



Maverick

User Guide

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Information and specifications in this document are subject to change without notice.

Welcome to Cineo Maverick

Maverick

Cineo Lighting has developed the versatile Cineo Maverick Remote Phosphor light source. Maverick operates from many power options, including AC, DC and battery power. The power connection uses an industrystandard XLR4 connector with an input voltage range of 10.8 to 28 VDC. Like all Cineo soft lights, Maverick allows the user to change the Remote Phosphor panels, supporting CCT of 2700K, 3200K, 4300K, 5600K, 6500K, Chroma Blue and Green. Their color quality perfectly matches all other Cineo soft lights, with CRI ratings of 90-98, depending on color temperature. Maverick fixtures feature a versatile mounting system that supports industry-standard hardware for virtually limitless mounting options.

Rather than traditional diffusion to soften the light source, the light actually emits from the Remote Phosphor panels on the front of the fixture, providing a light characteristic that radiates equally in a 160° radius, providing Maverick the ability to "wrap" your subject with soft light with edgeless shadows. The phosphor panels are excited by blue LEDs, which are automatically turned off when the phosphor panels are removed. The color temperature of Maverick is extremely consistent fixture to fixture, and will not change over time like other lighting technologies.

Cineo Maverick fixtures are extremely durable, built to last with anodized alloy construction, flexible polycarbonate panels, and field-serviceable components. Dimming options include both local and DMX control.

Cineo Maverick is perfect for any film or television project, in the studio or on location, or anywhere flicker-free, color-accurate soft light is required.

General Notes

- 1. Please read through this manual carefully before operating Cineo Maverick, and keep this manual for future reference.
- 2. There are numerous safety instructions and warnings that must be adhered to for your own safety.
- 3. Maverick is not intended for residential use. It is intended for use in a professional studio.
- 4. Maverick service must be performed by a qualified technician.
- 5. Although Maverick is weather-resistant, the fixture is intended primarily for indoor use.
- 6. Cineo products are not certified for use in hazardous locations.
- 7. Maverick has a typical operating temperature of 120° F (50° C).

Fixture Set Up

- 1. Read these safety instructions carefully to ensure fixture and accessories are used safely.
- 2. It is suggested that the fixture is correctly mounted onto the supporting surface before use.
- 3. Ensure the Maverick and power sources are operated within an ambient temperature range of -4 to 122°F (20 to +50°C)

System Components, Connections and Controls

Maverick Lamphead

The Maverick lamphead represents the next generation of Remote Phosphor professional lighting, incorporating simple operation, advanced passive cooling and versatile configuration options. Local 0-100% dimming is facilitated with a simple rotary control, while adding the DMX module provides remote control of the fixture. Maverick can be configured to run on battery, DC or AC power sources.

Maverick typically includes a mounting yoke that can be easily removed from the industry-standard 80/20 profile mounting slot. The 80/20 slot also accommodates additional mounting options from both Cineo Lighting and others.

The fixture can be operated in inclement weather conditions, and although not completely waterproof it can withstand moderately wet conditions.

Depending on input power and CCT, Maverick can output up to 8,000 lumens from a very compact form factor.



Maverick Power Sources

The Maverick fixture features SmartPower™ power control, allowing operation with any 12-24VDC power source capable of delivering 75 -150 watts. This provides compatibility with a wide range of battery and AC options. Configuration of SmartPower is covered in detail in the Advanced Power Setting section of this guide.

Cineo offers the following power accessories for mounting on the either the Maverick yoke or BackPak[™] accessory bracket. Maverick can be used with virtually any nominal 12-24VDC power source, including camera batteries, car lighter sockets, etc. Adapters and accessory cables are sold for connection to various power sources, including the following:

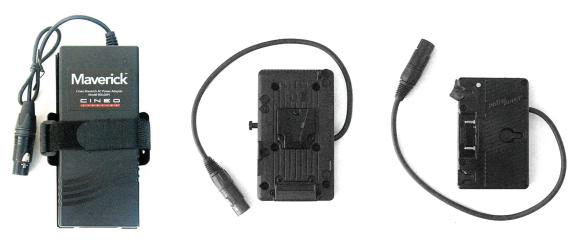
900.0095 120w portable AC Adapter

900.0195 150w studio power supply

900.0086 V-Lock Battery Plate

900.0094 Gold-Mount Plate

903.0003 Maverick Cigar Lighter Cable



Input power from other sources is also possible, using an XLR4 connector with the following pin configuration:

- Pin1 GND
- Pin2 NC
- Pin3 NC
- Pin4 +VDC

Advanced Power Settings

SmartPower settings are configured on a set of DIP switches located inside the lamphead. By placing these switches inside the fixture, misuse of various power configurations is minimized, as the fixture should be set up with the power sources intended for use in mind.

