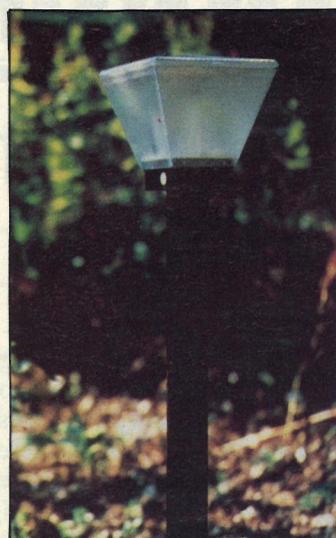
Light Fantastic is a post top lantern, with clear acrylic diffuser, that can be adjusted, for example, to glow brightly during the evening and softly throughout the night.

The tiny integral solar panel allows it to stand alone requiring no wiring, installation or maintenance, as well as costing nothing to run.

When night falls the light automatically switches on, and as dawn arrives it turns off.

Light Fantastic highlights plants and shrubs and animates pools and waterfalls.

The full power setting gives bright light for up to six hours and a low wattage lamp permits



extended running for up to 24 hr at a reduced level for a soft glow.

A third setting lets internal nickel cadmium batteries recharge for longer operation at either output when required.

Reader Service No. 151

## Amenity lighting

Chronar has also launched a range of solar powered amenity lights which are claimed to be the most

effective yet produced.

AreaLites are self-contained, automatic lighting packages, each consisting of an array of solar modules with a luminaire and battery pack. They can be mounted either on a 3m column or on a wall.

A light sensor switches on the light at dusk and a built-in timer turns it off after a set number of hours.

Designed for small to medium-sized commercial and public lighting applications, AreaLite is suitable for hotel grounds, car parks, sports and recreation areas.

Eight versions are available, each with a different combination of solar panel size and lamp wattage, allowing the product to be matched to the application according to lumen output requirements and nightly operating hours.

For example, the ALS417 has a four-panel module and uses a 7W PL type compact fluorescent lamp to give 450 lumens for 10 hours. The ALS429 gives 1200 lumens for five hours using two 9W lamps and a four-panel solar module.

Customised models can be produced, such as a 150W tungsten halogen version with infra-red sensor for security purposes.

Reader Service No. 152

provides overheating protection. The all-insulated enclosure measures 110 x 103 x 105mm.

At present 100VA and 50VA versions are available, but the range will be extended.

Reader Service No. 153

For more information on any of the products listed above, circle the enquiry number on the free reader reply service card.

A 35mm diameter, 12V, tungsten halogen lamp with axial filament and sealed front has been added to the Tru-Aim Professional range by GTE Sylvania Ltd.

The 20W size is available in 10°, 20° and 30° beam angles; the 35W size in 10° and 20° beam angles.

Reader Service No. 154

## Courtesy home floodlighting

Fitzgerald Lighting has introduced a 500W tungsten halogen floodlight with a passive infra-red unit attached which detects movement up to 15m away within an angle of 90° and switches on the light.

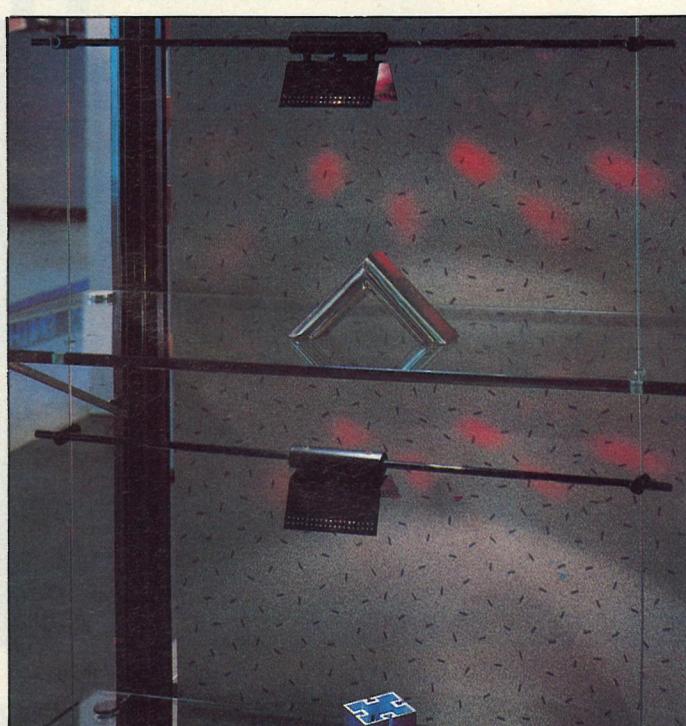
Sceptre welcomes visitors by automatically lighting up when



they approach and deters intruders in the same way.

The floodlight is ingress protection rated IP55.

Reader Service No. 155



## Wire-and-rod lighting

Cablelight by Peerless Designs Ltd is a low voltage display lighting system using vertical, tensioned cables and adjustable horizontal rods. The current is carried by

## Emergency signs

Edge-Lite from Menvier (Electronic Engineers) Ltd uses a small fluorescent tube to light the edge of a Perspex screen carrying a warning or advisory notice. The

these cables and rods.

Tungsten halogen dichroic lamps rated at 20W and 35W are used with the system. They have black, perforated metal baffles to minimise glare and can be swivelled to give either upward or downward light.

This system is being made in Britain. Reader Service No. 156

Edge-Lite, which has a gold coloured finish, can be wall or ceiling mounted. Single and double-sided models are available.

As well as versions for mains only operation, there are others for use with a central battery emergency system or with self-contained batteries.

Reader Service No. 157

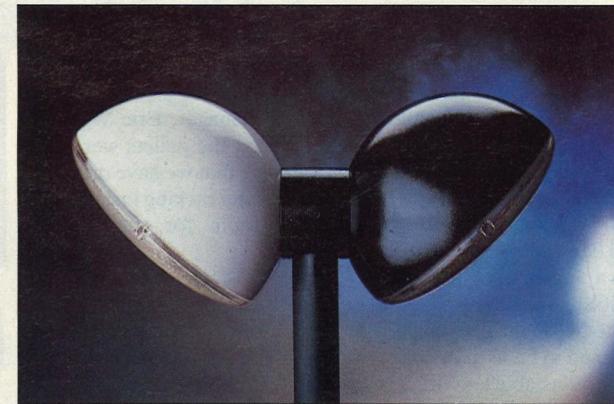
# Fael LUCE



Aesthetic Amenity Lighting



New range of Display Lighting

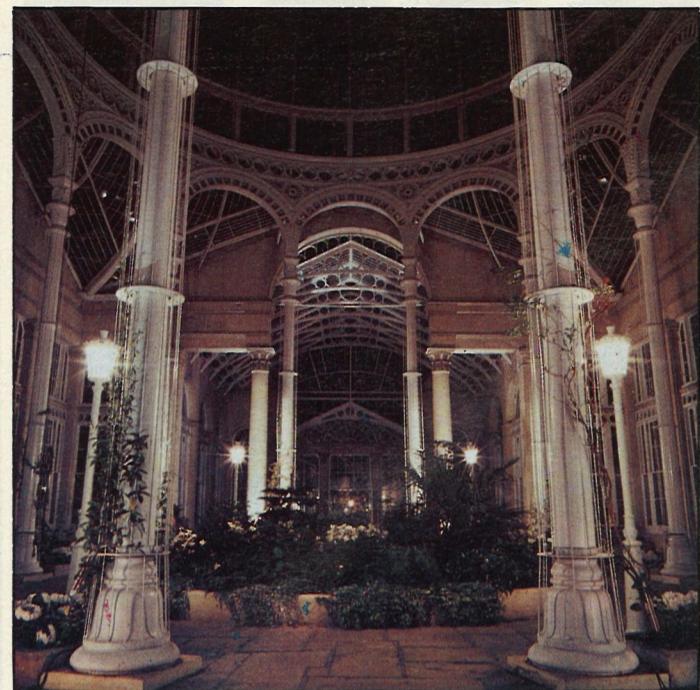


Aesthetic Area Cover

## QUALITY PRODUCTS FROM FAEL

Fael Luce UK Ltd, Units 1/2, Eastern Road, Aldershot, Hants GU12 4TD  
Telephone: (0252) 336555 Fax: 0252 331902.

# NEW PRODUCTS



## Exterior lighting from Europe

Marlin Lighting now has the exclusive UK distributorship for Boom exterior lighting made in Belgium. Classic styles, mostly finished in black and white, make up the range.

The variety of luminaires offers a style for every setting, from private gardens to public parks and from entrances to pedestrian pre-

cincts. There are hanging lanterns, wall lights, post, pillar and under-canopy lights. Stainless steel, cast aluminium, solid copper, bronze alloy and hand-blown glass are used for their manufacture.

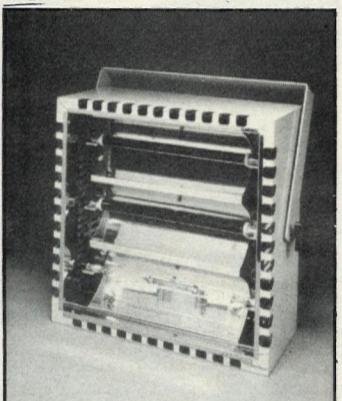
Many models are based on traditional European designs and have names such as Madrid and Vienna. **Reader Service No. 158**

### Heat and light combined in one unit

Quartzray Ltd has introduced a combined heat and light unit called Halo (for heat and light option).

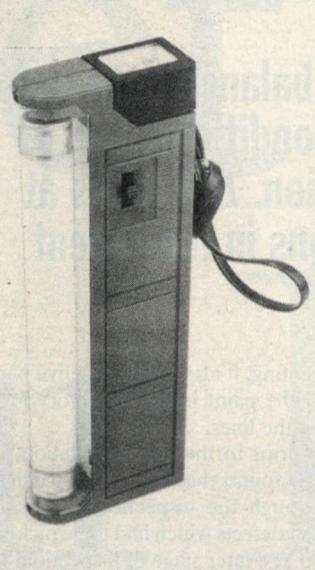
Using quartz halogen lamps which radiate heat at a selected short wave frequency, and a high pressure sodium quartz tubular lamp in conjunction with an anodised aluminium reflector, both heat and light can be accurately beamed onto the required area.

The standard Halo unit provides 3kW of heating plus 250W of illumination. Alternative combinations are available to suit specific requirements.



Suitable applications include aircraft hangars, sports halls, warehouses, factories and churches.

**Reader Service No. 160**



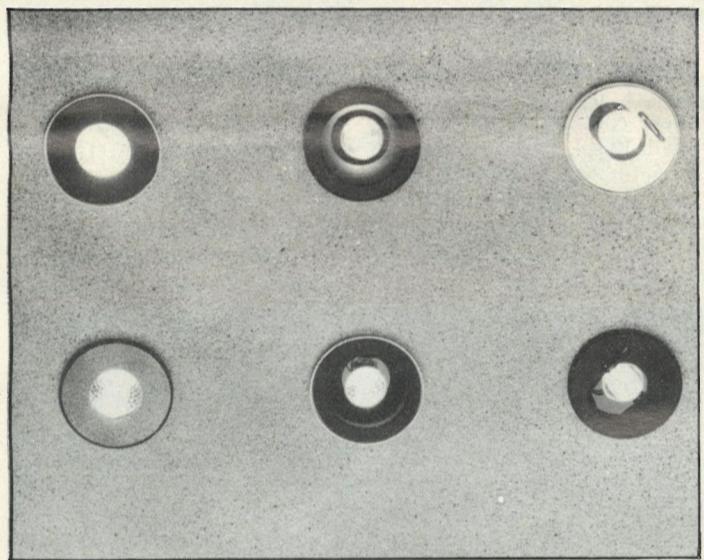
### Mini lantern is versatile

Mini lantern, from Maplin Electronic Supplies Ltd, combines the features of a hand torch and a fluorescent lantern. Its overall size is only 152 x 53 x 21mm.

The torch part uses a 6V MES tubular pre-focused lamp while the fluorescent lamp is a 150mm 4W tube. A switch on the side of the casing changes from tungsten to fluorescent, as required.

Typical uses include garages, sheds and for camping, fishing, etc. The lantern has a carrying or hanging strap.

The unit operates on four AA cells. **Reader Service No. 161**



### Recessed downlights

Microlights Ltd has a range of four recessed downlights for 12V tungsten halogen lamps. A feature of the Magnit range is that the three fixed fittings have interchangeable bezels in a choice of black, white, chromium or gold colour. The rings are held in place by magnetism.

