

# UPGRADING TREND CONTROLS IQ2 TO IQ4 SERIES WITHOUT TRAGEDY OR DRAMA

## PROJECT DETAILS

### Client

Malvern Theatres

### Completed

October 2015

### Oakland Business Line

Trend Controls

### Objective

Upgrade of BMS controls and installation of inverter drives

MALVERN THEATRES IS A MAJOR CENTRE FOR ARTS IN THE MIDLANDS FOR PLAYS, MUSIC, DANCE AND FILM. THE WORCESTERSHIRE BASED VENUE HAS BEEN THE HOME OF THE FAMOUS MALVERN FESTIVAL SINCE 1929 AND UNDERWENT A LOTTERY FUNDED REFURBISHMENT IN 1997.

In 2015, Oakland Air Control was engaged to upgrade the building management system (BMS) controls and also install inverter drives into the central air conditioning units to enable control over ventilation noise levels as well as improve energy efficiency.

As a Trend Approved OEM Partner, Oakland upgraded the existing Trend IQ2 controls to the very latest IQ4E system. The IQ4E controllers are Building Management System controllers that use Ethernet and TCP/IP networking technologies. Each controller incorporates a web server which can deliver user specific web pages to a PC or mobile device running internet browser software.

If a system is set up with the correct connections, a user with the appropriate security codes can monitor or adjust the controller from any internet access point in the world. It is also compatible with the traditional IQ system protocol.

The Trend system was configured to control the building's HVAC engineering and lighting systems. The installation also included a new EINC in the Chiller plant room and updated Trend 963 Supervisor units. A 36 way lighting control panel was installed to enable highly automated light switching throughout the facility via the Trend BMS.

The central ventilation systems included two supply and two extract air handling units (AHUs). Oakland's solution was to fit Trend NXL variable speed inverters to the fans in the AHUs linked to air quality and temperature sensors in the ducts.

The installation was completed in October 2015.