Application **Guide**

SceneSelect II

Scene-setting and dimming system

Innovative Lighting Management Systems

Ex-Or

Making light work

SceneSelect II in action

SceneSelect II – making scenes without the drama!

Convenience
Pre-set lighting scenes are recalled at the touch of a button.

Flexibility in design
When the layout or usage of an area changes, the system is simply reprogrammed to suit the new requirements.

Increased lamp life
Surge-limiting, voltage-regulating and ‘soft-start’ technologies protect lamps from high inrush currents and power surges thus dramatically increasing lamp life.

Energy savings
Lighting can be adjusted according to ambient light levels or turned off when areas are not in use.

Ease of installation and configuration
SceneSelect II is easier to install and takes less time to configure than conventional wiring systems.

Setting the perfect scene

Many different activities and events take place within a building during the course of a year, a week or even a day. It is always desirable, and often essential, that the lighting be tailored to suit whatever is taking place.

Providing the right lighting configuration, at the correct level, not only facilitates the carrying out of particular tasks, it minimises energy waste and provides cost savings.

Appropriate lighting is also vital in creating a mood or enhancing the aesthetic appearance of a building. Different establishments or commercial enterprises will all have their own requirements and priorities. Whatever these may be, they can be fulfilled with the SceneSelect II range from Ex-Or.

Customised lighting

SceneSelect II enables customised lighting scenes to be created and recalled at will. Once the lighting has been set up as required for a particular activity or time of day, it is saved as a pre-set scene. The user can then recall this, or any other scene that has been created and stored, at the touch of a button; the lighting fades seamlessly from one scene to another.

The advantages of conveniently accessed, customised lighting scenes are obvious but there are further benefits too.

Energy efficient

As the system delivers levels of light suited to what is actually happening at a particular time, only the amount of light that is really needed is used, leading to significant energy cost savings. SceneSelect II also dramatically increases lamp life as the system automatically protects lamps from high inrush currents and power surges.

SceneSelect II is inherently extremely flexible – whenever the layout or usage of an area changes, the system can be reprogrammed quickly and easily to suit the new requirements.

The system can be used to control all types of lighting: fluorescent, low voltage and mains voltage. The SceneSelect II range includes Leading Edge and Trailing Edge Dimmers, Fluorescent Dimmers for analogue or digital ballasts and Relay Controllers for non-dimming loads.

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SceneSelect II in operation at St Michael and All Saints Church, Macclesfield.

1
SceneSelect II used in conjunction with video-conferencing technology at the two-centre Hull York Medical School allows a lecture to be delivered simultaneously at both campuses. Selecting the pre-set lighting scene for the lecture at Hull (shown) automatically creates the appropriate lit scene for the remote York lecture theatre.

Applications

Public Buildings

- Galleries
- Exhibition Centres
- Museums
- Leisure Centres
- Conference Centres
- Churches

Domestic & Commercial

- Bars, Pubs and Clubs
- Restaurants
- Hotel Lobbies
- Cinemas and Theatres
- Shops
- Offices
- Residential

Schools and Colleges

- Lecture Theatres
- Laboratories

Control Panels

SceneSelect II control panels provide a simple user interface to the SceneSelect bus and are capable of functions ranging from straightforward scene-setting tasks through to complex, conditional logic routines.

Standard Range & Series 3

Standard Range control panels are available in 5-button and 10-button versions. Both versions provide pre-set levels. The 10-button version includes pre-set programming facility.

Series 3 is a 'mix-and-match' modular range offering a variety of finishes and numbers of buttons.

Classic Range

Classic Range control panels are available in several formats. They are supplied in linished stainless steel finish with square switchcaps in silver, black surround and black engraving. The panels can be programmed to give pre-set levels (number dependent on configuration of the panel). Alternatively, they can be programmed to run sequential and conditional logic routines. Panels are available which include the facility for infrared remote-control operation.

See separate Technical Data Sheet for full range of single-gang and double-gang control plates.

Accessories

Graphic Panel with Touch Screen

This powerful LCD touch screen incorporates a real-time clock, sequencer and up to 100 pages of display for user-customised control functions.

Displays such as logos, button configurations, floorplans and diagnostic icons can be installed to enable it to perform simple or conditional logic tasks. This visual programming and execution tool can be used in architectural and theatrical applications to control any product on a SceneSelect bus system.