There are three fixed downlights using dichroic lamps, one of which has a cowl attachment, and a wall washer that is adjustable to 45°.

The fittings are re-lamped from the front.

**Reader Service No. 159**

### Central control for lighting

A central system that controls lighting either through bus wiring or mains signalling has been developed by ECS Energy Conservation Systems Ltd. It can also be linked to building management systems.

The S8000 offers 16 channels of time- and daylight-linked control. Timed switching is programmed using an integral keypad; up to 1184 programs are available.

It can be programmed to take account of British summer time and up to ten holiday periods.

**Reader Service No. 162**

# LIF LINE

## The Lighting Revolution 1969 — onwards

This month as France is proudly flying its 'tricolour' and celebrating the bicentenary of the fall of the Bastille and the beginning of the French Revolution, it may not have occurred to everyone that a less familiar celebration is taking place in Balham. Yes, it's happy bidecennial to the LIF!

But do the comparisons with French history stop there, or can we add that LIF has also undergone a revolution and established its own 'Code Napoléon' or rather a 'Code Eclairage' which now serves as the basis for good lighting practice?

LIF was formed in July 1969 through an amalgamation of Members of the Electric Lamp Industry Council and the Electric Light Fittings Association. These two trade associations had their origins at the turn of the century and must have been two of the oldest electrical trade associations in this country.

Twenty years later, this 'marriage' has produced 85 members who last year enjoyed a collective turnover in the home market of at least £500 million, and exports worth at least £140 million.

Let us consider some of the more recent catalysts that have contributed to this proliferation. Historically, LIF's objectives have always included liaison with government, overseeing the preparation of standards, and promoting the wide-scale benefits of good lighting. As a result, local authority spending on security and street lighting has increased; so too has national media coverage of the campaign.

Moreover, LIF has a long-established commitment to securing the international harmonisation of standards. In this field, it is in fact ahead of most other industry sectors, many of which have still to begin the process. As a result of LIF's commitment to work on IEC standards and its insistence on Members operating to BS 5750 (ISO 9000), it has secured for its fold a strong vantage ground for penetrating foreign markets.

Promoting the benefits of good lighting has consistently been in the forefront of policy although through the years, it has paraded under different banners. Emerging from the 'Light it Better' in 1984, a new quality lighting competition was inaugurated; subsequently the first National Lighting Awards ceremony was held in February 1987.

The Federation's other lighting competition EMILAS, coincides with current environmental concerns. LIF maintains that good lighting is energy-efficient.

Then, LIF took good lighting a step further. In 1985, together with its continental counterparts, it founded the European Lighting Council. During the four years of its existence, the ELC has steadily built up credibility by recognising the serious short-comings of Community lighting standards and declaring this a top priority.

Following the success of the NLA scheme, the ELC followed suit by launching a European lighting competition in 1987. As a result, the EEC is beginning to regard the ELC as a partner for discussion on EEC Directives concerning lighting codes or practice.

Just as it was difficult in 1969 to predict future developments, so it is now in 1989 to forecast what will happen in the next two decades. However, what can be said is that LIF is confident in continuing its 'Code Eclairage', that it is its policy to implement good lighting practice, and it will carry on exploring different ways of achieving this.

Plans for this year include the launch of the results of the lighting and crime surveys carried out in Hammersmith and Fulham, when the Federation will be asking more women MPs to join in its government lobby.

Further lobbying is planned in a major new initiative to reduce the waste of energy in hospitals where there are currently 2 million starterless type fluorescent fittings still in use, in schools and in the defence estate — the latter being guilty of using vast quantities of GLS lamps.

Other developments include a planned policy statement on 'green' issues, with the possibility of liaising with Friends of the Earth; a new LIF fact finder on good lighting of modern offices; a new lamp guide and a 'Lighting Controls and Energy Management Systems' guide.

Imminent on the agenda are of course the third National Lighting Awards, to be held in London on 21 November 1989. Entry forms are available from the LIF, but hurry, the closing date is Friday 11 August!

**1992**  
**IS YOUR Q.C. READY?  
—OURS IS!!**

You can't afford to wait until 1992 to get it right!

As one of the world's leading designers and manufacturers of light and colour measuring instruments we know that you need the best to produce the best.

We make meters to measure, and check, Luminance, Illuminance, Kelvin and colour of luminaires, fibre optics, LED's, LCD's, monitors and much more. Contact us now and see if we can solve your problems. We like to make measuring light work!



### LIGHT METERS FOR INDUSTRY

"Call me now, for a free information pack or a no-strings demonstration, on 0908-211211, extension 216, or write direct to: The Industrial Department, Minolta (UK) Limited, 1-3 Tanners Drive, Blakelands North, Milton Keynes, Buckinghamshire MK14 5BU

Tracey Walker



Reader Service No. 4

# Winning ways

Energy efficiency means finding the right balance between energy saving and providing good visual conditions; the cut-off point will differ with each application. *LEN* looks at some of the highly commended installations in the recent EMILAS Awards.

**E**nergy management in lighting is not merely concerned with cost saving; a core consideration is that of improving the visual environment.

Recent refurbishment projects show two distinct trends. One route is to reduce energy consumption; the alternative is to keep energy consumption the same but to improve the standard of lighting considerably. The design of most installations fall somewhere between these two extremes.

New build schemes probably provide the best opportunity of showing what modern lighting technology can accomplish. This year's crop of highly commended schemes were no exception, although some installations like that at the Jaguar assembly line posed very difficult lighting problems.

Exacting demands had to be met by the new lighting installation for the audit lines in the number one assembly hall of Jaguar Cars in Coventry. Not only does the installation have to provide glare-free

lighting, it also plays an active part in the paint inspection procedure on the lines.

Prior to the new installation, it was found that cars, after passing through the inspection area, still had defects which had to be picked up at a later stage of inspection. It was clear that a major upgrade of the lighting was the solution.

As a result, 696 Philips TLD 50W HF lamps in twin surface mounted HF luminaires have been installed to create lighting levels of 2500 lux in the horizontal and 1200 lux in the vertical plane over the 770 m<sup>2</sup> of the two audit lines.

Six continuous rows of low brightness luminaires have been used above the lines and a row of prismatic luminaires has been installed about 1m above the floor on either side of each line.

High frequency lighting has been chosen for its absence of flicker, low energy consumption and high quality light output. The problem of glare has been solved by fitting mirror louvres to the overhead luminaires.

## Blemishes

The operatives use the lighting in such a way as to catch the reflection of the luminaire in the paintwork of the car. This uncovers the presence of blemishes on the paintwork.

In addition to local switching the lighting is linked into Jaguar Cars' central computer which turns the lighting on and off at certain times, to coincide with the shifts being worked.

A pagoda-like building situated on the Atlantic Wharf of Cardiff's docklands area houses the new headquarters of the County of South Glamorgan, another highly commended award winner in the new lighting schemes section. Energy efficiency and high quality for all building services were key elements in the original brief.

The 400 m<sup>2</sup> of office space is lit with 3000 continuous recessed fluorescent Thorn Arena fittings with low brightness louvres which ensure that VDU operators are not hampered by glare or reflections on their screens. A service illuminance of 640 lux is provided. Polylux triphosphor fluorescent tubes have been used for high light output and excellent colour



Assembly line at Jaguar cars.



Low brightness lighting at South Glamorgan.

rendering.

Elsewhere, wall and column mounted uplights provide an indirect lighting system which offers comfortable and shadow free lighting, of particular benefit in the drawing offices. Corridors and office perimeters are lit with over 500 modular Thorn Hyform fittings incorporating the compact fluorescent 2D lamp.

The lighting system is controlled by an ECS energy management system. A central computer sends mains-borne signals to each luminaire, turning them on or off at pre-programmed times. This can then be overridden by local switching so staff have control over their own individual light fittings.

A railway station relit to give a twelvefold increase in illuminance



High light output with low spill at Gresley Rovers' ground.



Glasgow Central station uses high-bay luminaires.

for three times the lighting load is a scheme worthy of a highly commended award in the commercial section.

A number of years ago Glasgow Central Station concourse, an area of some 21 500 m<sup>2</sup>, was relit as part of a highly successful modernisation programme. But, thirty years later, the 189 twin fluorescent lamp luminaires over the platforms needed replacing and the lighting compared unfavourably with that in the main hall.

The luminaires have now been replaced by Holophane Prismalume fittings, industrial high bay luminaires using 400W high pressure sodium lamps. A prismatic hard glass reflector directs about 25% of the light upwards to reveal detail in the freshly painted steelwork, which now stands out sharply against the glazing. Lighting levels in the platform area have increased from a dismal 18 lux to a generous 230 lux, while the installed lighting load has only gone up from 25.1kW to 69.9kW.

Economies have been made to running costs by the use of photocell control and automatic time switching to each platform to suit night traffic. A manual override accommodates late trains at any platform and is operated by the station staff with the aid of an illuminated mimic panel.

## Football

The lighting installation for the football ground of the Gresley Rovers Football Club in Burton-on-Trent was also highly commended in the commercial section. The semi-professional team, playing in a Midlands League, required the ground to be lit to Category 1 standard of the Football Association, giving a lighting level of 160 lux.

The scheme adopted uses sixteen MNF 307 floodlights, fitted with 415V HPI/T metal halide lamps of 2000W and mounted on eight masts at a height of 16m, giving 200 lux on the field.

This is more than double the level before relighting, when a total of 48 tungsten halogen lamps were used, requiring double the current installed load. The MNF 307 floodlights have a much higher light output because the optical system concentrates the light more effectively.

The new installation makes it possible to switch on the lighting on one side only for training purposes and to phase the lighting on one quadrant at a time with a time delay between each switching, thus reducing the maximum demand and sudden voltage drops in the incoming supply.

As the ground is in close proximity to private housing, maximum reduction of spill light is essential. In this respect the MNF 307 floodlights were ideal as their optical system provides a very tight beam control.

## Think Creative Period Lighting

D W Windsor design flexibility comes from an ability to provide a wide variety of copper lanterns, globes, lamp posts, pedestals and brackets, in many combinations. Our new specifying chart makes this easy by showing graphically the combinations that are technically and aesthetically viable. And the chart is only a starting point... our technical and design advice is freely available to support it. Via the chart, or an over-the-drawing board discussion, you can think creatively about period lighting.

**D.W. Windsor**

D W Windsor Limited  
Pindar Road, Hoddesdon,  
Herts, EN11 0EZ  
Telephone: 0992 445666  
Telex: 263311 WINSOR G  
Fax: 0992 440493



## Bulkhead fittings in bulk?

**The Newey & Eyre**  
Lighting  
Catalogue  
has all  
the answers

£10m. of lighting  
fittings always available, fast, from:-

**NEWY & EYRE LTD**  
Nationwide Electrical Distributors  
Dome House, Calthorpe Road, Edgbaston, Birmingham B15 1QX.  
Telephone: 021-455 9727 Telex: 337726 Fax: 021-454 0948

# Don't let 1992 be your 1066.



It doesn't matter how small your business is. It doesn't matter what kind of market you're in, even if you know your business inside out. You're now part of the single market.

And your competitors, both at home and abroad, are doing something about it.

If you don't it could cost you very dear indeed.

As a first step send away for the new DTI Action Guide for Smaller Firms. It's full of useful information about how small businesses can survive, and thrive, in the single market.

Send off for your copy today or telephone 01-200 1992 and give yourself a flying start.

**dti**

To: DTI 1992 Campaign, FREEPOST (GR 629), Cirencester, Glos. GL7 1BR.  
Please send me the Action Guide for Smaller Firms.  
Or phone our Hotline: 01-200 1992.

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Postcode \_\_\_\_\_

Number of employees \_\_\_\_\_

Is your business primarily involved in:  
Manufacturing  Service  Other



LEN 1

Reader Service No. 7

# Centre point

By creatively combining traffic, amenity and decorative lighting, the urban night-time environment can be enhanced. LEN reviews outdoor lighting in some European town centres.

The energy crisis of the 1970s led to a reappraisal of the treatment of inner city areas and moved the emphasis from urban redevelopment to town centre conservation. Initially attention was primarily concentrated on the building fabric; more recently lighting has been used in an increasingly creative way to contribute to the overall effect.

Each project requires individual, sympathetic treatment. It needs both an artistic eye to highlight architectural features or other focal points in a scene using a light source of a slightly different colour to the background lighting, and a very practical eye to find the best places to conceal any unsightly equipment.