To access the switches, you must remove the lower panel from the lamphead. Two large screws must be removed, plus two smaller screws, as shown in the following photo:



The two small switches are located as shown and can be depressed or lifted using a small pin.

The simplest way to think about the SmartPower settings is to consider the maximum power capability of your DC source below 18 VDC (Low Voltage setting), and the option of limiting of power draw at a nominal 24VDC (High Voltage setting).

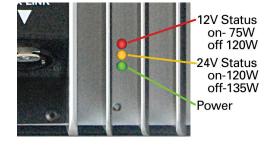
Low Voltage setting (LV)

A standard capacity V-Lock or Gold Mount camera battery will draw 70-95 watts with an output voltage ranging from 10.5 to 16 VDC. A high-capacity camera battery typically has a 120-150 watt output with a similar output voltage range.

If the Maverick is being used with standard capacity batteries, the LV setting should be set to 75 watts; if the fixture will only be used with high-capacity batteries, the LV setting can be set to 120 watts. Note that if the LV setting is 75 watts, virtually any capacity camera battery will work well with Maverick, without damage to the battery.

Note the location of the switch labeled "Option A", which controls the LV setting. When depressed, the LV mode is set to 75 watts. This is indicated on the back of the fixture by illuminating the Red LED. This is the default setting when the fixture is shipped from the factory. When in the UP position, the LV mode is set to 120 watts and the Red LED on the back of the fixture is OFF.

Use of the 120 watt LV setting should ONLY be used with batteries whose output equals or exceeds 120 watts. A standard capacity battery will exhibit very little run time and risk battery damage if operating a Maverick with the LV setting at 120 watts.



High Voltage setting (HV)

The Maverick fi xture is designed for use with a 24VDC AC adapter when used on house power. The HV switch allows the fi xture to be confi gured for use at 120 watts or up to 135 watts, depending on the application.

For portable use, Cineo provides a small, lightweight AC adapter, capable of operating from 90-240 VAC, with a 24VDC output of 120 watts. The mounting bracket for this AC adapter is designed for quick removal of the adapter from the fi xture when minimum weight is a factor.

Note the location of switch closest to the bottom of the fixture, which controls the HV setting (labeled "Option B"). To set the fixture for 120 watt operation at 24 VDC, the switch position should be DOWN. The Yellow LED on the back of the fixture will illuminate, indicating the 120 watt mode is selected. This is the default mode when the fixture is shipped from the factory. When the position of this switch is

UP, the fixture is running at 135 watts. In this mode the fixture MUST be powered with a 150 watt or greater power source or damage to the power source may occur.

Local and Remote Dimming

When correct DC power is applied to the unit, the green LED illuminates on the back, between the cooling fins. The output of the Maverick is controlled with the local control knob on the back of the fixture. The fixture does not employ an on/off switch; when the knob position is at 0, the fixture is virtually off, as it draws only 10 ma of power. The dimming curve is logarithmic in nature, providing a very "analog" characteristic to its control.

Remote Dimming via DMX

Cineo offers a DMX interface module for control of the fixture via standard DMX lighting protocol. The interface module (900.0087) attaches to either the yoke or the BackPak accessory and connects to the Maverick fixture's AUX port via an included RJ45 cable. The

module includes both DMX IN and DMX THRU via standard 5-pin XLR connections. The DMX pin-out wiring is as follows:

- Pin 1: Signal Common
- Pin 2: Data -
- Pin 3: Data +
- Pin 4: Spare
- Pin 5: Spare

The DMX control line is automatically self-terminating and does not require external DMX termination when no cable is inserted into the DMX THRU connector.

Note that when the DMX control is in use and DMX control signal is lost, the fixture will hold its last level. When the Maverick loses power, it retains all of its DMX settings when power is resumed.

DMX Module Operation

When the DMX module is connected to the Maverick fixture, control of the fixture is automatically switched to the module. The DMX module has a multi-line display screen that indicates the firmware level, control mode (local / remote) and DMX address. The module is programmed by the use of four capacitive-touch buttons below the screen (-, +, Mode, Save).

There are two control modes: one for determining local or DMX control, and one for setting the DMX address (0 - 255). Touching the Mode button toggles the arrow on the right of the screen between these modes.

When the arrow is pointing to the "Control" setting, the "-" and "+" buttons will switch between local and DMX control. When the desired control method is displayed, touch the "Save" button to lock the setting. If the setting is not saved, it will revert to its previous setting in a few seconds.

When the arrow is pointing to the "Address" mode, the "-" and "+" buttons will increase or decrease the DMX address setting to the desired address. When the desired address is displayed, touch the "Save" button to lock the setting. If the setting is not saved, it will revert to its previous setting in a few seconds.

