

Specifications – Claypaky HY B-EYE K15 Wash Luminaire

GENERAL

A.) Overview

- 1.) The unit shall be a LED-sourced moving head wash luminaire using nineteen (19) 40-Watt RGBW (red/green/blue/white) LEDs with a CRI of 70 or higher, an output of 8500 lumens in white light, and a native color temperature of 6000K.
- 2.) The unit's head, yoke and enclosure housings shall be constructed of a combination of formed plastics, steel, and aluminum alloys for light weight, strength, and durability.
- 3.) The unit shall be black in color.
- 4.) The unit shall be cETLus listed and CE-marked. The unit shall conform to the following European Directives:
 - a) 2014/35/EU - Safety of electrical equipment supplied at low voltage (LVD)
 - b) 2014/30/EU - Electromagnetic Compatibility (EMC)
 - c) 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)
 - d) 2009/125/EC - EcoDesign requirements for Energy-related Products (ErP)
- 5.) The unit shall conform to USITT DMX-512A (RDM), Art-Net, Claypaky WebServer protocol standards.
- 6.) The unit shall have a backlit LCD monochrome display for manual control and settings of the fixture. The unit shall have AUTOTEST functionality to read and store fixture error messages that can be displayed on the LCD display.
- 7.) The unit shall have a long life, self-charging battery that allows basic information of the luminaire to viewed on the LCD display without connecting the unit to an AC power source.
- 8.) The unit shall have a 15:1 linear zoom range of 4° to 60°.
- 9.) The unit shall have individual lenses over each LED. The unit will be capable of a variable beam focus to create soft, uniform color washes and aerial effects. The front lens assembly shall be capable of rotating for additional effects.
- 10.) The unit shall have dedicated control connections for:
 - a) DMX512 with input and throughput via 3-Pin and 5-Pin DMX XLR connectors
 - b) RDM with input and throughput via 3-Pin and 5-Pin DMX XLR connectors
 - c) DMX512 with input via an Ethernet RJ45 connector
- 11.) All control and power input connectors shall be located on the same panel of the unit's enclosure.

B.) Physical

- 1.) The unit's head, yoke and enclosure housings shall be constructed of a combination of formed plastics, steel, and aluminum alloys for light weight, strength, and durability.
- 2.) The unit's head covers shall use captive screws for easy removal and access to the luminaire's gobos, colors, etc. for cleaning and removal.

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- 3.) The unit shall be no more than 438 millimeters or 17.24 inches long and 391 millimeters or 15.39 inches wide at its greatest dimensions (not including accessories).
- 4.) The unit shall hang on 550 millimeter or 21,6 inch centers.
- 5.) The unit shall weigh no more than 21 kilograms or 46,2 pounds (not including accessories).
- 6.) The unit's enclosure shall accept two fast-lock omega clamp brackets to accept suitable hooks (or clamps, by others) for hanging and the unit shall operate in any working position. The unit shall be supplied with 2 fast-lock omega clamp brackets as standard accessories.
- 7.) The unit's enclosure shall have a label (on the same side of the hanging points) stating, "Front" to indicate the direction of hang for the unit.
- 8.) The unit's enclosure shall be equipped with two (2) handles specifically designed to support the weight of the unit when being carried.
- 9.) The unit's enclosure shall have a dedicated safety cable (safety bond) anchor point other than the luminaire's handles.
- 10.) The unit shall be at least IP20 rated.

C.) Mechanical

- 1.) The unit shall have variable speed cooling fans. The user shall be able to select the fan cooling modes of Standard, Quiet, and Theater. The modes can be set via the user at the LCD menu system or via DMX control.
- 2.) The unit shall contain two independent three-phase stepper motors to provide accurate movement of the head through 540° in the horizontal plane (pan) and 200° in the vertical plane (tilt). The pan and tilt mechanisms shall be belt-driven.
- 3.) The unit shall have independent locking mechanisms for pan and tilt to prevent movement for traveling or servicing the fixture.

D.) Electrical

- 1.) The unit will be equipped for to accept a Neutrik powerCON TRUE1® connector for power input and shall operate between the voltages of 120VAC to 240VAC (single phase, 50/60 Hertz) and not draw more than 600VA at 230VAC at 50 Hz.
- 2.) The unit shall be supplied with a 3-meter AC input cable with a Neutrik powerCON TRUE1® connector on one end and the other end prepped by the supplier to accept an approved and suitable connector (by others) as required to connect to power source.
- 3.) The unit shall have both 3-pin and 5-pin DMX connectors for both input and output DMX control signals.
- 4.) The unit shall provide a system to protect the LED driver and LEDs from overheating by derating the power provided to LEDs when the unit experiences over temperature conditions.

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- 5.) The unit's light source shall be a nineteen (19) 40-Watt RGBW (red/green/blue/white) LEDs that produces uniform colors. The user can control the LED engine's refresh frequency rate from 1000Hz to 50050Hz.