It can be used as a mini lighting-control console in order to perform many 'set-and-forget' routines. PIN-password protection prevents accidental reprogramming.

Time Clock

This powerful astronomical time clock and sequencer interfaces with other devices on the SceneSelect bus to automate tasks and events. It may be used as a central controller or simply to select scenes at pre-set times of the day or week. It incorporates a PIN password to prevent unauthorized adjustment and can be used with all SceneSelect bus-compatible equipment.

Infrared Hand-held Controller

Allows scene recall with selected control plates (those with integral IR receivers).

Wall bracket available.

Software Package

This Windows-compatible software can be used to configure a SceneSelect network and provides commissioning, diagnostics, maintenance and end-user master-control facilities.

External Analogue Photocell

Enables scenes to be created taking daylight into account. Dynamic range < 5 lux to > 5000 lux.

Partition Switch

To provide control requirements taking partitioning into account.

Dimmers

SceneSelect II offers a comprehensive range of dimmers for the control of all types of lighting load: fluorescent, low voltage and mains voltage. Relay controllers are included in the range so that non-dimmable loads can be incorporated in the pre-set scenes.

Leading Edge Dimmers

Two 4-channel dimmers (5A and 10A versions) and a 12-channel dimmer (5A) are suitable for dimming control of lighting circuits including mains-voltage incandescent, neon and low-voltage incandescent connected through magnetic transformers or compatible electronic transformers. All outgoing circuits are protected by suitable MCBs.

Trailing Edge Dimmer

This 4-channel (5A) dimmer is suitable for dimming control of lighting circuits with capacitive properties, including mains-voltage incandescent and low-voltage incandescent with compatible electronic transformers. All outgoing circuits are protected by suitable MCBs.

Mixed Dimmer

This 8-channel (4 x leading edge and 4 x fluorescent) unit is suitable for control of combinations of leading-edge regulated outputs, fluorescent-control outputs and switched outputs. The ability to control mixed load types from the one controller provides savings on initial capital costs as well as installation costs.

Relay Controller

The relay controller is suitable for switched on/off control of all load types. Incorporating voltage-free changeover output relays, it is ideal for controlling non-dimmable lighting of any type. It can be used to control bi-directional motors such as curtain motors and other non-lighting devices.

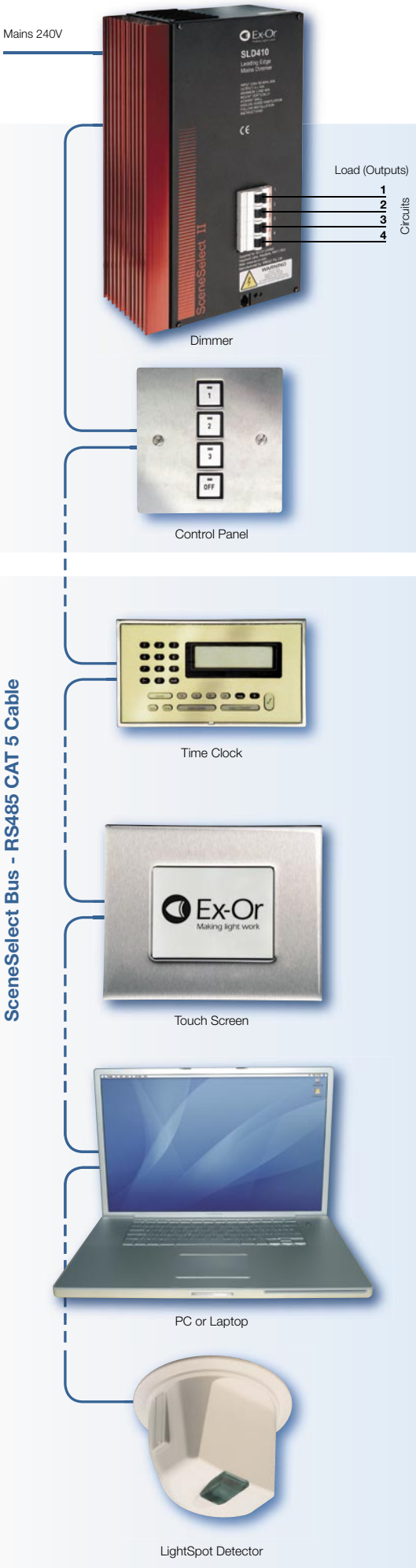
The relay controller can also be used for system integration where a low-voltage contact interface is required. The device is DIN-rail mountable, designed for installation within a switchboard or next to circuit breakers feeding the circuits to be controlled.

