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As versatile as your requirements.

Simple, functional, flexible: lighting control with EASY Color Control.

SEE THE WORLD IN A NEW LIGHT

OSRAM



One lighting control system for all occasions?

Dynamic light is used in a large number of applications which all place different specific requirements on the lighting management system. These applications include RGB effect lighting systems with coloured fluorescent lamps and LED, daylight simulation with white fluorescent lamps, dynamic lighting solutions for retail outlets with low-voltage halogen lamps, and control systems for static lighting scenes for conference and training rooms.

All these applications call for lighting control systems that have to meet specific requirements. Up to now, different lighting control systems have generally had to be used for these different applications, most of which called for complicated and costly installation and configuration.

Thanks to OSRAM everything is now so much simpler.

The new innovative solution for every occasion is called EASY Color Control.

With just one control line it is possible to provide a wide range of lighting solutions – static or dynamic, with coloured or white light sources. And it's all so simple, convenient and versatile.



■ RGB applications with LED. _____ 4



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■ Dynamic lighting solutions for retail areas. _____ 7



■ Conference/training rooms. _____ 8



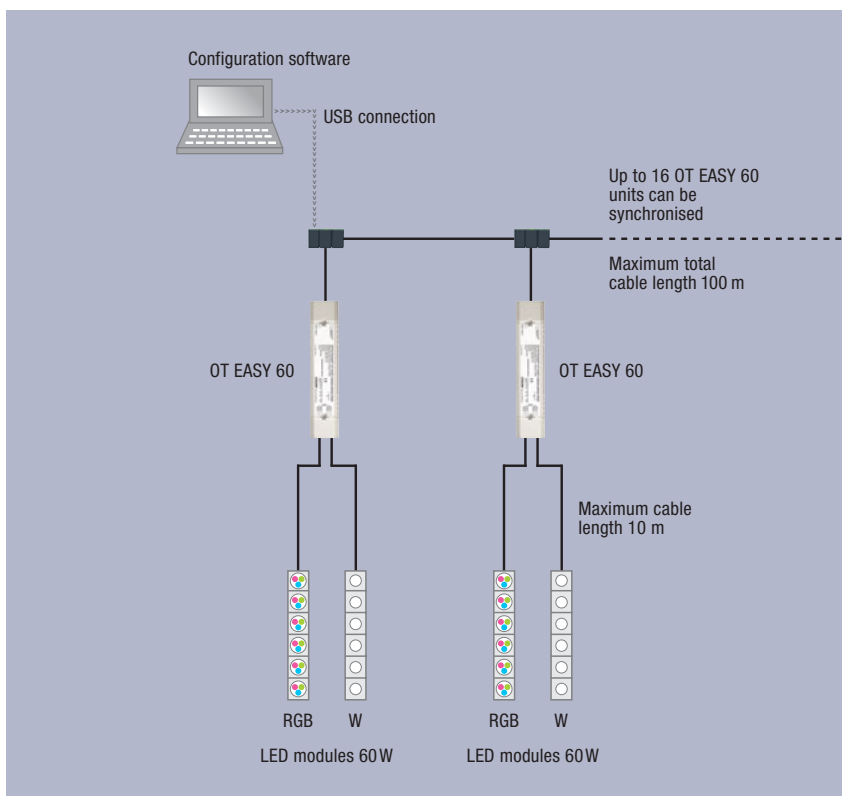
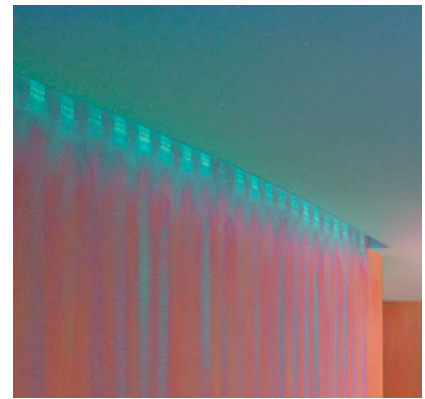
■ EASY Color Control configuration software. _____ 9



RGB applications with LED.

