

CHANNEL TRACK SPECIFICATIONS

Provide a lighting control console as described below and as shown on the drawings.

~~I. Console shall be an integral unit capable of housing all required controls and equipment. It shall be substantially constructed and of furniture quality with all exposed metal joints filled and ground smooth. All steel surfaces shall be primed or plated. All exposed metal surfaces shall be primed and painted with baked enamel as directed by the architect. All exposed wood surfaces shall be finished as directed by the architect or laminated with wood grain Formica. Provide leveling feet on legs and a heavy duty flexible plastic console cover.~~

Control surfaces shall be black with engraved or epoxy screen white legends for readability. Exposed screwheads shall be kept to a minimum and towards the edge to avoid visual clutter. All controls shall be logically laid out and suitably identified. All digital controls shall have their status indicated by internal illumination or illuminated digital readouts. All analog controls shall have their position indicated by easily legible scales or illuminated dynamic digital readouts. Control panels shall be hinged for ease of service and provided with supports when open.

Interior components shall be suitably mounted and neatly wired with all wiring bundled and properly marked. All printed circuitboards and major electronic sub-assemblies shall plug in for ease of service. All wiring to be extended outside the console shall be terminated in suitably marked tubular screwclamp type terminals.

II. Control shall employ no more than 1000 watts of 50/60 Hz single phase power and develop whatever control signals are necessary for the proper operation of the dimmer specified in another section of this specification. It shall properly operate from a 103V to 127V (207V to 253V) power source in an environment of 41°F to 114°F (5°C to 46°C) and 20% to 80% humidity without condensation. The user is responsible to maintain these items within these limits.

Acceptable professional digital electronic techniques shall be employed to store intensity level information for \_\_\_\_\_ dimming channels and place it in dynamic control as required by the operator. At least 1000 sets of intensity level information or memories shall have the capability of being stored at one time and reliably retained for a period of at least one month without external power. Random access to any of the 1000 memories shall be made available to the operator in less than .8 seconds. All intensity level information shall be stored and processed in at least 256 steps per dimming channel.

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The operator shall be provided with the necessary controls to place any, some, or all memories in dynamic control of the dimmers both as an instant action and as a smooth continuously variable action. The operator shall also be provided with the necessary controls to automatically override and control any, some or all dimming channels as an instant action and as a smooth continuously variable action. Static control and all dynamic control other than an instant action shall be such that there is no perceivable drift, dip, step or flicker of the output from a 100 watt lamp connected to any dimmer due to the control signal from this unit. Instant action shall be such that there is no perceivable bounce or lag other than filament lag of the output from a 100 watt lamp connected to any dimmer due to the control signal from this unit.

III. Provide the following items as an integral part of the control console treating all "or" statement as inclusive:

- A. Analog proportional grand mastering of all memory system outputs
- B. Power control to the memory system by key lock
- C. Enable/disable control of all record and erase functions by key lock keyed differently from the power locks.
- D. Recording of all intensities as seen onstage or as set blind in any memory.
- E. Erasing of any memory or all memories.
- F. Enable/disable control of the automatic addressing of the next memory whenever any fade is initiated
- G. Enable/disable control of the automatic introduction of recorded time fade whenever the fade is initiated
- H. Digital entry and display of memory number being addressed separate from any channel number entry and display
- I. Digital entry, display and recording of fade times up to 99 minutes and 99 seconds associated with any memory
- J. Digital entry, display and recording of next memory to be addressed associated with any memory.
- K. Controls for copying the contents of one memory into another memory, modifying it and then recording it.
- L. Independent simultaneous proportional fading of at least 6 memories where at least half are automatic timed fades.
- M. Independent simultaneous dipless splithandle crossfading of at least 2 sets of memories where at least half are automatic timed fades.
- N. Independent simultaneous proportional timed subfading of at least 2 memories within each timed dipless splithandle crossfade.
- O. Independent analog control from 0 to 90 seconds and from 0 to 90 minutes of the timing of each automatic timed fade including separate control of the upfade and downfade of each crossfade.

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- P. Digital and analog control of any channel or combination of channels onstage or in any memory including digital entry and display of channel or channels selected and of intensity.
- Q. Analog control override without matching of any channel or combination of channels.
- R. Analog proportional submastering of at least 18 groups of channels.
- S. Geometric or proportional analog control of any given channel in any memory or simultaneously in blocks of at least 100 memories including the capability of recording its effects.
- T. Controls for temporarily blocking until restored any or all memory system outputs
- U. Library storage of at least 1000 memories per storage medium cartridge and supply at least 2 blank cartridges.
- V. Controls for the remote operation of all memory system functions from anywhere within 1000 feet of the control console.
- W. Dynamic display of the intensities of all memory system outputs in groups of at least 100.
- X. Dynamic display of the intensities of all channels in any given memory in groups of at least 100.
- Y. Dynamic display of the intensities of any given channel in all memories in groups of at least 100.
- Z. Simultaneous dynamic display of the progress of all timed fades in minutes/seconds and in percent.
  
- AA. Dynamic display of the intensities of all manual system outputs in groups of at least 100.
- BB. Power control to the manual system separate from the memory system by keylock
- CC. Analog proportional grand mastering of all manual system outputs including required buffering.
- DD. Separate analog manual control by potentiometer of each channel where the output is diode or'd to the output of the memory system.
- EE. Recording of all intensities as set on manual system in any memory.
- FF. Power supplies for manual system separate from memory system so that if any part of the memory system fails in any way, the manual system is immediately and automatically available without transfer of control.

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