

What is Scene Setting?

The User Interface

Most of us are familiar with the rotary knob dimmer control, which is readily available in DIY shops for the home market. This is often referred to as manual control. The same principle is applied when using linear fader levers on some products. Whilst iLight™ is able to offer this type of remote control, the vast majority of professional dimming is conducted using the principle of "scene setting". This concept was "borrowed" from the theatre and pioneered in the 1970s.

In the theatrical sense a scene takes place in a dramatic context, hence the expression setting the scene (or in an architectural sense, setting a mood). As the story unfolds, so the look and feel and structure of the scenes within a play will change. The lighting is a fundamental part of this mood setting. Indeed the Set in a play may remain unchanged through a complete act, but as part of the illusion process in theatre, the lighting directs our attention to where the action is. Clever and creative use of lighting in theatre enables very basic Sets to be dramatically manipulated to spectacular effect by the director.

The same principles of lighting apply in an architectural application.

Note that there is a direct correlation between the amount of time we spend in a space, and the intensity of the illumination. The brighter a space, the less time we spend in it! That is why a fast food restaurant is brightly lit and a gourmet restaurant has subtle lighting with candles. Let's face it, would you want a romantic dinner for two in MacDonald's?

A typical application for this approach would be in a hotel Coffee Shop. Here the management would want a predetermined lighting "scene" for Breakfast, another for Lunch, one for Dinner and

another for Supper time. In addition to this they might want two other scenes. One for the cleaners over-night when there are no customers, and another for the setting up of tables between the four main periods when customers are present.

At breakfast time the lighting would be set to be bright and functional, with the main emphasis being on the servery. At lunch time the overall ambient level would be lower, with the emphasis on a buffet or carvery area. At dinner time the ambient level would be lower again, with more emphasis on the pictures and architectural features in the room. Also if there were a piano position there would be accent lighting to this when the pianist was entertaining the diners. Finally at supper time, the overall ambient level would be set low and there would be lit candles on the tables, to provide an atmosphere of romance and a little sparkle.

The cleaners' scene would use only functional lighting, providing sufficient illumination for the cleaners to complete their work, with minimum energy usage in the lighting. It is also common for this scene to have a pre-programmed time out, so that the lights are not left on all night! The set up scene would also be a functional scene providing lighting to the tables, to enable the staff to see them clearly whilst setting up for the next meal period.

These settings would be pre-set and then simply recalled at the touch of a button. The transition time from scene to scene may also be preset and stored in memory. This way the customers in the Coffee Shop do not feel any visual discomfort when the lighting changes from one mood to another over (say) ten minutes.

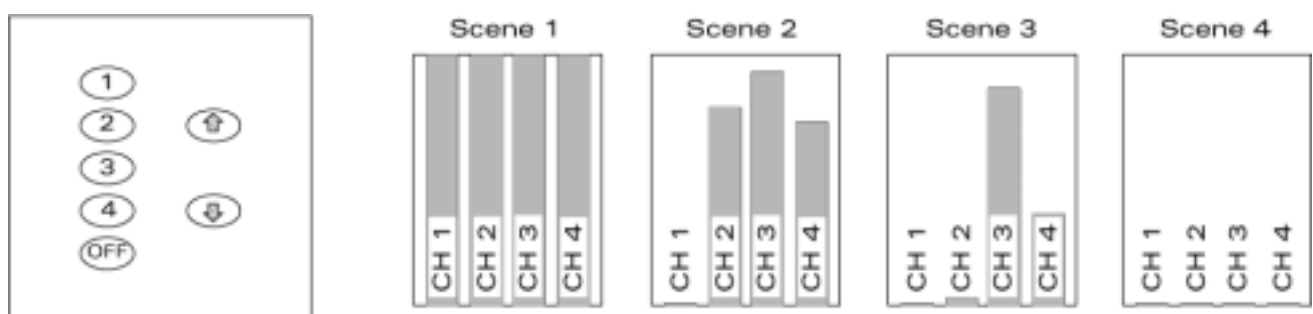


Figure 1

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The programming of the lighting scenes is done using either the control panels themselves, a hand held programmer which is removed once the programming is completed or a laptop computer with dedicated programming software (iCANsoft™). The detailed description of these methods is explained later in this binder "Programming & Configuration", section 13.

The secure memory facility in the iCAN™ source controllers provides a capacity for over 128 scenes, which is more than adequate for even the most demanding of installations.

There are very many different applications for the scene setting approach. Some of these are dealt with in much more detail in the Application Notes later in this Binder section 8.

The user interface to the scene setting is usually by means of a push button control panel, mounted at a logical position within a room. In many applications there will be several controls operating in parallel. Each button cap is back illuminated when active, and will invariably have a legend with the name of the scene.

Other methods of accessing the preset scenes are from LCD touch screen controllers, time clock, PE/PIR units, wireless remote hand held controls, central PC controllers with remote access and Audio Visual and Home control systems, as well as Building Management Computer systems.

Time Clocks and PE/PIR Photo Electric/Passive InfraRed units enable the scene selection process to be automated. This method ensures that the correct scenes are set at the appropriate time of day and day of the week.

PE/PIR units allow scenes to be triggered or selected automatically, depending on ranges of natural light intensities or by persons entering a room or area in a building.

