Maverick™

User Guide

Revision 1.2 — May, 2016

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

Welcome to Cineo Maverick

Maverick™

Cineo Maverick is a versatile Remote Phosphor light source developed by Cineo Lighting.

Rather than use traditional diffusion to soften the light source, the light from a Cineo Maverick is actually emitted from the Remote Phosphor panels on the front of the fixture, providing a true 160° lambertian emitter. This allows Maverick to wrap your subject in soft light with edgeless shadows. The phosphor panels are excited by blue LEDs, which are automatically turned off when the top lid is lifted. Like all Cineo Remote Phosphor soft lights, Maverick allows the user to change the color temperature panels, supporting CCT of 2700K, 3200K, 4300K, 5600K, 6500K, Chroma Blue and Green.

The CineoColor Remote Phosphor panels used in Maverick perfectly match all other Cineo soft lights, with Extended CRI ratings of 94-98, depending on color temperature. Cineo Color also utilizes deeper red values optimized for camera capture to ensure the most natural light on skin tones. The color temperature of Maverick is extremely consistent fixture to fixture, and will not change over time like other lighting technologies.

Maverick operates from many power options, including AC, DC and battery power. The on board power connection uses an industry standard XLR4 connector with an input voltage range of 10.8 to 28 VDC. Dimming options include both local rotary dial and built-in DMX control.

Maverick fixtures feature a versatile mounting system that supports a variety of industry-standard hardware for virtually limitless mounting options. Cineo Maverick fixtures are extremely durable, built to last with anodized alloy construction, flexible polycarbonate panels, and field-serviceable components.

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 professional use only.

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 120º 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

Maverick3 is 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. Depending on Maverick model, DMX may be added or included to provide 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 adjusted along and removed from the industry standard 80/20 profile mounting slot. The 80/20s also accommodate a variety of other mounting options from 3rd party sources.

The lamphead 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.

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 a variety of power accessories that can be mounted directly to the fixture, on the Maverick yoke, or to the 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

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

Cineo SmartPower™

Intelligent management of output performance

Cineo Maverick advances portable lighting power by bundling several features that optimize the Cineo Maverick for various powering conditions. This protects your battery investment and provides flexibility for studio and portable AC operation.

By default, the Maverick operates at 120 watts on AC power with a lightweight, removable AC adapter. For studio operation, the Maverick can be can run at 135 watts on a more permanent, heavy-duty AC adapter. Under battery power, the Maverick is capable of operating with a standard-capacity, 6.5 amp battery with either V-Lock or Gold Mount options. If you plan to operate with high-capacity 10 amp batteries, the fixture can be switched to provide maximum output with larger batteries.

The light output of most portable fixtures diminishes with the decrease in battery voltage, which can result in unstable light output and potentially damaged batteries. Cineo SmartPower is designed to give constant light output as the battery voltage decreases, shutting off before the current draw on the battery becomes excessive.

Typical Light Output Over Time

Runtime in Minutes

— Fixture Output Over Time (Typical)   — SmartPower Controlled Output (Maverick)
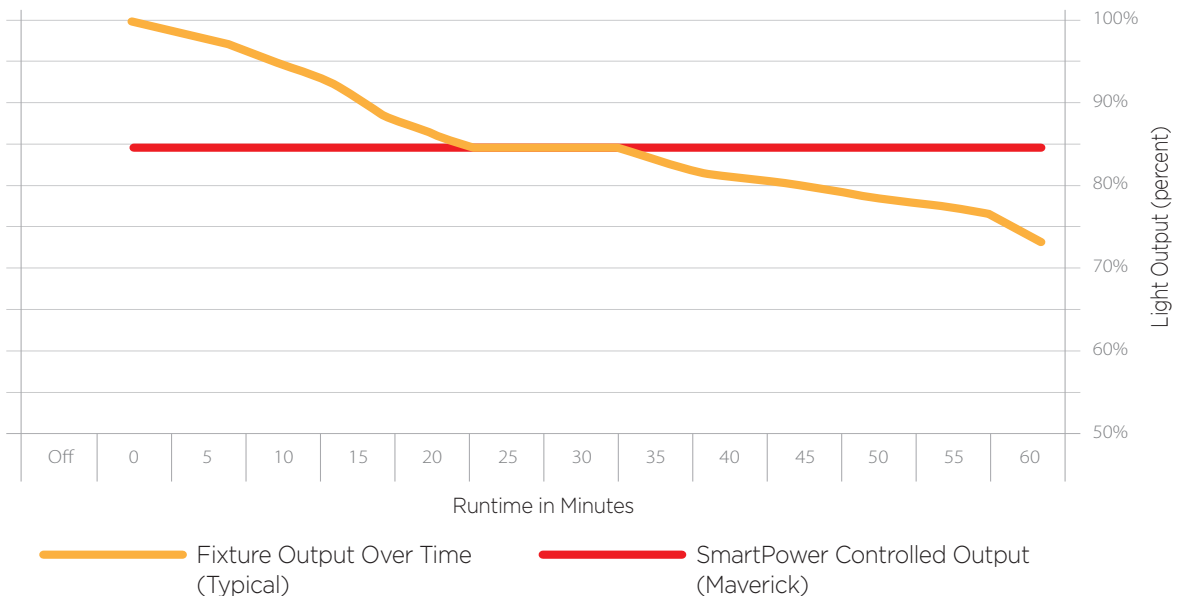
Determining Maverick Model