LED modules are ideal for all RGB effect lighting applications in which conventional fluorescent lamps and low-voltage halogen lamps reach the limits of their capabilities. The advantages of the small LED modules are obvious – extremely compact dimensions, low thermal output, long life, high colour intensity and a wide variety of designs. EASY Color Control is suitable in particular for LED applications because with OT EASY 60 there is no need for additional power supplies or control modules.

Photo: Lighting designer Walter Holper

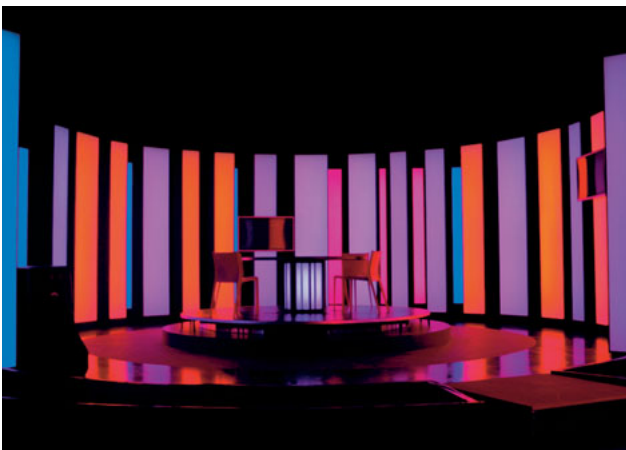


System solution with EASY Color Control:

- OT EASY 60 control unit for direct connection of RGB LED modules.
- Control unit with integrated sequencer, software configurable.
- Independent sequencer mode possible without a PC.
- Up to 16 OT EASY control units can be synchronised (60 W LED output per control module, 960 W LED total output).
- RGB sequences can be configured from up to 16 lighting scenes with individual hold and crossfade times.

RGB applications with fluorescent lamps.

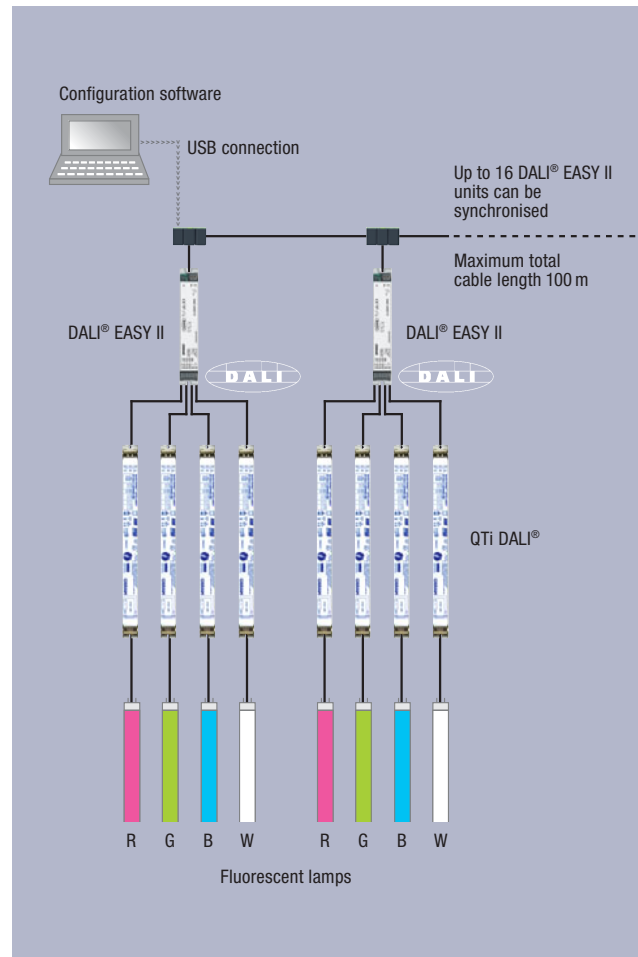
The QUICKTRONIC® INTELLIGENT DALI® ECG is the perfect DIM ECG for RGB coloured lighting applications with fluorescent lamps. Thanks to its intelligent control of electrode preheating, the QT_i DALI® ECG enables rapid dynamic dimming operations to be performed without adversely affecting lamp life. The digital DALI® interface ensures that the predefined dimming values are precisely achieved for optimum RGB mixes. EASY Color Control is excellent for RGB applications with coloured fluorescent lamps because the QT_i DALI® ECGs can be connected directly to the DALI® EASY II control module without the need for addressing.



