zencontrol



Emergency lighting



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Emergency lighting is a requirement for most commercial buildings Automatic monitoring is a good way to reduce ongoing testing costs



DALI emergency lighting

- DALI is the <u>only</u> published, certifiable and auditable standard for remote monitoring of emergency luminaries (IEC 62386)
- DALI has a full set of testing procedures and protocols for control system / device interaction and deals with
 - How to perform a test and report with valid and correct responses
 - How to deal with faults and report them accurately
 - How to deal with other edge cases and how they shall interact
- A certified device is tested to ensure that it preforms devices 100% as the control system and the standard describes and includes testing timing accuracy
- A compatible device has no guarantee that it tests the device correctly or provides correct results to the control system





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Integrating DALI with emergency

- The logical step of combining DALI lighting and DALI emergency lighting together allows for
 - Reduced cabling cost
 - Reduce installation costs
 - Reduced Hardware / PC/ Routers
 - Removal of duplication and training.
 - Auditable installations. (other DALI vendors / installers can be called to check the DALI lines and devices)





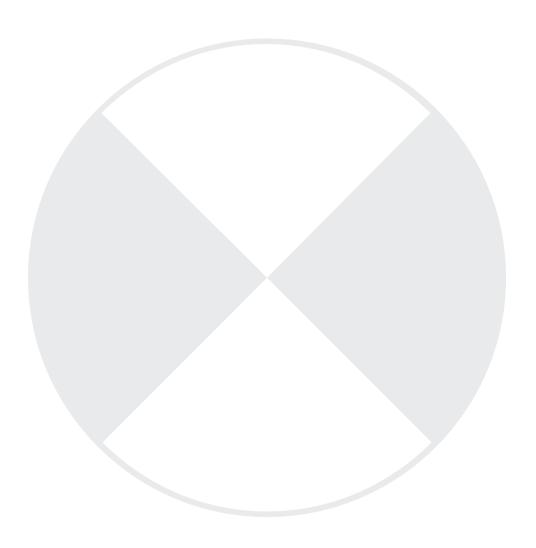
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Emergency testing

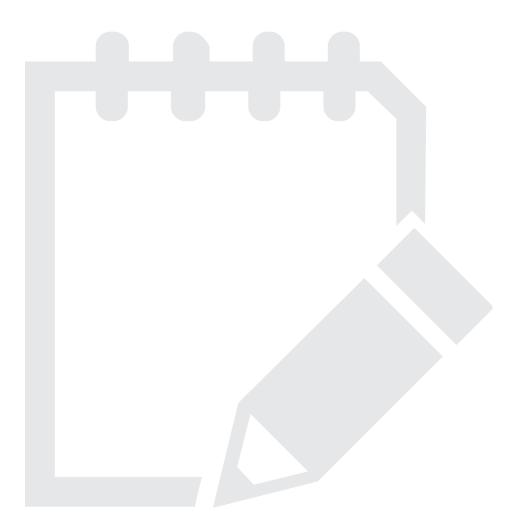
- Emergency testing can be hard, technically it is more difficult than most lighting control system functions.
- zencontrol utilises an emulated state machine to ensure complete fault tolerance.
- Our systems ensures full compatibility with DALI compliant emergency devices and guarantees full functional testing.





Reporting

- Break down buildings into tenancies
- Allow each tenant to test their own areas
- Automatically stage emergency tests to reduce risk
- View complete test reports or just faults
- Email completed reports
- Allow other system to obtain emergency tests via BACnet





Commissioning

Problem

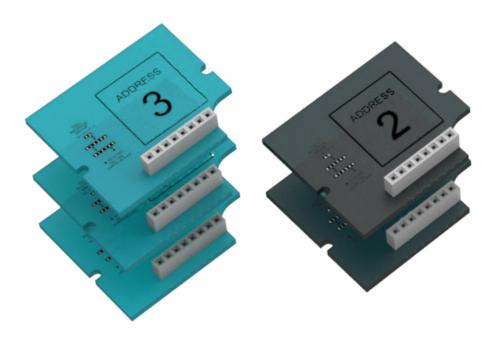
- Emergency products need to be addressed and located as part of regulations
- Normally commissioning is a two-person job
- An Identifier (number) needs to be placed onto each fitting as part of AS2293
- On device failure, the commissioning needs to be redone to add the new replacement





