

Strand Lighting Specification

I. 301 BACK UP CONTROL CONSOLE

A. GENERAL

1. The control console shall be a microcomputer based lighting system designed specifically as a back up device for any DMX 512 control console. The unit shall be suitable for table top or rack mounting.

B. SYSTEM CAPACITY

1. The system shall support 12 pages of 12 back up scenes on 12 faders for a total of 144.
2. The console shall support the processing of up to 512 DMX levels. Additional DMX ranges may be supported using multiple panels in master/slave mode.

C. MECHANICAL

1. The console shall consist of a free standing table top console with LED status indicators and an LCD display.
2. The control panels shall be of rigid steel construction finished in blue powder coat paint. The shall fit into a folded steel enclosure, with four rubber feet.

D. ELECTRICAL

1. The Supply Voltage shall be 15V DC $\pm 10\%$ (from power supply). The 301 back up console shall be powered through the use of an independent power supply with a molded plug appropriate to the specific geographic locale of use. No internal modification to the system is required to enable operation at 100VAC, 110VAC, 220VAC or 240VAC. The 301 shall be powered with a low voltage DC supply. The low voltage power shall be supplied through a calculator-style female connector with the outer surface positive, the pin hole negative. 110/120VAC, 60Hz AC or 220/240VAC, 50Hz AC power supplies are available on request.
2. The following data input/output connectors shall be provided:
 - a. DMX out: 5-pin XLR - Female
 - b. DMX input 5 – pin XLR Male
 - c. Back up link input 3-pin XLR - Male
 - d. Back up link output 3-pin XLR – Female
 - e. Analogue In D – type 15 pin - Female
3. The power supply shall be UL and cUL listed for 120 volt systems and CE marked for 230/240 volt systems

E. OPERATIONAL FEATURES

The console shall provide but not be limited to:

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1. The system shall feature three modes of operation, Back up, Manual and Timed events. Access to each mode shall be via function keys in conjunction with the system LCD display.
2. Scene Storage: In back mode the system capacity shall support 12 pages of 12 scenes for a total of 144 back “looks” or scenes. In timed event mode the system shall store 12 scene for playback by the system clock.
3. A Grand Master fader shall provide master level and black out control for the system.
4. Faders: 12 control faders shall be identified by a number and associated fader scale which operate over a range of 0 to 10 (Full). Faders shall be available for use in either channel mode or in back up scene mode
5. Back up mode: shall allow the recording and playback of up to 144 scenes.
 - a. In Record Mode, the console shall capture up to 512 DMX levels for each back up scene using a simple recording process. Navigation and Page selection controls shall be provided to insure fast and easy programming.
 - b. In Playback Mode, the console shall allow the user to perform fades between the fully overlapping scene masters, providing proportional control over a maximum of 144 recorded scenes (memories or scenes) on 12 pages. Back up looks can be played back in any order.
 - c. Flash Switches on each fader shall act as a "bump" button with an LED indicator associated for each scene potentiometer to flash all levels assigned to the fader. The switches shall be also used in conjunction with the record key for the rapid recording of the system DMX input into the selected scene master.
 - d. An LED indicator and warning tone will sound in the event of DMX signal loss to alert the operator that the control system is now in back mode.
 - e. It shall be possible to record the output of existing back up looks into other back ups.
 - f. 12 analogue 0-10V DC input can allow remote fader for 12 faders of the page 12 at any time.
6. Timed Event Mode:
 - a. Up to 12 timed events may be recorded on the system with record operations matching the methods used for recording back up looks..
 - b. Events shall be triggered using the system time clock in conjunction with the LCD display and associated controls.
 - c. Timed Events may be played back in any order.
7. Manual Preset mode:
 - a. It shall be possible to operate the system as a 12 channel manual preset desk with a full 512 dimmer DMX Patch.
 - b. The manual master fader shall act as a crossfader with an associated hold function allowing for a scene to be faded in and then “Held”. Once the faders are “Held” they can be reset to a new scene allowing the system to act as a two scene present control system.
8. Setup and Configuration functions for the console shall include the following functions:
 - a. System Operation mode.

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- b. Master Slave Operation.
 - c. "No DMX in" buzzer enable
 - d. Clock setup
9. An integral 4 row by 16 column (60 character) backlit LCD display shall be provided to access setup information plus create control patches for manual operation and select times in timed event mode..
10. In the event of system failure the DMX input shall automatically bypass the back up controller allowing for uninterrupted show operation. Systems that do not support this feature shall not be accepted.
11. The console shall maintain its memory for one month without power (by internal rechargeable batteries.) The console shall distinguish between being turned off and loss of power. If switched off a series of diagnostic tests shall be run before the desk is operational. After power loss the shall be restored to the same state, including running events.
12. Multiple control systems may be joined through their back up link connections to provide an extended backup system.

F. WEIGHTS AND DIMENSIONS

- 1. The 12 console shall be no larger than 19" (483.0mm) W x 10.5" (267.0mm) D x 3.5" (88.0mm) H and shall weigh no more than 5lbs (2.3kg).

G. OPERATING ENVIRONMENT

- 1. The console should be operated under general office level conditions, with a minimum of dust.
- 2. The maximum operating ambient temperature shall be 32° - 95°F (0° - 35°C).
- 3. The relative humidity shall be 10% - 95% (non-condensing).

H. INCLUDED FURNISHINGS

- 1. (1) Power supply

I. ACCESSORIES

- 1. A vinyl cover shall be available for the console.