## Multiple use

The lighting of the Esplanade de Port Ligny in Angers, France, is a good example of the problem of town centre lighting where several areas of quite different usage are juxtaposed.

The Esplanade itself is pedestrianised and is dominated by a 12th century chateau and the Cathédrale de St Maurice, however, a two-lane motorway which crosses Angers is close by. In addition, there are public gardens with a footpath that required lighting.

A combination of functional road lighting techniques and decorative effects has been used in a complex but sensitive lighting scheme.

In the main square, prismatic glass spheres are mounted in two- and four-arm arrangements on decorative columns which stand on individual pedestals. These luminaires by Thorn use high pressure sodium lamps within cylindrical louvres to minimise glare and direct 55% of the light downwards.

The motorway passes through a tunnel which is lit by Philips' special tunnel luminaires containing 66W SOX-E low pressure sodium lamps. Philips' 250W high pressure sodium lamps light the visible part of the motorway.

To illuminate the path through the gardens, glass spheres from the

Pilote range by Thorn are mounted on aluminium columns. An integral, cylindrical, aluminium louvre prevents dazzle from the high pressure sodium lamps.

A unified appearance has been created by the lighting throughout these areas of widely varied use.

La Rochelle, an historic town that is a tourist attraction in France, adopted a different approach to its town centre lighting.

Uniform lighting on columns was rejected, mainly because the streets of the old town are so narrow, but also because historic and architectural features of buildings needed highlighting. An indirect road lighting scheme was chosen using Thorn floodlights mounted on buildings.

The luminaires use high pressure sodium SON Deluxe lamps and have an asymmetric reflector with a sharp cut-off, which means that long outreach arms are not necessary. In many cases the fittings are mounted vertically because it was found that this alignment gave better modelling of the architectural detail.

Housings are made of polycarbonate coloured to match the stonework in order to make them unobtrusive.

## Indirect light

Light reflected from the buildings provides indirect light for the streets and walkways without glare, creating an ambience in which people enjoy strolling. The lighting complements rather than competes with lit shop windows and café fronts, at the same time drawing attention to the town's architecture.

As part of its policy for improving the urban environment, Westminster City Council recently floodlit St Mary's Church at Paddington Green.

The installation uses a mixture of mercury, mercury iodide and high pressure sodium lamps, mainly in luminaires by Phosco.

Each of the four main façades is lit by one 400W mercury iodide floodlight positioned at ground level and suitably camouflaged in a "boulder".

The main front, together with the east end, is further enhanced by the addition of one 250W tubular high pressure sodium fitting. One of these is mounted on an adjacent lighting column, the other is concealed at ground level in an artificial boulder.

To light the clock tower, four 125W mercury units are used, plus one 70W tubular high pressure sodium fitting at each corner. A 150W mercury iodide projector, also mounted on the nearby lighting column, lights the top of the clock tower on the main viewing side.

A 70W tubular high pressure sodium luminaire in the porch



Esplanade de Port Ligny, Angers.

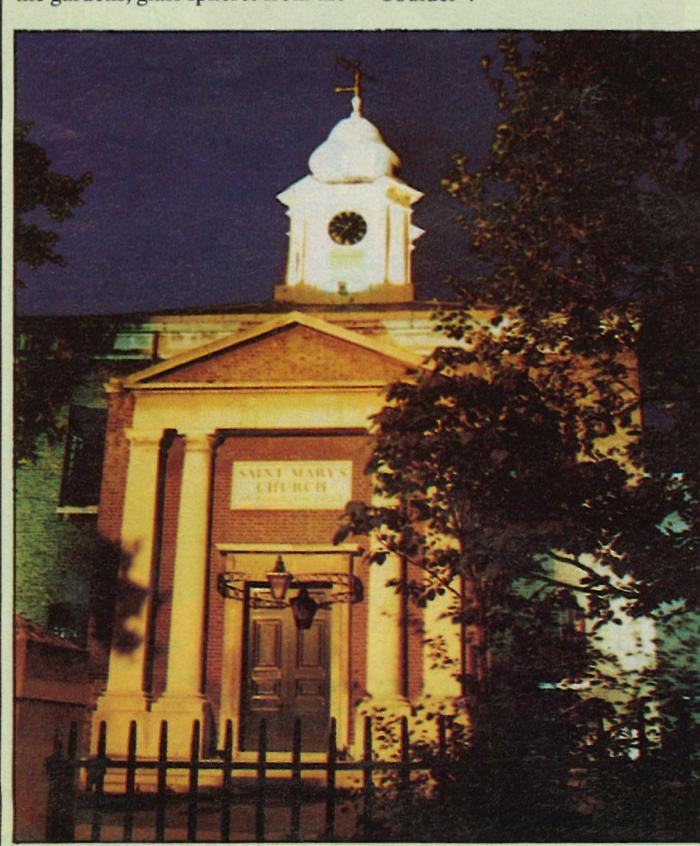
gives a welcoming light, while the path through the churchyard has been relit with 125W mercury lanterns on traditional style columns.

Total electrical load for this lighting scheme is 3.4kW.

But it is not always local authorities that instigate new lighting. The economic advantages of an attractively lit centre are well understood by the business community. In Scarborough, the popular northern holiday resort, there is

a local lighting committee composed of local tradesmen and hoteliers, and they asked the borough council to floodlight both sides of Marine Road, a major hotel area.

Road lighting is on standard



St Mary's Church, Paddington, London.

## BDC PREMIÈRE GOLD

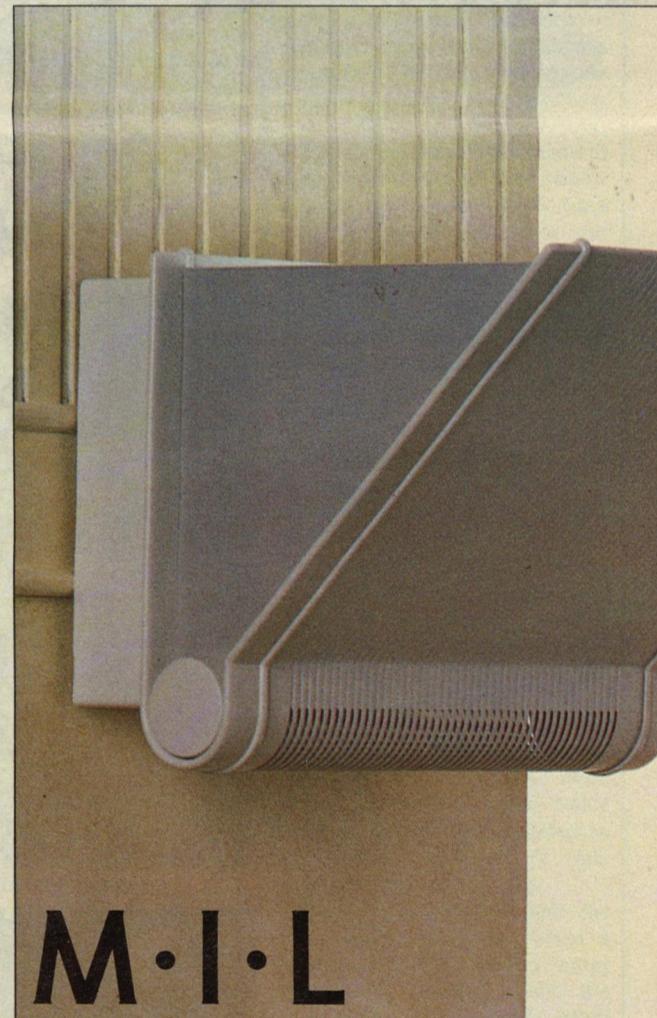
Now you can be certain that as soon as Concord launch a new range, like MIL, BDC will have stock in depth.

Join BDC's new and exclusive BDC Première Gold scheme and your company can enjoy all the privileges of Première Gold immediately.

These are just some of the privileges of joining BDC Première Gold. To find out the other benefits, you'll need to phone us on 01-881 2001 and ask for ext. 352.

- Priority access to the largest stock of new Concord products in the UK.
- Personalised project design service.
- 'Swiftquote' – a guaranteed quote within 24 hours.
- Stock commitment for your projects.
- Priority delivery.

Why not call BDC today? We'd like your business because we think you'll like ours.





Marine Road, Scarborough.

columns, and lighting engineers, Philips Lighting, decided to mount floodlighting on those columns which run down each side of the street. Groups of SNF luminaires were mounted on the columns at 5m from ground level and sited horizontally across the road to avoid glare to motorists. Those directed to the far side use 250W SON/T lamps, but for lighting the near side lower wattage SON/T lamps are used.

The council coordinated

the scheme has greatly improved the appearance of the hotels, providing enhanced amenity and safety for the guests.

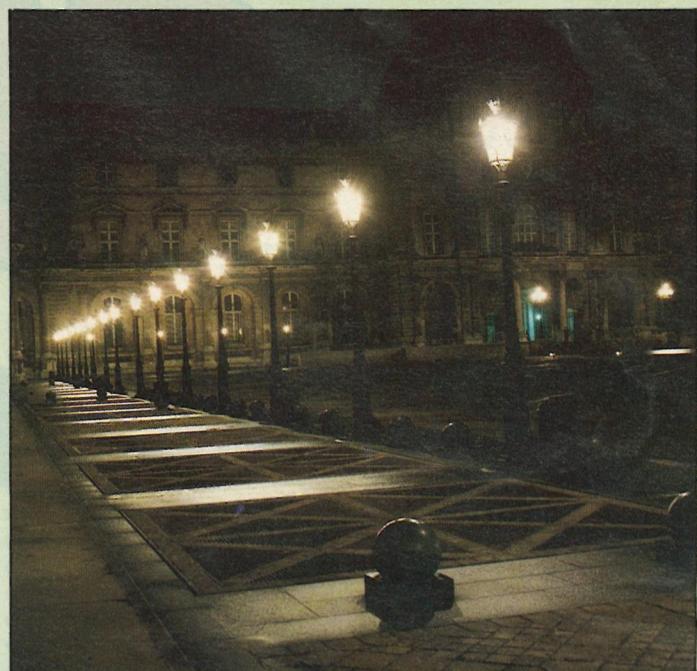
In continental Europe, Philips' White SON high pressure sodium lamps are being used in traditional

luminaires to provide amenity lighting.

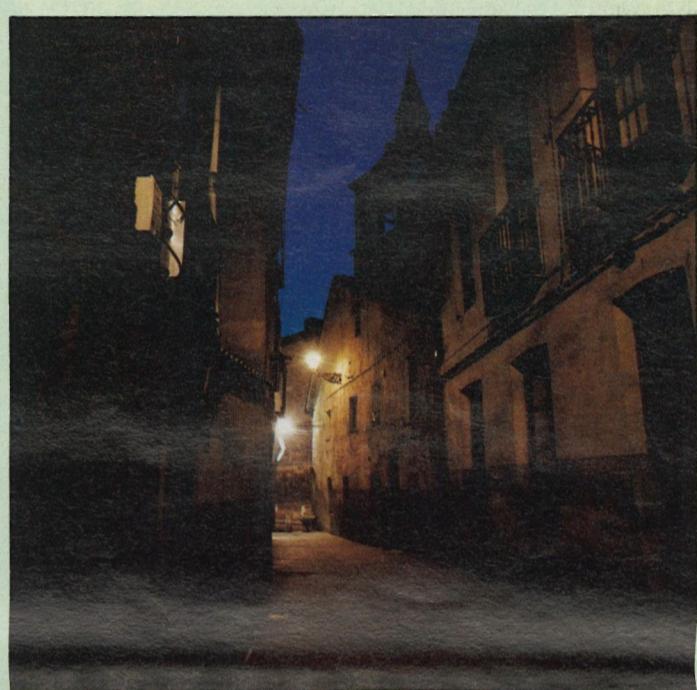
Applications include the Louvre in Paris: the first White SON lights were fitted at this tourist spot at the end of 1988. The Cour Napoléon, home of the now-famous pyramid (see *LEN*, May 1989), marks the exact location, where previously 70 incandescent lamps provided the illumination. Each unit consumed 300W of electricity and had a life of only 1000 hours; now, the White SON lamps require only 50W to produce high quality light.

In the neighbouring Rue de Rivoli, incandescent lamps have also been replaced by White SON. The effect has been to give this street a far pleasanter atmosphere — not only as a result of the softer lighting, but also because the old fashioned design of the lanterns themselves is much enhanced.

