

Pro-Palette

Color LED Cyclorama User Instructions



Pro-Palette Manual v1.0



Thank you for choosing Zylight and the Pro-Palette LED instrument. This fixture represents the state-of-the-art in LED lighting and will provide you with years of creativity. The flexibility of the Pro-Palette is unmatched and this fixture will be a contributing partner to your productions everyday. The Pro-Palette offers the ability to color tune your talent or set. Placed on the floor or mounted on in the grid, the Pro-Palette brings new levels of flexibility, creativity, and control to your stage or theater.

Zylight is thoroughly committed to sustainability and our responsibility to the global environment, and we actively encourage our customers to contribute to the integration of green practices in the studio and on location. By using this LED lighting instrument, you have taken the first step. This Zylight Pro-Palette uses less energy, produces less waste, and is an instant on/off light.

Take time to read through this manual to get the most from this cutting edge instrument.



10718 McCune Avenue
Los Angeles, CA 90034
info@zylight.com
www.zylight.com

Introduction: The Pro-Palette combines Zylight's unmatched color-mixing technology and high-quality construction to meet the demands of location and studio professionals who require an extremely bright and wide soft source, while offering all of the innovative features for which Zylight is renowned: fully dimmable lighting with minimal color shift, adjustable color temperature and color correction, unlimited color control, integrated DMX with RDM compatibility, and rugged construction for years of reliable service.

Every Pro-Palette has been thoroughly tested and has been shipped in optimal operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit have arrived intact. If damage has been found or parts are missing, please contact our customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

Your Pro-Palette includes the following items:

- One - Zylight Pro-Palette light head
- One - Yoke bar with 5/8" hole
- Two - Yoke adjustment knobs
- One - AC power cord
- One - Safety cable
- Two - DMX connector ends
- One - Pro-Palette User Guide

Customer Support: Zylight provides a customer support line to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.zylight.com for any comments or suggestions. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Eastern Standard Time.

Voice: (978) 244-0011

Fax: (978) 244-0011

E-mail: support@zylight.com

Caution! There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufacturer's warranty. In the unlikely event your unit may require service please contact Zylight customer support.

PLEASE recycle the shipping carton whenever possible.

General Instructions

To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit, for future reference.

The Pro-Palette carries a two year limited warranty. Please go to www.zylight.com/product-registration and register your product and validate your purchase. All returned service items, whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain an R.A. number by contacting our customer support team through our customer support number. All packages returned to the service department not displaying a R.A. number on the outside of the package will be returned to the shipper.

Specifications

Size	20.3" x 8.1" x 13.1" [516 mm x 205 mm x 332 mm]
Weight	27.5 lbs. [12.5 kg]
Power Input Plug	PowerCon
AC Power Supply	100-240V AC - 50/60Hz
Power Consumption	350W max.
Beam Angle	Horizontal:56°; Vertical:80° (approx.)
Dimming	0-100%
LED Life	≥ 20,000 Hours minimum (ambient temp ≤25°C)
Control Modes	4COL/HSI/FIL/CCT
CCT	3200K/4500K/5700K/7000K
Operating Temperature	0°-35°C
Control Signal	DM512 (USITT-1990), RDM E.1.20-2006
Cooling System	Forced - 2 fans
IP Rating	IP20

- To reduce the risk of electrical shock or fire, do not submerge this fixture in water.
- Do not spill large amounts of water or other liquids into or onto your fixture.
- Do not attempt to operate this unit if the power cord has been frayed or broken. Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Disconnect from main power before making any type of electrical or component connection.
- Do not remove the face or rear cover under any conditions. There are no user serviceable parts inside.
- Never plug this unit in to a dimmer pack.
- Always be sure to mount this fixture in an area that will allow proper ventilation. Allow at least 6" (15cm) between this device and a wall.
- Do not attempt to operate this fixture if it becomes damaged.
- During long periods of non-use, disconnect the fixture's main power.
- Always mount this fixture in safe and stable matter. Always use a safety cable as part of a secure installation. Use only a butterfly style hook which surrounds the latch point and connect to hanging system that can support at least ten times the weight of the fixture.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, especially to the point they exit from the fixture.
- Cleaning: The fixture should be cleaned only as recommended by the manufacturer. See page 12 for cleaning details.
- Heat: The instrument should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the instrument.
 - C. The instrument has been submerged in water.
 - D. The instrument does not appear to operate normally or exhibits a marked change in performance.

