

High Mast Guide

kingfisherlighting.com

Your guide to our **5-step system**

PART OF THE LUCECOplc GROUP OF COMPANIES













Contents





With over 70 years' experience, Luceco Plc group of companies include Kingfisher Lighting, Luceco LED Lighting, BG Electrical, Masterplug and Ross.

Luceco's UK based offices include assembly, distribution, warehousing and sales functions. Alongside our UK facilities, Luceco have offices around the world offering sales, manufacturing and logistics operations.

In-house laboratories host the latest test equipment which guarantee quality production and performance from product offerings.

The dedication to innovation and environmental factors brings the group to the forefront of LED technology and sets us apart from the competition.

Luceco.com













Kingfisher Lighting

We have a great team of people ready to help realise your scheme. Qualified Project Designers, technical lighting experts and customer focussed Project Managers - all with a desire to create stand-out lighting projects with you. You can opt for a full solution or a simple product support service, the choice is entirely yours.

Our wrap-around services combine project design & management, technical & product support, BIM capabilities, energy calculations and ROI proposals. Every customer and every project has a specific Project Coordinator and Project Sales Engineer for a seamless service.







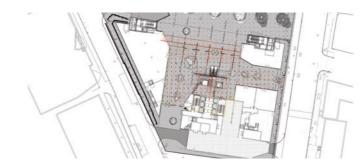


Technical support

We provide technical support whenever you need it. From product selection and custom options, through to site visits, payback calculations and sustainability data as well as controls solutions and smart technology integration.

Project design

Our experienced LIA and LET qualified Project Designers use the latest software to create everything from simple calculation plots to full 3D visualisations. You can talk to and meet with the Project Designer directly to discuss your scheme. We produce a comprehensive layout, broken down into zones detailing fitting types and lux values.



Project management

Our dedicated Project Sales Engineers and Coordinators will be there at every stage of your project. Based both in our offices and out in your region, they are on hand all day, every day to answer queries and proactively progress your scheme.

BIM capabilities

BIM is becoming increasingly important in construction so we provide BIM files for our luminaires, making sure you can speed up the design process and integrate smoothly in to the full build plan. We can work with you to understand any other design requirements you might have and provide the right files and data.

Controls and Smart Technologies

Controls and other smart technology can transform a lighting scheme by adding functionality, creating drama, saving on energy or providing real-time data. We can supply luminaires that work with simple step-dimming protocols, DMX colour change programmes or DALI and Wifi controls solutions. We can work with you to explore the possibilities of integrating smart technologies.



After your project has been specified we ensure that it gets delivered to the contractor in-line with the site requirements. Our fleet of vehicles offers nationwide delivery options with safe, efficient offloading capabilities for luminaires and columns. Product is delivered to site with clear scheme plans and product installation guide.





portable power solutions



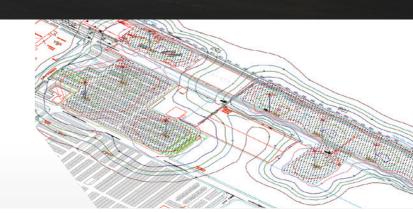




Every high mast scheme is different and requires a custom design. We will visit your site to carry out a detailed audit in order to fully understand the

requirements of your project.

Step 1 - Audit & Design



We supply, install and maintain all types of high mast lighting systems. We cover everything from road junction lighting, to dock lighting, airport lighting, and sports lighting.

Experience

We have been designing and installing high mast systems across the UK for over 25 years working on ports, airports, rail, highways, sports, retail and industrial sites. We are experts and sit on a variety of industry technical committees. We understand high mast design and installation and we can guide you with expertise through your project.

Technical support

We work with our clients to create the optimum design and then translate this into a real installation. Our structural and project design experts will design to suit the custom requirements of your project. Every one of our high mast projects is managed by an experienced project manager.

End-to-end solutions

We wrap around supply with a full end-to-end solution, from the initial audit through to new designs, product supply, installation and eventually the maintenance programme. Effective, safe implementation now and for years to come.

Once the audit has been completed we can give you the best structural and lighting project design possible - offering the perfect combination of mast system, lighting and controls.

Our project design team are all LIA trained and design with the latest 2D & 3D software. The team will create the most efficient scheme for your project along with calculations on energy consumption and light output so you can easily see the benefits of your high mast scheme.

Examples of high mast use

- Ports, harbours and docklands
- Railways and marshalling yards
- Water and energy facilities
- Manufacturing and storage facilities
- Motorway networks and intersections

- Airports
- Retail parks
- Sports stadiums
- Container terminals
- Military bases

Step 2 - The Mast

We can help simplify the technical nature of high mast lighting. At Kingfisher we specify the right system to suit the purpose and budget of your project.

Selecting the right mast is important and depending on the desired end use, maintenance requirements and available space, there are a number of mast options we can offer.

We will guide you through mast selection as well as our range of extras such as obstruction or warning lights, custom paint finishes and control systems.

Step 2 - Cont...

Lowering Head Frame Systems Explained







Head frame with canopy

Complete head frame & fittings

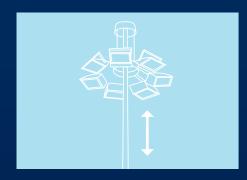
Head frame assembly

The lowering head frame mast is a comprehensive system that makes light work of accessing the fittings.