The lamps were first tested by Electricité de France in Paris in co-operation with Philips. Just before Christmas 1988, the lamps could be seen for the first time in the street, where previously they had only been used in shop windows. It is expected that in the future, White SON lamps will be more

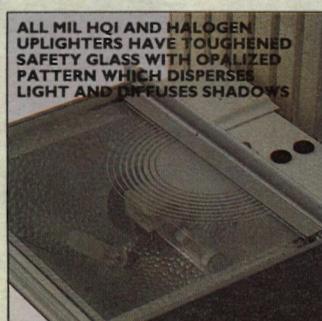
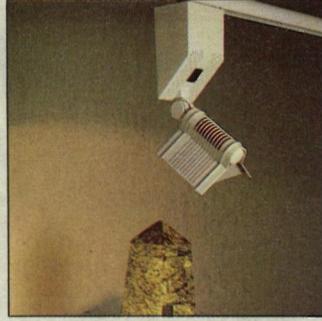
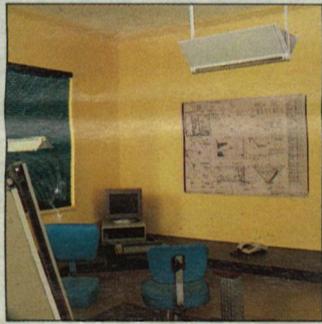


Cour Napoléon, at the Louvre, Paris.

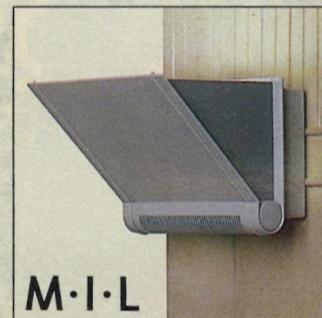


A picturesque part of León, Spain.

## Concord



### OTHER CONCORD FITTINGS AVAILABLE FROM BDC



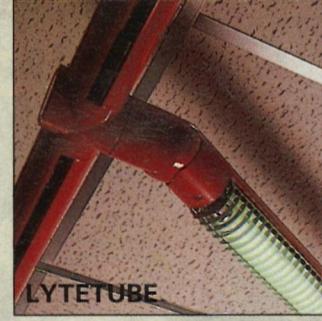
M·I·L



TORCH



MYRIAD



A N D

**bdc**  
YOUR CONCORD  
DISTRIBUTOR  
NATIONWIDE

**bdc**

YOUR CONCORD  
DISTRIBUTOR  
NATIONWIDE

widely applied in Paris, as old-style lanterns are a common feature of many parts of the city. In this way, lighting will help upgrade the city's image.

In the city of León, Spain, 800 100W White SON lamps have recently been installed in the Barrio Humedo, the old part of the town. Originally, 125W mercury lamps were used but as they have a cold feel to them, worsened by the fact that temperatures often fall to -20°C in winter, it was decided to

replace them with the White SON lamps.

At first, only 100 lamps were changed. However, the warm effect of White SON received such a positive reaction from local people that the remaining 700 cold blue mercury lamps were replaced soon afterwards.

The old fashioned luminaires — a common feature of the historic parts of many Spanish cities — were retained, as the new lamps help enhance their visual appeal.

## Lightplan TRANSFORMERS



A New Concept - Lightplan Mini-Series

A conventional transformer small enough to fit through a 65mm hole, complete with terminals, thermal cutout, and fuse, installation is safe, easy and economical. One of a range of robust, high specification transformers from Lightplan.

LION HOUSE DURHAM ROAD BIRLEY CO. DURHAM DH3 1LS  
TEL:(091)410-9919 FAX:(091)410-0056

# GEWISS

## In Factory or Forecourt, Precinct or Patio



*The Light Fantastic!*



For safety, lighting efficiency and sheer good looks, the new range of weatherproof luminaires from GEWISS is a shining example of the best in contemporary design and functional excellence.

Unsurpassed for durability, all luminaires feature a self-extinguishing polycarbonate base and diffuser that are both corrosion and impact resistant. GEWISS luminaires are easy to install, too. A full range of fittings is available and there are ample knockouts in the base to accept either conduit or cable.

Once installed, a GEWISS luminaire stays bright. The diffuser allows greater output of light and reduced glare. And because the outer surface is smooth, grime won't stick, cleaning is easier.

For special application in areas such as gardens, parks, pedestrian paths and around small buildings, the 'PARK' is an angled luminaire of pleasing design with a white reflector to ensure selective distribution of its high luminous output plus a special anti-glare diffuser for maximum visual comfort.

The 'PARK' is supplied complete with all electrical components for operation at 240V - 50Hz. As the main structure is of specially stabilised polycarbonate, the 'PARK' has high thermostability and double insulation, is robust and shock resistant, vandal proof and resistant to most chemical and atmospheric agents, including UV rays.

**'PARK' – Truly a bright new angle on lighting.**

## GEWISS

U. K. LIMITED

*Switched on to Style*

Head Office: South Marston Ind. Est.,  
South Marston, Swindon, Wiltshire SN3 4TQ.  
Tel: (0793) 827333. Fax: (0793) 831038.

# LETTERS

## Managing energy

As a practising Energy Manager (Selfridges Department Store, Oxford Street, London) and as Chairman of the Central London Energy Management Group and Chairman of the National Energy Efficiency Association (to be launched in November 1989), may I thank you for one of the most succinct and perceptive comments concerning lighting and the environment that it has been my pleasure to read (How green is my castle LEN, June 1989).

As with EMILAS, energy management has become very much an environmental matter.

Energy managers operate throughout the area of public service, commerce and industry. The National Energy Efficiency Association is primarily intended to represent the interests of the 8 000 plus energy managers in the UK and to join with other organisations in this field to ensure that this huge and expanding market is exploited in the manner which is necessary to our country and our environment.

Without electricity, we would still literally be in the dark ages,

but the generation of that same essential facility is a major factor in the development of the "greenhouse effect" and acid rain and yet since the end of Monergy '86, little has been done by the Energy Efficiency Office to bring this matter to the attention of the populace at large.

It is a sobering fact that Britain is considered by the EEC to contribute approximately 7% of the world's atmospheric pollutants.

Although our primary target is in the sector served currently by energy managers, we naturally also are very much concerned by the lack of effort being put into the domestic sector by government agencies. There is a burgeoning body of goodwill in this particular area, exhibiting vast concern over environmental matters. At the last count, some 23% of our cars now use unleaded fuel. No large supermarket chain now operates without including in its range at least some foods grown without the use of man made pesticides and fertilisers because of public demand.

Extra effort is being put into this area by organisations such as Neighbourhood Energy Action and Energy Action Scotland and we fully support their efforts in this sector.

To replace a 100 W GLS lamp with a 20 W electronic GLS lamp, (miniature fluorescent), saves 80% of the energy involved. To supply one of these free to every household in the country would cost far less than building a power station of equivalent capacity. Yet we continue to build new generating facilities and ignore the simple solution — energy efficiency.

It is our opinion that with the help of a vigorous energy management movement, industry, commerce and suppliers can all make the commercial sector work but without the domestic sector, we will not meet our targets and as you say, energy savings like charity, must surely begin at home.

**M G. Brill**

Chairman, National Energy Efficiency Association, London W1.

## Lighting Awards

Thank you for giving me the opportunity to react to your July Comment column which took as its subject the 1988/9 National Lighting Awards brochure.

I find it impossible to understand why you should regard the footnote you have quoted as a retrograde step and then go on to surmise that it will cause problems for the assessors and judges. Equally, I cannot understand why you feel forced to query whether such a competition can in any meaningful sense be called 'national', when the geographical restrictions have remained the same ie owners/users of lighting installations in the United Kingdom.

We simply wanted to take the opportunity of the brochure to say a few words about the equipment, (ie luminaires lamps and controls) manufactured by LIF members,

the sale of which generate the money to finance the NLA. Unless the cost benefit of the investment, which the LIF manufacturers make in the National Lighting Awards, is seen to be equitable in their eyes, they will not be willing to continue funding it, and that would be a great shame given that the awards have been such a successful vehicle in prompting all that is good about modern lighting.

I do agree wholeheartedly with the sentiments expressed in your last paragraph that potential entrants should be encouraged to submit their entries (before the end of August please) and trust in the integrity of the judges. Let me emphasise that in regard to integrity, the LIF has never and will never interfere with the assessing or judging. If it has a point to make, it makes it openly and before the competition begins as it has done in this footnote.

**Ernest Magog**  
Director, Lighting Industry Federation

## Dual intensity luminaires

In the final paragraph of his letter, published in your June edition, Mr John Burgess comments on Thorn's contribution to TV lighting and mentions specifically the development of the CP32 dual filament lamp, giving benefits in fast turn-round times in studios.

The idea of having dual intensity luminaires was put forward by the BBC when they were preparing for the introduction of colour television in the mid-60s. The concept of using a single lamp with two filaments, each of 2½ kW, which could be run either singly or together was proposed by Osram-GEC. Development of a practical lamp followed in close collaboration with a luminaire manufacturer, Mole-Richardson (soon to be taken over by Berkey Technical). Colour transmissions started from studios equipped with the Osram-GEC lamp (CP/20),

and a 1½/1½kW version, (CP22) was developed for smaller studios. In their initial form neither of these lamps operated on the tungsten halogen principle. At the time of the development there were not even single filament tungsten halogen lamps suitable for use in fresnel spotlights available, and the timescale set by the BBC was very tight.

Thorn introduced their CP/32 about a year later. This was a tungsten halogen design in a quartz bulb, interchangeable with the CP20 and for use in the same luminaires. The Osram-GEC CP/20 was converted to a tungsten halogen design shortly afterwards.

Although there have been some refinements to both lamps and luminaires since, the basic concept has remained unaltered.

**R. Burgin**  
Osram-GEC Ltd.

## TWO GREAT CREATIONS



**BOTH DESIGNED  
TO OPERATE  
FROM DUSK TO DAWN.**

## STARMASTER PHOTOCELL OPERATED LUMINAIRE

70 Watt High Pressure Sodium for golden light Code CMS 70.  
80 Watt Mercury Fluorescent for white light Code CMF 80.

### SECURITY

In the hours of darkness this automatic, Photocell operated luminaire combines low energy consumption with high light output.

### SAVING MONEY

- ▼ Save on buying new lamps - the 70 watt SON lamp lasts 5 times as long as the usual tungsten-halogen lamp.
- ▼ Save on labour charges - longer lamp life means less lamp replacements.
- ▼ Save on electricity charges - the POWERSON 70 is 70% cheaper to run than a 300 watt tungsten-halogen floodlight and gives a better light output.

Available from leading wholesalers throughout the U.K.



**In a spot for  
Spotlights?**

The Newey & Eyre  
Lighting  
Catalogue  
has all the  
answers

**£10m. of lighting fittings  
always available, fast, from:-**

**NEWY & EYRE LTD**  
Nationwide Electrical Distributors  
Donne House, Calthorpe Road, Edgbaston, Birmingham B15 1QX.  
Telephone: 021-455 9727 Telex: 337726 Fax: 021-454 0948

Reader Service No. 11

**Harvey Hubbell Ltd.****LIGHTING DESIGN ENGINEER**

Due to the further expansion of the Lighting Applications Department, there is a requirement for a Lighting Design Engineer.

Ideally the applicant should have at least two years experience in lighting design, preferably dealing with industrial interior schemes, exterior floodlighting including security, amenity and sports lighting. Duties include preparation of lighting schemes from initial concept to final presentation, dealing with consultants, end users and our own sales engineers.

A familiarisation with a C.A.D. system would be an advantage, but not essential as training can be given.

Please send C.V. to or call:

**The Personnel Department**  
**HARVEY HUBBELL LTD.,**  
**Woburn Road Industrial Estate**  
**Ronald Close**  
**Kempston**  
**Bedford MK42 7SH**  
**Tel: 0234 855444**



**BARTLETT SCHOOL OF ARCHITECTURE & PLANNING**  
**UNIVERSITY COLLEGE LONDON**

Lighting Research and Teaching

(Research Asst. Grade 1B)

A vacancy has arisen in the International Philips Centre for Lighting Education and Research, for a person to assist with the activities of the Centre. The Centre is responsible for the Lighting interests of the department which include research, consultancy and teaching. It is expected that the successful applicant will have a first degree in an appropriate subject with some experience in Lighting or a related topic and an enthusiasm for all aspects of Lighting. Within this employment it may be possible to register for a higher degree. Currently this is a grant supported post of two years duration with a possibility of extension.