The Pro-Palette is a professional grade LED Cyclorama Wash Light featuring RGBW four-color and 3,200K-7,500K white light operation. The Pro-Palette is fully controllable via standard DMX512 signals providing extremely smooth color mixing and flicker-free dimming from 0 to 100%. Two cooling fans located in the same direction of light source allow the Pro-Palette to operate in upright position on floors or to hang upside down on a grid without interfering with the cooling system. The specially designed reflector allows the Pro-Palette to produce a soft and even wash for cyclorama and walls. The Pro-Palette is also RDM ready for setting parameters remotely.

RGBW LED Controls

The Pro-Palette is a 350watt 8x32 RGBW LED Cyclorama Wash Light. The multiple color control modes make it extremely user friendly:

4COL, HSI, FIL and CCT.

1). 4COL (Red, Green, Blue, White)

Using four channels for four colours independently, this is a traditional way to control color changing LED fixtures. Color is mixed by adjusting the values of the R, G, B and White. Just assign the first DMX channel number for the RED and the fixture will automatically occupy the three sequencing channel numbers for the Green, Blue and White respectively.

2). HSI (Hue, Saturation, Intensity)

Using three channels, HSI is more intuitive for lighting designers. The first DMX channel assigned controls the intensity or brightness and the fixture will automatically occupy the two sequencing channel numbers for the Hue and Saturation respectively. Set the desired effect by scrolling through hues and altering the saturation from deep to white.

Note to fader-console users: Since the Hue is a color channel, it is better to push the intensity and saturation fader-channels to a certain level first in order to see the color effect created by the Hue channel.

3).FIL (Built-in color macros, Filters codes as color ref. only)

ZyLight has preloaded the XPRESS Color Scroller’s preference 16-colour gel-string as macros into the Pro-Palette for easier operation. Using two channels, the first DMX channel assigned controls the intensity or brightness and the fixture will automatically occupy the sequencing channel numbers for the color macros. The list below provides a quick check between the DMX values and color filters codes.

*Note: Color mixed by LED diodes are slightly different from tungsten lights projected through color filters. Effects: Built-in color macros (color filter codes for reference only)

	DMX	Color	Code
1	0-15	Clear	130
2	16-31	Pale Gold	152
3	32-47	Straw	103
4	48-63	Loving Amber	176
5	64-79	Chrome Orange	179
6	80-95	Bright Pink	128
7	96-111	Flesh Pink	192
8	112-127	Magenta	113
9	128-143	Bright Red	48
10	144-159	Rose Purple	26
11	160-175	Mauve	126
12	176-191	Moss Green	89
13	192-207	Dark Green	124
14	208-223	Full CT BBlue	201
15	224-239	Peacock Blue	115
16	240-255	Dark Blue	119

4). CCT (Color temperature for white lights)

Using two channels, the first DMX channel assigned controls the intensity or brightness and the fixture will automatically occupy the sequencing channel numbers for the Color Temperature setting. Accurate white lights from warm tungsten (3,200K) to cool daylight (7,500K) can be scrolled through DMX controls. See DMX values for different color temperature settings on page 12.

Front View



Rear View



Connecting Power:

The Pro-Palette utilizes PowerCon connectors for power input (blue connector) and loop through (the white connector). To avoid overloading, the maximum looping for the Pro-Palette is five units at 220V or three units at 110V. The Pro-Palette comes with a power cable terminated with a PowerCon connector on one side and a bare wire on the other side.

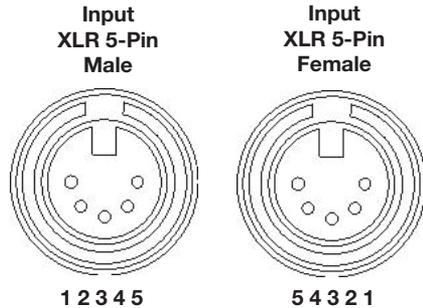
Attention:

Don't connect or disconnect the PowerCon connector under load or live! Connect the power connectors only with an authorized and licensed technician!