Disconnecting the DMX module from the Maverick fixture will place the fixture back into local control.

Remote Phosphor Panels

Color temperature (CCT) for the Maverick is changed by replacing the Remote Phosphor panel on the front of the fixture. The CCT is clearly labeled on each panel.

To change RP panels:

1. Loosen the two thumbscrews at the top of the fixture, and remove the top plate. The top plate is tethered to the body of the fixture to avoid loss or damage.



- 2. Remove the RP panel by sliding it up and out of the fixture. If the lamp is on, the output will be cut when the panel is removed.
- 3. Insert a new panel into the slots and firmly seat it into the bottom of the slot. If power is applied, the lamp will turn on.
- 4. Replace the top plate, tightening the two thumbscrews finger-tight.

Although no harmful UV emanates from the fixture, Maverick should only be used with the remote phosphor panels in place. Although the panels are extremely durable, avoid exposing them to abrasive surfaces. Please reference the Cineo Maverick catalogue for available color temperature options.



Mounting and Accessory Attachment

Maverick has an integrated slot in front of the RP panel for attachment of light control accessories, including the following:

900.0088 90º Louver

900.0089 4-leaf Barndoor set

902.0100 Snapbag[™] softbox

902.0101 Chimera™ softbox

To install a light control accessory in the slot:

- 1. Rotate the accessory lock to the open position
- 2. Slide the accessory frame into the slot
- 3. Rotate the accessory lock to the closed position

Maverick also features two industry-standard 80/20 profile slots running vertically along the sides of the fixture. Not only do these provide an easy way to attach, detach and vertically position the yoke to the lamphead, it provides a universal mounting solution

for other accessories, including handles, frames and Cineo's BackPak accessory bracket.

Additionally, all Cineo Maverick accessories (battery plates, AC adapters, DMX adapters, etc.) conform to a standard mounting hole pattern that is repeated on the BackPak and several locations on the yoke. This allows your Maverick unit to be configured optimally for the application.





For example, a studio lighting installation is best configured with the 150 watt power supply and DMX adapter attached to opposite sides of the yoke. For portable applications, the BackPak is an ideal mounting tool for one or two battery plates, or a battery plate and a 120 watt portable AC adapter.



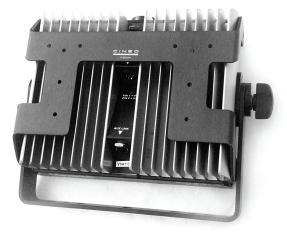
To remove / install the yoke:

- 1. Position the yoke 90° to the body of the fixture
- 2. With a #2 Phillips screwdriver, loosen the (4) mounting screws approximately one revolution
- 3. Slide yoke out of 80/20 slot
- 4. Installation is in reverse order

To install / remove the BackPak:

- 1. Align the attached oval-shaped nuts at the top of the BackPak to the top of the 80/20 slot.
- 2. Slide the top of the BackPak down so the oval nuts on the bottom can be inserted into the bottom of the 80/20 slot.
- 3. Position the BackPak in the desired location.
- 4. Tighten the #2 Phillips screws to secure the BackPak bracket





Specifications

Lamphead

Input voltage: 10.5-28 VDC

Power consumption: 75 watts / 120 watts / 135 watts (user configurable)

4-pin XLR power input

EtherCon DMX port

Completely silent, flicker-free operation

Fixture dimensions: 9.4" x 7.3" x 3" (240mm x 186mm x 78mm)

Weight: 2.2 kg (4.9 lbs)

Maximum output: 8,000 lumens

Beam Angle: >160°

Max. temperature rise: +45° C above ambient

Environmental temperature range: -20 - +50 C

35,000 hr. L70 rated

2-year parts and labor warranty

ETL and cETL pending, CE Compliant

Zero UV light emitted

Made in USA

Maverick Power Sources

120w AC Adapter

Part # 900.0095

Input Voltage: 100-240VAC

Output Voltage: 24VDC

Max. output current: 5A

Output connector: XLR4

Dimensions: 6.61" x 2.8" x 1.48" (168mm x 71mm x 37.2mm)

Weight: 1.5 lb. (680.3g)

2-year parts and labor warranty

UL, cULus and CE listed

150w AC Adapter

Part # 900.0195

Input Voltage: 100-240VAC

Output Voltage: 24VDC

Max. output current: 6.25A

Output connector: XLR4

Dimensions: 6.5" x 3.25" x 1.58 (165.1mm x 82.8mm x 40.1mm)

Weight: 2.25 lb. (1.0 kg)

2-year parts and labor warranty

UL, cULus and CE listed

Input Voltage: 100-240VAC

Output Voltage: 24VDC, 6.25A

900.0086 V-Lock Battery Plate

Max output current: 10A

Output connector: XLR4

Dimensions: 5.6" x 3.2" x 1" (142.1mm x 82.3mm x 26.3mm)

Weight: 13 oz. (368.5 g)

900.0094 Gold-Mount Plate

Max output current: 10A

Output connector: XLR4

Dimensions: 4.7" x 3.9" x 1.7" (119.6mm x 76.5mm x 17.8mm)

Weight: 9.2 oz. (260.8 g)

903.0003 Car Lighter Cable

Length: 10 ft.