For further details contact:

Nigel Rogers,  
Bartlett School of Architecture and  
Planning,  
University College London,  
22, Gordon Street,  
London WC1H 0QB.  
Tel: 01-387 7050 (Ext. 4800)  
Closing Date 8th September 1989.

**AGENTS REQUIRED**

for manufacturer of  
emergency Lighting and fire  
detection products.

Apply to:  
The Managing Director  
Armada Lighting and Fire Ltd  
Unit 1b, Huxley Close  
Newnham Industrial Estate,  
Plymouth,  
Plymouth, PL7 4JN

**BRIAN D. RADLEY**

Manufacturers Agent, Lighting Consultant and Lighting + Electrical Distributor. Seeks Agencies and Companies that could use his expertise (over 20 years in the lighting industry).

Please contact him on:

01-521 5485.

or write to:

**Brian D. Radley**  
Lighting + Electrical  
Distributors, (LED)  
71 Somerset Road,  
London E17 8QN.

**Who is Ronald Dury Anyway?**

NOT

**MALCOLM BRULEY AS WELL!****AGENTS REQUIRED**

for decorative lighting, table lamps/shades.  
Areas U.K. and Republic of Ireland.

Apply to: **Fersina Lighting**  
45 Kent Street,  
Glasgow 9402

**TO RESERVE SPACE  
IN THE CLASSIFIED  
COLUMNS CALL  
THE CLASSIFIED  
SALES DEPARTMENT ON:  
01-975 9759**

**ELECTRICAL SALES****SPECIFICATION SALES EXECUTIVE**

£17,500 Basic + £6,000 Bonus + 1.6 GL New Cavalier + Full Expense Account

This British company has a reputation in the market-place for professionalism and a superb product range. Very well established client base that will secure your future and increase your earning potential significantly.

**TECHNICAL SALES REPRESENTATIVE**

£15,350 Basic + £5,000 Commission + Executive Company Car + Pension Scheme

Market demand has caused rapid expansion that is really gearing this company towards 1992. Comprehensive product training is offered as well as structured career progression.

Call now for an immediate interview  
Russell Bebb on (0628) 667095 or  
Ian Owen on (0923) 816621

RECRUITMENT  
CONSULTANTS

**Austin Benn**

**Ibex House, 337 Bath Road, Slough SL1 5PR**  
OFFICES IN: Birmingham, Bristol, Crawley, Manchester,  
Northampton, Nottingham, Slough, Swindon, Watford.

**FANCY STARTING YOUR OWN LIGHTING BUSINESS?**

You are tired of offering one manufacturer's product. You want to promote your name or your Company for a change! You want to work when you want to. You want to benefit from your efforts. You are angry when your big successes go to House Accounts? Pressure and paperwork mount up — to say nothing of targets (the more you do this year — the bigger your target next year! Why can't you have a share of the bigger profit margin projects — and windfalls? You do not mind long hours — as long as it is for you. Your greatest asset is probably your contacts — why can't you use them for your benefit.

Just like everyone else, we have been looking for good Commercial and Industrial lighting sales people at £15K/£20K basic but they are few and far between — especially in London and the south east.

We think we have the magic formula to attract people to work with us to find some different incentive for them to sell our products as if they were their own, to run their own business and sharing some of the profit margin as well as taking a good commission to feel free to make their own deals, decide discounts themselves. To sell your personal service for your company. We can carry the financial project funding. You need to survive for, say, the first year — we might have ways of helping here.

We cannot give secret success, formulae away over the telephone but we will be happy to talk to you in person if you would telephone to fix a meeting.

DON'T START ON YOUR OWN! START WITH US — ON YOUR OWN  
We have found RONALD DURY and MALCOLM BRULEY!  
Talk to them if you want to — they have done it!

Contact: John Smith, Managing Director on 0462 420908, N.I. Lighting Ltd,  
34-35 Cam Centre, Wilbury Way, Hitchin Herts SG4 0AP.

**WANTED:****A LIGHTING ENGINEER****WHO IS LIGHT YEARS AHEAD OF THE REST**

Light Years, the fastest growing manufacturer, design specifier and supplier in the industry, is looking for a lighting engineer to cover London and the home counties who, like Light Years, is one step ahead of the pack.

Essential requirements, a natural ability to negotiate with architects and designers; to create imaginative but cost effective lighting schemes and get them specified.

The Light Years' team is professional, dynamic, enthusiastic and backed by vast experience and reputation.

The successful applicant will be a good team worker with a broad lighting product knowledge and proven customer base.

There is an exciting future in a rapidly expanding company for the right person. Excellent salary and benefits, including medical insurance, pension scheme and car. If you think you measure up, ring John Barnett on 01-446 6021.

**LIGHT  
YEARS**

**Hitech**

**TECHNICAL SALES  
CONSULTANT****HEAD OFFICE BASED**

Hitech Lighting plc is a most successful and fast moving lighting Company. We require a keen and enthusiastic sales oriented individual to manage our 'service hot-line'.

Applicants will ideally have considerable previous lighting industry experience, a sound knowledge of IEE and luminaire regulation IEC 598.

Excellent communication skills coupled with an ability to deal with architects, designers, electrical contractors and end users is a must.

If you are looking to join a progressive plc write or fax your CV to:

**Michelle Newman**  
Hitech Lighting plc  
Tower House  
Lea Valley Trading Estate  
Edmonton  
London N18 3HR  
Fax 01-807 8594



**Designed Architectural Lighting** a progressive company specialising in the design and manufacture of high quality architectural luminaires is expanding its development team and require:

**DETAIL DESIGNER** to develop accurate working drawings from an initial design brief.

**PROJECT CO-ORDINATOR** to liaise between customer, design office, and factory to ensure the smooth running of large projects.

**TECHNICAL ASSISTANT** to assist our design team in the development, testing and approval of a wide range of luminaires.

Attractive salaries commensurate with the appointments, so if you are looking for a challenging opportunity, please write to:

**C. SHORT**  
Designed Architectural Lighting Co Ltd  
10 Bowling Green Lane, London EC1R 0BD.

**BUSINESS SERVICES****RELIEF LIGHTING DESIGN**

**LIGHTING DESIGNER (I. Eng. MILE, ACIBSE)**

- ★ 20 YRS EXPERIENCE
- ★ INDEPENDENT DESIGN PRACTICE
- ★ COMPUTER AIDED DESIGN & DRAUGHTING
- ★ FAST PERSONALISED SERVICE
- ★ COMPLETE CONFIDENTIALITY

**BOX No 1471, Lighting Equipment News**  
Maclean Hunter Ltd., Maclean Hunter House, Chalk Lane, Cockfosters Road, Barnet, Herts EN4 0BU

To advertise  
in this Directory  
contact Joanne Barker.

# WHERE TO BUY DIRECTORY

Telephone:  
01-975 9759 Ext.1154

## ACCESSORIES — BRASS PRESSED AND TURNED

S. Liley & Son Ltd.,  
80 Alcester Street,  
Birmingham B12 0QE  
Tel: 021-622 2385  
Fax: 021-666 6148

## ACCESSORIES — CEILING CUPS/ CORD-GRIPS/PLUGS/ SWITCHES



Hylec-Elettro Gibi (UK) Limited  
Unit 4, Trinity Centre  
Park Farm Industrial Estate,  
Wellingborough,  
Northants NN8 3ZB  
Tel: (0933) 677633  
Telex: 312620 HYLEC G  
Fax: (0933) 675771

## LIGHT SOURCE

Light Source Electrical  
Equipment Ltd.,  
Lightsource House,  
24 Scrubs Lane,  
London NW10 6RD  
Tel: 01-960 2188  
Telex: 915506  
Fax: 01-960 8901

## ACCREDITED SAFETY TESTS



Albury Laboratories Ltd.,  
Albury, Guildford,  
Surrey GU5 9AZ  
Tel: (04641) Shere  
2041/4  
Telex: 859336 Albury G



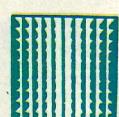
BSI Testing  
Maylands Avenue  
Hemel Hempstead  
Herts HP2 4SQ  
Tel: 0442 230442  
Contact: David Price  
Safety testing and  
photometry.



SGS Quality Control Int.  
Alperton Lane,  
Wembley, HA0 1WU  
Tel: 01-998 2171

## ALUMINIUM LOW BRIGHTNESS AND VDU LOUVRES

A.D.D. Louvre Sales Ltd.,  
8 Seax Way,  
Laindon, Basildon,  
Essex SS15 6SL  
Tel: 0268 415828  
Fax: 0268 410985  
The UK's foremost  
manufacturers of low  
brightness aluminium  
louvres.



Avonlux Limited,  
Nathan Way, Woolwich  
London SE28 0AZ  
Tel: 01-854 3388  
Telex: 896061 (ALPA G)

Maxi Engineering Company,  
26/32 Plumstead High St.,  
London SE18 1SL  
Tel: 01-854 3181



204 Oldbury Road,  
West Bromwich,  
West Midlands B70 9DE  
Tel: 021-553 7551  
High quality louvres for the  
lighting industry.  
Also — a wide range of  
plastic light controllers.

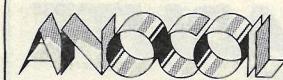
## ANODISED ALUMINIUM COIL AND SHEET



Alanod & Garfield Lewis  
Middlemore Road,  
Birmingham.  
Pre-anodised strip-blanks  
for louvres and reflectors  
available from stock to  
your precise requirements  
telephone or fax for more  
information and details of  
our 9 UK service centres.  
Tel: 021-554 5242  
Fax: 021-551 9315



Alcan  
Anocoil pre-anodised  
aluminium coil, sheet and  
blanks available ex-stock  
from the following service  
centres.  
Tipton 0902 880881  
Uxbridge 0895 444554  
Leeds 0532 450304  
Glasgow 041-647 9222  
Southampton 0703 611471  
Bridgend 0656 55981



Ano-Coil Ltd.,  
Bilton Road, Bletchley,  
Milton Keynes MK1 1HT  
Tel: 0908 75642  
Telex: 825031  
Fax: 0908 643956  
Pre-anodised aluminium for  
reflectors, louvres and  
decorative uses.

## BATTENHOLDERS/ CEILING ROSES/ JUNCTION BOXES

Ashley and Rock Limited  
Morecambe Road,  
Ulverston,  
Cumbria LA12 9BN  
Tel: 0229 53333  
Telex: 65164  
Fax: 0229 57659

## BATTERY BASED EMERGENCY STANDBY SYSTEMS

Colbere Eng Ltd.,  
Church Lane,  
Caldwell, Burton on Trent,  
DE12 6RT  
Tel: 0283 761267



P. B. Design/Dev  
Batteries, Chargers, U.P.S.  
Emergency Lighting  
Systems, Service and  
Sales.  
Unit 7  
Riverside Business Park  
St Annes Road  
Bristol BS4 4ED  
Tel: 0272 723880 (5 lines)  
Fax: 0272 723879  
Reader Service No. 53

## BEGA LIGHTING STOCKISTS LIGHTING COLUMN SUPPLIERS UNDERWATER LIGHTING

## BEGA

Exterior-Lite Services Ltd.,  
Unit 4, The Empire Centre,  
Imperial Way, Watford,  
Herts, WD2 4YH  
Tel: 0923 247254  
Telex: 916196

## BRASS PLATED LAMPS AND FITTINGS

Newtown Manufacturing Co. Ltd.  
Rear of 116 Aldridge Road  
Perry Barr  
Birmingham B42 2TP  
Tel: 021-356 8151  
Manufacturers of brass  
plated and powder coated  
metal components for the  
lighting industry.  
Specialising in traditional  
and modern designs. Made  
in Birmingham, cast from  
our own dies.

## BULKHEAD LUMINAIRES — TUNGSTEN AND ENERGY SAVING

## BG

BG Electrical Accessories  
Arlen House,  
808 Oxford Avenue  
Slough, Berks  
Tel: 0753 37921  
Telex: 847194  
Fax: 0753 691468

## CABLE ASSEMBLIES

Display Services Ltd.,  
Cable cutting, stripping  
and terminating. Sub  
assemblies/assemblers for  
the lighting and P.O.S.  
industry. Installation &  
maintenance of illuminated  
& non-illuminated displays  
and gantries.  
Tel: 0533 514647/514994  
Tel: 0323 842485/440522  
Fax: 0323 847916

## LANG

## WIRING TECHNOLOGIES

Peel Road, West Pimbo,  
Skelmersdale, Lancashire,  
WN8 9PT UK  
Tel 0695 51833  
Fax: 0695 50084  
Wires, Cables cut to length  
Crimp and Solder  
Terminations Wire Harness  
Assembly.

