

200 PLUS SERIES CONTROL CONSOLE SPECIFICATION.

GENERAL.

A.) Overview.

1.) The control console shall be a microprocessor based lighting system designed specifically for the control of theatrical, television, and live performance dimming systems.

B.) Channel Capacity.

1.) The console shall support the processing of up to 512 total DMX512 outputs with the 12/24 or the 24/48 console, arranged in either two scenes of manual potentiometers or with expanded control capacity in a single scene configuration.

2.) Communication to system devices over a network shall be available utilizing the Art-Net protocol.

C.) Mechanical.

1.) The console shall consist of a free standing tabletop console with LED status indicators and an LCD display.

2.) The control surface shall be constructed of rigid folded sheet steel and flame retardant ABS control; the control console enclosure shall be designed for table or rack mounting with removable end pieces to facilitate this.

D.) Electrical.

1.) The supply voltage shall be 18VDC (from power supply). The 200 Series 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.

2.) The following data input/output connectors shall be provided:

a.) (1) DMX512 Out (5-pin XLR - Female).

b.) (1) DMX512 In (5-pin XLR - Male).

c.) (1) RJ-45 Network cable port for Art-Net communication protocol.

d.) (1) USB Port.

e.) (1) VGA Port.

3.) The power supply shall be UL, cUL listed and the entire system shall be CE marked.

E.) Operational Overview.

1.) These consoles are manual preset desks (12/24 or 24/48) with an integrated video display port that has submaster storage, memory playback, effects storage and playback and additional advanced features specifically engineered for LEDs and moving lights.

F.) Operational Features.

1.) The 12/24 console shall either control 24 channels in one scene mode or 12 channels in two scenes. The 24/48 console shall either control 48 channels in one scene mode or 24 channels in two scenes.

2.) The system shall be available to patch any dimmer or group of dimmers to a single channel. It shall be possible to set every dimmer with a level (0% to 100%) that shall scale the channel level proportionally.

3.) Submaster Storage: capacity shall be related to channel size. The 12/24 channel console shall have 288 submaster scenes available (12 pages of 24 submasters); the 24/48 channel console shall have 1152 submaster scenes available (24 pages of 48 submasters).

4.) Grand Master and Blackout Switch: the entire system output shall be mastered by this potentiometer and switch.

5.) Channel Faders: in two scene mode each of the two scenes of 12 [24] control channels shall be identified by a channel number and associated potentiometers which operate over the scale of 0 to 10 (Full).

6.) Mode Selector Switches: shall select fader operation between Single Scene, Two Scene, Submaster, Moving Light, LED and Memory Playback modes.

a.) In Two Scene Mode; the console shall be operated in two scene manual preset fashion.

b.) In Single mode, the console shall provide expanded channel capacity through the use of channel assignment buttons (1-48 or 49-96) utilizing all of the system potentiometers.

c.) In submaster mode all of the potentiometers shall perform as fully overlapping scene masters, providing proportional control over a maximum of 288 [1152] recorded scenes (memories or cues) in 12 [24] pages.

7.) Flash Switches: a "bump" button with a LED indicator associated with each channel or scene potentiometer shall be provided to flash channels or scenes to a level set by the flash level potentiometer. These switches shall be instructed to operate in a flash or solo fashion. When the console is in record mode, the switches shall be used for rapid recording the total live output into a selected submaster.

8.) The console shall include a special effects package that includes the following features:

a.) Up to 12 effects stacks with 48 steps (12/24 console) or 96 steps (24/48 console).

b.) The start, stop, fade time, and running speed (step time) of each effect can be controlled individually.

c.) The fade in and fade out time of each effect is set by the FX fade time potentiometer and adjustable from instant (0) to 2 minutes.

d.) Individual steps and their contents may be inserted or deleted.

9.) It shall be possible to create and edit Scenes and Effects either Live or in a Preview mode.