Max output current: 10A

Output connector: XLR4

DMX Interface Module

Interface connector: Ethercon F

DMX connectors: XLR5 IN / THRU, self-terminating

Dimensions: 3.0" x 3.9" x 1.7" (77.2mm x 99mm x 43.7mm)

Weight: 7.3 oz. (207 g)

Warnings, Disclaimers and Warranty

Burning Injuries

Be aware of high temperatures in excess of 50°C inside the lamphead during and after fixture use. To avoid burning injuries, do not touch the LEDs.

Flammable Materials

Keep flammable materials away from the installation. Ensure that the amount of air flow required for safe operation of the equipment is not compromised. Proper ventilation must be provided.

ESD and LED's

LED components used in Maverick are ESD (Electro-Static Discharge) sensitive. To prevent the possibility of destroying LED components do not touch either while the fixture is in operation or while it is switched off.

Blue Light Output

Do not bypass the lamphead safety switches that turn off the blue LEDs when phosphor panels are removed. The light-output intensity may be harmful to human eyes. No UV or IR is emitted at any time from this fixture.

AC Power Supplies and DC Cables

Use only a rated AC power supply. The user is responsible for ensuring DC power cables are of adequate condition for each application. If the cables are damaged, replace them with new ones.

Environmental: Disposal of Old Electrical & Electronic Equipment

This product shall not be treated as household waste.

CINEO LIGHTING LIMITED WARRANTY

Products from Cineo Lighting are warranted against defects in materials and workmanship for two years from the date the Product is shipped to Customer. Products are guaranteed to perform substantially in accordance with the accompanying written materials within the warranty period under normal use.

If the Product fails to work as warranted, Cineo Lighting will, in its sole discretion, repair or replace the Product with a new or remanufactured Product that is at least equivalent to the original Product. Customer must obtain a Return Material Authorization number from Cineo Lighting before returning any Products under warranty to Cineo Lighting.

Customer shall pay expenses for shipment of repaired or replacement Products to Cineo Lighting's repair facility. Any repaired or replaced Products will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. Cineo Lighting will pay shipping of repaired goods back to the customer. After examining and testing a returned product, if Cineo Lighting concludes that a returned product is not defective, Customer will be notified, the product returned at Customer's expense.

This Limited Warranty is void if failure of the Products has resulted from accident, abuse, misapplication, or use outside of normal operating conditions. Warranty is void if serial number has been defaced or removed.

NO OTHER WARRANTIES. EXCEPT AS EXPRESSLY SET FORTH ABOVE, THE PRODUCTS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, AND NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED ARE MADE WITH RESPECT TO THE PRODUCTS, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE OR NON-INFRINGEMENT OR ANY OTHER WARRANTIES THAT MAY ARISE FROM USAGE OF TRADE OR COURSE OF DEALING. ELEMENT DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE OF OR THE RESULTS OF THE USE OF THE PRODUCTS IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE AND DOES NOT WARRANT THAT THE OPERATION OF THE PRODUCTS WILL BE UNINTERRUPTED OR ERROR FREE. CINEO LIGHTING EXPRESSLY DISCLAIMS ANY WARRANTIES NOT STATED HEREIN. NO LIABILITY FOR CONSEQUENTIAL DAMAGES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL ELEMENT AND ITS LICENSORS, DISTRIBUTORS, AND SUPPLIERS (INCLUDING ITS AND THEIR DIRECTORS, OFFICERS, EMPLOYEES, AND AGENTS) BE LIABLE FOR ANY DAMAGES, INCLUDING, BUT NOT LIMITED TO, ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES, EXPENSES, LOST PROFITS, INSTALLATION COSTS, LOST SAVINGS, BUSINESS INTERRUPTION, LOST BUSINESS INFORMATION, OR ANY OTHER DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCTS, EVEN IF ELEMENT OR ITS LICENSORS, DISTRIBUTORS, AND SUPPLIERS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. CINEO LIGHTING'S TOTAL LIABILITY ON ALL CLAIMS, WHETHER IN CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE OR BREACH OF STATUTORY DUTY), STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE AMOUNTS PAID BY CUSTOMER FOR THE PRODUCTS.

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