

and work together on the principle of 'last action takes precedence', to give independent, yet simultaneous, control. To suit the precise needs of the venue, or intended performance, multiple control panels can be installed. For example, in a TV situation, where channels are frequently manually adjusted live, two channel control panels (each with a channel entry keyboard and LED display) may be installed for independent control of a key and fill light. Another two channel controls may also be in use in a second desk on the studio floor, all four of them working simultaneously.

TV studios are usually equipped with a single, simple playback with one blind, and one live preset. In theatre situations, where the playback of lighting cues can be more complex, with multi-part timed fades, up to four advanced playbacks may be installed, typically with two in the main desk, and two in a duplicate stalls desk.

The grey laminated control panels incorporate internally-illuminated pushbuttons, and clear LED numeric displays. The primary functionality of the Galaxy Nova is defined by each panel, and the selection of panels, and the number of each chosen, permits the system to be specifically tailored to its intended use. The **Channel Control** includes a keypad, display and wheel to adjust and control channel intensity levels and colour scroll setting. Three versions of the playback are available; a basic theatre playback, an advanced theatre playback, and a TV playback. The basic **Playback** has two wheels for controlling the increasing and decreasing channel levels, either as a manual fade, or to control the times during a timed fade. The **Advanced Playback** is also for theatre, but with the added features of direct access to 6 independent fades in progress, plus a unique 'learn fade profile' feature which memorises the exact profile of a fade (with pauses, changes in rate etc.) and reproduces the fade exactly during a performance. The **Studio Playback** is specifically designed for TV studios with direct access for fading and transferring memories to either the studio output or to a preset. The **Memory and Output** panel has a keypad and display to select memory numbers for recording levels, fade, wait and delay times, motion memories, and for controlling the combined output of the Galaxy Nova through two programmable Grand Master faders and blackout switch.

Two different types of submasters are available. The **Preset Masters** panel has ten submaster faders with bump buttons and individual displays. Two panels may be installed to give a maximum of 20 overlapping (highest levels take precedence) submasters. In contrast, the **Group Masters** panel operates with a channel control panel to extend the facilities of a channel control with an additional six wheels. This facility was first seen on Strand's Lightboard console of the

1970's, specified by Richard Pilbrow, who envisaged a "palette" of lights which could be balanced and blended to give the designer the desired 'look'. Channels, groups and cues are selected on the host channel control panel, then 'transferred' to a group master

sequence. The **Auxiliary System** includes dual 3.5" disk drives for archiving the system memories, and in addition an independent control system is incorporated, which can utilise channel level data saved to disk as a security backup system.

A characteristic feature of Galaxy

SPECIFICATIONS

- Full-specification, comprehensive memory lighting control with custom options, integrated automated lighting control and digital dimmer feedback facilities.
- Modular panel construction offers many combinations of custom-selectable desk layouts.
- For opera houses, large-scale theatres, concert halls and TV studios.
- Controls up to 999 channels patched to a maximum of 1536 dimmers.
- Simultaneous D54 and DMX 512 dimmer output protocols.
- 10 or 20 submasters.
- Simultaneous control from different locations.
- Fully programmable special effects.
- Colour change and automation fully integrated.
- Upgrade options for existing Galaxy consoles.
- Comprehensive designer and remote control options.
- Dual floppy disk tracking backup.
- Full dual electronics with split mode for 100% back up security.



wheel. Other selections are transferred to the remaining wheels, which interact on the principle of 'latest action takes precedence' for the balancing process. One of the best liked features of Galaxy Nova is the **Programmable Effects**. This control panel provides manual performance controls for the effects system, plus access to the set-up procedure, which is one of the most simple and elegant programmable effects operator interfaces available. The setup screen takes the operator through an interactive 'questionnaire' for pre-programming of up to 99 individual effects, each with up to 256 steps. Channels and memories may take part in any step, there is a wide range of effect types, and the start and completion conditions may be fully integrated with the main lighting sequence. The **Motion Control** panel has a keypad and four wheels to select and control individual attributes of automated luminaires for manual control and recording. Changes of position and colour can be made manually, or integrated within the main lighting

is that separate keypads are available for channel and memory selection, which is an integral part of the multi-user multi-tasking philosophy. In addition to clear displays on the desktop, there are typically two colour monitors per desk. Larger systems may be equipped with up to four monitors, with the data from 200 channels displayed on a single monitor. Display push buttons allow further information to be displayed, such as memory list, text, and system configuration menus.

The process of selecting panels from an extensive library of ten basic types actually moulds the 'personality' of the system. For example, a playhouse may require only a few panels giving recording and playback facilities only whereas a variety theatre may choose more panels offering 'spontaneous' features, and programmable special effects, but not the advanced automated playback functions. A TV studio would concentrate on panels offering multiple simultaneous control from different locations, fast record and re-recording and shot by

shot playback features. An opera house system would provide the lighting designer the means to 'paint with light' using panels to mix and blend lighting states, and to remotely control the functions of an automated spotlight.

It is a lighting designer's system; a lighting control which is more of an artistic tool than a computer. Galaxy's pedigree is obvious from the intuitive and rapid operation to the sophistication of some of the facilities which can only have been included with the help of user experience.

LATEST FEATURES

Galaxy Nova is immediately distinguished from previous versions by its appearance; grey control surfaces and housing. Hardware improvements include redesigned panels, a new electronics crate, processor and memory cards.

Colour and motion control are further integrated into the primary functionality of the system, with colour controls being directly accessible from the channel control, and positional recording facilities available on both the motion control and memory panels.

The colour control of Galaxy Nova was developed in conjunction with the custom electronics of the ColourCall scroller. The Galaxy can be configured with colour scroller addresses linked to the channel number controlling the intensity of the host spotlight, avoiding the necessity of remembering a separate scroller number. With the scroller identified as a separate entity, the Galaxy Nova then excludes the scroller signal from general fades. For this level of control, the Galaxy outputs signals in its PALS protocol, called MRL. The added advantage of this is that the protocol supports a time parameter which provides the means for very smooth colour changes of up to 4 minutes.

The latest version C2 software has added even more functions to the base program. For example, there are more options for system customisation, and for setting default information. Improvements have been made to the motion control and playbacks (through the preset masters and group masters panels).

For those situations where full tracking backup systems are specified, Galaxy Nova can operate with dual electronics. Another special option is the button mimic panel which not only indicates the status of a channel in relation to its geographic position in the venue, it also provides a primary method of control. By pressing the required button indicator, or group of buttons, the channel numbers are automatically entered for the operator in a channel control.

Galaxy Nova's impressive pedigree, and Strand's record of continuing software development to meet the latest needs of its clients, has confirmed Galaxy's place as one of the world's leading theatre and TV memory lighting control system.