E.) Environmental

- 1.) Maximum operating ambient temperature shall not exceed 40 degrees Celsius or 104degrees Fahrenheit.
- 2.) The unit shall have a variable speed cooling system to maintain the optimal operating temperature of the luminaire. The user shall be able to select the fan cooling modes of Standard, Quiet, and Theater. The modes can be set via the user at the LCD menu system or via DMX control.
- 3.) The unit shall comply with all RoHS requirements and be mercury free.
- 4.) The unit shall be able to illuminate objects 0.2 meters or 8 inches or further safely.

F.) Operation

- 1.) The unit shall have dedicated control connections for:
 - a) DMX512 with input and throughput via 3-pin and 5-Pin DMX XLR connectors
 - b) RDM with input and throughput via 3-pin and 5-Pin DMX XLR connectors
 - c) DMX512 with input via an Ethernet RJ45 connector
- 2.) The unit shall two user-selectable DMX modes – Standard mode with twenty-two (22) channels of DMX-512A control and Shapes mode with thirty-six (36) channels of DMX-512A control as follows:

DMX Channel	Standard Mode	Shapes Mode
1	Red Color	Red Color
2	Red Color Fine	Red Color Fine
3	Green Color	Green Color
4	Green Color Fine	Green Color Fine
5	Blue Color	Blue Color
6	Blue Color Fine	Blue Color Fine
7	White Color	White Color
8	White Color Fine	White Color Fine
9	Linear CTO	Linear CTO
10	Macro Color	Macro Color
11	Strobe	Strobe
12	Dimmer	Dimmer
13	Dimmer Fine	Dimmer Fine
14	Pan	Pan
15	Pan Fine	Pan Fine
16	Tilt	Tilt
17	Tilt Fine	Tilt Fine
18	Function	Function
19	Reset	Reset
20	Zoom	Zoom
21	Zoom Rotation	Zoom Rotation
22	Frequency	Shape Selection
23	--	Shape Speed
24	--	Shape Fade
25	--	Shape R (red)
26	--	Shape G (green)

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27	--	Shape B (blue)
28	--	Shape W (white)
29	--	Shape Dimmer
30	--	Background Dimmer
31	--	Shape Transition
32	--	Shape Offset
33	--	Foreground Strobe
34	--	Background Strobe
35	--	Background Select
36	--	Frequency

- 3.) The unit shall provide additional LED engine control via DMX call Pixel Engine. Pixel Engine control shall offer RGB or RGBW control and emulate a wide range of Lee Color Filter Colors. These modes shall be accessible and user-selectable/settable via the unit's LCD menu system.
- 4.) The unit shall include an LCD menu system that will allow users to set fixture operating parameters and display fixture errors as follows:
 - a) Setup
 1. Basic Engine (including DMX Address)
 2. Pixels Engine (including DMX Address)
 3. Repeat on DMX
 4. Ethernet Interface
 5. Fixture ID
 - b) Option
 1. Pan / Tilt
 2. Silent Mode
 3. Fan Speed Mode
 4. Display
 5. Special Functions
 6. Setting
 - c) Information
 1. System Errors
 2. Fixture Hours
 3. LED Energy Tot(al)
 4. System Version
 5. Board Diagnostic
 6. DMX Monitor
 7. Fans Monitor
 8. RDM Unique ID
 9. Sensor Status
 10. Network Parameters
 - d) Manual Control
 1. Reset
 2. Channels
 - e) Test
 1. Pan/Tilt
 2. Color
 3. Zoom
 4. Rotation
 5. All
 6. Zoom Rotation Sensor Test
 - f) Advanced (*password protected*)
 1. Zoom Reposition

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2. Upload Firmware
3. Setup Model
4. Calibration
5. Menu Locking
6. LED Calibration

5.) The unit shall include the following effects mechanisms/operation/effects:

- a) Bidirectional rotating front lens assembly.
- b) Digital wash-beam framing / shapes effects.
- c) An electronic 16-bit dimmer that provides full field dimming and has four (4) user-selectable dimming curves. The unit's dimmer must allow for smooth timed fades and fast blackouts.
- d) An electronic strobe that operates in a linear fashion from 1 to 25 flashes per second or 3 levels of random effects.
- e) Beam edge softening control (in wash mode)
- f) Color temperature emulation of 2500K to 8000K.
- g) Pixel pattern macros with enhanced control.
- h) Three (3) operating modes – wash, beam, FX (Kaleido effects).

H). Warranty

- 1.) The manufacturer of the luminaire shall offer a two-year limited warranty on the luminaire in its entirety.
- 2.) Manufacturers not offering a minimum of a two-year warranty shall not be accepted.

I). Accessories

- 1.) The unit shall include the following accessories for each unit purchased:
 - a) One (1) each 3-meter AC input cable that includes a Neutrik powerCON TRUE1® power input connector and the other end prepped by the supplier to accept an approved and suitable connector (by others) as required to connect to power source.
 - b) Two (2) each fast-lock omega clamp brackets.
 - c) Product safety documentation.
- 2.) The following accessories shall be made available for each unit:
 - a) A preformed road case shell insert.

- End of Specification -