10.) Playback Controls: playback of channels shall be provided via manual channel faders, submasters, manual scene masters, effects playback, LED mode or Moving Light mode.

a.) The Preset mode A/B manual split crossfader shall have separate incoming and outgoing preset controllers to provide a dipless crossfade between the two manual potentiometers.

b.) The submaster mode A/B manual split crossfader shall have separate incoming and outgoing preset controller to provide a dipless crossfade between sequential and/or non-sequential recorded submasters.

c.) The Time fader potentiometers shall enable timed fades between 0 (manual) and 10 minutes. Timed crossfades may be stopped, paused and continued, manually over-ridden or reversed at any time prior to fade completion.

d.) The special effects playback controls shall allow the recording of 12 effects stacks with 48 steps (12/24 console) or 96 steps (24/48 console).

11.) LED Features

- a.) Up to 12 LEDs can be controlled on the 12/24 console and up to 24 LEDs can be controlled on the 24/48 console. There are dedicated LED faders for Red, Green, Blue and Attribute.
- b.) A maximum of 20 Playbacks (8 on the 12/24) can be recorded with each playback having a maximum of 99 steps. Each step can have an individual fade time and wait time.
- c.) LEDs can be combined with Moving Lights and conventional channels and their output levels can be stored into the effects stacks.
- d.) Multiple LED units can be stored together as a Group. 12 groups are available on the 12/24 and 24 groups on the 24/48.
- e.) Built in shape effects are available for LED fixtures. The available shapes shall be Rainbow, Knight Rider or Chase. Parameters that shall be adjustable are number of colors, color size, speed and direction.
- f.) Advanced LED playback features shall allow up to 170 LEDs to output from a Flash video file for dynamic effects.

12.) Moving Light Features

- a.) Up to 12 Moving Lights can be controlled on the 12/24 console and up to 24 Moving Lights can be controlled on the 24/48 console. There are dedicated Moving Light faders for Pan, Tilt, Color and one additional, assignable Moving Light parameter.
- b.) Auto DMX shall automatically patch all fixtures assigned starting with the first channel available for Moving Lights.
- c.) Pan/Tilt Invert shall allow for inverting of either or both pan and tilt functions.
- d.) Moving Lights can be combined with LEDs and conventional channels and their output levels can be stored into the effects stacks.
- e.) Multiple Moving Lights can be stored together as a Group. 12 groups are available on the 12/24 and 24 groups on the 24/48.
- f.) Commonly used positions, colors and gobos shall be stored as part of the Moving Light fixture library. 10 Master Focus Groups are available and each group shall have up to 10 palettes associated with it.

g.) Built in shape effects are available for Moving Light fixtures. The available shapes shall be Circle, Figure 8 and Fan Function. Parameters that shall be adjustable are center pan, center tilt and radius.

13.) Setup and Configuration functions for the console shall include the following functions:

a.) Contrast and backlight control of the LCD display.

b.) Memory Enable or Memory Lock.

14.) An integral 7 row by 21 column (147 character) backlit LCD display shall be provided to access setup information plus create, preview, and modify recorded scenes and effects.

15.) 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 console shall be restored to the same state, including running effects and timed fades.

16.) User and field service personnel oriented diagnostic tests and an electronic fault log shall be provided.

G.) Weights And Dimensions.

1.) The 12/24 channel console shall be no larger than 22.4 inches (568 mm) W x 12.5 inches (318 mm) D x 3.2 inches (80 mm) H and shall weigh no more than 15 lbs (6.8 kg).

2.) The 24/48 channel console shall be no larger than 31.7 inches (804 mm) W x 12.5 inches (318 mm) D x 3.2 inches (80 mm) H and shall weigh no more than 21 lbs (9.5 kg).

H.) 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 - 104 degrees Fahrenheit (0 - 40 degrees Celsius).

3.) The relative humidity shall be 0% - 95% (non-condensing).

I.) Included Furnishings.

1.) Universal Power Supply (90 - 240VAC, auto-ranging).

2.) Dust Cover.

3.) Operation Manual.