

5 1.01 Bijou Control Console

A. Description:

- 10 1. The Bijou control console shall be a high-speed microprocessor-based lighting control system designed specifically for theatrical and television dimming systems. The system shall have the capacity to address up to 512 control channels and 1024 dimmers incorporating USITT standard DMX512 protocol.
- 15 2. All principal control electronics shall be of plug-in design, with locking connectors as required, housed within the low-profile console. Not including SVGA drivers and channel cards, the maximum number of printed circuit boards shall be two. All control outputs shall be based on locking-style connectors, insuring positive connection.
- 20 3. Console dimensions are:
a. Memory: 21" L x 15.5"W x 4.5"H
b. 24-Channel: 36" L x 15.5"W x 4.5"H
c. 48-Channel: 60" L x 15.5"W x 4.5"H
- 25 4. The console shall be designed to generate a graphic quality SVGA output signal for a detached color CRT for display of all control functions and information status. Display colors shall alert the operator to active operating conditions. The system shall require only one CRT for operation. The SVGA driver card shall be of standard computer design and plug-in replaceable.
- 30 5. The controls in the console shall be logically grouped into keypads, push buttons and linear potentiometers designed for numeric input, function selection, and manual controls for automated playback. All controls shall be clearly presented for easy selection in a low-light setting.
- 35 6. The console shall not require the use of any periphery device for operation. The operating program shall be stored in a programmable read-only memory. In the event of power failure, a ten-year lithium battery shall retain random access memory.
7. The console shall be equipped with a 3.5" high-density disk drive for recorded information storage.
8. The set-up menu shall allow user access to disk functions.

B. Standard Features:

- 40 1. The console shall be provided with the following as standard features for consistent operation:
- 45 a. One high-resolution Super VGA graphic quality detached color CRT for display of, and access to, the addresses of system parameter screens, while displaying fader and cue status information to include:
- 50 1) Stage: for channel, fader, and cue information. At minimum the screen shall display 200 control channels; fader operations; effects activation information, and system identification.
- 55 2) Cue: for review and address of recorded cue information without affecting the existing stage picture. Screen shall allow for revision of cue type, channel levels, up time, down time; up delay time, and down delay time.
- 3) Submaster: for review and modification of submaster information. Screen shall allow for modification of channel levels, submaster type (normal, inhibited, solo), up time, dwell time, and down time.
- 60 4) Cue List: for display of all cue command line information. Display shall present cue number, cue name, up and down times, up and down delay times, and cue link information.
- 55 5) Track: for display of cues and levels in a spreadsheet type format.
- b. Additional displays:
- 60 1) Patch: for organization and review of dimmer-to-channel assignments. Patch shall have two styles of display: patch by dimmer and patch by channel. The system shall have two distinct patch tables.
- 2) Profile: up to 25 profiles shall be selectable and assignable to dimmers. Profile shall

- 5 allow the shape of the fade to be altered and assigned via the patch table.
- 3) Setup: for selection of system parameters. Set-up shall allow the establishment of defaults parameters such as default tracking, default preset, default cue times. Setup will allow the activation of SMPTE format and MIDI format inputs. Setup will allow the initiation of remote monitors, designer's remotes, hand-held remotes, and initiate actions at additional system compatible memory units such as SubCommander or CopyCat dimmer electronics and stage manager's panels.
 - 4) Cue List: for a summary of cue names and numbers.
 - 5) Sub List: a numeric keypad shall be used to enter information to create channel, submaster, cue, effects lists, and command line information. These keys shall have the capacity to select or edit information in the primary screens.

c. Additional Keys:

- 1) The system shall include display keys, which quickly access a minimum of eleven distinct screens for console status. The active cue and fader status along with the current and next cues shall be present in the Stage screen.
- 2) Information keys shall offer direct access to commands and routines used in the organization and replay of recorded information to include:
 - a) Update: for immediate re-recording of cue level information from any stage composition.
 - b) Flash: for channel identification.
 - c) Next/Last: for CRT repositioning.
 - d) Macro#: for executing Macro called.
 - e) Cue Only: Shall record information into the current cue on a "this cue only" basis.
- 3) The system shall include a command keypad to address the attributes of cues, and submasters. These keys present information on either a last action or highest-takes-precedence basis.
- 4) An action keypad shall include oversized GO and STOP buttons as well as LOAD and FADE RATE keys that initiate or modify actions. There shall be a principal cue radar section, which includes two sets of crossfaders, and a master with blackout switch.
- 5) The system shall include a submaster section with twenty-four linear sliders with bump buttons and tricolor LED's, which can be assigned to operate in either pile-on or inhibitive status. Submasters can contain specific cues, channels, or any combination thereof, with a manual or timed status. The color of the LED's shall indicate the status and type of record loaded without the CRT.
- 6) The system shall offer a dedicated HELP key.
- 7) There shall be a high-inertia proportional rotary encoder with a textured surface, which can address or take control of channel levels for individual or mastered control of input or output information.