Maverick1
Instructions in ▊ throughout user guide.
Purchase date: pre-2016

Maverick2
Instructions in ▊ throughout user guide.
Purchase date: January 2016-June 2016

Maverick3
Instructions in ▊ throughout user guide.
Purchase date: June 2016-onward

Advanced Power Settings

Maverick 1&2

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.

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 power draw at a nominal 24 VDC (high voltage setting).

Accessing the DIP switches

1. Remove the bottom panel from the lamphead by removing the two large plus two smaller screws, as shown.

2. The two DIP switches are located at the bottom of the fixture, slightly left of center, as shown.
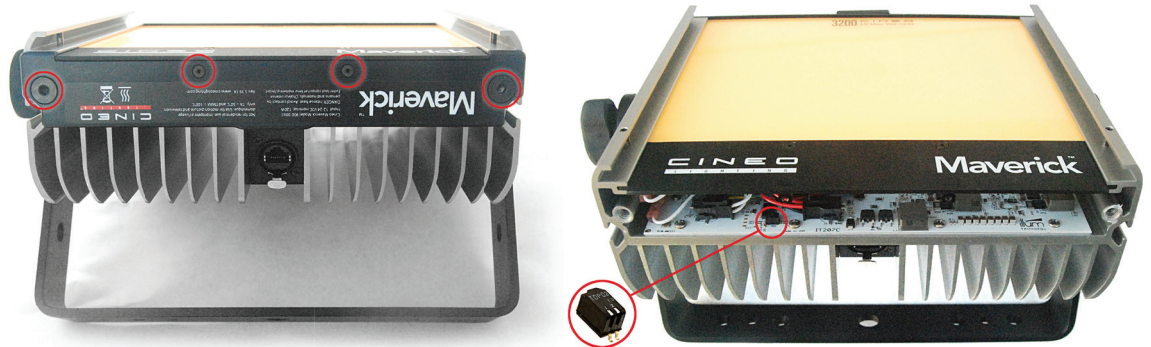
Batteries – Low Voltage (LV) Setting

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

The LV setting is indicated by the status of the RED LED on the back of the fixture. If the Red LED is ON, the LV setting is 75W. If the red LED is OFF, the LV setting is 120 watts.

To set the LV mode:

1. Note the location of the DIP switch labeled "Option A." This switch controls the LV setting.

2. To set the LV mode to 75W, depress the "Option A" switch with a small pin. The red LED on the back of the fixture will be ON when power is applied.

3. To set the LV mode to 120W, lift the "Option A" switch to the up position. The red LED on the back of the fixture will be OFF when power is applied. **The 120W LV setting should only be used with batteries whose output equals or exceeds 120 watts. Using this LV setting with a standard capacity battery may damage the battery.**

NOTE: if the LV setting is 75 watts, virtually any capacity camera battery will work well with Maverick, without damage to the battery. Therefore, this is the default setting when the fixture is shipped from the factory.

AC Operation – High Voltage setting (HV)

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

If Maverick is being used with a 120w power supply, the HV setting should be set to 120w mode; if the fixture will be used with a 150w power supply, the HV setting should be set to 135w mode.

To set the HV mode:

1. Note the location of the DIP switch labeled "Option B." This switch controls the HV setting.

2. To set the HV mode to 120w, depress the "Option B" switch with a small pin. The yellow LED on the back of the fixture will be ON when power is applied.

3. To set the HV mode to 135w, lift the "Option B" switch to the up position. The yellow LED on the back of the fixture will be OFF when power is applied. The 135w HV setting MUST be powered with a 150 watt or greater power source or damage to the power source may occur.


12V Status on- 75W off 120W
24V Status on-120W off-135W
Power
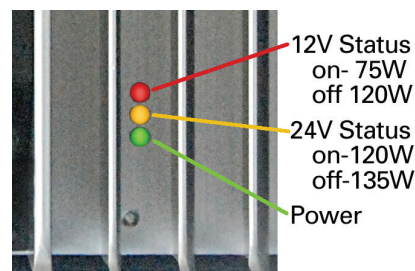
NOTE: The default factory setting for HV mode is 120w.