- 1. An aluminium spun canopy provides protection for the pulley assembly at the mast
- 2. A junction splitter box provides wiring within flexible conduits to luminaire spigots
- **3.** The head frame and carriage are fabricated from mid-steel and galvanised for strength and durability
- 4. Fully sealed maintenance free aluminium pulleys, needing no lubrication, allow the cable to run smoothly

- **5.** Stainless steel hoist ropes are robust enough for any high mast system
- **6.** Mechanical winch systems are used to safely raise and lower the high mast head frame. Single or double winches are available depending on the headframe load.
- **7.** A dedicated power tool and accessory pack come as part of the package for easy winding of the pulley system.

Mast Options



Lowering Head Frames

This mast allows the fitting to be fixed to a movable frame which can be secured in position or lowered down the length of the mast using a powered winch and pulley system. This mechanism simplifies the process for regular maintenance.

- Maintenance is carried out safely at ground level
- · No need for expensive high level platform
- Great for areas with space restrictions as no ground clearance is required



Fixed Masts

Fixed masts are exactly that – fixed. Teamed with efficient lighting they offer a great way to light large areas. Don't forget maintenance must be carried out on specialist equipment at height.

- Easily maintained mast no moving parts
- Standard installation process



Mid-Hinged Masts & **Base-Hinged Masts**

Hinged masts are popular on sports facilities. They hinge in the middle, or at the base allowing the lighting to be accessed at ground level. Remember that ground clearance is needed in the lowered position.

- Installation and maintenance is carried out safely at ground level
- No need for expensive high level platform

Step 3 - Lighting & Controls

Our energy saving LED lighting provides instant white light ideal for security and task lighting. Our floodlights are designed to minimise light pollution and glare making them the perfect choice for your site, your neighbours and wildlife.

Flood Lighting

Amnis

A world-class flood light designed and engineered in the UK. Using reflector technology, this low glare fitting produces an outstanding output. This high-quality fitting offers a 100,000 hours lifetime



across the whole fitting and comes with a marine grade finish as standard; this really is a Fit&Forget™ solution.

Italo Flood

A performance LED street light body with a flood light optic, available in three sizes with four optics. Lowglare reflector technology ensures a comfortably lit environment.



Galileo

Galileo is a transformational flood light with a low glare reflectorbased optic. Its high performance and modular technology make it ideal for projects requiring high lighting levels.



Zactis

A high-performance flat-to-ground LED flood light perfect for sports, high mast and area applications. As well as facilitating easy installation and maintenance, the sleek, lowprofile design, reduces the load together with decreasing windage.



Controls & Accessories

Obstruction/ Warning lights

Bright, long-life and low maintenance LED lighting available in either a single or double lamp.

Customise your mast to company or

industry colours with our made to

Custom Paint

order options.



System Capabilities include:

- Switch lighting on or off Via relay, PIR or Daylight sensor
- · Part night dimming





Our easy to install, wireless control system gives you total flexibility through a bespoke web portal and it's easy to use interface. This standalone system, does not require ongoing licencing fees and can be tailored and adapted to evolve with your lighting scheme.







• Remote configuration and diagnostics



Our experienced high mast installation team work on all types of projects and sites.











We can give you peace of mind with our HERS registration, full insurance (including airside cover), ISO 9001, 14001 and 18001 certifications.

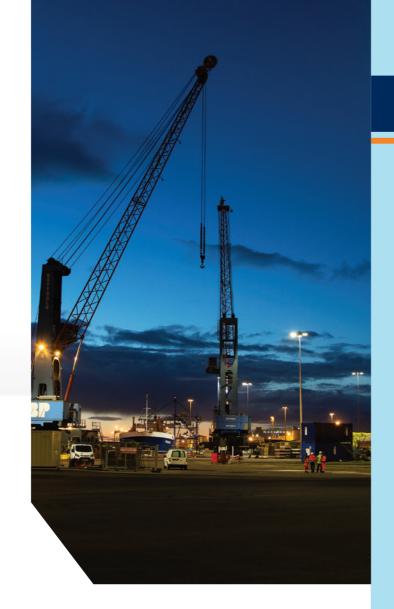
We can also fully commission your lighting scheme and provide lux level reports to ensure the reality matches the design.

Step 5 - Maintenance

Taking care of your current high mast lighting, or planning a maintenance programme for your new system is vital to ensure both the performance and health & safety of your lighting and to remain compliant with site insurance requirements. It's your responsibility.

Our fully trained and certified team can maintain and repair all kinds of high mast lighting, both our own and non-Kingfisher systems.

Our maintenance packages, which are compliant with ILP PLG07, have been designed to make sure you have the right level of cover for your system. Why not consider an LED upgrade during your planned maintenance visit?



Activity	Level 1	Level 2	Level 3
Check the winch and fixings	\checkmark	✓	\checkmark
Lower the carriage ring to check rope suspension points and suspension belts	\checkmark	\checkmark	\checkmark
Repair of lanterns and control gear	\checkmark	\checkmark	\checkmark
Check base mounted electrics	\checkmark	\checkmark	\checkmark
Raise the carriage unit and leave the mast fully lit	\checkmark	\checkmark	\checkmark
Use of cherry picker to visually check the head and pulleys, the wire ropes over the full length and the mast structure itself	-	\checkmark	\checkmark
Visual check of foundations, foundation nuts and protective material	-	\checkmark	\checkmark
Structural assessment	-	-	\checkmark
Ultrasonic testing	-	-	\checkmark
Torque pull out tests	-	-	\checkmark
NDT if required	-	-	\checkmark

Other Product Ranges Available

Sports Lighting







Amnis

Galileo

Zactis

Amenity/Architectural Lighting







Eco Rays

Gothic

Villa II

Street/Road Lighting







I-TRON

Italo

Viva-City Pro

Wall Mounted Lighting







Ellis

Quarto 2.0

Tito

Contacts

Get in touch with our expert team for more information and to see how we can transform your sports and high mast project.

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