C. Operating Functions:

- 1. The control console shall provide the functions outlined for minimal operation:
 - a. There shall be a configuration set-up menu to display options for operation to include: user specific clear commands, load and save functions, activation of remote inputs, real-time clock, submaster functions, standard level adjustments, basic disk and print functions, and diagnostic functions. Operating parameters shall be changeable without clearing memory assignments.
 - b. A patch feature shall allow the user to assign one or more dimmers to a channel at a specified level. Any dimmer may be assigned as a non-dim. Twenty-five user-programmable profiles can be assigned, which allow actual outputs to be programmed with a minimum of twenty steps. Dimmers may be isolated from assigned channels and held at user-specified levels where outputs are exempt from the recording cue process.

- 5 c. Control channel lists can be constructed by cursor positioning and the use of: and, thru, except, at, full, clear and enter keys, in combination with numeric values.
- 10 d. It shall be possible to capture the current stage output or contents of selected channels, or cue blocks for modification, on the wheel. Selected channels may be held at existing values while others are forced to zero. Channel levels shall be altered in a single cue only, or may track through a series of cues. The display shall indicate the status of any channel addressed or recorded. Channel levels may be set, modified, or displayed in either stage or preview modes.
- 15 e. Channels shall be assignable to submasters in cue configuration, or a direct basis without any other record feature. Information assigned to submasters can be played back by either manual or timed modes. Timed submasters can be stopped and restarted. An overall dwell time as well as up and down times can be defined in timed submasters. Displays shall support an alphanumeric label.
- 20 f. Any combination of selected channels and submaster inputs can be recorded into a cue action. Cue actions can have separate up and down times, with delays up to 100 minutes. Cues can be recorded in any order. Up to nine cues can be inserted between any two whole numbers. Each cue can be assigned an alphanumeric label. Attributes assignable to cues are: auto start, manual, preset, track, and link too.
- 25 g. A track sheet display shall identify any channel addressed in a cue as either active or passive. It shall be possible to edit cue name, type, and time information with global effect in the track sheet. Additionally, it shall be possible to edit channel levels.
- 30 h. A cue sheet display shall be provided which lists cues in numeric order with command line and label information.
- 35 i. Recorded information may be played back on the principal faders in either a manual or timed mode by selecting the GO command. Timed cues assigned to a fader may be stopped, reversed, or converted to manual on command.
- 40 j. Submasters: Submasters may be initiated in manual or timed mode. A tricolor LED shall identify active Submaster controlling channels. Green LED shall indicate that the Submaster contains manual channel levels. Amber LED shall indicate that the Submaster contains an effect. Red LED shall indicate that the Submaster has been designated as an "inhibitive" or solo submaster with channel information.
- 45 k. The channel lists contained in a submaster can be viewed in the sub display with current fader information present. The submasters shall support a minimum of 24 pages (288 records) of information. A display shall identify the labeled information and the status of any submaster at any time.
- 50 l. There shall be the capacity to initiate a series of up to 20 keystrokes, which define an action through a macro command. Macros shall be initiated by start-up, or direct key input with a capacity for 2500 recorded sequences. Macros can be initiated by inputting the Macro number through keystroke action. A Macro may also be assigned to initiate in any cue via the "CUE LIST" screen.
- 55 m. Effects:
- 1) Each effect shall contain up to 100 steps consisting of channels with levels.
 - 2) Each effect can be recorded with any combination of attributes, including chase, bounce, random, and invert.
 - 3) Effects can be loaded onto submaster handles.
 - 4) Effects may also be activated for a cue using the "Special" Macro Command
 - 5) Up to 12 effects can operate simultaneously
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- n. Internal diagnostics routines shall be available in the setup screen. The diagnostics shall test memory; disks read and write functions, key inputs and video drivers.
 - o. It shall be possible to download presets directly from the control console to a remote secondary control console. These include, Sub Commander, CopyCat, and the MX dimmer control back-up looks.
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D. Options:

- 1. Off-line Editor
- 2. Hand-held Remote
- 3. Midi In & Out Communications Ports
- 15 4. SMPTE Input Port
- 5. Designers Remote
- 6. Remote Video Receiver
- 7. "CF" Moving Lights Outtrigger
- 8. DMX In
- 20 9. RS232 Port

E. Manufacturer:

- 1. The console shall be the Bijou, as manufactured by Electronics Diversified, Inc., Hillsboro, OR 97124, USA
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