Fluorescent HF Ballast Dimmers

These 4-channel and 12-channel (10A) dimmers are suitable for regulation of fluorescent lighting fitted with high-frequency 1-10V or DSI-dimmable ballasts. They can also control low-voltage incandescent lighting fixtures fitted with DSI transformers. The 12-channel version is DIN-rail mountable.

See separate Technical Data Sheets for full information.

System schematic illustrating modular build-up



Minimum system requirements

Dimmer

Any one of the SceneSelect range of dimmers, controlling the appropriate lighting loads.

Control Panel

The simplest form of control is to use a control panel to turn lights on to a pre-set scene. Each control panel stores in its memory all the information it needs in order to operate. When a button is pressed on the control panel, the panel sends out a message across the network, e.g. “Area 1 go to Pre-set 1 over 5 seconds”. All devices on the network listen to the message.

Control panels can also provide more advanced functionality such as sequential logic (“Do this, wait, then do this”) or conditional logic (“If this, then do that”).

Optional add on features

Time Clock

The time clock stores events and tasks in its memory. It works in much the same way as a control panel but, instead of a person pressing a button to send a message, the time clock simulates a button press at a pre-programmed time. Advanced functionality includes tasks containing high level sequential and conditional logic.

Touch Screen

In certain applications it may be necessary to provide many buttons on a user control panel at a single location. An LCD touch screen provides an interface that can be easily configured or modified if requirements change. The touch screen operates in a similar way to a control panel. In response to user actions the unit broadcasts command messages across the network from pre-sets, events and tasks stored within its memory. The unit also features complete time-clock control.

An inbuilt configuration utility and display editor allows multiple-screen page layouts to be created with a graphic device library or imported CAD files. Floor plans can be simulated on individual screen pages to assist user interpretation. Buttons on a parent screen page can be linked to a hierarchy of screen pages to represent specific areas.

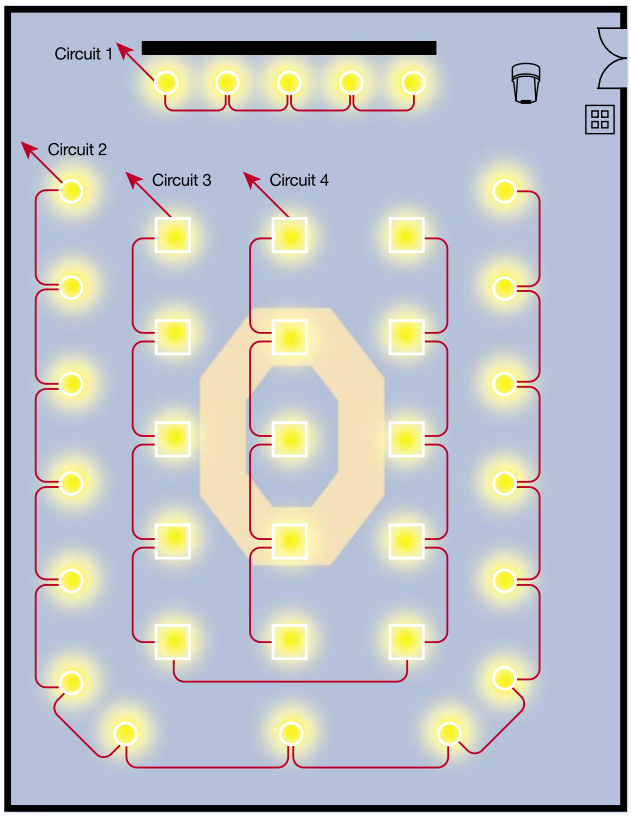
PC or Laptop

A PC or laptop is used to set up and configure a SceneSelect bus network using the SceneSelect application software which provides commissioning, diagnostics, maintenance and end-user, master-control facilities. The user makes changes to the configuration of devices using the software programme, then downloads these across the network. This allows the user to keep an electronic copy of the system’s configuration thus enabling changes to be made more easily and allowing for troubleshooting.

LightSpot Presence Detector

LightSpot detectors can be connected into the system to provide presence-detection control. Compatible detectors – Gold, Mid Range and Long Range Series LightSpot.