Coloured fluorescent lamps are ideal for large-scale RGB applications. White fluorescent lamps can be used in addition to achieve a particularly pure "white" or to brighten a mix of colours.

System solution with EASY Color Control:

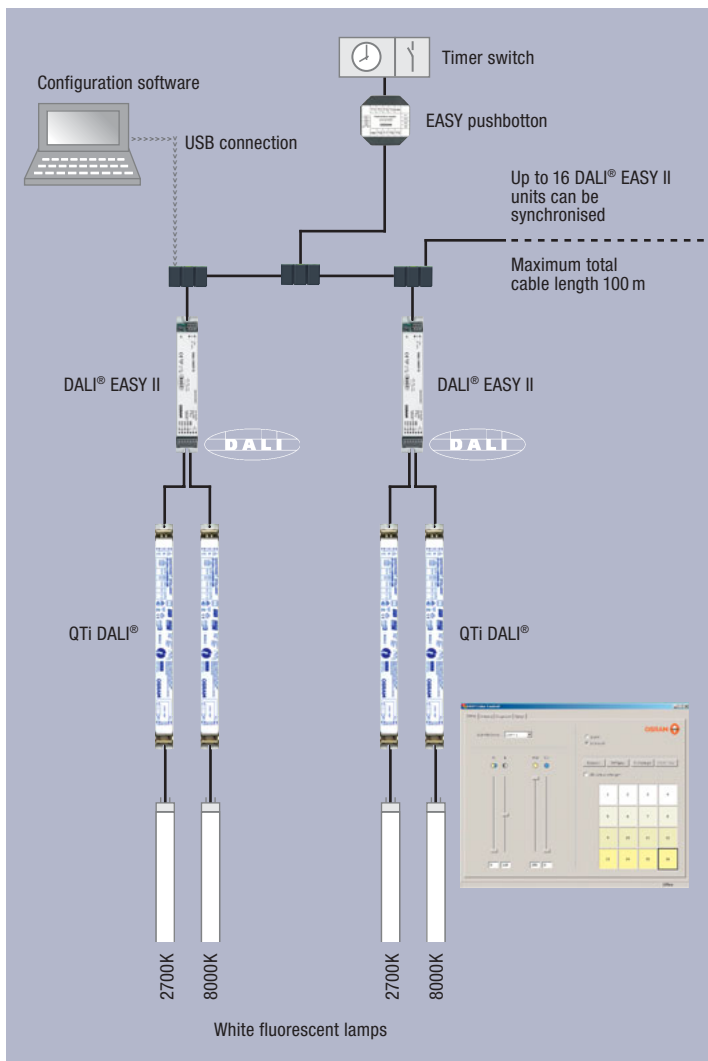
- DALI® EASY II control unit with 4 DALI® group outputs, up to 32 ECGs per control unit.
- No DALI® addressing required thanks separate DALI® outputs.
- Up to 16 control units can be synchronised for large



scale solutions with up to 512 DALI® ECGs.

- Simple configuration of RGB sequences via graphical user interfaces.
- 4 RGB sequences can be configured from up to 16 lighting scenes with different hold and cross-fade times.

Daylight simulation with fluorescent lamps.



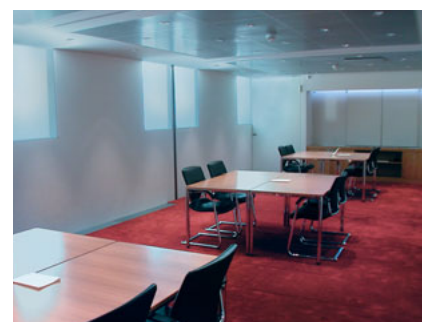
White fluorescent lamps with different colour temperatures of 2700K to 8000K are suitable for daylight simulation in window-less areas, light ceilings and task lighting with variable colour temperatures.