A relatively new method of control, which is rapidly



Figure 2

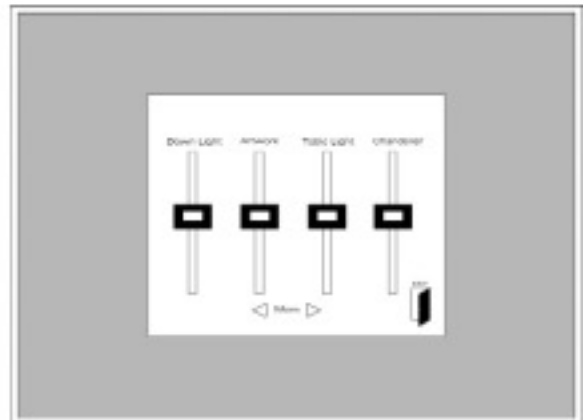
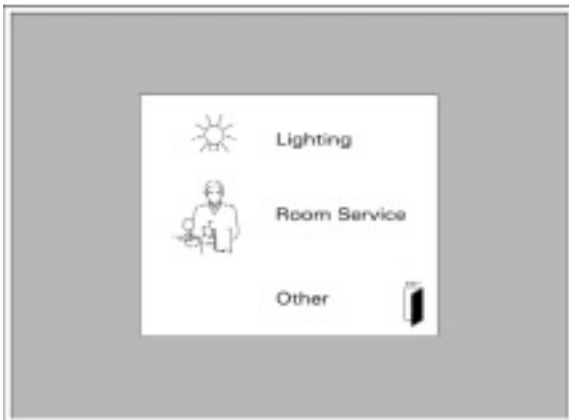
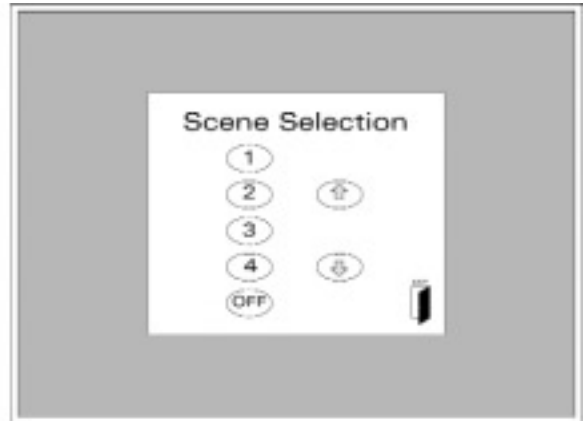
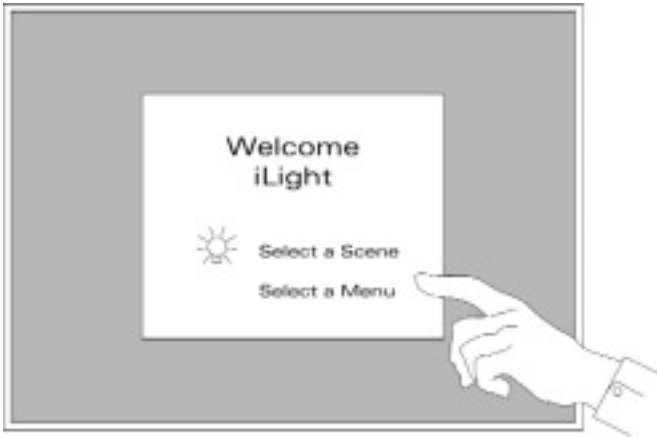
gaining popularity in Hotels, Corporate Offices, themed restaurants and Smart Home applications is that of Touch Screen control. In this method of control all manual, scene set, time clock and graphical control can all be integrated into one simple control panel.

The LCD touch screen is a flexible device which provides an intuitive "user friendly" method of interfacing to the Lighting Control system. The LCD touch screen provides virtually a limitless flexibility of system configuration and control.

This method of control is ideal for areas where complex and flexible control is required. It is completely software based, and programs can be tailored to suit the precise needs of the user. It also offers many advantages over conventional control panels not least of which are multiple control functions. For example in a hotel suite, these units can be programmed to control the lighting, the motorised curtains, the air conditioning, the TV, and any other device that is fitted with the appropriate control interface. The screens can be programmed in a highly graphical way to guide the user through what they should do to achieve the desired result. This is particularly useful where users have a variety of languages or levels of skill.

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Examples of typical screen graphics



The Touch Screen offers the following functions and features:-

Full graphical "tell back" control of each and every circuit within an area.

Integral Astronomical time clock.

Virtual fader control for manual operation of circuit levels.

Hidden page and function capability. This will provide (for example) a hidden programming page for the lighting designer to program pre-set scenes.

An automatic screen fade down function which reduces the screen brightness automatically to a non-intrusive level after a programmed time out period.

A programmable "return to welcome page" function.

Help pages.

The LCD touch screen communicates directly with the iCANnet™ network. Messages are both transmitted and received, allowing remote monitoring of control panels and sensors.

The iLight™ engineering team has had several years of experience in this technology, and, importantly, in creating suitable programs for many and varied installations. Common applications include:- casinos, restaurants, hotel ballrooms, cathedrals, visitor centres, themed restaurants, corporate boardrooms and atria, smart homes and shopping malls.