Commissioning/programming SceneSelect II



Example of a boardroom showing how groups of lights are connected to a circuit.

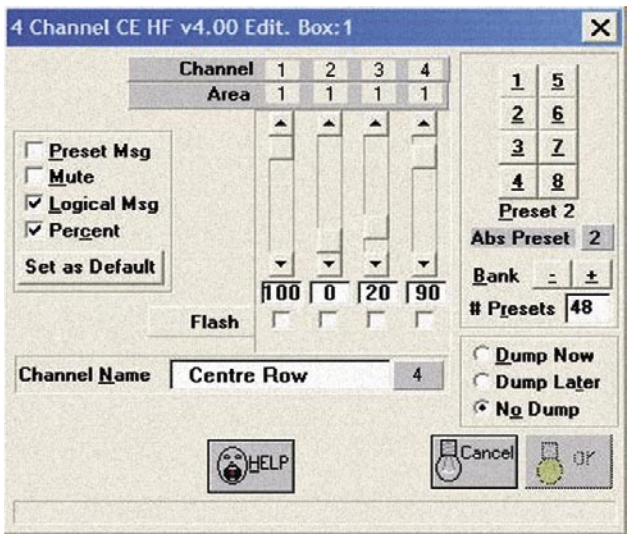
Small systems, such as the boardroom illustrated here, can be programmed and the pre-sets configured via a control panel incorporating programming capability.

KEY

Circuit 1	Whiteboard/screen
Circuit 2	Downlighters
Circuit 3	General lighting – fluorescent
Circuit 4	Centre row lighting – fluorescent
	Control Panel
	LightSpot Presence Detector

Example of scene setting via computer

Programming can also be carried out using SceneSelect II software as shown below. This is necessary for larger or more complex installations.



Screen above shows programming of pre-set 2.

All dimmers have inputs for laptop connection. Alternatively, a dedicated programming port can be provided in a convenient location.

Pre-set 1 – Set Up

Lights are on for the room to be set up ready for use. Downlighters, fluorescents and whiteboard/screen lights are set to 90% for maximum viewing, energy savings and lamp life.

Pre-set 2 – General Meeting

Once participants are assembled round the table, the downlighters will be switched off, the centre row fluorescents at 90% and outer row fluorescents dimmed to 20% and whiteboard/screen lights on full.

Pre-set 3 – AV Presentation

All lights dimmed to 10% except screen lights which will be switched to 10%.

Pre-set 4 – Off

All lights are set to off when the room is not in use.

SceneSelect II enables customised pre-set scenes to be created and recalled. Once the lighting has been set up as required for a particular activity or time of day, it is saved as a pre-set scene. The user can then recall this, or any other scene that has been created and stored, at the touch of a button; the lighting fades seamlessly from one scene to another.

It offers:

- **Flexibility in design** – when the layout or usage of an area changes, the system is simply reprogrammed to suit the new requirements.
- **Increased lamp life** – surge-limiting, voltage-regulating and 'soft-start' technologies protect lamps from high inrush currents and power surges thus dramatically increasing lamp life.
- **Energy savings** – lighting can be adjusted according to ambient light levels or turned off when areas are not in use.
- **Ease of installation and configuration** – SceneSelect II is easier to install and takes less time to configure than conventional wiring systems.

SceneSelect II can be used to control all types of lighting: fluorescent, low voltage and mains voltage.

This Application Guide provides an introduction to the system – please refer to technical data sheets and installation instructions for supplementary technical information.

Complete Service

Ex-Or offers a complete support service from initial design to complete project management.

We can help you by:

- Visiting you to discuss your requirements
- Identifying areas where control systems will provide benefits
- Recommending the appropriate control systems
- Supplying, installing and commissioning your complete project

If you would like to see Ex-Or controls in action, you're welcome to join us at Haydock for one of our regular seminars. Please ring for details.

All Ex-Or products are CE marked and manufactured to ISO9002.

OGC buying.solutions

ESTA energy systems trade association

Reference No: A4011B

The Ex-Or range of Lighting Management Systems comprises:

MLS Digital
Managed Lighting System

CONNECT
Quick connection systems

FailSafe
Emergency lighting testing systems

LightSpot
Lighting control by presence detection and photocell

SceneSelect II
Scene-setting and dimming system

LooSpot
Washroom management by presence detection

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