## CABLES/SILICONE

Technical Silicones Ltd.,  
3rd Floor,  
Stamford House,  
Stamford New Road,  
Altrincham,  
Cheshire WA14 1BL  
Tel: 061-941 5766

## COLD CATHODE

National Signs Ltd.,  
1 Hampshire Street  
London NW5 2TE  
Tel: 01-485 3363  
Fax: 01-284 1700  
Cold Cathode/Lighting  
installations \* servicing  
nationwide. Wide range of  
colours.

## S.W.1.

We are Specialist  
Consultants in Cold Cathode  
and Neon Lighting. Our  
company undertakes  
design, supply and  
Installation. Contact Mr  
Beecroft or Mr Watts on  
01-720 2650/01-720 4305

## COLOURED SLEEVES FOR FLUORESCENT TUBES

## COLORAP

E. C. Hinton & Co. Ltd.,  
225 Cannon Hill Lane,  
London SW20 9DB  
Tel: 01-540 5813  
Fax: 01-543 9395

## COMBINED MAINS AND EMERGENCY LUMINAIRES

existalite  
The Brightest Solution

existalite Ltd.,  
Project House,  
18 Tallon Road, Hutton,  
Essex CM13 1TZ  
Tel: 0277 263600  
Telex: 996770 Apex  
Fax: 0277 263592

## CUSTOM DESIGN LUMINAIRES

Sugg Lighting Ltd.,  
65 Gatwick Road,  
Crawley, Sussex  
Tel: 0293 540111

## DECORATIVE OUTDOOR LIGHTING

Celebration

George Turnock Ltd  
Green Lane  
Walsall, West Midlands  
WS2 8HT  
Tel: 0922 24966  
Fax: 0922 25521

## DIMMERS

DFP  
ELECTRONICS LTD

DFP Electronics Ltd  
Meadow Road,  
Apperley Bridge  
Bradford, BD10 0LY  
Tel: 0274 616395

## Hamilton Litestat

R. Hamilton & Co. Ltd.,  
Unit G, Quarry Ind. Estate,  
Mere, Warminster,  
Wilts. BA12 6LA  
Tel: 0747 860088  
Telex: 41416 HAMILT G  
Fax: 0747 861032

Strand Lighting (Environ),  
Grant Way (off Syon Lane)  
Isleworth  
Middlesex TW7 5QD  
Tel: 01-560 3171  
Telex: 27976

Fax: 01-568 2103

## HELVAR

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 291439 HELVAR G

Helvar Ltd.,  
1 Ealing Road Trading Est.  
Ealing Road, Brentford,  
Middlesex TW8 0QY  
Tel: 01-568 6205  
Fax: 01-568 6473  
Telex: 2

To advertise  
in this Directory  
contact Joanne Barker.

# WHERE TO BUY DIRECTORY

Telephone:  
01-975 9759 Ext.1154

## GENERATING SETS

Brimotor Ltd.,  
Tel: 0892 37588  
Telex: 95446+Floodlighting

## LAMPHOLDERS

Ashley and Rock Limited,  
Morecambe Road,  
Ulverston,  
Cumbria LA12 9BN  
Tel: 0229 53333  
Telex: 65164  
Fax: 0229 57659

Golden Peacock

A-143 New Friends Colony  
New Delhi — 110065  
India  
Tel: (91-11) 635322, 529545  
Telex: (031) 62324 LITE IN  
Cable: Lightwest  
All items meet BS 5042  
Part 1: 1981.

## A G H

A. G. Hackney & Co. Ltd.,  
Westport Road, Burslem,  
Stoke-on-Trent ST6 4AP  
Tel: 0782 577575  
Telex: 36674  
Fax: 0782 575230

IMI Reeves Lampholders  
Holdford Road, Witton,  
Birmingham B6 7ES  
Tel: 021-356 7369  
Telex: 335959  
Fax: 021-356 7987

## LIGHT SOURCE

Light Source Electrical  
Equipment Ltd.,  
Lightsource House,  
24 Scrubs Lane,  
London NW10 6RD  
Tel: 01-960 2188  
Telex: 915506  
Fax: 01-960 8901

S. Lilley & Son Ltd.,  
80 Alcester Street,  
Birmingham B12 0QE  
Tel: 021-622 2385  
Fax: 021-6666 148

## ITE WORK

LiteWork Ltd.,  
42a Mill Road, Hailsham  
East Sussex BN27 2HT  
Tel: 0323 842485/440522  
Fax: 0323 847916

## LINDNER

Sole Agent and Distributor  
Hylec-Elettro Gibi (UK) Ltd  
Unit 4, Trinity Centre  
Park Farm Industrial Estate  
Wellingborough  
Northants NN8 3ZB  
Tel: (0933) 677633  
Telex: 31260 HYLEC G  
Fax: (0933) 675771

## BENDER + WIRTH



C. Qitman Ltd.,  
Sole Agent and Stockist for  
Bender and Wirth  
Ullswater Crescent,  
Marlpit Lane, Coulsdon,  
Surrey CR3 2HR

Tel: 01-668 52956  
Telex: 945809  
Fax: 01-660 2589

Studen Products Ltd.,  
Villiers Street,  
off Cobden Street,  
Pendleton, Salford,  
Manchester M6  
Tel: 061-736 8855  
Bakelite and brass wired  
holders.

## Tridonic

Tridonic Ltd.,  
Unit D1, Grafton Way,  
West Ham Industrial Estate,  
Basingstoke, Hampshire  
RG22 5HY  
Tel: 0256 842323  
Telex: 858137  
Fax: 0256 840113

## VOSSLOH

Vossloh Ltd.,  
38 Tanners Drive,  
Blakelands,  
Milton Keynes MP14 5BW  
Tel: 0908 611060  
Fax: 0908 613131  
Telex: 825606 VOSUK G

## LAMP COLOURING



Lampcolors Ltd.,  
Wiseman Street,  
Burnley,  
Lancs BB11 1RU  
Tel: 0282 56231/2

The largest independent  
lamp spraying company  
in Europe, with the fastest  
turnround of orders in the  
business.

Lampspray (Lampcolourers)  
Unit 41/42,  
Cromwell Industrial Estate,  
Staffa Road, London E10  
Tel: 01-539 Vossloh

## LAMP SHADE AND BASE MANUFACTURERS

The London Trend Lighting Co. Ltd.,  
3/5 Coxtie Green Road  
Pilgrims Hatch, Brentwood,  
Essex CM14 5PN  
Tel: 0277 374247  
Telex: 995801 GLOTLX

## LAMP SHADE FRAMES

Brendon C. Hoarau,  
149 Tideswell Road,  
Eastbourne, Sussex  
Tel: 0323 37096  
Frames plastic coated  
delivered anywhere in  
England. Good quality, good  
prices, fast and reliable  
delivery.

## Wards Coatings

Sheffield S2 3DA  
Tel: 0742 580963  
Manufacturers of quality  
frames in round or flat wire.  
Coated or plain wire.

## C and G Weir (Glasgow) Ltd.

Project 9, Unit D/A,  
91 McPhail Street,  
Bridgetown,  
Glasgow G40 1ND  
Tel: 041-554 3126

Quality lampshade frames,  
ringsets and shade carriers.  
Nylon coating.

## LAMPS AND LIGHTING

American Lamps and Lighting Ltd.,  
367 Uxbridge Road,  
Acton, London W3 9RH  
Tel: 01-993 3181  
Telex: 894452



# WHERE TO BUY DIRECTORY

Chadwell T.S.M. Ltd.,  
Unit No.2  
Southbrook Mews,  
Southbrook Road, Lee,  
London SE12 8QL  
Osram-Thorn-Philips-  
Omega-Wotan.  
Tel: 01-318 5071

H. J. Rose,  
84 Boundary Road,  
London E17 8JU  
Tel: 01-521 5845  
Coloured lamps a  
speciality.

## TUNGSRAM

Tungsramp Lighting Ltd.,  
35-37 William Road  
London NW1 3ER  
Tel: 01-388 8889,  
01-722 6611  
Telex: 266086  
Fax: 01-387 4071

## LIGHTING ACCESSORIES/ CONNECTORS

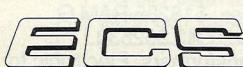
Ashley and Rock Limited,  
Morecambe Road,  
Ulverston,  
Cumbria LA12 9BN  
Tel: 0229 53333  
Telex: 65164  
Fax: 0229 57659  
The revolutionary new  
KLIK connector makes a  
mechanical and electrical  
connection simultaneously.

## LIGHTING COMPONENTS/ LAMPHOLDERS/SWITCHES CABLE/BRASS/GLASS



Collingwood VLM Ltd.,  
17 Stilebrook Road,  
Olney,  
Bucks.  
Tel: 0234 712121  
Telex: 826207  
Fax: 713673

## LIGHTING CONTROLS



ECS Energy Conserv. Systems Ltd.,  
Enterprise House, North  
Feltham Trading Estate,  
Feltham,  
Middlesex TW14 0RX  
Tel: 01-751 6514  
Fax: 01-890 7438

## LIGHTING DIFFUSERS

Diffuser Replacement  
Services,  
197 Eade Road,  
London N4 1DN  
Tel: 01-802 1429  
Fax: 01-800 9819  
Manufacturers of all types of  
diffusers and metal louvres.

Panelservice Ltd.,  
Wycliffe Works,  
Wycliffe Road,  
Wimbledon SW19 1ER  
Tel: 01-540 7172

## LIGHTING DIFFUSERS/ PLASTICS

Arrow Plastics Ltd.,  
Arrow Works,  
Hampden Road,  
Kingston-upon-Thames,  
Surrey  
Tel: 01-546 6258  
Telex: 8955343  
MBM Plastics Ltd.,  
204 Oldbury Road,  
West Bromwich,  
West Midlands B70 9DE  
Tel: 021-553 7551  
Extruded, fabricated and  
moulded diffusers for the  
lighting industry.  
Also — aluminium louvres.

## LIGHTING GLASS

Glastics Ltd.,  
Common Lane,  
Wath-upon-Dearne,  
Rotherham, S63 7DY  
Tel: 0709 878721  
Telex: 547455



C. Qitman Ltd.,  
Ullswater Crescent,  
Marlpit Lane, Coulsdon,  
Surrey CR3 2HR  
Tel: 01-668 5295/6  
Telex: 945809  
Fax: 01-660 2589

## LIGHTING LOW VOLTAGE FLEXIBLE STRIP

Aelectralink Distributing Company

Unit 5, Popin Building,  
South Way, Wembley,  
Middlesex HA9 0HB  
Tel: 01-900 2322  
Fax: 01-903 3403  
Only 1/2" wide uses new  
type of miniature Halogen  
lamps, runs bright, white,  
cool (low heat emission).  
It is new it is amazing.

## LIGHT MEASURING INSTRUMENTS



Hagner International  
(UK) Ltd.,  
Itchenor, Chichester,  
West Sussex PO20 7DA  
Tel: 0243 512387

Megatron Limited,  
165 Marlborough Road,  
London N19 4NE  
Tel: 01-272 3739

## LIGHT SOURCES & COMPONENTS TO OEM MANUFACTURERS



EFA Ltd.,  
Arlen House,  
808 Oxford Avenue,  
Slough, Berks.  
Tel: 0753 37921  
Telex: 847194  
Fax: 0753 691468

## ITE WORK

LiteWork Ltd.,  
42a Mill Road, Hailsham  
East Sussex BN27 2HT  
Tel: 0323 842485/440522  
Fax: 0323 847916

## LOW BRIGHTNESS VDU LOUVRES

ALC CELLITE LIMITED  
AMERICAN LOUVER COMPANY

A.L.C. Cellite Ltd.,  
Unit 16 Adler Ind. Est.,  
Betam Road, Hayes,  
Middlesex UB3 1ST  
Tel: 01-848 1881

## MANUFACTURERS OF SPECIAL AND PURPOSE MADE FITTINGS

## ITE WORK

LiteWork Ltd.,  
42a Mill Road, Hailsham  
East Sussex BN27 2HT  
Tel: 0323 842485/440522  
Fax: 0323 847916

Maxi Engineering Co.,  
26/32 Plumstead High St.,  
London SE18 7SL  
Tel: 01-854 3181



Vector Lighting Ltd.,  
Porte Marsh Estate,  
Calne, Wiltshire SN11 9PU.  
Tel: 0249 814548  
Fax: 0249 816138

## SYMONDS

Symonds Engineering plc,  
High Street, Cheshunt,  
Herts EN8 0BU  
Tel: 0992 26222  
Telex: 28725  
Fax: 0992 37738  
Luminaires/louvres, major  
trade suppliers.  
BS5750 part 2.  
Contact: Lee Freeman.