The QTi DALI® ECG is the perfect platform for this applications, too. Intelligent control of electrode preheating in dimming operations ensures that the lamps achieve their maximum life. The digital DALI® interface translates the dimming values precisely into the required mixing ratios.

EASY Color Control is the optimum system for these applications because it allows very slow crossfades that are almost imperceptible to the human eye.

System solution with EASY Color Control:

- DALI® EASY II control unit with 4 DALI® group outputs, up to 32 ECGs per control unit.
- No DALI® addressing required thanks separate DALI® outputs.
- Up to 16 control units can be synchronised for large-scale solutions with up to 512 DALI® ECGs.
- Slow cross-fades from 2700K to 8000K can be configured via a graphical user interface.



Dynamic lighting solutions for retail areas.

Light for retail areas, such as shop windows and display areas, has to present products in their best light, provide accent lighting, and guide and seduce customers.

Dynamic light adds another important dimension. Dynamic everchanging light draws attention and therefore makes customers more aware of the products. Dwell times in front of shop windows and other active sales areas increase – more potential customers are attracted.

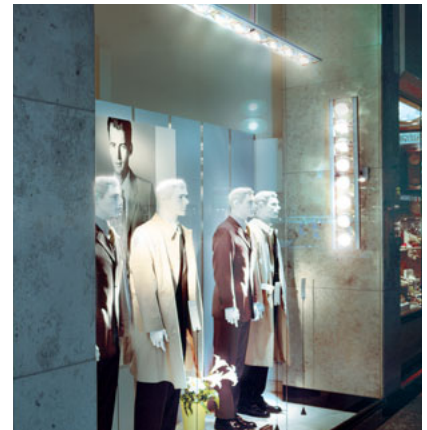


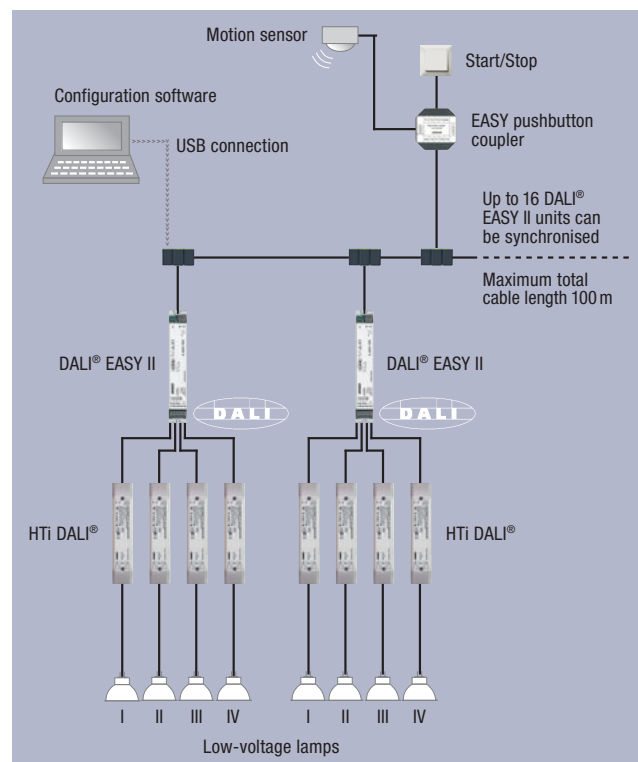
Photo: Studio Latzel for iGuzzini

Low-voltage halogen lamps are excellent for such applications. Colour filters can provide additional effects. Perfect dynamic lighting calls for a large number of lighting scenes, cross-fade and hold times and a quick and simple means by which users can change these parameters without having to call on the services of specialists.

The low-voltage HALOTRONIC® INTELLIGENT DALI® transformer is the ideal partner for EASY Color Control in such applications.