Solution

- zencontrol Easy Commissioning Modules (ECM)
- Easy plug and play addressing module

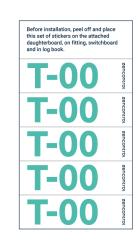


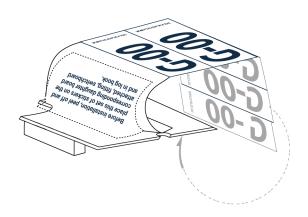


ECMs

- Each ECM comes complete with 5 identification labels and a pre-addressed module
- A complete kit is supplied with enough to complete one DALI line
- Four different coloured kits can be supplied
 - Black
 - Green
 - Red
 - White



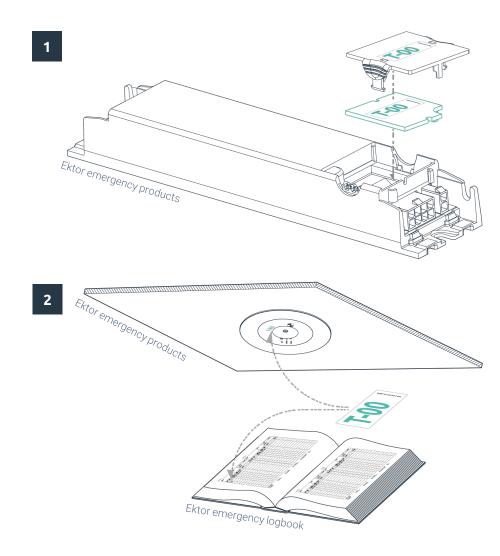






Use

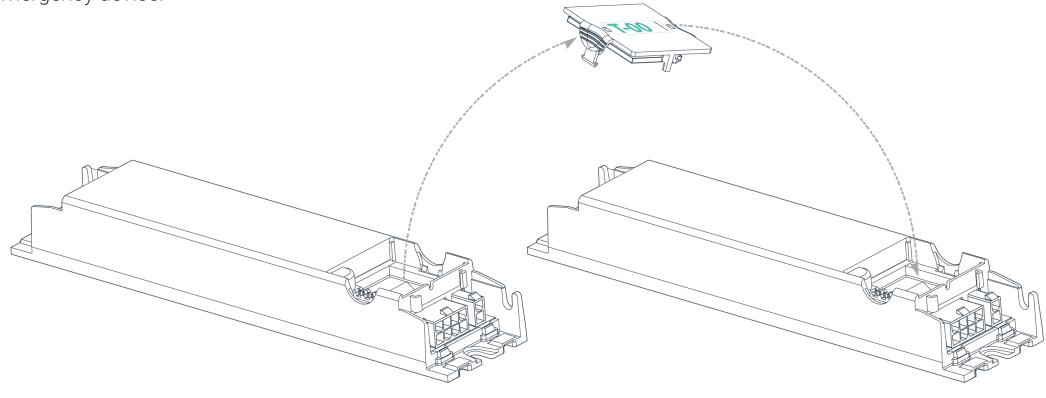
- Plug the ECM into the emergency fitting on installation (normally undertaken by the electrician)
- Use the identification labels provided to label the fitting You can use the extra labels to mark on the plan in your building register
- Try to use same colour ECMs for the entire floor or DALI line
- The ECM will assign the DALI device a DALI short address on start-up removing the addressing requirements





Replacing a failed device

If an emergency device needs to be replaced due to a fault you can remove the ECM and place it into the new Ektor emergency device.





Room controller

- Room controllers fully support the ECM modules
- Room controllers will not reassign a short address to any device which has an ECM
- Because there is a small number of emergency devices in each room, additional commissioning is not required
- In a room control setup, each room is given a logical name, for example "office 3.022". Each emergency device found in the room is natively assigned the location of the room (ie Office 3.003 Address B-01)
- This automatic logical addressing helps locate and identify the device.





Thank you

for your attention