# GALAXY® NOVA LIGHTING CONTROL SYSTEM



• 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, largescale theatres, concert halls and TV studios

• Controls up to 999 channels patched to a maximum of 1536 dimmers

• Simultaneous D54 and DMX512 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 is standard

• Full dual electronics with split mode for 100% backup security

### Overview

Galaxy Nova is the most advanced control desk in the world today, supporting bidirectional communication with EC90 MD*plus* digital dimmers, direct control of colour scrollers and up to 249 automated spotlights with control of pan, tilt and focus. Galaxy Nova is constructed in modules to allow customisation for a wide range of applications.

## Construction

The Galaxy Nova allows for two desks to be operated simultaneously (main control desk and remote control desk), and the desks can be equipped identically and work together on the principle of "last action takes precedence", to give independent, yet simultaneous, control. The control desks can be configured to fit the space where they are to be used, and the panels are assembled to suit the application and the needs of the customer.

#### **Modular Control Panels**

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 following list outlines the function of each panel, and the maximum number of each type used in a system is shown in parenthesis:

• Channel control (4)

Keypad, display and wheel to adjust and control channel levels and colour scroll setting.

• Playback (4)

Basic timed playback for theatre applications.

Advanced Playback (4)

Also for theatre, but with the added features of direct access to fades in progress, and the unique 'learn fade profile' feature.

• Studio Playback (1)

Playback specifically designed for TV studios with direct access for fade and cut to either the studio output or preset.

• Memory and output (1 per desk)

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 programmable Grand Master and blackout facilities.

• Preset masters (2)

Ten submaster faders with bump buttons and individual displays. Two may be installed to give a maximum of 20 overlapping submasters.

• Group masters (1 per channel control)

Six wheels which extend the facilities of a channel control to permit balancing and blending of channels and groups on one panel prior to, or after, recording.

### • Programmable effects (1)

Central control panel for pre-programming and manual execution of up to 99 effects, each with 256 steps. Start and stop conditions may be fully integrated with the main lighting sequence.

• Motion control (2)

Comprising a keypad and four level 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 sequence.

• Auxiliary system

This includes dual 3.5" disk drives for archiving the system memories. In addition, an independent control system is incorporated, which can also utilise channel level data saved to disk as a security backup system.

Separate keypads for channel and memory selection are included, thus avoiding operating errors as there is no need for multi-function command sequence buttons. 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 other information to be displayed, such as memory list, text, and system configuration menus.

#### Configuring a system

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.

Galaxy 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. The dimmer status feedback facility, DFD, was included to receive and display the performance data from EC90 MD*plus* digital dimmers.

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.

Version C2 software has just been released, and this has added even more functions to the base program. For example, there are more options for system customisation, and for setting default information. Improvements were 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.

## **Concise specification**

- Channels: 999
- Dimmers: 1536
- Dimmer protocols: D54, DMX-512
- Colour Call<sup>™</sup> scroller & PALS<sup>™</sup> Automated luminaires: 249 max
- Dimmer status reporting from EC90 MD*plus*
- Simultaneous fades: 24
- Playbacks (max): 4
- Studio Playback: 1
- Channel Controls (max): 4
- Group masters (max): 24
- Preset masters (max): 20
- VDUs (max): 4
- Choice of languages

From Strand Lighting datasheet (1994)