## METAL FINISHERS

Aspects Polishers  
13 Long Lane, Ickenham,  
Middlesex.  
Tel: 0895 672515  
Brass polishing and  
lacquering.

## METAL PRESSWORK AND POWDER COATING

Colmore Pressings Ltd.  
40-41 Macdonald Street,  
Birmingham B5 6TQ  
Tel: 021-692 1701/1702  
Wide range of standard  
parts for domestic and  
industrial light fittings.

## ITE WORK

LiteWork Ltd.,  
42a Mill Road, Hailsham  
East Sussex BN27 2HT  
Tel: 0323 842485/440522  
Fax: 0323 847916

## METAL SPINNERS

A. L. Munro (B'ham) Ltd.,  
46 New Summer Street  
Newtown  
Aston  
Birmingham B19 3TG  
Tel: 021-333 3454  
Fax: 021-359 6865  
Metal Spinners for the  
Lighting Industry.

## Anglia Spinners

Spinnings, Presswork,  
Spraying & Finishing,  
Unit 115a,  
Little Staughton Airfield,  
Little Staughton, Beds  
Tel: Colmworth  
0230 62 398

## H.D. Collins Ltd.

Delamare Road,  
Cheshunt,  
Herts EN8 9TB  
Tel: 0992 25981/24936  
Fax: 0992 36915  
Auto and manual spinners,  
presswork and assy.

## E.G. Sheet Metal Works

Metal spinners and  
general sheet metal  
workers. A complete service  
to the lighting industry.  
Third Way,  
Exhibition Grounds,  
Wembley, Middlesex  
Tel: 01-902 2153  
01-903 3171

## Jacksons General Metal Spinners

Prototypes and small  
quantities a speciality  
Unit 1

Noke Lane Business Centre  
Noke Lane, St. Albans  
Herts AL2 3NY  
Tel: 0727 46038

## K.A.S.

Met Spinning Ltd.,  
Glebe Farm, Creak Road,  
Sculthorpe, Nr Fakenham  
Norfolk NR21 9NF  
Tel: 0328 55208

## Moore Metal Spinners Ltd

3 Sussex Place  
London W6 9EA  
Tel: 01-748 6061  
Comprehensive service to  
the lighting industry from  
prototypes to batch  
production.

## V

**SHEET METAL WORKERS/  
PRESSWORKERS AND  
ASSEMBLERS TO THE  
LIGHTING INDUSTRY**

**Argand Lighting Limited**  
Units 12/14  
Roxwell Trading Park  
Argall Avenue, Leyton,  
London E10 7QE  
Tel: 01-556 6423 and Fax  
Contact: Barry Davolls  
Established supplier to  
major brand names.



**Litework Ltd.**,  
42a Mill Road, Hailsham  
East Sussex BN27 2HT  
Tel: 0323 842485/440522  
Fax: 0323 847916  
Assembly workers to the  
lighting and P.O.S. industry

**SPECIAL GLASS**

**Scorpie Lighting** for:  
Heat Resistant Glass  
U.V. Absorbing Glass  
Dichroic Filters  
Iridescent Glass  
Custom made Glass  
Tel: 01-446 9072  
Fax: 01-445 7033

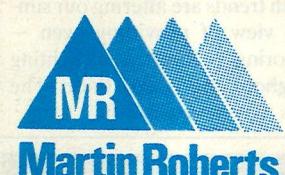
**SPECIAL & PURPOSE MADE  
FITTINGS**

**DAVIS CASH**

**Davis Cash & Co. Ltd.**,  
Alexandra Road,  
Ponders End, Enfield,  
Middx EN3 7EN  
Tel: 01-804 4028  
Fax: 01-805 2896  
Quality manufacturing  
service to customer  
drawings.



**Litework Ltd.**,  
42a Mill Road, Hailsham  
East Sussex BN27 2HT  
Tel: 0323 842485/440522  
Fax: 0323 847916



**Martin Roberts**  
Grimrod Place  
East Gillibrands  
Skelmersdale  
Lancashire WN8 9UU  
Tel: 0695 33068  
Telex: 629020  
Fax: 0695 50227  
Manufacturers of all types of  
luminaires and metal louvres  
to the Trade.

**STANDARD & SPECIAL  
LUMINAIRES &  
FLUORESCENT LIGHTING  
DESIGN SERVICE**

**Maxi Engineering Co.**,  
26 Plumstead High Street,  
London SE18 1SL  
Tel: 01-854 3181

**TERMINAL BLOCKS**



**HYLEC-Eletto Gibi (UK) Limited**  
Unit 4, Trinity Centre,  
Park Farm Industrial Estate  
Wellingborough,  
Northants NN8 3ZB  
Tel: 0933 677633  
Telex: 31260 HYLEC G  
Fax: 0933 675771

**TOROID  
TRANSFORMER  
MANUFACTURERS**

**Airlink Transformers Ltd.**,  
Unit 6, The Maltings,  
Sawbridgeworth, Herts.  
Tel: 0279 724425



**Toroid Technology Ltd.**,  
175A Brigstock Road,  
Thornton Heath,  
Surrey CR4 7JP  
Tel: 01-689 8002, 684-4217  
Telex: 8813271 Gecoms G  
Fax: 01-689 0002

**TOWER/MASTS  
FLOODLIGHTING**

**Towermaster Steelwork Ltd.**,  
Braintree,  
Essex CM7 7YN  
Tel: 0376 24809  
Telex: 987312 TOWERS G

**TRANSFORMER  
MANUFACTURERS**



**Carroll & Meynell Ltd.**,  
Portrack Grange Road,  
Stockton-on-Tees  
Cleveland TS18 2PH  
Tel: 0642 617406  
Telex: 58646  
Fax: 0642 614178  
Manufacturer of Low  
Voltage Transformers.

**J. M. Clarke Ltd.**,  
64/66 Percy Road,  
Leicester LE2 8FN.  
Tel: (0533) 833321  
Fax: (0533) 830730  
Manufacturers of low  
voltage wound and  
electronic transformers.

**Cumbernauld Transformers  
Ltd.**,  
18-20 West Lenziemill  
Industrial Estate,  
Cumbernauld,  
Glasgow G67 2XT  
Tel: 023-67 25914  
Telex: 777350  
Full range of low-voltage  
transformers available.

**ULTRA VIOLET  
FLUORESCENT TUBES**



**TOROID  
TECHNOLOGY LTD**

**Toroid Technology Ltd**  
175A Brigstock Road,  
Thornton Heath,  
Surrey CR4 7JP  
Tel: 01-689 8002  
Telex: 8813271 Gecoms G  
Fax: 01-689 0002

**Tidonic**

**Tridonic Ltd.**,  
Unit D1, Grafton Way,  
West Ham Industrial Estate,  
Basingstoke, Hampshire  
RG22 5HY  
Tel: 0256 843232  
Telex: 858137  
Fax: 0256 840113

**UNIVERSAL  
TRANSFORMERS**

**Universal Transformers**  
9 Hurworth Road  
Aycliffe Industrial Estate  
Newton Aycliffe  
County Durham DL5 6AW  
Tel: 0325 317429  
Fax: 0325 311081  
Fax for instant quote.  
Full range of Toroidal  
and Laminated  
Transformers  
available Ex-Stock.

**WLA**

P.O. Box 524  
Lostock Hall, Preston  
Lancs PR5 5HZ  
Tel: 0772 626900  
Fax: 0772 627729

**TUBES**

**Cobham Engineering**  
Unit 2,  
Upper Conybere Street  
Birmingham B12 0YP  
Brass, Steel and Aluminium  
8, 10, 13mm Arms.  
Brazing and Spot Welding  
Stampings and Luminaire  
parts.

Tel: 021-440 1690  
Fax: 021-446 4197

**S. Lilley & Son Ltd.**,  
80 Alcester Street,  
Birmingham B12 0QE  
Tel: 021-622 2385  
Fax: 021-6666 148

**ULTRA VIOLET  
FLUORESCENT TUBES**

**Eastmead Electronics Limited**  
Lavant  
Chichester PO18 QDE  
Tel: 0243 527922  
Fax: 0243 531537

**ULTRA VIOLET/SPECIALIST  
LAMPS & EQUIPMENT**

**Starna Ltd.**,  
33 Station Road,  
Chadwell Heath, Romford,  
Essex RM6 4BL  
Tel: 01-599 5115  
Telex: 8951154 Starna G  
Fax: 01-599 5415

**VICTORIAN REPRODUCTION  
GAS AND ELECTRIC  
LIGHT FITTINGS**

**Sugg Lighting Ltd.**,  
65 Gatwick Road,  
Crawley, Sussex  
Tel: 0293 540111

**WOOD FLOOR  
STANDARD LAMPS**

**George Wood Ltd.**,  
Laundry Street,  
Pendleton, Salford  
Lancs. M6 6WJ  
Tel: 061-736 6855

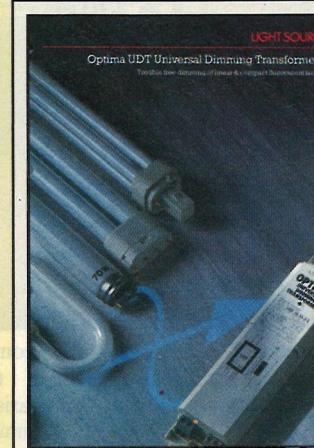
**ZONES 1 & 2 BASEEFA  
APPROVED LIGHTING  
FITTINGS**

**B.V. Industria**,  
52-62 Brasenose Road  
Boote  
Merseyside L20 8HG  
Tel: 051-922 0052  
Telex: 629135  
Fax: 051-922 0099

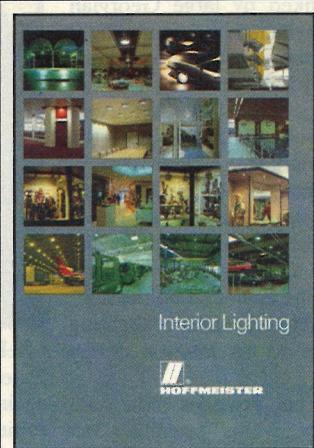


**Tekcon Electrical Limited**  
Porte Marsh Estate  
Calne, Wilts. SN11 9PU  
Tel: 0249 814548  
Fax: 0249 816138  
Lamp Transformers (SELV)  
50VA to 600VA rating.

