

# Specifications – Claypaky Mini-B Luminaire

## GENERAL

### A.) Overview

- 1.) The unit shall be a LED-sourced moving head profile luminaire using seven (7) 40-Watt RGBW (red/green/blue/white) LEDs with a CRI of 70 or higher, an output of 3420 lumens in white light, and a color temperature range of 2500K TO 8000K.
- 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 be viewed on the LCD display without connecting the unit to an AC power source.
- 8.) The unit shall have a 13.8:1 zoom optics system that adjusts the projected field angle over a range of 4° to 55°.
- 9.) The unit shall have dedicated control connections for:
  - a) DMX512 with input and throughput via 5-Pin DMX XLR connectors
  - b) RDM with input and throughput via 5-Pin DMX XLR connectors
  - c) DMX512 with input via an Ethernet RJ45 connector
- 10.) All control and power input connectors shall be located on the same panel of the unit's enclosure. The unit shall have a user-replaceable 6.3 Amp fuse for over-current protection.

### 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.
- 3.) The unit shall be no more than 346 millimeters or 13.62 inches long and 240 millimeters or 9.5 inches wide at its greatest dimensions (not including accessories).
- 4.) The unit shall hang on 350 millimeter or 13,7 inch centers.

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- 5.) The unit shall weigh no more than 6.5 kilograms or 14.5 pounds (not including accessories).
- 6.) The unit's enclosure shall accept one fast-lock double-ear omega clamp bracket 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 one fast-lock double-ear omega clamp bracket as a standard accessory.
- 7.) The unit's enclosure shall have four mounting holes so the one fast-lock double-ear omega clamp bracket can be positioned as desired.
- 8.) The manufacturer shall offer, as an option and additional cost, a handle set that is easily installed by the user. The handle set shall include two curved black handles and hardware to install on unit's base. Handle set part number is CA3001000100.
- 9.) The unit's enclosure shall have a dedicated safety cable (safety bond) anchor point.
- 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 (STD), automatic (AUTO), or silent (SLN). 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 260° in the vertical plane (tilt). The pan and tilt mechanisms shall be belt-driven.

## *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 375VA 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's enclosure shall have an a Netutrik powerCON TRUE1® AC output connect capable of passing power to two (2) additional Mini-B luminaires at 100 to 120VAC or up to six (6) Mini-B luminaires at 200 to 240VAC.
- 4.) The unit's enclosure shall have an accessible from the input panel a user-replaceable fuse that protects the unit from over current.
- 5.) The unit's light source shall be comprised of seven (7) 40-Watt RGBW (red/green/blue/white) LEDs producing a wide range of colors. The user can control the LED engine's refresh frequency rate from 600Hz to 25000Hz.

## *E.) Environmental*

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- 1.) Maximum operating ambient temperature shall not exceed 40 degrees Celsius or 104degrees Fahrenheit.
- 2.) The unit shall comply with all RoHS requirements and be mercury free.
- 3.) The unit shall be able to illuminate objects 0.2 meters or 0.7 feet or further safely.

## F.) Operation

- 1.) The unit shall have dedicated control connections for:
  - a) DMX512 with input and throughput via 5-Pin DMX XLR connectors
  - b) RDM with input and throughput via 5-Pin DMX XLR connectors
  - c) DMX512 with input via an Ethernet RJ45 connector
- 2.) The unit shall offer three (4) user selectable DMX modes of Basic RGBW, Basic RGBW 16 bit, Extended RGBW, and Extended RGBW 16 bit. The DMX modes of DMX-512A control as follows:

<i>DMX Channel</i>	<i>Basic RGBW</i>	<i>Basic RGBW 16 bit</i>	<i>Extended RGBW</i>	<i>Extended RGBW 16 bit</i>
1	Red	Red	Red Circle	Red Circle
2	Green	Red fine	Green Circle	Red Circle fine
3	Blue	Green	Blue Circle	Green Circle
4	White	Green fine	White Circle	Green Circle fine
5	CTO	Blue	Red Centre	Blue Circle
6	Macro color	Blue fine	Green Centre	Blue Circle fine
7	Strobe	White	Blue Centre	White Circle
8	Dimmer	White fine	White Centre	White Circle fine
9	Dimmer fine	CTO	CTO	Red Centre
10	Pan	Macro color	Macro color	Red Centre fine
11	Pan fine	Strobe	Strobe	Green Centre
12	Tilt	Dimmer	Dimmer	Green Centre fine
13	Tilt fine	Dimmer fine	Dimmer fine	Blue Centre
14	Zoom	Pan	Pan	Blue Centre fine
15	Function	Pan fine	Pan fine	White Centre
16	Reset	Tilt	Tilt	White Centre fine
17	-	Tilt fine	Tilt fine	CTO
18	-	Zoom	Zoom	Macro color
19	-	Function	Function	Strobe
20	-	Reset	Reset	Dimmer
21	-	-	-	Dimmer fine
22	-	-	-	Pan
23	-	-	-	Pan fine
24	-	-	-	Tilt
25	-	-	-	Tilt fine
26	-	-	-	Zoom
27	-	-	-	Function
28	-	-	-	Reset

- 3.) 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

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1. DMX Address
2. DMX Channels (4 control modes)
3. Ethernet Interface
- b) Option
  1. Pan / Tilt
  2. Display
  3. Fan Mode
  4. Special Functions
  5. Setting
- c) Information
  1. System Errors
  2. Fixture Errors
  3. LED Hours
  4. System Version
  5. DMX Monitor
  6. Fans Monitor
  7. Network Parameters
  8. UID
- d) Manual Control
  1. Reset
  2. Channel
- e) Test
  1. Pan/Tilt
  2. Color
  3. Zoom
  4. All
- f) Advanced (*password protected*)
  1. Upload Firmware
  2. Calibration
  3. Menu Locking

## 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) One (1) each fast-lock double-ear omega clamp bracket.
  - c) Product safety documentation.
- 2.) The following accessories shall be made available for each unit:
  - a) A set of two (2) carry handles with mounting hardware.
  - b) A preformed road case shell insert.

**- End of Specification -**