Maverick 3

Power Settings

1. Push and hold local knob for approx. 15 seconds, Display shows **b** for battery.

2. Rotate knob to **L** (Low capacity 75W battery mode) or **H** (High capacity 120W battery mode). The 120W High Power setting should only be used with batteries whose output equals or exceeds 120 watts. Using this battery High Power setting with a standard capacity battery may damage the battery. Push knob to select.

3. Display shows **AC**. Rotate knob to **L** (Low power 120w mode) or **H** (High power 135w mode). The 135w high power setting MUST be powered with a 150 watt or greater power source or damage to the power source may occur. Push knob to select and return to normal operation.

Power
Local Mode
DMX Mode
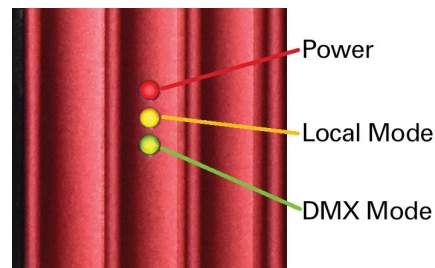
Local and Remote Dimming

Maverick 1 & 2:

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 signal is lost, the fixture will hold its last level. When the Maverick loses power, it retains all of its DMX settings when the 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.

█ Maverick 3:

Local Mode:

1. Push local control knob for 5 seconds. The digital display shows current mode.

2. Rotate knob to scroll between the two modes: *Loc* or *Add*. Push the knob to select *Loc*.

3. Display shows dim level. Rotate knob to adjust.

Note: Double pushing the local control knob turns the fixture off. Pushing the button again turns the fixture on to its previous light level setting.

DMX Mode:

DMX control is built into the Maverick3 and no external DMX module is necessary. To set DMX address:

1. Push local control knob for 5 seconds. The digital display shows current mode.

2. Rotate knob to scroll between the two modes: *Loc* or *Add*. Push knob to select. DMX address flashes.

3. Turn knob to select DMX address. Push knob to select. Display shows DMX address selected.

Maintenance Mode (Maverick 3 Only):

The Maverick 3 includes a maintenance mode that displays the firmware version running on the fixture, as well as performing a system calibration cycle. To enter the maintenance mode, perform the following steps:

1. Disconnect power from the fixture for at least 30 seconds.

2. Depress and hold the knob while re-powering the fixture.

3. The display will show the current firmware version, then perform a self-calibration.

4. When complete, the fixture will return to its previous operating mode.

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.

902.1227 Maverick Phosphor Panel - 2700k

902.1232 Maverick Phosphor Panel - 3200K

902.1243 Maverick Phosphor Panel - 4300K

902.1256 Maverick Phosphor Panel - 5600K

902.1265 Maverick Phosphor Panel - 6500K

902.1240 Maverick Phosphor Panel - Chroma Blue

902.1250 Maverick Phosphor Panel - Chroma Green

To change RP panels:

1. Loosen the two thumbscrews at the top of the fixture, and remove the top plate.

   Maverick 1: The top plate is tethered to the body of the fixture to avoid loss or damage.

   Maverick 2&3: The top plate is hinged.

2. Remove the RP panel by sliding it up and out of the fixture. If the lamp is on, the output will be cut.

3. Insert a new panel into the slots and firmly seat it into the bottom of the slot.

4. Close the top door, tightening the two thumbscrews finger tight.

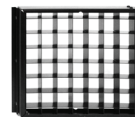## Mounting and Accessory Attachment

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 remove/install the yoke:

1. Position the yoke 90º to the body of the fixture.

2. With a #2 Phillips screwdriver, loosen the (4) mounting screws approximately one revolution.

3. Slide the yoke out of the 80/20 slot.

4. Installation is in reverse order.

■ **Maverick 1:**

To install / remove the Accessory 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
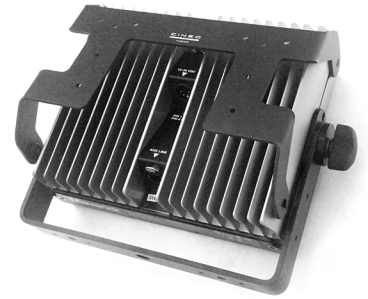
■■ **Maverick 2&3**:

Accessories may be attached directly to 80/20 slots on the back of the fixture. To attach accessories:

1. Slide the accessory plate into the 80/20 slot on the back of the fixture.

2. Tighten the screws with a #2 Phillips screwdriver to secure the accessory plate.

Specifications

Lamphead

Input voltage: 10.5-28 VDC

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

4-pin XLR power input

Maverick 1&2: EtherCon DMX port, connecting to external DMX module

Maverick 3: DMX in/thru on-board

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: >160º

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 certified, 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

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)

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 50ºC 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.

Customer acknowledges that the applicable purchase price or license fee for the Products reflects this allocation of risk. Because some states/jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply. The above limitations shall apply notwithstanding the failure of any limited remedy to fulfill its essential purpose.

Maverick™