System solution with EASY Color Control:

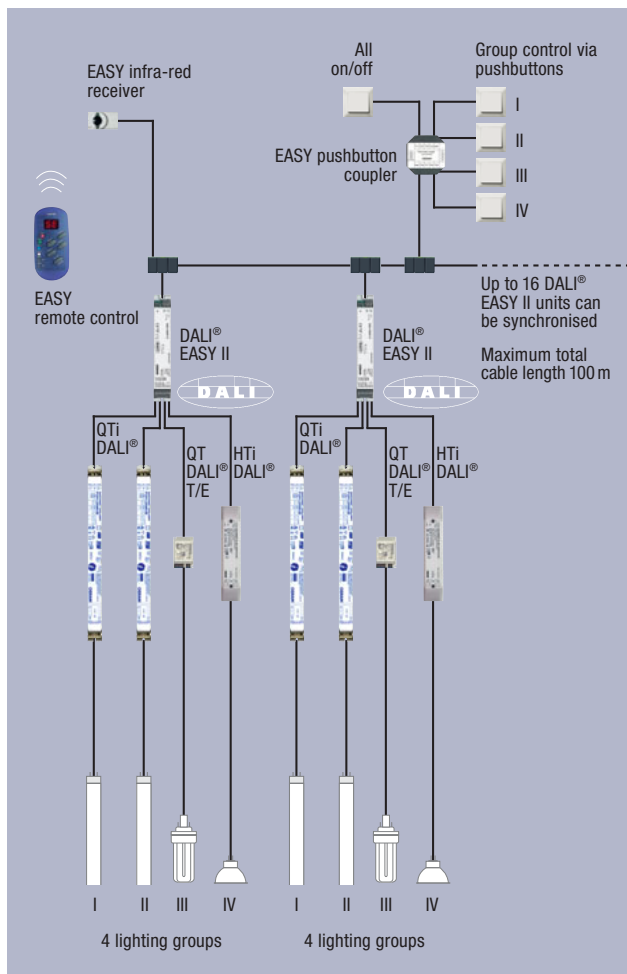
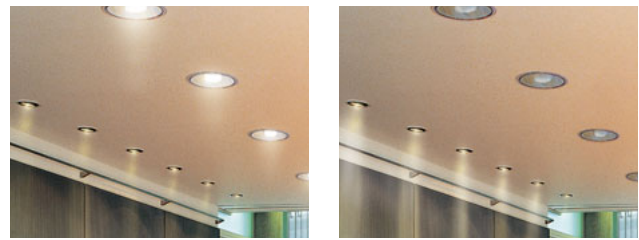
- DALI® EASY II control unit with 4 DALI® broadcast outputs, up to 32 HTi DALI® units per control unit.
- 4 Dynamic sequences can be configured from up to 16 lighting scenes with different hold and cross-fade times.
- Motion sensors and standard interface programs can be integrated.



Conference/training rooms.

Conference and training rooms need a variety of lighting scenes to cover the different circumstances in which these rooms are used.

The lighting has to be compatible with the specific tasks, for which appropriate luminaires and lamps are needed, and a scene-based lighting management system is needed. A large number of scenes are needed to cover all the special requirements that occur for example in presentation rooms. Cross-fade times have to be flexible so users can change them to suit their needs. Simple clear operation via standard pushbutton units or remote control is important particularly in rooms with different users.



EASY Color Control is also the ideal solution for static lighting management applications.

System solution with EASY Color Control:

- DALI® EASY II control unit for four different lighting groups.
- Up to 16 control units can be synchronised; up to 16 ECGs per control unit for lighting solutions with up to 512 DALI® ECGs.
- Connection of standard interface programs for operating four groups, 16 scenes and a central function.
- Operation of four groups and four scenes via EASY remote control.

EASY Color Control configuration software.

The configuration software enables 4 different color sequences from up to 16 individual RGB(W) scenes to be produced. The hold and cross-fade times for each scene can be set separately. The user interface has been designed for maximum clarity with self-explanatory displays. A series of tabs are provided so that sequences can be built up quickly and easily step by step.

Creating up to 16 individual lighting scenes with preview windows

The screenshot shows the 'Scene' tab of the software. It features a control panel with sliders for H (hue), S (saturation), L (brightness), R (red), G (green), and B (blue) channels. Below these are numerical input fields for each channel. To the right is a 4x4 grid of 16 numbered scene preview windows. Callouts point to 'Copy' and 'Paste' buttons for copying scenes, a '3' in a box representing a scene preview window, and color channel adjustment controls (R, G, B and H, S, L).