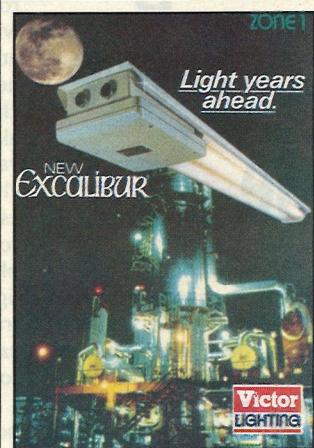
# CATALOGUE DIRECTORY



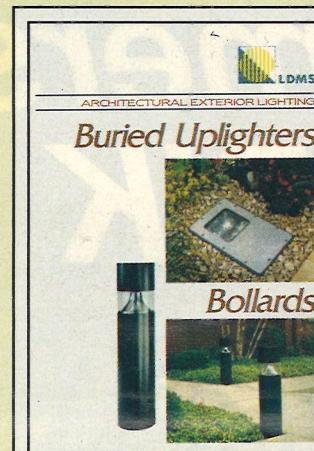
**The UDT 70 Dimming  
Transformer from Light  
Source** operates T12 and T8  
linear lamps, and compact  
fluorescent lamps, in ratings  
from 18 to 75W. Lamps may  
be dimmed from 100% down  
to 5%, with instant restrike  
at any point across the range:  
circle 90



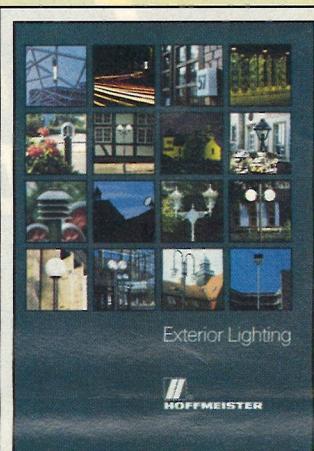
**The Hoffmeister Interior  
Catalogue** of 272 pages  
features double page  
presentation of luminaire  
groups with photographs,  
descriptive text, photometric  
data and technical drawing  
detailing to enable precise  
assessment of design and  
performance with clarity:  
circle 91



Available in standard and  
emergency versions, the  
Excalibur is fast becoming  
the first choice when ex 'E'  
luminaires are required.  
The Excalibur is slim and  
lightweight but well able to  
withstand the rigours of zone  
1 or zone 2 and the harsh  
offshore environment:  
circle 92



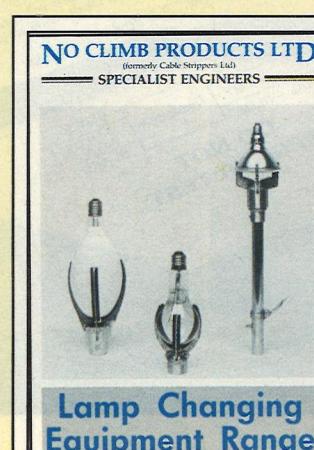
**LDMS Architectural Exterior  
Lighting. Buried Uplighters**  
which give spectacular illumina-  
tion from discreet sources.  
Modern architectural Bollards  
in a variety of colours and an  
alternative square version. Low  
voltage exterior spotlights ideal  
for countless applications. Full  
range exhibited at suite 304,  
Business Design Centre,  
Islington: circle 93



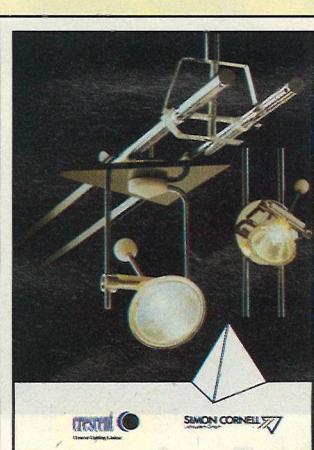
**The Hoffmeister Exterior  
Catalogue** of 250 pages  
features Pathway Luminaires,  
bollards, 100mm tubular  
system, street luminaires etc  
which enable illumination of  
public, office, church or  
private garden lighting, from  
this extensive exterior  
luminaire programme:  
circle 94



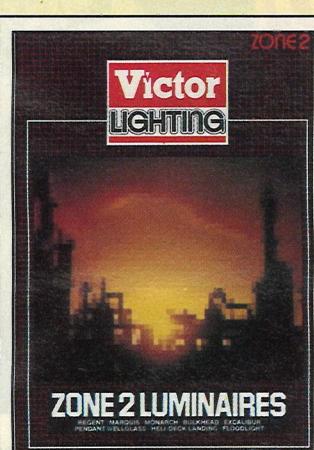
**'FIREWATCH'** is a fully  
intelligent fire detection  
system capable of monitoring  
addressable fire sensors.  
Precise locational data is  
clearly displayed on all  
'alarm' conditions, and the  
selected response to each  
condition pre-programmed to  
meet the requirements of the  
site. Channel Safety Systems  
Ltd: circle 95



**No Climb Products** produce  
a range of lamp changing  
equipment comprising a  
series of inter-connecting  
insulated poles with three-  
fingered grabs for changing  
any lamps up to 30 feet high.  
The apparatus saves time and  
expense, avoiding the cost  
and disruption of having to  
hire/buy and set up scaffold-  
ing or platforms: circle 96



**Crescent Lighting** introduce  
the Simon Cornell profes-  
sional low voltage system. Based  
around super-pure aluminium  
rods capable of handling up  
to 290 amps, the system is  
ideal for retail and display  
application. Corner pieces  
both horizontal and vertical  
enable virtually any design to  
be realised using up to 75W  
Dichroic lamps: circle 97



**NEI Victor** produce a range  
of Zone 2 luminaires  
featuring floodlight, pendant  
bulkhead and tubular  
fluorescent designs, as well  
as general purpose variants  
offering the same quality  
manufacturing materials:  
circle 98

**To advertise  
your Catalogue in this directory  
contact Joanne Barker on 01-975 9759 ext 1154.**

## Showing off decorative style

A lighting showroom featuring everything from chandeliers to low voltage fittings has been opened by Chelsom in their Blackpool factory and office complex. "We have planned it," says managing director Robert Chelsom, "to take its place among the best that Europe has to offer, and equipped it with every facility to cope with visitors

from the UK and overseas." The 250 square metre showroom is divided into ten 'style' rooms linked by large Georgian windows which admit natural light and add to the feeling of spaciousness. They follow the major design classifications laid down in the catalogue, with subdivisions into the various market segments: hotels, clubs, pubs, general leisure, domestic and so on. The decor of each room reflects the period of its display, and different finishes to the light fittings demonstrate the contribution that decorative lighting can make to an interior design scheme.

A oak bar provides showroom hospitality while providing an ideal setting for the pub lighting. Another decorative feature is the original door of the shop in which



Chelsom started 42 years ago. 2D compact fluorescent lamps fitted to wall brackets for comparison.

Dimmers are installed throughout, and separate switching allows each individual fitting to be assessed for effect.

In addition, the low energy conversion service has its own demonstration area with EL, SL, PL and

## Guide helps lamp specifiers

A useful guide to assist anyone who specifies lamps and needs to check technical and other data has been produced by Rolfe Data Services. Called *The specifiers' guide to lamps*, it covers mercury, metal halide, fluorescent (linear and compact), high pressure sodium low pressure sodium and tungsten halogen types. It excludes all filament lamps except tungsten halogen.

The guide has been produced from a database of some 1600 lamps and covers the main manufacturers' products used for interior and exterior lighting.

Addresses and telephone numbers for ordering are listed in an appendix.

Included in the 15 column headings of the guide are lamp watts, manufacturers' catalogue reference, cap, nominal length and width, burning position, colour temperature, initial and lighting design lumens and trade price.

The guide, which has been compiled by Paul Rolfe, previously secretary to the Lighting Division of the Chartered Institution of Building Services Engineers, is to be updated at regular intervals.

Price including free update sheets for one year, and postage and packing, is £65. Copies can be ordered from Rolfe Data Services, 22 Hareton Close, London SE23 3TG.

## Industrial safety needs tightening

Launching the Health and Safety Commission's *Plan of work for 1989-90 and beyond*, chairman Dr John Cullen said, "Our prime task as ever must be to encourage industry by every available means to improve its safety performance."

Many parts of British industry have a good safety record, but studies of major disasters, or

smaller incidents causing death or serious injury, too often reveal a lamentable lack of precaution, a significant management failure to plan to meet risks.

Financial provision has been agreed by the government to enable inspection and enforcement to be increased in each of the next three years.

Dr Cullen concluded by saying that the Commission and industry needed to work more closely together as the European Year of Health and Safety, 1992, approached.

## Lighting division change

David Loe has been elected Chairman of the Lighting Division of CIBSE; he took office at the Division's AGM on 3 May.

David Loe, MPhil, FCIBSE, MIES, is Director of the International Philips Centre for Lighting Education and Research at the Bartlett School of Architecture and Planning, University College London, where he runs an MSc course in Light and Lighting.

Two areas of particular interest and concern are, naturally enough, the continuing growth and development of lighting education and the provision of adequate funding for research projects. "The importance of these two aspects cannot be over emphasised if we are to maintain our position in the vanguard of lighting design, expertise and product development" Mr Loe told *LEN*.

## IN YOUR NEXT ISSUE

Office lighting is the major theme of the September issue of *LEN*. While energy efficiency calls for centralised switching, both social factors and the need for flexibility are increasingly dictating individual control of the environment.

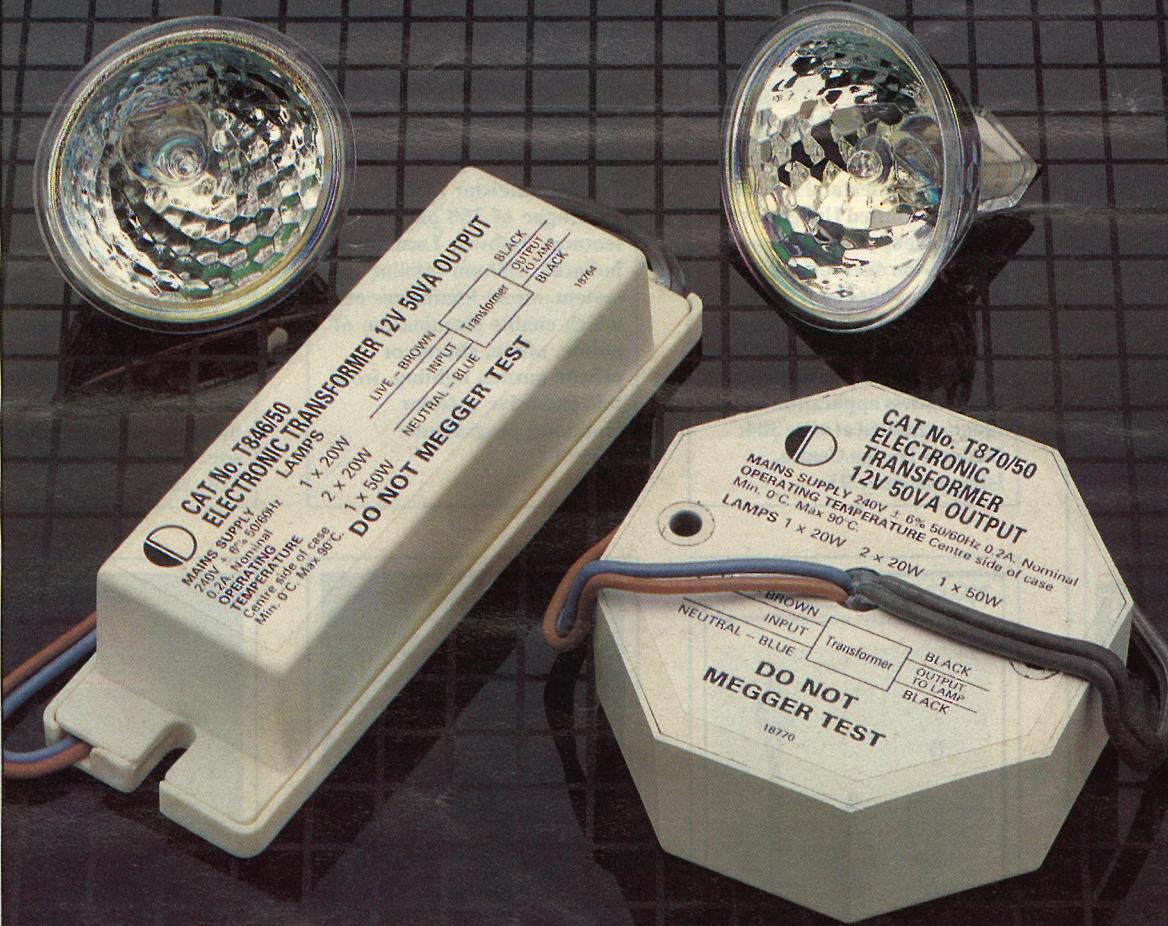
Both trends are altering our simplistic view of providing even — and boring — fluorescent lighting throughout the office floor. The results may prove exciting.

**crescent**

The Wever & Ducre range from Crescent Lighting Ltd. 8-10 West Mills, Newbury, Berkshire Tel: 0635 361111 Fax: 0635 38090

**JP PRESS • STOP PRESS • STOP PRESS • STOP PRESS**

## New Electronic Transformers from ORBIK



The new Electronic Transformer from Orbik is an advanced design, high technology electronic transformer available in 20W/50W and 35W/75W versions.

The units are specifically designed to be lightweight (approximately 83% lighter than a conventional 50VA transformer) and extremely compact.

### SPECIAL FEATURES

- Low power consumption
- Capable of operating at high temperatures (Maximum case temperature 90°C)
- Soft Start feature, to prolong lamp life
- Overload and short circuit protected
- R.F.I. suppressed
- Transient Protected
- Dimmable
- 100% Burn in tests

Compared with a conventional transformer the ORBIK ELECTRONIC TRANSFORMER outshines the rest.

**ORBIK**

Electronics Limited

Orbik House, Northgate, Aldridge, Walsall, West Mids WS9 8TH. Tel: (0922) 743515. Fax: (0922) 743173. Telex: 339612.

Reader Service No. 13

Page 16

Lighting Equipment News, August 1989