

Control Gear

Things to Know

Electronic Control Gear (ECG) System pitfalls

- ECG has many advantages however it contains delicate componetry and is not as robust as inductive Conventional Control Gear (CCG).
- When using ECG more care has to be taken to consider the likely maximum ambient temperature and the marked T°C of the electronics.
- Mains and Extra Low Voltage cable must be separated.
- Protection from dampness must be assured.
- Ensure you don't build hybrid installations where ECG is installed on a lighting supply shared with CCG or other inductive gear. For example ignition peaks produced by CCG will damage electronic components in ECG. All the fixtures must be replaced with high frequency gear.
- Isolated luminaries can be subject to constant voltage from inductive loads created in 'double switched' strap cables.
- As ECG is not as robust as CCG, a professional approach is required for equipment selection in any given system.
- An IR sensor may not be compatible with ECG. A separate interface switch such as a relay should be used.
- Frequency and mains voltage must remain within the mandatory normal range, plus or minus 6%.
- Transformers must be installed correctly to allow their own generated heat to dissipate, never cover them with building insulation.
- If 2 lamps are connected to the same control gear insure the wiring lengths are the same.
- Wiring near the lamps must have high temperature insulation and electroplated strands.
- Extra low voltage connections must be very secure to avoid resistance overheating.
- Discharge lamps such as fluorescents gradually depreciate rather than fail. It is important to implement a maintenance cycle for lamp replacement, otherwise ECG can be adversely affected.
- In some situations ECG is not the correct choice.
- Read installation data sheets supplied with control gear.