- Copy Paste: Simple pasting of RGB(W) scenes to other preview windows
- 3: RGB(W) scene preview window
- R G B: Adjusting the colour channels
- H S L: Adjusting the colour location, saturation and brightness of individual scenes

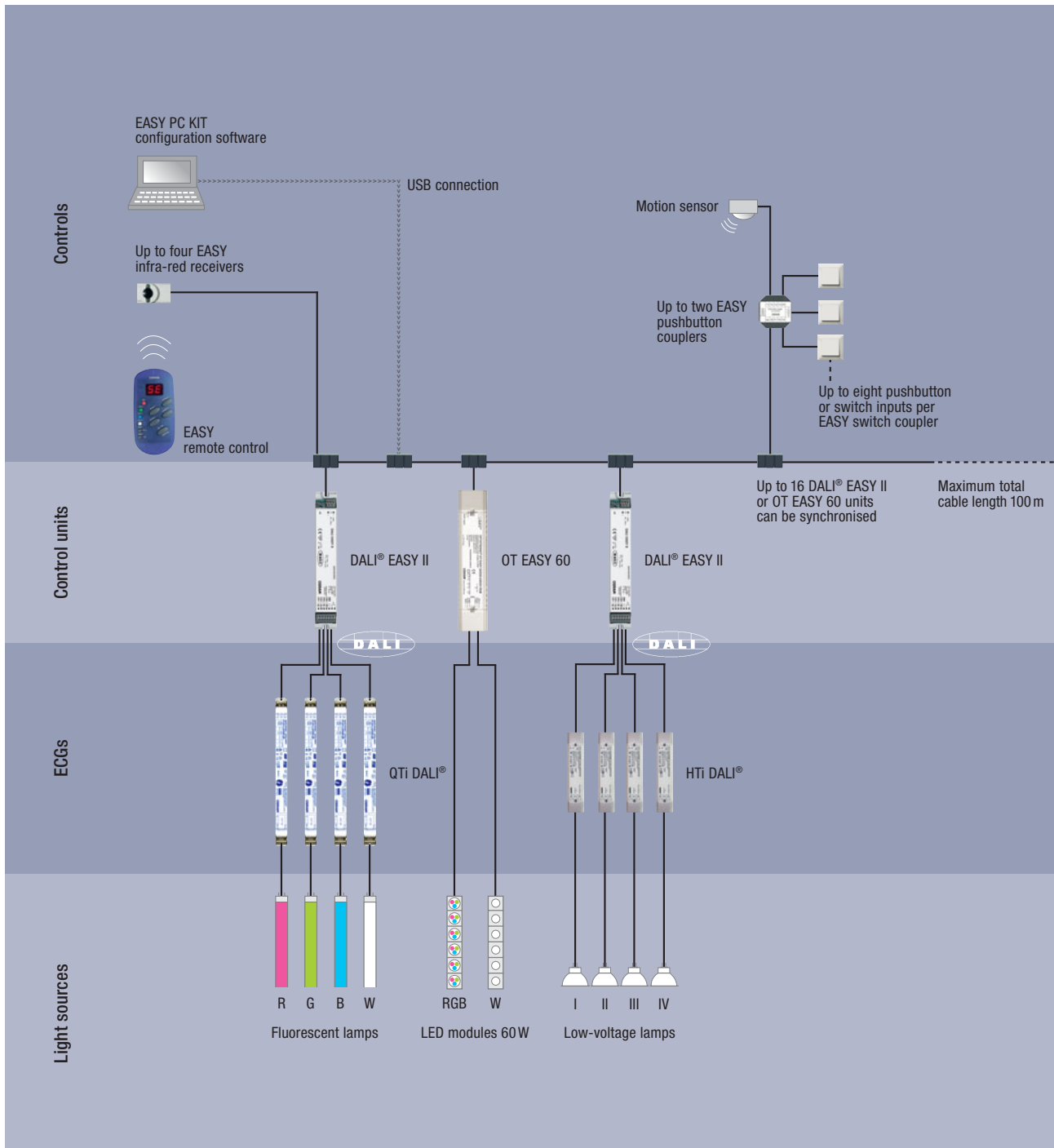
Creating a dynamic RGB(W) sequence

The screenshot shows the 'Sequence' tab. It displays a table with columns for 'Scene', 'Active', 'Fade Time', and 'Static Time'. Below the table is a 'Preview' section with playback controls (play, stop, fast forward, fast reverse) and a 'Display all scenes' checkbox. A 4x4 grid of 16 scene preview windows is also visible. Callouts point to 'Program', 'Load', 'Save', and timing controls for individual scenes.

- Program: Program function for playing back sequences
- Load Save: Loading and saving sequences and scenes
- Preview function: Playback controls for the sequence
- 00:00:04.0 00:00:01.0: Hold and cross-fade times for individual scenes

System requirements: Windows Vista, Windows XP, 2000, USB port

EASY Color Control system overview.





DALI® EASY II control unit

Reference:
DALI® EASY II
4008321053046

- Configurable DALI® control unit for static and dynamic lighting control applications.
- 4 DALI® broadcast outputs for up to 32 DALI® ECGs.
- Integrated RGB(W) sequencer and scene controller.
- 16 different RGB(W) lighting scenes can be configured with hold and cross-fade times.
- Lighting scenes can be retrieved as sequences or static scenes.
- Serial interface for EASY infra-red receiver and PC.
- Software configurable (16 scenes) or EASY remote control (4 scenes).
- Up to 16 control units can be synchronised via Y connectors.
- Dimensions 189 × 30 × 21 mm (L × W × H).



EASY LED control unit

Reference:
OT EASY 60
4008321187796

- Configurable LED control unit for static and dynamic lighting control applications.
- 4 PWM outputs – 24V, for direct connection of 24 V RGB(W) LED modules with a total output of 60 W.
- Integrated RGB(W) sequencer and scene controller.
- 16 different RGB(W) lighting scenes can be configured with hold and cross-fade times.
- Lighting scenes can be retrieved as sequences or static scenes.