Power Conductor	USA	International
Live (L)	Black	Brown
Neutral (N)	White	Blue
Earth (E)	Green	Green and Yellow

DMX Signals

Pin #	Signal
1	Common
2	Signal (-)
3	Signal (+)
4	---
5	---



Data connection:

- (1) Connect a DMX signal to the male XLR socket of the fixture from the controller.
- (2) Insert a line to female XLR socket, and connect it to the next fixture.
- (3) Connect a terminator at the last fixture.

Instruction of data transmission reliability:

- (1) Use a shielded twisted pair designed for RS-485: (standard microphone cable is unsuitable for long-distances), and the transmission distance of the 24AWG cable can exceed 300m (1000 feet). Cable with a larger wire diameter is needed for long-distance transmission, and the signal amplifier may be needed.
- (2) The number of fixtures connected with the single signal port should not exceed 32.
- (3) A resistor of 120 ohm / .5W will be needed between "signal +" and "signal -" at both ends of a communication line link, so as to avoid signal reflection interference. If a distribution amp is used, the resistor will need to be connected at both ends of the communication line respectively.

Mounting:

Always mount this product in a safe position with adequate ventilation and away from a heat source. Keep flammable materials away from this product while it is operating.

Always connect the provided Safety Cable to the fixture and a suitable anchor. The safety cable should loop through the fixture yoke and be connected to a secure attachment on the other end.

The Pro-Palette may be mounted upright or upside down; however, make sure there is adequate room for ventilation, configuration, and maintenance.

The fixture comes with a hanging/mounting yoke to attach mounting clamps. The bracket has a 12-mm hole. Make sure the clamps are capable of supporting the weight of this product.

Caution:

The maximum ambient temperature is 95°F (35 °C). Do not operate this product at a higher temperature.

Do not cover the ventilation holes when operating to avoid internal overheating.

Avoid direct eye exposure to the light source while the product is on. Do not touch this product's housing during operation because it may be very hot.



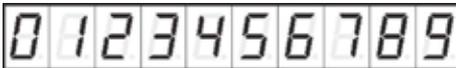
The Pro-Palette will start a self-checking process when power is applied. The unit will display the first DMX address of the 4COL mode and is ready to use. For standard operation, connect the fixture to a power source (100~240V AC single phase), and a DMX signal cable. The LED Display will turn on after the power switch is turned to the “ON” position and you are ready to set the desired configuration. and DMX addresses.

Press the Function Knob once to enter the main menu. Rotate the Function knob to change “Add- and SET- ”on the LED display. Under the “Add-” menu, press the Function Knob to display (AX.X.X.) on the interface, with three additional dots displayed under the value. Rotate the Function knob to change the dimming address (dimming address range: 1-512), and press the Function Knob once to save. Under the “SET- ”menu, press the Function Knob to display any one of 4COL/HSI/FIL/CCT on the interface, rotate the Function Knob to select one control mode, press the Function Knob again to save. The menu will return to the main interface (Axxx) if there is no operation within 3 seconds.

Display of Numbers and Characters:

The four-bit seven-segment displays of MacoLEDs series LED light fixtures adopt the following format to display the information:

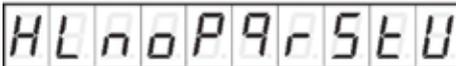
Digits 0-9



Common Letters: A,B,C,D,E, and F



Special Letters: H,L,N,O,P,Q,R,S,T, and U.



Note: The number 5 and the character S have the same display format.

You can assign a starting DMX channel for the chosen mode, check out the numbers of channels to be occupied by each mode in the chart in page 12. These parameters can also be assigned through a console.

