

BBC

Case Study



CASAMBI



BBC installs Casambi wireless lighting controls across the UK. Nine major sites – including the broadcaster’s London HQ – will benefit from the Casambi’s slick, intuitive, app-based lighting control harnessing Bluetooth Low Energy Mesh.

The BBC is the latest major client to back Casambi, installing the wireless lighting control system at nine of its buildings across the UK, with several more sites to follow.

The BBC’s output reaches more than 400 million people around the world every week, and its TV news operation is the biggest in the world.



Now the organisation wants to bring the same forward-thinking approach to its buildings, which house numerous TV and radio studios, data centres and offices. The BBC is on a mission to reduce energy use, improve comfort for staff, and introduce smarter, more flexible control. All upgrades must achieve energy reductions of at least 20% in order to go ahead, in line with the BBC's sustainability strategy.

That's why the broadcaster's technical services team decided to bring Casambi's lighting control solution to seven of its buildings, allowing lights to be controlled wirelessly from mobile devices.

At Broadcasting House, the BBC's London HQ, 2,000 fluorescent light fittings in the new part of the building have been replaced with LED alternatives, together with new sensors and Casambi wireless control.

The eight-storey Broadcasting House operates 24 hours a day, and is home to BBC News – the world's biggest TV news operation – as well as several radio stations, including the World Service.

Casambi is now installed in all of the following sites incorporating a total of more than 10,000 nodes:

- New Broadcasting House, London
- Wogan House, London
- Energy Centre, London
- Mailbox, Birmingham
- Glasgow Pacific Quay
- Belfast
- Manchester Media Centre
- BBC Oxford
- BBC Radio Nottingham

The lighting installation in Broadcasting House already includes several thousand Casambi wireless nodes – including luminaires, sensors and switches – and more are being added. The building's old T5 fittings, which were controlled using a 1-10v system, have been replaced one-for-one with recessed linear LED luminaires from WILA Lighting.

Casambi is based on Bluetooth and allows lighting to be controlled from any mobile device. Casambi Ready luminaires, sensors and switches incorporate a Bluetooth communication module that enables them to form a wireless mesh network with each other. Using the Casambi app, users can easily switch and dim lights, configure sensors and switches, and create pre-set scenes. Choosing a Casambi system gave the BBC team access to the entire Casambi Ready ecosystem of thousands of interoperable sensors and control devices. Sensors from Tridonic and Danlers have been installed to enable presence/absence detection and daylight dimming, ensuring lights are only on when they're needed. Energy-harvesting wireless switches from EnOcean are also being used, which provide another easy way for staff to control the lights. EnOcean's wireless switches are particularly well suited to Casambi, because it is the only lighting control system in which they can be paired with the whole network, rather than just the nearest individual node, ensuring reliable commissioning and operation.

The installation at Broadcasting House was carried out during late evenings, and each area being upgraded had to be ready the following morning when staff returned to their desks, so there would be no disruption.

Because Casambi is completely wireless, it's ideal for projects in existing buildings where adding new wiring is difficult. The new luminaires and sensors were simply installed in the spaces left by the old equipment, using existing power lines, but with the old wired control function no longer in use. In certain areas, versions of WILA's Cluster luminaires featuring tuneable white light were installed, so that colour temperature can be adjusted via the Casambi control platform from a warm 2700K to a cool 6500K.

Apart from Casambi Ready luminaires, sensors and switches, no other hardware is required to operate and control the new lighting, so installation at all of the BBC locations was quick, simple and cost-effective. The system was commissioned wirelessly from a remote location, meaning there was no need for anyone to be on site, minimising disruption to work.

The client is delighted with the results at Broadcasting House. The space has been described as brighter and more vibrant, and all the feedback so far has been positive. The flexibility to adjust light levels at any time means the BBC has been able to easily accommodate staff preferences and requests.

Kari Mettälä, CEO of Casambi, said: 'We're really proud that a globally renowned organisation like the BBC has put its trust in us to provide controls for all seven of these sites, including the iconic Broadcasting House. It's testament to the power of Casambi, and a great demonstration of how buildings can benefit from the best in modern lighting control to make the working environment more flexible, more pleasant and more energy efficient.'



LOCATION

United Kingdom

PROJECT LEAD & LUMINAIRES

WILA Lighting

Holders Components

BBC SITES

New Broadcasting House,
London

Wogan House, London

Energy Centre, London

Mailbox, Birmingham

Glasgow Pacific Quay,

Belfast

Manchester Media Centre

BBC Oxford

BBC Radio Nottingham

CASAMBI UNITS

10.000 +

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