- Serial interface for EASY infra-red receiver and PC.
- Software configurable (16 scenes) or EASY remote control (4 scenes).
- Up to 16 control units can be synchronised via Y connectors.
- Cable clamp for separate installation.
- Dimensions 220 × 47 × 44 mm (L × W × H).



EASY PC KIT

Reference:
EASY PC KIT
4008321915559

- Software for configuring the DALI® EASY II or EASY LED control units.
- Clear graphical user interface for configuring sequences or static lighting scenes with preview function.
- With USB adapter cable and detailed manual.
- System requirements: Windows Vista, Windows XP, 2000, USB port.



EASY remote control

Reference:
EASY RMC
4008321053152

- Infra-red remote control for configuring and operating the DALI® EASY II or EASY LED control units.
- Self-explanatory arrangement of controls and sequencing speed for central dimming function, 4 groups, 4 scenes, start/stop.
- Dimensions 120 × 58 × 27 mm (L × W × H).



EASY infra-red receiver EASY IR Installation in luminaires

Reference:
EASY IR
4008321053138

- Infra-red receiver for luminaire installation for connection DALI® EASY II or EASY LED control units.
- 2 m connecting cable with RJ10 connector.
- Dimensions 35 × 21 × 16 mm (L × B × H).



EASY infra-red receiver Ceiling mounting

Reference:
EASY IR CI
4008321915573

- Infra-red receiver for surface or recessed ceiling mounting for connection to DALI® EASY II or EASY LED control units.
- Dimensions Ø 50 mm.
- Accessory (not included): adaptor kit
Reference: adaptor kit 4008321916662.



EASY pushbutton coupler

Reference:
EASY PB COUPLER
4008321915597

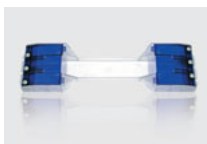
- Pushbutton coupler for connection to DALI® EASY II or EASY LED control units.
- Enables conventional pushbutton units to be connected for group and scene control, central switching and dimming functions, and sequencer start/stop.
- Motion sensors or timer switches can be connected.
- Connection via Y connector for multiple control units.
- Up to 2 EASY pushbutton couplers can be connected to the overall system.
- Dimensions 54 × 14 mm (Ø × H).