Control Parameters

Operation Mode	Occupied DMX Channels	Control Channels	DMX Value	Output Value
4COL	4	Red	0-255	0-100%
		Green	0-255	0-100%
		Blue	0-255	0-100%
		White	0-255	0-100%
HIS	3	Intensity	0-255	0-100%
		Hue	0-255	0-360°
		Saturation	0-255	0-100%
FIL	2	Brightness	0-255	0-100%
		Effect (16 Colors)	0-15	Clear
			16-31	Pale Gold
			32-47	Straw
			48-63	Loving Amber
			64-79	Chrome Orange
			80-95	Bright Pink
			96-111	Flesh Pink
			112-127	Magenta
			128-143	Bright Red
			144-159	Rose Purple
			160-175	Mauve
			176-191	Moss Green
192-207	Dark green			
208-223	Full CT BLue			
224-239	Peacock Blue			
240-255	Dark Blue			
CCT	2	Brightness	0-255	0-100%
		Color Temp.	0-63	3200K
			64-126	4500K
			127-189	5600K
			190-255	7500K

Maintenance:

To eliminate unnecessary wear and improve lifespan, during periods of non-use, completely disconnect the product from power via breaker or by unplugging it.

Expected LED Lifespan:

LEDs gradually decline in brightness over time, mostly because of heat. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal, single-LED conditions. For this reason, using clustered LEDs at their fullest intensity significantly reduces the LEDs' lifespan. Under normal conditions, this lifespan can be 20,000 hours at 25 °C (77 °F). If extending this lifespan is vital, lowering the operating temperature by improving the ventilation around the product and reducing the ambient temperature is recommended.

2-YEAR LIMITED WARRANTY

- A. Zylight LLC warrants to the original end user customer of its products that its products are free from defects in material and workmanship under normal use for two (2) years from the date of purchase. Except as provided herein, Zylight LLC makes no express warranties, and any implied warranties, including those of merchantability and fitness for a particular purpose, are limited in duration to the duration of the written limited warranties contained herein. Except as provided herein, Zylight LLC shall have no liability or responsibility to its customer or any other person or entity with respect to any liability, loss, or damage caused directly or indirectly by use or performance of the product or arising out of any breach of this warranty, including, but not limited to, any damages resulting from inconvenience, loss of time, data, property, revenue or profit or any indirect, special, incidental, or consequential damages, even if Zylight LLC has been advised of the possibility of such damages.
- B. In the event of a product defect during the warranty period, you must contact Zylight LLC at the phone number or address listed in the product's user manual or on the internet at www.zylight.com to obtain a return merchandise authorization (RMA) number. After obtaining an RMA number, send the product fully insured, with proof of purchase, to the address given to you by the Customer Service representative. Zylight LLC will, at its option, repair or replace the defective product.
- C. All replaced parts and products become the property of Zylight LLC. Repaired or replacement parts and products are warranted for the remaining term of the original warranty period. You will be charged for materials and labor or replacement of the product after the expiration of the warranty period.
- D. This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, drops, misuse, improper or abnormal usage, failure to follow instruction, improper installation or maintenance, alteration, lightning or other incidence of excess or reverse voltage or current, exposure to excess dampness or moisture; (b) removal of, or tampering with, any attached stickers, decals, knobs, enclosures, protective windows, hardware, or fasteners; (c) use of power supply equipment, power adapters, or cables not supplied by Zylight LLC for specific use with the equipment for which it was specified; (d) any unauthorized disassembly, repair, or modification; (e) cosmetic damage; (f) transportation, shipping, or insurance costs; (g) costs of product removal, installation, set-up, service adjustment, or reinstallation; (h) cracking, abrasion, scratching, coating wear, or breakage of protective windows or lenses; (i) abnormal mechanical or environmental conditions; (j) product that has been sold as second-hand; (k) product that has been transported, shipped, purchased, or resold contrary to US export regulations; (l) product that has been transported, shipped, purchased, or resold outside countries for which it has received electronic product compliance certification.
- E. This is not a service contract, and this warranty does not include maintenance, cleaning, or periodic check-up. During the period specified above, Zylight will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Zylight under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Zylight. All products covered by this warranty were manufactured after April 1, 2014, and bear identifying marks to that effect.

- F. Zylight reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products previously manufactured.
- G. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by Zylight in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. No warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The Consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above.
- H. This warranty is the only written warranty applicable to Zylight Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published. Under no circumstances shall Zylight be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



5440 Cerritos Avenue
Cypress, CA 90630 (USA)
+1.800.838.7446
sales@zylight.com