## Road Hog® 4 Console

### A. General:

- 1. The lighting control console shall be a Road Hog console. The console shall be available from High End Systems, Inc., 2105 Gracy Farms Lane, Austin, TX 78758, USA.
- 2. The lighting control system shall be designed specifically for the control of stage, studio, touring, entertainment and architainment lighting systems.
- 3. A company having over 20 years of experience in the control of entertainment lighting shall manufacture the lighting control system.
- 4. The equipment shall be ETL listed.
- 5. Systems that do not provide the features listed below shall not be acceptable.

#### B. Hardware:

- 1. The console shall be constructed of a rugged aluminum chassis with powder coated panels and faceplates. An elbow rest shall be provided.
- 2. A universal 90 250V 50/60 Hz power factor corrected power supply shall be incorporated.
- 3. The console shall contain a G850 2.9 GHz processor on an industrial motherboard.
- 4. A solid state high performance internal hard disk drive shall be provided
- 5. Controls shall consist of keypad, four (4) rotary encoder knobs and twelve (12) User Keys. There shall be ten (10) user programmable, Penny & Giles faders with associated illuminated enable buttons on the playback portion of the console.
- 6. The console shall have one (1) 22" 10 point multi touch sensitive colour display screen.
- 7. One (1) desk lamp shall be provided, using dimmable white LEDs for illumination. A dimmable white LED worklight shall be on the front of the console along with dual blue LED marker lights.
- 8. One (1) external DVI-D monitor shall be supported. External touchscreen monitors shall be supported.
- 9. The console shall be capable of outputting four DMX universes via 5-pin XLR connectors and up to 8 universes of DMX over ArtNet and sACN directly.

- 10. External network output devices may be attached to expand DMX output capability (no limit).
- 11. MIDI and SMPTE Timecode functionality may be added through use of external widgets.
- 12. The following interfaces shall be provided
  - a.Four (4) 5-pin XLR DMX outputs.
  - b. Two (2) Gigabit Ethernet connections, allowing for Hog Net and Fixture Net capability.
  - c. Five (5) Universal Serial Bus (USB) ports
  - d. One (1) DVI-D monitor output
- 13. The console shall be 759mm x 572mm x 310mm weight, weighing 19.4 kg.
- 14. The user shall make operating software upgrades via USB flash drive. No changing of internal components shall be required. USB connected accessories shall also be upgradeable via USB flash drive.
- 15. The control console shall be supplied with
  - a. Power cord
  - b. Desk lamp (white)
  - c. USB Flash drive (Storage)
  - d. USB Flash drive (Restore)
  - e. Dust cover
  - f. Capture lighting design software license, Duet level
- C. Programming and playback:
  - 1. The controller's capacities shall be: 4096 local output channels/parameters, an unlimited number of simultaneous crossfades, and up to 65,536 cues, cue lists, chases, scenes, palettes, groups, and pages. There shall be no specific limit on the number of DMX universes supported when DMX processor units are connected.
  - 2. The console shall contain a library that includes definitions of moving lights, media servers, and other DMX-controlled devices such as color scrollers. The control console shall contain an inherent mapping of fixtures for the various attributes associated with automated and fixed focus lighting units.

- 3. Multiple fixture types shall be simultaneously supported and any fixture may be patched to any address on any universe.
- 4. The console shall follow an industry standard command line programming syntax.
- 5. The console shall contain the capacity to program unlimited multi-part cues, automated preset focus updating, and shall be able to track changes to the modifications of previously recorded cues. Each element of programming in a Cue shall possess independent timing and fade path settings. Cue timing options shall include: fade, delay, or manual (all with in/out option). Times may be programmable from 0.0 seconds to several days.
- 6. The console shall provide complete programming manipulation including move, copy, merge, mask, as well as comprehensive patch features for profiles, proportional patching, parking, etc.
- 7. The console will provide a multi-level undo/redo function and an online help system.
- 8. The console shall be equipped with an effects engine that shall instantly generate complex effects including those commonly referred to as "rainbows" and "ballyhoos". Chases shall have fully adjustable direction, crossfading, and rates.
- 9. The controller shall provide unlimited simultaneous playback of independent cue lists, chases, or scenes on up to 10 Playback masters on the console. Additional Playback masters may be added with expansion wing units and virtual masters. Masters shall also be able to provide inhibitive intensity control of some or all fixtures.
- 10. Cue lists, scenes, and inhibitives shall be dynamically assigned to Masters and grouped together on a Page. Changing Pages shall load a new set of cue lists, scenes and inhibitives to the Masters.
- 11. The controller shall possess advanced Page features including: instant changes, crossfading between pages, flexible sizes, automatic holdover and remain in background.
- 12. Custom settings shall be provided for Go and Flash buttons, Cues, Cuelists, and submasters including but not limited to activation, precedence (HTP or LTP), resetting, inhibitive.
- 13. There shall be a main set of playback controls providing Go, Halt/Back, Step Forward, Step Back, Go To, Release and Assert buttons.
- 14. The control console shall provide instant access to fixtures, groups, and palettes via touch-sensitive displays. The displays shall contain numerous windows to give feedback on programming and fixture status. If connected to external displays, all displays may simultaneously show different windows, windows may be sized and moved on any display as desired, and custom configured views may be saved and instantly recalled.
- 15. All recordable items may be given useful names to simplify operation.

- 16. The software shall allow for custom mapping of function of fixture parameters to any of the five main encoders. Custom maps shall be stored and recalled by means of the User Kind keys.
- 17. The software shall allow for the networking of multiple consoles across a network, and shall allow for the presence of multiple servers on the same show. The software shall allow for full network failover.
- 18. The software shall be separated into various processes, allowing for greater redundancy and the ability to restart said processes without requiring to reboot the console.
- 19. Each DMX Processor 8000 process shall allow for up to eight discrete streams of MIDI or SMTPE time code to be handled by the software, without any specific limits to total number of streams.
- 20. The software shall provide a 'console lock' to be activated by the user.
- 21. GUI elements shall be able to be set to different sizes and colours, and when recalled will remember these settings.
- 22. User Keys shall be represented as an element of the graphical user interface.

# D. Peripheral equipment:

- 1. A range of optional complementary equipment shall be available from the console manufacturer including but not limited to the following:
  - a. DMX Processor 8000 providing up to sixteen universes of DMX output via 8 XLR 5-pin connectors or Art-Net/E1.31 (sACN). It shall be possible to connect multiple DMX processors via Ethernet.
  - b. USB DMX Widget (1 universe)
  - c. USB DMX Super Widget (up to 4 universes)
  - d. USB DMX Super Duper Widget (up to 8 universes)
  - e. USB MIDI/LTC Timecode Widget
  - f. Playback Wing 4
  - g. Master Wing 4
  - h. MiniWing 4
  - i. Hoglet 4 consolette

## E. Provide the following