Y-connector

Reference:
Y-CONNECTOR
4050300803135

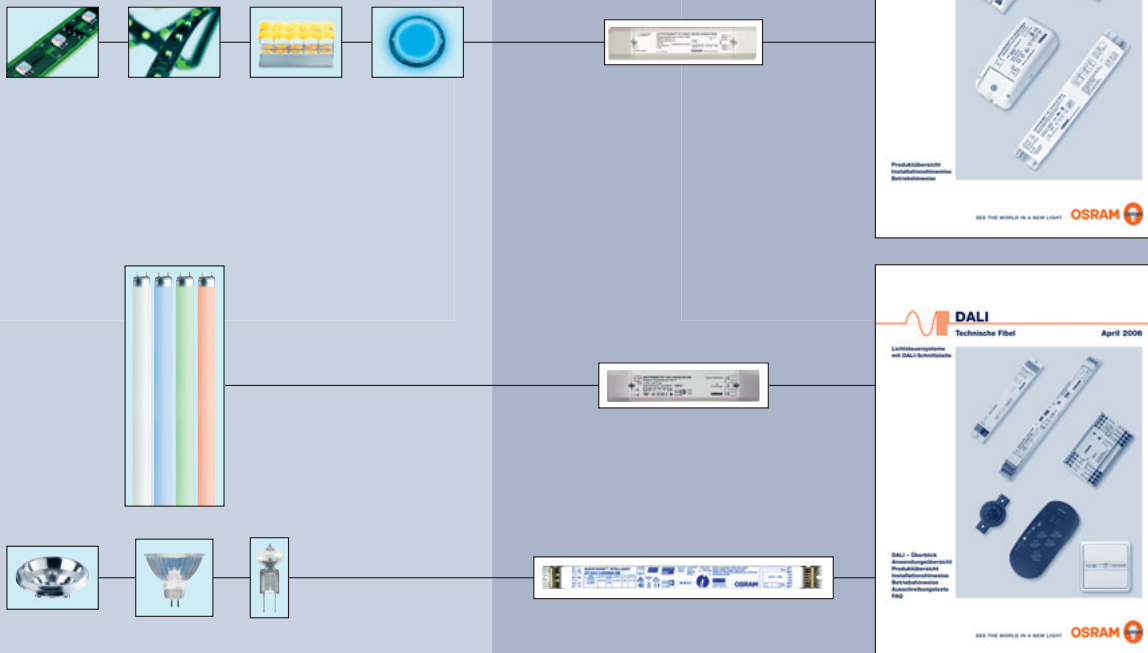
- Y connector for system expansion with two ready-made RJ10 cables (2 m).
- Enables multiple DALI® EASY II or EASY LED control units to be synchronised, and EASY infra-red receivers and EASY pushbutton couplers to be connected.
- Dimensions 36 × 19 × 16 mm (L × B × H).
- Optional available with screw clamp
Reference: Y-CON SCREW 4008321916686.



Installation kit

Reference:
LMS CI BOX
4008321083692

- Casing with cable clamps for separate installation of DALI® EASY II control units.
- Terminal compartment for convenient through-wiring.
- Dimensions 261 × 71/35 × 27 mm (L × W × H).



Innovative technology and outstanding quality add up to real benefits for our customers. OSRAM offers an extensive three-stage guarantee for ECGs and ECG/lamp systems from OSRAM. All the details on the relevant products, registration and the guarantee requirements can be found at: www.osram.com/system-guarantee

Further technical information

The ideal system partners for EASY Color Control are:

- QTl DALI® with fluorescent lamps.
- HTl DALI® with LV halogen lamps.
- OT EASY 60 with LED modules.

For further information on QTl DALI® and HTl DALI® from OSRAM please refer to the DALI® Guide. For information on OT EASY 60 and LED modules from OSRAM please refer to the OT Guide (download at www.osram.com).

