

# Experts in Energy Saving Lighting and Heating



## University eTRV+ with PAIR

A leading London University made energy savings of over 30% by installing [eTRV+](#) with [PAIR](#) in their halls of residence.

The University had been using their building management system to control the heating, with temperature control via TRV's in each bedroom, the kitchen and corridors. The system provided two heating periods, switching on in the morning and evening and remaining off in the afternoon and overnight.

eTRV+ was initially fitted in student's bedrooms, and then extended into corridors and kitchens to provide balanced temperature control throughout the building. Bedrooms and were set to 19°C, with the boost facility to 21°C. Corridors were set to 16°C and kitchens to 19°C.

PAIR was installed in bedrooms to detect occupancy. If a student left their room for longer than one hour, eTRV+ would decrease the temperature to the low setting (16°C).

eTRV+ includes a Sleep facility, that provides the option to reduce heating further during longer periods of vacancy. For example, the heating can be set to switch off 24 hours after a student leaves their room, making savings when they are away over weekends or for holidays.

For the University, eTRV+ with PAIR provides savings through automatic temperature control and only fully heating occupied areas. Complex scheduling can be avoided and energy is saved by eliminating wasteful heating over weekends and holidays for reduced numbers of remaining students.

Additional savings are made through reduced maintenance. A common problem faced by Universities is TRV's sticking over the summer, when the valves do not move. eTRV+ features a weekly valve exercise feature which prevents sticking year round.

eTRV+ also reduces load across the heating system, so in some cases, variable pump speeds can be reduced, providing electricity savings.

For the students, eTRV+ provides greater comfort. Bedrooms are no longer too warm or cool. The manual one hour heat boost provides control if extra heat is needed.

We offer a range of communication tools designed to support students switching to eTRV+ heating, please click [here](#) to see a video example.

“eTRV+ with PAIR has provided us with energy savings, without compromising student comfort. Working closely with Chalmor, we have honed the system to suit our exact needs and now plan to implement this throughout all of our halls of residence”  
- **Energy and Environment Manager**