HedgeHog® 4X Console

A. General:

1. The lighting control console shall be a HedgeHog 4X 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 arm rest shall be provided.

2. A universal 100 – 230V 50/60 Hz power factor corrected power supply shall be incorporated.

3. The console shall contain a G5400 307GHz 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 encoders and twelve (12) User Keys. There shall be ten (10) user programmable, Alps faders with associated illuminated enable buttons on the playback portion of the console.

6. The console shall have one (1) 12.1" multi touch sensitive colour display screen.

7. One (1) desk lamp is provided, using dimmable white LEDs for illumination.

8. The following interfaces shall be provided

    a. Eight (8) Universal Serial Bus ports

    b. Two (2) 5-pin XLR DMX outputs

    c. Two (2) Gigabit Ethernet connections, allowing for Hog Net and Fixture Net capability.

    d. Two (2) display port connectors for external monitors/touchscreens

9. The console shall be capable of outputting two (2) DMX universes via 5-pin XLR connectors and up to six (6) universes of DMX over ArtNet and sACN directly.

10. External DMX processor devices can be attached to expand DMX output capability (no limit).

11. The console shall be 20.74" (526.8mm) wide by 21.83" (554.37mm) deep by 3.97" (100.78mm) high, weighing 17lbs (7.7kg).

12. 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.

13. Midi and SMPTE Timecode functionality may be added through use of external widgets.

14. The control console shall be supplied with

    a. Power cord

    b. Desk lamp (white)

    c. USB Flash drive (Restore)

    d. Dust cover

    e. Capture lighting design software license, Solo level

C. Programming and playback:

1. The controller's capacities shall be: 3072 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 be separated into various processes, allowing for greater redundancy and the ability to restart said processes without requiring to reboot the console.

18. Each DMX Processor 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.

19. The software shall provide a 'console lock' to be activated by the user.

20. GUI elements shall be able to be set to different sizes and colours, and when recalled will remember these settings.

21. 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 console manufacturer and shall include the following:

   a. HPU processor providing up to sixty-four universes of DMX output via 8 – XLR 5-pin connectors or Art-Net/E1.31 (sACN). It shall be possible to connect multiple processors via Ethernet.

   b. USB DMX Widget

   c. USB DMX Super Widget (maximum 2 universes)

   d. USB MIDI/LTC Timecode Widget

   e. Playback Wing 4

   f. Master Wing 4

   g. MiniWing 4

E. Provide the following

Qty	Part number	Description
-	6102A1002 US/INT	Hog 4-18 Control Console (US or INT accessories)
-	61020005	Full Boar 4 Control Console in Road Case
-	6102A1003	Road Hog 4-21 Control Console
-	61020014	HedgeHog 4X Control Console
-	6204A1001	HPU Rack Mount Unit
-	6204A1002	HPU Port Replicator
-	6204K1003	HPU Rack Mount Rear Support Kit
-	74040007	USB DMX Widget
-	74040008	USB Super Widget
-	74040009	USB MIDI/LTC Time Code Widget
-	4268A1200	Response 4-Port Gateway, XLR Output
-	4268K1001	Gateway Rack Mount Kit
-	61040060	Playback Wing 4
-	61040062	Master Wing 4
-	61040065	MiniWing 4
-	61040064	Hoglet 4 consolette
-	90903068	Hog USB Flash Drive Red (Restore)
-	90903067	Hog USB Flash Drive
-	61040109	Super Widget Expansion Kit
-	74040010	MIDI/LTC Time Code Expansion Kit
-	61070012	Playback /Master Wing 4 Road Case
-	61070011	Road Hog 4 Road Case
-	99330191	HedgeHog 4 Soft Carry Bag
-	61070015	HedgeHog 4 Gator Hard Case
-	61070014	HedgeHog 4 Custom Road Case
-	61070016	Hoglet 4 Road Case
-	61070017	MiniWing 4 Road Case

-       61040004   Hog Desk Light (extra)