

Case Study: Harrow Boys School

Project

Control of lighting to flood lit sports courts in the school's grounds.

Control

Client wanted simple control of all court lighting with timed auto OFF and manual wall switches.

Lighting

Challenger Flat Glass Floodlights with double asymmetric reflectors ensuring zero up light & minimal overspill & glare to onlookers.

Installer

Abacus Lighting, Nottingham



Light Symphony Solution

This prestigious school located on Harrow-on-the-hill in Middlesex presented some installation issues: primarily because of the age of the institution and the property's listed status (dating back to 1572) and the inherent lay of the land.

All installation work was required to be done sensitively, with minimal disruption to the look of the historic property.

Initially, only four lighting zones were required to control their floodlit 3G football pitch, athletics track & tennis courts.

Abacus Lighting installed flood lights cabled back to a control panel <A>, central to the surrounding courts and an additional controller on the more modern swimming pool complex which had line-of-sight across the extensive grounds.

What the picture doesn't show is the extent of the gradient of the surrounding ground. A grass mound between A & B meant a Repeater Unit located in an outbuilding with power <C> would ensure a reliable signal around the obstacle as foliage and trees continued to grow.

Wireless Wall Switches were used to give manual control of the 4 courts and a Long Range Remote Control was used to prove that the range of the proposed expansion south of <D> was indeed viable. It was suggested that an aerial was used to keep the signal above the substantial chain-linked fencing at the extremities of the plans to maintain a reliable signal at all times.



Harrow Boys School Continued ...



Light Symphony Solution

The above photograph shows more clearly how the radio signal had to fight its way through the greenery next to the swimming pool complex and then skim the brow of the mound, before passing between two established trees to an existing control cabinet (red line) – not ideal! Although working most of the time, the controls were proving intermittent.

Our proposed solution was to install a Repeater Unit on an existing mast on the roof of an outbuilding (you can just see the roof apex), avoiding the trees, with a clear route to the control cabinet and beyond (green line). Moving the cabinet was not an option.

A site survey using the Remote Control, proved that the signal was indeed effective 100% when avoiding the mound. It also revealed the extent to which the signal continued, giving the user confidence that future plans were within range too.

The modular approach that Light Symphony's product range exhibits, makes it ideal for projects where budget is tight. It can provide a complex, robust system from the outset, which can then be installed and added to, whilst still preserving the existing cabling and controls. This minimises spend overall and future-proofs the project too.

All our controllers are designed to work with the Key Fobs, Wall Switches, Remote Controls, Smart Phone and now Alexa. This ensures that different people can choose the control option that works for them. These can be mixed & matched to work alongside each other which is very convenient where a number of custodians share responsibility for an area or building(s) like this school.

Wall Switches give pupils & staff easy manual control but a Light Symphony Timer Unit can be used to ensure all lighting is OFF at a reasonable time, thus limiting disturbance to neighbours & minimising running costs for the school.